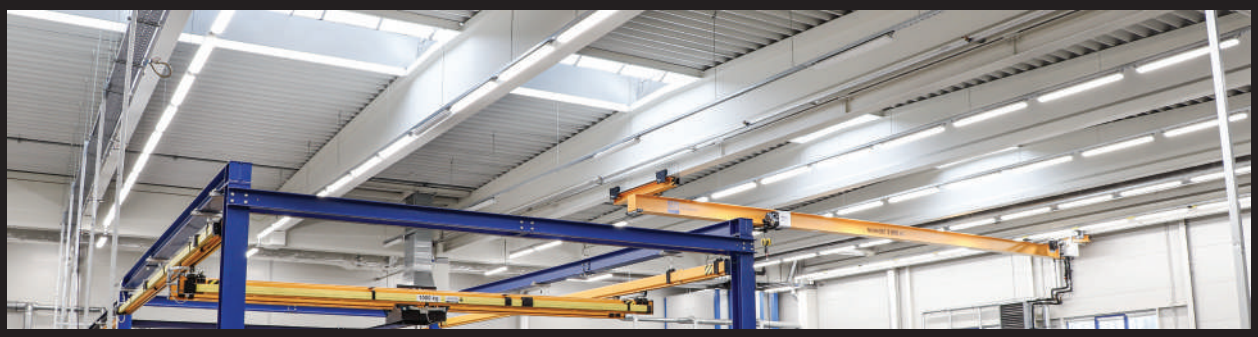
TREVOS

CZECH **LED LUMINAIRES**



20**24**

ABOUT COMPANY

HISTORY
Headquartered in the north of Bohemia in the Czech Republic, Trevos is a market-leading manufacturer of industrial and interior luminaires, boasting over 30 years of experience. Trevos is also a local and global technological trendsetter when it comes to producing high-quality, innovative and affordable light fixtures. Currently exporting to over 60 countries in the world, the company has its own R&D Department and invests heavily in innovations to satisfy market demands.

In 2021, Trevos launched NANOTTICA, a family of cutting-edge light fittings that feature a nano-structure. So far, this patent-pending technology has not been used by any other manufacturer anywhere in the world.

The total turnover of the company is divided into two basic groups: Domestic sales – 40 % and Export sales – 60 %.

REGIONAL POSITION
The interest of the market in the Czech Republic in industrial and indoor light fittings is mostly driven by the demand of assembling companies from the branch of electrical engineering. Deliveries are secured through the network of wiring material and light fitting wholesale customers. The TREVOS company ranks among leading manufacturers of industrial and office light fittings at the domestic market. With almost 240 employees, TREVOS counts itself as one of the largest employers in the region.

GLOBAL POSITION
Besides its significant share of the domestic market, the company is also very active in export. It successfully exports its products into more than 50 countries of the world, e.g. Germany, Italy, Belgium, Poland, Netherlands, Estonia, Switzerland and many more.

The company acquired its illumination technology market share first of all by the implementation of its own research and development in the production of innovative models of light fittings as well as investments into quality thermoplastic materials and electric components. The business strategy of the company is also based on the production of continually innovated lines of light fittings inspired by modern trends of illumination technology while keeping reasonable prices in comparison with top world producers.

The business has been continually increasing especially with customers from the European Union, to which Trevos supplies complete products modified in details on the basis of individual customer's requirements.

COMPANY GOAL
The goal of the company is to offer its clients first-class products for competitive prices.

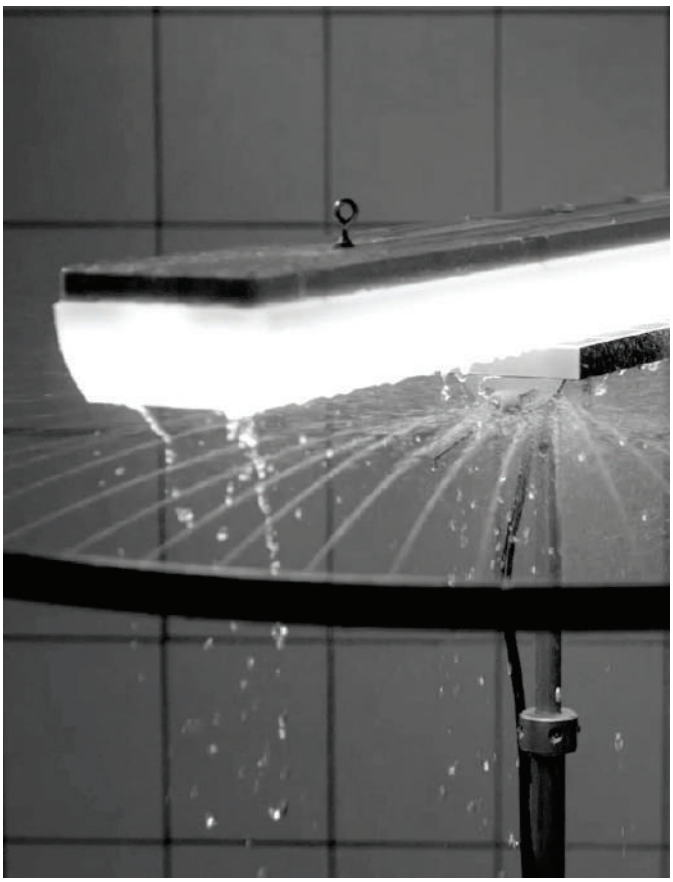
LIGHT FITTING DEVELOPMENT

All development tasks are subject to and strictly managed by the ISO 9001 quality process.

The development and implementation of production of new light fitting type lines is driven particularly by market requirements which are monitored in detail and summarized into marketing studies.

The projects are well secured as regards human resources. The members of the technical division have the required know-how and experience. They apply the results to industrial practice. Within the projects, they also closely cooperate with knowledgeable academicians of several technical universities.

The technical division has an extensive background of premises with cutting-edge equipment, serving for the implementation of applied research and experimental development including the execution of key measurement and tests.



PRODUCTION

The production program of the company is segmented into product lines of light fittings with similar or identical ways of use. Another criterion consists in type lines distinguishing the products by the achieved technical parameters and their capabilities.

The company has a large technological park that ensures its own production program. All injection machines are robotized. New innovative technologies include e.g. the robotized overmoulding of aluminium cores, the fully automated System Robot connecting workstation or the Sonderhoff foaming line.

CERTIFICATION

Company TREVOS, a.s. utilizes an integrated management system (IMS) that consists of a range of processes, rules, policies, and documents the company needs to deliver high-quality products and provide superior services in an appropriate and timely fashion, ensuring everything is done perfectly the first time. The company is managed in accordance with these processes, rules, policies, and documents.

Our ISM integrates a variety of the company's performance criteria to ensure compliance with the requirements of a number of management system standards. These include ČSN EN ISO 9001:2016 (QMS) and ČSN EN ISO 14001:2016 (EMS) as well as ČSN EN ISO 50001:2019 (EnMS) and ČSN ISO 45001:2018 (OHSMS). The ISM uses simplified processes, procedures and documents while increasing production efficiency and eliminating the elementary approach. As a result, costs are cut, system efficiency increases, and less effort is required.

We are holders of the EPD, ENEC, CB, ESČ, EAC, ATEX and DLG certificates. We are authorized to the use the "Czech Quality" mark for light fittings with ESČ licence. Ex fittings designed for hazardous areas (zones 1, 21): conformity to type ensured by internal production management and product testing under the supervision of a notified body.

ELEKTROTECHNICKÝ ZKUŠEBNÍ ÚSTAV

CERTIFIKÁT

ČSN ISO 45001:2018

TREVOS, a.s.

TREVOS

IQNet

THE INTERNATIONAL CERTIFICATION NETWORK

CERTIFICATE

TREVOS, a.s.

Nová Ves 34, 511 01 Turnov, Czech Republic

Environmental Management System

ISO 14001:2015

Registration Number: CZ – 162/2020

ELEKTROTECHNICKÝ ZKUŠEBNÍ ÚSTAV

CERTIFIKÁT

ELEKTROTECHNICKÝ ZKUŠEBNÍ ÚSTAV

CERTIFIKÁT

ČSN EN ISO 9001:2016

TREVOS, a.s.

TREVOS

ELEKTROTECHNICKÝ ZKUŠEBNÍ ÚSTAV

CERTIFIKÁT/CERTIFICATE

TREVOS, a.s.

DIAMANTOVÝ CERTIFIKÁT

QMS - ČSN EN ISO 9001:2016

EMS - ČSN EN ISO 14001:2016

EnMS - ČSN EN ISO 50001:2019

SM BOZP - ČSN ISO 45001:2018

Výroba, vývoj, dodávky svítidel a komponentů pro svítidla

ENVIRONMENT

Pursuant to Czech Act No. 541/2020 Sb. (the Waste Act), and Act No. 542/2020 Sb., on End-of-life Products, Trevos participates in EKOLAMP, a non-profit initiative seeking to ensure compliance with applicable electrical appliance collection and recycling rules. Additionally, Trevos meets the requirements of Directive No. 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) as well as of Regulation No. 1907/2006 concerning the registration, evaluation, authorisation and restriction of chemicals (REACH).

THE EPD PROTOCOL?

You may have already heard of the EPD protocol, but if not, we'd love to introduce it to you.

The EPD protocol is an important internationally recognized document that helps us to transparently describe the environmental impact of our products. It is a set of measurable information that covers, for example, energy consumption, water consumption, waste production, recycling or climate change impact, throughout the entire life cycle of a product, including its final recycling.

To obtain an EPD report, all data is carefully verified by a third party, so you can be sure that it is trustworthy and verifiable.

Our EPD protocols are registered and published in the Environdec International EPD system. They can also be downloaded from our website.

With EPD protocols, you can make good and informed decisions about your suppliers and contribute to a more sustainable future.

The protocols were created by: LCA Studio
The protocol is only a sample.

#WeCareAboutFuture

TREVOS LUMINAIRES AND **DIALUX** PLUG-IN

... our aim is to make it easier and more fun for you to plan and calculate lighting for your project – as well as empower you with a tool that will allow you to deliver professional presentations of your artificial lighting calculations. That is why we have joined DIALux.

In the DIALux planning tool, you will find Trevos luminaires from the NANOTTICA, FUTURA and INNOVA product lines.

Our lighting specialists will design and calculate lighting projects for interiors, exteriors, sports grounds or streets in the DIALux software completely free of charge for you.

Do you require a lighting design or calculation for an indoor or outdoor space, sports facility or street with TREVOS fixtures in DIALux?

You can start working on it today – our products now feature in this planning tool.

WHY HAVE WE CHOSEN DIALUX?

The world's leading lighting design and planning software, DIALux connects designers and manufacturers from all over the world, boasting over 700,000 users. The software is currently available in 25 language mutations.

All major lighting manufacturers offer digital product data for the purposes of planning in DIALux. Crucially, DIALux is impartial and neutral towards all manufacturers.

At TREVOS, we are confident joining DIALux will make planning lighting so much easier for you.

WHAT IS DIALUX?

It is software. Available free of charge, DIALux is a global gold standard for designing, calculating and visualising lighting solutions in a myriad of indoor as well as outdoor arrangements. The software was created in 1994 – and has been maintained since then – by German company DIAL GmbH. As a tool for working with contemporary lighting designs and design implementation, the software meets all the requirements that a designer may have.

HOW DOES DIALUX WORK?

DIALux allows you to create a lighting design featuring selected luminaire versions with their actual light and technical properties and parameters, while also making it possible to import these from the database. The software considers the international regulations, limits and norms applicable to the given working space and evaluates if the proposed lighting system meets the relevant legislative and health and safety requirements.

Not only can the software simulate a combination of daylight and artificial light. It can also take into account the circadian rhythms of the human body in the calculations.

WHAT IS THE RESULT?

The result is a 3D render of a lighting solution where distribution of lighting intensity (light distribution curves), light uniformity and unwanted glare are visualised. This professional material can be used to support your proposed lighting project and increase the chances of it being approved.

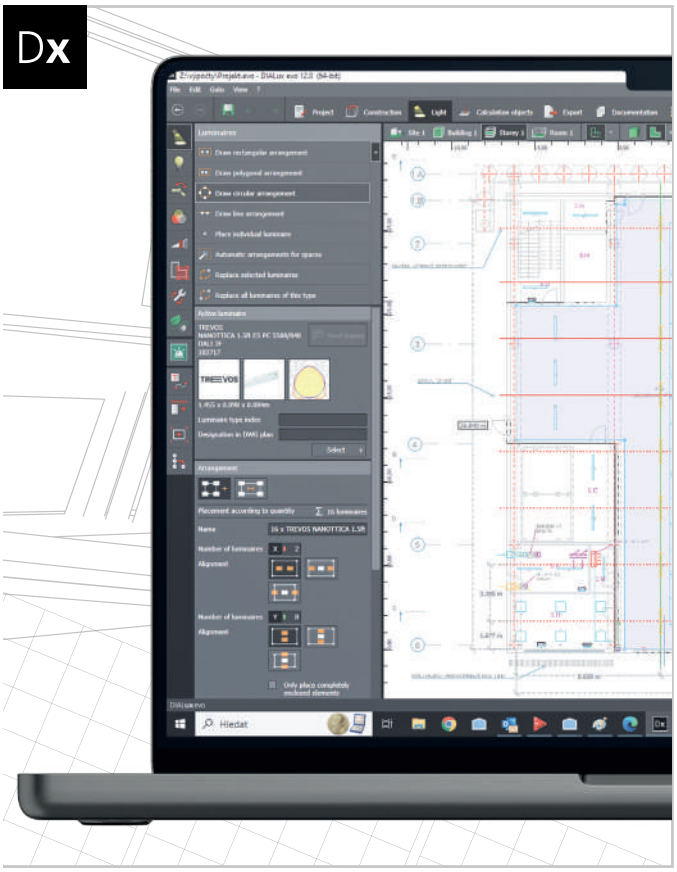
WHY SHOULD I USE DIALUX?

This is a complex photorealistic rendering software bundle that allows import and export of .dxf and .dwg files from and to all CAD programmes as well as the use of .3ds files for realistic modelling and creating photorealistic videos and presentations. The software includes most norms and standards.

SOUNDS GREAT! HOW DO I START?

Just go to the "Download" section on our website and download a .zip file with the offline version of the catalogue. Alternatively, you can open the online version of the catalogue at luminaires.dialux.com, choose TREVOS luminaires and import these into your open project in DIALux Evo. It really could not be easier.

We hope you will enjoy preparing lighting design proposals and lighting calculations more than ever before.



Industrial plastic

NANOTTICA 14

NANOTTICA ES TRS
energy saver, exceptionally low UGR 16

NANOTTICA ES
energy saver 20

NANOTTICA TRS
exceptionally low UGR 24

NANOTTICA
basic version 28

NANOTTICA NB
for high ceilings 32

NANOTTICA WB
for low ceilings 36

NANOTTICA ES ABS energy saver,
chemically resistant version 40

NANOTTICA ABS
chemically resistant version 44

NANOTTICA NB ABS for high ceilings,
chemically resistant version 48

NANOTTICA WB ABS for low ceilings,
chemically resistant version 52

NANOTTICA VP
for outdoor spaces 56

NANOTTICA VP ABS for outdoor
spaces, chemically resistant version 60

NANOTTICA MAX
for extreme temperatures 64

NANOTTICA CLASS II
with Class II insulation 67

NANOTTICA SNS
with motion detector 71

Industrial plastic

PRIMA 76

PRIMA 78

NEW

PRIMA VP
for outdoor spaces 81

NEW

PRIMA ABS
chemically resistant version 84

NEW

PRIMA VP ABS for outdoor
spaces, chemically resistant version 87

NEW

PRIMA VALUE
value version 90

NEW

PRIMA VALUE ABS
value, chemically resistant version 93

NEW

PRIMA CLASS II
with Class II insulation 96

NEW

PRIMA TRS
exceptionally low UGR 99

NEW

PRIMA SNS
with motion detector 102

NEW

INNOVA 106

INNOVA 108

INNOVA NB
for high ceilings 111

INNOVA WB
for low ceilings 114

INNOVA ABS
chemically resistant version 117

INNOVA NB ABS for high ceilings,
chemically resistant version 120

Industrial plastic

INNOVA WB ABS for low ceilings,
chemically resistant version 123

INNOVA TRS
for both direct and indirect illumina 126

FUTURA 130

FUTURA, ES PC, HE PC 132

FUTURA VP
for outdoor spaces 143

FUTURA NB
for high ceilings 147

FUTURA ABS, ES ABS, HE ABS
chemically resistant version 150

FUTURA CLASS II
with Class II insulation 160

FUTURA MAX
for extreme temperatures 164

FUTURA SNS
with motion detector 167

FROST 172

FROST
for cold stores and freezing facilities 174

FROST PLUS
for cold stores and freezing facilities 177

MIDDLE EAST Ta 55 180

MIDDLE EAST Ta 55 182

Industrial plastic

PRIMA LED 186

PRIMA LED 188

PRIMA LED VP
for outdoor spaces 191

PRIMA LED ABS
chemically resistant version 194

PRIMA LED CLASS II
with Class II insulation 197

PRIMA LED TRS
for both direct and indirect illumina 200

PRIMA LED MAX
for extreme temperatures 203

PRIMA LED SNS
with motion detector 205

PRIMA LED Ex
for explosion-hazard environment 208

PRIMA LED TUBE 211

PRIMA LED TUBE SLIM 214

NEW

RED, BLUE, HCL

CONCEPT RED
with red light module 218

CONCEPT BLUE
with blue light module 220

HUMAN CENTRIC LIGHTING
to boost circadian rhythms 222

TW

Industrial metal

TrEx 226

TrEx
for explosion-hazard environment 228

PERUN SLIM 234

PERUN SLIM 236

PERUN SLIM Ex 239

NEW

ALUMAX LED 242

ALUMAX LED 244

ALUMAX LED MAX
for extreme temperatures 247

CANOPUS 252

CANOPUS 254

CANOPUS HE
high efficiency 261

LANUS 266

LANUS SQUARE 268

NEW

LANUS ROUND 270

NEW

Indoor surface-mounted plastic

LINEA 274

LINEA 276

LINEA SQUARE 278

LINEA ROUND 280

LUXOR LED 284

LUXOR LED 286

SB LED 290

SB LED 292

LYRA 294

LYRA 296

Indoor surface-mounted plastic

BELTR LED 298

BELTR LED 300

BELTR LED TUBE 303

NAOS 308

NAOS 310

NAOS AS 313

NAOS SQUARE 315

NAOS MPR 317

NAOS SQUARE MPR 320

MO SLIM 324

MO SLIM 326

Emergency light fittings

Emergency 330

PRIMA LED NM 332

PRIMA LED Ex NM 335

FUTURA NM 337

PRIMA NM 340

PERUN SLIM Ex NM 343

NEW

BELTR LED NM 346

HELIOS LED 349

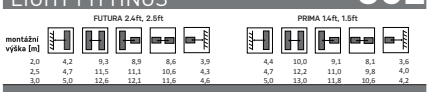
PLEXI LED 352

Additional information

INFORMATION 356

DALI PROFESSIONAL CONTROL 356

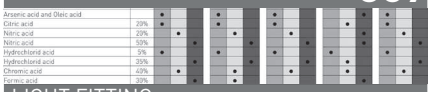
PROPOSAL OF EMERGENCY LIGHT FITTINGS 362



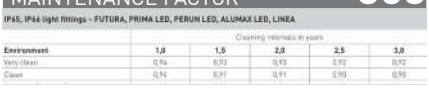
CORRIDOR FUNCTION 364

SOURCE COLOUR RENDERING 366

CHEMICAL RESISTANCE 367



LIGHT FITTING MAINTENANCE FACTOR 368



IP66 (Ingress Protection) code for protection level against dust, solid items and water.

IP69 Test of protection against hot water high-pressure jets.

up to a 45°C Nominal maximum temperature of environment

850°C Fire and ignition resistance at test by hot loop heated to 850 °C

IK 10 Code for protection level against external impact
Anti-vandalism version

LED LED light fitting

WARRANTY 5 Light fitting with 5-year warranty. It does not cover light fittings fitted with emergency module (2 years) and batteries (6 months).

D Light fitting external surface warming

Class 1 light fitting - basic insulation, plus terminal for guard wire

Class 2 light fitting

220-240 V 50/60 Hz Nominal input voltage 220-240V, 50/60 Hz

DALI Electric equipment:
with digital dimmable driver DALI

1F 1 phase through-wiring connection

3F 3 phase through-wiring connection

EMERGENCY Electric equipment: for emergency illumination with own independent source

Electrical equipment: a microwave motion sensor

CRI >80 The colour rendering index determines the colour sensation accuracy at other than daily lighting

CCT 4000 K 3 SDCM The chromaticity temperature determines the colour spectrum of the light (it is given in Kelvin - K)

L90 B10 During the stated operation life and under observance of the specified operating conditions, no more than 10% (B10) chips could experience defaults and the total luminous flux of the light fitting will not drop under 90% (L90).

CE Conformity mark documenting conformity verification of product with all EU harmonising provisions

Licence mark indicating product conformity with European standards for electric safety of product

The mark is registered at the CENELEC as a Czech mark expressing the permanent conformity of a product with electrical safety standards

CB test Internationally acknowledged certificate. Product certification according to IEC standards

EMC Electromagnetic compatibility

EAC Certificate of the United Customs Union (Russia, Belarus, Kazakhstan, Armenia, Kyrgyzstan)

Ex Light fitting intended for environments with danger of explosion

HACCP Declaration of conformity with legal norms for food industry

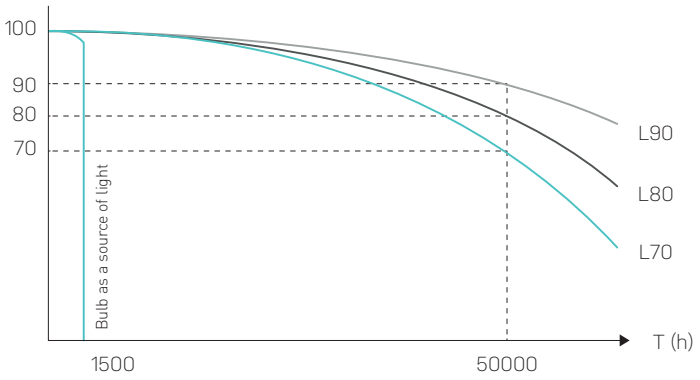
DLG The light fitting complies with the relevant requirements of the German Agricultural Society (DLG) and may be installed in agricultural buildings.

BALL-PROOF The luminaire complies with the resistance requirements as per DIN 18032-3 and DIN EN 13964 and may be installed in sports halls.

Light fittings meet photobiological safety requirements in accordance with the CSN EN 62471:2009 standard. Suitable for use in areas with persons sensitive to UV radiation & the blue visible spectrum (daylight).

EPD The luminaire has the EPD document that transparently describes the environmental impact of our products. This information is gathered through life cycle analysis (LCA), which serves as an objective method for verifying the environmental impact of products according to ISO 14040-49 standards.

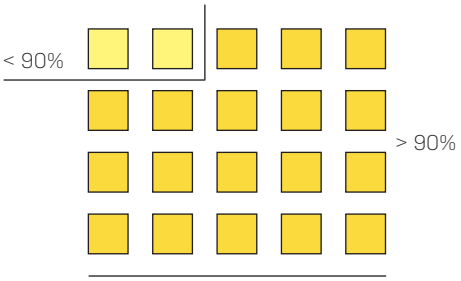
Reliability and long lifespan are some of the key advantages of LED technology. And while it is true that they do not last forever, unlike light bulbs and halogen lamps, LED chips never fail abruptly. Instead, they gradually fade over time until they become too dim.



Sudden failure of traditional light bulbs as opposed to a gradual decrease in output of LEDs

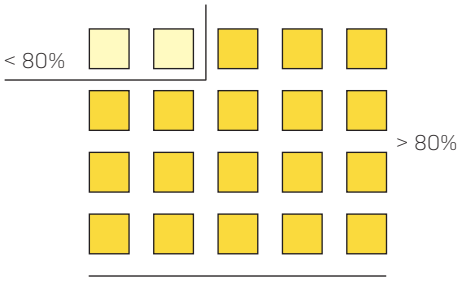
WHAT DOES LxBx MEAN?

L90 B10



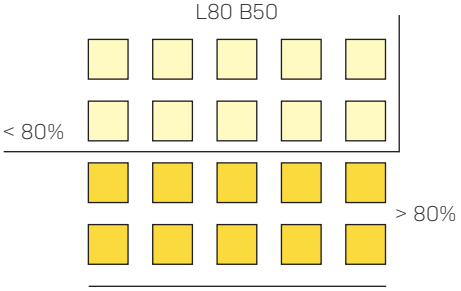
90 % of sources of light retain more than 90 % of their luminous power while the remaining 10 % retain less than 90% of their rated luminous power.

L80 B10



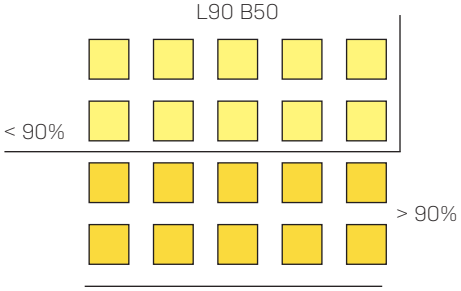
90 % of sources of light retain more than 80 % of their luminous power while the remaining 10 % retain less than 80% of their rated luminous power.

L80 B50



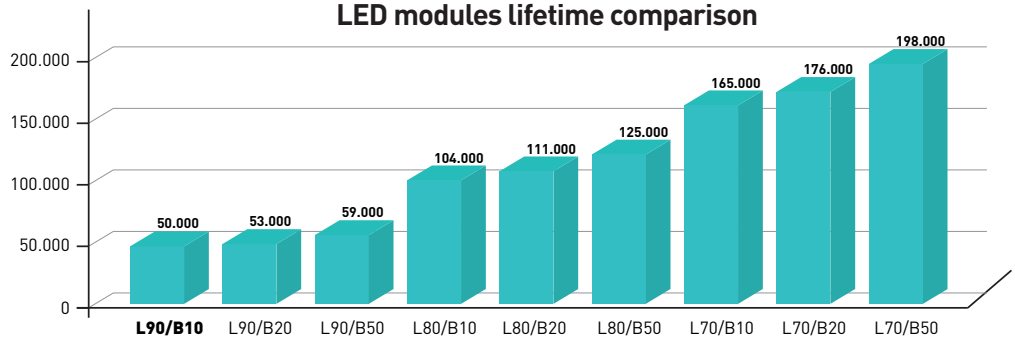
50 % of sources of light retain more than 80 % of their luminous power while the remaining 50 % retain less than 80% of their rated luminous power.

L90 B50



50 % of sources of light retain more than 90 % of their luminous power while the remaining 50 % retain less than 90% of their rated luminous power.

The values shown are based on LM-80 and TM-21 standards. TREVOS LED modules' standard lifespan is indicated by their L90B10 rating. All lifespans exceeding 60.000 hours are calculated without taking into consideration other possible types of failure. The stated lifespans are indicative only and not covered by the warranty.



The given values apply to the ambient temperatures prescribed for each luminaire type and for luminaires with a given luminous power.

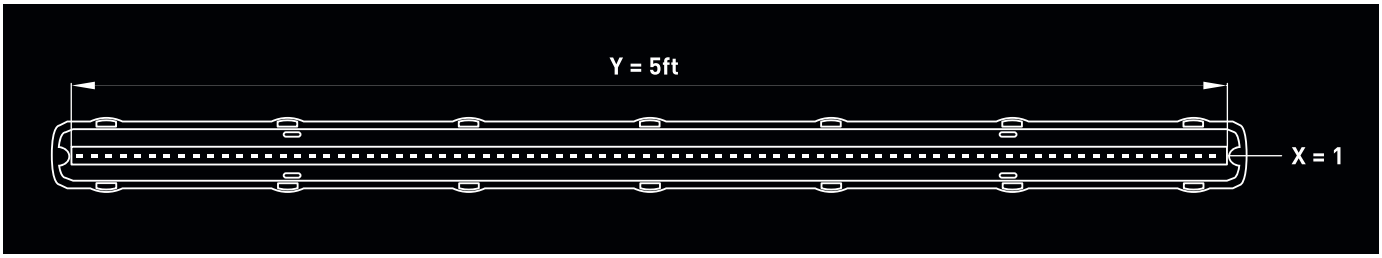
LIGHT FITTING NAME X.Yft

X
- total number of LED module rows in light
- X = {1, 2, 4, 5, 6, 7}

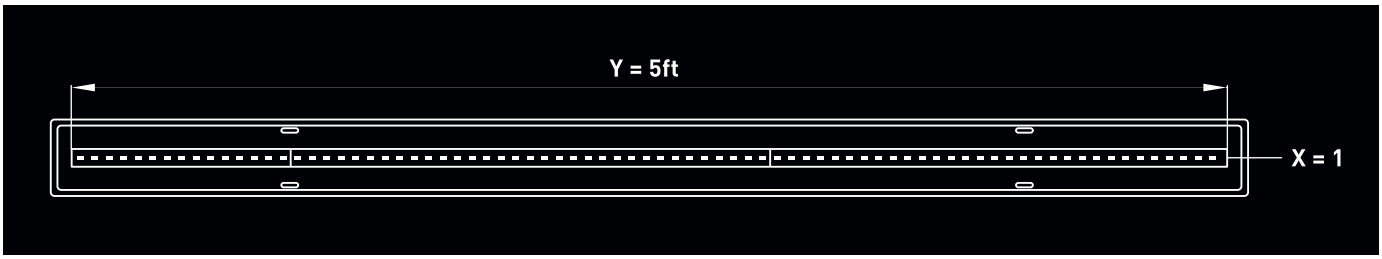
Y
- total length of LED modules in one row
- Y = {1, 2, 4, 5}

ft
- unit of length
- 1ft = 1 feet (280 mm)

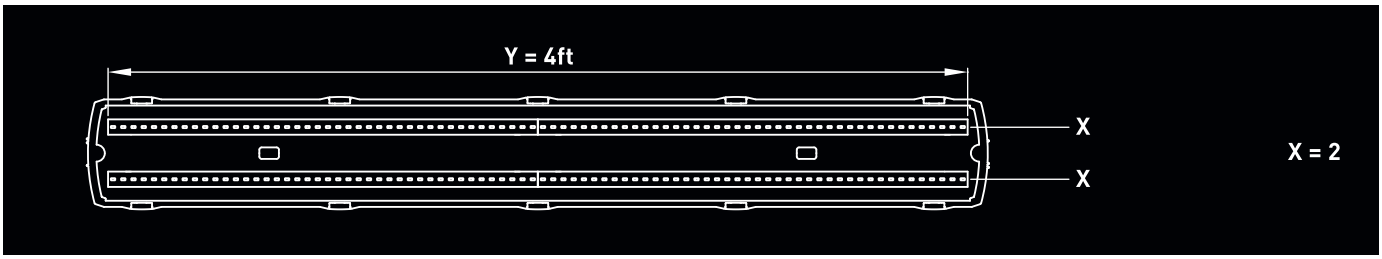
NANOTTICA 1.5ft
- X = 1
- Y = 5ft



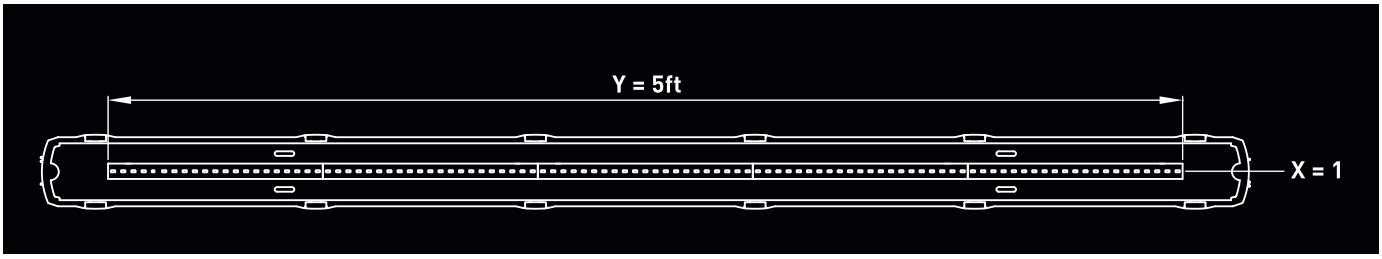
INNOVA 1.5ft
- X = 1
- Y = 5ft



FUTURA 2.4ft
- X = 2
- Y = 4ft



PRIMA LED 1.5ft
- X = 1
- Y = 5ft



TAKE A SNEAK PEEK

The future of commercial lighting

Every year we come up with something new, be it a fixture we have just launched or a redesign of one that we have been offering for a while. In any case, we respect the needs of the market and do our best to suit each client's requirements.

Our new NANOTTICA LED light fitting family has been developed with an emphasis on reducing energy consumption while keeping the same luminous power.

Modern design process with BIM objects

Not only have we prepared BIM objects for our most popular luminaires – NANOTTICA, INNOVA, FUTURA, LINEA and PRIMA LED. We pioneered the use of BIM objects by becoming the first in the Czech Republic to offer them for this type of luminaires. Currently, designers and architects are welcome to download BIM plugins for Archicad or Revit.

bim.lighting

Are LED fittings worth it?

Here is one of the most frequently asked questions: Is investing in TREVOS LEDs and replacing an existing fluorescent lighting system worth it? Most probably yes! You can calculate replacement costs as well as your energy savings using our easy-to-use app.

return.trevos.cz

Luminaires deserve their own videos

Don't believe that exciting videos can be made about light fittings? Then check out our YouTube channel! There's an installation speed test video featuring two differently connected light fittings. There's one that shows you how to build a Trevos exhibition stand. And there are many more that introduce our products and manufacturing processes as well as test our light fittings.

YouTube

Keeping you posted on all things Trevos

Like us on Facebook to keep in touch with what we do. Be the first to check out our new and redesigned products, photos of our production floor and from trade fairs, and lots more. Feel free to like, share and comment.

facebook.com/trevoslighting

Sharing information with professionals

We also share info about our products as well as news on LinkedIn, though in a more formal way.

linkedin.com/company/trevos-a-s-

Hashtag TREVOS

Guess what! We have just started using a #hashtag. It gives our fans access to unusual product photos and short vids, exciting news about a product we are about to launch or redesign, and lots more.

#trevoslighting

Want us to keep you posted about all things Trevos? Contact us at **marketing@trevos.cz**

TREVOS.EU

NANOTTICA

INDUSTRIAL

PLASTIC

DUSTPROOF

WATERPROOF

IMPACT RESISTANT

NANOTTICA – industrial plastic LED light fitting

NANOTTICA ENERGY SAVER, EXCEPTIONALLY LOW UGR
page 16
IP66 IP69

NANOTTICA ES TRS
PC, PCc
page 16

NANOTTICA ES
ENERGY SAVER
page 20
IP66 IP69

NANOTTICA ES
PC, PCc
page 20

NANOTTICA
EXCEPTIONALLY LOW UGR
page 24
IP66 IP69

NANOTTICA TRS
PC, PCc
page 24

NANOTTICA
BASIC VERSION
page 28
IP66 IP69

NANOTTICA
PC, PCc
page 28

NANOTTICA
FOR HIGH CEILINGS
page 32
IP66 IP69

NANOTTICA NB
PC, PCc
page 32

NANOTTICA
FOR LOW CEILINGS
page 36
IP66 IP69

NANOTTICA WB
PC, PCc
page 36

NANOTTICA ENERGY SAVER, CHEMICALLY RESISTANT VERSION
page 40
IP66 IP69

NANOTTICA ES
ABS, ABSc
page 40

NANOTTICA CHEMICALLY RESISTANT VERSION
page 44
IP66 IP69

NANOTTICA
ABS, ABSc
page 44

NANOTTICA FOR HIGH CEILINGS, CHEMICALLY RESISTANT VERSION
page 48
IP66 IP69

NANOTTICA NB
ABS, ABSc
page 48

NANOTTICA FOR LOW CEILINGS, CHEMICALLY RESISTANT VERSION
page 52
IP66 IP69

NANOTTICA WB
ABS, ABSc
page 52

NANOTTICA FOR OUTDOOR SHELTERED SPACES
page 56
IP66 IP69

NANOTTICA VP
PC, PCc
page 56

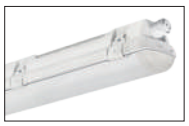
NANOTTICA FOR OUTDOOR SHELTERED SPACES, CHEMICALLY RESISTANT VERSION
page 60
IP66 IP69

NANOTTICA VP
ABS, ABSc
page 60

NANOTTICA
FOR EXTREME TEMPERATURES
page 64
IP66 IP69

NANOTTICA MAX
PCc
page 64

NANOTTICA WITH CLASS II INSULATION
page 67
IP66 IP69



NANOTTICA CLASS II
PC, PCc
page 67

NANOTTICA WITH MOTION DETECTOR
page 71
IP66 IP69

NANOTTICA SNS
PC, PCc
page 71

NANOTTICA
ACCESSORIES
page 75

NANOTTICA
ACCESSORIES
page 75

BIM ready
www.bim.lighting

NANOTTICA ES TRS

... energy saver, exceptional efficiency and UGR, ceiling height from 3.5 to 8 m, impact resistant.

USE

Compared to its basic version, **fully transparent** Nanottica ES TRS PC boasts considerably **lower UGR values** as well as **lower energy consumption**, the latter translating into considerably **higher luminous efficacy (lm/W)**.

The fitting is highly recommended for **illumination of premises where workers' visual precision is of paramount importance.** These include workshops where fine assembly work is performed as well as craft workshops and visual inspection areas.

Its **standard beam angle** makes it a perfect choice for premises with an optimum luminaire installation height of **3.5 to 8 m**. It is designed for indoor spaces, **industrial premises, agricultural buildings, warehouses as well as sports facilities, transport hubs, car parks and garages, workshops and laboratories** with no explosion hazard. IP69-rated and HACCP-compliant, the fitting's design also makes it a great choice for the food industry.

Made of clear polycarbonate, the base and the diffuser boast **high impact and deformation resistance.** Emissions in the environment of use may reduce the usability of the plastics; for more information see page 367.

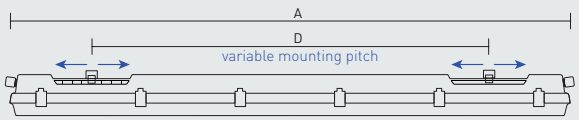
ADVANTAGES

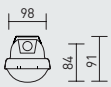
- Maximum light fitting efficiency: **171 lm/W**
- Patented optics ensures absolute control over light beam distribution
- Exceptionally low UGR values **range from 17.1 to 22.5**
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from ta = -25 °C to **ta = 50 °C**
- Lifetime: 50 000 hours / L90B10
- High **mechanical resistance IK10**
- **Variable suspension pitch,** optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- Optional throughwiring (up to 7 wires inside the light fitting)
- Standard model CRI > 80: 4000 K
- On request CRI > 80: 3000 K, 5000 K, 6500 K
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- Optional delivery in dimmable version
- Certificates: **EPD, ESČ, ENEC, CB, HACCP**

NANOTTICA ES TRS PC, PCc

TECHNICAL DESCRIPTION

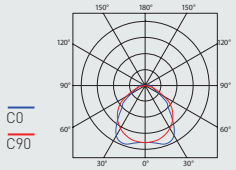
- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 50 °C**
- Maximum ambient temperature: ta = 0-25 °C for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **171 lm/W**
- **UGR ranging from 17.1 to 22.5**
- Optimum luminaire installation height **from 3.5 to 8 m**
- **CRI > 80: 4000 K** – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: **transparent PC with nanooptics** (high mechanical resistance, UV stability)
- Body: **transparent PC** (high mechanical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5 (standard), or rubber (SBS)
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %





UGR EVALUATED FOR	
X = 4 H, Y = 8 H	S = 0.25 H
Reflectivity	70/50/20

NANOTTICA 1.5ft ES TRS



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature ta = 50 °C - body transparent polycarbonate - diffusor with nanooptics (standard beam angle), transparent polycarbonate									
NANOTTICA 1,2ft ES TRS PC 1300/840	50	1350	1270	7,6	167	17,1 / 18,9	0,9	610	110 - 370
NANOTTICA 1.2ft ES TRS PC 1600/840	50	1600	1500	9,1	165	17,7 / 19,5	0,9	610	110 - 370
NANOTTICA 1.2ft ES TRS PC 2200/840	45	2200	2070	12,3	168	18,8 / 20,6	0,9	610	110 - 370
NANOTTICA 1.4ft ES TRS PC 2600/840	50	2690	2530	15,3	165	17,3 / 19,4	1,7	1170	700 - 960
NANOTTICA 1.4ft ES TRS PC 3200/840	50	3190	3000	18,2	165	17,9 / 20,0	1,7	1170	700 - 960
NANOTTICA 1.4ft ES TRS PC 4400/840	45	4380	4120	24,6	167	19,0 / 21,1	1,7	1170	700 - 960
NANOTTICA 1.4ft ES TRS PC 6400/840	45	6220	5850	34,2	171	20,3 / 22,3	1,7	1170	700 - 960
NANOTTICA 1.5ft ES TRS PC 3250/840	50	3310	3110	18,5	168	17,3 / 19,4	2,0	1450	970 - 1230
NANOTTICA 1.5ft ES TRS PC 4000/840	50	3940	3700	22,2	167	17,9 / 20,0	2,0	1450	970 - 1230
NANOTTICA 1.5ft ES TRS PC 5500/840	45	5560	5230	30,9	169	19,1 / 21,2	2,0	1450	970 - 1230
NANOTTICA 1.5ft ES TRS PC 8000/840	45	8170	7680	44,8	171	20,5 / 22,5	2,0	1450	970 - 1230

NANOTTICA ES TRS PC

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
103134	NANOTTICA 1.2ft ES TRS PC 1300/840	103145	103156	x	x	x	x
103135	NANOTTICA 1.2ft ES TRS PC 1600/840	103146	103157	x	x	x	x
103136	NANOTTICA 1.2ft ES TRS PC 2200/840	103147	103158	x	x	x	x
103137	NANOTTICA 1.4ft ES TRS PC 2600/840	103148	103159	103170	103178	103186	103194
103138	NANOTTICA 1.4ft ES TRS PC 3200/840	103149	103160	103171	103179	103187	103195
103139	NANOTTICA 1.4ft ES TRS PC 4400/840	103150	103161	103172	103180	103188	103196
103140	NANOTTICA 1.4ft ES TRS PC 6400/840	103151	103162	103173	103181	103189	103197
103141	NANOTTICA 1.5ft ES TRS PC 3250/840	103152	103163	103174	103182	103190	103198
103142	NANOTTICA 1.5ft ES TRS PC 4000/840	103153	103164	103175	103183	103191	103199
103143	NANOTTICA 1.5ft ES TRS PC 5500/840	103154	103165	103176	103184	103192	103200
103144	NANOTTICA 1.5ft ES TRS PC 8000/840	103155	103166	103177	103185	103193	103201

NANOTTICA ES TRS PCc

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
103202	NANOTTICA 1.2ft ES TRS PCc 1300/840	103213	103224	x	x	x	x
103203	NANOTTICA 1.2ft ES TRS PCc 1600/840	103214	103225	x	x	x	x
103204	NANOTTICA 1.2ft ES TRS PCc 2200/840	103215	103226	x	x	x	x
103205	NANOTTICA 1.4ft ES TRS PCc 2600/840	103216	103227	103238	103246	103254	103262
103206	NANOTTICA 1.4ft ES TRS PCc 3200/840	103217	103228	103239	103247	103255	103263
103207	NANOTTICA 1.4ft ES TRS PCc 4400/840	103218	103229	103240	103248	103256	103264
103208	NANOTTICA 1.4ft ES TRS PCc 6400/840	103219	103230	103241	103249	103257	103265
103209	NANOTTICA 1.5ft ES TRS PCc 3250/840	103220	103231	103242	103250	103258	103266
103210	NANOTTICA 1.5ft ES TRS PCc 4000/840	103221	103232	103243	103251	103259	103267
103211	NANOTTICA 1.5ft ES TRS PCc 5500/840	103222	103233	103244	103252	103260	103268
103212	NANOTTICA 1.5ft ES TRS PCc 8000/840	103223	103234	103245	103253	103261	103269

NANOTTICA ES TRS PC DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
103270	NANOTTICA 1.2ft ES TRS PC 1300/840 DALI	103281	x	x	x	x	x
103271	NANOTTICA 1.2ft ES TRS PC 1600/840 DALI	103282	x	x	x	x	x
103272	NANOTTICA 1.2ft ES TRS PC 2200/840 DALI	103283	x	x	x	x	x
103273	NANOTTICA 1.4ft ES TRS PC 2600/840 DALI	103284	103295	103306	103314	103322	103330
103274	NANOTTICA 1.4ft ES TRS PC 3200/840 DALI	103285	103296	103307	103315	103323	103331
103275	NANOTTICA 1.4ft ES TRS PC 4400/840 DALI	103286	103297	103308	103316	103324	103332
103276	NANOTTICA 1.4ft ES TRS PC 6400/840 DALI	103287	103298	103309	103317	103325	103333
103277	NANOTTICA 1.5ft ES TRS PC 3250/840 DALI	103288	103299	103310	103318	103326	103334
103278	NANOTTICA 1.5ft ES TRS PC 4000/840 DALI	103289	103300	103311	103319	103327	103335
103279	NANOTTICA 1.5ft ES TRS PC 5500/840 DALI	103290	103301	103312	103320	103328	103336
103280	NANOTTICA 1.5ft ES TRS PC 8000/840 DALI	103291	103302	103313	103321	103329	103337

NANOTTICA ES TRS PCc DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
103338	NANOTTICA 1.2ft ES TRS PCc 1300/840 DALI	103349	x	x	x	x	x
103339	NANOTTICA 1.2ft ES TRS PCc 1600/840 DALI	103350	x	x	x	x	x
103340	NANOTTICA 1.2ft ES TRS PCc 2200/840 DALI	103351	x	x	x	x	x
103341	NANOTTICA 1.4ft ES TRS PCc 2600/840 DALI	103352	103363	103374	103382	103390	103398
103342	NANOTTICA 1.4ft ES TRS PCc 3200/840 DALI	103353	103364	103375	103383	103391	103399
103343	NANOTTICA 1.4ft ES TRS PCc 4400/840 DALI	103354	103365	103376	103384	103392	103400
103344	NANOTTICA 1.4ft ES TRS PCc 6400/840 DALI	103355	103366	103377	103385	103393	103401
103345	NANOTTICA 1.5ft ES TRS PCc 3250/840 DALI	103356	103367	103378	103386	103394	103402
103346	NANOTTICA 1.5ft ES TRS PCc 4000/840 DALI	103357	103368	103379	103387	103395	103403
103347	NANOTTICA 1.5ft ES TRS PCc 5500/840 DALI	103358	103369	103380	103388	103396	103404
103348	NANOTTICA 1.5ft ES TRS PCc 8000/840 DALI	103359	103370	103381	103389	103397	103405

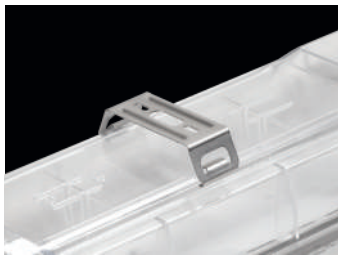
LEGEND

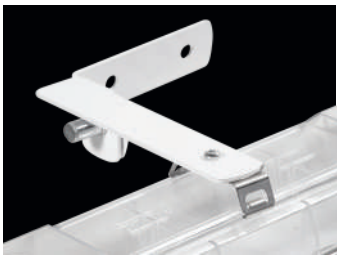
1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

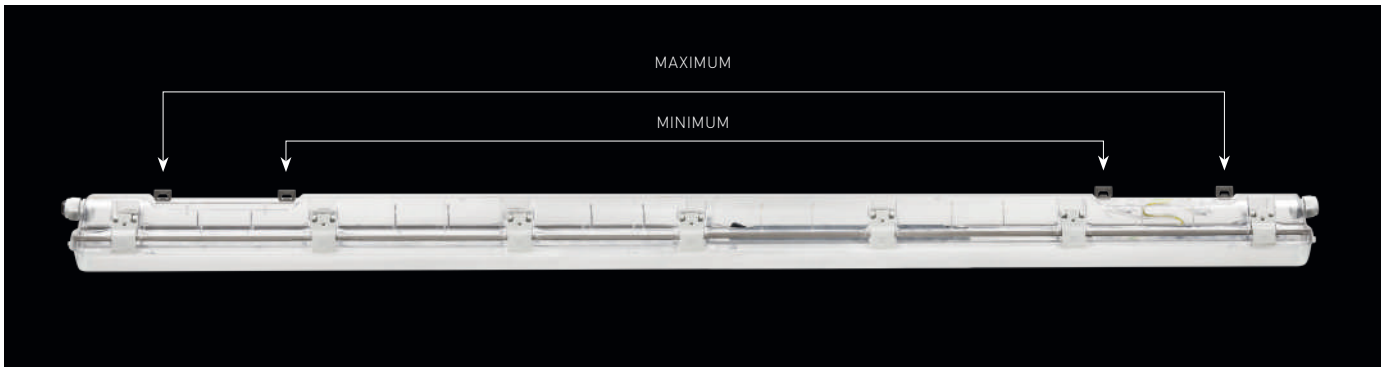
a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories





VARIABLE INSTALLATION PITCH

NANOTTICA ES TRS



LIGHT FITTING DETAILED VIEW

NANOTTICA ES TRS

NANOTTICA ES

... energy saver, exceptional efficiency, ceiling height from 3.5 to 8 m, impact resistant.

USE

Compared to its basic version, Nanottica ES boasts **lower energy consumption**, which translates into **considerably higher luminous efficacy (lm/W).**

The fitting is highly recommended for **illumination of premises where workers' visual precision is of paramount importance.** These include workshops where fine assembly work is performed as well as craft workshops and visual inspection areas.

Its **standard beam angle** makes it a perfect choice for premises with an optimum luminaire installation height of **3.5 to 8 m**. It is designed for indoor spaces, **industrial premises, agricultural buildings, warehouses as well as sports facilities, transport hubs, car parks and garages, workshops and laboratories** with no explosion hazard. IP69-rated and HACCP-compliant, the fitting's design also makes it a great choice for the food industry.

Made of clear polycarbonate, the base and the diffuser boast **high impact and deformation resistance.** Emissions in the environment of use may reduce the usability of the plastics; for more information see page 367.

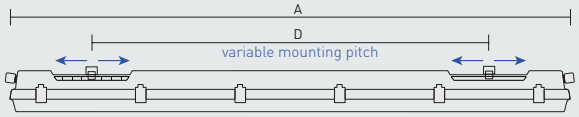
ADVANTAGES

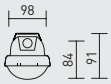
- Maximum light fitting efficiency: **171 lm/W**
- Patented optics ensures absolute control over light beam distribution
- Low **UGR ranging from 19.2 to 23.6**
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from ta = -25 °C to **ta = 50 °C**
- Lifetime: 50 000 hours / L90B10
- High **mechanical resistance IK10**
- **Variable suspension pitch,** optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- Optional throughwiring (up to 7 wires inside the light fitting)
- Standard model CRI > 80: 4000 K
- On request CRI > 80: 3000 K, 5000 K, 6500 K
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- Optional delivery in dimmable version
- Certificates: **EPD, ESČ, ENEC, CB, HACCP**

NANOTTICA ES PC, PCc

TECHNICAL DESCRIPTION

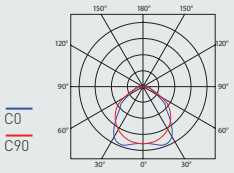
- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 50 °C**
- Maximum ambient temperature: ta = 0-25 °C for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **171 lm/W**
- **UGR ranging from 19.2 to 23.6**
- Optimum luminaire installation height **from 3.5 to 8 m**
- **CRI > 80: 4000 K** – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: **transparent PC with nanooptics** (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5 (standard), or rubber (SBS)
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %





UGR EVALUATED FOR	
X = 4 H, Y = 8 H	S = 0.25 H
Reflectivity	70/50/20

NANOTTICA 1.5ft ES



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature ta = 50 °C - body: grey polycarbonate - diffusor with nanooptics (standard beam angle), transparent polycarbonate									
NANOTTICA 1.2ft ES PC 1300/840	50	1350	1270	7,6	167	19,2 / 20,1	0,9	610	110 - 370
NANOTTICA 1.2ft ES PC 1600/840	50	1600	1500	9,1	165	19,8 / 20,7	0,9	610	110 - 370
NANOTTICA 1.2ft ES PC 2200/840	45	2200	2070	12,3	168	20,9 / 21,8	0,9	610	110 - 370
NANOTTICA 1.4ft ES PC 2600/840	50	2690	2530	15,3	165	19,4 / 20,4	1,7	1170	700 - 960
NANOTTICA 1.4ft ES PC 3200/840	50	3190	3000	18,2	165	19,9 / 21,0	1,7	1170	700 - 960
NANOTTICA 1.4ft ES PC 4400/840	45	4380	4120	24,6	167	21,0 / 22,1	1,7	1170	700 - 960
NANOTTICA 1.4ft ES PC 6400/840	45	6220	5850	34,2	171	22,3 / 23,4	1,7	1170	700 - 960
NANOTTICA 1.5ft ES PC 3250/840	50	3310	3110	18,5	168	19,3 / 20,4	2,0	1450	970 - 1230
NANOTTICA 1.5ft ES PC 4000/840	50	3940	3700	22,2	167	19,9 / 21,1	2,0	1450	970 - 1230
NANOTTICA 1.5ft ES PC 5500/840	45	5560	5230	30,9	169	21,1 / 22,3	2,0	1450	970 - 1230
NANOTTICA 1.5ft ES PC 8000/840	45	8170	7680	44,8	171	22,5 / 23,6	2,0	1450	970 - 1230

NANOTTICA ES PC

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
102550	NANOTTICA 1.2ft ES PC 1300/840	102561	102572	x	x	x	x
102551	NANOTTICA 1.2ft ES PC 1600/840	102562	102573	x	x	x	x
102552	NANOTTICA 1.2ft ES PC 2200/840	102563	102574	x	x	x	x
102553	NANOTTICA 1.4ft ES PC 2600/840	102564	102575	102586	102594	102602	102610
102554	NANOTTICA 1.4ft ES PC 3200/840	102565	102576	102587	102595	102603	102611
102555	NANOTTICA 1.4ft ES PC 4400/840	102566	102577	102588	102596	102604	102612
102556	NANOTTICA 1.4ft ES PC 6400/840	102567	102578	102589	102597	102605	102613
102557	NANOTTICA 1.5ft ES PC 3250/840	102568	102579	102590	102598	102606	102614
102558	NANOTTICA 1.5ft ES PC 4000/840	102569	102580	102591	102599	102607	102615
102559	NANOTTICA 1.5ft ES PC 5500/840	102570	102581	102592	102600	102608	102616
102560	NANOTTICA 1.5ft ES PC 8000/840	102571	102582	102593	102601	102609	102617

NANOTTICA ES PCc

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
102618	NANOTTICA 1.2ft ES PCc 1300/840	102629	102640	x	x	x	x
102619	NANOTTICA 1.2ft ES PCc 1600/840	102630	102641	x	x	x	x
102620	NANOTTICA 1.2ft ES PCc 2200/840	102631	102642	x	x	x	x
102621	NANOTTICA 1.4ft ES PCc 2600/840	102632	102643	102654	102662	102670	102678
102622	NANOTTICA 1.4ft ES PCc 3200/840	102633	102644	102655	102663	102671	102679
102623	NANOTTICA 1.4ft ES PCc 4400/840	102634	102645	102656	102664	102672	102680
102624	NANOTTICA 1.4ft ES PCc 6400/840	102635	102646	102657	102665	102673	102681
102625	NANOTTICA 1.5ft ES PCc 3250/840	102636	102647	102658	102666	102674	102682
102626	NANOTTICA 1.5ft ES PCc 4000/840	102637	102648	102659	102667	102675	102683
102627	NANOTTICA 1.5ft ES PCc 5500/840	102638	102649	102660	102668	102676	102684
102628	NANOTTICA 1.5ft ES PCc 8000/840	102639	102650	102661	102669	102677	102685

NANOTTICA ES PC DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
102686	NANOTTICA 1.2ft ES PC 1300/840 DALI	102697	x	x	x	x	x
102687	NANOTTICA 1.2ft ES PC 1600/840 DALI	102698	x	x	x	x	x
102688	NANOTTICA 1.2ft ES PC 2200/840 DALI	102699	x	x	x	x	x
102689	NANOTTICA 1.4ft ES PC 2600/840 DALI	102700	102711	102722	102730	102738	102746
102690	NANOTTICA 1.4ft ES PC 3200/840 DALI	102701	102712	102723	102731	102739	102747
102691	NANOTTICA 1.4ft ES PC 4400/840 DALI	102702	102713	102724	102732	102740	102748
102692	NANOTTICA 1.4ft ES PC 6400/840 DALI	102703	102714	102725	102733	102741	102749
102693	NANOTTICA 1.5ft ES PC 3250/840 DALI	102704	102715	102726	102734	102742	102750
102694	NANOTTICA 1.5ft ES PC 4000/840 DALI	102705	102716	102727	102735	102743	102751
102695	NANOTTICA 1.5ft ES PC 5500/840 DALI	102706	102717	102728	102736	102744	102752
102696	NANOTTICA 1.5ft ES PC 8000/840 DALI	102707	102718	102729	102737	102745	102753

NANOTTICA ES PCc DALI

Digital dimmable driver DALI - stainless clips (c)

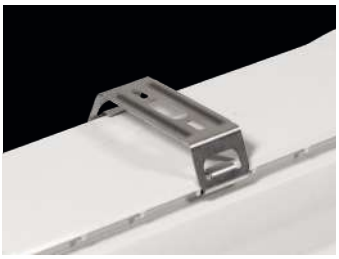
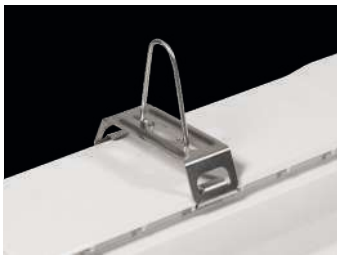
Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
102754	NANOTTICA 1.2ft ES PCc 1300/840 DALI	102765	x	x	x	x	x
102755	NANOTTICA 1.2ft ES PCc 1600/840 DALI	102766	x	x	x	x	x
102756	NANOTTICA 1.2ft ES PCc 2200/840 DALI	102767	x	x	x	x	x
102757	NANOTTICA 1.4ft ES PCc 2600/840 DALI	102768	102779	102790	102798	102806	102814
102758	NANOTTICA 1.4ft ES PCc 3200/840 DALI	102769	102780	102791	102799	102807	102815
102759	NANOTTICA 1.4ft ES PCc 4400/840 DALI	102770	102781	102792	102800	102808	102816
102760	NANOTTICA 1.4ft ES PCc 6400/840 DALI	102771	102782	102793	102801	102809	102817
102761	NANOTTICA 1.5ft ES PCc 3250/840 DALI	102772	102783	102794	102802	102810	102818
102762	NANOTTICA 1.5ft ES PCc 4000/840 DALI	102773	102784	102795	102803	102811	102819
102763	NANOTTICA 1.5ft ES PCc 5500/840 DALI	102774	102785	102796	102804	102812	102820
102764	NANOTTICA 1.5ft ES PCc 8000/840 DALI	102775	102786	102797	102805	102813	102821

LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

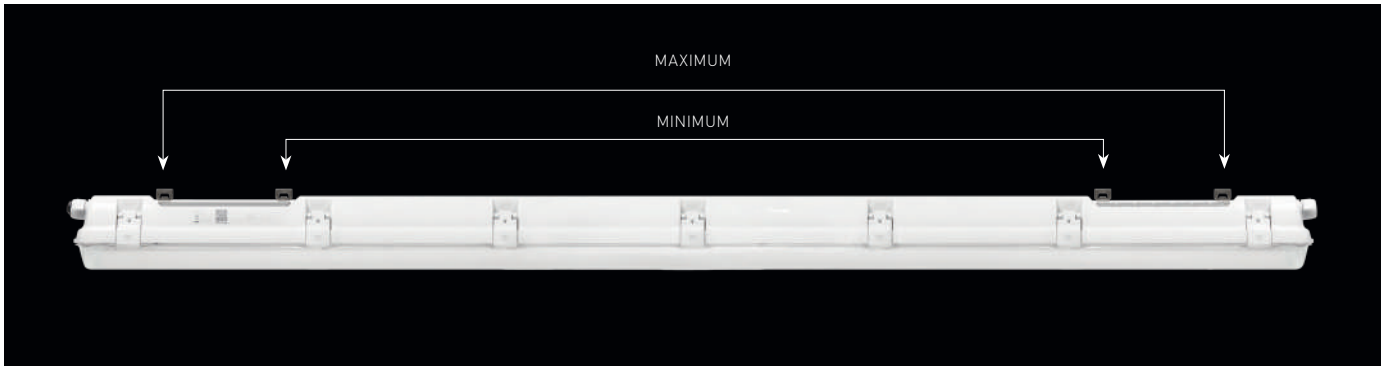
LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories

VARIABLE INSTALLATION PITCH

NANOTTICA ES PC



LIGHT FITTING DETAILED VIEW

NANOTTICA ES PC

NANOTTICA TRS

... exceptionally low UGR, ceiling height from 3.5 to 8 m, impact resistant.

USE

Compared to its basic version, **fully transparent** Nanottica TRS PC boasts considerably **lower UGR values**.

The fitting is highly recommended for **illumination of premises where workers' visual precision is of paramount importance.** These include workshops where fine assembly work is performed as well as craft workshops and visual inspection areas.

Its **standard beam angle** makes it a perfect choice for premises with an optimum luminaire installation height of **3.5 to 8 m**. It is designed for indoor spaces, **industrial premises, agricultural buildings, warehouses as well as sports facilities, transport hubs, car parks and garages, workshops and laboratories** with no explosion hazard. IP69-rated and HACCP-compliant, the fitting's design also makes it a great choice for the food industry.

Made of clear polycarbonate, the base and the diffuser boast **high impact and deformation resistance.** Emissions in the environment of use may reduce the usability of the plastics; for more information see page 367.

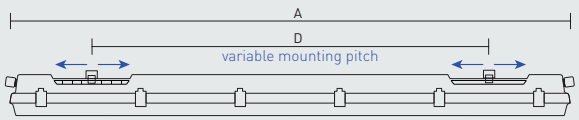
ADVANTAGES

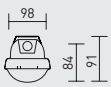
- Maximum light fitting efficiency: **165 lm/W**
- Patented optics ensures absolute control over light beam distribution
- Exceptionally low UGR values **range from 17,0 to 22,4**
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from ta = -25 °C to **ta = 50 °C**
- Lifetime: 50 000 hours / L90B10
- High **mechanical resistance IK10**
- **Variable suspension pitch,** optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- Optional throughwiring (up to 7 wires inside the light fitting)
- Standard model CRI > 80: 4000 K
- On request CRI > 80: 3000 K, 5000 K, 6500 K
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- Optional delivery in dimmable version
- Certificates: **EPD, ESČ, ENEC, CB, HACCP**

NANOTTICA TRS PC, PCc

TECHNICAL DESCRIPTION

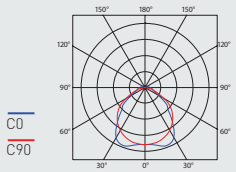
- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 50 °C**
- Maximum ambient temperature: ta = 0-25 °C for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **165 lm/W**
- **UGR ranging from 17,0 to 22,4**
- Optimum luminaire installation height **from 3.5 to 8 m**
- **CRI > 80: 4000 K** – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: **transparent PC with nanooptics** (high mechanical resistance, UV stability)
- Body: **transparent PC** (high mechanical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5 (standard), or rubber (SBS)
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %





UGR EVALUATED FOR	
X = 4 H, Y = 8 H	S = 0.25 H
Reflectivity	70/50/20

NANOTTICA 1.5ft TRS



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature ta = 50 °C - body transparent polycarbonate - diffusor with nanooptics (standard beam angle), transparent polycarbonate									
NANOTTICA 1.2ft TRS PC 1300/840	50	1310	1230	8,2	150	17.0 / 18.8	0,9	610	110 - 370
NANOTTICA 1.2ft TRS PC 1600/840	50	1560	1470	9,8	150	17.6 / 19.4	0,9	610	110 - 370
NANOTTICA 1.2ft TRS PC 2200/840	45	2140	2010	13,2	152	18.7 / 20.5	0,9	610	110 - 370
NANOTTICA 1.4ft TRS PC 2600/840	50	2600	2440	16,1	152	17.2 / 19.2	1,7	1170	700 - 960
NANOTTICA 1.4ft TRS PC 3200/840	50	3100	2910	19,1	152	17.8 / 19.8	1,7	1170	700 - 960
NANOTTICA 1.4ft TRS PC 4400/840	45	4300	4040	26,0	155	19.0 / 21.0	1,7	1170	700 - 960
NANOTTICA 1.4ft TRS PC 6400/840	45	6120	5750	36,1	159	20.2 / 22.2	1,7	1170	700 - 960
NANOTTICA 1.5ft TRS PC 3250/840	50	3240	3050	19,5	156	17.3 / 19.3	2,0	1450	970 - 1230
NANOTTICA 1.5ft TRS PC 4000/840	50	3850	3620	23,3	155	17.9 / 19.9	2,0	1450	970 - 1230
NANOTTICA 1.5ft TRS PC 5500/840	45	5340	5020	31,9	157	19.0 / 21.1	2,0	1450	970 - 1230
NANOTTICA 1.5ft TRS PC 8000/840	45	7780	7310	44,3	165	20.3 / 22.4	2,0	1450	970 - 1230

NANOTTICA TRS PC

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
103118	NANOTTICA 1.2ft TRS PC 1300/840	103121	101563	x	x	x	x
103119	NANOTTICA 1.2ft TRS PC 1600/840	101553	101564	x	x	x	x
103120	NANOTTICA 1.2ft TRS PC 2200/840	101554	101565	x	x	x	x
101544	NANOTTICA 1.4ft TRS PC 2600/840	101555	101566	101577	101585	101593	101601
101545	NANOTTICA 1.4ft TRS PC 3200/840	101556	101567	101578	101586	101594	101602
101546	NANOTTICA 1.4ft TRS PC 4400/840	101557	101568	101579	101587	101595	101603
101547	NANOTTICA 1.4ft TRS PC 6400/840	101558	101569	101580	101588	101596	101604
101548	NANOTTICA 1.5ft TRS PC 3250/840	101559	101570	101581	101589	101597	101605
101549	NANOTTICA 1.5ft TRS PC 4000/840	101560	101571	101582	101590	101598	101606
101550	NANOTTICA 1.5ft TRS PC 5500/840	101561	101572	101583	101591	101599	101607
101551	NANOTTICA 1.5ft TRS PC 8000/840	101562	101573	101584	101592	101600	101608

NANOTTICA TRS PCc

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
101609	NANOTTICA 1.2ft TRS PCc 1300/840	101620	101631	x	x	x	x
101610	NANOTTICA 1.2ft TRS PCc 1600/840	101621	101632	x	x	x	x
101611	NANOTTICA 1.2ft TRS PCc 2200/840	101622	101633	x	x	x	x
101612	NANOTTICA 1.4ft TRS PCc 2600/840	101623	101634	101645	101653	101661	x
101613	NANOTTICA 1.4ft TRS PCc 3200/840	101624	101635	101646	101654	101662	101670
101614	NANOTTICA 1.4ft TRS PCc 4400/840	101625	101636	101647	101655	101663	101671
101615	NANOTTICA 1.4ft TRS PCc 6400/840	101626	101637	101648	101656	101664	101672
101616	NANOTTICA 1.5ft TRS PCc 3250/840	101627	101638	101649	101657	101665	101673
101617	NANOTTICA 1.5ft TRS PCc 4000/840	101628	101639	101650	101658	101666	101674
101618	NANOTTICA 1.5ft TRS PCc 5500/840	101629	101640	101651	101659	101667	101675
101619	NANOTTICA 1.5ft TRS PCc 8000/840	101630	101641	101652	101660	101668	101676

NANOTTICA TRS PC DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
101677	NANOTTICA 1.2ft TRS PC 1300/840 DALI	101688	x	x	x	x	x
101678	NANOTTICA 1.2ft TRS PC 1600/840 DALI	101689	x	x	x	x	x
101679	NANOTTICA 1.2ft TRS PC 2200/840 DALI	101690	x	x	x	x	x
101680	NANOTTICA 1.4ft TRS PC 2600/840 DALI	101691	101702	101713	101721	101729	101737
101681	NANOTTICA 1.4ft TRS PC 3200/840 DALI	101692	101703	101714	101722	101730	101738
101682	NANOTTICA 1.4ft TRS PC 4400/840 DALI	101693	101704	101715	101723	101731	101739
101683	NANOTTICA 1.4ft TRS PC 6400/840 DALI	101694	101705	101716	101724	101732	101740
101684	NANOTTICA 1.5ft TRS PC 3250/840 DALI	101695	101706	101717	101725	101733	101741
101685	NANOTTICA 1.5ft TRS PC 4000/840 DALI	101696	101707	101718	101726	101734	101742
101686	NANOTTICA 1.5ft TRS PC 5500/840 DALI	101697	101708	101719	101727	101735	101743
101687	NANOTTICA 1.5ft TRS PC 8000/840 DALI	101698	101709	101720	101728	101736	101744

NANOTTICA TRS PCc DALI

Digital dimmable driver DALI - stainless clips (c)

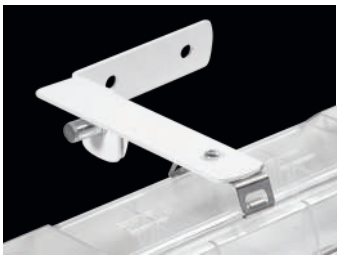
Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
101745	NANOTTICA 1.2ft TRS PCc 1300/840 DALI	101756	x	x	x	x	x
101746	NANOTTICA 1.2ft TRS PCc 1600/840 DALI	101757	x	x	x	x	x
101747	NANOTTICA 1.2ft TRS PCc 2200/840 DALI	101758	x	x	x	x	x
101748	NANOTTICA 1.4ft TRS PCc 2600/840 DALI	101759	101770	101781	101789	101797	101805
101749	NANOTTICA 1.4ft TRS PCc 3200/840 DALI	101760	101771	101782	101790	101798	101806
101750	NANOTTICA 1.4ft TRS PCc 4400/840 DALI	101761	101772	101783	101791	101799	101807
101751	NANOTTICA 1.4ft TRS PCc 6400/840 DALI	101762	101773	101784	101792	101800	101808
101752	NANOTTICA 1.5ft TRS PCc 3250/840 DALI	101763	101774	101785	101793	101801	101809
101753	NANOTTICA 1.5ft TRS PCc 4000/840 DALI	101764	101775	101786	101794	101802	101810
101754	NANOTTICA 1.5ft TRS PCc 5500/840 DALI	101765	101776	101787	101795	101803	101811
101755	NANOTTICA 1.5ft TRS PCc 8000/840 DALI	101766	101777	101788	101796	101804	101812

LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

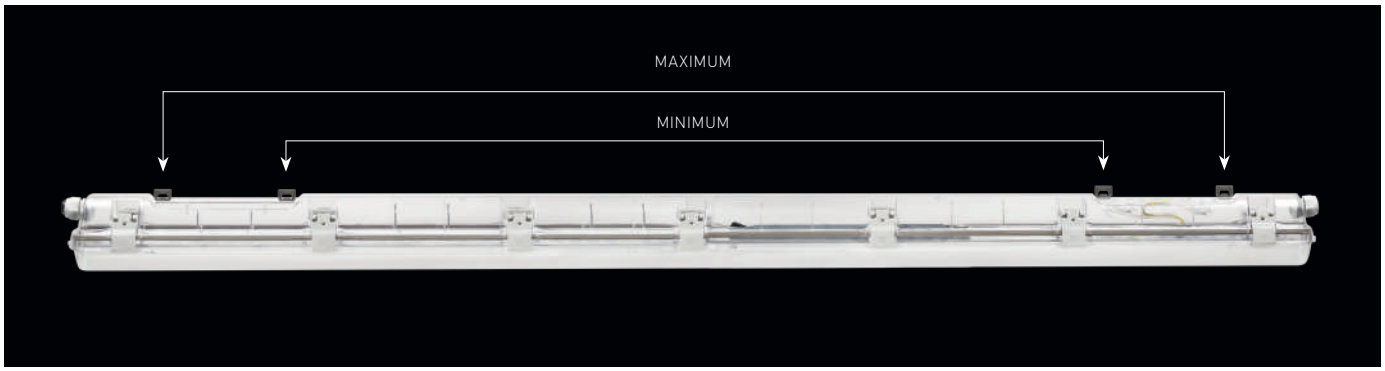
LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories



VARIABLE INSTALLATION PITCH

NANOTTICA TRS



LIGHT FITTING DETAILED VIEW

NANOTTICA TRS

NANOTTICA

... ceiling height from 3.5 to 8 m, impact resistant.

USE

The fixture boasts a **low unified glare rating with UGR values** its patented nanooptics. This ensures eye comfort, **high visual performance and workplace safety,** which indirectly **translates into higher productivity.**

The fitting is highly recommended for **illumination of premises where workers' visual precision is of paramount importance.** These include workshops where fine assembly work is performed as well as craft workshops and visual inspection areas.

Its **standard beam angle** makes it a perfect choice for premises with an optimum luminaire installation height of **3.5 to 8 m**. It is designed for indoor spaces, **industrial premises, agricultural buildings, warehouses as well as sports facilities, transport hubs, car parks and garages, workshops and laboratories** with no explosion hazard. IP69-rated and HACCP-compliant, the fitting's design also makes it a great choice for the food industry.

Made of clear polycarbonate, the base and the diffuser boast **high impact and deformation resistance.** Emissions in the environment of use may reduce the usability of the plastics; for more information see page 367.

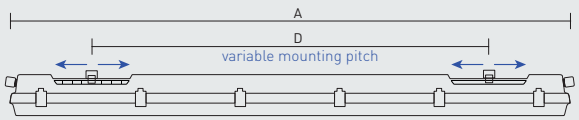
ADVANTAGES

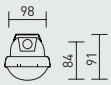
- Patented optics ensures absolute control over light beam distribution
- Low **UGR ranging from 19,1 to 23,4**
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from ta = -25°C to **ta = 50°C**
- Lifetime: 50 000 hours / L90B10
- High **mechanical resistance IK10**
- **Variable suspension pitch,** optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- Optional throughwiring (up to 7 wires inside the light fitting)
- Standard model CRI > 80: 4000 K
- On request CRI > 80: 3000 K, 5000 K, 6500 K
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- Optional delivery in dimmable version
- Certificates: **EPD, ESČ, ENEC, CB, HACCP**

NANOTTICA PC, PCc

TECHNICAL DESCRIPTION

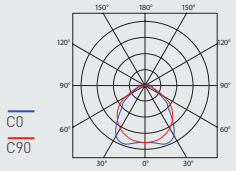
- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 50 °C**
- Maximum ambient temperature: ta = 0-25 °C for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **165 lm/W**
- **UGR ranging from 19,1 to 23,4**
- Optimum luminaire installation height **from 3.5 to 8 m**
- **CRI > 80: 4000 K** – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: **transparent PC with nanooptics** (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5 (standard), or rubber (SBS)
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %





UGR EVALUATED FOR	
X = 4 H, Y = 8 H	S = 0.25 H
Reflectivity	70/50/20

NANOTTICA 1.5ft



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature ta = 50 °C - body: grey polycarbonate - diffusor with nanooptics (standard beam angle), transparent polycarbonate									
NANOTTICA 1.2ft PC 1300/840	50	1310	1230	8,2	150	19.1 / 20.0	0,9	610	110 - 370
NANOTTICA 1.2ft PC 1600/840	50	1560	1470	9,8	150	19.7 / 20.7	0,9	610	110 - 370
NANOTTICA 1.2ft PC 2200/840	45	2140	2010	13,2	152	20.8 / 21.7	0,9	610	110 - 370
NANOTTICA 1.4ft PC 2600/840	50	2600	2440	16,1	152	19.2 / 20.3	1,7	1170	700 - 960
NANOTTICA 1.4ft PC 3200/840	50	3100	2910	19,1	152	19.8 / 20.9	1,7	1170	700 - 960
NANOTTICA 1.4ft PC 4400/840	45	4300	4040	26,0	155	21.0 / 22.1	1,7	1170	700 - 960
NANOTTICA 1.4ft PC 6400/840	45	6120	5750	36,1	159	22.2 / 23.3	1,7	1170	700 - 960
NANOTTICA 1.5ft PC 3250/840	50	3240	3050	19,5	156	19.3 / 20.4	2,0	1450	970 - 1230
NANOTTICA 1.5ft PC 4000/840	50	3850	3620	23,3	155	19.9 / 21.0	2,0	1450	970 - 1230
NANOTTICA 1.5ft PC 5500/840	45	5340	5020	31,9	157	21.0 / 22.1	2,0	1450	970 - 1230
NANOTTICA 1.5ft PC 8000/840	45	7780	7310	44,3	165	22.3 / 23.4	2,0	1450	970 - 1230

NANOTTICA PC

Code	Type	Non-dimmable driver - plastic clips					
		1F	3F	M1h	M3h	3F M1h	3F M3h
100001	NANOTTICA 1.2ft PC 1300/840	100012	100023	x	x	x	x
100002	NANOTTICA 1.2ft PC 1600/840	100013	100024	x	x	x	x
100003	NANOTTICA 1.2ft PC 2200/840	100014	100025	x	x	x	x
100004	NANOTTICA 1.4ft PC 2600/840	100015	100026	100037	100045	100053	100061
100005	NANOTTICA 1.4ft PC 3200/840	100016	100027	100038	100046	100054	100062
100006	NANOTTICA 1.4ft PC 4400/840	100017	100028	100039	100047	100055	100063
100007	NANOTTICA 1.4ft PC 6400/840	100018	100029	100040	100048	100056	100064
100008	NANOTTICA 1.5ft PC 3250/840	100019	100030	100041	100049	100057	100065
100009	NANOTTICA 1.5ft PC 4000/840	100020	100031	100042	100050	100058	100066
100010	NANOTTICA 1.5ft PC 5500/840	100021	100032	100043	100051	100059	100067
100011	NANOTTICA 1.5ft PC 8000/840	100022	100033	100044	100052	100060	100068

NANOTTICA PCc

Code	Type	Non-dimmable driver - stainless clips (c)					
		1F	3F	M1h	M3h	3F M1h	3F M3h
100069	NANOTTICA 1.2ft PCc 1300/840	100080	100091	x	x	x	x
100070	NANOTTICA 1.2ft PCc 1600/840	100081	100092	x	x	x	x
100071	NANOTTICA 1.2ft PCc 2200/840	100082	100093	x	x	x	x
100072	NANOTTICA 1.4ft PCc 2600/840	100083	100094	100105	100113	100121	100129
100073	NANOTTICA 1.4ft PCc 3200/840	100084	100095	100106	100114	100122	100130
100074	NANOTTICA 1.4ft PCc 4400/840	100085	100096	100107	100115	100123	100131
100075	NANOTTICA 1.4ft PCc 6400/840	100086	100097	100108	100116	100124	100132
100076	NANOTTICA 1.5ft PCc 3250/840	100087	100098	100109	100117	100125	100133
100077	NANOTTICA 1.5ft PCc 4000/840	100088	100099	100110	100118	100126	100134
100078	NANOTTICA 1.5ft PCc 5500/840	100089	100100	100111	100119	100127	100135
100079	NANOTTICA 1.5ft PCc 8000/840	100090	100101	100112	100120	100128	100136

NANOTTICA PC DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
100137	NANOTTICA 1.2ft PC 1300/840 DALI	100148	x	x	x	x	x
100138	NANOTTICA 1.2ft PC 1600/840 DALI	100149	x	x	x	x	x
100139	NANOTTICA 1.2ft PC 2200/840 DALI	100150	x	x	x	x	x
100140	NANOTTICA 1.4ft PC 2600/840 DALI	100151	100162	100173	100181	100189	100197
100141	NANOTTICA 1.4ft PC 3200/840 DALI	100152	100163	100174	100182	100190	100198
100142	NANOTTICA 1.4ft PC 4400/840 DALI	100153	100164	100175	100183	100191	100199
100143	NANOTTICA 1.4ft PC 6400/840 DALI	100154	100165	100176	100184	100192	100200
100144	NANOTTICA 1.5ft PC 3250/840 DALI	100155	100166	100177	100185	100193	100201
100145	NANOTTICA 1.5ft PC 4000/840 DALI	100156	100167	100178	100186	100194	100202
100146	NANOTTICA 1.5ft PC 5500/840 DALI	100157	100168	100179	100187	100195	100203
100147	NANOTTICA 1.5ft PC 8000/840 DALI	100158	100169	100180	100188	100196	100204

NANOTTICA PCc DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
100205	NANOTTICA 1.2ft PCc 1300/840 DALI	100216	x	x	x	x	x
100206	NANOTTICA 1.2ft PCc 1600/840 DALI	100217	x	x	x	x	x
100207	NANOTTICA 1.2ft PCc 2200/840 DALI	100218	x	x	x	x	x
100208	NANOTTICA 1.4ft PCc 2600/840 DALI	100219	100230	100241	100249	100257	100265
100209	NANOTTICA 1.4ft PCc 3200/840 DALI	100220	100231	100242	100250	100258	100266
100210	NANOTTICA 1.4ft PCc 4400/840 DALI	100221	100232	100243	100251	100259	100267
100211	NANOTTICA 1.4ft PCc 6400/840 DALI	100222	100233	100244	100252	100260	100268
100212	NANOTTICA 1.5ft PCc 3250/840 DALI	100223	100234	100245	100253	100261	100269
100213	NANOTTICA 1.5ft PCc 4000/840 DALI	100224	100235	100246	100254	100262	100270
100214	NANOTTICA 1.5ft PCc 5500/840 DALI	100225	100236	100247	100255	100263	100271
100215	NANOTTICA 1.5ft PCc 8000/840 DALI	100226	100237	100248	100256	100264	100272

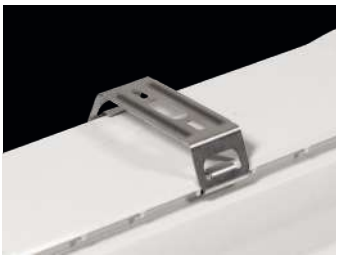
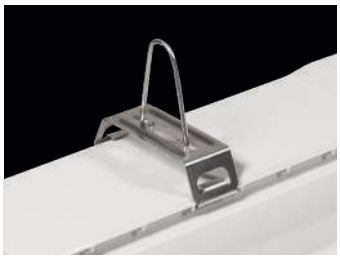
LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

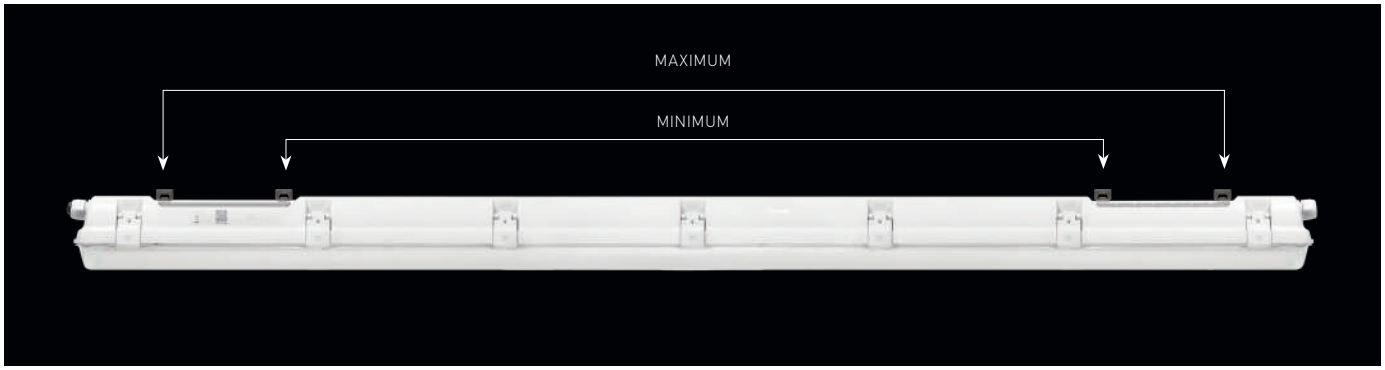
LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories

VARIABLE INSTALLATION PITCH

NANOTTICA PC



LIGHT FITTING DETAILED VIEW

NANOTTICA PC

NANOTTICA NB

... ceiling height from 7.5 to 12 m, impact resistant.

USE

The fixture boasts a **low unified glare rating with UGR values** its patented nanooptics. This ensures eye comfort, **high visual performance and workplace safety**, which indirectly **translates into higher productivity**.

The luminaire's **narrow-beam angle** makes it suitable for premises with an optimum luminaire installation height of **7.5 to 12 m**.

It is designed for indoor spaces, **walls and large corridors in high industrial and agricultural buildings as well as in warehouses and sports facilities. It is also a great choice for warehouse aisles and roofed sports halls.** IP69-rated and HACCP-compliant, the fitting's design also makes it a perfect choice for the food industry.

Made of clear polycarbonate, the base and the diffuser boast **high impact and deformation resistance.**

Emissions in the environment of use may reduce the usability of the plastics; for more information see page 367.

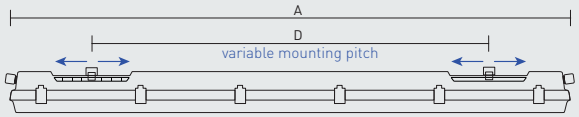
ADVANTAGES

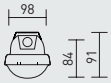
- Patented optics ensures absolute control over light beam distribution
- Low **UGR ranging from 21,6 to 25**
- Narrow Beam angle (NB), optimum luminaire installation height **from 7.5 to 12 m**
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from ta = -25 °C to **ta = 45 °C**
- Lifetime: 50 000 hours / L90B10
- High **mechanical resistance IK10**
- **Variable suspension pitch,** optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- Optional throughwiring (up to 7 wires inside the light fitting)
- Standard model CRI > 80: 4000 K
- On request CRI > 80: 3000 K, 5000 K, 6500 K
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- Optional delivery in dimmable version
- Certificates: **EPD, ESČ, ENEC, CB, HACCP**

NANOTTICA NB PC, PCc

TECHNICAL DESCRIPTION

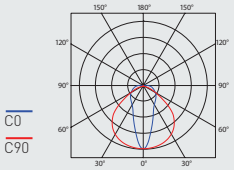
- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 45 °C**
- Maximum ambient temperature: ta = 0-25 °C for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **160 lm/W**
- **UGR ranging from 21,6to 25**
- Optimum luminaire installation height **from 7.5 to 12 m**
- **CRI > 80: 4000 K** – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: **transparent PC with nanooptics Narrow Beam** (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5 (standard), or rubber (SBS)
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %





UGR EVALUATED FOR	
X = 4 H, Y = 8 H	S = 0.25 H
Reflectivity	70/50/20

NANOTTICA 1.5ft NB



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature ta = 45 °C - body: grey polycarbonate - diffusor with nanooptics NB (narrow beam angle), transparent polycarbonate									
NANOTTICA 1.4ft NB PC 4400/840	45	4300	3910	26,0	150	23.7 / 21.6	1,7	1170	700 - 960
NANOTTICA 1.4ft NB PC 6400/840	45	6120	5570	36,1	154	24.9 / 22.8	1,7	1170	700 - 960
NANOTTICA 1.5ft NB PC 5500/840	45	5340	4860	31,9	152	23.7 / 21.6	2,0	1450	970 - 1230
NANOTTICA 1.5ft NB PC 8000/840	45	7780	7080	44,3	160	25.0 / 22.9	2,0	1450	970 - 1230

NANOTTICA NB PC

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
100273	NANOTTICA 1.4ft NB PC 4400/840	100277	100281	100285	100289	100293	100297
100274	NANOTTICA 1.4ft NB PC 6400/840	100278	100282	100286	100290	100294	100298
100275	NANOTTICA 1.5ft NB PC 5500/840	100279	100283	100287	100291	100295	100299
100276	NANOTTICA 1.5ft NB PC 8000/840	100280	100284	100288	100292	100296	100300

NANOTTICA NB PCc

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
100301	NANOTTICA 1.4ft NB PCc 4400/840	100305	100309	100313	100317	100321	100325
100302	NANOTTICA 1.4ft NB PCc 6400/840	100306	100310	100314	100318	100322	100326
100303	NANOTTICA 1.5ft NB PCc 5500/840	100307	100311	100315	100319	100323	100327
100304	NANOTTICA 1.5ft NB PCc 8000/840	100308	100312	100316	100320	100324	100328

NANOTTICA NB PC DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
100329	NANOTTICA 1.4ft NB PC 4400/840 DALI	100333	100337	100341	100345	100349	100353
100330	NANOTTICA 1.4ft NB PC 6400/840 DALI	100334	100338	100342	100346	100350	100354
100331	NANOTTICA 1.5ft NB PC 5500/840 DALI	100335	100339	100343	100347	100351	100355
100332	NANOTTICA 1.5ft NB PC 8000/840 DALI	100336	100340	100344	100348	100352	100356

NANOTTICA NB PCc DALI

Digital dimmable driver DALI - stainless clips (c)

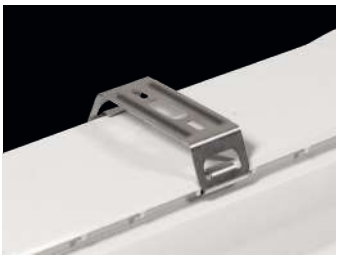
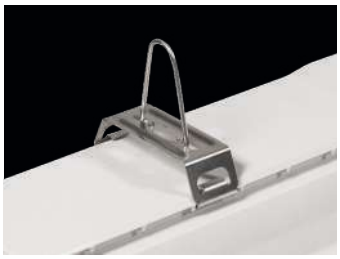
Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
100357	NANOTTICA 1.4ft NB PCc 4400/840 DALI	100361	100365	100369	100373	100377	100381
100358	NANOTTICA 1.4ft NB PCc 6400/840 DALI	100362	100366	100370	100374	100378	100382
100359	NANOTTICA 1.5ft NB PCc 5500/840 DALI	100363	100367	100371	100375	100379	100383
100360	NANOTTICA 1.5ft NB PCc 8000/840 DALI	100364	100368	100372	100376	100380	100384

LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

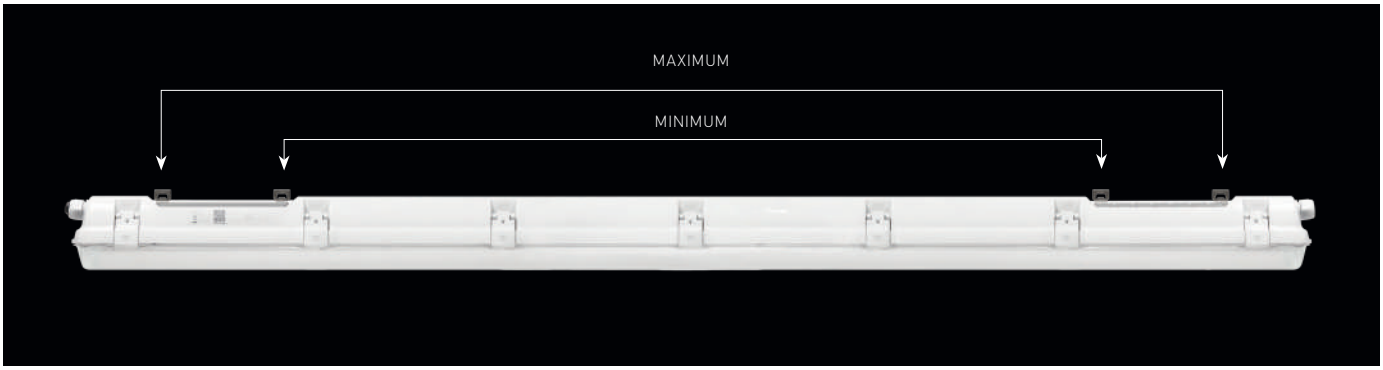
LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories

VARIABLE INSTALLATION PITCH

NANOTTICA NB PC



LIGHT FITTING DETAILED VIEW

NANOTTICA NB PC

NANOTTICA WB

... ceiling height from 2.5 to 4 m, impact resistant.

USE

The fixture boasts a **low unified glare rating with UGR values** its patented nanooptics. This ensures eye comfort, **high visual performance and workplace safety**, which indirectly **translates into higher productivity.**

The fitting is highly recommended for **illumination of premises where workers' visual precision is of paramount importance.** These include workshops where fine assembly work is performed as well as craft workshops and visual inspection areas.

The fitting's **wide beam angle** makes it a great choice for premises with an optimum fitting installation height ranging from **2.5 to 4 m**. It is designed for indoor spaces, **production plants, multi-storey car parks and garages as well as workshops, corridors, cellars, pedestrian underpasses and underground spaces with low ceilings**. IP69-rated and HACCP-compliant, the fitting's design also makes it suitable for the food industry.

Made of clear polycarbonate, the base and the diffuser boast **high impact and deformation resistance.** Emissions in the environment of use may reduce the usability of the plastics; for more information see page 367.

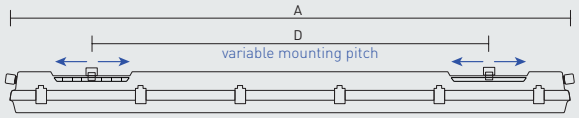
ADVANTAGES

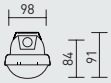
- Patented optics ensures absolute control over light beam distribution
- Wide Beam angle (WB), optimum luminaire installation height from 2.5 to 4 m
- Low **UGR ranging from 20,5 to 25**
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from ta = -25 °C to **ta = 50 °C**
- Lifetime: 50 000 hours / L90B10
- High **mechanical resistance IK10**
- **Variable suspension pitch,** optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- Optional throughwiring (up to 7 wires inside the light fitting)
- Standard model CRI > 80: 4000 K
- On request CRI > 80: 3000 K, 5000 K, 6500 K
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- Optional delivery in dimmable version
- Certificates: **EPD, ESČ, ENEC, CB, HACCP**

NANOTTICA WB PC, PCc

TECHNICAL DESCRIPTION

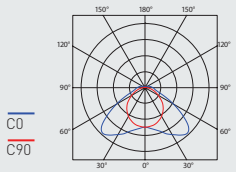
- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 50 °C**
- Maximum ambient temperature: ta = 0-25 °C for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **163 lm/W**
- **UGR ranging from 20,5 to 25**
- Optimum luminaire installation height **from 2.5 to 4 m**
- **CRI > 80: 4000 K** – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: **transparent PC with nanooptics Wide Beam** (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5 (standard), or rubber (SBS)
- Terminal block: screwless and 3-pole (standard version), or screw terminal
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %





UGR EVALUATED FOR	
X = 4 H, Y = 8 H	S = 0.25 H
Reflectivity	70/50/20

NANOTTICA 1.5ft WB



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature ta = 50 °C - body: grey polycarbonate - diffusor with nanooptics WB (wide beam angle), transparent polycarbonate									
NANOTTICA 1.4ft WB PC 2600/840	50	2600	2420	16,1	150	21.9 / 20.5	1,7	1170	700 - 960
NANOTTICA 1.4ft WB PC 3200/840	50	3100	2880	19,1	151	22.5 / 21.1	1,7	1170	700 - 960
NANOTTICA 1.4ft WB PC 4400/840	45	4300	4000	26,0	154	23.6 / 22.3	1,7	1170	700 - 960
NANOTTICA 1.4ft WB PC 6400/840	45	6120	5690	36,1	158	24.9 / 23.5	1,7	1170	700 - 960
NANOTTICA 1.5ft WB PC 3250/840	50	3240	3010	19,5	154	21.9 / 20.6	2,0	1450	970 - 1230
NANOTTICA 1.5ft WB PC 4000/840	50	3850	3580	23,3	154	22.5 / 21.2	2,0	1450	970 - 1230
NANOTTICA 1.5ft WB PC 5500/840	45	5340	4970	31,9	156	23.7 / 22.3	2,0	1450	970 - 1230
NANOTTICA 1.5ft WB PC 8000/840	45	7780	7240	44,3	163	25.0 / 23.6	2,0	1450	970 - 1230

NANOTTICA WB PC

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
100385	NANOTTICA 1.4ft WB PC 2600/840	100393	100401	100409	100417	100425	100433
100386	NANOTTICA 1.4ft WB PC 3200/840	100394	100402	100410	100418	100426	100434
100387	NANOTTICA 1.4ft WB PC 4400/840	100395	100403	100411	100419	100427	100435
100388	NANOTTICA 1.4ft WB PC 6400/840	100396	100404	100412	100420	100428	100436
100389	NANOTTICA 1.5ft WB PC 3250/840	100397	100405	100413	100421	100429	100437
100390	NANOTTICA 1.5ft WB PC 4000/840	100398	100406	100414	100422	100430	100438
100391	NANOTTICA 1.5ft WB PC 5500/840	100399	100407	100415	100423	100431	100439
100392	NANOTTICA 1.5ft WB PC 8000/840	100400	100408	100416	100424	100432	100440

NANOTTICA WB PCc

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
100441	NANOTTICA 1.4ft WB PCc 2600/840	100449	100457	100465	100473	100481	100489
100442	NANOTTICA 1.4ft WB PCc 3200/840	100450	100458	100466	100474	100482	100490
100443	NANOTTICA 1.4ft WB PCc 4400/840	100451	100459	100467	100475	100483	100491
100444	NANOTTICA 1.4ft WB PCc 6400/840	100452	100460	100468	100476	100484	100492
100445	NANOTTICA 1.5ft WB PCc 3250/840	100453	100461	100469	100477	100485	100493
100446	NANOTTICA 1.5ft WB PCc 4000/840	100454	100462	100470	100478	100486	100494
100447	NANOTTICA 1.5ft WB PCc 5500/840	100455	100463	100471	100479	100487	100495
100448	NANOTTICA 1.5ft WB PCc 8000/840	100456	100464	100472	100480	100488	100496

NANOTTICA WB PC DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
100497	NANOTTICA 1.4ft WB PC 2600/840 DALI	100505	100513	100521	100529	100537	100545
100498	NANOTTICA 1.4ft WB PC 3200/840 DALI	100506	100514	100522	100530	100538	100546
100499	NANOTTICA 1.4ft WB PC 4400/840 DALI	100507	100515	100523	100531	100539	100547
100500	NANOTTICA 1.4ft WB PC 6400/840 DALI	100508	100516	100524	100532	100540	100548
100501	NANOTTICA 1.5ft WB PC 3250/840 DALI	100509	100517	100525	100533	100541	100549
100502	NANOTTICA 1.5ft WB PC 4000/840 DALI	100510	100518	100526	100534	100542	100550
100503	NANOTTICA 1.5ft WB PC 5500/840 DALI	100511	100519	100527	100535	100543	100551
100504	NANOTTICA 1.5ft WB PC 8000/840 DALI	100512	100520	100528	100536	100544	100552

NANOTTICA WB PCc DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
100553	NANOTTICA 1.4ft WB PCc 2600/840 DALI	100561	100569	100577	100585	100593	100601
100554	NANOTTICA 1.4ft WB PCc 3200/840 DALI	100562	100570	100578	100586	100594	100602
100555	NANOTTICA 1.4ft WB PCc 4400/840 DALI	100563	100571	100579	100587	100595	100603
100556	NANOTTICA 1.4ft WB PCc 6400/840 DALI	100564	100572	100580	100588	100596	100604
100557	NANOTTICA 1.5ft WB PCc 3250/840 DALI	100565	100573	100581	100589	100597	100605
100558	NANOTTICA 1.5ft WB PCc 4000/840 DALI	100566	100574	100582	100590	100598	100606
100559	NANOTTICA 1.5ft WB PCc 5500/840 DALI	100567	100575	100583	100591	100599	100607
100560	NANOTTICA 1.5ft WB PCc 8000/840 DALI	100568	100576	100584	100592	100600	100608

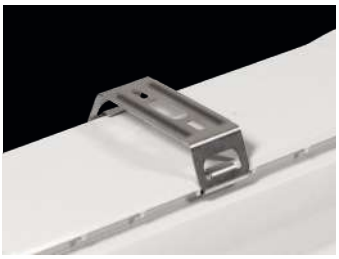
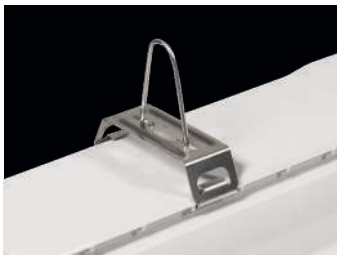
LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

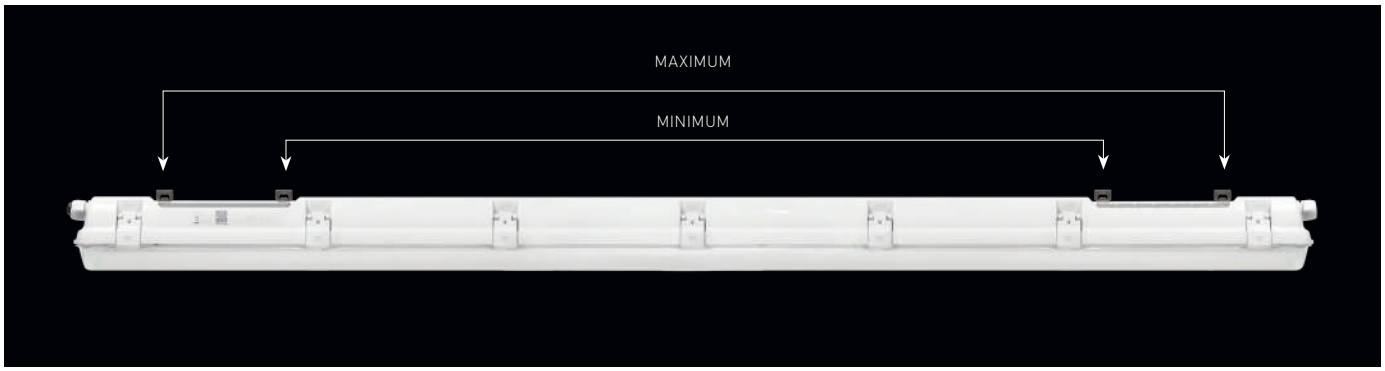
LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories

VARIABLE INSTALLATION PITCH

NANOTTICA WB PC



LIGHT FITTING DETAILED VIEW

NANOTTICA WB PC

NANOTTICA ES ABS

... energy saver, exceptional efficiency, ceiling height from 3.5 to 8 m, chemically resistant.

USE

Compared to its basic version, Nanottica ES ABS boasts **lower energy consumption**, which translates into considerably **higher luminous efficacy (lm/W).**

The fitting is highly recommended for **illumination of premises where workers' visual precision is of paramount importance.** These include workshops where fine assembly work is performed as well as craft workshops and visual inspection areas.

The fitting's standard beam angle makes it a great choice for premises with a fitting installation height of **3.5 to 8 m**. In addition to indoor spaces, it is designed for agricultural buildings and other spaces with chemically aggressive environments due to ammonia fumes, lye fumes, alkali and hot water (hydrolysis). The fitting is primarily intended for large **agricultural premises and industrial halls such as farms, stables, production plants and warehouses, car washes and laboratories** with no explosion hazard. IP69-rated and HACCP-compliant, the fitting's design also makes it suitable for the food industry.

The fitting´s base is made of ABS and diffuser of AC, resulting in their **exceptional chemical resistance**. Emissions in the environment of use may reduce the usability of the plastics; for more information see page 367.

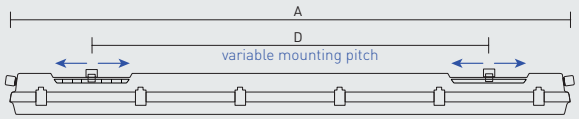
ADVANTAGES

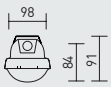
- Maximum light fitting efficiency: **160 lm/W**
- Patented optics ensures absolute control over light beam distribution
- Low **UGR ranging from 18,9 to 23,4**
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from ta = -25°C to **ta = 50°C**
- Lifetime: 50 000 hours / L90B10
- High **chemical resistance**
- **Variable suspension pitch,** optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- Optional throughwiring (up to 7 wires inside the light fitting)
- Standard model CRI > 80: 4000 K
- On request CRI > 80: 3000 K, 5000 K, 6500 K
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- Optional delivery in dimmable version
- Certificates: **EPD, ESČ, ENEC, CB, DLG, HACCP**

NANOTTICA ES ABS, ABSc

TECHNICKÝ POPIS

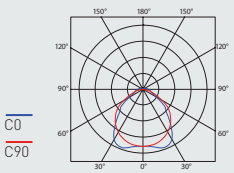
- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 50 °C**
- Maximum ambient temperature: ta = 0-25 °C for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **160 lm/W**
- **UGR ranging from 18,9 to 23,4**
- Optimum luminaire installation height **from 3.5 to 8 m**
- **CRI > 80: 4000 K** – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: **transparent AC with nanooptics** (high chemical resistance, UV stability)
- Body: dark grey ABS (high chemical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5 (standard), or rubber (SBS)
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %





UGR EVALUATED FOR	
X = 4 H, Y = 8 H	S = 0.25 H
Reflectivity	70/50/20

NANOTTICA 1.5ft ES ABS



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature ta = 50 °C - body dark grey ABS - diffusor with nanooptics (standard beam angle), transparent acrylate									
NANOTTICA 1.2ft ES ABS 1300/840	50	1350	1190	7,6	157	18,9 / 19,9	0,9	610	110 - 370
NANOTTICA 1.2ft ES ABS 1600/840	50	1600	1410	9,1	155	19,5 / 20,5	0,9	610	110 - 370
NANOTTICA 1.2ft ES ABS 2200/840	45	2200	1940	12,3	158	20,6 / 21,6	0,9	610	110 - 370
NANOTTICA 1.4ft ES ABS 2600/840	50	2690	2370	15,3	155	19,1 / 20,2	1,7	1170	700 - 960
NANOTTICA 1.4ft ES ABS 3200/840	50	3190	2810	18,2	154	19,7 / 20,8	1,7	1170	700 - 960
NANOTTICA 1.4ft ES ABS 4400/840	45	4380	3850	24,6	157	20,8 / 21,9	1,7	1170	700 - 960
NANOTTICA 1.4ft ES ABS 6400/840	45	6220	5470	34,2	160	22,0 / 23,1	1,7	1170	700 - 960
NANOTTICA 1.5ft ES ABS 3250/840	50	3310	2910	18,5	157	19,1 / 20,2	2,0	1450	970 - 1230
NANOTTICA 1.5ft ES ABS 4000/840	50	3940	3470	22,2	156	19,7 / 20,8	2,0	1450	970 - 1230
NANOTTICA 1.5ft ES ABS 5500/840	45	5560	4890	30,9	158	20,9 / 22,0	2,0	1450	970 - 1230
NANOTTICA 1.5ft ES ABS 8000/840	45	8170	7190	44,8	160	22,2 / 23,4	2,0	1450	970 - 1230

NANOTTICA ES ABS

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
102822	NANOTTICA 1.2ft ES ABS 1300/840	102833	102844	x	x	x	x
102823	NANOTTICA 1.2ft ES ABS 1600/840	102834	102845	x	x	x	x
102824	NANOTTICA 1.2ft ES ABS 2200/840	102835	102846	x	x	x	x
102825	NANOTTICA 1.4ft ES ABS 2600/840	102836	102847	102858	102866	102874	102882
102826	NANOTTICA 1.4ft ES ABS 3200/840	102837	102848	102859	102867	102875	102883
102827	NANOTTICA 1.4ft ES ABS 4400/840	102838	102849	102860	102868	102876	102884
102828	NANOTTICA 1.4ft ES ABS 6400/840	102839	102850	102861	102869	102877	102885
102829	NANOTTICA 1.5ft ES ABS 3250/840	102840	102851	102862	102870	102878	102886
102830	NANOTTICA 1.5ft ES ABS 4000/840	102841	102852	102863	102871	102879	102887
102831	NANOTTICA 1.5ft ES ABS 5500/840	102842	102853	102864	102872	102880	102888
102832	NANOTTICA 1.5ft ES ABS 8000/840	102843	102854	102865	102873	102881	102889

NANOTTICA ES ABSc

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
102890	NANOTTICA 1.2ft ES ABSc 1300/840	102901	102912	x	x	x	x
102891	NANOTTICA 1.2ft ES ABSc 1600/840	102902	102913	x	x	x	x
102892	NANOTTICA 1.2ft ES ABSc 2200/840	102903	102914	x	x	x	x
102893	NANOTTICA 1.4ft ES ABSc 2600/840	102904	102915	102926	102934	102942	102950
102894	NANOTTICA 1.4ft ES ABSc 3200/840	102905	102916	102927	102935	102943	102951
102895	NANOTTICA 1.4ft ES ABSc 4400/840	102906	102917	102928	102936	102944	102952
102896	NANOTTICA 1.4ft ES ABSc 6400/840	102907	102918	102929	102937	102945	102953
102897	NANOTTICA 1.5ft ES ABSc 3250/840	102908	102919	102930	102938	102946	102954
102898	NANOTTICA 1.5ft ES ABSc 4000/840	102909	102920	102931	102939	102947	102955
102899	NANOTTICA 1.5ft ES ABSc 5500/840	102910	102921	102932	102940	102948	102956
102900	NANOTTICA 1.5ft ES ABSc 8000/840	102911	102922	102933	102941	102949	102957

NANOTTICA ES ABS DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
102958	NANOTTICA 1.2ft ES ABS 1300/840 DALI	102969	x	x	x	x	x
102959	NANOTTICA 1.2ft ES ABS 1600/840 DALI	102970	x	x	x	x	x
102960	NANOTTICA 1.2ft ES ABS 2200/840 DALI	102971	x	x	x	x	x
102961	NANOTTICA 1.4ft ES ABS 2600/840 DALI	102972	102983	102994	103002	103010	103018
102962	NANOTTICA 1.4ft ES ABS 3200/840 DALI	102973	102984	102995	103003	103011	103019
102963	NANOTTICA 1.4ft ES ABS 4400/840 DALI	102974	102985	102996	103004	103012	103020
102964	NANOTTICA 1.4ft ES ABS 6400/840 DALI	102975	102986	102997	103005	103013	103021
102965	NANOTTICA 1.5ft ES ABS 3250/840 DALI	102976	102987	102998	103006	103014	103022
102966	NANOTTICA 1.5ft ES ABS 4000/840 DALI	102977	102988	102999	103007	103015	103023
102967	NANOTTICA 1.5ft ES ABS 5500/840 DALI	102978	102989	103000	103008	103016	103024
102968	NANOTTICA 1.5ft ES ABS 8000/840 DALI	102979	102990	103001	103009	103017	103025

NANOTTICA ES ABSc DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
103026	NANOTTICA 1.2ft ES ABSc 1300/840 DALI	103037	x	x	x	x	x
103027	NANOTTICA 1.2ft ES ABSc 1600/840 DALI	103038	x	x	x	x	x
103028	NANOTTICA 1.2ft ES ABSc 2200/840 DALI	103039	x	x	x	x	x
103029	NANOTTICA 1.4ft ES ABSc 2600/840 DALI	103040	103051	103062	103070	103078	103086
103030	NANOTTICA 1.4ft ES ABSc 3200/840 DALI	103041	103052	103063	103071	103079	103087
103031	NANOTTICA 1.4ft ES ABSc 4400/840 DALI	103042	103053	103064	103072	103080	103088
103032	NANOTTICA 1.4ft ES ABSc 6400/840 DALI	103043	103054	103065	103073	103081	103089
103033	NANOTTICA 1.5ft ES ABSc 3250/840 DALI	103044	103055	103066	103074	103082	103090
103034	NANOTTICA 1.5ft ES ABSc 4000/840 DALI	103045	103056	103067	103075	103083	103091
103035	NANOTTICA 1.5ft ES ABSc 5500/840 DALI	103046	103057	103068	103076	103084	103092
103036	NANOTTICA 1.5ft ES ABSc 8000/840 DALI	103047	103058	103069	103077	103085	103093

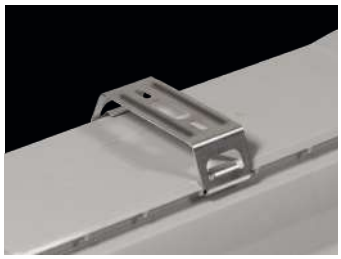
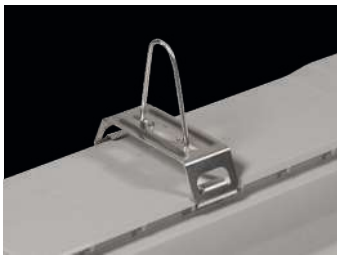
LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

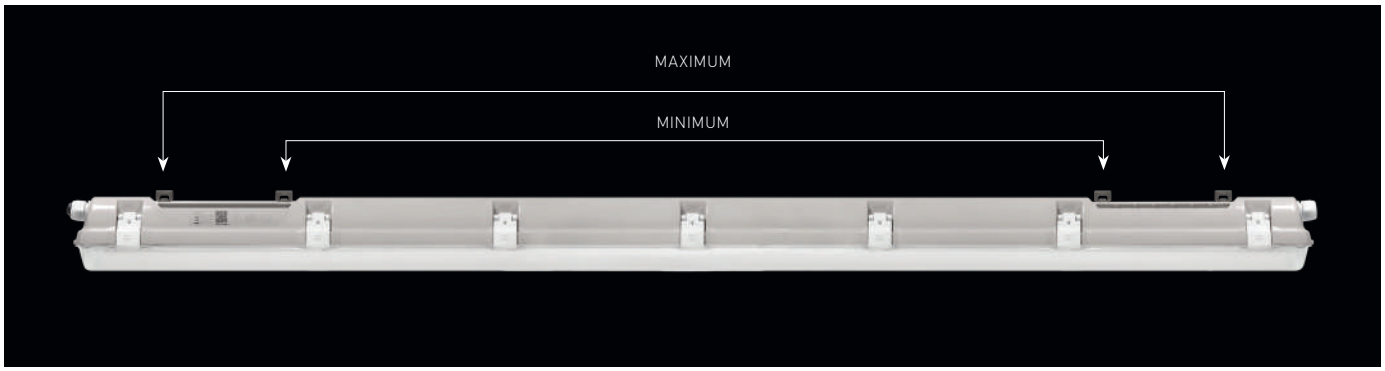
LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories

VARIABLE INSTALLATION PITCH

NANOTTICA ES ABS



LIGHT FITTING DETAILED VIEW

NANOTTICA ES ABS

NANOTTICA ABS

... ceiling height from 3.5 to 8 m, chemically resistant.

USE

The fixture boasts a **low unified glare rating with UGR values** its patented nanooptics. This ensures eye comfort, **high visual performance and workplace safety,** which indirectly **translates into higher productivity.**

The fitting is highly recommended for **illumination of premises where workers' visual precision is of paramount importance.** These include workshops where fine assembly work is performed as well as craft workshops and visual inspection areas.

The fitting's standard beam angle makes it a great choice for premises with a fitting installation height of **3.5 to 8 m**. In addition to indoor spaces, it is designed for agricultural buildings and other spaces with chemically aggressive environments due to ammonia fumes, lye fumes, alkali and hot water (hydrolysis). The fitting is primarily intended for large **agricultural premises and industrial halls such as farms, stables, production plants and warehouses, car washes and laboratories** with no explosion hazard. IP69-rated and HACCP-compliant, the fitting's design also makes it suitable for the food industry.

The fitting´s base is made of ABS and diffuser of AC, resulting in their **exceptional chemical resistance**. Emissions in the environment of use may reduce the usability of the plastics; for more information see page 367.

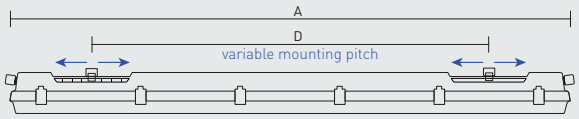
ADVANTAGES

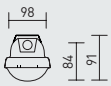
- Patented optics ensures absolute control over light beam distribution
- Low **UGR ranging from 18,8 to 23,2**
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from ta = -25 °C to **ta = 50 °C**
- Lifetime: 50 000 hours / L90B10
- High **chemical resistance**
- **Variable suspension pitch,** optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- Optional throughwiring (up to 7 wires inside the light fitting)
- Standard model CRI > 80: 4000 K
- On request CRI > 80: 3000 K, 5000 K, 6500 K
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- Optional delivery in dimmable version
- Certificates: **EPD, ESČ, ENEC, CB, DLG, HACCP**

NANOTTICA ABS ABSc

TECHNICAL DESCRIPTION

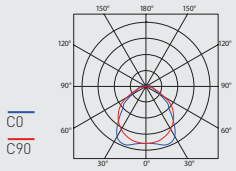
- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 50 °C**
- Maximum ambient temperature: ta = 0-25 °C for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **155 lm/W**
- **UGR ranging from 18,8to 23,2**
- Optimum luminaire installation height **from 3.5 to 8 m**
- **CRI > 80: 4000 K** – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: **transparent AC with nanooptics** (high chemical resistance, UV stability)
- Body: dark grey ABS (high chemical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5 (standard), or rubber (SBS)
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %





UGR EVALUATED FOR	
X = 4 H, Y = 8 H	S = 0.25 H
Reflectivity	70/50/20

NANOTTICA 1.5ft ABS



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature ta = 50 °C - body dark grey ABS - diffusor with nanooptics (standard beam angle), transparent acrylate									
NANOTTICA 1.2ft ABS 1300/840	50	1310	1150	8,2	140	18.8 / 19.8	0,9	610	110 - 370
NANOTTICA 1.2ft ABS 1600/840	50	1560	1370	9,8	140	19.4 / 20.4	0,9	610	110 - 370
NANOTTICA 1.2ft ABS 2200/840	45	2140	1880	13,2	142	20.5 / 21.5	0,9	610	110 - 370
NANOTTICA 1.4ft ABS 2600/840	50	2600	2290	16,1	142	19.0 / 20.1	1,7	1170	700 - 960
NANOTTICA 1.4ft ABS 3200/840	50	3100	2730	19,1	143	19.6 / 20.7	1,7	1170	700 - 960
NANOTTICA 1.4ft ABS 4400/840	45	4300	3780	26,0	145	20.7 / 21.8	1,7	1170	700 - 960
NANOTTICA 1.4ft ABS 6400/840	45	6120	5390	36,1	149	22.0 / 23.1	1,7	1170	700 - 960
NANOTTICA 1.5ft ABS 3250/840	50	3240	2850	19,5	146	19.0 / 20.1	2,0	1450	970 - 1230
NANOTTICA 1.5ft ABS 4000/840	50	3850	3390	23,3	145	19.6 / 20.7	2,0	1450	970 - 1230
NANOTTICA 1.5ft ABS 5500/840	45	5340	4700	31,9	147	20.8 / 21.9	2,0	1450	970 - 1230
NANOTTICA 1.5ft ABS 8000/840	45	7780	6850	44,3	155	22.1 / 23.2	2,0	1450	970 - 1230

NANOTTICA ABS

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
100609	NANOTTICA 1.2ft ABS 1300/840	100620	100631	x	x	x	x
100610	NANOTTICA 1.2ft ABS 1600/840	100621	100632	x	x	x	x
100611	NANOTTICA 1.2ft ABS 2200/840	100622	100633	x	x	x	x
100612	NANOTTICA 1.4ft ABS 2600/840	100623	100634	100645	100653	100661	100669
100613	NANOTTICA 1.4ft ABS 3200/840	100624	100635	100646	100654	100662	100670
100614	NANOTTICA 1.4ft ABS 4400/840	100625	100636	100647	100655	100663	100671
100615	NANOTTICA 1.4ft ABS 6400/840	100626	100637	100648	100656	100664	100672
100616	NANOTTICA 1.5ft ABS 3250/840	100627	100638	100649	100657	100665	100673
100617	NANOTTICA 1.5ft ABS 4000/840	100628	100639	100650	100658	100666	100674
100618	NANOTTICA 1.5ft ABS 5500/840	100629	100640	100651	100659	100667	100675
100619	NANOTTICA 1.5ft ABS 8000/840	100630	100641	100652	100660	100668	100676

NANOTTICA ABSc

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
100677	NANOTTICA 1.2ft ABSc 1300/840	100688	100699	x	x	x	x
100678	NANOTTICA 1.2ft ABSc 1600/840	100689	100700	x	x	x	x
100679	NANOTTICA 1.2ft ABSc 2200/840	100690	100701	x	x	x	x
100680	NANOTTICA 1.4ft ABSc 2600/840	100691	100702	100713	100721	100729	100737
100681	NANOTTICA 1.4ft ABSc 3200/840	100692	100703	100714	100722	100730	100738
100682	NANOTTICA 1.4ft ABSc 4400/840	100693	100704	100715	100723	100731	100739
100683	NANOTTICA 1.4ft ABSc 6400/840	100694	100705	100716	100724	100732	100740
100684	NANOTTICA 1.5ft ABSc 3250/840	100695	100706	100717	100725	100733	100741
100685	NANOTTICA 1.5ft ABSc 4000/840	100696	100707	100718	100726	100734	100742
100686	NANOTTICA 1.5ft ABSc 5500/840	100697	100708	100719	100727	100735	100743
100687	NANOTTICA 1.5ft ABSc 8000/840	100698	100709	100720	100728	100736	100744

NANOTTICA ABS DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
100745	NANOTTICA 1.2ft ABS 1300/840 DALI	100756	x	x	x	x	x
100746	NANOTTICA 1.2ft ABS 1600/840 DALI	100757	x	x	x	x	x
100747	NANOTTICA 1.2ft ABS 2200/840 DALI	100758	x	x	x	x	x
100748	NANOTTICA 1.4ft ABS 2600/840 DALI	100759	100770	100781	100789	100797	100805
100749	NANOTTICA 1.4ft ABS 3200/840 DALI	100760	100771	100782	100790	100798	100806
100750	NANOTTICA 1.4ft ABS 4400/840 DALI	100761	100772	100783	100791	100799	100807
100751	NANOTTICA 1.4ft ABS 6400/840 DALI	100762	100773	100784	100792	100800	100808
100752	NANOTTICA 1.5ft ABS 3250/840 DALI	100763	100774	100785	100793	100801	100809
100753	NANOTTICA 1.5ft ABS 4000/840 DALI	100764	100775	100786	100794	100802	100810
100754	NANOTTICA 1.5ft ABS 5500/840 DALI	100765	100776	100787	100795	100803	100811
100755	NANOTTICA 1.5ft ABS 8000/840 DALI	100766	100777	100788	100796	100804	100812

NANOTTICA ABSc DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
100813	NANOTTICA 1.2ft ABSc 1300/840 DALI	100824	x	x	x	x	x
100814	NANOTTICA 1.2ft ABSc 1600/840 DALI	100825	x	x	x	x	x
100815	NANOTTICA 1.2ft ABSc 2200/840 DALI	100826	x	x	x	x	x
100816	NANOTTICA 1.4ft ABSc 2600/840 DALI	100827	100838	100849	100857	100865	100873
100817	NANOTTICA 1.4ft ABSc 3200/840 DALI	100828	100839	100850	100858	100866	100874
100818	NANOTTICA 1.4ft ABSc 4400/840 DALI	100829	100840	100851	100859	100867	100875
100819	NANOTTICA 1.4ft ABSc 6400/840 DALI	100830	100841	100852	100860	100868	100876
100820	NANOTTICA 1.5ft ABSc 3250/840 DALI	100831	100842	100853	100861	100869	100877
100821	NANOTTICA 1.5ft ABSc 4000/840 DALI	100832	100843	100854	100862	100870	100878
100822	NANOTTICA 1.5ft ABSc 5500/840 DALI	100833	100844	100855	100863	100871	100879
100823	NANOTTICA 1.5ft ABSc 8000/840 DALI	100834	100845	100856	100864	100872	100880

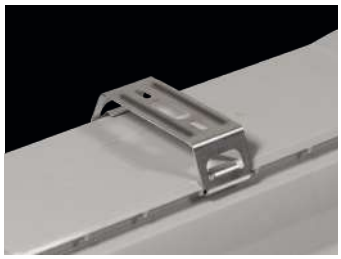
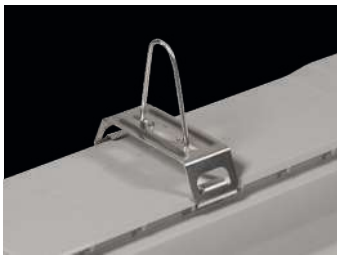
LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

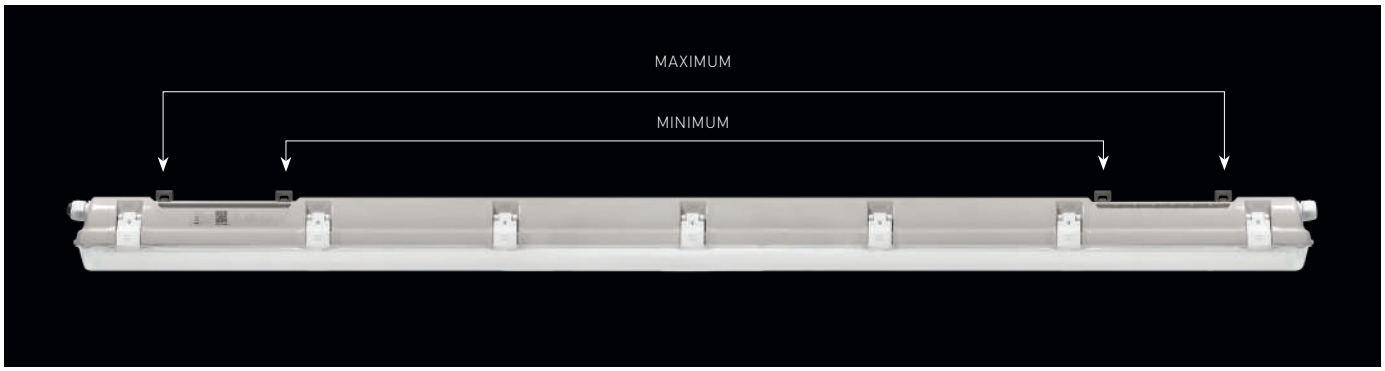
LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories

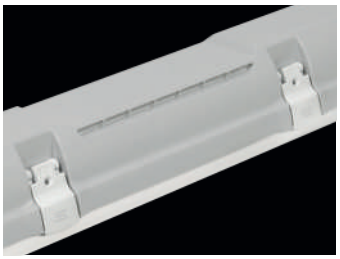
VARIABLE INSTALLATION PITCH

NANOTTICA ABS



LIGHT FITTING DETAILED VIEW

NANOTTICA ABS



NANOTTICA NB ABS

... ceiling height from 7.5 to 12 m, chemically resistant.

USE

The fixture boasts a **low unified glare rating with UGR values** its patented nanooptics. This ensures eye comfort, **high visual performance and workplace safety**, which indirectly **translates into higher productivity.**

The luminaire's **narrow-beam angle** makes it suitable for premises with an optimum luminaire installation height of **7.5 to 12 m**. The luminaire is designed for indoor spaces as well as for agricultural buildings and other spaces with chemically aggressive environments due to ammonia fumes, lye fumes, alkali and hot water (hydrolysis). The fitting is primarily intended for **walls and large corridors in high industrial and agricultural buildings, production plants and warehouse aisles, farms, stables and laboratories** with no explosion hazard. IP69-rated and HACCP-compliant, the fitting's design also makes it suitable for the food industry.

The fitting´s base is made of ABS and diffuser of AC, resulting in their **exceptional chemical resistance**. Emissions in the environment of use may reduce the usability of the plastics; for more information see page 367.

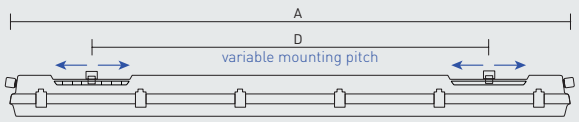
ADVANTAGES

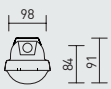
- Patented optics ensures absolute control over light beam distribution
- Narrow Beam angle (NB), optimum luminaire installation height **from 7.5 to 12 m**
- Low **UGR ranging from 21,4 to 24,8**
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from ta = -25 °C to **ta = 45 °C**
- Lifetime: 50 000 hours / L90B10
- High **chemical resistance**
- **Variable suspension pitch,** optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- Optional throughwiring (up to 7 wires inside the light fitting)
- Standard model CRI > 80: 4000 K
- On request CRI > 80: 3000 K, 5000 K, 6500 K
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- Optional delivery in dimmable version
- Certificates: **ESČ, ENEC, CB, DLG, HACCP**

NANOTTICA NB ABS, ABSc

TECHNICAL DESCRIPTION

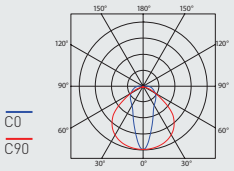
- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 45 °C**
- Maximum ambient temperature: ta = 0-25 °C for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **153 lm/W**
- **UGR ranging from 21,4 to 24,8**
- Optimum luminaire installation height **from 7.5 to 12 m**
- **CRI > 80: 4000 K** – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: **transparent AC with nanooptics Narrow Beam** (high chemical resistance, UV stability)
- Body: dark grey ABS (high chemical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5 (standard), or rubber (SBS)
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %





UGR EVALUATED FOR	
X = 4 H, Y = 8 H	S = 0.25 H
Reflectivity	70/50/20

NANOTTICA 1.5ft NB ABS



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature ta = 45 °C - body dark grey ABS - diffusor with nanooptics NB (narrow beam angle), transparent acrylate									
NANOTTICA 1.4ft NB ABS 4400/840	45	4300	3740	26,0	144	23.5 / 21.4	1,7	1170	700 - 960
NANOTTICA 1.4ft NB ABS 6400/840	45	6120	5320	36,1	147	24.7 / 22.6	1,7	1170	700 - 960
NANOTTICA 1.5ft NB ABS 5500/840	45	5340	4650	31,9	146	23.5 / 21.5	2,0	1450	970 - 1230
NANOTTICA 1.5ft NB ABS 8000/840	45	7780	6770	44,3	153	24.8 / 22.8	2,0	1450	970 - 1230

NANOTTICA NB ABS

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
100881	NANOTTICA 1.4ft NB ABS 4400/840	100885	100889	100893	100897	100901	100905
100882	NANOTTICA 1.4ft NB ABS 6400/840	100886	100890	100894	100898	100902	100906
100883	NANOTTICA 1.5ft NB ABS 5500/840	100887	100891	100895	100899	100903	100907
100884	NANOTTICA 1.5ft NB ABS 8000/840	100888	100892	100896	100900	100904	100908

NANOTTICA NB ABSc

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
100909	NANOTTICA 1.4ft NB ABSc 4400/840	100913	100917	100921	100925	100929	100933
100910	NANOTTICA 1.4ft NB ABSc 6400/840	100914	100918	100922	100926	100930	100934
100911	NANOTTICA 1.5ft NB ABSc 5500/840	100915	100919	100923	100927	100931	100935
100912	NANOTTICA 1.5ft NB ABSc 8000/840	100916	100920	100924	100928	100932	100936

NANOTTICA NB ABS DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
100937	NANOTTICA 1.4ft NB ABS 4400/840 DALI	100941	100945	100949	100953	100957	100961
100938	NANOTTICA 1.4ft NB ABS 6400/840 DALI	100942	100946	100950	100954	100958	100962
100939	NANOTTICA 1.5ft NB ABS 5500/840 DALI	100943	100947	100951	100955	100959	100963
100940	NANOTTICA 1.5ft NB ABS 8000/840 DALI	100944	100948	100952	100956	100960	100964

NANOTTICA NB ABSc DALI

Digital dimmable driver DALI - stainless clips (c)

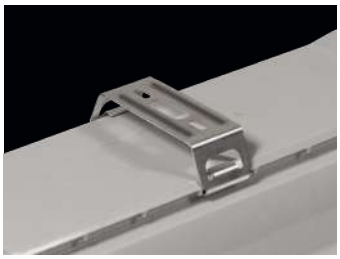
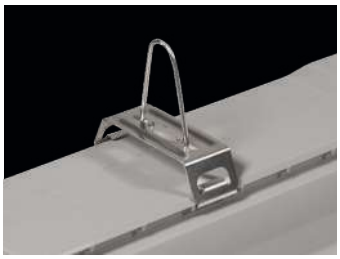
Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
100965	NANOTTICA 1.4ft NB ABSc 4400/840 DALI	100969	100973	100977	100981	100985	100989
100966	NANOTTICA 1.4ft NB ABSc 6400/840 DALI	100970	100974	100978	100982	100986	100990
100967	NANOTTICA 1.5ft NB ABSc 5500/840 DALI	100971	100975	100979	100983	100987	100991
100968	NANOTTICA 1.5ft NB ABSc 8000/840 DALI	100972	100976	100980	100984	100988	100992

LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

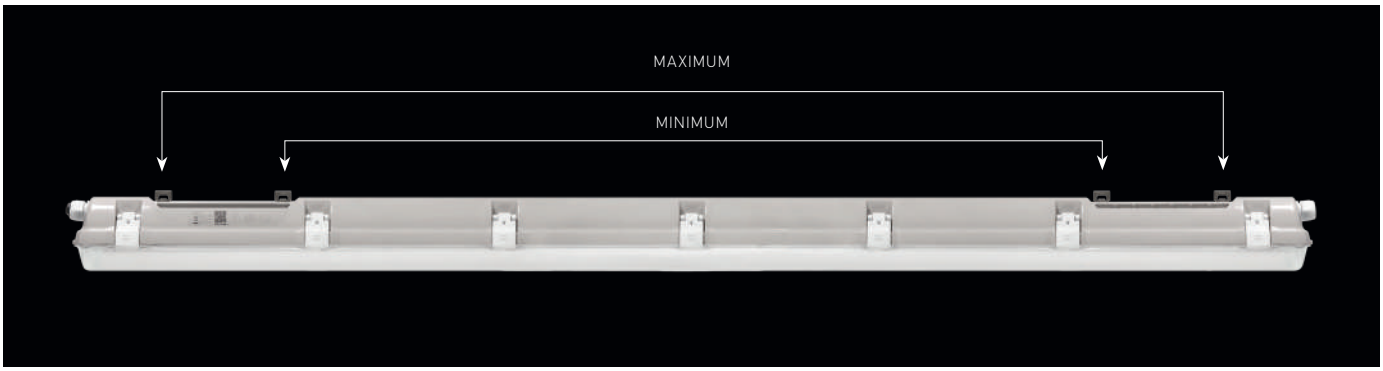
LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories

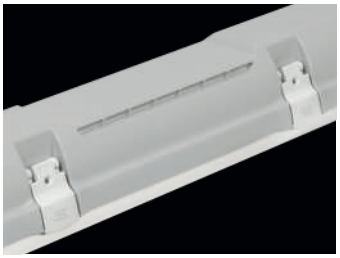
VARIABLE INSTALLATION PITCH

NANOTTICA NB ABS



LIGHT FITTING DETAILED VIEW

NANOTTICA NB ABS



SCANIA
STOP

NANOTTICA WB ABS

... ceiling height from 2.5 to 4 m, chemically resistant.

USE

The fixture boasts a **low unified glare rating with UGR values** its patented nanooptics. This ensures eye comfort, **high visual performance and workplace safety**, which indirectly **translates into higher productivity.**

The fitting is highly recommended for **illumination of premises where workers' visual precision is of paramount importance.** These include workshops where fine assembly work is performed as well as craft workshops and visual inspection areas. Its **wide beam angle** makes it an excellent choice for spaces with an optimum luminaire installation height ranging from **2.5 to 4 m.** It is designed for indoor spaces as well as for agricultural buildings and other spaces with chemically aggressive environments due to ammonia fumes, lye fumes, alkali and hot water (hydrolysis). The product is primarily intended for **walls and large corridors in low agricultural buildings and industrial halls, workshops, corridors, cellars, farms, stables and laboratories** with no explosion hazard. IP69-rated and HACCP-compliant, the fitting's design also makes it suitable for the food industry.

The fitting´s base is made of ABS and diffuser of AC, resulting in their **exceptional chemical resistance**. Emissions in the environment of use may reduce the usability of the plastics; for more information see page 367.

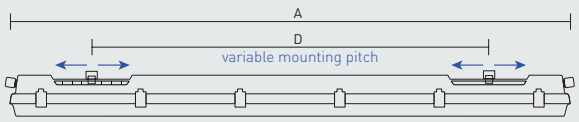
ADVANTAGES

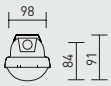
- Patented optics ensures absolute control over light beam distribution
- Wide Beam angle (WB), optimum luminaire installation height from 2.5 to 4 m
- Low **UGR ranging from 20,3 to 24,8**
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from ta = -25 °C to **ta = 50 °C**
- Lifetime: 50 000 hours / L90B10
- High **chemical resistance**
- **Variable suspension pitch,** optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- Optional throughwiring (up to 7 wires inside the light fitting)
- Standard model CRI > 80: 4000 K
- On request CRI > 80: 3000 K, 5000 K, 6500 K
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- Optional delivery in dimmable version
- Certificates: **EPD, ESČ, ENEC, CB, DLG, HACCP**

NANOTTICA WB ABS, ABSc

TECHNICAL DESCRIPTION

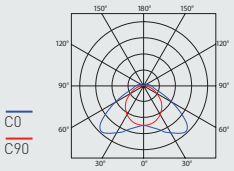
- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 50 °C**
- Maximum ambient temperature: ta = 0-25 °C for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **155 lm/W**
- **UGR ranging from 20,3 to 24,8**
- Optimum luminaire installation height **from 2.5 to 4 m**
- **CRI > 80: 4000 K** – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: **transparent AC with nanooptics Wide Beam** (high chemical resistance, UV stability)
- Body: dark grey ABS (high chemical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5 (standard), or rubber (SBS)
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %





UGR EVALUATED FOR	
X = 4 H, Y = 8 H	S = 0.25 H
Reflectivity	70/50/20

NANOTTICA 1.5ft WB ABS



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature ta = 50 °C - body dark grey ABS - diffusor with nanooptics WB (wide beam angle), transparent acrylate									
NANOTTICA 1.4ft WB ABS 2600/840	50	2600	2290	16,1	142	21.7 / 20.3	1,7	1170	700 - 960
NANOTTICA 1.4ft WB ABS 3200/840	50	3100	2730	19,1	143	22.3 / 21.0	1,7	1170	700 - 960
NANOTTICA 1.4ft WB ABS 4400/840	45	4300	3780	26,0	145	23.5 / 22.1	1,7	1170	700 - 960
NANOTTICA 1.4ft WB ABS 6400/840	45	6120	5390	36,1	149	24.7 / 23.3	1,7	1170	700 - 960
NANOTTICA 1.5ft WB ABS 3250/840	50	3240	2850	19,5	146	21.7 / 20.4	2,0	1450	970 - 1230
NANOTTICA 1.5ft WB ABS 4000/840	50	3850	3390	23,3	145	22.3 / 21.0	2,0	1450	970 - 1230
NANOTTICA 1.5ft WB ABS 5500/840	45	5340	4700	31,9	147	23.5 / 22.1	2,0	1450	970 - 1230
NANOTTICA 1.5ft WB ABS 8000/840	45	7780	6850	44,3	155	24.8 / 23.4	2,0	1450	970 - 1230

NANOTTICA WB ABS

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
100993	NANOTTICA 1.4ft WB ABS 2600/840	101001	101009	101017	101025	101033	101041
100994	NANOTTICA 1.4ft WB ABS 3200/840	101002	101010	101018	101026	101034	101042
100995	NANOTTICA 1.4ft WB ABS 4400/840	101003	101011	101019	101027	101035	101043
100996	NANOTTICA 1.4ft WB ABS 6400/840	101004	101012	101020	101028	101036	101044
100997	NANOTTICA 1.5ft WB ABS 3250/840	101005	101013	101021	101029	101037	101045
100998	NANOTTICA 1.5ft WB ABS 4000/840	101006	101014	101022	101030	101038	101046
100999	NANOTTICA 1.5ft WB ABS 5500/840	101007	101015	101023	101031	101039	101047
101000	NANOTTICA 1.5ft WB ABS 8000/840	101008	101016	101024	101032	101040	101048

NANOTTICA WB ABSc

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
101049	NANOTTICA 1.4ft WB ABSc 2600/840	101057	101065	101073	101081	101089	101097
101050	NANOTTICA 1.4ft WB ABSc 3200/840	101058	101066	101074	101082	101090	101098
101051	NANOTTICA 1.4ft WB ABSc 4400/840	101059	101067	101075	101083	101091	101099
101052	NANOTTICA 1.4ft WB ABSc 6400/840	101060	101068	101076	101084	101092	101100
101053	NANOTTICA 1.5ft WB ABSc 3250/840	101061	101069	101077	101085	101093	101101
101054	NANOTTICA 1.5ft WB ABSc 4000/840	101062	101070	101078	101086	101094	101102
101055	NANOTTICA 1.5ft WB ABSc 5500/840	101063	101071	101079	101087	101095	101103
101056	NANOTTICA 1.5ft WB ABSc 8000/840	101064	101072	101080	101088	101096	101104

NANOTTICA WB ABS DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
101105	NANOTTICA 1.4ft WB ABS 2600/840 DALI	101113	101121	101129	101137	101145	101153
101106	NANOTTICA 1.4ft WB ABS 3200/840 DALI	101114	101122	101130	101138	101146	101154
101107	NANOTTICA 1.4ft WB ABS 4400/840 DALI	101115	101123	101131	101139	101147	101155
101108	NANOTTICA 1.4ft WB ABS 6400/840 DALI	101116	101124	101132	101140	101148	101156
101109	NANOTTICA 1.5ft WB ABS 3250/840 DALI	101117	101125	101133	101141	101149	101157
101110	NANOTTICA 1.5ft WB ABS 4000/840 DALI	101118	101126	101134	101142	101150	101158
101111	NANOTTICA 1.5ft WB ABS 5500/840 DALI	101119	101127	101135	101143	101151	101159
101112	NANOTTICA 1.5ft WB ABS 8000/840 DALI	101120	101128	101136	101144	101152	101160

NANOTTICA WB ABSc DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
101161	NANOTTICA 1.4ft WB ABSc 2600/840 DALI	101169	101177	101185	101193	101201	101209
101162	NANOTTICA 1.4ft WB ABSc 3200/840 DALI	101170	101178	101186	101194	101202	101210
101163	NANOTTICA 1.4ft WB ABSc 4400/840 DALI	101171	101179	101187	101195	101203	101211
101164	NANOTTICA 1.4ft WB ABSc 6400/840 DALI	101172	101180	101188	101196	101204	101212
101165	NANOTTICA 1.5ft WB ABSc 3250/840 DALI	101173	101181	101189	101197	101205	101213
101166	NANOTTICA 1.5ft WB ABSc 4000/840 DALI	101174	101182	101190	101198	101206	101214
101167	NANOTTICA 1.5ft WB ABSc 5500/840 DALI	101175	101183	101191	101199	101207	101215
101168	NANOTTICA 1.5ft WB ABSc 8000/840 DALI	101176	101184	101192	101200	101208	101216

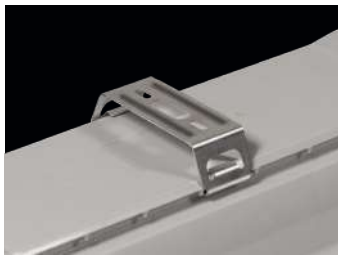
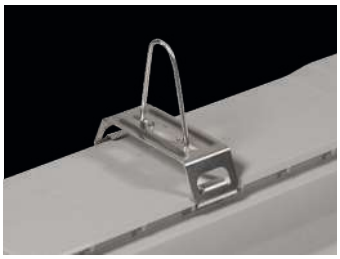
LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire
(L3 used for emergency unit unswitched power supply)

DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire
(L3 used for emergency unit unswitched power supply)

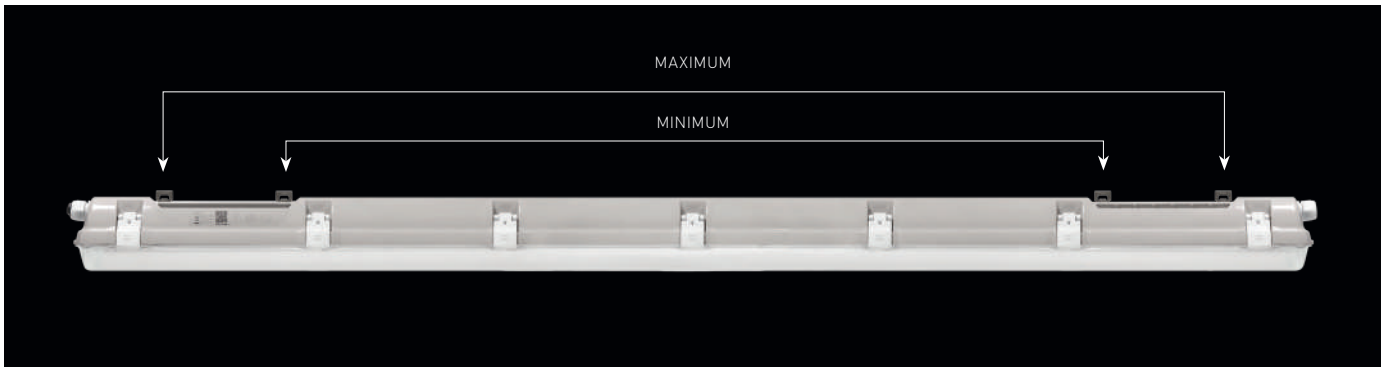
LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories

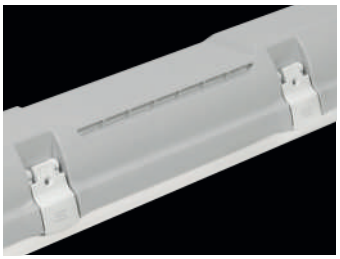
VARIABLE INSTALLATION PITCH

NANOTTICA WB ABS



LIGHT FITTING DETAILED VIEW

NANOTTICA WB ABS



NANOTTICA VP

... for outdoor sheltered spaces, ceiling height from 3.5 to 8 m, impact resistant.

USE

The fixture boasts a **low unified glare rating with UGR values** its patented nanooptics. This ensures eye comfort, **high visual performance and workplace safety**, which indirectly **translates into higher productivity.**

The fitting's **standard beam angle** makes it a great choice for premises with an optimum fitting installation height of **3.5 to 8 m**.

It is intended to be installed **in sheltered outdoor spaces**. It features a ventilation membrane that equalizes pressures while blocking water and contaminants that build up inside of the fitting as a result of temperature fluctuations. The fixture is highly recommended for **industrial premises, warehouses, agricultural buildings, sports facilities as well as transport hubs, car parks and garages, workshops and laboratories** with no explosion hazard. IP69-rated and HACCP-compliant, the fitting's design also makes it a great choice for the food industry.

Made of clear polycarbonate, the base and the diffuser boast **high impact and deformation resistance.** Emissions in the environment of use may reduce the usability of the plastics; for more information see page 367.

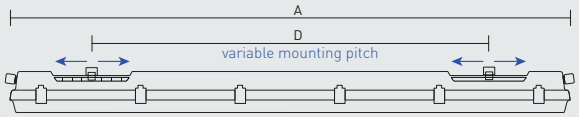
ADVANTAGES

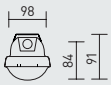
- Patented optics ensures absolute control over light beam distribution
- Low **UGR ranging from 19,1 to 23,4**
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from ta = -25°C to **ta = 50°C**
- Lifetime: 50 000 hours / L90B10
- High **mechanical resistance IK10**
- **Variable suspension pitch,** optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- Optional throughwiring (up to 7 wires inside the light fitting)
- Standard model CRI > 80: 4000 K
- On request CRI > 80: 3000 K, 5000 K, 6500 K
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- Optional delivery in dimmable version
- Certificates: **EPD,ESČ, ENEC, CB, HACCP**

NANOTTICA VP PC, PCc

TECHNICAL DESCRIPTION

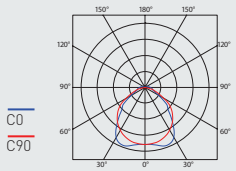
- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 50 °C**
- Maximum ambient temperature: ta = 0-25 °C for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **165 lm/W**
- **UGR ranging from 19,1 to 23,4**
- Optimum luminaire installation height **from 3.5 to 8 m**
- **CRI > 80: 4000 K** – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: **transparent PC with nanooptics** (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- **A ventilation membrane** in the base equalizes pressures while blocking water and contaminants
- Reflector: steel sheet, white colour (RAL 9003)
- **Mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %





UGR EVALUATED FOR	
X = 4 H, Y = 8 H	S = 0.25 H
Reflectivity	70/50/20

NANOTTICA 1.5ft VP



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature ta = 50 °C - body: grey polycarbonate - diffusor with nanooptics (standard beam angle), transparent polycarbonate									
NANOTTICA 1.2ft VP PC 1300/840	50	1310	1230	8,2	150	19.1 / 20.0	0,9	610	110 - 370
NANOTTICA 1.2ft VP PC 1600/840	50	1560	1470	9,8	150	19.7 / 20.7	0,9	610	110 - 370
NANOTTICA 1.2ft VP PC 2200/840	45	2140	2010	13,2	152	20.8 / 21.7	0,9	610	110 - 370
NANOTTICA 1.4ft VP PC 2600/840	50	2600	2440	16,1	152	19.2 / 20.3	1,7	1170	700 - 960
NANOTTICA 1.4ft VP PC 3200/840	50	3100	2910	19,1	152	19.8 / 20.9	1,7	1170	700 - 960
NANOTTICA 1.4ft VP PC 4400/840	45	4300	4040	26,0	155	21.0 / 22.1	1,7	1170	700 - 960
NANOTTICA 1.4ft VP PC 6400/840	45	6120	5750	36,1	159	22.2 / 23.3	1,7	1170	700 - 960
NANOTTICA 1.5ft VP PC 3250/840	50	3240	3050	19,5	156	19.3 / 20.4	2,0	1450	970 - 1230
NANOTTICA 1.5ft VP PC 4000/840	50	3850	3620	23,3	155	19.9 / 21.0	2,0	1450	970 - 1230
NANOTTICA 1.5ft VP PC 5500/840	45	5340	5020	31,9	157	21.0 / 22.1	2,0	1450	970 - 1230
NANOTTICA 1.5ft VP PC 8000/840	45	7780	7310	44,3	165	22.3 / 23.4	2,0	1450	970 - 1230

NANOTTICA VP PC

Code	Type	Non-dimmable driver - plastic clips		
		3F	M3h	3F M3h
101217	NANOTTICA 1.2ft VP PC 1300/840	101228	x	x
101218	NANOTTICA 1.2ft VP PC 1600/840	101229	x	x
101219	NANOTTICA 1.2ft VP PC 2200/840	101230	x	x
101220	NANOTTICA 1.4ft VP PC 2600/840	101231	101239	101247
101221	NANOTTICA 1.4ft VP PC 3200/840	101232	101240	101248
101222	NANOTTICA 1.4ft VP PC 4400/840	101233	101241	101249
101223	NANOTTICA 1.4ft VP PC 6400/840	101234	101242	101250
101224	NANOTTICA 1.5ft VP PC 3250/840	101235	101243	101251
101225	NANOTTICA 1.5ft VP PC 4000/840	101236	101244	101252
101226	NANOTTICA 1.5ft VP PC 5500/840	101237	101245	101253
101227	NANOTTICA 1.5ft VP PC 8000/840	101238	101246	101254

NANOTTICA VP PCc

Code	Type	Non-dimmable driver - stainless clips (c)		
		3F	M3h	3F M3h
101255	NANOTTICA 1.2ft VP PCc 1300/840	101266	x	x
101256	NANOTTICA 1.2ft VP PCc 1600/840	101267	x	x
101257	NANOTTICA 1.2ft VP PCc 2200/840	101268	x	x
101258	NANOTTICA 1.4ft VP PCc 2600/840	101269	101277	101285
101259	NANOTTICA 1.4ft VP PCc 3200/840	101270	101278	101286
101260	NANOTTICA 1.4ft VP PCc 4400/840	101271	101279	101287
101261	NANOTTICA 1.4ft VP PCc 6400/840	101272	101280	101288
101262	NANOTTICA 1.5ft VP PCc 3250/840	101273	101281	101289
101263	NANOTTICA 1.5ft VP PCc 4000/840	101274	101282	101290
101264	NANOTTICA 1.5ft VP PCc 5500/840	101275	101283	101291
101265	NANOTTICA 1.5ft VP PCc 8000/840	101276	101284	101292

NANOTTICA VP PC DALI

Digital dimmable driver DALI - plastic clips

Code	Type	3F	M3h	3F M3h
101293	NANOTTICA 1.2ft VP PC 1300/840 DALI	x	x	x
101294	NANOTTICA 1.2ft VP PC 1600/840 DALI	x	x	x
101295	NANOTTICA 1.2ft VP PC 2200/840 DALI	x	x	x
101296	NANOTTICA 1.4ft VP PC 2600/840 DALI	101307	101315	101323
101297	NANOTTICA 1.4ft VP PC 3200/840 DALI	101308	101316	101324
101298	NANOTTICA 1.4ft VP PC 4400/840 DALI	101309	101317	101325
101299	NANOTTICA 1.4ft VP PC 6400/840 DALI	101310	101318	101326
101300	NANOTTICA 1.5ft VP PC 3250/840 DALI	101311	101319	101327
101301	NANOTTICA 1.5ft VP PC 4000/840 DALI	101312	101320	101328
101302	NANOTTICA 1.5ft VP PC 5500/840 DALI	101313	101321	101329
101303	NANOTTICA 1.5ft VP PC 8000/840 DALI	101314	101322	101330

NANOTTICA VP PCc DALI

Digital dimmable driver DALI - stainless clips (c)

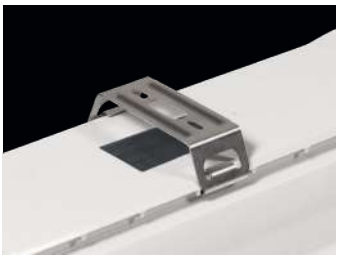
Code	Type	3F	M3h	3F M3h
101331	NANOTTICA 1.2ft VP PCc 1300/840 DALI	x	x	x
101332	NANOTTICA 1.2ft VP PCc 1600/840 DALI	x	x	x
101333	NANOTTICA 1.2ft VP PCc 2200/840 DALI	x	x	x
101334	NANOTTICA 1.4ft VP PCc 2600/840 DALI	101345	101353	101361
101335	NANOTTICA 1.4ft VP PCc 3200/840 DALI	101346	101354	101362
101336	NANOTTICA 1.4ft VP PCc 4400/840 DALI	101347	101355	101363
101337	NANOTTICA 1.4ft VP PCc 6400/840 DALI	101348	101356	101364
101338	NANOTTICA 1.5ft VP PCc 3250/840 DALI	101349	101357	101365
101339	NANOTTICA 1.5ft VP PCc 4000/840 DALI	101350	101358	101366
101340	NANOTTICA 1.5ft VP PCc 5500/840 DALI	101351	101359	101367
101341	NANOTTICA 1.5ft VP PCc 8000/840 DALI	101352	101360	101368

LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

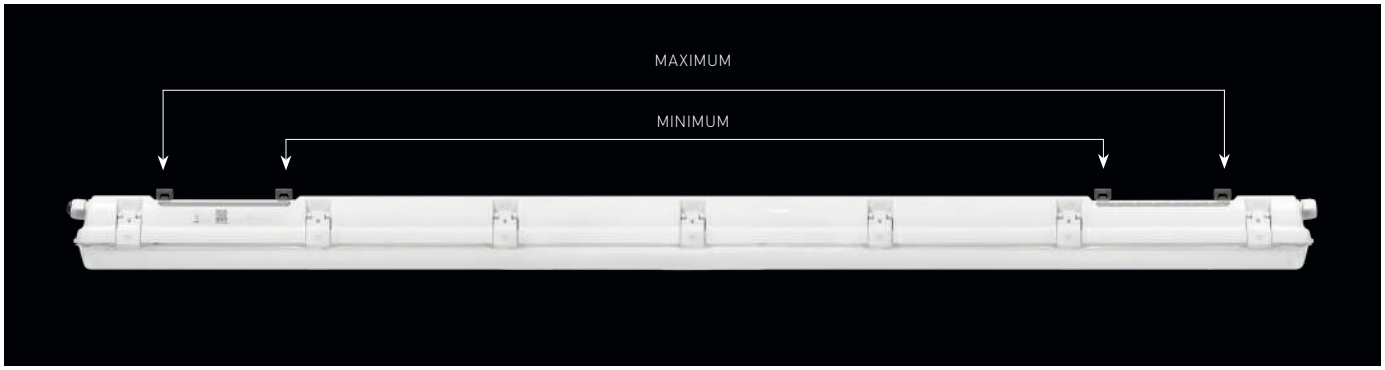
LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories



VARIABLE INSTALLATION PITCH

NANOTTICA VP PC



LIGHT FITTING DETAILED VIEW

NANOTTICA VP PC

NANOTTICA VP ABS

... for outdoor sheltered spaces, ceiling height from 3.5 to 8 m, chemically resistant.

USE

The fixture boasts a **low unified glare rating with UGR values** its patented nanooptics. This ensures eye comfort, **high visual performance and workplace safety**, which indirectly **translates into higher productivity.**

The fitting's **standard beam angle** makes it a great choice for premises with an optimum fitting installation height of **3.5 to 8 m**.

It is intended to be installed **in sheltered outdoor spaces**. It features a ventilation membrane that equalizes pressures while blocking water and contaminants that build up inside of the fitting as a result of temperature fluctuations. The fitting is highly recommended for agricultural buildings and other spaces with chemically aggressive environments due to ammonia fumes, lye fumes, alkali, hot water (hydrolysis) and oils. The product is primarily intended for **agricultural buildings and industrial halls such as farms, stables, production plants and warehouses, and spaces with permanently high humidity (such as car washes and tunnels). Additionally, it is a perfect choice for the tropical zone and coastal areas.** IP69-rated and HACCP-compliant, the fitting's design also makes it a great choice for the food industry.

The fitting´s base is made of ABS and diffuser of AC, resulting in their **exceptional chemical resistance**. Emissions in the environment of use may reduce the usability of the plastics; for more information see page 367.

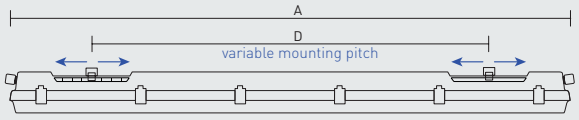
ADVANTAGES

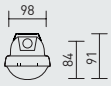
- Patented optics ensures absolute control over light beam distribution
- Low **UGR ranging from 18,8 to 23,2**
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from ta = -25 °C to **ta = 50 °C**
- Lifetime: 50 000 hours / L90B10
- High **chemical resistance**
- **Variable suspension pitch,** optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- Optional throughwiring (up to 7 wires inside the light fitting)
- Standard model CRI > 80: 4000 K
- On request CRI > 80: 3000 K, 5000 K, 6500 K
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- Optional delivery in dimmable version
- Certificates: **EPD, ESČ, ENEC, CB, DLG, HACCP**

NANOTTICA VP ABS, ABSc

TECHNICAL DESCRIPTION

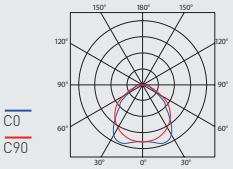
- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 50 °C**
- Maximum ambient temperature: ta = 0-25 °C for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **155 lm/W**
- **UGR ranging from 18,8 to 23,2**
- Optimum luminaire installation height **from 3.5 to 8 m**
- **CRI > 80: 4000 K** – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: transparent AC with nanooptics (high chemical resistance, UV stability)
- Body: dark grey ABS (high chemical resistance, UV stability)
- **A ventilation membrane** in the base equalizes pressures while blocking water and contaminants
- Reflector: steel sheet, white colour (RAL 9003)
- **Mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %





UGR EVALUATED FOR	
X = 4 H, Y = 8 H	S = 0.25 H
Reflectivity	70/50/20

NANOTTICA 1.5ft VP ABS



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature ta = 50 °C - body dark grey ABS - diffusor with nanooptics (standard beam angle), transparent acrylate									
NANOTTICA 1.2ft VP ABS 1300/840	50	1310	1150	8,2	140	18.8 / 19.8	0,9	610	110 - 370
NANOTTICA 1.2ft VP ABS 1600/840	50	1560	1370	9,8	140	19.4 / 20.4	0,9	610	110 - 370
NANOTTICA 1.2ft VP ABS 2200/840	45	2140	1880	13,2	142	20.5 / 21.5	0,9	610	110 - 370
NANOTTICA 1.4ft VP ABS 2600/840	50	2600	2290	16,1	142	19.0 / 20.1	1,7	1170	700 - 960
NANOTTICA 1.4ft VP ABS 3200/840	50	3100	2730	19,1	143	19.6 / 20.7	1,7	1170	700 - 960
NANOTTICA 1.4ft VP ABS 4400/840	45	4300	3780	26,0	145	20.7 / 21.8	1,7	1170	700 - 960
NANOTTICA 1.4ft VP ABS 6400/840	45	6120	5390	36,1	149	22.0 / 23.1	1,7	1170	700 - 960
NANOTTICA 1.5ft VP ABS 3250/840	50	3240	2850	19,5	146	19.0 / 20.1	2,0	1450	970 - 1230
NANOTTICA 1.5ft VP ABS 4000/840	50	3850	3390	23,3	145	19.6 / 20.7	2,0	1450	970 - 1230
NANOTTICA 1.5ft VP ABS 5500/840	45	5340	4700	31,9	147	20.8 / 21.9	2,0	1450	970 - 1230
NANOTTICA 1.5ft VP ABS 8000/840	45	7780	6850	44,3	155	22.1 / 23.2	2,0	1450	970 - 1230

NANOTTICA VP ABS

Non-dimmable driver - plastic clips

Code	Type	3F	M3h	3F M3h
101369	NANOTTICA 1.2ft VP ABS 1300/840	101380	x	x
101370	NANOTTICA 1.2ft VP ABS 1600/840	101381	x	x
101371	NANOTTICA 1.2ft VP ABS 2200/840	101382	x	x
101372	NANOTTICA 1.4ft VP ABS 2600/840	101383	101391	101399
101373	NANOTTICA 1.4ft VP ABS 3200/840	101384	101392	101400
101374	NANOTTICA 1.4ft VP ABS 4400/840	101385	101393	101401
101375	NANOTTICA 1.4ft VP ABS 6400/840	101386	101394	101402
101376	NANOTTICA 1.5ft VP ABS 3250/840	101387	101395	101403
101377	NANOTTICA 1.5ft VP ABS 4000/840	101388	101396	101404
101378	NANOTTICA 1.5ft VP ABS 5500/840	101389	101397	101405
101379	NANOTTICA 1.5ft VP ABS 8000/840	101390	101398	101406

NANOTTICA VP ABSc

Non-dimmable driver - stainless clips (c)

Code	Type	3F	M3h	3F M3h
101407	NANOTTICA 1.2ft VP ABSc 1300/840	101418	x	x
101408	NANOTTICA 1.2ft VP ABSc 1600/840	101419	x	x
101409	NANOTTICA 1.2ft VP ABSc 2200/840	101420	x	x
101410	NANOTTICA 1.4ft VP ABSc 2600/840	101421	101429	101437
101411	NANOTTICA 1.4ft VP ABSc 3200/840	101422	101430	101438
101412	NANOTTICA 1.4ft VP ABSc 4400/840	101423	101431	101439
101413	NANOTTICA 1.4ft VP ABSc 6400/840	101424	101432	101440
101414	NANOTTICA 1.5ft VP ABSc 3250/840	101425	101433	101441
101415	NANOTTICA 1.5ft VP ABSc 4000/840	101426	101434	101442
101416	NANOTTICA 1.5ft VP ABSc 5500/840	101427	101435	101443
101417	NANOTTICA 1.5ft VP ABSc 8000/840	101428	101436	101444

NANOTTICA VP ABS DALI

Digital dimmable driver DALI - plastic clips

Code	Type	3F	M3h	3F M3h
101445	NANOTTICA 1.2ft VP ABS 1300/840 DALI	x	x	x
101446	NANOTTICA 1.2ft VP ABS 1600/840 DALI	x	x	x
101447	NANOTTICA 1.2ft VP ABS 2200/840 DALI	x	x	x
101448	NANOTTICA 1.4ft VP ABS 2600/840 DALI	101459	101467	101475
101449	NANOTTICA 1.4ft VP ABS 3200/840 DALI	101460	101468	101476
101450	NANOTTICA 1.4ft VP ABS 4400/840 DALI	101461	101469	101477
101451	NANOTTICA 1.4ft VP ABS 6400/840 DALI	101462	101470	101478
101452	NANOTTICA 1.5ft VP ABS 3250/840 DALI	101463	101471	101479
101453	NANOTTICA 1.5ft VP ABS 4000/840 DALI	101464	101472	101480
101454	NANOTTICA 1.5ft VP ABS 5500/840 DALI	101465	101473	101481
101455	NANOTTICA 1.5ft VP ABS 8000/840 DALI	101466	101474	101482

NANOTTICA VP ABSc DALI

Digital dimmable driver DALI - stainless clips (c)

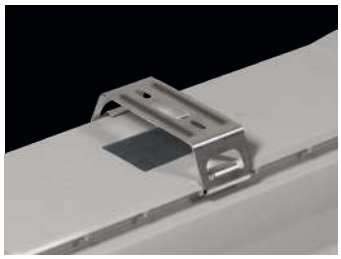
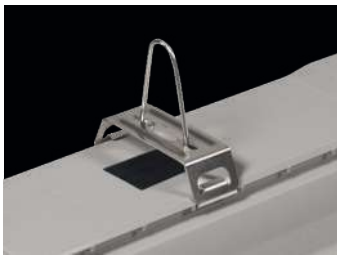
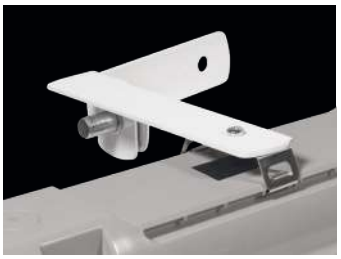
Code	Type	3F	M3h	3F M3h
101483	NANOTTICA 1.2ft VP ABSc 1300/840 DALI	x	x	x
101484	NANOTTICA 1.2ft VP ABSc 1600/840 DALI	x	x	x
101485	NANOTTICA 1.2ft VP ABSc 2200/840 DALI	x	x	x
101486	NANOTTICA 1.4ft VP ABSc 2600/840 DALI	101497	101505	101513
101487	NANOTTICA 1.4ft VP ABSc 3200/840 DALI	101498	101506	101514
101488	NANOTTICA 1.4ft VP ABSc 4400/840 DALI	101499	101507	101515
101489	NANOTTICA 1.4ft VP ABSc 6400/840 DALI	101500	101508	101516
101490	NANOTTICA 1.5ft VP ABSc 3250/840 DALI	101501	101509	101517
101491	NANOTTICA 1.5ft VP ABSc 4000/840 DALI	101502	101510	101518
101492	NANOTTICA 1.5ft VP ABSc 5500/840 DALI	101503	101511	101519
101493	NANOTTICA 1.5ft VP ABSc 8000/840 DALI	101504	101512	101520

LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

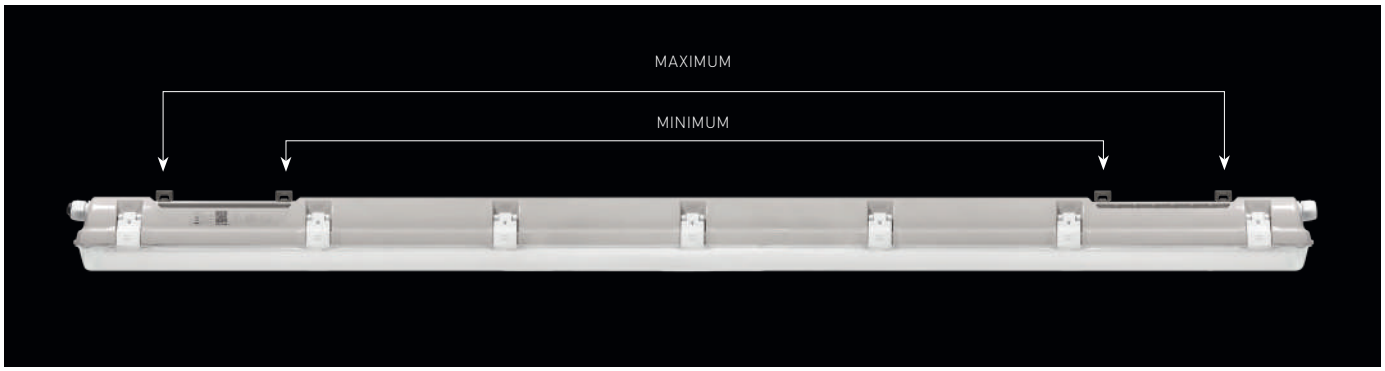
LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories

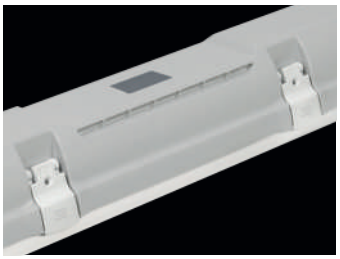
VARIABLE INSTALLATION PITCH

NANOTTICA VP ABS



LIGHT FITTING DETAILED VIEW

NANOTTICA VP ABS



NANOTTICA MAX

... for extreme temperatures -40 °C to +65 °C, ceiling height from 3.5 to 8 m.

USE

The fixture boasts a **low unified glare rating with UGR values** its patented nanooptics. This ensures eye comfort, **high visual performance and workplace safety**, which indirectly **translates into higher productivity.**

The fitting's **standard beam angle** makes it a great choice for premises with an optimum fitting installation height of **3.5 to 8 m**.

Designed to be installed indoors, in sheltered outdoor spaces as well as in spaces **with extreme ambient temperatures as low as -40 °C or as high as +65 °C**. A ventilation membrane equalizes pressures while blocking water and contaminants that build up inside of the fitting as a result of temperature fluctuations. Highly recommended for **heating plants, metallurgical plants, glassworks, freezing plants, cooling plants** and other spaces with no explosion hazard. IP69-rated and HACCP-compliant, the fitting's design also makes it a great choice for the food industry.

Emissions in the environment of use may reduce the usability of the plastics; for more information see page 367.

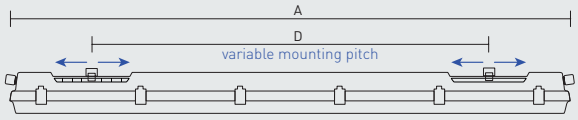
ADVANTAGES

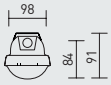
- Patented optics ensures absolute control over light beam distribution
- Low **UGR ranging from 19,8 to 22,1**
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from **ta = -40 °C to ta = 65 °C**
- Lifetime: 50 000 hours / L80B10
- **Variable suspension pitch,** optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- Optional throughwiring (up to 7 wires inside the light fitting)
- Standard model CRI > 80: 4000 K
- On request CRI > 80: 3000 K, 5000 K, 6500 K
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- Optional delivery in dimmable version
- Certificates: **HACCP**

NANOTTICA MAX PCc

TECHNICAL DESCRIPTION

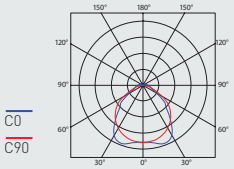
- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = -40 °C**
- Maximum ambient temperature: **ta = 65 °C**
- Lifetime: 50 000 hours / L80B10
- Maximum light fitting efficiency: **157 lm/W**
- **UGR ranging from 19,8 to 22,1**
- Optimum luminaire installation height **from 3.5 to 8 m**
- **CRI > 80: 4000 K** – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: **transparent PC with nanooptics** (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- **A ventilation membrane** in the base equalizes pressures while blocking water and contaminants
- Reflector: steel sheet, white colour (RAL 9003)
- **Mounting clips:** stainless steel, stainless steel hooks included
- Clips: stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %





UGR EVALUATED FOR	
X = 4 H, Y = 8 H	S = 0.25 H
Reflectivity	70/50/20

NANOTTICA 1.5ft MAX



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature ta = 65 °C - body: grey polycarbonate - diffusor with nanooptics (standard beam angle), transparent polycarbonate									
NANOTTICA 1.4ft MAX PCc 3200/840	65	3100	2910	19,1	152	19.8 / 20.9	1,7	1170	700 - 960
NANOTTICA 1.4ft MAX PCc 4400/840	60	4300	4040	26,0	155	21.0 / 22.1	1,7	1170	700 - 960
NANOTTICA 1.5ft MAX PCc 4000/840	65	3850	3620	23,3	155	19.9 / 21.0	2,0	1450	970 - 1230
NANOTTICA 1.5ft MAX PCc 5500/840	60	5340	5020	31,9	157	21.0 / 22.1	2,0	1450	970 - 1230

NANOTTICA MAX PCc

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	DALI	DALI 3F
101521	NANOTTICA 1.4ft MAX PCc 3200/840	101525	101529	x	x	101533	101537
101522	NANOTTICA 1.4ft MAX PCc 4400/840	101526	101530	x	x	101534	101538
101523	NANOTTICA 1.5ft MAX PCc 4000/840	101527	101531	x	x	101535	101539
101524	NANOTTICA 1.5ft MAX PCc 5500/840	101528	101532	x	x	101536	101540

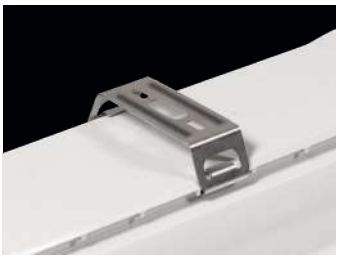
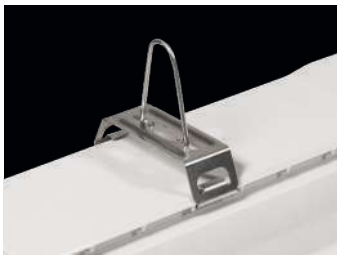
LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories

VARIABLE INSTALLATION PITCH

NANOTTICA MAX

LIGHT FITTING DETAILED VIEW

NANOTTICA MAX

NANOTTICA CLASS II

... class II insulation, ceiling height from 3.5 to 8 m, impact resistant.

USE

The fixture boasts a **low unified glare rating with UGR values** its patented nanooptics. This ensures eye comfort, **high visual performance and workplace safety,** which indirectly **translates into higher productivity.**

The fitting is highly recommended for **illumination of premises where workers' visual precision is of paramount importance.** These include workshops where fine assembly work is performed as well as craft workshops and visual inspection areas.

Its **standard beam angle** makes it a perfect choice for premises with an optimum luminaire installation height of **3.5 to 8 m**. The fixture is intended for indoor spaces, **industrial and agricultural buildings, warehouses, rail vehicle maintenance facilities, platforms, substations, depots, car parks, garages, workshops and laboratories** with no explosion hazard. IP69-rated and HACCP-compliant, the fitting's design also makes it a great choice for the food industry.

Made of clear polycarbonate, the base and the diffuser boast **high impact and deformation resistance.** Emissions in the environment of use may reduce the usability of the plastics; for more information see page 367.

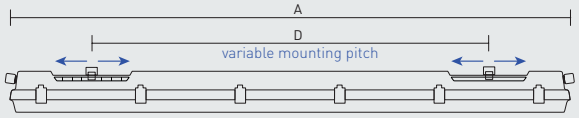
ADVANTAGES

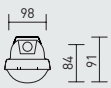
- Patented optics ensures absolute control over light beam distribution
- Low **UGR ranging from 19,1to 23,4**
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from ta = -25 °C to **ta = 50 °C**
- Lifetime: 50 000 hours / L90B10
- High **mechanical resistance IK10**
- **Variable suspension pitch,** optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- Optional throughwiring (up to 6 wires inside the light fitting)
- Standard model CRI > 80: 4000 K
- On request CRI > 80: 3000 K, 5000 K, 6500 K
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- Optional delivery in dimmable version

NANOTTICA CLASS II PC, PCc

TECHNICAL DESCRIPTION

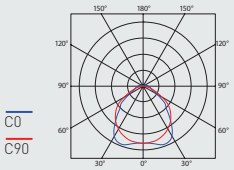
- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 50 °C**
- Maximum ambient temperature: ta = 0-25 °C for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **165 lm/W**
- **UGR ranging from 19,1 to 23,4**
- Optimum luminaire installation height **from 3.5 to 8 m**
- **CRI > 80: 4000 K** – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: **transparent PC with nanooptics** (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Connectors with 2, 4 or 6 poles, wire section 1.5 or 2.5 mm2
- The package includes the opposite of the counterpart
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %





UGR EVALUATED FOR	
X = 4 H, Y = 8 H	S = 0.25 H
Reflectivity	70/50/20

NANOTTICA 1.5ft CLASS II



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature ta = 50 °C - body: grey polycarbonate - diffusor with nanooptics (standard beam angle), transparent polycarbonate									
NANOTTICA 1.2ft CLASS II PC 1300/840	50	1310	1230	8,2	150	19.1 / 20.0	0,9	610	110 - 370
NANOTTICA 1.2ft CLASS II PC 1600/840	50	1560	1470	9,8	150	19.7 / 20.7	0,9	610	110 - 370
NANOTTICA 1.2ft CLASS II PC 2200/840	45	2140	2010	13,2	152	20.8 / 21.7	0,9	610	110 - 370
NANOTTICA 1.4ft CLASS II PC 2600/840	50	2600	2440	16,1	152	19.2 / 20.3	1,7	1170	700 - 960
NANOTTICA 1.4ft CLASS II PC 3200/840	50	3100	2910	19,1	152	19.8 / 20.9	1,7	1170	700 - 960
NANOTTICA 1.4ft CLASS II PC 4400/840	45	4300	4040	26,0	155	21.0 / 22.1	1,7	1170	700 - 960
NANOTTICA 1.4ft CLASS II PC 6400/840	45	6120	5750	36,1	159	22.2 / 23.3	1,7	1170	700 - 960
NANOTTICA 1.5ft CLASS II PC 3250/840	50	3240	3050	19,5	156	19.3 / 20.4	2,0	1450	970 - 1230
NANOTTICA 1.5ft CLASS II PC 4000/840	50	3850	3620	23,3	155	19.9 / 21.0	2,0	1450	970 - 1230
NANOTTICA 1.5ft CLASS II PC 5500/840	45	5340	5020	31,9	157	21.0 / 22.1	2,0	1450	970 - 1230
NANOTTICA 1.5ft CLASS II PC 8000/840	45	7780	7310	44,3	165	22.3 / 23.4	2,0	1450	970 - 1230

NANOTTICA CLASS II PC

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
101813	NANOTTICA 1.2ft CLASS II PC 1300/840	101824	101835	x	x	x	x
101814	NANOTTICA 1.2ft CLASS II PC 1600/840	101825	101836	x	x	x	x
101815	NANOTTICA 1.2ft CLASS II PC 2200/840	101826	101837	x	x	x	x
101816	NANOTTICA 1.4ft CLASS II PC 2600/840	101827	101838	101846	101854	101862	101870
101817	NANOTTICA 1.4ft CLASS II PC 3200/840	101828	101839	101847	101855	101863	101871
101818	NANOTTICA 1.4ft CLASS II PC 4400/840	101829	101840	101848	101856	101864	101872
101819	NANOTTICA 1.4ft CLASS II PC 6400/840	101830	101841	101849	101857	101865	101873
101820	NANOTTICA 1.5ft CLASS II PC 3250/840	101831	101842	101850	101858	101866	101874
101821	NANOTTICA 1.5ft CLASS II PC 4000/840	101832	101843	101851	101859	101867	101875
101822	NANOTTICA 1.5ft CLASS II PC 5500/840	101833	101844	101852	101860	101868	101876
101823	NANOTTICA 1.5ft CLASS II PC 8000/840	101834	101845	101853	101861	101869	101877

NANOTTICA CLASS II PCc

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
101878	NANOTTICA 1.2ft CLASS II PCc 1300/840	101889	101900	x	x	x	x
101879	NANOTTICA 1.2ft CLASS II PCc 1600/840	101890	101901	x	x	x	x
101880	NANOTTICA 1.2ft CLASS II PCc 2200/840	101891	101902	x	x	x	x
101881	NANOTTICA 1.4ft CLASS II PCc 2600/840	101892	101903	101911	101919	101927	101935
101882	NANOTTICA 1.4ft CLASS II PCc 3200/840	101893	101904	101912	101920	101928	101936
101883	NANOTTICA 1.4ft CLASS II PCc 4400/840	101894	101905	101913	101921	101929	101937
101884	NANOTTICA 1.4ft CLASS II PCc 6400/840	101895	101906	101914	101922	101930	101938
101885	NANOTTICA 1.5ft CLASS II PCc 3250/840	101896	101907	101915	101923	101931	101939
101886	NANOTTICA 1.5ft CLASS II PCc 4000/840	101897	101908	101916	101924	101932	101940
101887	NANOTTICA 1.5ft CLASS II PCc 5500/840	101898	101909	101917	101925	101933	101941
101888	NANOTTICA 1.5ft CLASS II PCc 8000/840	101899	101910	101918	101926	101934	101942

NANOTTICA CLASS II PC DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
101943	NANOTTICA 1.2ft CLASS II PC 1300/840 DALI	101954	x	x	x	x	x
101944	NANOTTICA 1.2ft CLASS II PC 1600/840 DALI	101955	x	x	x	x	x
101945	NANOTTICA 1.2ft CLASS II PC 2200/840 DALI	101956	x	x	x	x	x
101946	NANOTTICA 1.4ft CLASS II PC 2600/840 DALI	101957	101968	101976	101984	101992	102000
101947	NANOTTICA 1.4ft CLASS II PC 3200/840 DALI	101958	101969	101977	101985	101993	102001
101948	NANOTTICA 1.4ft CLASS II PC 4400/840 DALI	101959	101970	101978	101986	101994	102002
101949	NANOTTICA 1.4ft CLASS II PC 6400/840 DALI	101960	101971	101979	101987	101995	102003
101950	NANOTTICA 1.5ft CLASS II PC 3250/840 DALI	101961	101972	101980	101988	101996	102004
101951	NANOTTICA 1.5ft CLASS II PC 4000/840 DALI	101962	101973	101981	101989	101997	102005
101952	NANOTTICA 1.5ft CLASS II PC 5500/840 DALI	101963	101974	101982	101990	101998	102006
101953	NANOTTICA 1.5ft CLASS II PC 8000/840 DALI	101964	101975	101983	101991	101999	102007

NANOTTICA CLASS II PCc DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
102008	NANOTTICA 1.2ft CLASS II PCc 1300/840 DALI	102019	x	x	x	x	x
102009	NANOTTICA 1.2ft CLASS II PCc 1600/840 DALI	102020	x	x	x	x	x
102010	NANOTTICA 1.2ft CLASS II PCc 2200/840 DALI	102021	x	x	x	x	x
102011	NANOTTICA 1.4ft CLASS II PCc 2600/840 DALI	102022	102033	102041	102049	102057	102065
102012	NANOTTICA 1.4ft CLASS II PCc 3200/840 DALI	102023	102034	102042	102050	102058	102066
102013	NANOTTICA 1.4ft CLASS II PCc 4400/840 DALI	102024	102035	102043	102051	102059	102067
102014	NANOTTICA 1.4ft CLASS II PCc 6400/840 DALI	102025	102036	102044	102052	102060	102068
102015	NANOTTICA 1.5ft CLASS II PCc 3250/840 DALI	102026	102037	102045	102053	102061	102069
102016	NANOTTICA 1.5ft CLASS II PCc 4000/840 DALI	102027	102038	102046	102054	102062	102070
102017	NANOTTICA 1.5ft CLASS II PCc 5500/840 DALI	102028	102039	102047	102055	102063	102071
102018	NANOTTICA 1.5ft CLASS II PCc 8000/840 DALI	102029	102040	102048	102056	102064	102072

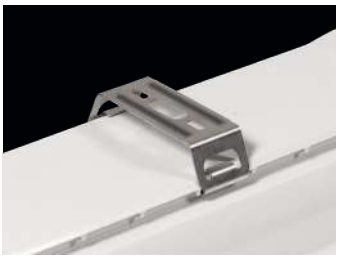
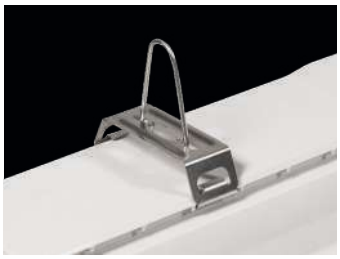
LEGEND

CLASS II 1F 1-phase 2 core through-wiring in the luminaire
CLASS II 3F 3-phase 4 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
CLASS II 3F Mxh 3-phase 4 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

DALI version with digital dimmable driver DALI
CLASS II DALI 1F 1-phase 4 core through-wiring in the luminaire
CLASS II DALI 3F 3-phase 6 core through-wiring in the luminaire
CLASS II DALI 3F Mxh 3-phase 6 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

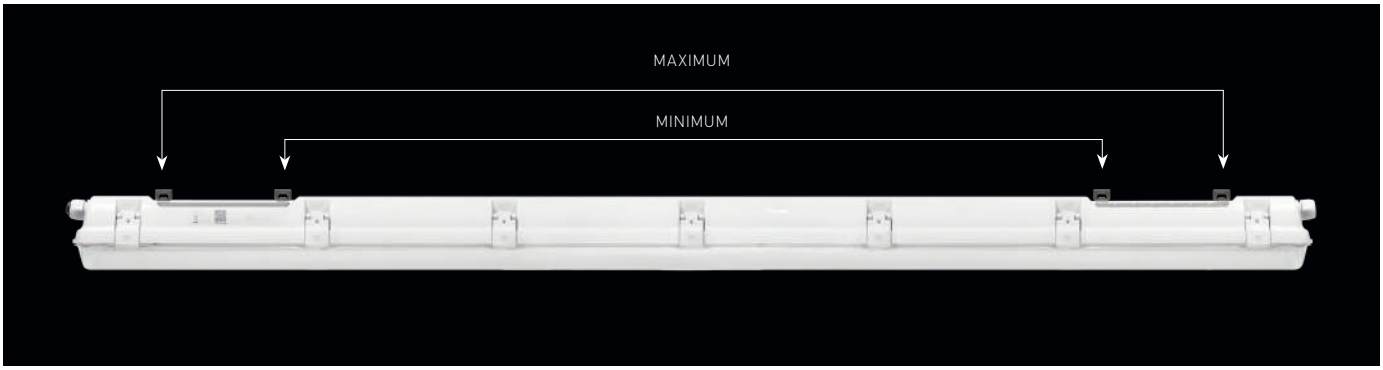
LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories

VARIABLE INSTALLATION PITCH

NANOTTICA CLASS II



LIGHT FITTING DETAILED VIEW

NANOTTICA CLASS II

NANOTTICA SNS

... with movement detector, ceiling height from 3.5 to 6 m.

USE

The fixture boasts a **low unified glare rating with UGR values** its patented nanooptics. This ensures eye comfort, **high visual performance and workplace safety,** which indirectly **translates into higher productivity.**

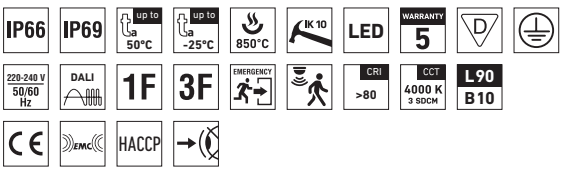
Highly recommended also for **illumination of spaces where workers' visual precision is of paramount importance.** These include workshops where fine assembly work is performed as well as visual inspection areas. Its **standard beam angle with the sensor** makes it a perfect choice for premises with an optimum luminaire installation height of **3.5 to 6 m**.

It is designed for indoor spaces, **industrial premises, agricultural buildings, warehouses as well as sports facilities, transport hubs, car parks and garages, workshops and laboratories** with no explosion hazard. IP69-rated and HACCP-compliant, the fitting's design also makes it a great choice for the food industry.

Made of clear polycarbonate, the base and the diffuser boast **high impact and deformation resistance.** Emissions in the environment of use may reduce the usability of the plastics; for more information see page 367.

ADVANTAGES

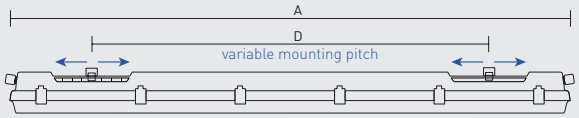
- Patented optics ensures absolute control over light beam distribution
- Includes an in-built **microwave motion sensor**
- Low **UGR ranging from 18,9 to 23,1**
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from ta = -25 °C to **ta = 50 °C**
- Lifetime: 50 000 hours / L90B10
- High **mechanical resistance IK10**
- **Variable suspension pitch,** optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- Optional throughwiring (up to 7 wires inside the light fitting)
- Standard model CRI > 80: 4000 K
- On request CRI > 80: 3000 K, 5000 K, 6500 K
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- Optional delivery in dimmable version
- Certificates: **HACCP**

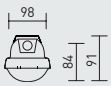


NANOTTICA SNS PC, PCc

TECHNICAL DESCRIPTION

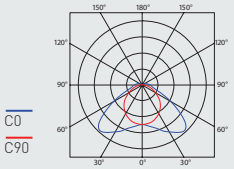
- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 50 °C**
- Maximum ambient temperature: ta = 0-25 °C for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **165 lm/W**
- **UGR ranging from 18,9 to 23,1**
- Optimum luminaire installation height **from 3.5 to 6 m**
- **CRI > 80: 4000 K** – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: **transparent PC with nanooptics** (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- **Motion sensor:** 360° range, switch on height 1 – 6 m, time range 5 sec – 30 min, switch-on sensitivity 2 – 50 lux
- Cable glands: screwed PG 13.5 (standard), or rubber (SBS)
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %





UGR EVALUATED FOR	
X = 4 H, Y = 8 H	S = 0.25 H
Reflectivity	70/50/20

NANOTTICA 1.4ft SNS



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature ta = 50 °C - body: grey polycarbonate - diffusor with nanooptics (standard beam angle), transparent polycarbonate									
NANOTTICA 1.4ft SNS PC 2600/840	50	2340	2200	14,4	153	18.9 / 20.0	1,8	1170	700 - 960
NANOTTICA 1.4ft SNS PC 3200/840	50	2790	2620	17,1	153	19.5 / 20.6	1,8	1170	700 - 960
NANOTTICA 1.4ft SNS PC 4400/840	45	3840	3610	23,2	156	20.6 / 21.7	1,8	1170	700 - 960
NANOTTICA 1.4ft SNS PC 6400/840	45	5510	5180	32,4	160	21.8 / 22.9	1,8	1170	700 - 960
NANOTTICA 1.5ft SNS PC 3250/840	50	2980	2800	17,9	156	19.0 / 20.1	2,1	1450	970 - 1230
NANOTTICA 1.5ft SNS PC 4000/840	50	3540	3330	21,4	156	19.6 / 20.7	2,1	1450	970 - 1230
NANOTTICA 1.5ft SNS PC 5500/840	45	4880	4590	29,1	158	20.7 / 21.8	2,1	1450	970 - 1230
NANOTTICA 1.5ft SNS PC 8000/840	45	7160	6730	40,7	165	22.0 / 23.1	2,1	1450	970 - 1230

NANOTTICA SNS PC

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
102073	NANOTTICA 1.4ft SNS PC 2600/840	102081	102089	102097	102105	102111	102119
102074	NANOTTICA 1.4ft SNS PC 3200/840	102082	102090	102098	102106	102112	102120
102075	NANOTTICA 1.4ft SNS PC 4400/840	102083	102091	102099	102107	102113	102121
102076	NANOTTICA 1.4ft SNS PC 6400/840	102084	102092	102100	103647	102114	103648
102077	NANOTTICA 1.5ft SNS PC 3250/840	102085	102093	102101	102108	102115	102122
102078	NANOTTICA 1.5ft SNS PC 4000/840	102086	102094	102102	102109	102116	102123
102079	NANOTTICA 1.5ft SNS PC 5500/840	102087	102095	102103	102110	102117	102124
102080	NANOTTICA 1.5ft SNS PC 8000/840	102088	102096	102104	103649	102118	103418

NANOTTICA SNS PCc

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
102125	NANOTTICA 1.4ft SNS PCc 2600/840	102133	102141	102149	102157	102163	102171
102126	NANOTTICA 1.4ft SNS PCc 3200/840	102134	102142	102150	102158	102164	102172
102127	NANOTTICA 1.4ft SNS PCc 4400/840	102135	102143	102151	102159	102165	102173
102128	NANOTTICA 1.4ft SNS PCc 6400/840	102136	102144	102152	103419	102166	103420
102129	NANOTTICA 1.5ft SNS PCc 3250/840	102137	102145	102153	102160	102167	102174
102130	NANOTTICA 1.5ft SNS PCc 4000/840	102138	102146	102154	102161	102168	102175
102131	NANOTTICA 1.5ft SNS PCc 5500/840	102139	102147	102155	102162	102169	102176
102132	NANOTTICA 1.5ft SNS PCc 8000/840	102140	102148	102156	103421	102170	103422

NANOTTICA SNS PC CORRIDOR

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
102177	NANOTTICA 1.4ft SNS PC 2600/840 CORRIDOR	102185	102193	102201	106717	102212	106720
102178	NANOTTICA 1.4ft SNS PC 3200/840 CORRIDOR	102186	102194	102202	106718	102213	106721
102179	NANOTTICA 1.4ft SNS PC 4400/840 CORRIDOR	102187	102195	102203	106719	102214	106722
102180	NANOTTICA 1.4ft SNS PC 6400/840 CORRIDOR	102188	102196	102204	103635	102215	103637
102181	NANOTTICA 1.5ft SNS PC 3250/840 CORRIDOR	102189	102197	102205	102209	102216	102220
102182	NANOTTICA 1.5ft SNS PC 4000/840 CORRIDOR	102190	102198	102206	102210	102217	102221
102183	NANOTTICA 1.5ft SNS PC 5500/840 CORRIDOR	102191	102199	102207	102211	102218	102222
102184	NANOTTICA 1.5ft SNS PC 8000/840 CORRIDOR	102192	102200	102208	103636	102219	103638

NANOTTICA SNS PCc CORRIDOR

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
102223	NANOTTICA 1.4ft SNS PCc 2600/840 CORRIDOR	102231	102239	102247	106723	102265	106726
102224	NANOTTICA 1.4ft SNS PCc 3200/840 CORRIDOR	102232	102240	102248	106724	102266	106727
102225	NANOTTICA 1.4ft SNS PCc 4400/840 CORRIDOR	102233	102241	102256	106725	102267	106728
102226	NANOTTICA 1.4ft SNS PCc 6400/840 CORRIDOR	102234	102242	102257	103639	102268	103641
102227	NANOTTICA 1.5ft SNS PCc 3250/840 CORRIDOR	102235	102243	102258	102262	102269	102273
102228	NANOTTICA 1.5ft SNS PCc 4000/840 CORRIDOR	102236	102244	102259	102263	102270	102274
102229	NANOTTICA 1.5ft SNS PCc 5500/840 CORRIDOR	102237	102245	102260	102264	102271	102275
102230	NANOTTICA 1.5ft SNS PCc 8000/840 CORRIDOR	102238	102246	102261	103640	102272	103642

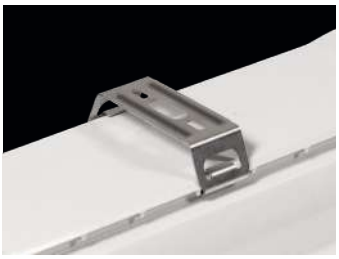
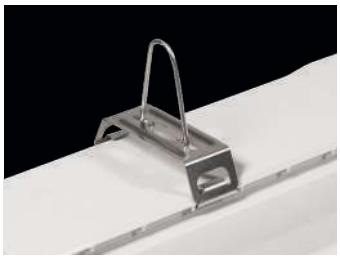
LEGEND

SNS 1F 1-phase 3 core through-wiring in the luminaire for connection of max. 5 slave luminaires
SNS 3F 3-phase 5 core through-wiring in the luminaire for connection of max. 5 slave luminaires (sensor connected to L3)
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
SNS 3F Mxh 3-phase 5 core through-wiring in the luminaire for connection of max. 5 slave luminaires (sensor and emergency unit connected to L3)

CORRIDOR version with digital dimmable driver DALI and set corridor function
CORRIDOR 1F 1-phase 5 core through-wiring in the luminaire for connection of max. 20 luminaires
CORRIDOR 3F 3-phase 7 core through-wiring in the luminaire for connection of max. 20 luminaires (sensor connected to L3)
CORRIDOR 3F Mxh 3-phase 7 core through-wiring in the luminaire for connection of max. 20 luminaires (sensor and emergency unit connected to L3)

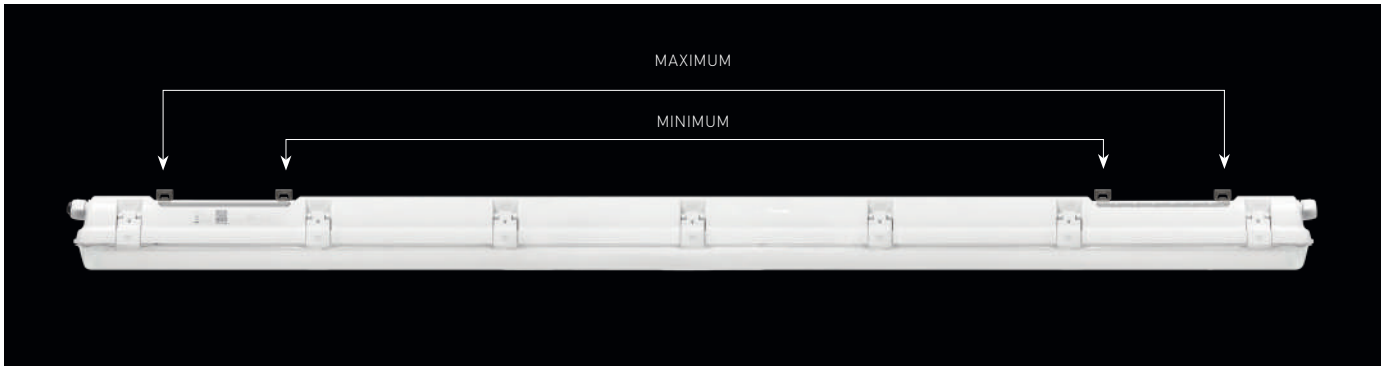
LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories

VARIABLE INSTALLATION PITCH

NANOTTICA SNS

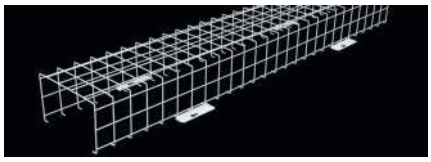


LIGHT FITTING DETAILED VIEW

NANOTTICA SNS

OM – protective grid

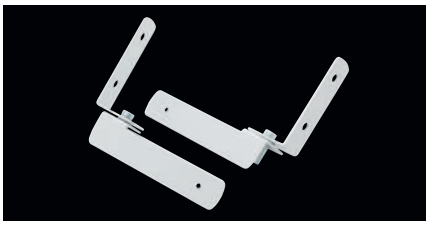
The metal grid protects the light fitting against mechanical damage and unauthorised handling. It is attached to the surface with the use of screws.
The surface is treated with the RAL 9003 powder-coated colour.



Code	Type	Description	Weight [kg]
11941	OM 218	protective grid for types 218, 214/224, 2.2ft (700×220×130 mm)	1,0
11942	OM 236	protective grid for types 236, 228/254, 2.4ft (1300×220×130 mm)	1,7
11943	OM 258	protective grid for types 258, 235/249/280, 2.5ft (1600×220×130 mm)	2,0

BZ – side hanger

It serves to attach the light fitting to the wall with the possibility of its positioning.



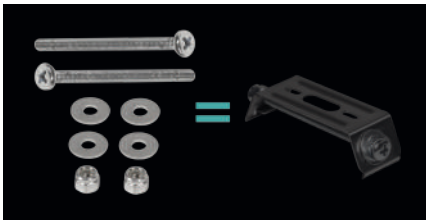
Code	Type	Description	Weight [kg]
90002	BZ	side hanger with blocking (set for 1 light fitting)	0,4

Canalis busbar system connector

The connector enables a quick 1 phase or 3 phase interconnection of light fittings without their opening.

Code	Type	Description	Weight [kg]
79001	KBA 40 ZU	light fitting suspended holder - Canalis KBA system	0,1
70002	KBC 10 CC211	connector with 1 m cable - Canalis KBA system	0,2

Locking set for bracket G3



Code	Type	Description	Weight [kg]
11553	G3 SET	a locking set for G3 stainless steel bracket (bolts, nuts, washers)	0,2

PRIMA

INDUSTRIAL

PLASTIC

DUSTPROOF

WATERPROOF

IMPACT RESISTANT

PRIMA – industrial plastic LED light fitting

PRIMA
BASIC VERSION
page 78

IP66 IP69

PRIMA
PC, PCc
page 78

PRIMA FOR
OUTDOOR SHELTERED
SPACES
page 81

IP66 IP69

PRIMA VP
PC, PCc
page 81

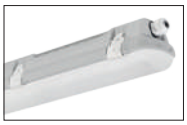
PRIMA CHEMICALLY
RESISTANT VERSION
page 84

IP66 IP69

PRIMA
ABS, ABSc
page 84

PRIMA FOR OUTDOOR SHEL-
TERED SPACES, CHEMICALLY
RESISTANT VERSION
page 87

IP66 IP69



PRIMA VP
ABS, ABSc
page 87

PRIMA VALUE
BASIC VERSION
page 90

IP66

PRIMA VALUE
PC, PCc
page 90

PRIMA VALUE
CHEMICALLY RESISTANT
VERSION
page 93

IP66

PRIMA VALUE
ABS, ABSc
page 93

PRIMA WITH
CLASS II INSULATION
page 96

IP66 IP69

PRIMA CLASS II
PC, PCc
page 96

PRIMA
EXCEPTIONALLY LOW
UGR
page 99

IP66 IP69

PRIMA TRS
PC, PCc
page 99

PRIMA WITH
MOTION DETECTOR
page 102

IP66 IP69

PRIMA SNS
PC, PCc
page 102

PRIMA
ACCESSORIES
page 105

PRIMA
ACCESSORIES
page 105

PRIMA

NEW

... dustproof, waterproof and impact resistant.

USE

It is designed for indoor spaces, **industrial premises, agricultural buildings, warehouses as well as sports facilities, transport hubs, car parks and garages, workshops and laboratories** with no explosion hazard.

IP69-rated and HACCP-compliant, the fitting's design also makes it a great choice for the food industry.

Made of clear polycarbonate, the base and the diffuser boast **high impact and deformation resistance**. Emissions in the environment of use may reduce the usability of the plastics.

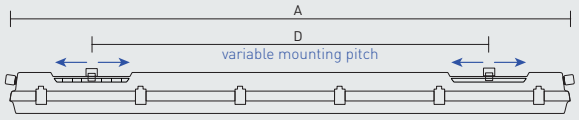
ADVANTAGES

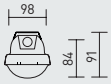
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from ta = -25°C to **ta = 50°C**
- Lifetime: 50 000 hours / L90B10
- High **mechanical resistance IK10**
- **Variable suspension pitch,** optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- Optional throughwiring (up to 7 wires inside the light fitting)
- Standard model CRI > 80: 4000 K
- On request CRI > 80: 3000 K, 5000 K, 6500 K
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- Certificates: **EPD, ENEC, CB, HACCP**

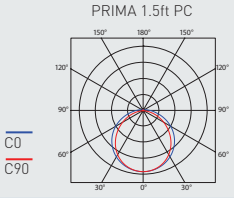
PRIMA PC, PCc

TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 50 °C**
- Maximum ambient temperature: ta = 0-25 °C for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **163 lm/W**
- **CRI** > **80: 4000 K** – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: **translucent PC** (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5 (standard), or rubber (SBS)
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %







Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature ta = 50 °C - body: grey polycarbonate - diffuser: translucent polycarbonate									
PRIMA 1.2ft PC 1300/840	50	1310	1220	8,2	149	22.2 / 21.4	0,9	610	110 - 370
PRIMA 1.2ft PC 1600/840	50	1560	1450	9,8	148	22.8 / 22.0	0,9	610	110 - 370
PRIMA 1.2ft PC 2200/840	45	2140	1990	13,2	151	23.9 / 23.1	0,9	610	110 - 370
PRIMA 1.4ft PC 2600/840	50	2600	2420	16,1	150	22.3 / 21.5	1,7	1170	700 - 960
PRIMA 1.4ft PC 3200/840	50	3100	2880	19,1	151	22.9 / 22.1	1,7	1170	700 - 960
PRIMA 1.4ft PC 4400/840	45	4300	4000	26,0	154	24.1 / 23.2	1,7	1170	700 - 960
PRIMA 1.4ft PC 6400/840	45	6120	5690	36,1	158	25.3 / 24.5	1,7	1170	700 - 960
PRIMA 1.4ft PC 8000/840	35	8050	7490	47,3	158	26.3 / 25.4	1,7	1170	700 - 960
PRIMA 1.5ft PC 3250/840	50	3240	3010	19,5	154	22.4 / 21.5	2,0	1450	970 - 1230
PRIMA 1.5ft PC 4000/840	50	3850	3580	23,3	154	23.0 / 22.1	2,0	1450	970 - 1230
PRIMA 1.5ft PC 5500/840	45	5340	4970	31,9	156	24.1 / 23.3	2,0	1450	970 - 1230
PRIMA 1.5ft PC 8000/840	45	7780	7240	44,3	163	25.4 / 24.6	2,0	1450	970 - 1230
PRIMA 1.5ft PC 10000/840	35	9890	9200	58,6	157	26.2 / 25.4	2,0	1450	970 - 1230

PRIMA PC

Code	Type
105245	PRIMA 1.2ft PC 1300/840
105246	PRIMA 1.2ft PC 1600/840
105247	PRIMA 1.2ft PC 2200/840
105248	PRIMA 1.4ft PC 2600/840
105249	PRIMA 1.4ft PC 3200/840
105250	PRIMA 1.4ft PC 4400/840
105251	PRIMA 1.4ft PC 6400/840
106797	PRIMA 1.4ft PC 8000/840
105252	PRIMA 1.5ft PC 3250/840
105253	PRIMA 1.5ft PC 4000/840
105254	PRIMA 1.5ft PC 5500/840
105255	PRIMA 1.5ft PC 8000/840
106798	PRIMA 1.5ft PC 10000/840

Non-dimmable driver - plastic clips

1F	3F	M1h	M3h	3F M1h	3F M3h
105256	105267	x	x	x	x
105257	105268	x	x	x	x
105258	105269	x	x	x	x
105259	105270	105278	105286	105294	105302
105260	105271	105279	105287	105295	105303
105261	105272	105280	105288	105296	105304
105262	105273	105281	105289	105297	105305
106799	106801	x	x	x	x
105263	105274	105282	105290	105298	105306
105264	105275	105283	105291	105299	105307
105265	105276	105284	105292	105300	105308
105266	105277	105285	105293	105301	105309
106800	106802	x	x	x	x

PRIMA PCc

Code	Type
105310	PRIMA 1.2ft PCc 1300/840
105311	PRIMA 1.2ft PCc 1600/840
105312	PRIMA 1.2ft PCc 2200/840
105313	PRIMA 1.4ft PCc 2600/840
105314	PRIMA 1.4ft PCc 3200/840
105315	PRIMA 1.4ft PCc 4400/840
105316	PRIMA 1.4ft PCc 6400/840
106803	PRIMA 1.4ft PCc 8000/840
105317	PRIMA 1.5ft PCc 3250/840
105318	PRIMA 1.5ft PCc 4000/840
105319	PRIMA 1.5ft PCc 5500/840
105320	PRIMA 1.5ft PCc 8000/840
106804	PRIMA 1.5ft PCc 10000/840

Non-dimmable driver - stainless clips (c)

1F	3F	M1h	M3h	3F M1h	3F M3h
105321	105332	x	x	x	x
105322	105333	x	x	x	x
105323	105334	x	x	x	x
105324	105335	105343	105351	105359	105367
105325	105336	105344	105352	105360	105368
105326	105337	105345	105353	105361	105369
105327	105338	105346	105354	105362	105370
106805	106807	x	x	x	x
105328	105339	105347	105355	105363	105371
105329	105340	105348	105356	105364	105372
105330	105341	105349	105357	105365	105373
105331	105342	105350	105358	105366	105374
106806	106808	x	x	x	x

PRIMA PC DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
105375	PRIMA 1.2ft PC 1300/840 DALI	105386	x	x	x	x	x
105376	PRIMA 1.2ft PC 1600/840 DALI	105387	x	x	x	x	x
105377	PRIMA 1.2ft PC 2200/840 DALI	105388	x	x	x	x	x
105378	PRIMA 1.4ft PC 2600/840 DALI	105389	105400	105408	105416	105424	106653
105379	PRIMA 1.4ft PC 3200/840 DALI	105390	105401	105409	105417	105425	106654
105380	PRIMA 1.4ft PC 4400/840 DALI	105391	105402	105410	105418	105426	106655
105381	PRIMA 1.4ft PC 6400/840 DALI	105392	105403	105411	105419	105427	106656
106809	PRIMA 1.4ft PC 8000/840 DALI	106811	106813	x	x	x	x
105382	PRIMA 1.5ft PC 3250/840 DALI	105393	105404	105412	105420	105428	105432
105383	PRIMA 1.5ft PC 4000/840 DALI	105394	105405	105413	105421	105429	105433
105384	PRIMA 1.5ft PC 5500/840 DALI	105395	105406	105414	105422	105430	105434
105385	PRIMA 1.5ft PC 8000/840 DALI	105396	105407	105415	105423	105431	105435
106810	PRIMA 1.5ft PC 10000/840 DALI	106812	106814	x	x	x	x

PRIMA PCc DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
105444	PRIMA 1.2ft PCc 1300/840 DALI	105455	x	x	x	x	x
105445	PRIMA 1.2ft PCc 1600/840 DALI	105456	x	x	x	x	x
105446	PRIMA 1.2ft PCc 2200/840 DALI	105457	x	x	x	x	x
105447	PRIMA 1.4ft PCc 2600/840 DALI	105458	105469	105477	105485	105493	106657
105448	PRIMA 1.4ft PCc 3200/840 DALI	105459	105470	105478	105486	105494	106658
105449	PRIMA 1.4ft PCc 4400/840 DALI	105460	105471	105479	105487	105495	106659
105450	PRIMA 1.4ft PCc 6400/840 DALI	105461	105472	105480	105488	105496	106660
106815	PRIMA 1.4ft PCc 8000/840 DALI	106817	106819	x	x	x	x
105451	PRIMA 1.5ft PCc 3250/840 DALI	105462	105473	105481	105489	105497	105501
105452	PRIMA 1.5ft PCc 4000/840 DALI	105463	105474	105482	105490	105498	105502
105453	PRIMA 1.5ft PCc 5500/840 DALI	105464	105475	105483	105491	105499	105503
105454	PRIMA 1.5ft PCc 8000/840 DALI	105465	105476	105484	105492	105500	105504
106816	PRIMA 1.5ft PCc 10000/840 DALI	106818	106820	x	x	x	x

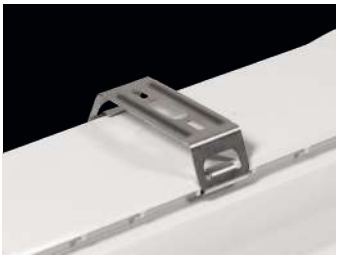
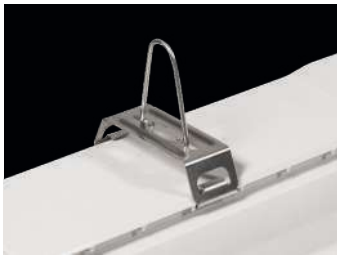
LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories

LIGHT FITTING DETAILED VIEW

PRIMA PC

PRIMA VP

NEW

... for outdoor sheltered spaces, impact resistant.

USE

It is intended to be installed **in sheltered outdoor spaces**. It features a ventilation membrane that equalizes pressures while blocking water and contaminants that build up inside of the fitting as a result of temperature fluctuations.

The fixture is highly recommended for **industrial premises, warehouses, agricultural buildings, sports facilities as well as transport hubs, car parks and garages, workshops and laboratories** with no explosion hazard.

IP69-rated and HACCP-compliant, the fitting's design also makes it a great choice for the food industry.

Made of clear polycarbonate, the base and the diffuser boast **high impact and deformation resistance**. Emissions in the environment of use may reduce the usability of the plastics.

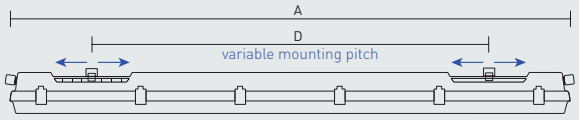
ADVANTAGES

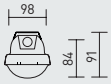
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from ta = -25 °C to **ta = 50 °C**
- Lifetime: 50 000 hours / L90B10
- High **mechanical resistance IK10**
- **Variable suspension pitch,** optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- Optional throughwiring (up to 7 wires inside the light fitting)
- Standard model CRI > 80: 4000 K
- On request CRI > 80: 3000 K, 5000 K, 6500 K
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- Certificates: **EPD, ENEC, CB, HACCP**

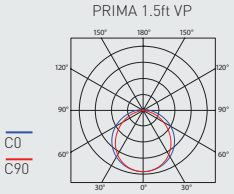
PRIMA VP PC, PCc

TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 50 °C**
- Maximum ambient temperature: ta = 0-25 °C for version with emergency back-up M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **163 lm/W**
- **CRI** > **80: 4000 K** – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: **translucent PC** (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5 (standard), or rubber (SBS)
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %







Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature ta = 50 °C - body: grey polycarbonate - diffuser: translucent polycarbonate									
PRIMA 1.2ft VP PC 1300/840	50	1310	1220	8,2	149	22.2 / 21.4	0,9	610	110 - 370
PRIMA 1.2ft VP PC 1600/840	50	1560	1450	9,8	148	22.8 / 22.0	0,9	610	110 - 370
PRIMA 1.2ft VP PC 2200/840	45	2140	1990	13,2	151	23.9 / 23.1	0,9	610	110 - 370
PRIMA 1.4ft VP PC 2600/840	50	2600	2420	16,1	150	22.3 / 21.5	1,7	1170	700 - 960
PRIMA 1.4ft VP PC 3200/840	50	3100	2880	19,1	151	22.9 / 22.1	1,7	1170	700 - 960
PRIMA 1.4ft VP PC 4400/840	45	4300	4000	26,0	154	24.1 / 23.2	1,7	1170	700 - 960
PRIMA 1.4ft VP PC 6400/840	45	6120	5690	36,1	158	25.3 / 24.5	1,7	1170	700 - 960
PRIMA 1.4ft VP PC 8000/840	35	8050	7490	47,3	158	26.3 / 25.4	1,7	1170	700 - 960
PRIMA 1.5ft VP PC 3250/840	50	3240	3010	19,5	154	22.4 / 21.5	2,0	1450	970 - 1230
PRIMA 1.5ft VP PC 4000/840	50	3850	3580	23,3	154	23.0 / 22.1	2,0	1450	970 - 1230
PRIMA 1.5ft VP PC 5500/840	45	5340	4970	31,9	156	24.1 / 23.3	2,0	1450	970 - 1230
PRIMA 1.5ft VP PC 8000/840	45	7780	7240	44,3	163	25.4 / 24.6	2,0	1450	970 - 1230
PRIMA 1.5ft VP PC 10000/840	35	9890	9200	58,6	157	26.2 / 25.4	2,0	1450	970 - 1230

PRIMA VP PC

Code	Type	Non-dimmable driver - plastic clips		
		3F	M3h	3F M3h
105781	PRIMA 1.2ft VP PC 1300/840	105792	x	x
105782	PRIMA 1.2ft VP PC 1600/840	105793	x	x
105783	PRIMA 1.2ft VP PC 2200/840	105794	x	x
105784	PRIMA 1.4ft VP PC 2600/840	105795	105803	106669
105785	PRIMA 1.4ft VP PC 3200/840	105796	105804	106670
105786	PRIMA 1.4ft VP PC 4400/840	105797	105805	106671
105787	PRIMA 1.4ft VP PC 6400/840	105798	105806	106672
106845	PRIMA 1.4ft VP PC 8000/840	106847	x	x
105788	PRIMA 1.5ft VP PC 3250/840	105799	105807	105811
105789	PRIMA 1.5ft VP PC 4000/840	105800	105808	105812
105790	PRIMA 1.5ft VP PC 5500/840	105801	105809	105813
105791	PRIMA 1.5ft VP PC 8000/840	105802	105810	105814
106846	PRIMA 1.5ft VP PC 10000/840	106848	x	x

PRIMA VP PCc

Code	Type	Non-dimmable driver - stainless clips (c)		
		3F	M3h	3F M3h
105823	PRIMA 1.2ft VP PCc 1300/840	105834	x	x
105824	PRIMA 1.2ft VP PCc 1600/840	105835	x	x
105825	PRIMA 1.2ft VP PCc 2200/840	105836	x	x
105826	PRIMA 1.4ft VP PCc 2600/840	105837	105845	106673
105827	PRIMA 1.4ft VP PCc 3200/840	105838	105846	106674
105828	PRIMA 1.4ft VP PCc 4400/840	105839	105847	106675
105829	PRIMA 1.4ft VP PCc 6400/840	105840	105848	106676
106849	PRIMA 1.4ft VP PCc 8000/840	106851	x	x
105830	PRIMA 1.5ft VP PCc 3250/840	105841	105849	105853
105831	PRIMA 1.5ft VP PCc 4000/840	105842	105850	105854
105832	PRIMA 1.5ft VP PCc 5500/840	105843	105851	105855
105833	PRIMA 1.5ft VP PCc 8000/840	105844	105852	105856
106850	PRIMA 1.5ft VP PCc 10000/840	106852	x	x

PRIMA VP PC DALI

Digital dimmable driver DALI - plastic clips

Code	Type	3F	M3h	3F M3h
105865	PRIMA 1.2ft VP PC 1300/840 DALI	x	x	x
105866	PRIMA 1.2ft VP PC 1600/840 DALI	x	x	x
105867	PRIMA 1.2ft VP PC 2200/840 DALI	x	x	x
105868	PRIMA 1.4ft VP PC 2600/840 DALI	105879	105887	106677
105869	PRIMA 1.4ft VP PC 3200/840 DALI	105880	105888	106678
105870	PRIMA 1.4ft VP PC 4400/840 DALI	105881	105889	106679
105871	PRIMA 1.4ft VP PC 6400/840 DALI	105882	105890	106680
106853	PRIMA 1.4ft VP PC 8000/840 DALI	106855	x	x
105872	PRIMA 1.5ft VP PC 3250/840 DALI	105883	105891	105895
105873	PRIMA 1.5ft VP PC 4000/840 DALI	105884	105892	105896
105874	PRIMA 1.5ft VP PC 5500/840 DALI	105885	105893	105897
105875	PRIMA 1.5ft VP PC 8000/840 DALI	105886	105894	105898
106854	PRIMA 1.5ft VP PC 10000/840 DALI	106856	x	x

PRIMA VP PCc DALI

Digital dimmable driver DALI - stainless clips (c)

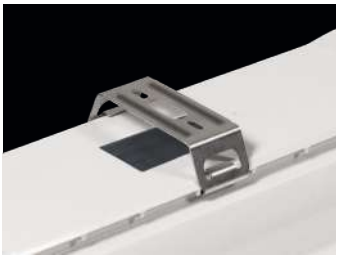
Code	Type	3F	M3h	3F M3h
105907	PRIMA 1.2ft VP PCc 1300/840 DALI	x	x	x
105908	PRIMA 1.2ft VP PCc 1600/840 DALI	x	x	x
105909	PRIMA 1.2ft VP PCc 2200/840 DALI	x	x	x
105910	PRIMA 1.4ft VP PCc 2600/840 DALI	105921	105929	106681
105911	PRIMA 1.4ft VP PCc 3200/840 DALI	105922	105930	106682
105912	PRIMA 1.4ft VP PCc 4400/840 DALI	105923	105931	106683
105913	PRIMA 1.4ft VP PCc 6400/840 DALI	105924	105932	106684
106857	PRIMA 1.4ft VP PCc 8000/840 DALI	106859	x	x
105914	PRIMA 1.5ft VP PCc 3250/840 DALI	105925	105933	105937
105915	PRIMA 1.5ft VP PCc 4000/840 DALI	105926	105934	105938
105916	PRIMA 1.5ft VP PCc 5500/840 DALI	105927	105935	105939
105917	PRIMA 1.5ft VP PCc 8000/840 DALI	105928	105936	105940
106858	PRIMA 1.5ft VP PCc 10000/840 DALI	106860	x	x

LEGEND

3F 3-phase 5 core through-wiring in the luminaire
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
DALI version with digital dimmable driver DALI
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories



LIGHT FITTING DETAILED VIEW

PRIMA VP PC

PRIMA ABS

NEW

... dustproof, waterproof and chemically resistant.

USE

In addition to indoor spaces, it is designed for agricultural buildings and other spaces with chemically aggressive environments due to ammonia fumes, lye fumes, alkali and hot water (hydrolysis).

The fitting is primarily intended for large **agricultural premises and industrial halls such as farms, stables, production plants and warehouses, car washes and laboratories** with no explosion hazard.

IP69-rated and HACCP-compliant, the fitting's design also makes it suitable for the food industry.

The fitting´s base is made of ABS and diffuser of AC, resulting in their **exceptional chemical resistance**. Emissions in the environment of use may reduce the usability of the plastics.

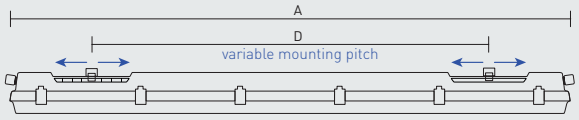
ADVANTAGES

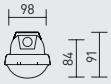
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from ta = -25 °C to **ta = 50 °C**
- Lifetime: 50 000 hours / L90B10
- **Variable suspension pitch,** optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- Optional throughwiring (up to 7 wires inside the light fitting)
- Standard model CRI > 80: 4000 K
- On request CRI > 80: 3000 K, 5000 K, 6500 K
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- Certificates: **EPD, ENEC, CB, HACCP**

PRIMA ABS, ABSc

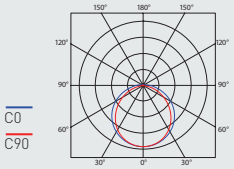
TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 50 °C**
- Maximum ambient temperature: ta = 0-25 °C for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **163 lm/W**
- **CRI** > **80: 4000 K** – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: translucent ABS (high chemical resistance, UV stability)
- Body: dark grey ABS (high chemical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5 (standard), or rubber (SBS)
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %





PRIMA 1.5ft ABS



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature ta = 50 °C - body: dark grey ABS - diffuser: translucent polycarbonate									
PRIMA 1.2ft ABS 1300/840	50	1310	1220	8,2	149	22.0 / 21.6	0,9	610	110 - 370
PRIMA 1.2ft ABS 1600/840	50	1560	1450	9,8	148	22.6 / 22.2	0,9	610	110 - 370
PRIMA 1.2ft ABS 2200/840	45	2140	1990	13,2	151	23.7 / 23.3	0,9	610	110 - 370
PRIMA 1.4ft ABS 2600/840	50	2600	2420	16,1	150	22.2 / 21.7	1,7	1170	700 - 960
PRIMA 1.4ft ABS 3200/840	50	3100	2880	19,1	151	22.8 / 22.3	1,7	1170	700 - 960
PRIMA 1.4ft ABS 4400/840	45	4300	4000	26,0	154	23.9 / 23.4	1,7	1170	700 - 960
PRIMA 1.4ft ABS 6400/840	45	6120	5690	36,1	158	25.1 / 24.7	1,7	1170	700 - 960
PRIMA 1.4ft ABS 8000/840	35	8050	7490	47,3	158	26.1 / 25.6	1,7	1170	700 - 960
PRIMA 1.5ft ABS 3250/840	50	3240	3010	19,5	154	22.2 / 21.7	2,0	1450	970 - 1230
PRIMA 1.5ft ABS 4000/840	50	3850	3580	23,3	154	22.8 / 22.3	2,0	1450	970 - 1230
PRIMA 1.5ft ABS 5500/840	45	5340	4970	31,9	156	23.9 / 23.4	2,0	1450	970 - 1230
PRIMA 1.5ft ABS 8000/840	45	7780	7240	44,3	163	25.2 / 24.7	2,0	1450	970 - 1230
PRIMA 1.5ft ABS 10000/840	35	9890	9200	58,6	157	26.1 / 25.6	2,0	1450	970 - 1230

PRIMA ABS

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
105513	PRIMA 1.2ft ABS 1300/840	105524	105535	x	x	x	x
105514	PRIMA 1.2ft ABS 1600/840	105525	105536	x	x	x	x
105515	PRIMA 1.2ft ABS 2200/840	105526	105537	x	x	x	x
105516	PRIMA 1.4ft ABS 2600/840	105527	105538	105546	105554	105562	105570
105517	PRIMA 1.4ft ABS 3200/840	105528	105539	105547	105555	105563	105571
105518	PRIMA 1.4ft ABS 4400/840	105529	105540	105548	105556	105564	105572
105519	PRIMA 1.4ft ABS 6400/840	105530	105541	105549	105557	105565	105573
106821	PRIMA 1.4ft ABS 8000/840	106823	106825	x	x	x	x
105520	PRIMA 1.5ft ABS 3250/840	105531	105542	105550	105558	105566	105574
105521	PRIMA 1.5ft ABS 4000/840	105532	105543	105551	105559	105567	105575
105522	PRIMA 1.5ft ABS 5500/840	105533	105544	105552	105560	105568	105576
105523	PRIMA 1.5ft ABS 8000/840	105534	105545	105553	105561	105569	105577
106822	PRIMA 1.5ft ABS 10000/840	106824	106826	x	x	x	x

PRIMA ABSc

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
105578	PRIMA 1.2ft ABSc 1300/840	105589	105600	x	x	x	x
105579	PRIMA 1.2ft ABSc 1600/840	105590	105601	x	x	x	x
105580	PRIMA 1.2ft ABSc 2200/840	105591	105602	x	x	x	x
105581	PRIMA 1.4ft ABSc 2600/840	105592	105603	105611	105619	105627	105635
105582	PRIMA 1.4ft ABSc 3200/840	105593	105604	105612	105620	105628	105636
105583	PRIMA 1.4ft ABSc 4400/840	105594	105605	105613	105621	105629	105637
105584	PRIMA 1.4ft ABSc 6400/840	105595	105606	105614	105622	105630	105638
106827	PRIMA 1.4ft ABSc 8000/840	106829	106831	x	x	x	x
105585	PRIMA 1.5ft ABSc 3250/840	105596	105607	105615	105623	105631	105639
105586	PRIMA 1.5ft ABSc 4000/840	105597	105608	105616	105624	105632	105640
105587	PRIMA 1.5ft ABSc 5500/840	105598	105609	105617	105625	105633	105641
105588	PRIMA 1.5ft ABSc 8000/840	105599	105610	105618	105626	105634	105642
106828	PRIMA 1.5ft ABSc 10000/840	106830	106832	x	x	x	x

PRIMA ABS DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
105643	PRIMA 1.2ft ABS 1300/840 DALI	105654	x	x	x	x	x
105644	PRIMA 1.2ft ABS 1600/840 DALI	105655	x	x	x	x	x
105645	PRIMA 1.2ft ABS 2200/840 DALI	105656	x	x	x	x	x
105646	PRIMA 1.4ft ABS 2600/840 DALI	105657	105668	105676	105684	105692	106661
105647	PRIMA 1.4ft ABS 3200/840 DALI	105658	105669	105677	105685	105693	106662
105648	PRIMA 1.4ft ABS 4400/840 DALI	105659	105670	105678	105686	105694	106663
105649	PRIMA 1.4ft ABS 6400/840 DALI	105660	105671	105679	105687	105695	106664
106833	PRIMA 1.4ft ABS 8000/840 DALI	106835	106837	x	x	x	x
105650	PRIMA 1.5ft ABS 3250/840 DALI	105661	105672	105680	105688	105696	105700
105651	PRIMA 1.5ft ABS 4000/840 DALI	105662	105673	105681	105689	105697	105701
105652	PRIMA 1.5ft ABS 5500/840 DALI	105663	105674	105682	105690	105698	105702
105653	PRIMA 1.5ft ABS 8000/840 DALI	105664	105675	105683	105691	105699	105703
106834	PRIMA 1.5ft ABS 10000/840 DALI	106836	106838	x	x	x	x

PRIMA ABSc DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
105712	PRIMA 1.2ft ABSc 1300/840 DALI	105723	x	x	x	x	x
105713	PRIMA 1.2ft ABSc 1600/840 DALI	105724	x	x	x	x	x
105714	PRIMA 1.2ft ABSc 2200/840 DALI	105725	x	x	x	x	x
105715	PRIMA 1.4ft ABSc 2600/840 DALI	105726	105737	105745	105753	105761	106665
105716	PRIMA 1.4ft ABSc 3200/840 DALI	105727	105738	105746	105754	105762	106666
105717	PRIMA 1.4ft ABSc 4400/840 DALI	105728	105739	105747	105755	105763	106667
105718	PRIMA 1.4ft ABSc 6400/840 DALI	105729	105740	105748	105756	105764	106668
106839	PRIMA 1.4ft ABSc 8000/840 DALI	106841	106843	x	x	x	x
105719	PRIMA 1.5ft ABSc 3250/840 DALI	105730	105741	105749	105757	105765	105769
105720	PRIMA 1.5ft ABSc 4000/840 DALI	105731	105742	105750	105758	105766	105770
105721	PRIMA 1.5ft ABSc 5500/840 DALI	105732	105743	105751	105759	105767	105771
105722	PRIMA 1.5ft ABSc 8000/840 DALI	105733	105744	105752	105760	105768	105772
106840	PRIMA 1.5ft ABSc 10000/840 DALI	106842	106844	x	x	x	x

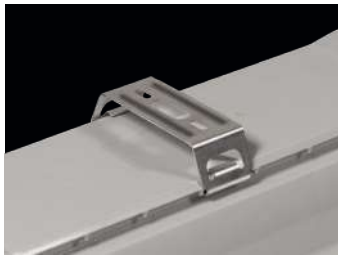
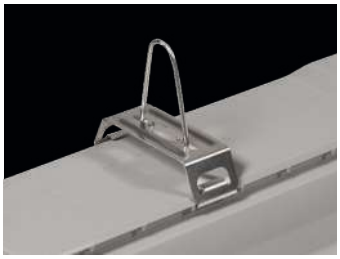
LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories

LIGHT FITTING DETAILED VIEW

PRIMA ABS

PRIMA VP ABS

NEW

... for outdoor sheltered spaces, chemically resistant.

USE

It is intended to be installed in **sheltered outdoor spaces.** It features a ventilation membrane that equalizes pressures while blocking water and contaminants that build up inside of the fitting as a result of temperature fluctuations.

The fitting is highly recommended for agricultural buildings and other spaces with chemically aggressive environments due to ammonia fumes, lye fumes, alkali, hot water (hydrolysis) and oils. The product is primarily intended for **agricultural buildings and industrial halls such as farms, stables, production plants and warehouses, and spaces with permanently high humidity (such as car washes and tunnels). Additionally, it is a perfect choice for the tropical zone and coastal areas.** IP69-rated and HACCP-compliant, the fitting's design also makes it a great choice for the food industry.

The fitting´s base is made of ABS and diffuser of AC, resulting in their **exceptional chemical resistance**. Emissions in the environment of use may reduce the usability of the plastics.

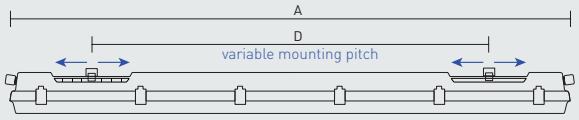
ADVANTAGES

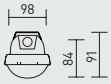
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from ta = -25 °C to **ta = 50 °C**
- Lifetime: 50 000 hours / L90B10
- **Variable suspension pitch,** optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- Optional throughwiring (up to 7 wires inside the light fitting)
- Standard model CRI > 80: 4000 K
- On request CRI > 80: 3000 K, 5000 K, 6500 K
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- Certificates: **EPD, ENEC, CB, HACCP**

PRIMA VP ABS, ABSc

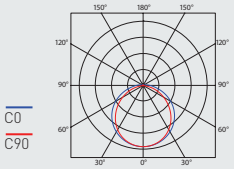
TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 50 °C**
- Maximum ambient temperature: ta = 0-25 °C for version with emergency back-up M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **163 lm/W**
- **CRI** > **80: 4000 K** – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: translucent ABS (high chemical resistance, UV stability)
- Body: dark grey ABS (high chemical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5 (standard), or rubber (SBS)
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %





PRIMA 1.5ft VP ABS



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature ta = 50 °C - body: grey polycarbonate - diffuser: translucent polycarbonate									
PRIMA 1.2ft VP ABS 1300/840	50	1310	1220	8,2	149	22.0 / 21.6	0,9	610	110 - 370
PRIMA 1.2ft VP ABS 1600/840	50	1560	1450	9,8	148	22.6 / 22.2	0,9	610	110 - 370
PRIMA 1.2ft VP ABS 2200/840	45	2140	1990	13,2	151	23.7 / 23.3	0,9	610	110 - 370
PRIMA 1.4ft VP ABS 2600/840	50	2600	2420	16,1	150	22.2 / 21.7	1,7	1170	700 - 960
PRIMA 1.4ft VP ABS 3200/840	50	3100	2880	19,1	151	22.8 / 22.3	1,7	1170	700 - 960
PRIMA 1.4ft VP ABS 4400/840	45	4300	4000	26,0	154	23.9 / 23.4	1,7	1170	700 - 960
PRIMA 1.4ft VP ABS 6400/840	45	6120	5690	36,1	158	25.1 / 24.7	1,7	1170	700 - 960
PRIMA 1.4ft VP ABS 8000/840	35	8050	7490	47,3	158	26.1 / 25.6	1,7	1170	700 - 960
PRIMA 1.5ft VP ABS 3250/840	50	3240	3010	19,5	154	22.2 / 21.7	2,0	1450	970 - 1230
PRIMA 1.5ft VP ABS 4000/840	50	3850	3580	23,3	154	22.8 / 22.3	2,0	1450	970 - 1230
PRIMA 1.5ft VP ABS 5500/840	45	5340	4970	31,9	156	23.9 / 23.4	2,0	1450	970 - 1230
PRIMA 1.5ft VP ABS 8000/840	45	7780	7240	44,3	163	25.2 / 24.7	2,0	1450	970 - 1230
PRIMA 1.5ft VP ABS 10000/840	35	9890	9200	58,6	157	26.1 / 25.6	2,0	1450	970 - 1230

PRIMA VP ABS

Code	Type	Non-dimmable driver - plastic clips		
		3F	M3h	3F M3h
105949	PRIMA 1.2ft VP ABS 1300/840	105960	x	x
105950	PRIMA 1.2ft VP ABS 1600/840	105961	x	x
105951	PRIMA 1.2ft VP ABS 2200/840	105962	x	x
105952	PRIMA 1.4ft VP ABS 2600/840	105963	105971	106685
105953	PRIMA 1.4ft VP ABS 3200/840	105964	105972	106686
105954	PRIMA 1.4ft VP ABS 4400/840	105965	105973	106687
105955	PRIMA 1.4ft VP ABS 6400/840	105966	105974	106688
106861	PRIMA 1.4ft VP ABS 8000/840	106863	x	x
105956	PRIMA 1.5ft VP ABS 3250/840	105967	105975	105979
105957	PRIMA 1.5ft VP ABS 4000/840	105968	105976	105980
105958	PRIMA 1.5ft VP ABS 5500/840	105969	105977	105981
105959	PRIMA 1.5ft VP ABS 8000/840	105970	105978	105982
106862	PRIMA 1.5ft VP ABS 10000/840	106864	x	x

PRIMA VP ABSc

Code	Type	Non-dimmable driver - stainless clips (c)		
		3F	M3h	3F M3h
105991	PRIMA 1.2ft VP ABSc 1300/840	106002	x	x
105992	PRIMA 1.2ft VP ABSc 1600/840	106003	x	x
105993	PRIMA 1.2ft VP ABSc 2200/840	106004	x	x
105994	PRIMA 1.4ft VP ABSc 2600/840	106005	106013	106689
105995	PRIMA 1.4ft VP ABSc 3200/840	106006	106014	106690
105996	PRIMA 1.4ft VP ABSc 4400/840	106007	106015	106691
105997	PRIMA 1.4ft VP ABSc 6400/840	106008	106016	106692
106865	PRIMA 1.4ft VP ABSc 8000/840	106867	x	x
105998	PRIMA 1.5ft VP ABSc 3250/840	106009	106017	106021
105999	PRIMA 1.5ft VP ABSc 4000/840	106010	106018	106022
106000	PRIMA 1.5ft VP ABSc 5500/840	106011	106019	106023
106001	PRIMA 1.5ft VP ABSc 8000/840	106012	106020	106024
106866	PRIMA 1.5ft VP ABSc 10000/840	106868	x	x

PRIMA VP ABS DALI

Digital dimmable driver DALI - plastic clips

Code	Type	3F	M3h	3F M3h
106033	PRIMA 1.2ft VP ABS 1300/840 DALI	x	x	x
106034	PRIMA 1.2ft VP ABS 1600/840 DALI	x	x	x
106035	PRIMA 1.2ft VP ABS 2200/840 DALI	x	x	x
106036	PRIMA 1.4ft VP ABS 2600/840 DALI	106047	106055	106693
106037	PRIMA 1.4ft VP ABS 3200/840 DALI	106048	106056	106694
106038	PRIMA 1.4ft VP ABS 4400/840 DALI	106049	106057	106695
106039	PRIMA 1.4ft VP ABS 6400/840 DALI	106050	106058	106696
106869	PRIMA 1.4ft VP ABS 8000/840 DALI	106871	x	x
106040	PRIMA 1.5ft VP ABS 3250/840 DALI	106051	106059	106063
106041	PRIMA 1.5ft VP ABS 4000/840 DALI	106052	106060	106064
106042	PRIMA 1.5ft VP ABS 5500/840 DALI	106053	106061	106065
106043	PRIMA 1.5ft VP ABS 8000/840 DALI	106054	106062	106066
106870	PRIMA 1.5ft VP ABS 10000/840 DALI	106872	x	x

PRIMA VP ABSc DALI

Digital dimmable driver DALI - stainless clips (c)

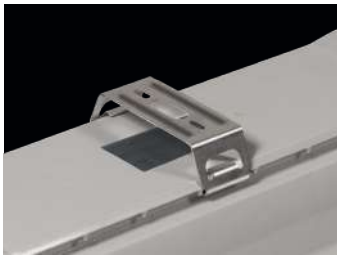
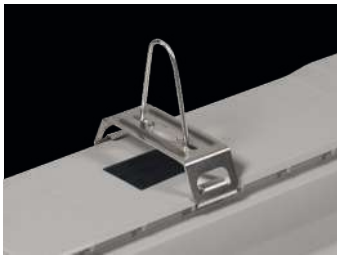
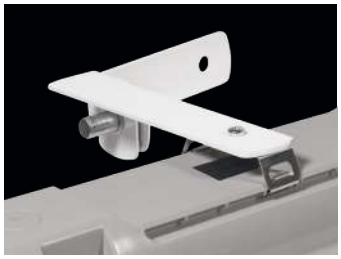
Code	Type	3F	M3h	3F M3h
106075	PRIMA 1.2ft VP ABSc 1300/840 DALI	x	x	x
106076	PRIMA 1.2ft VP ABSc 1600/840 DALI	x	x	x
106077	PRIMA 1.2ft VP ABSc 2200/840 DALI	x	x	x
106078	PRIMA 1.4ft VP ABSc 2600/840 DALI	106089	106097	106697
106079	PRIMA 1.4ft VP ABSc 3200/840 DALI	106090	106098	106698
106080	PRIMA 1.4ft VP ABSc 4400/840 DALI	106091	106099	106699
106081	PRIMA 1.4ft VP ABSc 6400/840 DALI	106092	106100	106700
106873	PRIMA 1.4ft VP ABSc 8000/840 DALI	106875	x	x
106082	PRIMA 1.5ft VP ABSc 3250/840 DALI	106093	106101	106105
106083	PRIMA 1.5ft VP ABSc 4000/840 DALI	106094	106102	106106
106084	PRIMA 1.5ft VP ABSc 5500/840 DALI	106095	106103	106107
106085	PRIMA 1.5ft VP ABSc 8000/840 DALI	106096	106104	106108
106874	PRIMA 1.5ft VP ABSc 10000/840 DALI	106876	x	x

LEGEND

3F 3-phase 5 core through-wiring in the luminaire
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
DALI version with digital dimmable driver DALI
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories

LIGHT FITTING DETAILED VIEW

PRIMA VP ABS

PRIMA VALUE

NEW

... dustproof, waterproof and impact resistant.

USE

It is designed for indoor spaces, **industrial premises, agricultural buildings, warehouses as well as sports facilities, transport hubs, car parks and garages, workshops and laboratories** with no explosion hazard.

Made of clear polycarbonate, the base and the diffuser boast **high impact and deformation resistance**. Emissions in the environment of use may reduce the usability of the plastics.

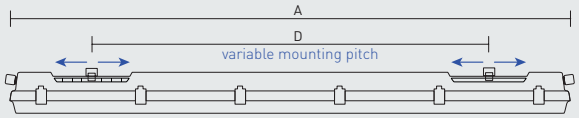
ADVANTAGES

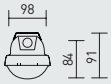
- Light fitting protection **IP66**
- High temperature resistance in a range from ta = -25 °C to **ta = 45 °C**
- Lifetime: 50 000 hours / L90B10
- High **mechanical resistance IK10**
- **Variable suspension pitch,** optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- Standard model CRI > 80: 4000 K
- Certificates: CE (only)

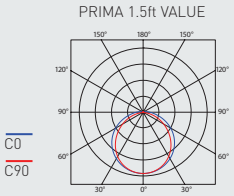
PRIMA VALUE PC, PCc

TECHNICAL DESCRIPTION

- Light fitting protection: **IP66**
- Maximum ambient temperature: **ta = 45 °C**
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **140 lm/W**
- **CRI** > **80: 4000 K** – standard
- MacAdam = 3 SDCM
- Diffuser: **translucent PC** (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: rubber (SBS)
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %







Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature ta = 45 °C - body: grey polycarbonate - diffuser: translucent polycarbonate									
PRIMA VALUE 1.2ft PC 1300/840	45	1440	1340	9,8	137	22.5 / 21.7	0,9	610	110 - 370
PRIMA VALUE 1.2ft PC 1600/840	45	1690	1570	11,5	137	23.1 / 22.2	0,9	610	110 - 370
PRIMA VALUE 1.2ft PC 2200/840	40	2360	2190	15,7	139	24.2 / 23.4	0,9	610	110 - 370
PRIMA VALUE 1.4ft PC 2600/840	45	2910	2710	19,7	138	22.7 / 21.9	1,7	1170	700 - 960
PRIMA VALUE 1.4ft PC 3200/840	45	3350	3120	22,8	137	23.2 / 22.4	1,7	1170	700 - 960
PRIMA VALUE 1.4ft PC 4400/840	40	4720	4390	31,4	140	24.4 / 23.6	1,7	1170	700 - 960
PRIMA VALUE 1.4ft PC 6400/840	40	6580	6120	43,8	140	25.6 / 24.7	1,7	1170	700 - 960
PRIMA VALUE 1.5ft PC 3250/840	45	3620	3370	24,0	140	22.7 / 21.9	2,0	1450	970 - 1230
PRIMA VALUE 1.5ft PC 4000/840	45	4140	3850	28,0	138	23.2 / 22.4	2,0	1450	970 - 1230
PRIMA VALUE 1.5ft PC 5500/840	40	5740	5340	38,3	139	24.3 / 23.5	2,0	1450	970 - 1230
PRIMA VALUE 1.5ft PC 8000/840	40	8030	7470	54,3	138	25.5 / 24.7	2,0	1450	970 - 1230

PRIMA VALUE PC

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
106729	PRIMA VALUE 1.2ft PC 1300/840	x	x	x	x	x	x
106730	PRIMA VALUE 1.2ft PC 1600/840	x	x	x	x	x	x
106731	PRIMA VALUE 1.2ft PC 2200/840	x	x	x	x	x	x
106732	PRIMA VALUE 1.4ft PC 2600/840	x	x	x	x	x	x
106733	PRIMA VALUE 1.4ft PC 3200/840	x	x	x	x	x	x
106734	PRIMA VALUE 1.4ft PC 4400/840	x	x	x	x	x	x
106735	PRIMA VALUE 1.4ft PC 6400/840	x	x	x	x	x	x
106736	PRIMA VALUE 1.5ft PC 3250/840	x	x	x	x	x	x
106737	PRIMA VALUE 1.5ft PC 4000/840	x	x	x	x	x	x
106738	PRIMA VALUE 1.5ft PC 5500/840	x	x	x	x	x	x
106739	PRIMA VALUE 1.5ft PC 8000/840	x	x	x	x	x	x

PRIMA VALUE PCc

Non-dimmable driver - stainless clips (c)

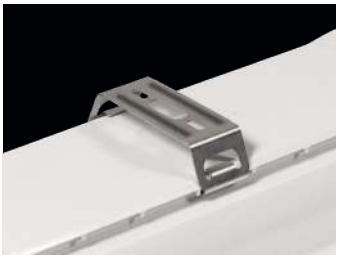
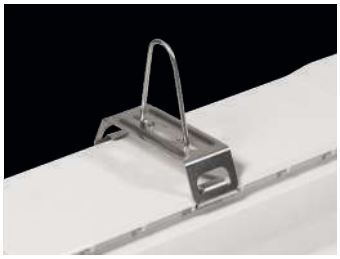
Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
106740	PRIMA VALUE 1.2ft PCc 1300/840	x	x	x	x	x	x
106741	PRIMA VALUE 1.2ft PCc 1600/840	x	x	x	x	x	x
106742	PRIMA VALUE 1.2ft PCc 2200/840	x	x	x	x	x	x
106743	PRIMA VALUE 1.4ft PCc 2600/840	x	x	x	x	x	x
106744	PRIMA VALUE 1.4ft PCc 3200/840	x	x	x	x	x	x
106745	PRIMA VALUE 1.4ft PCc 4400/840	x	x	x	x	x	x
106746	PRIMA VALUE 1.4ft PCc 6400/840	x	x	x	x	x	x
106747	PRIMA VALUE 1.5ft PCc 3250/840	x	x	x	x	x	x
106748	PRIMA VALUE 1.5ft PCc 4000/840	x	x	x	x	x	x
106749	PRIMA VALUE 1.5ft PCc 5500/840	x	x	x	x	x	x
106750	PRIMA VALUE 1.5ft PCc 8000/840	x	x	x	x	x	x

LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories

LIGHT FITTING DETAILED VIEW

PRIMA VALUE PC

PRIMA VALUE ABS

NEW

... dustproof, waterproof and chemically resistant.

USE

In addition to indoor spaces, it is designed for agricultural buildings and other spaces with chemically aggressive environments due to ammonia fumes, lye fumes, alkali and hot water (hydrolysis).

The fitting is primarily intended for large **agricultural premises and industrial halls such as farms, stables, production plants and warehouses, car washes and laboratories** with no explosion hazard.

The fitting´s base is made of ABS and diffuser of AC, resulting in their **exceptional chemical resistance**. Emissions in the environment of use may reduce the usability of the plastics.

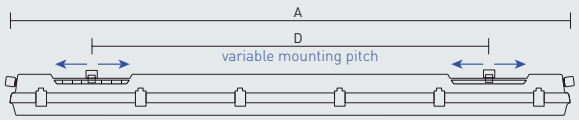
ADVANTAGES

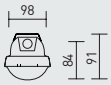
- Light fitting protection **IP66**
- High temperature resistance in a range from ta = -25 °C to **ta = 45 °C**
- Lifetime: 50 000 hours / L90B10
- **Variable suspension pitch,** optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- Standard model CRI > 80: 4000 K
- Certificates: CE (only)

PRIMA VALUE ABS, ABSc

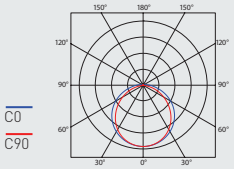
TECHNICAL DESCRIPTION

- Light fitting protection: **IP66**
- Maximum ambient temperature: **ta = 45 °C**
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **140 lm/W**
- **CRI** > **80: 4000 K** – standard
- MacAdam = 3 SDCM
- Diffuser: translucent ABS (high chemical resistance, UV stability)
- Body: dark grey ABS (high chemical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: rubber (SBS)
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %





PRIMA 1.5ft VALUE ABS



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature ta = 45 °C - body: dark grey ABS - diffuser: translucent polycarbonate									
PRIMA VALUE 1.2ft ABS 1300/840	45	1440	1340	9,8	137	22.4 / 21.9	0,9	610	110 - 370
PRIMA VALUE 1.2ft ABS 1600/840	45	1690	1570	11,5	137	22.9 / 22.4	0,9	610	110 - 370
PRIMA VALUE 1.2ft ABS 2200/840	40	2360	2190	15,7	139	24.1 / 23.6	0,9	610	110 - 370
PRIMA VALUE 1.4ft ABS 2600/840	45	2910	2710	19,7	138	22.6 / 22.1	1,7	1170	700 - 960
PRIMA VALUE 1.4ft ABS 3200/840	45	3350	3120	22,8	137	23.0 / 22.6	1,7	1170	700 - 960
PRIMA VALUE 1.4ft ABS 4400/840	40	4720	4390	31,4	140	24.2 / 23.8	1,7	1170	700 - 960
PRIMA VALUE 1.4ft ABS 6400/840	40	6580	6120	43,8	140	25.4 / 24.9	1,7	1170	700 - 960
PRIMA VALUE 1.5ft ABS 3250/840	45	3620	3370	24,0	140	22.6 / 22.1	2,0	1450	970 - 1230
PRIMA VALUE 1.5ft ABS 4000/840	45	4140	3850	28,0	138	23.0 / 22.6	2,0	1450	970 - 1230
PRIMA VALUE 1.5ft ABS 5500/840	40	5740	5340	38,3	139	24.2 / 23.7	2,0	1450	970 - 1230
PRIMA VALUE 1.5ft ABS 8000/840	40	8030	7470	54,3	138	25.3 / 24.9	2,0	1450	970 - 1230

PRIMA VALUE ABS

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
106751	PRIMA VALUE 1.2ft ABS 1300/840	x	x	x	x	x	x
106752	PRIMA VALUE 1.2ft ABS 1600/840	x	x	x	x	x	x
106753	PRIMA VALUE 1.2ft ABS 2200/840	x	x	x	x	x	x
106754	PRIMA VALUE 1.4ft ABS 2600/840	x	x	x	x	x	x
106755	PRIMA VALUE 1.4ft ABS 3200/840	x	x	x	x	x	x
106756	PRIMA VALUE 1.4ft ABS 4400/840	x	x	x	x	x	x
106757	PRIMA VALUE 1.4ft ABS 6400/840	x	x	x	x	x	x
106758	PRIMA VALUE 1.5ft ABS 3250/840	x	x	x	x	x	x
106759	PRIMA VALUE 1.5ft ABS 4000/840	x	x	x	x	x	x
106760	PRIMA VALUE 1.5ft ABS 5500/840	x	x	x	x	x	x
106761	PRIMA VALUE 1.5ft ABS 8000/840	x	x	x	x	x	x

PRIMA VALUE ABSc

Non-dimmable driver - stainless clips (c)

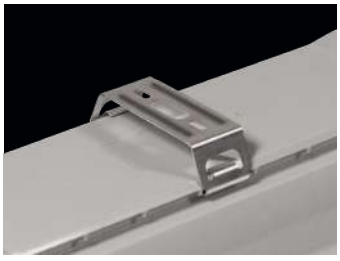
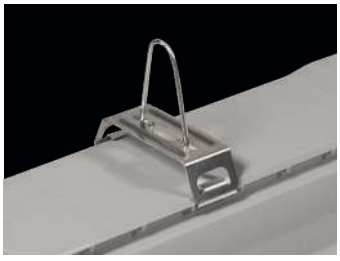
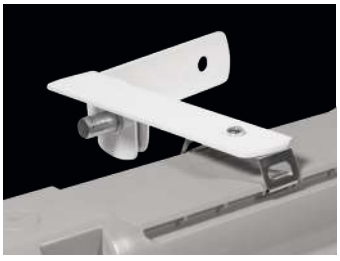
Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
106762	PRIMA VALUE 1.2ft ABSc 1300/840	x	x	x	x	x	x
106763	PRIMA VALUE 1.2ft ABSc 1600/840	x	x	x	x	x	x
106764	PRIMA VALUE 1.2ft ABSc 2200/840	x	x	x	x	x	x
106765	PRIMA VALUE 1.4ft ABSc 2600/840	x	x	x	x	x	x
106766	PRIMA VALUE 1.4ft ABSc 3200/840	x	x	x	x	x	x
106767	PRIMA VALUE 1.4ft ABSc 4400/840	x	x	x	x	x	x
106768	PRIMA VALUE 1.4ft ABSc 6400/840	x	x	x	x	x	x
106769	PRIMA VALUE 1.5ft ABSc 3250/840	x	x	x	x	x	x
106770	PRIMA VALUE 1.5ft ABSc 4000/840	x	x	x	x	x	x
106771	PRIMA VALUE 1.5ft ABSc 5500/840	x	x	x	x	x	x
106772	PRIMA VALUE 1.5ft ABSc 8000/840	x	x	x	x	x	x

LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories

LIGHT FITTING DETAILED VIEW

PRIMA VALUE ABS

PRIMA CLASS II

NEW

... class II insulation, impact resistant.

USE

The fixture is intended for indoor spaces, **industrial and agricultural buildings, warehouses, rail vehicle maintenance facilities, platforms, substations, depots, car parks, garages, workshops and laboratories** with no explosion hazard.

IP69-rated and HACCP-compliant, the fitting's design also makes it a great choice for the food industry.

Made of clear polycarbonate, the base and the diffuser boast **high impact and deformation resistance**. Emissions in the environment of use may reduce the usability of the plastics.

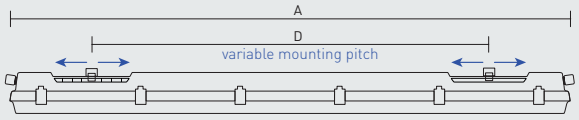
ADVANTAGES

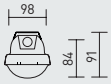
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from ta = -25°C to **ta = 50°C**
- Lifetime: 50 000 hours / L90B10
- High **mechanical resistance IK10**
- **Variable suspension pitch,** optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- Optional throughwiring (up to 6 wires inside the light fitting)
- Standard model CRI > 80: 4000 K
- On request CRI > 80: 3000 K, 5000 K, 6500 K
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- Certificates: **ENEC, CB, HACCP**

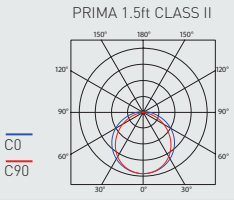
PRIMA CLASS II PC, PCc

TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 50 °C**
- Maximum ambient temperature: ta = 0-25 °C for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **163 lm/W**
- **CRI** > **80: 4000 K** – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: **translucent PC** (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5 (standard), or rubber (SBS)
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %







Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature ta = 50 °C - body: grey polycarbonate - diffuser: translucent polycarbonate									
PRIMA 1.2ft CLASS II PC 1300/840	50	1310	1220	8,2	149	22.2 / 21.4	0,9	610	110 - 370
PRIMA 1.2ft CLASS II PC 1600/840	50	1560	1450	9,8	148	22.8 / 22.0	0,9	610	110 - 370
PRIMA 1.2ft CLASS II PC 2200/840	45	2140	1990	13,2	151	23.9 / 23.1	0,9	610	110 - 370
PRIMA 1.4ft CLASS II PC 2600/840	50	2600	2420	16,1	150	22.3 / 21.5	1,7	1170	700 - 960
PRIMA 1.4ft CLASS II PC 3200/840	50	3100	2880	19,1	151	22.9 / 22.1	1,7	1170	700 - 960
PRIMA 1.4ft CLASS II PC 4400/840	45	4300	4000	26,0	154	24.1 / 23.2	1,7	1170	700 - 960
PRIMA 1.4ft CLASS II PC 6400/840	45	6120	5690	36,1	158	25.3 / 24.5	1,7	1170	700 - 960
PRIMA 1.5ft CLASS II PC 3250/840	50	3240	3010	19,5	154	22.4 / 21.5	2,0	1450	970 - 1230
PRIMA 1.5ft CLASS II PC 4000/840	50	3850	3580	23,3	154	23.0 / 22.1	2,0	1450	970 - 1230
PRIMA 1.5ft CLASS II PC 5500/840	45	5340	4970	31,9	156	24.1 / 23.3	2,0	1450	970 - 1230
PRIMA 1.5ft CLASS II PC 8000/840	45	7780	7240	44,3	163	25.4 / 24.6	2,0	1450	970 - 1230

PRIMA CLASS II PC

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
106117	PRIMA 1.2ft CLASS II PC 1300/840	106128	106139	x	x	x	x
106118	PRIMA 1.2ft CLASS II PC 1600/840	106129	106140	x	x	x	x
106119	PRIMA 1.2ft CLASS II PC 2200/840	106130	106141	x	x	x	x
106120	PRIMA 1.4ft CLASS II PC 2600/840	106131	106142	106150	106158	106166	106174
106121	PRIMA 1.4ft CLASS II PC 3200/840	106132	106143	106151	106159	106167	106175
106122	PRIMA 1.4ft CLASS II PC 4400/840	106133	106144	106152	106160	106168	106176
106123	PRIMA 1.4ft CLASS II PC 6400/840	106134	106145	106153	106161	106169	106177
106124	PRIMA 1.5ft CLASS II PC 3250/840	106135	106146	106154	106162	106170	106178
106125	PRIMA 1.5ft CLASS II PC 4000/840	106136	106147	106155	106163	106171	106179
106126	PRIMA 1.5ft CLASS II PC 5500/840	106137	106148	106156	106164	106172	106180
106127	PRIMA 1.5ft CLASS II PC 8000/840	106138	106149	106157	106165	106173	106181

PRIMA CLASS II PCc

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
106182	PRIMA 1.2ft CLASS II PCc 1300/840	106193	106204	x	x	x	x
106183	PRIMA 1.2ft CLASS II PCc 1600/840	106194	106205	x	x	x	x
106184	PRIMA 1.2ft CLASS II PCc 2200/840	106195	106206	x	x	x	x
106185	PRIMA 1.4ft CLASS II PCc 2600/840	106196	106207	106215	106223	106231	106239
106186	PRIMA 1.4ft CLASS II PCc 3200/840	106197	106208	106216	106224	106232	106240
106187	PRIMA 1.4ft CLASS II PCc 4400/840	106198	106209	106217	106225	106233	106241
106188	PRIMA 1.4ft CLASS II PCc 6400/840	106199	106210	106218	106226	106234	106242
106189	PRIMA 1.5ft CLASS II PCc 3250/840	106200	106211	106219	106227	106235	106243
106190	PRIMA 1.5ft CLASS II PCc 4000/840	106201	106212	106220	106228	106236	106244
106191	PRIMA 1.5ft CLASS II PCc 5500/840	106202	106213	106221	106229	106237	106245
106192	PRIMA 1.5ft CLASS II PCc 8000/840	106203	106214	106222	106230	106238	106246

PRIMA CLASS II PC DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
106247	PRIMA 1.2ft CLASS II PC 1300/840 DALI	106258	x	x	x	x	x
106248	PRIMA 1.2ft CLASS II PC 1600/840 DALI	106259	x	x	x	x	x
106249	PRIMA 1.2ft CLASS II PC 2200/840 DALI	106260	x	x	x	x	x
106250	PRIMA 1.4ft CLASS II PC 2600/840 DALI	106261	106272	106280	106288	106296	106701
106251	PRIMA 1.4ft CLASS II PC 3200/840 DALI	106262	106273	106281	106289	106297	106702
106252	PRIMA 1.4ft CLASS II PC 4400/840 DALI	106263	106274	106282	106290	106298	106703
106253	PRIMA 1.4ft CLASS II PC 6400/840 DALI	106264	106275	106283	106291	106299	106704
106254	PRIMA 1.5ft CLASS II PC 3250/840 DALI	106265	106276	106284	106292	106300	106304
106255	PRIMA 1.5ft CLASS II PC 4000/840 DALI	106266	106277	106285	106293	106301	106305
106256	PRIMA 1.5ft CLASS II PC 5500/840 DALI	106267	106278	106286	106294	106302	106306
106257	PRIMA 1.5ft CLASS II PC 8000/840 DALI	106268	106279	106287	106295	106303	106307

PRIMA CLASS II PCc DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
106316	PRIMA 1.2ft CLASS II PCc 1300/840 DALI	106327	x	x	x	x	x
106317	PRIMA 1.2ft CLASS II PCc 1600/840 DALI	106328	x	x	x	x	x
106318	PRIMA 1.2ft CLASS II PCc 2200/840 DALI	106329	x	x	x	x	x
106319	PRIMA 1.4ft CLASS II PCc 2600/840 DALI	106330	106341	106349	106357	106365	106705
106320	PRIMA 1.4ft CLASS II PCc 3200/840 DALI	106331	106342	106350	106358	106366	106706
106321	PRIMA 1.4ft CLASS II PCc 4400/840 DALI	106332	106343	106351	106359	106367	106707
106322	PRIMA 1.4ft CLASS II PCc 6400/840 DALI	106333	106344	106352	106360	106368	106708
106323	PRIMA 1.5ft CLASS II PCc 3250/840 DALI	106334	106345	106353	106361	106369	106373
106324	PRIMA 1.5ft CLASS II PCc 4000/840 DALI	106335	106346	106354	106362	106370	106374
106325	PRIMA 1.5ft CLASS II PCc 5500/840 DALI	106336	106347	106355	106363	106371	106375
106326	PRIMA 1.5ft CLASS II PCc 8000/840 DALI	106337	106348	106356	106364	106372	106376

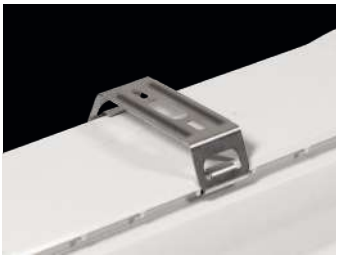
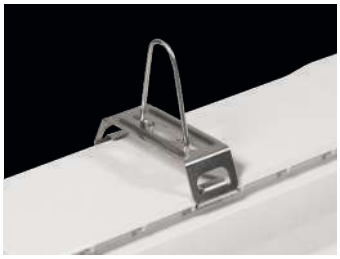
LEGEND

1F 1-phase 2 core through-wiring in the luminaire
3F 3-phase 4 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 4 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

DALI version with digital dimmable driver DALI
DALI 1F 1-phase 4 core through-wiring in the luminaire
DALI 3F 3-phase 6 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 6 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories

LIGHT FITTING DETAILED VIEW

PRIMA CLASS II PC

PRIMA TRS

NEW

... exceptionally low UGR, impact resistant.

USE

Compared to its basic version, **fully transparent** PRIMA TRS boasts considerably **lower UGR values**.

It is designed for indoor spaces, **industrial premises, agricultural buildings, warehouses as well as sports facilities, transport hubs, car parks and garages, workshops and laboratories** with no explosion hazard.

IP69-rated and HACCP-compliant, the fitting's design also makes it a great choice for the food industry.

Made of clear polycarbonate, the base and the diffuser boast **high impact and deformation resistance**. Emissions in the environment of use may reduce the usability of the plastics.

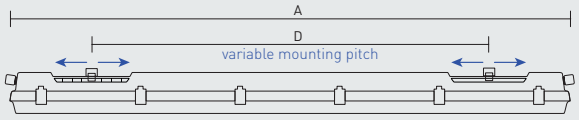
ADVANTAGES

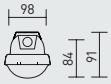
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from ta = -25 °C to **ta = 50 °C**
- Lifetime: 50 000 hours / L90B10
- High **mechanical resistance IK10**
- **Variable suspension pitch,** optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- Optional throughwiring (up to 7 wires inside the light fitting)
- Standard model CRI > 80: 4000 K
- On request CRI > 80: 3000 K, 5000 K, 6500 K
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- Certificates: **EPD, ENEC, CB, HACCP**

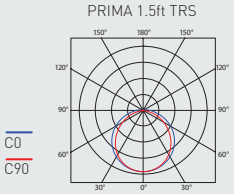
PRIMA TRS PC, PCc

TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 50 °C**
- Maximum ambient temperature: ta = 0-25 °C for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **165 lm/W**
- **CRI** > **80: 4000 K** – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: **translucent PC** (high mechanical resistance, UV stability)
- Body: **transparent PC** (high mechanical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5 (standard), or rubber (SBS)
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %







Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature ta = 50 °C - body: transparent polycarbonate - diffuser: translucent polycarbonate									
PRIMA 1.2ft TRS PC 1300/840	50	1310	1230	8,2	150	22.1 / 21.2	0,9	610	110 - 370
PRIMA 1.2ft TRS PC 1600/840	50	1560	1470	9,8	150	22.7 / 21.9	0,9	610	110 - 370
PRIMA 1.2ft TRS PC 2200/840	45	2140	2010	13,2	152	23.8 / 22.9	0,9	610	110 - 370
PRIMA 1.4ft TRS PC 2600/840	50	2600	2440	16,1	152	22.2 / 21.4	1,7	1170	700 - 960
PRIMA 1.4ft TRS PC 3200/840	50	3100	2910	19,1	152	22.8 / 22.0	1,7	1170	700 - 960
PRIMA 1.4ft TRS PC 4400/840	45	4300	4040	26,0	155	23.9 / 23.1	1,7	1170	700 - 960
PRIMA 1.4ft TRS PC 6400/840	45	6120	5750	36,1	159	25.2 / 24.3	1,7	1170	700 - 960
PRIMA 1.4ft TRS PC 8000/840	35	8050	7570	47,3	160	26.1 / 25.3	1,7	1170	700 - 960
PRIMA 1.5ft TRS PC 3250/840	50	3240	3050	19,5	156	22.2 / 21.4	2,0	1450	970 - 1230
PRIMA 1.5ft TRS PC 4000/840	50	3850	3620	23,3	155	22.8 / 22.0	2,0	1450	970 - 1230
PRIMA 1.5ft TRS PC 5500/840	45	5340	5020	31,9	157	23.9 / 23.1	2,0	1450	970 - 1230
PRIMA 1.5ft TRS PC 8000/840	45	7780	7310	44,3	165	25.3 / 24.4	2,0	1450	970 - 1230
PRIMA 1.5ft TRS PC 10000/840	35	9890	9300	58,6	159	26.1 / 25.3	2,0	1450	970 - 1230

PRIMA TRS PC

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
104977	PRIMA 1.2ft TRS PC 1300/840	104988	104999	x	x	x	x
104978	PRIMA 1.2ft TRS PC 1600/840	104989	105000	x	x	x	x
104979	PRIMA 1.2ft TRS PC 2200/840	104990	105001	x	x	x	x
104980	PRIMA 1.4ft TRS PC 2600/840	104991	105002	105010	105018	105026	105034
104981	PRIMA 1.4ft TRS PC 3200/840	104992	105003	105011	105019	105027	105035
104982	PRIMA 1.4ft TRS PC 4400/840	104993	105004	105012	105020	105028	105036
104983	PRIMA 1.4ft TRS PC 6400/840	104994	105005	105013	105021	105029	105037
106773	PRIMA 1.4ft TRS PC 8000/840	106775	106777	x	x	x	x
104984	PRIMA 1.5ft TRS PC 3250/840	104995	105006	105014	105022	105030	105038
104985	PRIMA 1.5ft TRS PC 4000/840	104996	105007	105015	105023	105031	105039
104986	PRIMA 1.5ft TRS PC 5500/840	104997	105008	105016	105024	105032	105040
104987	PRIMA 1.5ft TRS PC 8000/840	104998	105009	105017	105025	105033	105041
106774	PRIMA 1.5ft TRS PC 10000/840	106776	106778	x	x	x	x

PRIMA TRS PCc

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
105042	PRIMA 1.2ft TRS PCc 1300/840	105053	105064	x	x	x	x
105043	PRIMA 1.2ft TRS PCc 1600/840	105054	105065	x	x	x	x
105044	PRIMA 1.2ft TRS PCc 2200/840	105055	105066	x	x	x	x
105045	PRIMA 1.4ft TRS PCc 2600/840	105056	105067	105075	105083	105091	105099
105046	PRIMA 1.4ft TRS PCc 3200/840	105057	105068	105076	105084	105092	105100
105047	PRIMA 1.4ft TRS PCc 4400/840	105058	105069	105077	105085	105093	105101
105048	PRIMA 1.4ft TRS PCc 6400/840	105059	105070	105078	105086	105094	105102
106779	PRIMA 1.4ft TRS PCc 8000/840	106781	106783	x	x	x	x
105049	PRIMA 1.5ft TRS PCc 3250/840	105060	105071	105079	105087	105095	105103
105050	PRIMA 1.5ft TRS PCc 4000/840	105061	105072	105080	105088	105096	105104
105051	PRIMA 1.5ft TRS PCc 5500/840	105062	105073	105081	105089	105097	105105
105052	PRIMA 1.5ft TRS PCc 8000/840	105063	105074	105082	105090	105098	105106
106780	PRIMA 1.5ft TRS PCc 10000/840	106782	106784	x	x	x	x

PRIMA TRS PC DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
105107	PRIMA 1.2ft TRS PC 1300/840 DALI	105118	x	x	x	x	x
105108	PRIMA 1.2ft TRS PC 1600/840 DALI	105119	x	x	x	x	x
105109	PRIMA 1.2ft TRS PC 2200/840 DALI	105120	x	x	x	x	x
105110	PRIMA 1.4ft TRS PC 2600/840 DALI	105121	105132	105140	105148	105156	106645
105111	PRIMA 1.4ft TRS PC 3200/840 DALI	105122	105133	105141	105149	105157	106646
105112	PRIMA 1.4ft TRS PC 4400/840 DALI	105123	105134	105142	105150	105158	106647
105113	PRIMA 1.4ft TRS PC 6400/840 DALI	105124	105135	105143	105151	105159	106648
106785	PRIMA 1.4ft TRS PC 8000/840 DALI	106787	106789	x	x	x	x
105114	PRIMA 1.5ft TRS PC 3250/840 DALI	105125	105136	105144	105152	105160	105164
105115	PRIMA 1.5ft TRS PC 4000/840 DALI	105126	105137	105145	105153	105161	105165
105116	PRIMA 1.5ft TRS PC 5500/840 DALI	105127	105138	105146	105154	105162	105166
105117	PRIMA 1.5ft TRS PC 8000/840 DALI	105128	105139	105147	105155	105163	105167
106786	PRIMA 1.5ft TRS PC 10000/840 DALI	106788	106790	x	x	x	x

PRIMA TRS PCc DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
105176	PRIMA 1.2ft TRS PCc 1300/840 DALI	105187	x	x	x	x	x
105177	PRIMA 1.2ft TRS PCc 1600/840 DALI	105188	x	x	x	x	x
105178	PRIMA 1.2ft TRS PCc 2200/840 DALI	105189	x	x	x	x	x
105179	PRIMA 1.4ft TRS PCc 2600/840 DALI	105190	105201	105209	105217	105225	106649
105180	PRIMA 1.4ft TRS PCc 3200/840 DALI	105191	105202	105210	105218	105226	106650
105181	PRIMA 1.4ft TRS PCc 4400/840 DALI	105192	105203	105211	105219	105227	106651
105182	PRIMA 1.4ft TRS PCc 6400/840 DALI	105193	105204	105212	105220	105228	106652
106791	PRIMA 1.4ft TRS PCc 8000/840 DALI	106793	106795	x	x	x	x
105183	PRIMA 1.5ft TRS PCc 3250/840 DALI	105194	105205	105213	105221	105229	105233
105184	PRIMA 1.5ft TRS PCc 4000/840 DALI	105195	105206	105214	105222	105230	105234
105185	PRIMA 1.5ft TRS PCc 5500/840 DALI	105196	105207	105215	105223	105231	105235
105186	PRIMA 1.5ft TRS PCc 8000/840 DALI	105197	105208	105216	105224	105232	105236
106792	PRIMA 1.5ft TRS PCc 10000/840 DALI	106794	106796	x	x	x	x

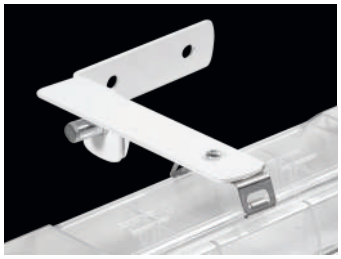
LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories



LIGHT FITTING DETAILED VIEW

PRIMA TRS PC

PRIMA SNS

NEW

... with movement detector, impact resistant.

USE

It is designed for indoor spaces, **industrial premises, agricultural buildings, warehouses as well as sports facilities, transport hubs, car parks and garages, workshops and laboratories** with no explosion hazard.

IP69-rated and HACCP-compliant, the fitting's design also makes it a great choice for the food industry.

Made of clear polycarbonate, the base and the diffuser boast **high impact and deformation resistance**. Emissions in the environment of use may reduce the usability of the plastics.

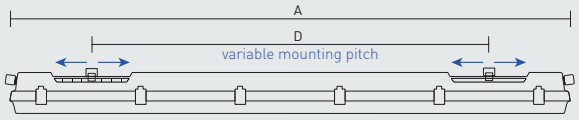
ADVANTAGES

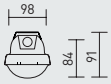
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from ta = -25°C to **ta = 50°C**
- Lifetime: 50 000 hours / L90B10
- High **mechanical resistance IK10**
- **Variable suspension pitch,** optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- Optional throughwiring (up to 5 wires inside the light fitting)
- Standard model CRI > 80: 4000 K
- On request CRI > 80: 3000 K, 5000 K, 6500 K
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- Certificates: **ENEC, CB, HACCP**

PRIMA SNS PC, PCc

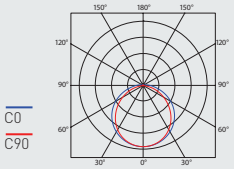
TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 50 °C**
- Maximum ambient temperature: ta = 0-25 °C for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **164 lm/W**
- **CRI** > **80: 4000 K** – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: **translucent PC** (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5 (standard), or rubber (SBS)
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %





PRIMA 1.5ft SNS



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature ta = 50 °C - body: grey polycarbonate - diffuser: translucent polycarbonate									
PRIMA 1.4ft SNS PC 2600/840	50	2340	2180	14,4	151	22.0 / 21.1	1,8	1170	700 - 960
PRIMA 1.4ft SNS PC 3200/840	50	2790	2590	17,1	151	22.6 / 21.7	1,8	1170	700 - 960
PRIMA 1.4ft SNS PC 4400/840	45	3840	3570	23,2	154	23.7 / 22.9	1,8	1170	700 - 960
PRIMA 1.4ft SNS PC 6400/840	45	5510	5120	32,4	158	24.9 / 24.1	1,8	1170	700 - 960
PRIMA 1.4ft SNS PC 8000/840	35	7250	6740	42,5	159	25.9 / 25.1	1,8	1170	700 - 960
PRIMA 1.5ft SNS PC 3250/840	50	2980	2770	17,9	155	22.1 / 21.2	2,1	1450	970 - 1230
PRIMA 1.5ft SNS PC 4000/840	50	3540	3290	21,4	154	22.7 / 21.8	2,1	1450	970 - 1230
PRIMA 1.5ft SNS PC 5500/840	45	4880	4540	29,1	156	23.8 / 22.9	2,1	1450	970 - 1230
PRIMA 1.5ft SNS PC 8000/840	45	7160	6660	40,7	164	25.1 / 24.3	2,1	1450	970 - 1230
PRIMA 1.5ft SNS PC 10000/840	35	9100	8460	53,9	157	25.9 / 25.1	2,1	1450	970 - 1230

PRIMA SNS PC

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
106385	PRIMA 1.4ft SNS PC 2600/840	106393	106401	106409	106417	106425	106433
106386	PRIMA 1.4ft SNS PC 3200/840	106394	106402	106410	106418	106426	106434
106387	PRIMA 1.4ft SNS PC 4400/840	106395	106403	106411	106419	106427	106435
106388	PRIMA 1.4ft SNS PC 6400/840	106396	106404	106412	106420	106428	106436
106877	PRIMA 1.4ft SNS PC 8000/840	106879	106881	x	x	x	x
106389	PRIMA 1.5ft SNS PC 3250/840	106397	106405	106413	106421	106429	106437
106390	PRIMA 1.5ft SNS PC 4000/840	106398	106406	106414	106422	106430	106438
106391	PRIMA 1.5ft SNS PC 5500/840	106399	106407	106415	106423	106431	106439
106392	PRIMA 1.5ft SNS PC 8000/840	106400	106408	106416	106424	106432	106440
106878	PRIMA 1.5ft SNS PC 10000/840	106880	106882	x	x	x	x

PRIMA SNS PCc

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
106441	PRIMA 1.4ft SNS PCc 2600/840	106449	106457	106465	106473	106481	106489
106442	PRIMA 1.4ft SNS PCc 3200/840	106450	106458	106466	106474	106482	106490
106443	PRIMA 1.4ft SNS PCc 4400/840	106451	106459	106467	106475	106483	106491
106444	PRIMA 1.4ft SNS PCc 6400/840	106452	106460	106468	106476	106484	106492
106883	PRIMA 1.4ft SNS PCc 8000/840	106885	106887	x	x	x	x
106445	PRIMA 1.5ft SNS PCc 3250/840	106453	106461	106469	106477	106485	106493
106446	PRIMA 1.5ft SNS PCc 4000/840	106454	106462	106470	106478	106486	106494
106447	PRIMA 1.5ft SNS PCc 5500/840	106455	106463	106471	106479	106487	106495
106448	PRIMA 1.5ft SNS PCc 8000/840	106456	106464	106472	106480	106488	106496
106884	PRIMA 1.5ft SNS PCc 10000/840	106886	106888	x	x	x	x

PRIMA SNS PC CORRIDOR

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
106497	PRIMA 1.4ft SNS PC 2600/840 CORRIDOR	106505	106513	106521	106529	106537	106709
106498	PRIMA 1.4ft SNS PC 3200/840 CORRIDOR	106506	106514	106522	106530	106538	106710
106499	PRIMA 1.4ft SNS PC 4400/840 CORRIDOR	106507	106515	106523	106531	106539	106711
106500	PRIMA 1.4ft SNS PC 6400/840 CORRIDOR	106508	106516	106524	106532	106540	106712
106889	PRIMA 1.4ft SNS PC 8000/840 CORRIDOR	106891	106893	x	x	x	x
106501	PRIMA 1.5ft SNS PC 3250/840 CORRIDOR	106509	106517	106525	106533	106541	106545
106502	PRIMA 1.5ft SNS PC 4000/840 CORRIDOR	106510	106518	106526	106534	106542	106546
106503	PRIMA 1.5ft SNS PC 5500/840 CORRIDOR	106511	106519	106527	106535	106543	106547
106504	PRIMA 1.5ft SNS PC 8000/840 CORRIDOR	106512	106520	106528	106536	106544	106548
106890	PRIMA 1.5ft SNS PC 10000/840 CORRIDOR	106892	106894	x	x	x	x

PRIMA SNS PCc CORRIDOR

Digital dimmable driver DALI - stainless clips (c)

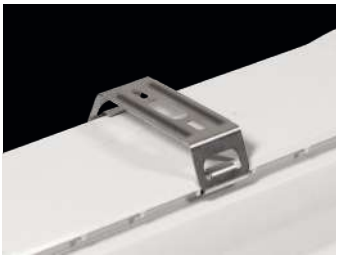
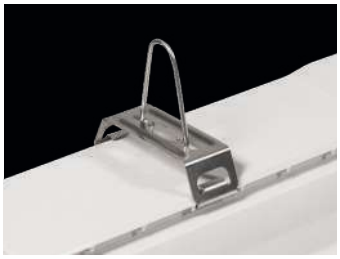
Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
106557	PRIMA 1.4ft SNS PCc 2600/840 CORRIDOR	106565	106573	106581	106589	106597	106713
106558	PRIMA 1.4ft SNS PCc 3200/840 CORRIDOR	106566	106574	106582	106590	106598	106714
106559	PRIMA 1.4ft SNS PCc 4400/840 CORRIDOR	106567	106575	106583	106591	106599	106715
106560	PRIMA 1.4ft SNS PCc 6400/840 CORRIDOR	106568	106576	106584	106592	106600	106716
106895	PRIMA 1.4ft SNS PCc 8000/840 CORRIDOR	106897	106899	x	x	x	x
106561	PRIMA 1.5ft SNS PCc 3250/840 CORRIDOR	106569	106577	106585	106593	106601	106605
106562	PRIMA 1.5ft SNS PCc 4000/840 CORRIDOR	106570	106578	106586	106594	106602	106606
106563	PRIMA 1.5ft SNS PCc 5500/840 CORRIDOR	106571	106579	106587	106595	106603	106607
106564	PRIMA 1.5ft SNS PCc 8000/840 CORRIDOR	106572	106580	106588	106596	106604	106608
106896	PRIMA 1.5ft SNS PCc 10000/840 CORRIDOR	106898	106900	x	x	x	x

LEGEND

1F	1-phase 3 core through-wiring in the luminaire
3F	3-phase 5 core through-wiring in the luminaire
M1h	emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h	emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh	3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
CORRIDOR	version with digital dimmable driver DALI and set corridor function
CORRIDOR 1F	1-phase 5 core through-wiring in the luminaire
CORRIDOR 3F	3-phase 7 core through-wiring in the luminaire
CORRIDOR 3F Mxh	3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories

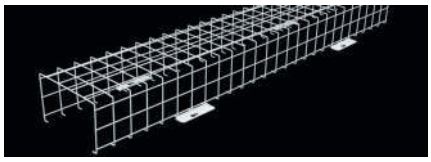



LIGHT FITTING DETAILED VIEW

PRIMA SNS PC

OM – protective grid

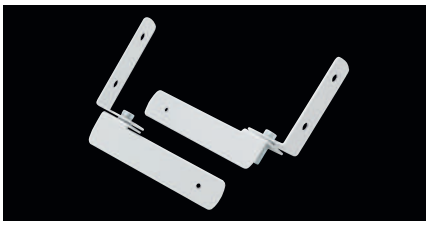
The metal grid protects the light fitting against mechanical damage and unauthorised handling. It is attached to the surface with the use of screws.
The surface is treated with the RAL 9003 powder-coated colour.



Code	Type	Description	Weight [kg]
11941	OM 218	protective grid for types 218, 214/224, 2.2ft (700×220×130 mm)	1,0
11942	OM 236	protective grid for types 236, 228/254, 2.4ft (1300×220×130 mm)	1,7
11943	OM 258	protective grid for types 258, 235/249/280, 2.5ft (1600×220×130 mm)	2,0

BZ – side hanger

It serves to attach the light fitting to the wall with the possibility of its positioning.



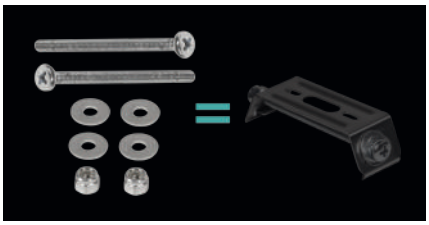
Code	Type	Description	Weight [kg]
90002	BZ	side hanger with blocking (set for 1 light fitting)	0,4

Canalis busbar system connector

The connector enables a quick 1 phase or 3 phase interconnection of light fittings without their opening.

Code	Type	Description	Weight [kg]
79001	KBA 40 ZU	light fitting suspended holder - Canalis KBA system	0,1
70002	KBC 10 CC211	connector with 1 m cable - Canalis KBA system	0,2

Locking set for bracket G3



Code	Type	Description	Weight [kg]
11553	G3 SET	a locking set for G3 stainless steel bracket (bolts, nuts, washers)	0,2

INNOVA

INDUSTRIAL

PLASTIC

IP66 / IP69

PLUG AND PLAY

INNOVA – industrial plastic LED light fitting

INNOVA
page 108

IP66 IP69

INNOVA PC
page 108

INNOVA
FOR HIGH CEILINGS
page 111

IP66 IP69

INNOVA NB PC
page 111

INNOVA
FOR LOW CEILINGS
page 114

IP66 IP69

INNOVA WB PC
page 114

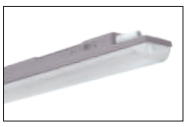
INNOVA - CHEMICALLY
RESISTANT VERSION
page 117

IP66 IP69

INNOVA ABS
page 117

INNOVA FOR HIGH CEIL-
INGS - CHEMICALLY
RESISTANT VERSION
page 120

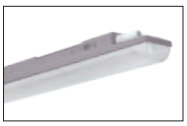
IP66 IP69



INNOVA NB ABS
page 120

INNOVA FOR LOW
CEILINGS - CHEMICALLY
RESISTANT VERSION
page 123

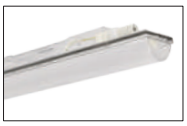
IP66 IP69



INNOVA WB ABS
page 123

INNOVA FOR BOTH
DIRECT AND INDIRECT
ILLUMINA
page 126

IP66 IP69



INNOVA TRS
page 126

INNOVA
ACCESSORIES
page 129

INNOVA
ACCESSORIES
page 129

BIM ready
www.bim.lighting/en

INNOVA

... dustproof, waterproof and impact-resistant.

USE

Closed and non-dismountable light fitting according to the standard ČSN EN 60598-1 part 4 suitable for indoor and outdoor space (even without shelter), **industrial, warehouse and agricultural buildings, sports premises, transport terminals, parking lots and garages, workshops and laboratories** without explosion hazard. The structural design of the light fitting (IP69) allows even placement in food-processing industry - HACCP.

The light fitting resists dust, humidity and washing with spouting water up to 80°C. The body and the diffuser made of PC material have high mechanical resistance against impact and deformation.

An external terminal strip makes it easy and quick to connect the supply cable with no need to open the **fitting (PLUG and PLAY system)**.

Emissions in the environment of use may reduce the usability of the plastics; for more information see page 367.

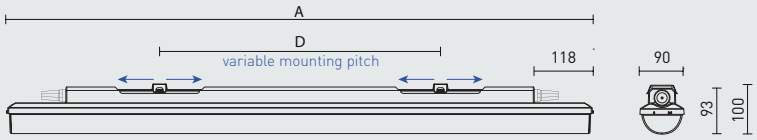
ADVANTAGES

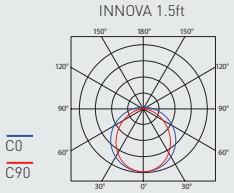
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from ta = -25 °C to **ta = 50 °C**
- Lifetime: 50 000 hours / L90B10
- High mechanical resistance IK10
- Variable suspension pitch; optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- **External terminal strip makes it easy to connect the supply cable – PLUG and PLAY system**
- Optional arrangement of light fittings in line without gaps
- Fully automatic 100% control of functionality and tightness (leak test) during production
- Easy cleaning and maintenance without need of replacing the light sources
- Eliminated risk of mechanical and electrostatic damage to LED chips
- Optional throughwiring (up to 5 wires inside the light fitting)
- Optional delivery in dimmable version
- Certificates: **ESČ, ENEC, CB, HACCP**

INNOVA PC

TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **t_a = 50 °C**
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: 165 lm/W
- **CRI > 80: 4000 K** – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: translucent PC (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- Snap-in mounting clips: stainless steel
- Ventilation membrane in the base eliminating vacuum and condensate build-up
- 3 or 5-pole **external terminal strip**, conductor cross-sectional area: 1.5 or 2.5 mm2
- Fittings may be **lined with zero distance** between them
- Optional constant luminous flux (CLO) in DALI version
- Electric equipment: LED modules, fixed output driver or DALI driver
- The package includes: stainless hooks and stainless brackets
- The values stated for power consumption and luminous flux are in a tolerance of ± 7,5 %





Type	Max, ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature t_a = 50 °C - body: grey polycarbonate - diffuser: translucent polycarbonate									
INNOVA 1.4ft PC 2600/840	50	2600	2440	16,1	152	22.1 / 20.4	1,5	1170	420 - 700
INNOVA 1.4ft PC 3200/840	50	3100	2910	19,1	152	22.7 / 21.0	1,5	1170	420 - 700
INNOVA 1.4ft PC 4400/840	45	4300	4040	26,0	155	23.9 / 22.2	1,5	1170	420 - 700
INNOVA 1.4ft PC 6400/840	45	6120	5750	36,1	159	25.1 / 23.4	1,5	1170	420 - 700
INNOVA 1.4ft PC 8800/840	40	8690	8170	49,7	164	26.3 / 24.6	1,6	1170	420 - 700
INNOVA 1.5ft PC 3250/840	50	3240	3050	19,5	156	22.1 / 20.5	1,8	1450	700 - 980
INNOVA 1.5ft PC 4000/840	50	3850	3620	23,3	155	22.7 / 21.1	1,8	1450	700 - 980
INNOVA 1.5ft PC 5500/840	45	5340	5020	31,9	157	23.9 / 22.2	1,8	1450	700 - 980
INNOVA 1.5ft PC 8000/840	45	7780	7310	44,3	165	25.2 / 23.5	1,8	1450	700 - 980
INNOVA 1.5ft PC 11000/840	40	12310	11570	71,1	163	26.8 / 25.1	1,9	1450	700 - 980

INNOVA 1.4ft PC 3200/840 = suitable replacement for tube light fitting PRIMA 136 PC – 1 × 36 W
INNOVA 1.4ft PC 6400/840 = suitable replacement for tube light fitting PRIMA 236 PC – 2 × 36 W
INNOVA 1.5ft PC 4000/840 = suitable replacement for tube light fitting PRIMA 158 PC – 1 × 58 W
INNOVA 1.5ft PC 8000/840 = suitable replacement for tube light fitting PRIMA 258 PC – 2 × 58 W

INNOVA PC

Diffuser made of translucent polycarbonate

Type	1x3P	1x5P	DALI 1x5P	2x3P	2x5P	DALI 2x5P
INNOVA 1.4ft PC 2600/840...	72111	72112	72113	72115	72116	72117
INNOVA 1.4ft PC 3200/840...	72121	72122	72123	72125	72126	72127
INNOVA 1.4ft PC 4400/840...	72131	72132	72133	72135	72136	72137
INNOVA 1.4ft PC 6400/840...	72141	72142	72143	72145	72146	72147
INNOVA 1.4ft PC 8800/840...	72101	72102	72103	72105	72106	72107
INNOVA 1.5ft PC 3250/840...	72151	72152	72153	72155	72156	72157
INNOVA 1.5ft PC 4000/840...	72161	72162	72163	72165	72166	72167
INNOVA 1.5ft PC 5500/840...	72171	72172	72173	72175	72176	72177
INNOVA 1.5ft PC 8000/840...	72181	72182	72183	72185	72186	72187
INNOVA 1.5ft PC 11000/840...	72191	72192	72193	72195	72196	72197

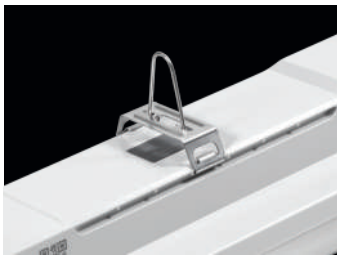
LEGEND

1x3P - a version featuring a non-dimmable ballast and a single 3-pole external terminal strip
1x5P - a version featuring a non-dimmable ballast and a single 5-pole external terminal strip
DALI 1x5P - a version featuring a digitally dimmable ballast and a single 5-pole external terminal strip

2x3P - a version featuring a non-dimmable ballast, two 3-pole external terminal strips and 3-wire connecting cables (1F), for continuous row installation
2x5P - a version featuring a non-dimmable ballast, two 5-pole external terminal strips and 5-wire connecting cables (3F), for continuous row installation
DALI 2x5P - a version featuring a digitally dimmable ballast, two 5-pole external terminal strips and 5-wire connecting cables (DALI 1F), for continuous row installation

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories

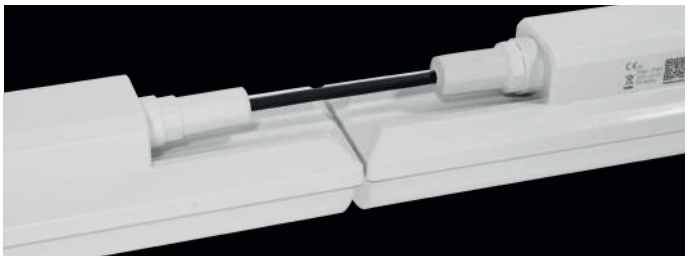


VARIABLE INSTALLATION PITCH

LIGHT FITTING INTERCONNECTION

An external terminal strip is used to ensure the supply cable can easily and quickly be connected with no need to open the light fixture (PLUG and PLAY system)

Interconnection of light fittings without spacing



LIGHT FITTING DETAILED VIEW

INNOVA PC

INNOVA NB

... impact-resistant, for areas with high ceilings of 8 – 12 m.

USE

Closed and non-dismountable light fitting according to the standard ČSN EN 60598-1 part 4 **with Narrow Beam** optics suitable for inside and outside spaces (even without shelter) intended for suspension height from 8 to 12 m, e.g. **inside or outside walls and corridors of high industrial, agricultural, warehouse or sports buildings, rack aisles in warehouses, outdoor playgrounds, covered sports arenas**. The structural design of the light fitting (IP69) allows even placement in food-processing industry - HACCP.

The light fitting resists dust, humidity and washing with spouting water up to 80°C. The body and the diffuser made of PC material have high mechanical resistance against impact and deformation.

An external terminal strip makes it easy and quick to connect the supply cable with no need to open the **fitting (PLUG and PLAY system)**.

Emissions in the environment of use may reduce the usability of the plastics; for more information see page 367.

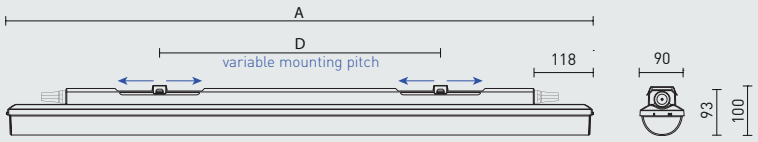
ADVANTAGES

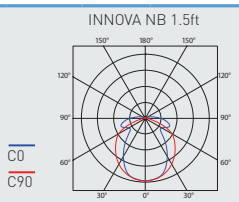
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from ta = -25 °C to **ta = 45 °C**
- Lifetime: 50 000 hours / L90B10
- High mechanical resistance IK10
- **Narrow Beam (NB)**, ceiling height 8 to 12 m
- **Variable suspension pitch**; optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- **External terminal strip makes it easy to connect the supply cable – PLUG and PLAY system**
- Optional arrangement of light fittings in line without gaps
- **Fully automatic 100% control of functionality and tightness (leak test) during production**
- Easy cleaning and maintenance without need of replacing the light sources
- Eliminated risk of mechanical and electrostatic damage to LED chips
- Optional throughwiring (up to 5 wires inside the light fitting)
- Optional delivery in dimmable version
- Certificates: **ESČ, ENEC, CB, HACCP**

INNOVA NB PC

TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **t_a = 45 °C**
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: 153 lm/W
- CRI > 80: 4000 K – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: transparent PC with Fresnel lenses, **Narrow Beam** (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- Snap-in mounting clips: stainless steel
- Ventilation membrane in the base eliminating vacuum and condensate build-up
- 3 or 5-pole **external terminal strip**, conductor cross-sectional area: 1.5 or 2.5 mm2
- Fittings may be **lined with zero distance** between themOptional constant luminous flux (CLO) in DALI version
- Electric equipment: LED modules, fixed output driver or DALI driver
- The package includes: stainless hooks and stainless brackets
- The values stated for power consumption and luminous flux are in a tolerance of ± 7,5 %





Type	Max, ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature t_a = 45 °C - body: grey polycarbonate - diffuser with Fresnel lenses, NB (Narrow Beam), transparent polycarbonate									
INNOVA 1.4ft NB PC 4400/840	45	4300	3740	26,0	144	25.1 / 19.8	1,5	1170	420 - 700
INNOVA 1.4ft NB PC 6400/840	45	6120	5320	36,1	147	26.4 / 21.1	1,5	1170	420 - 700
INNOVA 1.5ft NB PC 5500/840	45	5340	4650	31,9	146	25.2 / 19.9	1,8	1450	700 - 980
INNOVA 1.5ft NB PC 8000/840	45	7780	6770	44,3	153	26.5 / 21.2	1,8	1450	700 - 980

INNOVA NB

Diffuser with Fresnel lenses, Narrow Beam, transparent polycarbonate

Type	1x3P	1x5P	DALI 1x5P	2x3P	2x5P	DALI 2x5P
INNOVA 1.4ft NB PC 4400/840...	72211	72212	72213	72215	72216	72217
INNOVA 1.4ft NB PC 6400/840...	72221	72222	72223	72225	72226	72227
INNOVA 1.5ft NB PC 5500/840...	72231	72232	72233	72235	72236	72237
INNOVA 1.5ft NB PC 8000/840...	72241	72242	72243	72245	72246	72247

Example of type marking: 72223 = INNOVA 1.4ft NB PC 6400/840 **DALI 1x5P**

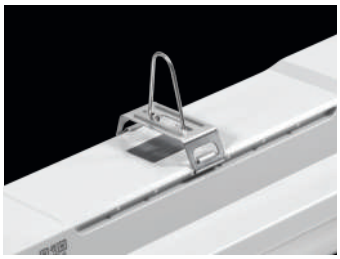
LEGEND

1x3P - a version featuring a non-dimmable ballast and a single 3-pole external terminal strip
1x5P - a version featuring a non-dimmable ballast and a single 5-pole external terminal strip
DALI 1x5P - a version featuring a digitally dimmable ballast and a single 5-pole external terminal strip

2x3P - a version featuring a non-dimmable ballast, two 3-pole external terminal strips and 3-wire connecting cables (1F), for continuous row installation
2x5P - a version featuring a non-dimmable ballast, two 5-pole external terminal strips and 5-wire connecting cables (3F), for continuous row installation
DALI 2x5P - a version featuring a digitally dimmable ballast, two 5-pole external terminal strips and 5-wire connecting cables (DALI 1F), for continuous row installation

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories



VARIABLE INSTALLATION PITCH

LIGHT FITTING INTERCONNECTION

An external terminal strip is used to ensure the supply cable can easily and quickly be connected with no need to open the light fixture (PLUG and PLAY system)

Interconnection of light fittings without spacing

LIGHT FITTING DETAILED VIEW

INNOVA NB

INNOVA WB

... impact-resistant, for areas with low ceilings of 2.5 – 5 m.

USE

Closed and non-dismountable light fitting according to the standard ČSN EN 60598-1 part 4 **with Wide Beam** optics, suitable for inside and outside spaces (even without shelter), intended for suspension height from 2.5 to 5 m, e.g.: **production premises, parking buildings and garages, workshops, cellars, pedestrian underpasses and underground rooms with low ceilings**. The structural design of the light fitting (IP69) allows even placement in food-processing industry - HACCP.

The light fitting resists dust, humidity and washing with spouting water up to 80 °C. The body and the diffuser made of PC material have high mechanical resistance against impact and deformation.

An external terminal strip makes it easy and quick to connect the supply cable with no need to open the **fitting (PLUG and PLAY system)**.

Emissions in the environment of use may reduce the usability of the plastics; for more information see page 367.

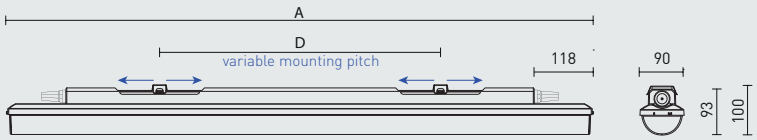
ADVANTAGES

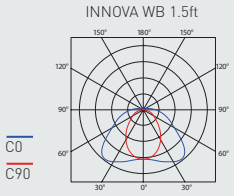
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from t_a = -25 °C to **t_a = 50 °C**
- Lifetime: 50 000 hours / L90B10
- High mechanical resistance IK10
- **Wide Beam (WB)**, ceiling height 2.5 to 5 m
- **Variable suspension pitch**; optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- **External terminal strip makes it easy to connect the supply cable – PLUG and PLAY system**
- Optional arrangement of light fittings in line without gaps
- **Fully automatic 100% control of functionality and tightness (leak test) during production**
- Easy cleaning and maintenance without need of replacing the light sources
- Eliminated risk of mechanical and electrostatic damage to LED chips
- Optional throughwiring (up to 5 wires inside the light fitting)
- Optional delivery in dimmable version
- Certificates: **ESČ, ENEC, CB, HACCP**

INNOVA WB PC

TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **t_a = 50 °C**
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: 153 lm/W
- **CRI > 80: 4000 K** – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: transparent PC with Fresnel lenses, **Wide Beam** (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- Snap-in mounting clips: stainless steel
- Ventilation membrane in the base eliminating vacuum and condensate build-up
- 3 or 5-pole **external terminal strip**, conductor cross-sectional area: 1.5 or 2.5 mm2
- Fittings may be **lined with zero distance** between them
- Optional constant luminous flux (CLO) in DALI version
- Electric equipment: LED modules, fixed output driver or DALI driver
- The package includes: stainless hooks and stainless brackets
- The values stated for power consumption and luminous flux are in a tolerance of ± 7,5 %





Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature t_a = 50 °C - body: grey polycarbonate - diffuser with Fresnel lenses, WB (Wide Beam), transparent polycarbonate									
INNOVA 1.4ft WB PC 2600/840	50	2600	2260	16,1	140	22.8 / 19.0	1,5	1170	420 - 700
INNOVA 1.4ft WB PC 3200/840	50	3100	2700	19,1	141	23.4 / 19.7	1,5	1170	420 - 700
INNOVA 1.4ft WB PC 4400/840	45	4300	3740	26,0	144	24.5 / 20.8	1,5	1170	420 - 700
INNOVA 1.4ft WB PC 6400/840	45	6120	5320	36,1	147	25.8 / 22.0	1,5	1170	420 - 700
INNOVA 1.5ft WB PC 3250/840	50	3240	2820	19,5	145	22.8 / 19.1	1,8	1450	700 - 980
INNOVA 1.5ft WB PC 4000/840	50	3850	3350	23,3	144	23.4 / 19.7	1,8	1450	700 - 980
INNOVA 1.5ft WB PC 5500/840	45	5340	4650	31,9	146	24.5 / 20.8	1,8	1450	700 - 980
INNOVA 1.5ft WB PC 8000/840	45	7780	6770	44,3	153	25.9 / 22.1	1,8	1450	700 - 980

INNOVA WB

Diffuser with Fresnel lenses, Wide Beam, transparent polycarbonate

Type	1x3P	1x5P	DALI 1x5P	2x3P	2x5P	DALI 2x5P
INNOVA 1.4ft WB PC 2600/840...	72311	72312	72313	72315	72316	72317
INNOVA 1.4ft WB PC 3200/840...	72321	72322	72323	72325	72326	72327
INNOVA 1.4ft WB PC 4400/840...	72331	72332	72333	72335	72336	72337
INNOVA 1.4ft WB PC 6400/840...	72341	72342	72343	72345	72346	72347
INNOVA 1.5ft WB PC 3250/840...	72351	72352	72353	72355	72356	72357
INNOVA 1.5ft WB PC 4000/840...	72361	72362	72363	72365	72366	72367
INNOVA 1.5ft WB PC 5500/840...	72371	72372	72373	72375	72376	72377
INNOVA 1.5ft WB PC 8000/840...	72381	72382	72383	72385	72386	72387

Example of type marking: 72343 = INNOVA 1.4ft WB PC 6400/840 **DALI 1x5P**

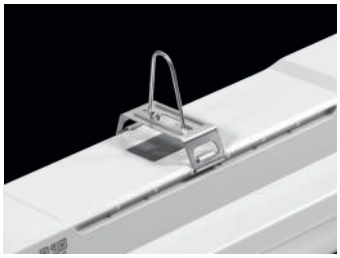
LEGEND

1x3P - a version featuring a non-dimmable ballast and a single 3-pole external terminal strip
1x5P - a version featuring a non-dimmable ballast and a single 5-pole external terminal strip
DALI 1x5P - a version featuring a digitally dimmable ballast and a single 5-pole external terminal strip

2x3P - a version featuring a non-dimmable ballast, two 3-pole external terminal strips and 3-wire connecting cables (1F), for continuous row installation
2x5P - a version featuring a non-dimmable ballast, two 5-pole external terminal strips and 5-wire connecting cables (3F), for continuous row installation
DALI 2x5P - a version featuring a digitally dimmable ballast, two 5-pole external terminal strips and 5-wire connecting cables (DALI 1F), for continuous row installation

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories



VARIABLE INSTALLATION PITCH

LIGHT FITTING INTERCONNECTION

An external terminal strip is used to ensure the supply cable can easily and quickly be connected with no need to open the light fixture (PLUG and PLAY system)

Interconnection of light fittings without spacing

LIGHT FITTING DETAILED VIEW

INNOVA WB

INNOVA ABS

... dustproof, waterproof and chemically resistant.

USE

Closed and non-dismountable light fitting according to the standard ČSN EN 60598-1 part 4 intended for chemically challenging or agricultural premises with incidence of vapours like ammonia, lye, alkaline compounds and hot water (hydrolysis). The light fitting is suitable particularly for **agricultural and industrial buildings like farms, stables, production and warehouse premises, car wash units and laboratories** without explosion hazard. The structural design of the light fitting (IP69) allows even placement in food-processing industry - HACCP.

The light fitting resists dust, humidity and washing with spouting water up to 80°C. The body and the diffuser made of ABS material have high chemical resistance.

An external terminal strip makes it easy and quick to connect the supply cable with no need to open the **fitting (PLUG and PLAY system)**.

Emissions in the environment of use may reduce the usability of the plastics; for more information see page č. 367.

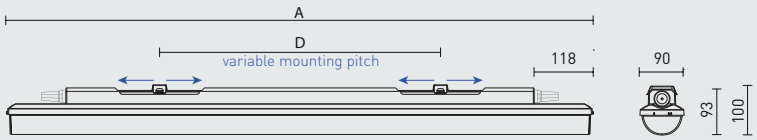
ADVANTAGES

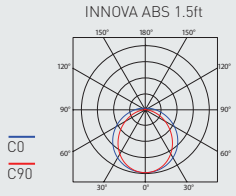
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from t_a = -25 °C to **t_a = 50 °C**
- Lifetime: 50 000 hours / L90B10
- High chemical resistance
- **Variable suspension pitch**; optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- **External terminal strip makes it easy to connect the supply cable – PLUG and PLAY system**
- Optional arrangement of light fittings in line without gaps
- **Fully automatic 100% control of functionality and tightness (leak test) during production**
- Easy cleaning and maintenance without need of replacing the light sources
- Eliminated risk of mechanical and electrostatic damage to LED chips
- Optional throughwiring (up to 5 wires inside the light fitting)
- Optional delivery in dimmable version
- Certificates: **ESČ, ENEC, CB, DLG, HACCP**

INNOVA ABS

TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **t_a = 50 °C**
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: 163 lm/W
- CRI > 80: 4000 K – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: translucent ABS (high chemical resistance, UV stability)
- Body: dark grey ABS (high chemical resistance, UV stability)
- Snap-in mounting clips: stainless steel
- Ventilation membrane in the base eliminating vacuum and condensate build-up
- 3 or 5-pole **external terminal strip**, conductor cross-sectional area: 1.5 or 2.5 mm2
- Fittings may be **lined with zero distance** between them
- Optional constant luminous flux (CLO) in DALI version
- Electric equipment: LED modules, fixed output driver or DALI driver
- The package includes: stainless hooks and stainless brackets
- The values stated for power consumption and luminous flux are in a tolerance of ± 7,5 %





Type	Max, ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature t_a = 50 °C - body: dark grey ABS - diffuser: translucent ABS									
INNOVA 1.4ft ABS 2600/840	50	2600	2420	16,1	150	22.1 / 20.4	1,5	1170	420 - 700
INNOVA 1.4ft ABS 3200/840	50	3100	2880	19,1	151	22.7 / 21.0	1,5	1170	420 - 700
INNOVA 1.4ft ABS 4400/840	45	4300	4000	26,0	154	23.8 / 22.1	1,5	1170	420 - 700
INNOVA 1.4ft ABS 6400/840	45	6120	5690	36,1	158	25.0 / 23.4	1,5	1170	420 - 700
INNOVA 1.4ft ABS 8800/840	40	8690	8080	49,7	163	26.3 / 24.6	1,6	1170	420 - 700
INNOVA 1.5ft ABS 3250/840	50	3240	3010	19,5	154	22.1 / 20.4	1,8	1450	700 - 980
INNOVA 1.5ft ABS 4000/840	50	3850	3580	23,3	154	22.7 / 21.1	1,8	1450	700 - 980
INNOVA 1.5ft ABS 5500/840	45	5340	4970	31,9	156	23.8 / 22.2	1,8	1450	700 - 980
INNOVA 1.5ft ABS 8000/840	45	7780	7240	44,3	163	25.1 / 23.5	1,8	1450	700 - 980
INNOVA 1.5ft ABS 11000/840	40	12310	11450	71,1	161	26.7 / 25.1	1,9	1450	700 - 980

INNOVA 1.4ft ABS 3200/840 = suitable replacement for tube light fitting PRIMA 136 ABS – 1 × 36 W
INNOVA 1.4ft ABS 6400/840 = suitable replacement for tube light fitting PRIMA 236 ABS – 2 × 36 W
INNOVA 1.5ft ABS 4000/840 = suitable replacement for tube light fitting PRIMA 158 ABS – 1 × 58 W
INNOVA 1.5ft ABS 8000/840 = suitable replacement for tube light fitting PRIMA 258 ABS – 2 × 58 W

INNOVA ABS

Diffuser from translucent ABS

Type	1x3P	1x5P	DALI 1x5P	2x3P	2x5P	DALI 2x5P
INNOVA 1.4ft ABS 2600/840...	72411	72412	72413	72415	72416	72417
INNOVA 1.4ft ABS 3200/840...	72421	72422	72423	72425	72426	72427
INNOVA 1.4ft ABS 4400/840...	72431	72432	72433	72435	72436	72437
INNOVA 1.4ft ABS 6400/840...	72441	72442	72443	72445	72446	72447
INNOVA 1.4ft ABS 8800/840...	72401	72402	72403	72405	72406	72407
INNOVA 1.5ft ABS 3250/840...	72451	72452	72453	72455	72456	72457
INNOVA 1.5ft ABS 4000/840...	72461	72462	72463	72465	72466	72467
INNOVA 1.5ft ABS 5500/840...	72471	72472	72473	72475	72476	72477
INNOVA 1.5ft ABS 8000/840...	72481	72482	72483	72485	72486	72487
INNOVA 1.5ft ABS 11000/840...	72491	72492	72493	72495	72496	72497

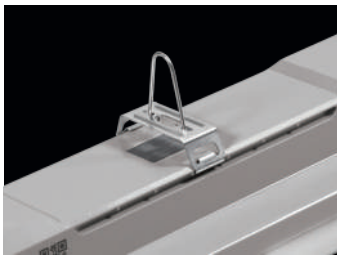
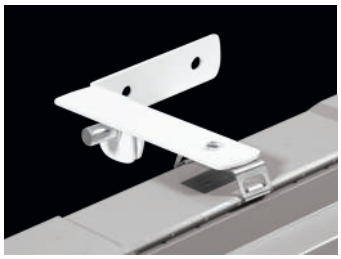
LEGEND

1x3P - a version featuring a non-dimmable ballast and a single 3-pole external terminal strip
1x5P - a version featuring a non-dimmable ballast and a single 5-pole external terminal strip
DALI 1x5P - a version featuring a digitally dimmable ballast and a single 5-pole external terminal strip

2x3P - a version featuring a non-dimmable ballast, two 3-pole external terminal strips and 3-wire connecting cables (1F), for continuous row installation
2x5P - a version featuring a non-dimmable ballast, two 5-pole external terminal strips and 5-wire connecting cables (3F), for continuous row installation
DALI 2x5P - a version featuring a digitally dimmable ballast, two 5-pole external terminal strips and 5-wire connecting cables (DALI 1F), for continuous row installation

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories

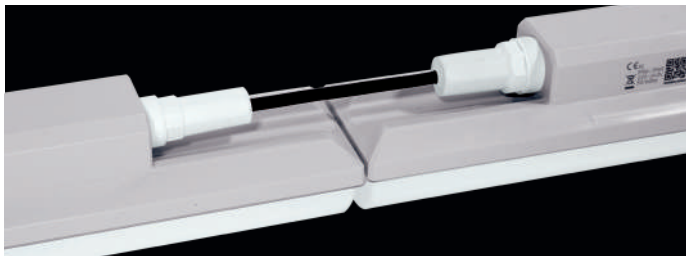



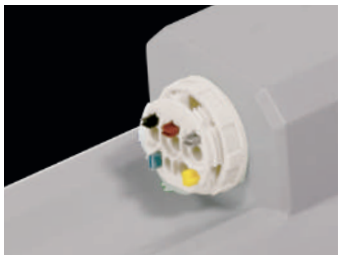
VARIABLE INSTALLATION PITCH

LIGHT FITTING INTERCONNECTION

An external terminal strip is used to ensure the supply cable can easily and quickly be connected with no need to open the light fixture (PLUG and PLAY system)

Interconnection of light fittings without spacing





LIGHT FITTING DETAILED VIEW

INNOVA ABS

INNOVA NB ABS

… chemically resistant, for areas with high ceilings of 8 – 12 m.

USE

Closed and non-dismountable light fitting according to the standard ČSN EN 60598-1 part 4 intended for chemically challenging or agricultural premises with incidence of vapours like ammonia, lye, alkaline compounds and hot water (hydrolysis). Thanks to the **Narrow Beam** optics, it is suitable for inside spaces with high ceilings, intended for suspension height from 8 to 12 m, e.g. **inside walls and corridors of high agricultural and industrial buildings, rack aisles in production and storage spaces, farms, stables and laboratories** without explosion hazard. The structural design of the light fitting (IP69) allows even placement in food-processing industry - HACCP.

The light fitting resists dust, humidity and washing with spouting water up to 80 °C. The body and the diffuser made of ABS material have high chemical resistance.

An external terminal strip makes it easy and quick to connect the supply cable with no need to open the **fitting (PLUG and PLAY system)**.

Emissions in the environment of use may reduce the usability of the plastics; for more information see page 367.

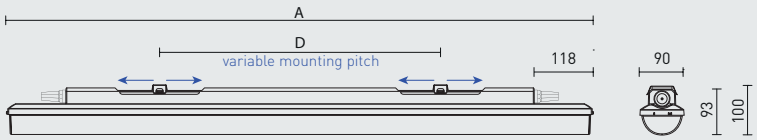
ADVANTAGES

- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from t_a = -25 °C to **t_a = 45 °C**
- Lifetime: 50 000 hours / L90B10
- High chemical resistance
- **Narrow Beam (NB)**, ceiling height 8 to 12 m
- **Variable suspension pitch**; optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- **External terminal strip makes it easy to connect the supply cable – PLUG and PLAY system**
- Optional arrangement of light fittings in line without gaps
- **Fully automatic 100% control of functionality and tightness (leak test) during production**
- Easy cleaning and maintenance without need of replacing the light sources
- Eliminated risk of mechanical and electrostatic damage to LED chips
- Optional throughwiring (up to 5 wires inside the light fitting)
- Optional delivery in dimmable version
- Certificates: **ESČ, ENEC, CB, DLG, HACCP**

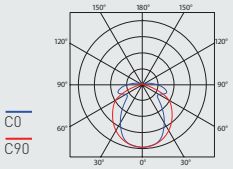
INNOVA NB ABS

TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **t_a = 45 °C**
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: 155 lm/W
- **CRI > 80: 4000 K** – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: transparent ABS with Fresnel lenses, **Narrow Beam** (high chemical resistance, UV stability)
- Body: dark grey ABS (high chemical resistance, UV stability)
- Snap-in mounting clips: stainless steel
- Ventilation membrane in the base eliminating vacuum and condensate build-up
- 3 or 5-pole **external terminal strip**, conductor cross-sectional area: 1.5 or 2.5 mm2
- Fittings may be **lined with zero distance** between them
- Optional constant luminous flux (CLO) in DALI version
- Electric equipment: LED modules, fixed output driver or DALI driver
- The package includes: stainless hooks and stainless brackets
- The values stated for power consumption and luminous flux are in a tolerance of ± 7,5 %



INNOVA NB ABS 1.5ft



Type	Max, ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature t_a = 45 °C - body: dark grey ABS - diffuser with Fresnel lenses, NB (Narrow Beam), transparent ABS									
INNOVA 1.4ft NB ABS 4400/840	45	4300	3780	26,0	145	25.2 / 19.9	1,5	1170	420 - 700
INNOVA 1.4ft NB ABS 6400/840	45	6120	5390	36,1	149	26.4 / 21.1	1,5	1170	420 - 700
INNOVA 1.5ft NB ABS 5500/840	45	5340	4700	31,9	147	25.2 / 19.9	1,8	1450	700 - 980
INNOVA 1.5ft NB ABS 8000/840	45	7780	6850	44,3	155	26.5 / 21.2	1,8	1450	700 - 980

INNOVA NB ABS

Diffuser with Fresnel lenses, Narrow Beam, transparent ABS

Type	1x3P	1x5P	DALI 1x5P	2x3P	2x5P	DALI 2x5P
INNOVA 1.4ft NB ABS 4400/840...	72511	72512	72513	72515	72516	72517
INNOVA 1.4ft NB ABS 6400/840...	72521	72522	72523	72525	72526	72527
INNOVA 1.5ft NB ABS 5500/840...	72531	72532	72533	72535	72536	72537
INNOVA 1.5ft NB ABS 8000/840...	72541	72542	72543	72545	72546	72547

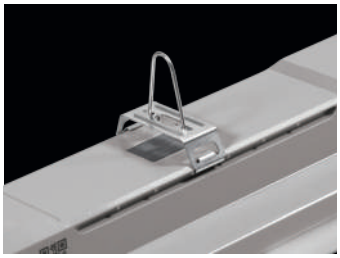
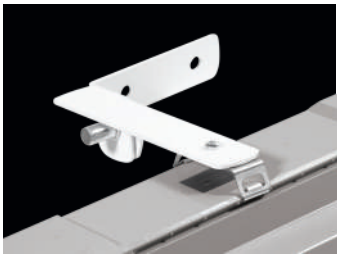
Example of type marking: 72523 = INNOVA 1.4ft NB ABS 6400/840 **DALI 1x5P**

LEGEND

1x3P - a version featuring a non-dimmable ballast and a single 3-pole external terminal strip
1x5P - a version featuring a non-dimmable ballast and a single 5-pole external terminal strip
DALI 1x5P - a version featuring a digitally dimmable ballast and a single 5-pole external terminal strip

2x3P - a version featuring a non-dimmable ballast, two 3-pole external terminal strips and 3-wire connecting cables (1F), for continuous row installation
2x5P - a version featuring a non-dimmable ballast, two 5-pole external terminal strips and 5-wire connecting cables (3F), for continuous row installation
DALI 2x5P - a version featuring a digitally dimmable ballast, two 5-pole external terminal strips and 5-wire connecting cables (DALI 1F), for continuous row installation

Light fitting attachment
a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories

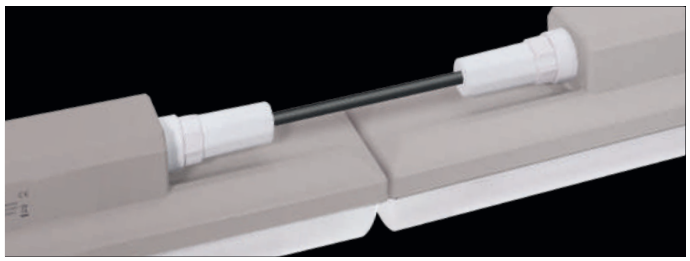



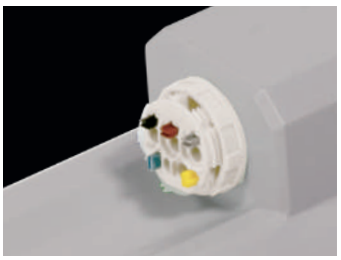
VARIABLE INSTALLATION PITCH

LIGHT FITTING INTERCONNECTION

An external terminal strip is used to ensure the supply cable can easily and quickly be connected with no need to open the light fixture (PLUG and PLAY system)

Interconnection of light fittings without spacing





LIGHT FITTING DETAILED VIEW

INNOVA NB ABS

INNOVA WB ABS

... chemically resistant, for areas with low ceilings of 2.5 – 5 m.

USE

Closed and non-dismountable light fitting according to the standard ČSN EN 60598-1 part 4 intended for chemically challenging or agricultural premises with incidence of vapours like ammonia, lye, alkaline compounds and hot water (hydrolysis). Thanks to the **Wide Beam** optics it is suitable for inside spaces with low ceilings, intended for suspension height from 2.5 to 5 m, e.g. **inside walls and corridors of low agricultural and industrial buildings, workshops, corridors, cellars, farms, stables and laboratories** without explosion hazard. The structural design of the light fitting (IP69) allows even placement in food-processing industry - HACCP.

The light fitting resists dust, humidity and washing with spouting water up to 80 °C. The body and the diffuser made of ABS material have high chemical resistance.

An external terminal strip makes it easy and quick to connect the supply cable with no need to open the **fitting (PLUG and PLAY system)**.

Emissions in the environment of use may reduce the usability of the plastics; for more information see page 367.

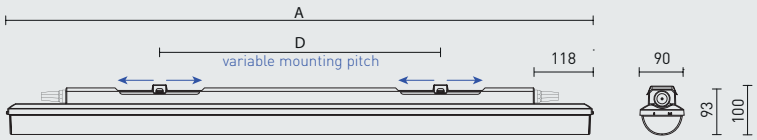
ADVANTAGES

- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from t_a = -25 °C to **t_a = 50 °C**
- Lifetime: 50 000 hours / L90B10
- High chemical resistance
- **Wide Beam (WB)**, ceiling height 2.5 to 5 m
- **Variable suspension pitch**; optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- **External terminal strip makes it easy to connect the supply cable – PLUG and PLAY system**
- Optional arrangement of light fittings in line without gaps
- **Fully automatic 100% control of functionality and tightness (leak test) during production**
- Easy cleaning and maintenance without need of replacing the light sources
- Eliminated risk of mechanical and electrostatic damage to LED chips
- Optional throughwiring (up to 5 wires inside the light fitting)
- Optional delivery in dimmable version
- Certificates: **ESČ, ENEC, CB, DLG, HACCP**

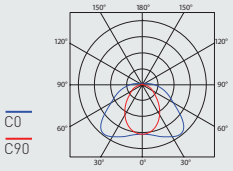
INNOVA WB ABS

TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **t_a = 50 °C**
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: 155 lm/W
- **CRI > 80: 4000 K** – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: transparent ABS with Fresnel lenses, **Wide Beam** (high chemical resistance, UV stability)
- Body: dark grey ABS (high chemical resistance, UV stability)
- Snap-in mounting clips: stainless steel
- Ventilation membrane in the base eliminating vacuum and condensate build-up
- 3 or 5-pole **external terminal strip**, conductor cross-sectional area: 1.5 or 2.5 mm2
- Fittings may be **lined with zero distance** between them
- Optional constant luminous flux (CLO) in DALI version
- Electric equipment: LED modules, fixed output driver or DALI driver
- The package includes: stainless hooks and stainless brackets
- The values stated for power consumption and luminous flux are in a tolerance of ± 7,5 %



INNOVA WB ABS 1.5ft



Type	Max, ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature t_a = 50 °C - body: dark grey ABS - diffuser with Fresnel lenses, WB (Wide Beam), transparent ABS									
INNOVA 1.4ft WB ABS 2600/840	50	2600	2290	16,1	142	22.8 / 19.1	1,5	1170	420 - 700
INNOVA 1.4ft WB ABS 3200/840	50	3100	2730	19,1	143	23.4 / 19.7	1,5	1170	420 - 700
INNOVA 1.4ft WB ABS 4400/840	45	4300	3780	26,0	145	24.6 / 20.8	1,5	1170	420 - 700
INNOVA 1.4ft WB ABS 6400/840	45	6120	5390	36,1	149	25.8 / 22.1	1,5	1170	420 - 700
INNOVA 1.5ft WB ABS 3250/840	50	3240	2850	19,5	146	22.8 / 19.1	1,8	1450	700 - 980
INNOVA 1.5ft WB ABS 4000/840	50	3850	3390	23,3	145	23.4 / 19.7	1,8	1450	700 - 980
INNOVA 1.5ft WB ABS 5500/840	45	5340	4700	31,9	147	24.6 / 20.9	1,8	1450	700 - 980
INNOVA 1.5ft WB ABS 8000/840	45	7780	6850	44,3	155	25.9 / 22.2	1,8	1450	700 - 980

INNOVA WB ABS

Diffuser with Fresnel lenses, Wide Beam, transparent ABS

Type	1x3P	1x5P	DALI 1x5P	2x3P	2x5P	DALI 2x5P
INNOVA 1.4ft WB ABS 2600/840...	72611	72612	72613	72615	72616	72617
INNOVA 1.4ft WB ABS 3200/840...	72621	72622	72623	72625	72626	72627
INNOVA 1.4ft WB ABS 4400/840...	72631	72632	72633	72635	72636	72637
INNOVA 1.4ft WB ABS 6400/840...	72641	72642	72643	72645	72646	72647
INNOVA 1.5ft WB ABS 3250/840...	72651	72652	72653	72655	72656	72657
INNOVA 1.5ft WB ABS 4000/840...	72661	72662	72663	72665	72666	72667
INNOVA 1.5ft WB ABS 5500/840...	72671	72672	72673	72675	72676	72677
INNOVA 1.5ft WB ABS 8000/840...	72681	72682	72683	72685	72686	72687

Example of type marking: 72643 = INNOVA 1.4ft WB ABS 6400/840 **DALI 1x5P**

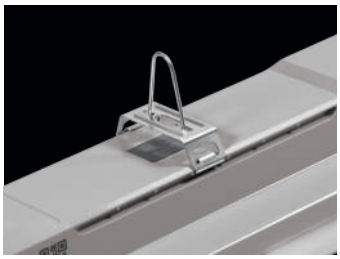
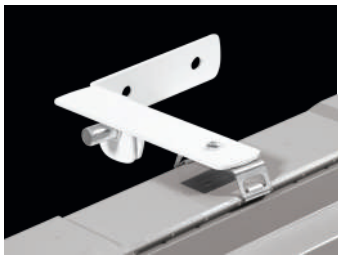
LEGEND

1x3P - a version featuring a non-dimmable ballast and a single 3-pole external terminal strip
1x5P - a version featuring a non-dimmable ballast and a single 5-pole external terminal strip
DALI 1x5P - a version featuring a digitally dimmable ballast and a single 5-pole external terminal strip

2x3P - a version featuring a non-dimmable ballast, two 3-pole external terminal strips and 3-wire connecting cables (1F), for continuous row installation
2x5P - a version featuring a non-dimmable ballast, two 5-pole external terminal strips and 5-wire connecting cables (3F), for continuous row installation
DALI 2x5P - a version featuring a digitally dimmable ballast, two 5-pole external terminal strips and 5-wire connecting cables (DALI 1F), for continuous row installation

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories

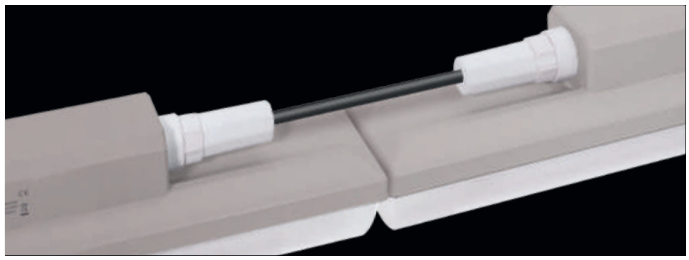



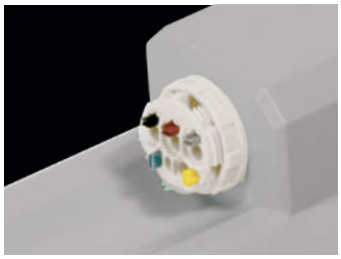
VARIABLE INSTALLATION PITCH

LIGHT FITTING INTERCONNECTION

An external terminal strip is used to ensure the supply cable can easily and quickly be connected with no need to open the light fixture (PLUG and PLAY system)

Interconnection of light fittings without spacing





LIGHT FITTING DETAILED VIEW

INNOVA WB ABS

INNOVA TRS

... for direct and indirect illumination.

USE

An enclosed, non-dismantable and **fully transparent** luminaire featuring a user non-replaceable light source in accordance with ČSN EN 60598-1(4). The fixture is a perfect choice for inside as well as outside spaces (roof and unroofed) with luminaire installation height ranging from 2.5 m to 5 m such as: **production plants, (multistorey) car parks and garages, workshops, corridors, cellars, pedestrian underpasses and underground spaces with low ceilings.** The structural design of the light fitting (IP69) allows even placement in food-processing industry - HACCP.

The light fitting resists dust, humidity and washing with spouting water up to 80 °C. The body and the diffuser made of PC material have high mechanical resistance against impact and deformation.

An external terminal strip makes it easy and quick to connect the supply cable with no need to open the **fitting (PLUG and PLAY system)**.

Emissions in the environment of use may reduce the usability of the plastics see page č. 367.

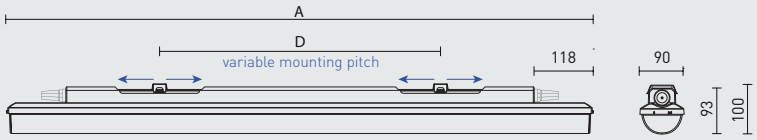
ADVANTAGES

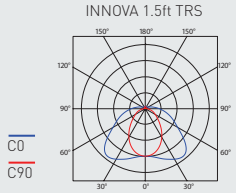
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from t_a = -25 °C to **t_a = 50 °C**
- Lifetime: 50 000 hours / L90B10
- High mechanical resistance IK10
- **For direct and indirect lighting**, ceiling height 2.5 to 5 m
- **Variable suspension pitch**; optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- **External terminal strip makes it easy to connect the supply cable – PLUG and PLAY system**
- Optional arrangement of light fittings in line without gaps
- **Fully automatic 100% control of functionality and tightness (leak test) during production**
- Easy cleaning and maintenance without need of replacing the light sources
- Eliminated risk of mechanical and electrostatic damage to LED chips
- Optional throughwiring (up to 5 wires inside the light fitting)
- Optional delivery in dimmable version
- Certificates: **ESČ, CB, HACCP**

INNOVA TRS PC

TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **t_a = 50 °C**
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: 153 lm/W
- **CRI > 80: 4000 K** – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: transparent PC (high mechanical resistance, UV stability)
- Body: transparent PC (high mechanical resistance, UV stability)
- Reflector: modified for **indirect illumination**
- Snap-in mounting clips: stainless steel
- Ventilation membrane in the base eliminating vacuum and condensate build-up
- 3 or 5-pole **external terminal strip**, conductor cross-sectional area: 1.5 or 2.5 mm2
- Fittings may be **lined with zero distance** between them
- Optional constant luminous flux (CLO) in DALI version
- Electric equipment: LED modules, fixed output driver or DALI driver
- The package includes: stainless hooks and stainless brackets, a connector's counterpart (if no cables are ordered)
- The values stated for power consumption and luminous flux are in a tolerance of ± 7,5 %





Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature t_a = 50 °C - body: transparent polycarbonate - diffuser: transparent polycarbonate									
INNOVA 1.4ft TRS PC 2600/840	50	2600	2260	16,1	140	22.9 / 18.6	1,5	1170	420 - 700
INNOVA 1.4ft TRS PC 3200/840	50	3100	2700	19,1	141	23.5 / 19.2	1,5	1170	420 - 700
INNOVA 1.4ft TRS PC 4400/840	45	4300	3740	26,0	144	24.6 / 20.3	1,5	1170	420 - 700
INNOVA 1.4ft TRS PC 6400/840	45	6120	5320	36,1	147	25.8 / 21.6	1,5	1170	420 - 700
INNOVA 1.5ft TRS PC 3250/840	50	3240	2820	19,5	145	22.9 / 18.6	1,8	1450	700 - 980
INNOVA 1.5ft TRS PC 4000/840	50	3850	3350	23,3	144	23.5 / 19.2	1,8	1450	700 - 980
INNOVA 1.5ft TRS PC 5500/840	45	5340	4650	31,9	146	24.6 / 20.4	1,8	1450	700 - 980
INNOVA 1.5ft TRS PC 8000/840	45	7780	6770	44,3	153	25.9 / 21.7	1,8	1450	700 - 980

INNOVA TRS

Diffuser: transparent polycarbonate

Type	1x3P	1x5P	DALI 1x5P	2x3P	2x5P	DALI 2x5P
INNOVA 1.4ft TRS PC 2600/840...	16280	16281	16203	16205	16206	16207
INNOVA 1.4ft TRS PC 3200/840...	16211	16212	16213	16215	16216	16217
INNOVA 1.4ft TRS PC 4400/840...	16221	16222	16223	16225	16226	16227
INNOVA 1.4ft TRS PC 6400/840...	16231	16232	16233	16235	16236	16237
INNOVA 1.5ft TRS PC 3250/840...	16241	16242	16243	16245	16246	16247
INNOVA 1.5ft TRS PC 4000/840...	16251	16252	16253	16255	16256	16257
INNOVA 1.5ft TRS PC 5500/840...	16261	16262	16263	16265	16266	16267
INNOVA 1.5ft TRS PC 8000/840...	16271	16272	16273	16275	16276	16277

Example of type marking: 16233 = INNOVA 1.4ft TRS PC 6400/840 **DALI 1x5P**

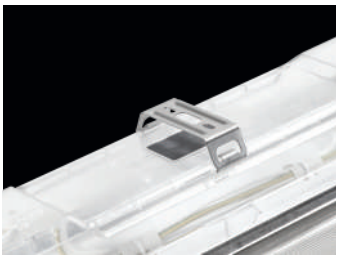
LEGEND

1x3P - a version featuring a non-dimmable ballast and a single 3-pole external terminal strip
1x5P - a version featuring a non-dimmable ballast and a single 5-pole external terminal strip
DALI 1x5P - a version featuring a digitally dimmable ballast and a single 5-pole external terminal strip

2x3P - a version featuring a non-dimmable ballast, two 3-pole external terminal strips and 3-wire connecting cables (1F), for continuous row installation
2x5P - a version featuring a non-dimmable ballast, two 5-pole external terminal strips and 5-wire connecting cables (3F), for continuous row installation
DALI 2x5P - a version featuring a digitally dimmable ballast, two 5-pole external terminal strips and 5-wire connecting cables (DALI 1F), for continuous row installation

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories

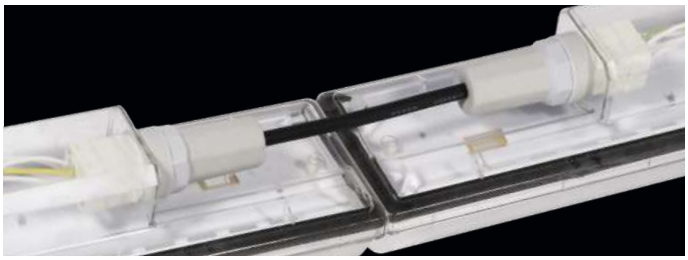


VARIABLE INSTALLATION PITCH

LIGHT FITTING INTERCONNECTION

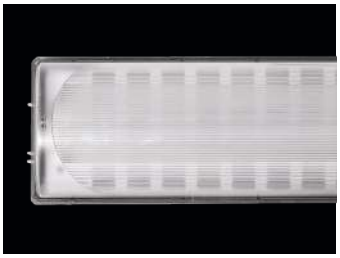
An external terminal strip is used to ensure the supply cable can easily and quickly be connected with no need to open the light fixture (PLUG and PLAY system)

Interconnection of light fittings without spacing



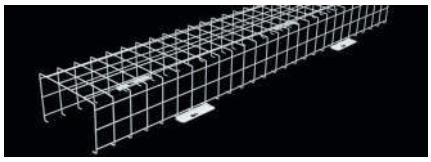
LIGHT FITTING DETAILED VIEW

INNOVA TRS



OM – protective grid

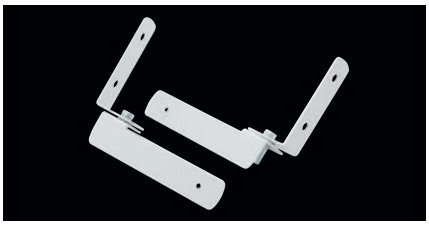
The metal grid protects the light fitting against mechanical damage and unauthorised handling. It is attached to the surface with the use of screws.
The surface is treated with the RAL 9003 powder-coated colour.



Code	Type	Description	Weight [kg]
11942	OM 236	protective grid for Types 236, 228/254, x.4ft (1300 × 220 × 130 mm)	1,7
11943	OM 258	protective grid for Types 258, 235/249/280, x.5ft (1600 × 220 × 130 mm)	2,0

BZ – side hanger

It serves to attach the light fitting to the wall with the possibility of its positioning.



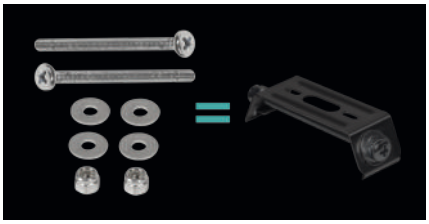
Code	Type	Description	Weight [kg]
90002	BZ	side hanger with blocking (set for 1 light fitting)	0,4

Canalis busbar system connector

The connector enables a quick 1 phase or 3 phase interconnection of light fittings without their opening.

Code	Type	Description	Weight [kg]
79001	KBA 40 ZU	light fitting suspension holder - Canalis KBA system	0,1
72971	KBC 10 CC212	three-pole connector with 1 m cable - Canalis KBA system	0,2
72972	KBC 10 CC213	five-pole connector with 1 m cable - Canalis KBA system	0,3

Locking set for bracket G3



Code	Type	Description	Weight [kg]
11553	G3 SET	a locking set for G3 stainless steel bracket (bolts, nuts, washers)	0,2

FUTURA

INDUSTRIAL

PLASTIC

DUSTPROOF

WATERPROOF

IMPACT-RESISTANT

FUTURA – industrial plastic LED light fitting

FUTURA
page 132

IP66

FUTURA PC Al,
PCc Al
page 132

FUTURA ES PC Al,
PCc Al
page 136

FUTURA HE PC Al,
PCc Al
page 140

FUTURA
FOR OUTDOOR SPACES
page 143

IP66

FUTURA VP PC Al,
VP PCc Al
page 143

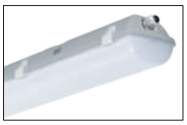
FUTURA
FOR HIGH CEILINGS
page 147

IP66

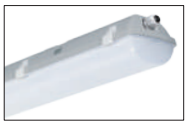
FUTURA NB PC Al,
PCc Al
page 147

FUTURA - CHEMICALLY
RESISTANT VERSION
page 150

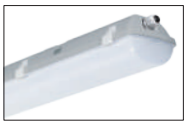
IP66



FUTURA ABS Al,
ABSc Al
page 150



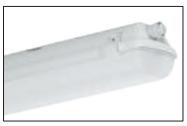
FUTURA ES ABS Al,
ABSc Al
page 154



FUTURA HE ABS Al,
ABSc Al
page 157

FUTURA
CLASS II INSULATION
S. 160

IP66



FUTURA CLASS II
S. 160

FUTURA FOR EXTREME
TEMPERATURES
page 164

IP66

FUTURA MAX PCc Al
page 164

FUTURA WITH
MOTION DETECTOR
page 167

IP66

FUTURA SNS PC Al,
PCc Al
page 167

FUTURA
ACCESSORIES
page 170

FUTURA
ACCESSORIES
page 170

BIM ready
www.bim.lighting/en

EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND
INVESTMENT IN YOUR FUTURE

FUTURA

... dustproof, waterproof and impact-resistant.

USE

The light fitting is suitable for industrial indoor and outdoor roofed spaces, warehouses, sports areas, workshops, garages, transport terminals, utility structures and laboratories without a danger of explosion of gas, dust and combustible fumes.

The light fitting is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have the increased resistance against deformation and impact.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic and aluminium at installations in an aggressive environment, see also page 367).

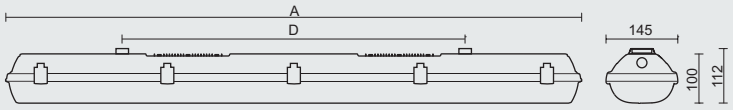
ADVANTAGES

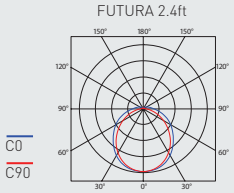
- Light fitting protection **IP66**
- Maximum ambient temperature up to t_a **= 50 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate with Al coolers (PC Al) = high mechanical resistance
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25 °C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Through-wiring of up to 10 wires at body
- Certification: EPD, ENEC, CB, HACCP

FUTURA PC Al, PCc Al

TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: t_a = 50 °C, Maximum ambient temperature: t_a = 0-25 °C (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 165 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate with Al coolers (PC Al), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, three-pole (basic version)
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver or current driver DALI





Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
For ambient temperature t_a = 50 °C - body: grey polycarbonate with Al coolers - diffuser: translucent polycarbonate									
FUTURA 2.2ft PC Al 2600/840	50	2600	2440	16,1	152	23.1 / 21.1	1,45	612	475
FUTURA 2.2ft PC Al 3200/840	50	3100	2910	19,1	152	23.8 / 21.8	1,45	612	475
FUTURA 2.2ft PC Al 4400/840	45	4300	4040	26,0	155	24.8 / 23.0	1,45	612	475
FUTURA 2.4ft PC Al 5200/840	50	5230	4920	30,3	162	23.3 / 21.6	2,45	1172	700
FUTURA 2.4ft PC Al 6400/840	50	6240	5870	36,3	162	24.0 / 22.2	2,45	1172	700
FUTURA 2.4ft PC Al 8800/840	45	8690	8170	49,7	164	25.1 / 23.4	2,45	1172	700
FUTURA 2.4ft PC Al 12800/840	35	13920	13080	82,5	159	26.7 / 24.9	2,65	1172	700
FUTURA 2.5ft PC Al 6500/840	50	6500	6110	37,1	165	23.3 / 21.6	2,95	1452	940
FUTURA 2.5ft PC Al 8000/840	50	7770	7300	44,4	164	24.0 / 22.2	2,95	1452	940
FUTURA 2.5ft PC Al 11000/840	45	12310	11570	71,1	163	25.6 / 23.9	2,95	1452	940
FUTURA 2.5ft PC Al 16000/840	35	17440	16390	102,2	160	26.7 / 25.0	3,25	1452	940

75020 FUTURA 2.2ft PC Al 3200/840 = suitable replacement for T8 fl. tube light fitting PRIMA 218 – 2×18W
75050 FUTURA 2.4ft PC Al 6400/840 = suitable replacement for T8 fl. tube light fitting PRIMA 236 – 2×36W
75080 FUTURA 2.5ft PC Al 8000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 258 – 2×58W

FUTURA PC Al

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
75010	FUTURA 2.2ft PC Al 2600/840	x	x	75014	75015	x	x
75020	FUTURA 2.2ft PC Al 3200/840	x	x	75024	75025	x	x
75030	FUTURA 2.2ft PC Al 4400/840	x	x	75034	75035	x	x
75040	FUTURA 2.4ft PC Al 5200/840	75140	75340	75044	75045	75344	75345
75050	FUTURA 2.4ft PC Al 6400/840	75150	75350	75054	75055	75354	75355
75060	FUTURA 2.4ft PC Al 8800/840	75160	75360	75064	75065	75364	75365
75410	FUTURA 2.4ft PC Al 12800/840	75411	75412	x	x	x	x
75070	FUTURA 2.5ft PC Al 6500/840	75170	75370	75074	75075	75374	75375
75080	FUTURA 2.5ft PC Al 8000/840	75180	75380	75084	75085	75384	75385
75090	FUTURA 2.5ft PC Al 11000/840	75190	75390	75094	75095	75394	75395
75420	FUTURA 2.5ft PC Al 16000/840	75421	75422	x	x	x	x

FUTURA PCc Al

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
75210	FUTURA 2.2ft PCc Al 2600/840	x	x	75214	75215	x	x
75220	FUTURA 2.2ft PCc Al 3200/840	x	x	75224	75225	x	x
75230	FUTURA 2.2ft PCc Al 4400/840	x	x	75234	75235	x	x
75240	FUTURA 2.4ft PCc Al 5200/840	75540	75640	75244	75245	75644	75645
75250	FUTURA 2.4ft PCc Al 6400/840	75550	75650	75254	75255	75654	75655
75260	FUTURA 2.4ft PCc Al 8800/840	75560	75660	75264	75265	75664	75665
75430	FUTURA 2.4ft PCc Al 12800/840	75431	75432	x	x	x	x
75270	FUTURA 2.5ft PCc Al 6500/840	75570	75670	75274	75275	75674	75675
75280	FUTURA 2.5ft PCc Al 8000/840	75580	75680	75284	75285	75684	75685
75290	FUTURA 2.5ft PCc Al 11000/840	75590	75690	75294	75295	75694	75695
75440	FUTURA 2.5ft PCc Al 16000/840	75441	75442	x	x	x	x

Example of type marking: 75665 = FUTURA 2.4ft PCc Al 8800/840 **3F M3h**

FUTURA PC Al DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
75013	FUTURA 2.2ft PC Al 2600/840 DALI	x	x	75017	75019	x	x
75023	FUTURA 2.2ft PC Al 3200/840 DALI	x	x	75027	75029	x	x
75033	FUTURA 2.2ft PC Al 4400/840 DALI	x	x	75037	75039	x	x
75043	FUTURA 2.4ft PC Al 5200/840 DALI	75143	75343	75047	75049	75347	75349
75053	FUTURA 2.4ft PC Al 6400/840 DALI	75153	75353	75057	75059	75357	75359
75063	FUTURA 2.4ft PC Al 8800/840 DALI	75163	75363	75067	75069	75367	75369
75450	FUTURA 2.4ft PC Al 12800/840 DALI	75451	75452	x	x	x	x
75073	FUTURA 2.5ft PC Al 6500/840 DALI	75173	75373	75077	75079	75377	75379
75083	FUTURA 2.5ft PC Al 8000/840 DALI	75183	75383	75087	75089	75387	75389
75093	FUTURA 2.5ft PC Al 11000/840 DALI	75193	75393	75097	75099	75397	75399
75460	FUTURA 2.5ft PC Al 16000/840 DALI	75461	75462	x	x	x	x

FUTURA PCc Al DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
75213	FUTURA 2.2ft PCc Al 2600/840 DALI	x	x	75217	75219	x	x
75223	FUTURA 2.2ft PCc Al 3200/840 DALI	x	x	75227	75229	x	x
75233	FUTURA 2.2ft PCc Al 4400/840 DALI	x	x	75237	75239	x	x
75243	FUTURA 2.4ft PCc Al 5200/840 DALI	75543	75643	75247	75249	75647	75649
75253	FUTURA 2.4ft PCc Al 6400/840 DALI	75553	75653	75257	75259	75657	75659
75263	FUTURA 2.4ft PCc Al 8800/840 DALI	75563	75663	75267	75269	75667	75669
75470	FUTURA 2.4ft PCc Al 12800/840 DALI	75471	75472	x	x	x	x
75273	FUTURA 2.5ft PCc Al 6500/840 DALI	75573	75673	75277	75279	75677	75679
75283	FUTURA 2.5ft PCc Al 8000/840 DALI	75583	75683	75287	75289	75687	75689
75293	FUTURA 2.5ft PCc Al 11000/840 DALI	75593	75693	75297	75299	75697	75699
75480	FUTURA 2.5ft PCc Al 16000/840 DALI	75481	75482	x	x	x	x

Example of type marking: 75687 = FUTURA 2.5ft PCc Al 8000/840 DALI **3F M1h**

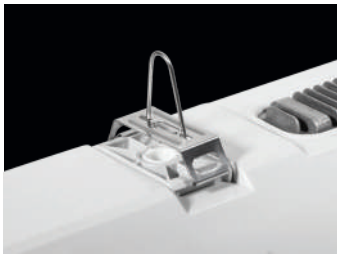
LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories



LIGHT FITTING DETAILED VIEW

FUTURA

FUTURA ES

... Energy Saver.

USE

The light fitting is suitable for industrial indoor and outdoor roofed spaces, warehouses, sports areas, workshops, garages, transport terminals, utility structures and laboratories without a danger of explosion of gas, dust and combustible fumes.

The light fitting is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have the increased resistance against deformation and impact.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic and aluminium at installations in an aggressive environment, see also page 367).

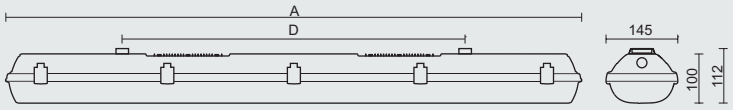
ADVANTAGES

- Light fitting protection **IP66**
- Maximum ambient temperature up to t_a **= 50 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate with Al coolers (PC Al) = high mechanical resistance
- Up to 50 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25 °C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Through-wiring of up to 10 wires at body
- Certification: EPD, ENEC, CB, HACCP

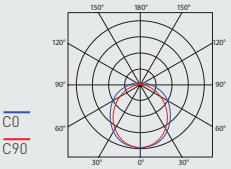
FUTURA ES PC Al, PCc Al

TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: t_a = 50 °C, Maximum ambient temperature: t_a = 0-25 °C (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 172 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate with Al coolers (PC Al), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, three-pole (basic version)
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver or current driver DALI



FUTURA 2.4ft ES



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
For ambient temperature t_a = 50 °C - body: grey polycarbonate with Al coolers - diffuser: translucent polycarbonate									
FUTURA 2.2ft ES PC Al 2600/840	50	2690	2530	15,3	165	23.2 / 21.3	1,45	612	475
FUTURA 2.2ft ES PC Al 3200/840	50	3190	3000	18,2	165	23.9 / 21.9	1,45	612	475
FUTURA 2.2ft ES PC Al 4400/840	45	4380	4120	24,6	167	24.9 / 23.1	1,45	612	475
FUTURA 2.4ft ES PC Al 5200/840	50	5300	4980	28,9	172	23.4 / 21.7	2,45	1172	700
FUTURA 2.4ft ES PC Al 6400/840	50	6410	6030	35,2	171	24.1 / 22.3	2,45	1172	700
FUTURA 2.4ft ES PC Al 8800/840	45	9110	8560	50,4	170	25.3 / 23.5	2,45	1172	700
FUTURA 2.4ft ES PC Al 12800/840	35	14490	13620	80,1	170	26.8 / 25.1	2,65	1172	700
FUTURA 2.5ft ES PC Al 6500/840	50	6920	6500	37,7	172	23.5 / 21.8	2,95	1452	940
FUTURA 2.5ft ES PC Al 8000/840	50	8150	7660	45,1	170	24.1 / 22.4	2,95	1452	940
FUTURA 2.5ft ES PC Al 11000/840	45	12560	11810	68,9	171	25.7 / 24.0	2,95	1452	940
FUTURA 2.5ft ES PC Al 16000/840	35	17980	16900	99,3	170	26.8 / 25.1	3,25	1452	940

10020 FUTURA 2.2ft ES PC Al 3200/840 = suitable replacement for T8 fl. tube light fitting PRIMA 218 – 2×18 W
10050 FUTURA 2.4ft ES PC Al 6400/840 = suitable replacement for T8 fl. tube light fitting PRIMA 236 – 2×36 W
10090 FUTURA 2.5ft ES PC Al 8000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 258 – 2×58 W

FUTURA ES PC Al

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
10010	FUTURA 2.2ft ES PC Al 2600/840	x	x	10014	10015	x	x
10020	FUTURA 2.2ft ES PC Al 3200/840	x	x	10024	10025	x	x
10030	FUTURA 2.2ft ES PC Al 4400/840	x	x	10034	10035	x	x
10040	FUTURA 2.4ft ES PC Al 5200/840	10041	10043	10044	10045	10046	10047
10050	FUTURA 2.4ft ES PC Al 6400/840	10051	10053	10054	10055	10056	10057
10060	FUTURA 2.4ft ES PC Al 8800/840	10061	10063	10064	10065	10066	10067
10070	FUTURA 2.4ft ES PC Al 12800/840	10071	10073	x	x	x	x
10080	FUTURA 2.5ft ES PC Al 6500/840	10081	10083	10084	10085	10086	10087
10090	FUTURA 2.5ft ES PC Al 8000/840	10091	10093	10094	10095	10096	10097
10100	FUTURA 2.5ft ES PC Al 11000/840	10101	10103	10104	10105	10106	10107
10110	FUTURA 2.5ft ES PC Al 16000/840	10111	10113	x	x	x	x

FUTURA ES PCc Al

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
10120	FUTURA 2.2ft ES PCc Al 2600/840	x	x	10124	10125	x	x
10130	FUTURA 2.2ft ES PCc Al 3200/840	x	x	10134	10135	x	x
10140	FUTURA 2.2ft ES PCc Al 4400/840	x	x	10144	10145	x	x
10150	FUTURA 2.4ft ES PCc Al 5200/840	10151	10153	10154	10155	10156	10157
10160	FUTURA 2.4ft ES PCc Al 6400/840	10161	10163	10164	10165	10166	10167
10170	FUTURA 2.4ft ES PCc Al 8800/840	10171	10173	10174	10175	10176	10177
10180	FUTURA 2.4ft ES PCc Al 12800/840	10181	10183	x	x	x	x
10190	FUTURA 2.5ft ES PCc Al 6500/840	10191	10193	10194	10195	10196	10197
10200	FUTURA 2.5ft ES PCc Al 8000/840	10201	10203	10204	10205	10206	10207
10210	FUTURA 2.5ft ES PCc Al 11000/840	10211	10213	10214	10215	10216	10217
10220	FUTURA 2.5ft ES PCc Al 16000/840	10221	10223	x	x	x	x

Example of type marking: 10177 = FUTURA 2.4ft ES PCc Al 8800/840 **3F M3h**

FUTURA ES PC Al DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
10230	FUTURA 2.2ft ES PC Al 2600/840 DALI	x	x	10234	10235	x	x
10240	FUTURA 2.2ft ES PC Al 3200/840 DALI	x	x	10244	10245	x	x
10250	FUTURA 2.2ft ES PC Al 4400/840 DALI	x	x	10254	10255	x	x
10260	FUTURA 2.4ft ES PC Al 5200/840 DALI	10261	10263	10264	10265	10266	10267
10270	FUTURA 2.4ft ES PC Al 6400/840 DALI	10271	10273	10274	10275	10276	10277
10280	FUTURA 2.4ft ES PC Al 8800/840 DALI	10281	10283	10284	10285	10286	10287
10290	FUTURA 2.4ft ES PC Al 12800/840 DALI	10291	10293	x	x	x	x
10300	FUTURA 2.5ft ES PC Al 6500/840 DALI	10301	10303	10304	10305	10306	10307
10310	FUTURA 2.5ft ES PC Al 8000/840 DALI	10311	10313	10314	10315	10316	10317
10320	FUTURA 2.5ft ES PC Al 11000/840 DALI	10321	10323	10324	10325	10326	10327
10330	FUTURA 2.5ft ES PC Al 16000/840 DALI	10331	10333	x	x	x	x

FUTURA ES PCc Al DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
10340	FUTURA 2.2ft ES PCc Al 2600/840 DALI	x	x	10344	10345	x	x
10350	FUTURA 2.2ft ES PCc Al 3200/840 DALI	x	x	10354	10355	x	x
10360	FUTURA 2.2ft ES PCc Al 4400/840 DALI	x	x	10364	10365	x	x
10370	FUTURA 2.4ft ES PCc Al 5200/840 DALI	10371	10373	10374	10375	10376	10377
10380	FUTURA 2.4ft ES PCc Al 6400/840 DALI	10381	10383	10384	10385	10386	10387
10390	FUTURA 2.4ft ES PCc Al 8800/840 DALI	10391	10393	10394	10395	10396	10397
10400	FUTURA 2.4ft ES PCc Al 12800/840 DALI	10401	10403	x	x	x	x
10410	FUTURA 2.5ft ES PCc Al 6500/840 DALI	10411	10413	10414	10415	10416	10417
10420	FUTURA 2.5ft ES PCc Al 8000/840 DALI	10421	10423	10424	10425	10426	10427
10430	FUTURA 2.5ft ES PCc Al 11000/840 DALI	10431	10433	10434	10435	10436	10437
10440	FUTURA 2.5ft ES PCc Al 16000/840 DALI	10441	10443	x	x	x	x

Example of type marking: 10426 = FUTURA 2.5ft ES PCc Al 8000/840 DALI **3F M1h**

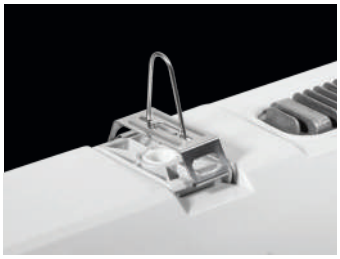
LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories



LIGHT FITTING DETAILED VIEW

FUTURA ES

FUTURA HE

... high efficiency, with sulphur-resistant LED chips.

USE

The light fitting is suitable for industrial indoor and outdoor roofed spaces, warehouses, sports areas, workshops, garages, transport terminals, utility structures and laboratories without a danger of explosion of gas, dust and combustible fumes.

The light fitting is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have the increased resistance against deformation and impact.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic and aluminium at installations in an aggressive environment, see also page 367).

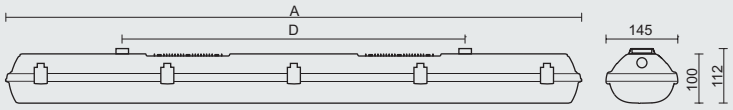
ADVANTAGES

- Light fitting protection **IP66**
- Maximum ambient temperature up to **t_a = 50 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate with Al coolers (PC Al) = high mechanical resistance
- Up to 55 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25 °C
- Standard model - CRI > 80: 4000 K
- It can be delivered in dimmable or emergency version
- Through-wiring of up to 10 wires at body
- **Chips with high sulphur resistance**
- Long lifetime due to low thermal resistance

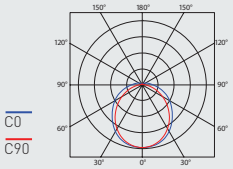
FUTURA HE PC Al, PCc Al

TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: t_a = 50 °C, Maximum ambient temperature: t_a = 0-25 °C (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 180 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate with Al coolers (PC Al), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, three-pole (basic version)
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED sulphur-resistant modules, current driver or current driver DALI



FUTURA 2.4ft HE



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
For ambient temperature t_a = 50 °C - body: grey polycarbonate with Al coolers - diffuser: translucent polycarbonate									
FUTURA 2.2ft HE PC Al 3200/840	50	3335	3130	18,6	168	24.1 / 22.0	1,45	612	475
FUTURA 2.2ft HE PC Al 4400/840	45	4520	4250	25,2	169	25.0 / 23.2	1,45	612	475
FUTURA 2.2ft HE PC Al 6400/840	35	6650	6250	35,9	174	26.5 / 24.4	1,45	612	475
FUTURA 2.4ft HE PC Al 6400/840	50	6690	6290	36,0	175	24.3 / 22.4	2,45	1172	700
FUTURA 2.4ft HE PC Al 8800/840	45	9140	8590	48,6	177	25.3 / 23.5	2,45	1172	700
FUTURA 2.4ft HE PC Al 12800/840	35	15610	14670	81,7	180	27.2 / 25.4	2,65	1172	700
FUTURA 2.5ft HE PC Al 8000/840	50	8330	7830	44,1	178	24.2 / 22.5	2,95	1452	940
FUTURA 2.5ft HE PC Al 11000/840	45	13200	12410	69,8	178	25.8 / 24.1	2,95	1452	940
FUTURA 2.5ft HE PC Al 16000/840	35	19400	18240	101,2	180	27.2 / 25.4	3,25	1452	940
FUTURA 2.5ft HE PC Al 22000/840	35	23220	21830	127,2	172	27.8 / 26.1	3,25	1452	940

FUTURA HE PC Al

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
11000	FUTURA 2.2ft HE PC Al 3200/840	x	x	11001	11002	x	x
11010	FUTURA 2.2ft HE PC Al 4400/840	x	x	11014	11015	x	x
11003	FUTURA 2.2ft HE PC Al 6400/840	x	x	11004	11005	x	x
11006	FUTURA 2.4ft HE PC Al 6400/840	11007	11008	11009	11011	11012	11013
11020	FUTURA 2.4ft HE PC Al 8800/840	11021	11023	11024	11025	11026	11027
11016	FUTURA 2.4ft HE PC Al 12800/840	11017	11018	x	x	x	x
11019	FUTURA 2.5ft HE PC Al 8000/840	11022	11028	11029	11032	11038	11039
11030	FUTURA 2.5ft HE PC Al 11000/840	11031	11033	11034	11035	11036	11037
11041	FUTURA 2.5ft HE PC Al 16000/840	11042	11043	x	x	x	x
103406	FUTURA 2.5ft HE PC Al 22000/840	103407	103408	x	x	x	x

FUTURA HE PCc Al

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
11046	FUTURA 2.2ft HE PCc Al 3200/840	x	x	11047	11048	x	x
11040	FUTURA 2.2ft HE PCc Al 4400/840	x	x	11044	11045	x	x
11049	FUTURA 2.2ft HE PCc Al 6400/840	x	x	11052	11058	x	x
11059	FUTURA 2.4ft HE PCc Al 6400/840	11062	11068	11069	11071	11072	11073
11050	FUTURA 2.4ft HE PCc Al 8800/840	11051	11053	11054	11055	11056	11057
11076	FUTURA 2.4ft HE PCc Al 12800/840	11077	11078	x	x	x	x
11079	FUTURA 2.5ft HE PCc Al 8000/840	11082	11088	11089	11092	11098	11099
11060	FUTURA 2.5ft HE PCc Al 11000/840	11061	11063	11064	11065	11066	11067
11101	FUTURA 2.5ft HE PCc Al 16000/840	11102	11103	x	x	x	x
103412	FUTURA 2.5ft HE PCc Al 22000/840	103413	103414	x	x	x	x

FUTURA HE PC Al DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
11106	FUTURA 2.2ft HE PC Al 3200/840 DALI	x	x	11107	11108	x	x
11070	FUTURA 2.2ft HE PC Al 4400/840 DALI	x	x	11074	11075	x	x
11109	FUTURA 2.2ft HE PC Al 6400/840 DALI	x	x	11112	11118	x	x
11119	FUTURA 2.4ft HE PC Al 6400/840 DALI	11122	11128	11129	11130	11131	11132
11080	FUTURA 2.4ft HE PC Al 8800/840 DALI	11081	11083	11084	11085	11086	11087
11133	FUTURA 2.4ft HE PC Al 12800/840 DALI	11134	11135	x	x	x	x
11136	FUTURA 2.5ft HE PC Al 8000/840 DALI	11137	11138	11139	11140	11141	11142
11090	FUTURA 2.5ft HE PC Al 11000/840 DALI	11091	11093	11094	11095	11096	11097
11143	FUTURA 2.5ft HE PC Al 16000/840 DALI	11144	11145	x	x	x	x
103411	FUTURA 2.5ft HE PC Al 22000/840 DALI	103409	103410	x	x	x	x

FUTURA HE PCc Al DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
11146	FUTURA 2.2ft HE PCc Al 3200/840 DALI	x	x	11147	11148	x	x
11100	FUTURA 2.2ft HE PCc Al 4400/840 DALI	x	x	11104	11105	x	x
11149	FUTURA 2.2ft HE PCc Al 6400/840 DALI	x	x	11150	11151	x	x
11152	FUTURA 2.4ft HE PCc Al 6400/840 DALI	11153	11154	11155	11156	11157	11158
11110	FUTURA 2.4ft HE PCc Al 8800/840 DALI	11111	11113	11114	11115	11116	11117
11159	FUTURA 2.4ft HE PCc Al 12800/840 DALI	11160	11161	x	x	x	x
11162	FUTURA 2.5ft HE PCc Al 8000/840 DALI	11163	11164	11165	11166	11167	11168
11120	FUTURA 2.5ft HE PCc Al 11000/840 DALI	11121	11123	11124	11125	11126	11127
11169	FUTURA 2.5ft HE PCc Al 16000/840 DALI	11170	11171	x	x	x	x
103415	FUTURA 2.5ft HE PCc Al 22000/840 DALI	103416	103417	x	x	x	x

Example of type marking: 11116 = FUTURA 2.4ft HE PCc Al 8800/840 DALI **3F M1h**

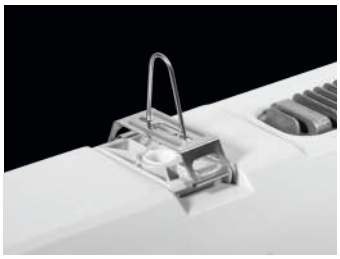
LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories



LIGHT FITTING DETAILED VIEW

FUTURA HE

FUTURA VP

... for outdoor spaces.

USE

The light fitting is suitable for the installation in outdoor spaces with shelter. It is equipped with a ventilation plug made of polyamide which eliminates the presence of condensation fumes and underpressure in the light fitting caused by ambient temperature fluctuations.

The light fitting is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have the increased resistance against deformation and impact.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic and aluminium at installations in an aggressive environment, see also page 367).

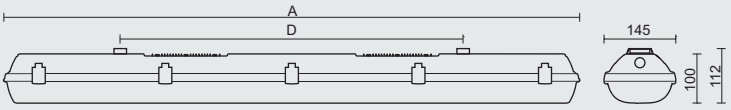
ADVANTAGES

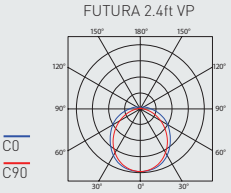
- Light fitting protection **IP66**
- Maximum ambient temperature up to t_a **= 50 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate with Al coolers (PC Al) = high mechanical resistance
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25 °C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Through-wiring of up to 10 wires at body
- Certification: EPD, ENEC, CB, HACCP

FUTURA VP PC Al, VP PCc Al

TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: t_a = 50 °C, Maximum ambient temperature: t_a = 0-25 °C (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 165 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate with Al coolers, UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Ventilation plug: type BVPB-01 made of polyamide, size M12 × 1.5
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, three-pole (basic version)
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver or current driver DALI





Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
For ambient temperature t_a = 50 °C - body: grey polycarbonate with Al coolers - diffuser: translucent polycarbonate									
FUTURA 2.2ft VP PC Al 2600/840	50	2600	2440	16,1	152	23.1 / 21.1	1,45	612	475
FUTURA 2.2ft VP PC Al 3200/840	50	3100	2910	19,1	152	23.8 / 21.8	1,45	612	475
FUTURA 2.2ft VP PC Al 4400/840	45	4300	4040	26,0	155	24.8 / 23.0	1,45	612	475
FUTURA 2.4ft VP PC Al 5200/840	50	5230	4920	30,3	162	23.3 / 21.6	2,45	1172	700
FUTURA 2.4ft VP PC Al 6400/840	50	6240	5870	36,3	162	24.0 / 22.2	2,45	1172	700
FUTURA 2.4ft VP PC Al 8800/840	45	8690	8170	49,7	164	25.1 / 23.4	2,45	1172	700
FUTURA 2.4ft VP PC Al 12800/840	35	13920	13080	82,5	159	26.7 / 24.9	2,65	1172	700
FUTURA 2.5ft VP PC Al 6500/840	50	6500	6110	37,1	165	23.3 / 21.6	2,95	1452	940
FUTURA 2.5ft VP PC Al 8000/840	50	7770	7300	44,4	164	24.0 / 22.2	2,95	1452	940
FUTURA 2.5ft VP PC Al 11000/840	45	12310	11570	71,1	163	25.6 / 23.9	2,95	1452	940
FUTURA 2.5ft VP PC Al 16000/840	35	17440	16390	102,2	160	26.7 / 25.0	3,25	1452	940

76020 FUTURA 2.2ft VP PC Al 3200/840 = suitable replacement for T8 fl. tube light fitting PRIMA 218 – 2×18 W
76050 FUTURA 2.4ft VP PC Al 6400/840 = suitable replacement for T8 fl. tube light fitting PRIMA 236 – 2×36 W
76080 FUTURA 2.5ft VP PC Al 8000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 258 – 2×58 W

FUTURA VP PC Al

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
76010	FUTURA 2.2ft VP PC Al 2600/840	x	x	76014	76015	x	x
76020	FUTURA 2.2ft VP PC Al 3200/840	x	x	76024	76025	x	x
76030	FUTURA 2.2ft VP PC Al 4400/840	x	x	76034	76035	x	x
76040	FUTURA 2.4ft VP PC Al 5200/840	76140	76340	76044	76045	76344	76345
76050	FUTURA 2.4ft VP PC Al 6400/840	76150	76350	76054	76055	76354	76355
76060	FUTURA 2.4ft VP PC Al 8800/840	76160	76360	76064	76065	76364	76365
76410	FUTURA 2.4ft VP PC Al 12800/840	76411	76412	x	x	x	x
76070	FUTURA 2.5ft VP PC Al 6500/840	76170	76370	76074	76075	76374	76375
76080	FUTURA 2.5ft VP PC Al 8000/840	76180	76380	76084	76085	76384	76385
76090	FUTURA 2.5ft VP PC Al 11000/840	76190	76390	76094	76095	76394	76395
76420	FUTURA 2.5ft VP PC Al 16000/840	76421	76422	x	x	x	x

FUTURA VP PCc Al

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
76210	FUTURA 2.2ft VP PCc Al 2600/840	x	x	76214	76215	x	x
76220	FUTURA 2.2ft VP PCc Al 3200/840	x	x	76224	76225	x	x
76230	FUTURA 2.2ft VP PCc Al 4400/840	x	x	76234	76235	x	x
76240	FUTURA 2.4ft VP PCc Al 5200/840	76540	76640	76244	76245	76644	76645
76250	FUTURA 2.4ft VP PCc Al 6400/840	76550	76650	76254	76255	76654	76655
76260	FUTURA 2.4ft VP PCc Al 8800/840	76560	76660	76264	76265	76664	76665
76430	FUTURA 2.4ft VP PCc Al 12800/840	76431	76432	x	x	x	x
76270	FUTURA 2.5ft VP PCc Al 6500/840	76570	76670	76274	76275	76674	76675
76280	FUTURA 2.5ft VP PCc Al 8000/840	76580	76680	76284	76285	76684	76685
76290	FUTURA 2.5ft VP PCc Al 11000/840	76590	76690	76294	76295	76694	76695
76440	FUTURA 2.5ft VP PCc Al 16000/840	76441	76442	x	x	x	x

Example of type marking: 76664 = FUTURA 2.4ft VP PCc Al 8800/840 **3F M1h**

FUTURA VP PC Al DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
76013	FUTURA 2.2ft VP PC Al 2600/840 DALI	x	x	76017	76019	x	x
76023	FUTURA 2.2ft VP PC Al 3200/840 DALI	x	x	76027	76029	x	x
76033	FUTURA 2.2ft VP PC Al 4400/840 DALI	x	x	76037	76039	x	x
76043	FUTURA 2.4ft VP PC Al 5200/840 DALI	76143	76343	76047	76049	76347	76349
76053	FUTURA 2.4ft VP PC Al 6400/840 DALI	76153	76353	76057	76059	76357	76359
76063	FUTURA 2.4ft VP PC Al 8800/840 DALI	76163	76363	76067	76069	76367	76369
76450	FUTURA 2.4ft VP PC Al 12800/840 DALI	76451	76452	x	x	x	x
76073	FUTURA 2.5ft VP PC Al 6500/840 DALI	76173	76373	76077	76079	76377	76379
76083	FUTURA 2.5ft VP PC Al 8000/840 DALI	76183	76383	76087	76089	76387	76389
76093	FUTURA 2.5ft VP PC Al 11000/840 DALI	76193	76393	76097	76099	76397	76399
76460	FUTURA 2.5ft VP PC Al 16000/840 DALI	76461	76462	x	x	x	x

FUTURA VP PCc Al DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
76213	FUTURA 2.2ft VP PCc Al 2600/840 DALI	x	x	76217	76219	x	x
76223	FUTURA 2.2ft VP PCc Al 3200/840 DALI	x	x	76227	76229	x	x
76233	FUTURA 2.2ft VP PCc Al 4400/840 DALI	x	x	76237	76239	x	x
76243	FUTURA 2.4ft VP PCc Al 5200/840 DALI	76543	76643	76247	76249	76647	76649
76253	FUTURA 2.4ft VP PCc Al 6400/840 DALI	76553	76653	76257	76259	76657	76659
76263	FUTURA 2.4ft VP PCc Al 8800/840 DALI	76563	76663	76267	76269	76667	76669
76470	FUTURA 2.4ft VP PCc Al 12800/840 DALI	76471	76472	x	x	x	x
76273	FUTURA 2.5ft VP PCc Al 6500/840 DALI	76573	76673	76277	76279	76677	76679
76283	FUTURA 2.5ft VP PCc Al 8000/840 DALI	76583	76683	76287	76289	76687	76689
76293	FUTURA 2.5ft VP PCc Al 11000/840 DALI	76593	76693	76297	76299	76697	76699
76480	FUTURA 2.5ft VP PCc Al 16000/840 DALI	76481	76482	x	x	x	x

Example of type marking: 76667 = FUTURA 2.4ft VP PCc Al 8800/840 DALI **3F M1h**

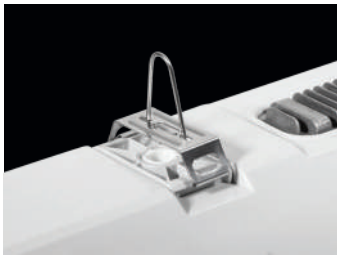
LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories



LIGHT FITTING DETAILED VIEW

FUTURA VP

FUTURA NB

... for storage rack lanes with high ceilings 10-15 m.

USE

The light fitting with narrow emitting characteristics is suitable to illuminate storage rack lanes and narrow spaces with high ceilings. Its assembly height is 10-15 m.

The light fitting is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have the increased resistance against deformation and impact.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic and aluminium at installations in an aggressive environment, see also page 367).

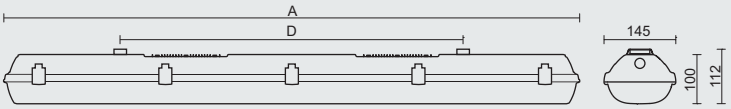
ADVANTAGES

- Light fitting protection **IP66**
- Maximum ambient temperature up to t_a = **40 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: transparent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate with Al coolers (PC Al) = high mechanical resistance
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25 °C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- ICan be delivered with a grille to reduce the longitudinal UGR
- Through-wiring of up to 10 wires at body
- Certification: HACCP

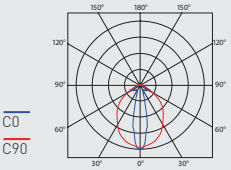
FUTURA NB PC Al, PCc Al

TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: t_a = 40 °C, Maximum ambient temperature: t_a = 0-25 °C (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 147 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: transparent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate with Al coolers (PC Al), UV stable, impact-resistant
- Reflector: parabolic polished aluminium with narrow emitting characteristics (NB - narrow beam)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, three-pole (basic version)
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver or current driver DALI



FUTURA NB 2.4ft



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
For ambient temperature t_a = 40 °C - body: grey polycarbonate with Al coolers - diffuser: transparent polycarbonate									
FUTURA 2.4ft NB PC Al 8800/840	40	8690	7300	49,7	147	20.8 / 23.8	3,3	1172	700
FUTURA 2.4ft NB PC Al 12800/840	30	13920	11690	82,5	142	22.4 / 25.3	3,3	1172	700
FUTURA 2.5ft NB PC Al 11000/840	40	12310	10340	71,1	145	21.3 / 24.3	3,9	1452	940
FUTURA 2.5ft NB PC Al 16000/840	30	17440	14650	102,2	143	22.5 / 25.4	3,9	1452	940

FUTURA NB PC Al

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
78060	FUTURA 2.4ft NB PC Al 8800/840	78160	78360	78064	78065	78364	78365
78070	FUTURA 2.4ft NB PC Al 12800/840	78170	78370	x	x	x	x
78090	FUTURA 2.5ft NB PC Al 11000/840	78190	78390	78094	78095	78394	78395
78080	FUTURA 2.5ft NB PC Al 16000/840	78180	78380	x	x	x	x

FUTURA NB PCc Al

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
78260	FUTURA 2.4ft NB PCc Al 8800/840	78560	78660	78264	78265	78664	78665
78270	FUTURA 2.4ft NB PCc Al 12800/840	78570	78670	x	x	x	x
78290	FUTURA 2.5ft NB PCc Al 11000/840	78590	78690	78294	78295	78694	78695
78280	FUTURA 2.5ft NB PCc Al 16000/840	78580	78680	x	x	x	x

FUTURA NB PC Al DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
78063	FUTURA 2.4ft NB PC Al 8800/840 DALI	78163	78363	78067	78069	78367	78369
78073	FUTURA 2.4ft NB PC Al 12800/840 DALI	78173	78373	x	x	x	x
78093	FUTURA 2.5ft NB PC Al 11000/840 DALI	78193	78393	78097	78099	78397	78399
78083	FUTURA 2.5ft NB PC Al 16000/840 DALI	78183	78383	x	x	x	x

FUTURA NB PCc Al DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
78263	FUTURA 2.4ft NB PCc Al 8800/840 DALI	78563	78663	78267	78269	78667	78669
78273	FUTURA 2.4ft NB PCc Al 12800/840 DALI	78573	78673	x	x	x	x
78293	FUTURA 2.5ft NB PCc Al 11000/840 DALI	78593	78693	78297	78299	78697	78699
78283	FUTURA 2.5ft NB PCc Al 16000/840 DALI	78583	78683	x	x	x	x

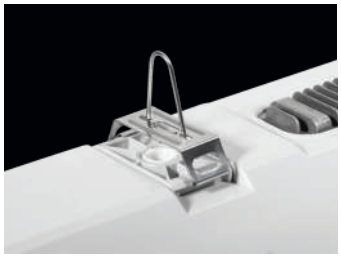
Example of type marking: 78669 = FUTURA 2.4ft NB PCc Al 8800/840 DALI **3F M3h**

LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

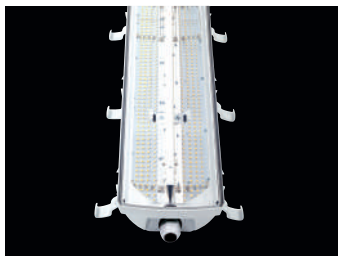
LIGHT FITTING ATTACHMENT

a) Directly to a ceiling with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks



LIGHT FITTING DETAILED VIEW

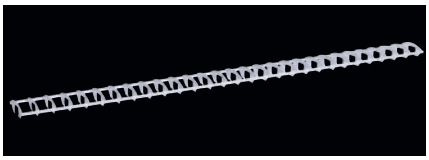
FUTURA NB



ACCESSORIES

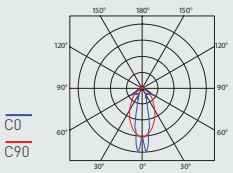
Grid FUTURA NB

Additional grid for reducing the longitudinal UGR for FUTURA NB lamps.
The grid reduces the glare value in the longitudinal direction to below 19 (see the luminance curve below).



Code	Type	Description	Weight [kg]
11989	MNB 2.4	grid FUTURA 2.4ft NB	0,36
11990	MNB 2.5	grid FUTURA 2.5ft NB	0,45

FUTURA NB 2.4ft (with grid)



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Change of the values for lamp variants with grid									
FUTURA 2.4ft NB PC Al 8800/840	40	8690	5650	49,7	114	20.8 / 19.5	3,3	1172	700
FUTURA 2.4ft NB PC Al 12800/840	30	13920	9050	82,5	110	22.3 / 21.0	3,3	1172	700
FUTURA 2.5ft NB PC Al 11000/840	40	12310	8000	71,1	113	21.2 / 20.0	3,9	1452	940
FUTURA 2.5ft NB PC Al 16000/840	30	17440	11340	102,2	111	22.4 / 21.1	3,9	1452	940

FUTURA ABS

... dustproof, waterproof and chemically resistant.

USE

The light fitting is suitable for the environment where ammoniac fumes, lixiviants, alkaline compounds and hot water (hydrolyses) can be present. We recommend this light fitting for agricultural operations, stables, car washing lines, warehouses, mechanical workshops and laboratories without a danger of explosion of gas, dust and combustible fumes.

The light fitting is resistant to dust, moisture and spouting water. The body made of ABS and the diffuser made of AC have increased chemical resistance.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic and aluminium at installations in an aggressive environment, see also page 367).

Always open the cover of the light fitting out of an environment with aggressive volatile substances.

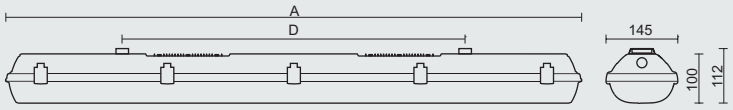
ADVANTAGES

- Light fitting protection **IP66**
- Maximum ambient temperature up to t_a **= 50 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent acrylate (AC) = high chemical resistance
- Body: dark grey ABS with Al coolers (ABS Al) = high chemical resistance
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25 °C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Through-wiring of up to 10 wires at body
- Certification: EPD, ENEC, CB, (except RED), HACCP

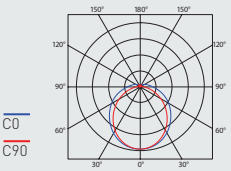
FUTURA ABS Al, ABSc Al

TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: t_a = 50 °C, Maximum ambient temperature: t_a = 0-25 °C (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 154 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent acrylate (AC), UV stable, chemically resistant
- Body: dark grey ABS with Al coolers (ABS Al), UV stable, chemically resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, three-pole (basic version)
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver or current driver DALI



FUTURA 2.4ft ABS



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
For ambient temperature t_a = 50 °C - body: dark grey ABS with Al coolers - diffuser: translucent acrylate									
FUTURA 2.2ft ABS Al 2600/840	50	2600	2290	16,1	142	23.1 / 20.9	1,45	612	475
FUTURA 2.2ft ABS Al 3200/840	50	3100	2730	19,1	143	23.7 / 21.5	1,45	612	475
FUTURA 2.2ft ABS Al 4400/840	45	4300	3780	26,0	145	24.9 / 22.6	1,45	612	475
FUTURA 2.4ft ABS Al 5200/840	50	5230	4600	30,3	152	23.3 / 21.3	2,45	1172	700
FUTURA 2.4ft ABS Al 6400/840	50	6240	5490	36,3	151	24.0 / 21.9	2,45	1172	700
FUTURA 2.4ft ABS Al 8800/840	45	8690	7650	49,7	154	25.1 / 23.1	2,45	1172	700
FUTURA 2.4ft ABS Al 12800/840	35	13920	12250	82,5	148	26.5 / 24.7	2,65	1172	700
FUTURA 2.5ft ABS Al 6500/840	50	6500	5720	37,1	154	23.4 / 21.4	2,95	1452	940
FUTURA 2.5ft ABS Al 8000/840	50	7770	6840	44,4	154	24.0 / 22.0	2,95	1452	940
FUTURA 2.5ft ABS Al 11000/840	45	12310	10830	71,1	152	25.6 / 23.6	2,95	1452	940
FUTURA 2.5ft ABS Al 16000/840	35	17440	15350	102,2	150	26.5 / 24.7	3,25	1452	940

77020 FUTURA 2.2ft ABS Al 3200/840 = suitable replacement for T8 fl. tube light fitting PRIMA 218 – 2×18 W
77050 FUTURA 2.4ft ABS Al 6400/840 = suitable replacement for T8 fl. tube light fitting PRIMA 236 – 2×36 W
77080 FUTURA 2.5ft ABS Al 8000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 258 – 2×58 W

FUTURA ABS Al

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
77010	FUTURA 2.2ft ABS Al 2600/840	x	x	77014	77015	x	x
77020	FUTURA 2.2ft ABS Al 3200/840	x	x	77024	77025	x	x
77030	FUTURA 2.2ft ABS Al 4400/840	x	x	77034	77035	x	x
77040	FUTURA 2.4ft ABS Al 5200/840	77140	77340	77044	77045	77344	77345
77050	FUTURA 2.4ft ABS Al 6400/840	77150	77350	77054	77055	77354	77355
77060	FUTURA 2.4ft ABS Al 8800/840	77160	77360	77064	77065	77364	77365
77410	FUTURA 2.4ft ABS Al 12800/840	77411	77412	x	x	x	x
77070	FUTURA 2.5ft ABS Al 6500/840	77170	77370	77074	77075	77374	77375
77080	FUTURA 2.5ft ABS Al 8000/840	77180	77380	77084	77085	77384	77385
77090	FUTURA 2.5ft ABS Al 11000/840	77190	77390	77094	77095	77394	77395
77420	FUTURA 2.5ft ABS Al 16000/840	77421	77422	x	x	x	x

FUTURA ABSc Al

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
77210	FUTURA 2.2ft ABSc Al 2600/840	x	x	77214	77215	x	x
77220	FUTURA 2.2ft ABSc Al 3200/840	x	x	77224	77225	x	x
77230	FUTURA 2.2ft ABSc Al 4400/840	x	x	77234	77235	x	x
77240	FUTURA 2.4ft ABSc Al 5200/840	77540	77640	77244	77245	77644	77645
77250	FUTURA 2.4ft ABSc Al 6400/840	77550	77650	77254	77255	77654	77655
77260	FUTURA 2.4ft ABSc Al 8800/840	77560	77660	77264	77265	77664	77665
77430	FUTURA 2.4ft ABSc Al 12800/840	77431	77432	x	x	x	x
77270	FUTURA 2.5ft ABSc Al 6500/840	77570	77670	77274	77275	77674	77675
77280	FUTURA 2.5ft ABSc Al 8000/840	77580	77680	77284	77285	77684	77685
77290	FUTURA 2.5ft ABSc Al 11000/840	77590	77690	77294	77295	77694	77695
77440	FUTURA 2.5ft ABSc Al 16000/840	77441	77442	x	x	x	x

FUTURA ABS Al DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
77013	FUTURA 2.2ft ABS Al 2600/840 DALI	x	x	77017	77019	x	x
77023	FUTURA 2.2ft ABS Al 3200/840 DALI	x	x	77027	77029	x	x
77033	FUTURA 2.2ft ABS Al 4400/840 DALI	x	x	77037	77039	x	x
77043	FUTURA 2.4ft ABS Al 5200/840 DALI	77143	77343	77047	77049	77347	77349
77053	FUTURA 2.4ft ABS Al 6400/840 DALI	77153	77353	77057	77059	77357	77359
77063	FUTURA 2.4ft ABS Al 8800/840 DALI	77163	77363	77067	77069	77367	77369
77450	FUTURA 2.4ft ABS Al 12800/840 DALI	77451	77452	x	x	x	x
77073	FUTURA 2.5ft ABS Al 6500/840 DALI	77173	77373	77077	77079	77377	77379
77083	FUTURA 2.5ft ABS Al 8000/840 DALI	77183	77383	77087	77089	77387	77389
77093	FUTURA 2.5ft ABS Al 11000/840 DALI	77193	77393	77097	77099	77397	77399
77460	FUTURA 2.5ft ABS Al 16000/840 DALI	77461	77462	x	x	x	x

FUTURA ABSc Al DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
77213	FUTURA 2.2ft ABSc Al 2600/840 DALI	x	x	77217	77219	x	x
77223	FUTURA 2.2ft ABSc Al 3200/840 DALI	x	x	77227	77229	x	x
77233	FUTURA 2.2ft ABSc Al 4400/840 DALI	x	x	77237	77239	x	x
77243	FUTURA 2.4ft ABSc Al 5200/840 DALI	77543	77643	77247	77249	77647	77649
77253	FUTURA 2.4ft ABSc Al 6400/840 DALI	77553	77653	77257	77259	77657	77659
77263	FUTURA 2.4ft ABSc Al 8800/840 DALI	77563	77663	77267	77269	77667	77669
77470	FUTURA 2.4ft ABSc Al 12800/840 DALI	77471	77472	x	x	x	x
77273	FUTURA 2.5ft ABSc Al 6500/840 DALI	77573	77673	77277	77279	77677	77679
77283	FUTURA 2.5ft ABSc Al 8000/840 DALI	77583	77683	77287	77289	77687	77689
77293	FUTURA 2.5ft ABSc Al 11000/840 DALI	77593	77693	77297	77299	77697	77699
77480	FUTURA 2.5ft ABSc Al 16000/840 DALI	77481	77482	x	x	x	x

Example of type marking: 77667 = FUTURA 2.4ft ABSc Al 8800/840 DALI **3F M1h**

LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

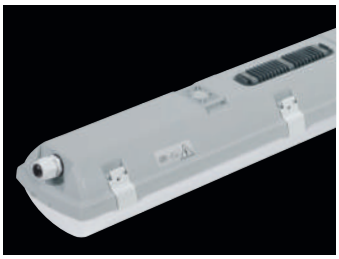
DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories

LIGHT FITTING DETAILED VIEW

FUTURA ABS



FUTURA ES ABS

... Energy Saver, chemically resistant.

USE

The light fitting is suitable for the environment where ammoniac fumes, lixiviants, alkaline compounds and hot water (hydrolyses) can be present. We recommend this light fitting for agricultural operations, stables, car washing lines, warehouses, mechanical workshops and laboratories without a danger of explosion of gas, dust and combustible fumes.

The light fitting is resistant to dust, moisture and spouting water. The body made of ABS and the diffuser made of AC have increased chemical resistance.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic and aluminium at installations in an aggressive environment, see also page 367).

Always open the cover of the light fitting out of an environment with aggressive volatile substances.

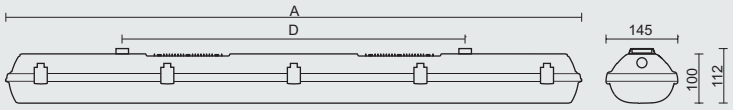
ADVANTAGES

- Light fitting protection **IP66**
- Maximum ambient temperature up to t_a **= 50 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent acrylate (AC) = high chemical resistance
- Body: dark grey ABS with Al coolers (ABS Al) = high chemical resistance
- Up to 50 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25 °C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Through-wiring of up to 10 wires at body
- Certification: EPD, ENEC, CB, HACCP

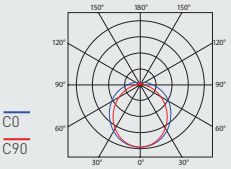
FUTURA ES ABS Al, ABSc Al

TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: t_a = 50 °C, Maximum ambient temperature: t_a = 0-25 °C (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 162 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent acrylate (AC), UV stable, chemically resistant
- Body: dark grey ABS with Al coolers (ABS Al), UV stable, chemically resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, three-pole (basic version)
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver or current driver DALI



FUTURA 2.4ft ES ABS



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
For ambient temperature t_a = 50 °C - body: dark grey ABS with Al coolers - diffuser: translucent acrylate									
FUTURA 2.2ft ES ABS Al 2600/840	50	2690	2370	15,3	155	23.2 / 21.0	1,45	612	475
FUTURA 2.2ft ES ABS Al 3200/840	50	3190	2810	18,2	154	23.8 / 21.6	1,45	612	475
FUTURA 2.2ft ES ABS Al 4400/840	45	4380	3850	24,6	157	24.9 / 22.7	1,45	612	475
FUTURA 2.4ft ES ABS Al 5200/840	50	5300	4660	28,9	161	23.4 / 21.4	2,45	1172	700
FUTURA 2.4ft ES ABS Al 6400/840	50	6410	5640	35,2	160	24.0 / 22.0	2,45	1172	700
FUTURA 2.4ft ES ABS Al 8800/840	45	9110	8020	50,4	159	25.3 / 23.2	2,45	1172	700
FUTURA 2.4ft ES ABS Al 12800/840	35	14490	12750	80,1	159	26.6 / 24.8	2,65	1172	700
FUTURA 2.5ft ES ABS Al 6500/840	50	6920	6090	37,7	162	23.6 / 21.6	2,95	1452	940
FUTURA 2.5ft ES ABS Al 8000/840	50	8150	7170	45,1	159	24.1 / 22.2	2,95	1452	940
FUTURA 2.5ft ES ABS Al 11000/840	45	12560	11050	68,9	160	25.6 / 23.7	2,95	1452	940
FUTURA 2.5ft ES ABS Al 16000/840	35	17980	15820	99,3	159	26.6 / 24.8	3,25	1452	940

77020 FUTURA 2.2ft ES ABS Al 3200/840 = suitable replacement for T8 fl. tube light fitting PRIMA 218 – 2×18 W
77050 FUTURA 2.4ft ES ABS Al 6400/840 = suitable replacement for T8 fl. tube light fitting PRIMA 236 – 2×36 W
77080 FUTURA 2.5ft ES ABS Al 8000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 258 – 2×58 W

FUTURA ES ABS Al

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
10510	FUTURA 2.2ft ES ABS Al 2600/840	x	x	10514	10515	x	x
10520	FUTURA 2.2ft ES ABS Al 3200/840	x	x	10524	10525	x	x
10530	FUTURA 2.2ft ES ABS Al 4400/840	x	x	10534	10535	x	x
10540	FUTURA 2.4ft ES ABS Al 5200/840	10541	10543	10544	10545	10546	10547
10550	FUTURA 2.4ft ES ABS Al 6400/840	10551	10553	10554	10555	10556	10557
10560	FUTURA 2.4ft ES ABS Al 8800/840	10561	10563	10564	10565	10566	10567
10570	FUTURA 2.4ft ES ABS Al 12800/840	10571	10573	x	x	x	x
10580	FUTURA 2.5ft ES ABS Al 6500/840	10581	10583	10584	10585	10586	10587
10590	FUTURA 2.5ft ES ABS Al 8000/840	10591	10593	10594	10595	10596	10597
10600	FUTURA 2.5ft ES ABS Al 11000/840	10601	10603	10604	10605	10606	10607
10610	FUTURA 2.5ft ES ABS Al 16000/840	10611	10613	x	x	x	x

FUTURA ES ABSc Al

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
10620	FUTURA 2.2ft ES ABSc Al 2600/840	x	x	10624	10625	x	x
10630	FUTURA 2.2ft ES ABSc Al 3200/840	x	x	10634	10635	x	x
10640	FUTURA 2.2ft ES ABSc Al 4400/840	x	x	10644	10645	x	x
10650	FUTURA 2.4ft ES ABSc Al 5200/840	10651	10653	10654	10655	10656	10657
10660	FUTURA 2.4ft ES ABSc Al 6400/840	10661	10663	10664	10665	10666	10667
10670	FUTURA 2.4ft ES ABSc Al 8800/840	10671	10673	10674	10675	10676	10677
10680	FUTURA 2.4ft ES ABSc Al 12800/840	10681	10683	x	x	x	x
10690	FUTURA 2.5ft ES ABSc Al 6500/840	10691	10693	10694	10695	10696	10697
10700	FUTURA 2.5ft ES ABSc Al 8000/840	10701	10703	10704	10705	10706	10707
10710	FUTURA 2.5ft ES ABSc Al 11000/840	10711	10713	10714	10715	10716	10717
10720	FUTURA 2.5ft ES ABSc Al 16000/840	10721	10723	x	x	x	x

Example of type marking: 10706 = FUTURA 2.4ft ES ABSc Al 8800/840 **3F M1h**

FUTURA ES ABS Al DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
10730	FUTURA 2.2ft ES ABS Al 2600/840 DALI	x	x	10734	10735	x	x
10740	FUTURA 2.2ft ES ABS Al 3200/840 DALI	x	x	10744	10745	x	x
10750	FUTURA 2.2ft ES ABS Al 4400/840 DALI	x	x	10754	10755	x	x
10760	FUTURA 2.4ft ES ABS Al 5200/840 DALI	10761	10763	10764	10765	10766	10767
10770	FUTURA 2.4ft ES ABS Al 6400/840 DALI	10771	10773	10774	10775	10776	10777
10780	FUTURA 2.4ft ES ABS Al 8800/840 DALI	10781	10783	10784	10785	10786	10787
10790	FUTURA 2.4ft ES ABS Al 12800/840 DALI	10791	10793	x	x	x	x
10800	FUTURA 2.5ft ES ABS Al 6500/840 DALI	10801	10803	10804	10805	10806	10807
10810	FUTURA 2.5ft ES ABS Al 8000/840 DALI	10811	10813	10814	10815	10816	10817
10820	FUTURA 2.5ft ES ABS Al 11000/840 DALI	10821	10823	10824	10825	10826	10827
10830	FUTURA 2.5ft ES ABS Al 16000/840 DALI	10831	10833	x	x	x	x

FUTURA ES ABSc Al DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
10840	FUTURA 2.2ft ES ABSc Al 2600/840 DALI	x	x	10844	10845	x	x
10850	FUTURA 2.2ft ES ABSc Al 3200/840 DALI	x	x	10854	10855	x	x
10860	FUTURA 2.2ft ES ABSc Al 4400/840 DALI	x	x	10864	10865	x	x
10870	FUTURA 2.4ft ES ABSc Al 5200/840 DALI	10871	10873	10874	10875	10876	10877
10880	FUTURA 2.4ft ES ABSc Al 6400/840 DALI	10881	10883	10884	10885	10886	10887
10890	FUTURA 2.4ft ES ABSc Al 8800/840 DALI	10891	10893	10894	10895	10896	10897
10900	FUTURA 2.4ft ES ABSc Al 12800/840 DALI	10901	10903	x	x	x	x
10910	FUTURA 2.5ft ES ABSc Al 6500/840 DALI	10911	10913	10914	10915	10916	10917
10920	FUTURA 2.5ft ES ABSc Al 8000/840 DALI	10921	10923	10924	10925	10926	10927
10930	FUTURA 2.5ft ES ABSc Al 11000/840 DALI	10931	10933	10934	10935	10936	10937
10940	FUTURA 2.5ft ES ABSc Al 16000/840 DALI	10941	10943	x	x	x	x

Example of type marking: 10896 = FUTURA 2.4ft ES ABSc Al 8800/840 DALI **3F M1h**

LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories

LIGHT FITTING DETAILED VIEW

FUTURA ES ABS

FUTURA HE ABS

... high efficiency, with sulphur-resistant LED chips, chemically resistant.

USE

The light fitting is suitable for the environment where ammoniac fumes, lixiviants, alkaline compounds and hot water (hydrolyses) can be present. We recommend this light fitting for agricultural operations, stables, car washing lines, warehouses, mechanical workshops and laboratories without a danger of explosion of gas, dust and combustible fumes.

The light fitting is resistant to dust, moisture and spouting water. The body made of ABS and the diffuser made of AC have increased chemical resistance.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic and aluminium at installations in an aggressive environment, see also page 367).

Always open the cover of the light fitting out of an environment with aggressive volatile substances.

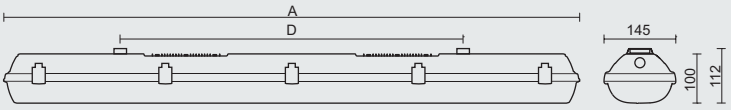
ADVANTAGES

- Light fitting protection **IP66**
- Maximum ambient temperature up to **t_a = 50 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent acrylate (AC) = high chemical resistance
- Body: dark grey ABS with Al coolers (ABS Al) = high chemical resistance
- Up to 55 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CL0)
- Constant luminous flux even in ambient temperature of -25 °C
- Standard model - CRI > 80: 4000 K
- It can be delivered in dimmable or emergency version
- Through-wiring of up to 10 wires at body
- **Chips with high sulphur resistance**
- Long lifetime due to low thermal resistance

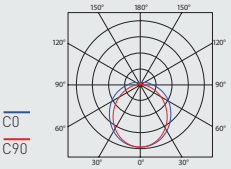
FUTURA HE ABS Al, ABSc Al

TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: t_a = 50 °C, Maximum ambient temperature: t_a = 0-25 °C (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 169 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent acrylate (AC), UV stable, chemically resistant
- Body: dark grey ABS with Al coolers (ABS Al), UV stable, chemically resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, three-pole (basic version)
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED sulphur-resistant modules, current driver or current driver DALI



FUTURA 2.4ft HE ABS



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
For ambient temperature t_a = 50 °C - body: dark grey ABS with Al coolers - diffuser: translucent acrylate									
FUTURA 2.2ft HE ABS Al 3200/840	50	3335	2930	18,6	158	23.8 / 21.8	1,45	612	475
FUTURA 2.2ft HE ABS Al 4400/840	45	4520	3980	25,2	158	24.8 / 23.0	1,45	612	475
FUTURA 2.2ft HE ABS Al 6400/840	35	6650	5850	35,9	163	26.2 / 24.2	1,45	612	475
FUTURA 2.4ft HE ABS Al 6400/840	50	6690	5890	36,0	164	24.1 / 22.2	2,45	1172	700
FUTURA 2.4ft HE ABS Al 8800/840	45	9140	8040	48,6	165	25.1 / 23.3	2,45	1172	700
FUTURA 2.4ft HE ABS Al 12800/840	35	15610	13740	81,7	168	26.9 / 25.2	2,65	1172	700
FUTURA 2.5ft HE ABS Al 8000/840	50	8330	7330	44,1	166	24.0 / 22.2	2,95	1452	940
FUTURA 2.5ft HE ABS Al 11000/840	45	13200	11620	69,8	166	25.6 / 23.9	2,95	1452	940
FUTURA 2.5ft HE ABS Al 16000/840	35	19400	17070	101,2	169	26.9 / 25.2	3,25	1452	940
FUTURA 2.5ft HE ABS Al 22000/840	35	23220	20430	127,2	161	27.6 / 25.8	3,25	1452	940

FUTURA HE ABS Al

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
11200	FUTURA 2.2ft HE ABS Al 3200/840	x	x	11201	11202	x	x
11210	FUTURA 2.2ft HE ABS Al 4400/840	x	x	11214	11215	x	x
11203	FUTURA 2.2ft HE ABS Al 6400/840	x	x	11204	11205	x	x
11206	FUTURA 2.4ft HE ABS Al 6400/840	11207	11208	11209	11211	11212	11213
11220	FUTURA 2.4ft HE ABS Al 8800/840	11221	11223	11224	11225	11226	11227
11216	FUTURA 2.4ft HE ABS Al 12800/840	11217	11218	x	x	x	x
11219	FUTURA 2.5ft HE ABS Al 8000/840	11222	11228	11229	11232	11238	11239
11230	FUTURA 2.5ft HE ABS Al 11000/840	11231	11233	11234	11235	11236	11237
11241	FUTURA 2.5ft HE ABS Al 16000/840	11242	11243	x	x	x	x
103423	FUTURA 2.5ft HE ABS Al 22000/840	103426	103427	x	x	x	x

FUTURA HE ABSc Al

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
11246	FUTURA 2.2ft HE ABSc Al 3200/840	x	x	11247	11248	x	x
11240	FUTURA 2.2ft HE ABSc Al 4400/840	x	x	11244	11245	x	x
11249	FUTURA 2.2ft HE ABSc Al 6400/840	x	x	11252	11258	x	x
11259	FUTURA 2.4ft HE ABSc Al 6400/840	11262	11268	11269	11271	11272	11273
11250	FUTURA 2.4ft HE ABSc Al 8800/840	11251	11253	11254	11255	11256	11257
11276	FUTURA 2.4ft HE ABSc Al 12800/840	11277	11278	x	x	x	x
11279	FUTURA 2.5ft HE ABSc Al 8000/840	11282	11288	11289	11292	11298	11299
11260	FUTURA 2.5ft HE ABSc Al 11000/840	11261	11263	11264	11265	11266	11267
11301	FUTURA 2.5ft HE ABSc Al 16000/840	11302	11303	x	x	x	x
103430	FUTURA 2.5ft HE ABSc Al 22000/840	103431	103425	x	x	x	x

Example of type marking: 11256 = FUTURA 2.4ft HE ABSc Al 8800/840 **3F M1h**

FUTURA HE ABS Al DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
11306	FUTURA 2.2ft HE ABS Al 3200/840 DALI	x	x	11307	11308	x	x
11270	FUTURA 2.2ft HE ABS Al 4400/840 DALI	x	x	11274	11275	x	x
11309	FUTURA 2.2ft HE ABS Al 6400/840 DALI	x	x	11312	11318	x	x
11319	FUTURA 2.4ft HE ABS Al 6400/840 DALI	11322	11328	11329	11330	11331	11332
11280	FUTURA 2.4ft HE ABS Al 8800/840 DALI	11281	11283	11284	11285	11286	11287
11333	FUTURA 2.4ft HE ABS Al 12800/840 DALI	11334	11335	x	x	x	x
11336	FUTURA 2.5ft HE ABS Al 8000/840 DALI	11337	11338	11339	11340	11341	11342
11290	FUTURA 2.5ft HE ABS Al 11000/840 DALI	11291	11293	11294	11295	11296	11297
11343	FUTURA 2.5ft HE ABS Al 16000/840 DALI	11344	11345	x	x	x	x
103430	FUTURA 2.5ft HE ABSc Al 22000/840	103431	103425	x	x	x	x

FUTURA HE ABSc Al DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
11346	FUTURA 2.2ft HE ABSc Al 3200/840 DALI	x	x	11347	11348	x	x
11300	FUTURA 2.2ft HE ABSc Al 4400/840 DALI	x	x	11304	11305	x	x
11349	FUTURA 2.2ft HE ABSc Al 6400/840 DALI	x	x	11350	11351	x	x
11352	FUTURA 2.4ft HE ABSc Al 6400/840 DALI	11353	11354	11355	11356	11357	11358
11310	FUTURA 2.4ft HE ABSc Al 8800/840 DALI	11311	11313	11314	11315	11316	11317
11359	FUTURA 2.4ft HE ABSc Al 12800/840 DALI	11360	11361	x	x	x	x
11362	FUTURA 2.5ft HE ABSc Al 8000/840 DALI	11363	11364	11365	11366	11367	11368
11320	FUTURA 2.5ft HE ABSc Al 11000/840 DALI	11321	11323	11324	11325	11326	11327
11369	FUTURA 2.5ft HE ABSc Al 16000/840 DALI	11370	11371	x	x	x	x
103432	FUTURA 2.5ft HE ABSc Al 22000/840 DALI	103433	103434	x	x	x	x

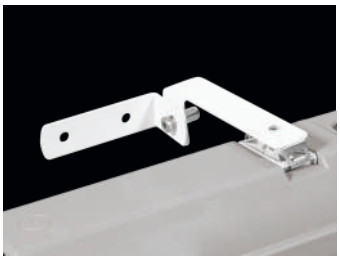
LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories



LIGHT FITTING DETAILED VIEW

FUTURA HE ABS

FUTURA CLASS II

... with Class II insulation.

USE

It is suitable for **industrial, warehouse and agricultural buildings, sports premises, transport terminals, railway vehicle repair shops, platforms, traction substations, depots, parking lots and garages, workshops and laboratories** without explosion hazard.

The light fitting resists dust, humidity and spouting water. The body and the diffuser made of PC material have high mechanical resistance against impact and deformation.

Easy, fast and maximally **efficient mounting is achieved when using the cables with connectors delivered by us**.

It is necessary to consider exhalation in the air which can reduce the usability of the plastic and aluminium at installations in an aggressive environment.

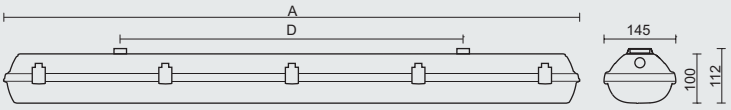
ADVANTAGES

- Light fitting protection **IP66**
- Maximum ambient temperature up to **t_a = 50 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate (PC) = high mechanical resistance
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25 °C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Available in ABS chemical resistant version
- Through-wiring of up to 6 wires at body (2.4ft and 2.5ft)

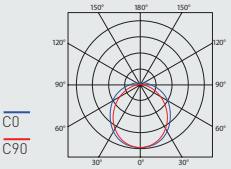
FUTURA CLASS II PC, PCc

TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: t_a = 50 °C, Maximum ambient temperature: t_a = 0-25 °C (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 165 lm/W
- AWEX emergency light module generates a luminous flux of 440 lm
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate (PC), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Distance part: polyamide + 10 % glass fibre
- Terminal block: **Connectors with 2, 4 or 6 poles, wire section 1.5 or 2.5 mm**
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver or current driver DALI



FUTURA CLASS II 2.4ft



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
For ambient temperature t_a = 50 °C - body: grey polycarbonate with Al coolers - diffuser: translucent polycarbonate									
FUTURA 2.2ft CLASS II PC 2600/840	50	2600	2440	16,1	152	23.1 / 21.1	1,35	612	475
FUTURA 2.2ft CLASS II PC 3200/840	50	3100	2910	19,1	152	23.8 / 21.8	1,35	612	475
FUTURA 2.2ft CLASS II PC 4400/840	45	4300	4040	26,0	155	24.8 / 23.0	1,35	612	475
FUTURA 2.4ft CLASS II PC 5200/840	50	5230	4920	30,3	162	23.3 / 21.6	2,35	1172	700
FUTURA 2.4ft CLASS II PC 6400/840	50	6240	5870	36,3	162	24.0 / 22.2	2,35	1172	700
FUTURA 2.4ft CLASS II PC 8800/840	45	8690	8170	49,7	164	25.1 / 23.4	2,35	1172	700
FUTURA 2.5ft CLASS II PC 6500/840	50	6500	6110	37,1	165	23.3 / 21.6	2,85	1452	940
FUTURA 2.5ft CLASS II PC 8000/840	50	7770	7300	44,4	164	24.0 / 22.2	2,85	1452	940
FUTURA 2.5ft CLASS II PC 11000/840	45	12310	11570	71,1	163	25.6 / 23.9	2,85	1452	940

47560 FUTURA 2.2ft CLASS II PC 3200/840 = suitable replacement for T8 fl. tube light fitting PRIMA 218 – 2×18W
47590 FUTURA 2.4ft CLASS II PC 6400/840 = suitable replacement for T8 fl. tube light fitting PRIMA 236 – 2×36W
47630 FUTURA 2.5ft CLASS II PC 8000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 258 – 2×58W

FUTURA CLASS II PC

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
47550	FUTURA 2.2ft CLASS II PC 2600/840	x	x	47554	47555	x	x
47560	FUTURA 2.2ft CLASS II PC 3200/840	x	x	47564	47565	x	x
47570	FUTURA 2.2ft CLASS II PC 4400/840	x	x	47574	47575	x	x
47580	FUTURA 2.4ft CLASS II PC 5200/840	47581	47583	47584	47585	47586	47587
47590	FUTURA 2.4ft CLASS II PC 6400/840	47591	47593	47594	47595	47596	47597
47600	FUTURA 2.4ft CLASS II PC 8800/840	47601	47603	47604	47605	47606	47607
47620	FUTURA 2.5ft CLASS II PC 6500/840	47621	47623	47624	47625	47626	47627
47630	FUTURA 2.5ft CLASS II PC 8000/840	47631	47633	47634	47635	47636	47637
47640	FUTURA 2.5ft CLASS II PC 11000/840	47641	47643	47644	47645	47646	47647

FUTURA CLASS II PCc

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
47660	FUTURA 2.2ft CLASS II PCc 2600/840	x	x	47664	47665	x	x
47670	FUTURA 2.2ft CLASS II PCc 3200/840	x	x	47674	47675	x	x
47680	FUTURA 2.2ft CLASS II PCc 4400/840	x	x	47684	47685	x	x
47690	FUTURA 2.4ft CLASS II PCc 5200/840	47691	47693	47694	47695	47696	47697
47700	FUTURA 2.4ft CLASS II PCc 6400/840	47701	47703	47704	47705	47706	47707
47710	FUTURA 2.4ft CLASS II PCc 8800/840	47711	47713	47714	47715	47716	47717
47730	FUTURA 2.5ft CLASS II PCc 6500/840	47731	47733	47734	47735	47736	47737
47740	FUTURA 2.5ft CLASS II PCc 8000/840	47741	47743	47744	47745	47746	47747
47750	FUTURA 2.5ft CLASS II PCc 11000/840	47751	47753	47754	47755	47756	47757

Example of type marking: 47717 = FUTURA 2.4ft CLASS II PCc 8800/840 **3F M3h**

FUTURA CLASS II PC DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
47770	FUTURA 2.2ft CLASS II PC 2600/840 DALI	x	x	47774	47775	x	x
47780	FUTURA 2.2ft CLASS II PC 3200/840 DALI	x	x	47784	47785	x	x
47790	FUTURA 2.2ft CLASS II PC 4400/840 DALI	x	x	47794	47795	x	x
47800	FUTURA 2.4ft CLASS II PC 5200/840 DALI	47801	47803	47804	47805	47806	47807
47810	FUTURA 2.4ft CLASS II PC 6400/840 DALI	47811	47813	47814	47815	47816	47817
47820	FUTURA 2.4ft CLASS II PC 8800/840 DALI	47821	47823	47824	47825	47826	47827
47840	FUTURA 2.5ft CLASS II PC 6500/840 DALI	47841	47843	47844	47845	47846	47847
47850	FUTURA 2.5ft CLASS II PC 8000/840 DALI	47851	47853	47854	47855	47856	47857
47860	FUTURA 2.5ft CLASS II PC 11000/840 DALI	47861	47863	47864	47865	47866	47867

FUTURA CLASS II PCc DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
47880	FUTURA 2.2ft CLASS II PCc 2600/840 DALI	x	x	47884	47885	x	x
47890	FUTURA 2.2ft CLASS II PCc 3200/840 DALI	x	x	47894	47895	x	x
47900	FUTURA 2.2ft CLASS II PCc 4400/840 DALI	x	x	47904	47905	x	x
47910	FUTURA 2.4ft CLASS II PCc 5200/840 DALI	47911	47913	47914	47915	47916	47917
47920	FUTURA 2.4ft CLASS II PCc 6400/840 DALI	47921	47923	47924	47925	47926	47927
47930	FUTURA 2.4ft CLASS II PCc 8800/840 DALI	47931	47933	47934	47935	47936	47937
47950	FUTURA 2.5ft CLASS II PCc 6500/840 DALI	47951	47953	47954	47955	47956	47957
47960	FUTURA 2.5ft CLASS II PCc 8000/840 DALI	47961	47963	47964	47965	47966	47967
47970	FUTURA 2.5ft CLASS II PCc 11000/840 DALI	47971	47973	47974	47975	47976	47977

Example of type marking: 47966 = FUTURA CLASS II 2.5ft PCc 8000/840 DALI **3F M1h**

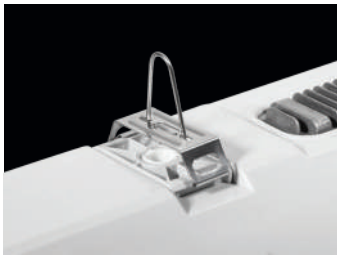
LEGEND

CLASS II 1F 1-phase 2 core through-wiring in the luminaire
CLASS II 3F 3-phase 4 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
CLASS II 3F Mxh 3-phase 4 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

DALI version with digital dimmable driver DALI
CLASS II DALI 1F 1-phase 4 core through-wiring in the luminaire
CLASS II DALI 3F 3-phase 6 core through-wiring in the luminaire
CLASS II DALI 3F Mxh 3-phase 6 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories



LIGHT FITTING DETAILED VIEW

FUTURA CLASS II

STUCCHI 37xx

WIELAND

FUTURA MAX

... for extreme temperatures -40 °C to +70 °C.

USE

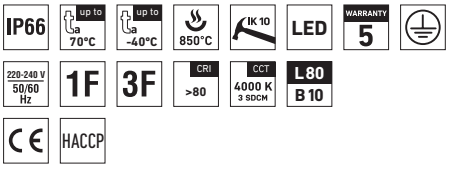
The light fitting is suitable for indoor and outdoor spaces with roof with extreme ambient temperatures from **(-40 °C to +70 °C)**. The light fitting is destined mainly for heating stations, metallurgical lines, glass-works, as well as for freezers, cooling plants and other premises without danger of explosion of gases, dusts and flammable vapors.

The light fitting is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have the increased resistance against deformation and impact.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic and aluminium at installations in an aggressive environment, see also page 367).

ADVANTAGES

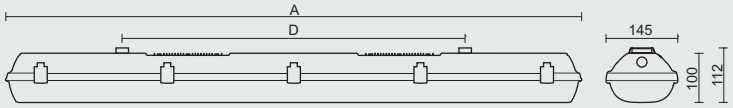
- Light fitting protection **IP66**
- Minimum ambient temperature up to t_a **= -40 °C**
- Maximum ambient temperature up to t_a **= 70 °C**
- Lifetime: 50,000 hours / L80B10
- Possibility of using in even higher ambient temperatures under the condition of a shortened service life of the light fitting – parameters solved within a particular project
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate with Al coolers (PC Al) = high mechanical resistance
- Up to 45 % lower electricity consumption when compared to tubes T5
- Constant luminous flux even in ambient temperature of -40 °C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K
- Through-wiring of up to 10 wires at body
- Certification: HACCP



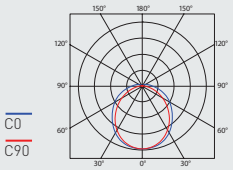
FUTURA MAX PCc Al

TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Minimum ambient temperature: t_a = -40 °C
- Maximum ambient temperature: t_a = 70 °C
- Lifetime: 50,000 hours / L80B10
- Possibility of using in even higher ambient temperatures under the condition of a shortened service life of the light fitting – parameters solved within a particular project
- Maximum system efficacy: 164 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate with Al coolers (PC Al), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Ventilation plug: type BVPB-01 made of polyamide, size M12 × 1.5
- Clips: stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, three-pole (basic version)
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver



FUTURA MAX 2.4ft



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
For ambient temperature t_a = 70 °C - body: grey polycarbonate with Al coolers - diffuser: translucent polycarbonate									
FUTURA 1.5ft MAX PCc Al 4000/840	70	3850	3620	23,3	155	21.5 / 19.9	3,05	1452	940
FUTURA 1.5ft MAX PCc Al 5500/840	65	5340	5020	31,9	157	22.7 / 21.0	3,05	1452	940
FUTURA 2.4ft MAX PCc Al 6400/840	65	6240	5870	36,3	162	24.0 / 22.2	2,65	1172	700
FUTURA 2.4ft MAX PCc Al 8800/840	60	8690	8170	49,7	164	25.1 / 23.3	2,65	1172	700
FUTURA 2.5ft MAX PCc Al 8000/840	65	7770	7300	44,4	164	24.0 / 22.3	3,15	1452	940
FUTURA 2.5ft MAX PCc Al 11000/840	60	12310	11570	71,1	163	25.6 / 23.9	3,15	1452	940

FUTURA MAX PCc Al

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	DALI	DALI 3F
79820	FUTURA 1.5ft MAX PCc Al 4000/840	79821	79823	x	x	79825	79826
79830	FUTURA 1.5ft MAX PCc Al 5500/840	79831	79833	x	x	79835	79836
79840	FUTURA 2.4ft MAX PCc Al 6400/840	79841	79843	x	x	79845	79846
79800	FUTURA 2.4ft MAX PCc Al 8800/840	79801	79803	x	x	79805	79806
79850	FUTURA 2.5ft MAX PCc Al 8000/840	79851	79853	x	x	79855	79856
79810	FUTURA 2.5ft MAX PCc Al 11000/840	79811	79813	x	x	79815	79816

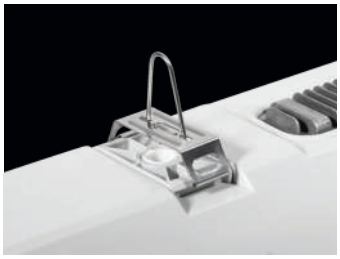
Example of type marking: 79813 = FUTURA MAX 2.5ft PCc Al 11000/840 **3F**

LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

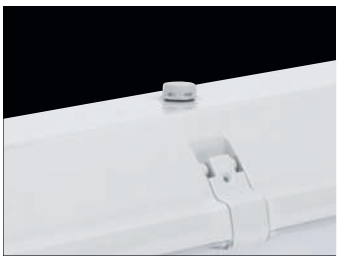
LIGHT FITTING ATTACHMENT

a) Directly to a ceiling with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories



LIGHT FITTING DETAILED VIEW

FUTURA MAX



FUTURA SNS

... dustproof, waterproof and impact-resistant.

USE

The light fitting is suitable for industrial indoor and outdoor roofed spaces, warehouses, sports areas, workshops, garages, transport terminals, utility structures and laboratories without a danger of explosion of gas, dust and combustible fumes.

The light fitting is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have the increased resistance against deformation and impact.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic and aluminium at installations in an aggressive environment, see also page 367).

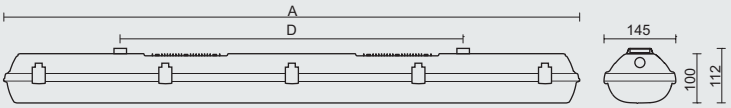
ADVANTAGES

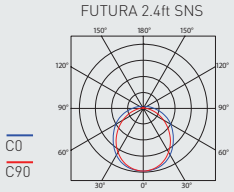
- Light fitting protection **IP66**
- Maximum ambient temperature up to t_a **= 50 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate with Al coolers (PC Al) = high mechanical resistance
- Up to 45 % lower electricity consumption when compared to tubes T5
- Current driver with the possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25 °C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- With built-in **microwave motion sensor**
- The possibility of setting the sensor using the DIP switch
- It can be delivered in dimmable or emergency version
- Through-wiring of up to 10 wires at body
- Certification: HACCP

FUTURA SNS PC Al, PCc Al

TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: t_a = 50 °C, Maximum ambient temperature: t_a = 0-25 °C (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 165 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate with Al coolers (PC Al), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, three-pole (basic version)
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver or digital dimmable driver DALI
- Motion sensor: 360° range, switch on height 1 – 6 m, time range 5 sec – 30 min, switch-on sensitivity 2 – 50 lux





Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
For ambient temperature t_a = 50 °C - body: grey polycarbonate with Al coolers - diffuser: translucent polycarbonate									
FUTURA 2.2ft SNS PC Al 2600/840	50	2600	2440	16,1	152	23.1 / 21.1	1,55	612	475
FUTURA 2.2ft SNS PC Al 3200/840	50	3100	2910	19,1	152	23.8 / 21.8	1,55	612	475
FUTURA 2.2ft SNS PC Al 4400/840	45	4300	4040	26,0	155	24.8 / 23.0	1,55	612	475
FUTURA 2.4ft SNS PC Al 5200/840	50	5230	4920	30,3	162	23.3 / 21.6	2,55	1172	700
FUTURA 2.4ft SNS PC Al 6400/840	50	6240	5870	36,3	162	24.0 / 22.2	2,55	1172	700
FUTURA 2.4ft SNS PC Al 8800/840	45	8690	8170	49,7	164	25.1 / 23.4	2,55	1172	700
FUTURA 2.4ft SNS PC Al 12800/840	35	13920	13080	82,5	159	26.7 / 24.9	2,75	1172	700
FUTURA 2.5ft SNS PC Al 6500/840	50	6500	6110	37,1	165	23.3 / 21.6	3,05	1452	940
FUTURA 2.5ft SNS PC Al 8000/840	50	7770	7300	44,4	164	24.0 / 22.2	3,05	1452	940
FUTURA 2.5ft SNS PC Al 11000/840	45	12310	11570	71,1	163	25.6 / 23.9	3,05	1452	940
FUTURA 2.5ft SNS PC Al 16000/840	35	17440	16390	102,2	160	26.7 / 25.0	3,35	1452	940

79050 FUTURA 2.4ft SNS PC Al 6400/840 = suitable replacement for T8 fl. tube light fitting PRIMA 236 – 2×36 W
79080 FUTURA 2.5ft SNS PC Al 8000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 258 – 2×58 W

FUTURA SNS PC Al

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
79010	FUTURA 2.2ft SNS PC Al 2600/840	x	x	79014	x	x	x
79020	FUTURA 2.2ft SNS PC Al 3200/840	x	x	79024	x	x	x
79030	FUTURA 2.2ft SNS PC Al 4400/840	x	x	79034	x	x	x
79040	FUTURA 2.4ft SNS PC Al 5200/840	79140	79340	79044	79045	79344	79345
79050	FUTURA 2.4ft SNS PC Al 6400/840	79150	79350	79054	79055	79354	79355
79060	FUTURA 2.4ft SNS PC Al 8800/840	79160	79360	79064	79065	79364	79365
79410	FUTURA 2.4ft SNS PC Al 12800/840	79411	79412	x	x	x	x
79070	FUTURA 2.5ft SNS PC Al 6500/840	79170	79370	79074	79075	79374	79375
79080	FUTURA 2.5ft SNS PC Al 8000/840	79180	79380	79084	79085	79384	79385
79090	FUTURA 2.5ft SNS PC Al 11000/840	79190	79390	79094	79095	79394	79395
79420	FUTURA 2.5ft SNS PC Al 16000/840	79421	79422	x	x	x	x

FUTURA SNS PCc Al

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
79210	FUTURA 2.2ft SNS PCc Al 2600/840	x	x	79214	x	x	x
79220	FUTURA 2.2ft SNS PCc Al 3200/840	x	x	79224	x	x	x
79230	FUTURA 2.2ft SNS PCc Al 4400/840	x	x	79234	x	x	x
79240	FUTURA 2.4ft SNS PCc Al 5200/840	79540	79640	79244	79245	79644	79645
79250	FUTURA 2.4ft SNS PCc Al 6400/840	79550	79650	79254	79255	79654	79655
79260	FUTURA 2.4ft SNS PCc Al 8800/840	79560	79660	79264	79265	79664	79665
79430	FUTURA 2.4ft SNS PCc Al 12800/840	79431	79432	x	x	x	x
79270	FUTURA 2.5ft SNS PCc Al 6500/840	79570	79670	79274	79275	79674	79675
79280	FUTURA 2.5ft SNS PCc Al 8000/840	79580	79680	79284	79285	79684	79685
79290	FUTURA 2.5ft SNS PCc Al 11000/840	79590	79690	79294	79295	79694	79695
79440	FUTURA 2.5ft SNS PCc Al 16000/840	79441	79442	x	x	x	x

Example of type marking: 79684 = FUTURA 2.5ft SNS PCc Al 8000/840 **3F M1h**

FUTURA SNS PC Al CORRIDOR

Digital dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
79043	FUTURA 2.4ft SNS PC Al 5200/840 CORRIDOR	79143	79343	79047	79049	79347	79349
79053	FUTURA 2.4ft SNS PC Al 6400/840 CORRIDOR	79153	79353	79057	79059	79357	79359
79063	FUTURA 2.4ft SNS PC Al 8800/840 CORRIDOR	79163	79363	79067	79069	79367	79369
79073	FUTURA 2.5ft SNS PC Al 6500/840 CORRIDOR	79173	79373	79077	79079	79377	79379
79083	FUTURA 2.5ft SNS PC Al 8000/840 CORRIDOR	79183	79383	79087	79089	79387	79389
79093	FUTURA 2.5ft SNS PC Al 11000/840 CORRIDOR	79193	79393	79097	79099	79397	79399

FUTURA SNS PCc Al CORRIDOR

Digital dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
79243	FUTURA 2.4ft SNS PCc Al 5200/840 CORRIDOR	79543	79643	79247	79249	79647	79649
79253	FUTURA 2.4ft SNS PCc Al 6400/840 CORRIDOR	79553	79653	79257	79259	79657	79659
79263	FUTURA 2.4ft SNS PCc Al 8800/840 CORRIDOR	79563	79663	79267	79269	79667	79669
79273	FUTURA 2.5ft SNS PCc Al 6500/840 CORRIDOR	79573	79673	79277	79279	79677	79679
79283	FUTURA 2.5ft SNS PCc Al 8000/840 CORRIDOR	79583	79683	79287	79289	79687	79689
79293	FUTURA 2.5ft SNS PCc Al 11000/840 CORRIDOR	79593	79693	79297	79299	79697	79699

Example of type marking: 79687 = FUTURA 2.5ft SNS PCc Al 8000/840 CORRIDOR **3F M1h**

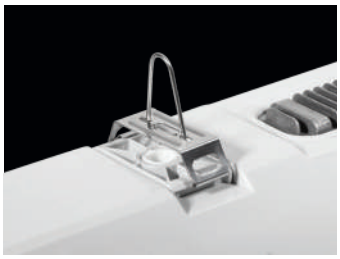
LEGEND

SNS 1F 1-phase 3 core through-wiring in the luminaire for connection of max. 5 slave luminaires
SNS 3F 3-phase 5 core through-wiring in the luminaire for connection of max. 5 slave luminaires (sensor connected to L3)
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
SNS 3F Mxh 3-phase 5 core through-wiring in the luminaire for connection of max. 5 slave luminaires (sensor and emergency unit connected to L3)

CORRIDOR version with digital dimmable driver DALI and set corridor function
CORRIDOR 1F 1-phase 5 core through-wiring in the luminaire for connection of max. 20 luminaires
CORRIDOR 3F 3-phase 7 core through-wiring in the luminaire for connection of max. 20 luminaires (sensor connected to L3)
CORRIDOR 3F Mxh 3-phase 7 core through-wiring in the luminaire for connection of max. 20 luminaires (sensor and emergency unit connected to L3)

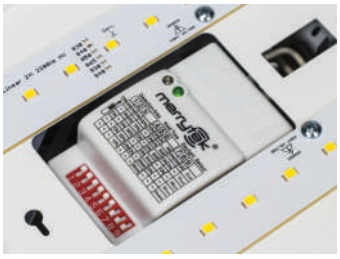
LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories



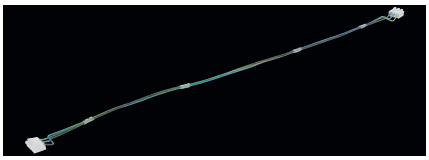
LIGHT FITTING DETAILED VIEW

FUTURA SNS

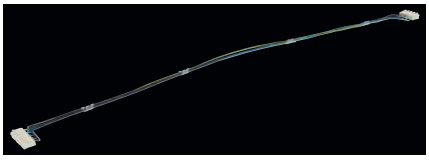


Through-wiring cables

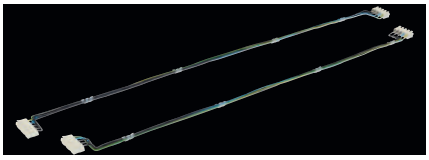
Additional furnishing of 1 phase, 3 phase or multi-phase through-wiring in the body to the light fitting.



Code	Type	Description	Weight [kg]
11995	Z1F-2.4	1 phase cables for through-wiring at body 2.4ft	0,1
11996	Z1F-2.5	1 phase cables for through-wiring at body 2.5ft	0,1



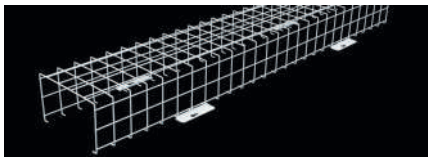
Code	Type	Description	Weight [kg]
11997	Z3F-2.4	3 phase cables for through-wiring at body 2.4ft	0,1
11998	Z3F-2.5	3 phase cables for through-wiring at body 2.5ft	0,1



Code	Type	Description	Weight [kg]
11987	Z2x3F-2.4	2x 3 phase cables for through-wiring at body 2.4ft	0,1
11988	Z2x3F-2.5	2x 3 phase cables for through-wiring at body 2.5ft	0,1

OM – protective grid

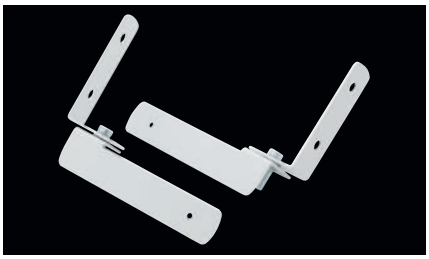
The metal grid protects the light fitting against mechanical damage and unauthorised handling. It is attached to the surface with the use of screws.
The surface is treated with the RAL 9003 powder-coated colour.



Code	Type	Description	Weight [kg]
11941	OM 218	protective grid for types 218, 214/224, 2.2ft (700×220×130 mm)	1,0
11942	OM 236	protective grid for types 236, 228/254, 2.4ft (1300×220×130 mm)	1,7
11943	OM 258	protective grid for types 258, 235/249/280, 2.5ft (1600×220×130 mm)	2,0

BZ – side hanger

It serves to attach the light fitting to the wall with the possibility of its positioning.



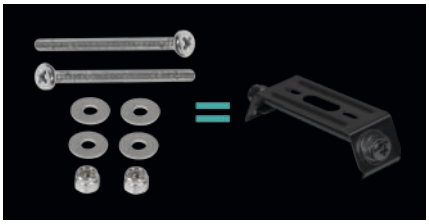
Code	Type	Description	Weight [kg]
90002	BZ	side hanger with blocking (set for 1 light fitting)	0,4

Canalis busbar system connector

The connector enables a quick 1 phase or 3 phase interconnection of light fittings without their opening.

Code	Type	Description	Weight [kg]
79001	KBA 40 ZU	light fitting suspended holder - Canalis KBA system	0,1
70002	KBC 10 CC211	connector with 1 m cable - Canalis KBA system	0,2

Locking set for bracket G3



Code	Type	Description	Weight [kg]
11553	G3 SET	a locking set for G3 stainless steel bracket (bolts, nuts, washers)	0,2

Light fitting inputs

The version with four inputs in the body side for types 2.4ft and 2.5ft can be made-to-order.

Stucchi or Wieland connector

The connector enables a quick 1 phase or 3 phase interconnection of light fittings without their opening.

FROST

INDUSTRIAL

PLASTIC

DUSTPROOF

WATERPROOF

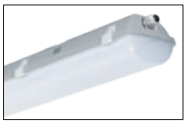
FROSTPROOF

IMPACT-RESISTANT

FROST – industrial plastic LED light fitting

FROST
page 174

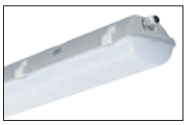
IP66



FROST
page 174

FROST PLUS
page 177

IP66



FROST PLUS
page 177

BIM ready
www.bim.lighting/en

EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND
INVESTMENT IN YOUR FUTURE

FROST

... for cold stores and freezing facilities with temperatures down to -25 °C

USE

Temperatures of chilled foods range from 0–5 degrees, whilst in freezing facilities can drop up to -25 degrees Celsius. Suitable luminaires for such demanding environments must handle extreme low temperatures, withstand condensation and vapors, have low maintenance and long service life to keep costs low.

Our lighting fixture for freezing storage and chilled storage saroundings is made of ABS material, is weather-proofed and chemically resistant (IP66 and IK 06).

FROST provide with high quality and good solution enduring a long service life of 50 000 hours.

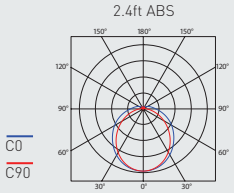
ADVATAGES

- Light fitting protection IP66
- Minimum ambient temperature down to ta = -25 °C
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent acrylate (AC), UV stable, chemically resistant
- Body: dark grey ABS, UV stable, chemically resistant
- Constant luminous flux even in ambient temperatures up to -25 °C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K
- It can be delivered in dimmable or emergency version
- Through-wiring of up to 5 wires at body
- Certification: CE

FROST

TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Minimum ambient temperature: t_a = -25 °C, Maximum ambient temperature: t_a = 25 °C (version with emergency back-up source for 3 hours; M3h)
- Maximum system efficacy: 154 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent acrylate (AC), UV stable, chemically resistant
- Body: dark grey ABS, UV stable, chemically resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: polyamide + 15% glass fibre
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Distance part: polyamide + 10% glass fibre
- Terminal block: screwless, three-pole (basic version)
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver



Type	Min. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
For ambient temperature down to t_a = 25 °C - body: dark grey - diffuser: translucent acrylate									
FROST 2.4ft 5200/840	-25	5230	4600	30,3	152	23.4 / 22.1	2,25	1172	700
FROST 2.4ft 6400/840	-25	6240	5490	36,3	151	24.0 / 22.7	2,25	1172	700
FROST 2.4ft 8800/840	-25	8690	7650	49,7	154	25.2 / 23.9	2,25	1172	700
FROST 2.5ft 6500/840	-25	6500	5720	37,1	154	23.4 / 22.1	2,75	1452	940
FROST 2.5ft 8000/840	-25	7770	6840	44,4	154	24.0 / 22.7	2,75	1452	940
FROST 2.5ft 11000/840	-25	12310	10830	71,1	152	25.6 / 24.3	2,75	1452	940

Battery heating consumption 10W

FROST

Non-dimmable driver - plastic clips

Code	Type	3F	M3h	3F M3h
103094	FROST 2.4ft 5200/840	103100	103106	103112
103095	FROST 2.4ft 6400/840	103101	103107	103113
103096	FROST 2.4ft 8800/840	103102	103108	103114
103097	FROST 2.5ft 6500/840	103103	103109	103115
103098	FROST 2.5ft 8000/840	103104	103110	103116
103099	FROST 2.5ft 11000/840	103105	103111	103117

LEGEND

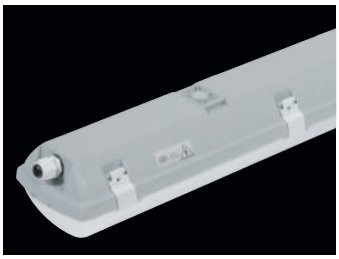
1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories

LIGHT FITTING DETAILED VIEW

FROST



FROST PLUS

... for cold stores and freezing facilities with temperatures down up to -40 °C

USE

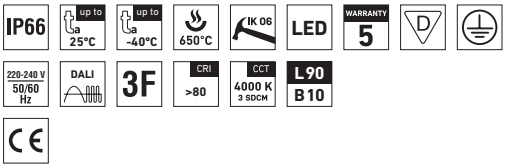
Temperatures of chilled foods range from 0–5 degrees, whilst in freezing facilities can drop up to –40 degrees Celsius. Suitable luminaires for such demanding environments must handle extreme low temperatures, withstand condensation and vapors, have low maintenance and long service life to keep costs low.

Our lighting fixture for freezing storage and chilled storage saroundings is made of ABS material, is weather-proofed and chemically resistant (IP66 and IK 06).

FROST PLUS provide with high quality and good solution enduring a long service life of 50 000 hours.

ADVATAGES

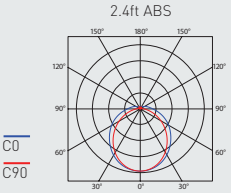
- Light fitting protection IP66
- Minimum ambient temperature down to ta = -40 °C
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent acrylate (AC), UV stable, chemically resistant
- Body: dark grey ABS, UV stable, chemically resistant
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K
- It can be delivered in dimmable version
- Through-wiring of up to 5 wires at body
- Certification: CE



FROST PLUS

TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Minimum ambient temperature: t_a = -40 °C
- Maximum ambient temperature: t_a = 0-25 °C
- Maximum system efficacy: 154 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent acrylate (AC), UV stable, chemically resistant
- Body: dark grey ABS, UV stable, chemically resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: polyamide + 15 % glass fibre
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, three-pole (basic version)
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver



Type	Min. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
For ambient temperature down to t_a = 25 °C - body: dark grey - diffuser: translucent acrylate									
FROST PLUS 2.4ft 5200/840	-40	5230	4600	30,3	152	23.4 / 22.1	2,25	1172	700
FROST PLUS 2.4ft 6400/840	-40	6240	5490	36,3	151	24.0 / 22.7	2,25	1172	700
FROST PLUS 2.4ft 8800/840	-40	8690	7650	49,7	154	25.2 / 23.9	2,25	1172	700
FROST PLUS 2.5ft 6500/840	-40	6500	5720	37,1	154	23.4 / 22.1	2,75	1452	940
FROST PLUS 2.5ft 8000/840	-40	7770	6840	44,4	154	24.0 / 22.7	2,75	1452	940
FROST PLUS 2.5ft 11000/840	-40	12310	10830	71,1	152	25.6 / 24.3	2,75	1452	940

Battery heating consumption 10W

FROST PLUS

Non-dimmable driver - plastic clips

Code	Type	3F
103122	FROST PLUS 2.4ft 5200/840	103128
103123	FROST PLUS 2.4ft 6400/840	103129
103124	FROST PLUS 2.4ft 8800/840	103130
103125	FROST PLUS 2.5ft 6500/840	103131
103126	FROST PLUS 2.5ft 8000/840	103132
103127	FROST PLUS 2.5ft 11000/840	103133

LEGEND

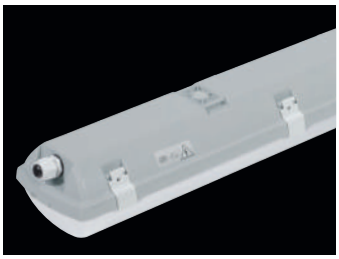
1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories

LIGHT FITTING DETAILED VIEW

FROST PLUS



MIDLLE EAST Ta 55

INDUSTRIAL

PLASTIC

DUSTPROOF

WATERPROOF

HEAT RESISTANT

IMPACT-RESISTANT

MIDLLE EAST Ta 55 – industrial plastic LED light fitting

MIDLLE EAST Ta 55
page 182

IP66

MIDLLE EAST Ta 55
page 182

BIM ready
www.bim.lighting/en

EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND
INVESTMENT IN YOUR FUTURE

MIDDLE EAST Ta 55

... for high temperature.

USE

The light fitting is suitable for industrial indoor and outdoor roofed spaces, warehouses, sports areas, workshops, garages, transport terminals, utility structures and laboratories without a danger of explosion of gas, dust and combustible fumes.

The light fitting is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have the increased resistance against deformation and impact.

It is necessary to consider exhalation in the air which can reduce the usability of the plastic at installations in an aggressive environment.

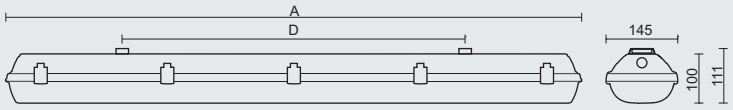
ADVANTAGES

- Light fitting protection **IP66**
- Maximum ambient temperature up to t_a **= 55 °C**
- Lifetime: 50,000 hours / L90B10
- ABS - on request
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate (PC) = high mechanical resistance
- Up to 45 % lower electricity consumption when compared to tubes T5
- Constant luminous flux even in ambient temperature of -25 °C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K
- Through-wiring of up to 7 wires at bodies of 1.4ft and 1.5ft type light fittings

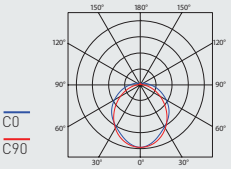
MIDDLE EAST Ta 55 PC, PCc

TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: t_a = 55 °C
- Maximum system efficacy: 141 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate (PC), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, three-pole (basic version)
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver, DALI driver.



MIDDLE EAST Ta 55 1.4ft



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
For ambient temperature t_a = 55 °C - body: grey polycarbonate - diffuser: translucent polycarbonate									
MIDDLE EAST Ta 55 1.2ft PC 2200/840	55	2360	2220	15,7	141	22.8 / 20.8	1,3	612	475
MIDDLE EAST Ta 55 1.2ft PC 3200/840	55	3350	3150	22,8	138	24.1 / 22.0	1,3	612	475
MIDDLE EAST Ta 55 1.4ft PC 4400/840	55	4720	4440	31,4	141	23.1 / 21.2	1,9	1172	700
MIDDLE EAST Ta 55 1.4ft PC 6400/840	55	6580	6190	43,8	141	24.2 / 22.4	1,9	1172	700
MIDDLE EAST Ta 55 1.5ft PC 5500/840	55	5740	5400	38,3	141	22.9 / 21.2	2,3	1452	940
MIDDLE EAST Ta 55 1.5ft PC 8000/840	55	8030	7550	54,3	139	24.1 / 22.3	2,3	1452	940

MIDDLE EAST Ta 55 PC

plastic clips

Code	Type	1F	3F	DALI
51510	MIDDLE EAST Ta 55 1.2ft PC 2200/840	x	x	
51515	MIDDLE EAST Ta 55 1.2ft PC 3200/840	x	x	51524
51520	MIDDLE EAST Ta 55 1.4ft PC 4400/840	51521	51522	51523
51525	MIDDLE EAST Ta 55 1.4ft PC 6400/840	51526	51527	51533
51530	MIDDLE EAST Ta 55 1.5ft PC 5500/840	51531	51532	51528
51535	MIDDLE EAST Ta 55 1.5ft PC 8000/840	51536	51537	51538

MIDDLE EAST Ta 55 PCc

stainless clips (c)

Code	Type	1F	3F	DALI
51540	MIDDLE EAST Ta 55 1.2ft PCc 2200/840	x	x	
51545	MIDDLE EAST Ta 55 1.2ft PCc 3200/840	x	x	51529
51550	MIDDLE EAST Ta 55 1.4ft PCc 4400/840	51551	51552	51553
51555	MIDDLE EAST Ta 55 1.4ft PCc 6400/840	51556	51557	51563
51560	MIDDLE EAST Ta 55 1.5ft PCc 5500/840	51561	51562	51558
51565	MIDDLE EAST Ta 55 1.5ft PCc 8000/840	51566	51567	51568

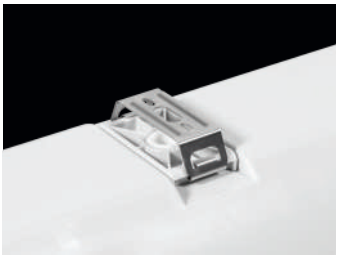
Example of type marking: 51567 = MIDDLE EAST Ta 55 1.5ft PCc 8000/840 **3F**

LEGEND

1F – 1 phase wiring cables for through-wiring
3F – 3 phase wiring cables for through-wiring
DALI – version with digital dimmable driver DALI

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories



LIGHT FITTING DETAILED VIEW

MIDDLE EAST Ta 55

PRIMA LED

INDUSTRIAL

PLASTIC

DUSTPROOF

WATERPROOF

IMPACT-RESISTANT

PRIMA LED – industrial plastic LED light fitting

PRIMA LED
page 188

IP66

PRIMA LED
PC, PCc
page 188

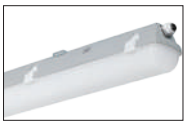
PRIMA LED FOR OUTDOOR SPACES
page 191

IP66

PRIMA LED
VP, VPc
page 191

PRIMA LED - CHEMICALLY RESISTANT VERSION
page 194

IP66



PRIMA LED
ABS, ABSc
page 194

PRIMA LED
CLASS II INSULATION
page 197

IP66

PRIMA LED
CLASS II
page 197

PRIMA LED TRS
page 200

IP66

PRIMA LED TRS
page 200

PRIMA LED FOR EXTREME TEMPERATURES
page 203

IP66

PRIMA LED
MAX PCc
page 203

PRIMA LED WITH MOTION DETECTOR
page 205

IP66

PRIMA LED
SNS PC, SNS PCc
page 205

PRIMA LED FOR ENVIRONMENT WITH A DANGER OF EXPLOSION
page 208

IP66

PRIMA LED Ex PCc
page 208

PRIMA LED TUBE
page 211

IP66

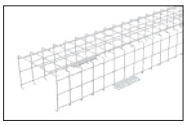
PRIMA LED TUBE
page 211

PRIMA LED TUBE SLIM
page 214

IP66

PRIMA LED TUBE
SLIM
page 214

PRIMA LED ACCESSORIES
page 217



PRIMA LED
ACCESSORIES
page 217

BIM ready
www.bim.lighting/en

PRIMA LED

... dustproof, waterproof and impact-resistant.

USE

The light fitting is suitable for industrial indoor and outdoor roofed spaces, warehouses, sports areas, workshops, garages, transport terminals, utility structures and laboratories without a danger of explosion of gas, dust and combustible fumes.

The light fitting is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have the increased resistance against deformation and impact.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic at installations in an aggressive environment, see also page 367).

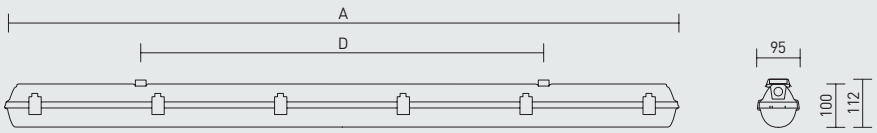
ADVANTAGES

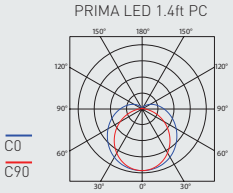
- Light fitting protection **IP66**
- Maximum ambient temperature up to t_a = **45 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate (PC) = high mechanical resistance
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25 °C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Certification: ESČ, ENEC, CB, HACCP

PRIMA LED PC, PCc

TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: t_a = 45 °C, Maximum ambient temperature: t_a = 0-25 °C (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 156 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate (PC), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5, or rubber (SBS)
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, five-pole (basic version), or screwed
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver or current driver DALI





Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
For ambient temperature t_a = 45 °C - body: grey polycarbonate - diffuser: translucent polycarbonate									
PRIMA LED 1.2ft PC 1300/840	45	1310	1170	8,2	143	22.0 / 18.8	1,0	662	350
PRIMA LED 1.2ft PC 1600/840	45	1560	1390	9,8	142	22.6 / 19.4	1,0	662	350
PRIMA LED 1.2ft PC 2200/840	40	2140	1900	13,2	144	23.6 / 20.5	1,0	662	350
PRIMA LED 1.4ft PC 2600/840	45	2600	2310	16,1	143	22.1 / 19.1	1,8	1272	700
PRIMA LED 1.4ft PC 3200/840	45	3100	2760	19,1	145	22.7 / 19.7	1,8	1272	700
PRIMA LED 1.4ft PC 4400/840	40	4300	3830	26,0	147	23.8 / 20.9	1,8	1272	700
PRIMA LED 1.4ft PC 6400/840	40	6120	5450	36,1	151	25.1 / 22.1	1,8	1272	700
PRIMA LED 1.5ft PC 3250/840	45	3240	2880	19,5	148	22.1 / 19.2	2,1	1572	940
PRIMA LED 1.5ft PC 4000/840	45	3850	3430	23,3	147	22.7 / 19.8	2,1	1572	940
PRIMA LED 1.5ft PC 5500/840	40	5340	4750	31,9	149	23.9 / 20.9	2,1	1572	940
PRIMA LED 1.5ft PC 8000/840	40	7780	6920	44,3	156	25.2 / 22.2	2,1	1572	940

65020 PRIMA LED 1.2ft PC 1600/840 = suitable replacement for T8 fl. tube light fitting PRIMA 118 – 1×18 W
65050 PRIMA LED 1.4ft PC 3200/840 = suitable replacement for T8 fl. tube light fitting PRIMA 136 – 1×36 W
65460 PRIMA LED 1.4ft PC 6400/840 = suitable replacement for T8 fl. tube light fitting PRIMA 236 – 2×36 W
65080 PRIMA LED 1.5ft PC 4000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 158 – 1×58 W
65490 PRIMA LED 1.5ft PC 8000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 258 – 2×58 W

PRIMA LED PC

Code	Type	Non-dimmable driver - plastic clips					
		1F	3F	M1h	M3h	3F M1h	3F M3h
65010	PRIMA LED 1.2ft PC 1300/840	x	x	x	x	x	x
65020	PRIMA LED 1.2ft PC 1600/840	x	x	x	x	x	x
65030	PRIMA LED 1.2ft PC 2200/840	x	x	x	x	x	x
65040	PRIMA LED 1.4ft PC 2600/840	65140	65340	65044	65045	65344	65345
65050	PRIMA LED 1.4ft PC 3200/840	65150	65350	65054	65055	65354	65355
65060	PRIMA LED 1.4ft PC 4400/840	65160	65360	65064	65065	65364	65365
65460	PRIMA LED 1.4ft PC 6400/840	65461	65462	x	x	x	x
65070	PRIMA LED 1.5ft PC 3250/840	65170	65370	65074	65075	65374	65375
65080	PRIMA LED 1.5ft PC 4000/840	65180	65380	65084	65085	65384	65385
65090	PRIMA LED 1.5ft PC 5500/840	65190	65390	65094	65095	65394	65395
65490	PRIMA LED 1.5ft PC 8000/840	65491	65492	x	x	x	x

PRIMA LED PCc

Code	Type	Non-dimmable driver - stainless clips (c)					
		1F	3F	M1h	M3h	3F M1h	3F M3h
65210	PRIMA LED 1.2ft PCc 1300/840	x	x	x	x	x	x
65220	PRIMA LED 1.2ft PCc 1600/840	x	x	x	x	x	x
65230	PRIMA LED 1.2ft PCc 2200/840	x	x	x	x	x	x
65240	PRIMA LED 1.4ft PCc 2600/840	65540	65640	65244	65245	65644	65645
65250	PRIMA LED 1.4ft PCc 3200/840	65550	65650	65254	65255	65654	65655
65260	PRIMA LED 1.4ft PCc 4400/840	65560	65660	65264	65265	65664	65665
65760	PRIMA LED 1.4ft PCc 6400/840	65761	65762	x	x	x	x
65270	PRIMA LED 1.5ft PCc 3250/840	65570	65670	65274	65275	65674	65675
65280	PRIMA LED 1.5ft PCc 4000/840	65580	65680	65284	65285	65684	65685
65290	PRIMA LED 1.5ft PCc 5500/840	65590	65690	65294	65295	65694	65695
65790	PRIMA LED 1.5ft PCc 8000/840	65791	65792	x	x	x	x

Example of type marking: 65644 = PRIMA LED 1.4ft PCc 2600/840 **3F M1h**

PRIMA LED PC DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
65013	PRIMA LED 1.2ft PC 1300/840 DALI	x	x	x	x	x	x
65023	PRIMA LED 1.2ft PC 1600/840 DALI	x	x	x	x	x	x
65033	PRIMA LED 1.2ft PC 2200/840 DALI	x	x	x	x	x	x
65043	PRIMA LED 1.4ft PC 2600/840 DALI	65143	65343	65047	65048	65347	65348
65053	PRIMA LED 1.4ft PC 3200/840 DALI	65153	65353	65057	65058	65357	65358
65063	PRIMA LED 1.4ft PC 4400/840 DALI	65163	65363	65067	65068	65367	65368
65860	PRIMA LED 1.4ft PC 6400/840 DALI	65861	65862	x	x	x	x
65073	PRIMA LED 1.5ft PC 3250/840 DALI	65173	65373	65077	65078	65377	65378
65083	PRIMA LED 1.5ft PC 4000/840 DALI	65183	65383	65087	65088	65387	65388
65093	PRIMA LED 1.5ft PC 5500/840 DALI	65193	65393	65097	65098	65397	65398
65890	PRIMA LED 1.5ft PC 8000/840 DALI	65891	65892	x	x	x	x

PRIMA LED PCc DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
65213	PRIMA LED 1.2ft PCc 1300/840 DALI	x	x	x	x	x	x
65223	PRIMA LED 1.2ft PCc 1600/840 DALI	x	x	x	x	x	x
65233	PRIMA LED 1.2ft PCc 2200/840 DALI	x	x	x	x	x	x
65243	PRIMA LED 1.4ft PCc 2600/840 DALI	65543	65643	65247	65248	65647	65648
65253	PRIMA LED 1.4ft PCc 3200/840 DALI	65553	65653	65257	65258	65657	65658
65263	PRIMA LED 1.4ft PCc 4400/840 DALI	65563	65663	65267	65268	65667	65668
65960	PRIMA LED 1.4ft PCc 6400/840 DALI	65961	65962	x	x	x	x
65273	PRIMA LED 1.5ft PCc 3250/840 DALI	65573	65673	65277	65278	65677	65678
65283	PRIMA LED 1.5ft PCc 4000/840 DALI	65583	65683	65287	65288	65687	65688
65293	PRIMA LED 1.5ft PCc 5500/840 DALI	65593	65693	65297	65298	65697	65698
65990	PRIMA LED 1.5ft PCc 8000/840 DALI	65991	65992	x	x	x	x

Example of type marking: 65693 = PRIMA LED 1.5ft PCc 5500/840 DALI **3F**

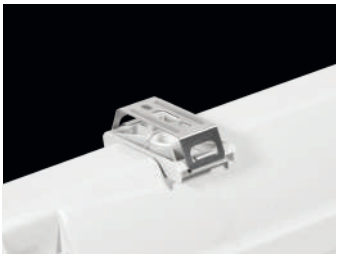
LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories



LIGHT FITTING DETAILED VIEW

PRIMA LED

PRIMA LED VP

... for outdoor spaces.

USE

The light fitting is suitable for the installation in outdoor spaces with shelter. It is equipped with a ventilation plug made of polyamide which eliminates the presence of condensation fumes and underpressure in the light fitting caused by ambient temperature fluctuations.

The light fitting is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have the increased resistance against deformation and impact.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic at installations in an aggressive environment, see also page 367).

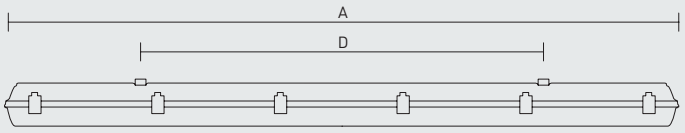
ADVANTAGES

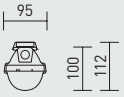
- Light fitting protection **IP66**
- Maximum ambient temperature up to t_a = **45 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate (PC) = high mechanical resistance
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25 °C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Certification: ESČ, ENEC, CB, HACCP

PRIMA LED VP, VPc

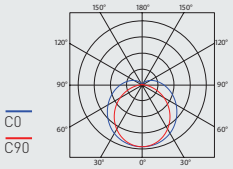
TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: t_a = 45 °C, Maximum ambient temperature: t_a = 0-25 °C (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 156 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate (PC), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Ventilation plug: type BVPB-01 made of polyamide, size M12 × 1.5
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5, or rubber (SBS)
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, five-pole (basic version), or screwed
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver or current driver DALI





PRIMA LED 1.4ft VP



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
For ambient temperature t_a = 45 °C - body: grey polycarbonate - diffuser: translucent polycarbonate									
PRIMA LED 1.2ft VP 1300/840	45	1310	1170	8,2	143	22.0 / 18.8	1,0	662	350
PRIMA LED 1.2ft VP 1600/840	45	1560	1390	9,8	142	22.6 / 19.4	1,0	662	350
PRIMA LED 1.2ft VP 2200/840	40	2140	1900	13,2	144	23.6 / 20.5	1,0	662	350
PRIMA LED 1.4ft VP 2600/840	45	2600	2310	16,1	143	22.1 / 19.1	1,8	1272	700
PRIMA LED 1.4ft VP 3200/840	45	3100	2760	19,1	145	22.7 / 19.7	1,8	1272	700
PRIMA LED 1.4ft VP 4400/840	40	4300	3830	26,0	147	23.8 / 20.9	1,8	1272	700
PRIMA LED 1.4ft VP 6400/840	40	6120	5450	36,1	151	25.1 / 22.1	1,8	1272	700
PRIMA LED 1.5ft VP 3250/840	45	3240	2880	19,5	148	22.1 / 19.2	2,1	1572	940
PRIMA LED 1.5ft VP 4000/840	45	3850	3430	23,3	147	22.7 / 19.8	2,1	1572	940
PRIMA LED 1.5ft VP 5500/840	40	5340	4750	31,9	149	23.9 / 20.9	2,1	1572	940
PRIMA LED 1.5ft VP 8000/840	40	7780	6920	44,3	156	25.2 / 22.2	2,1	1572	940

66020 PRIMA LED 1.2ft VP 1600/840 = suitable replacement for T8 fl. tube light fitting PRIMA 118 – 1×18 W
66050 PRIMA LED 1.4ft VP 3200/840 = suitable replacement for T8 fl. tube light fitting PRIMA 136 – 1×36 W
66460 PRIMA LED 1.4ft VP 6400/840 = suitable replacement for T8 fl. tube light fitting PRIMA 236 – 2×36 W
66080 PRIMA LED 1.5ft VP 4000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 158 – 1×58 W
66490 PRIMA LED 1.5ft VP 8000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 258 – 2×58 W

PRIMA LED VP

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
66010	PRIMA LED 1.2ft VP 1300/840	x	x	x	x	x	x
66020	PRIMA LED 1.2ft VP 1600/840	x	x	x	x	x	x
66030	PRIMA LED 1.2ft VP 2200/840	x	x	x	x	x	x
66040	PRIMA LED 1.4ft VP 2600/840	66140	66340	66044	66045	66344	66345
66050	PRIMA LED 1.4ft VP 3200/840	66150	66350	66054	66055	66354	66355
66060	PRIMA LED 1.4ft VP 4400/840	66160	66360	66064	66065	66364	66365
66460	PRIMA LED 1.4ft VP 6400/840	66461	66462	x	x	x	x
66070	PRIMA LED 1.5ft VP 3250/840	66170	66370	66074	66075	66374	66375
66080	PRIMA LED 1.5ft VP 4000/840	66180	66380	66084	66085	66384	66385
66090	PRIMA LED 1.5ft VP 5500/840	66190	66390	66094	66095	66394	66395
66490	PRIMA LED 1.5ft VP 8000/840	66491	66492	x	x	x	x

PRIMA LED VPc

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
66210	PRIMA LED 1.2ft VPc 1300/840	x	x	x	x	x	x
66220	PRIMA LED 1.2ft VPc 1600/840	x	x	x	x	x	x
66230	PRIMA LED 1.2ft VPc 2200/840	x	x	x	x	x	x
66240	PRIMA LED 1.4ft VPc 2600/840	66540	66640	66244	66245	66644	66645
66250	PRIMA LED 1.4ft VPc 3200/840	66550	66650	66254	66255	66654	66655
66260	PRIMA LED 1.4ft VPc 4400/840	66560	66660	66264	66265	66664	66665
66760	PRIMA LED 1.4ft VPc 6400/840	66761	66762	x	x	x	x
66270	PRIMA LED 1.5ft VPc 3250/840	66570	66670	66274	66275	66674	66675
66280	PRIMA LED 1.5ft VPc 4000/840	66580	66680	66284	66285	66684	66685
66290	PRIMA LED 1.5ft VPc 5500/840	66590	66690	66294	66295	66694	66695
66790	PRIMA LED 1.5ft VPc 8000/840	66791	66792	x	x	x	x

Example of type marking: 66644 = PRIMA LED 1.4ft VP 2600/840 **3F M1h**

PRIMA LED VP DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
66013	PRIMA LED 1.2ft VP 1300/840 DALI	x	x	x	x	x	x
66023	PRIMA LED 1.2ft VP 1600/840 DALI	x	x	x	x	x	x
66033	PRIMA LED 1.2ft VP 2200/840 DALI	x	x	x	x	x	x
66043	PRIMA LED 1.4ft VP 2600/840 DALI	66143	66343	66047	66048	66347	66348
66053	PRIMA LED 1.4ft VP 3200/840 DALI	66153	66353	66057	66058	66357	66358
66063	PRIMA LED 1.4ft VP 4400/840 DALI	66163	66363	66067	66068	66367	66368
66860	PRIMA LED 1.4ft VP 6400/840 DALI	66861	66862	x	x	x	x
66073	PRIMA LED 1.5ft VP 3250/840 DALI	66173	66373	66077	66078	66377	66378
66083	PRIMA LED 1.5ft VP 4000/840 DALI	66183	66383	66087	66088	66387	66388
66093	PRIMA LED 1.5ft VP 5500/840 DALI	66193	66393	66097	66098	66397	66398
66890	PRIMA LED 1.5ft VP 8000/840 DALI	66891	66892	x	x	x	x

PRIMA LED VPc DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
66213	PRIMA LED 1.2ft VPc 1300/840 DALI	x	x	x	x	x	x
66223	PRIMA LED 1.2ft VPc 1600/840 DALI	x	x	x	x	x	x
66233	PRIMA LED 1.2ft VPc 2200/840 DALI	x	x	x	x	x	x
66243	PRIMA LED 1.4ft VPc 2600/840 DALI	66543	66643	66247	66248	66647	66648
66253	PRIMA LED 1.4ft VPc 3200/840 DALI	66553	66653	66257	66258	66657	66658
66263	PRIMA LED 1.4ft VPc 4400/840 DALI	66563	66663	66267	66268	66667	66668
66960	PRIMA LED 1.4ft VPc 6400/840 DALI	66961	66962	x	x	x	x
66273	PRIMA LED 1.5ft VPc 3250/840 DALI	66573	66673	66277	66278	66677	66678
66283	PRIMA LED 1.5ft VPc 4000/840 DALI	66583	66683	66287	66288	66687	66688
66293	PRIMA LED 1.5ft VPc 5500/840 DALI	66593	66693	66297	66298	66697	66698
66990	PRIMA LED 1.5ft VPc 8000/840 DALI	66991	66992	x	x	x	x

Example of type marking: 66693 = PRIMA LED 1.5ft VPc 5500/840 DALI **3F**

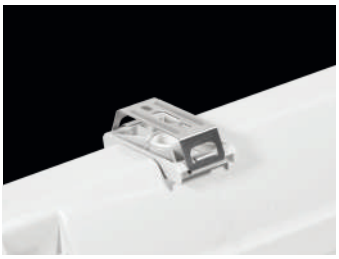
LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

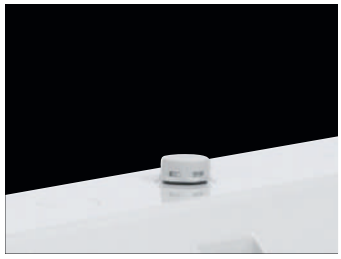
LIGHT FITTING ATTACHMENT

a) Directly to a ceiling with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories



LIGHT FITTING DETAILED VIEW

PRIMA LED VP



PRIMA LED ABS

... dustproof, waterproof and chemically resistant.

USE

The light fitting is suitable for the environment where ammoniac fumes, lixiviants, alkaline compounds and hot water (hydrolyses) can be present. We recommend this light fitting for agricultural operations, stables, car washing lines, warehouses, mechanical workshops and laboratories without a danger of explosion of gas, dust and combustible fumes.

The light fitting is resistant to dust, moisture and spouting water. The body made of ABS and the diffuser made of AC have increased chemical resistance.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic at installations in an aggressive environment, see also page 367).

Always open the cover of the light fitting out of an environment with aggressive volatile substances.

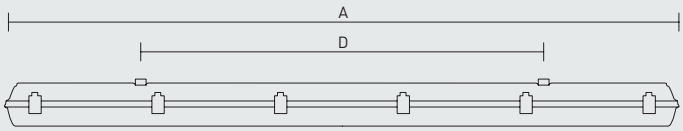
ADVANTAGES

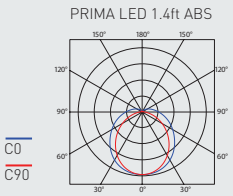
- Light fitting protection **IP66**
- Maximum ambient temperature up to t_a = **45 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent acrylate (AC) = high chemical resistance
- Body: dark grey (ABS) = high chemical resistance
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25 °C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Certification: ESČ, ENEC, CB, HACCP

PRIMA LED ABS, ABSc

TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: t_a = 45 °C, Maximum ambient temperature: t_a = 0-25 °C (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 153 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent acrylate (AC), UV stable, chemically resistant
- Body: dark grey (ABS), UV stable, chemically resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5, or rubber (SBS)
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, five-pole (basic version), or screwed
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver or current driver DALI





Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
For ambient temperature t_a = 45 °C - body: dark grey ABS - diffuser: translucent acrylate									
PRIMA LED 1.2ft ABS 1300/840	45	1310	1140	8,2	139	21.5 / 18.7	1,0	662	350
PRIMA LED 1.2ft ABS 1600/840	45	1560	1360	9,8	139	22.1 / 19.3	1,0	662	350
PRIMA LED 1.2ft ABS 2200/840	40	2140	1860	13,2	141	23.2 / 20.4	1,0	662	350
PRIMA LED 1.4ft ABS 2600/840	45	2600	2260	16,1	140	21.6 / 19.0	1,8	1272	700
PRIMA LED 1.4ft ABS 3200/840	45	3100	2700	19,1	141	22.2 / 19.6	1,8	1272	700
PRIMA LED 1.4ft ABS 4400/840	40	4300	3740	26,0	144	23.4 / 20.8	1,8	1272	700
PRIMA LED 1.4ft ABS 6400/840	40	6120	5320	36,1	147	24.6 / 22.0	1,8	1272	700
PRIMA LED 1.5ft ABS 3250/840	45	3240	2820	19,5	145	21.7 / 19.1	2,1	1572	940
PRIMA LED 1.5ft ABS 4000/840	45	3850	3350	23,3	144	22.3 / 19.7	2,1	1572	940
PRIMA LED 1.5ft ABS 5500/840	40	5340	4650	31,9	146	23.4 / 20.8	2,1	1572	940
PRIMA LED 1.5ft ABS 8000/840	40	7780	6770	44,3	153	24.7 / 22.1	2,1	1572	940

67020 PRIMA LED 1.2ft ABS 1600/840 = suitable replacement for T8 fl. tube light fitting PRIMA 118 – 1×18W
67050 PRIMA LED 1.4ft ABS 3200/840 = suitable replacement for T8 fl. tube light fitting PRIMA 136 – 1×36W
67490 PRIMA LED 1.5ft ABS 8000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 258 – 2×58W

PRIMA LED ABS

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
67010	PRIMA LED 1.2ft ABS 1300/840	x	x	x	x	x	x
67020	PRIMA LED 1.2ft ABS 1600/840	x	x	x	x	x	x
67030	PRIMA LED 1.2ft ABS 2200/840	x	x	x	x	x	x
67040	PRIMA LED 1.4ft ABS 2600/840	67140	67340	67044	67045	67344	67345
67050	PRIMA LED 1.4ft ABS 3200/840	67150	67350	67054	67055	67354	67355
67060	PRIMA LED 1.4ft ABS 4400/840	67160	67360	67064	67065	67364	67365
67460	PRIMA LED 1.4ft ABS 6400/840	67461	67462	x	x	x	x
67070	PRIMA LED 1.5ft ABS 3250/840	67170	67370	67074	67075	67374	67375
67080	PRIMA LED 1.5ft ABS 4000/840	67180	67380	67084	67085	67384	67385
67090	PRIMA LED 1.5ft ABS 5500/840	67190	67390	67094	67095	67394	67395
67490	PRIMA LED 1.5ft ABS 8000/840	67491	67492	x	x	x	x

PRIMA LED ABSc

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
67210	PRIMA LED 1.2ft ABSc 1300/840	x	x	x	x	x	x
67220	PRIMA LED 1.2ft ABSc 1600/840	x	x	x	x	x	x
67230	PRIMA LED 1.2ft ABSc 2200/840	x	x	x	x	x	x
67240	PRIMA LED 1.4ft ABSc 2600/840	67540	67640	67244	67245	67644	67645
67250	PRIMA LED 1.4ft ABSc 3200/840	67550	67650	67254	67255	67654	67655
67260	PRIMA LED 1.4ft ABSc 4400/840	67560	67660	67264	67265	67664	67665
67760	PRIMA LED 1.4ft ABSc 6400/840	67761	67762	x	x	x	x
67270	PRIMA LED 1.5ft ABSc 3250/840	67570	67670	67274	67275	67674	67675
67280	PRIMA LED 1.5ft ABSc 4000/840	67580	67680	67284	67285	67684	67685
67290	PRIMA LED 1.5ft ABSc 5500/840	67590	67690	67294	67295	67694	67695
67790	PRIMA LED 1.5ft ABSc 8000/840	67791	67792	x	x	x	x

Example of type marking: 67644 = PRIMA LED 1.4ft ABS 2600/840 **3F M1h**

PRIMA LED ABS DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
67013	PRIMA LED 1.2ft ABS 1300/840 DALI	x	x	x	x	x	x
67023	PRIMA LED 1.2ft ABS 1600/840 DALI	x	x	x	x	x	x
67033	PRIMA LED 1.2ft ABS 2200/840 DALI	x	x	x	x	x	x
67043	PRIMA LED 1.4ft ABS 2600/840 DALI	67143	67343	67047	67048	67347	67348
67053	PRIMA LED 1.4ft ABS 3200/840 DALI	67153	67353	67057	67058	67357	67358
67063	PRIMA LED 1.4ft ABS 4400/840 DALI	67163	67363	67067	67068	67367	67368
67860	PRIMA LED 1.4ft ABS 6400/840 DALI	67861	67862	x	x	x	x
67073	PRIMA LED 1.5ft ABS 3250/840 DALI	67173	67373	67077	67078	67377	67378
67083	PRIMA LED 1.5ft ABS 4000/840 DALI	67183	67383	67087	67088	67387	67388
67093	PRIMA LED 1.5ft ABS 5500/840 DALI	67193	67393	67097	67098	67397	67398
67890	PRIMA LED 1.5ft ABS 8000/840 DALI	67891	67892	x	x	x	x

PRIMA LED ABSc DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
67213	PRIMA LED 1.2ft ABSc 1300/840 DALI	x	x	x	x	x	x
67223	PRIMA LED 1.2ft ABSc 1600/840 DALI	x	x	x	x	x	x
67233	PRIMA LED 1.2ft ABSc 2200/840 DALI	x	x	x	x	x	x
67243	PRIMA LED 1.4ft ABSc 2600/840 DALI	67543	67643	67247	67248	67647	67648
67253	PRIMA LED 1.4ft ABSc 3200/840 DALI	67553	67653	67257	67258	67657	67658
67263	PRIMA LED 1.4ft ABSc 4400/840 DALI	67563	67663	67267	67268	67667	67668
67960	PRIMA LED 1.4ft ABSc 6400/840 DALI	67961	67962	x	x	x	x
67273	PRIMA LED 1.5ft ABSc 3250/840 DALI	67573	67673	67277	67278	67677	67678
67283	PRIMA LED 1.5ft ABSc 4000/840 DALI	67583	67683	67287	67288	67687	67688
67293	PRIMA LED 1.5ft ABSc 5500/840 DALI	67593	67693	67297	67298	67697	67698
67990	PRIMA LED 1.5ft ABSc 8000/840 DALI	67991	67992	x	x	x	x

Example of type marking: 67693 = PRIMA LED 1.5ft ABSc 5500/840 DALI **3F**

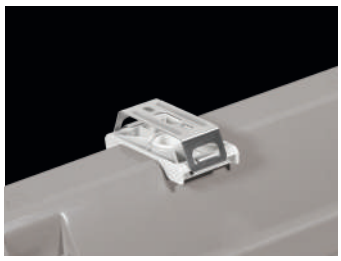
LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories



LIGHT FITTING DETAILED VIEW

PRIMA LED ABS

PRIMA LED CLASS II

... with Class II insulation.

USE

Light fitting is suitable for **industrial, warehouse and agricultural buildings, sports premises, transport terminals, railway vehicle repair shops, platforms, traction substations, depots, parking lots and garages, workshops and laboratories** without explosion hazard.

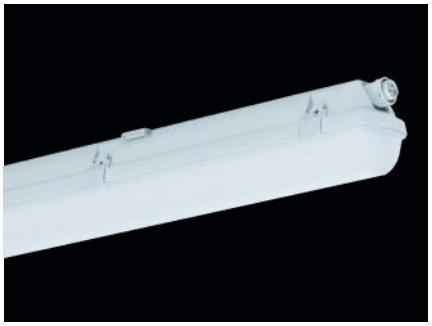
The light fitting resists dust, humidity and spouting water. The body and the diffuser made of PC material have high mechanical resistance against impact and deformation.

Emissions in the environment of use may reduce the usability of the plastics.

ADVANTAGES

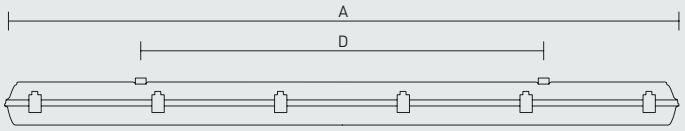
- Light fitting protection **IP66**
- Maximum ambient temperature up to t_a = **45 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate (PC) = high mechanical resistance
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25 °C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Available in ABS chemical resistant version
- Through-wiring of up to 6 wires at body (1.4ft and 1.5ft)

PRIMA LED CLASS II PC, PCc

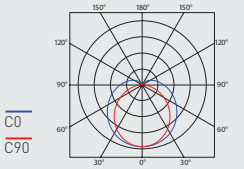


TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: t_a = 45 °C, Maximum ambient temperature: t_a = 0-25 °C (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 156 lm/W
- AWEX emergency light module generates a luminous flux of 440 lm
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate (PC), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5, or rubber (SBS)
- Distance part: polyamide + 10 % glass fibre
- Terminal block: **Connectors with 2, 4 or 6 poles, wire section 1.5 or 2.5 mm**
- Installation: package contains stainless hooks, stainless brackets and a connector's counterpart
- Electric equipment: LED modules, current driver or current driver DALI



PRIMA LED 1.4ft CLASS II PC



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
For ambient temperature t_a = 45 °C - body: grey polycarbonate - diffuser: translucent polycarbonate									
PRIMA LED 1.2ft CLASS II PC 1300/840	45	1310	1170	8,2	143	22.0 / 18.8	1,0	662	350
PRIMA LED 1.2ft CLASS II PC 1600/840	45	1560	1390	9,8	142	22.6 / 19.4	1,0	662	350
PRIMA LED 1.2ft CLASS II PC 2200/840	40	2140	1900	13,2	144	23.6 / 20.5	1,0	662	350
PRIMA LED 1.4ft CLASS II PC 2600/840	45	2600	2310	16,1	143	22.1 / 19.1	1,8	1272	700
PRIMA LED 1.4ft CLASS II PC 3200/840	45	3100	2760	19,1	145	22.7 / 19.7	1,8	1272	700
PRIMA LED 1.4ft CLASS II PC 4400/840	40	4300	3830	26,0	147	23.8 / 20.9	1,8	1272	700
PRIMA LED 1.4ft CLASS II PC 6400/840	40	6120	5450	36,1	151	25.1 / 22.1	1,8	1272	700
PRIMA LED 1.5ft CLASS II PC 3250/840	45	3240	2880	19,5	148	22.1 / 19.2	2,1	1572	940
PRIMA LED 1.5ft CLASS II PC 4000/840	45	3850	3430	23,3	147	22.7 / 19.8	2,1	1572	940
PRIMA LED 1.5ft CLASS II PC 5500/840	40	5340	4750	31,9	149	23.9 / 20.9	2,1	1572	940
PRIMA LED 1.5ft CLASS II PC 8000/840	40	7780	6920	44,3	156	25.2 / 22.2	2,1	1572	940

71210 PRIMA LED 1.2ft CLASS II PC 1600/840 = suitable replacement for T8 fl. tube light fitting PRIMA 118 – 1×18W
71240 PRIMA LED 1.4ft CLASS II PC 3200/840 = suitable replacement for T8 fl. tube light fitting PRIMA 136 – 1×36W
71260 PRIMA LED 1.4ft CLASS II PC 6400/840 = suitable replacement for T8 fl. tube light fitting PRIMA 236 – 2×36W
71280 PRIMA LED 1.5ft CLASS II PC 4000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 158 – 1×58W
71300 PRIMA LED 1.5ft CLASS II PC 8000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 258 – 2×58W

PRIMA LED CLASS II PC

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
71200	PRIMA LED 1.2ft CLASS II PC 1300/840	x	x	x	x	x	x
71210	PRIMA LED 1.2ft CLASS II PC 1600/840	x	x	x	x	x	x
71220	PRIMA LED 1.2ft CLASS II PC 2200/840	x	x	x	x	x	x
71230	PRIMA LED 1.4ft CLASS II PC 2600/840	71231	71233	71234	71235	71236	71237
71240	PRIMA LED 1.4ft CLASS II PC 3200/840	71241	71243	71244	71245	71246	71247
71250	PRIMA LED 1.4ft CLASS II PC 4400/840	71251	71253	71254	71255	71256	71257
71260	PRIMA LED 1.4ft CLASS II PC 6400/840	71261	71263	x	x	x	x
71270	PRIMA LED 1.5ft CLASS II PC 3250/840	71271	71273	71274	71275	71276	71277
71280	PRIMA LED 1.5ft CLASS II PC 4000/840	71281	71283	71284	71285	71286	71287
71290	PRIMA LED 1.5ft CLASS II PC 5500/840	71291	71293	71294	71295	71296	71297
71300	PRIMA LED 1.5ft CLASS II PC 8000/840	71301	71303	x	x	x	x

PRIMA LED CLASS II PCc

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
71310	PRIMA LED 1.2ft CLASS II PCc 1300/840	x	x	x	x	x	x
71320	PRIMA LED 1.2ft CLASS II PCc 1600/840	x	x	x	x	x	x
71330	PRIMA LED 1.2ft CLASS II PCc 2200/840	x	x	x	x	x	x
71340	PRIMA LED 1.4ft CLASS II PCc 2600/840	71341	71343	71344	71345	71346	71347
71350	PRIMA LED 1.4ft CLASS II PCc 3200/840	71351	71353	71354	71355	71356	71357
71360	PRIMA LED 1.4ft CLASS II PCc 4400/840	71361	71363	71364	71365	71366	71367
71370	PRIMA LED 1.4ft CLASS II PCc 6400/840	71371	71373	x	x	x	x
71380	PRIMA LED 1.5ft CLASS II PCc 3250/840	71381	71383	71384	71385	71386	71387
71390	PRIMA LED 1.5ft CLASS II PCc 4000/840	71391	71393	71394	71395	71396	71397
71400	PRIMA LED 1.5ft CLASS II PCc 5500/840	71401	71403	71404	71405	71406	71407
71410	PRIMA LED 1.5ft CLASS II PCc 8000/840	71411	71413	x	x	x	x

Example of type marking: 71346 = PRIMA LED 1.4ft CLASS II PCc 2600/840 **3F M1h**

PRIMA LED CLASS II PC DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
71420	PRIMA LED 1.2ft CLASS II PC 1300/840 DALI	x	x	x	x	x	x
71430	PRIMA LED 1.2ft CLASS II PC 1600/840 DALI	x	x	x	x	x	x
71440	PRIMA LED 1.2ft CLASS II PC 2200/840 DALI	x	x	x	x	x	x
71450	PRIMA LED 1.4ft CLASS II PC 2600/840 DALI	71451	71453	71454	71455	71456	71457
71460	PRIMA LED 1.4ft CLASS II PC 3200/840 DALI	71461	71463	71464	71465	71466	71467
71470	PRIMA LED 1.4ft CLASS II PC 4400/840 DALI	71471	71473	71474	71475	71476	71477
71480	PRIMA LED 1.4ft CLASS II PC 6400/840 DALI	71481	71483	x	x	x	x
71490	PRIMA LED 1.5ft CLASS II PC 3250/840 DALI	71491	71493	71494	71495	71496	71497
71500	PRIMA LED 1.5ft CLASS II PC 4000/840 DALI	71501	71503	71504	71505	71506	71507
71510	PRIMA LED 1.5ft CLASS II PC 5500/840 DALI	71511	71513	71514	71515	71516	71517
71520	PRIMA LED 1.5ft CLASS II PC 8000/840 DALI	71521	71523	x	x	x	x

PRIMA LED CLASS II PCc DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
71530	PRIMA LED 1.2ft CLASS II PCc 1300/840 DALI	x	x	x	x	x	x
71540	PRIMA LED 1.2ft CLASS II PCc 1600/840 DALI	x	x	x	x	x	x
71550	PRIMA LED 1.2ft CLASS II PCc 2200/840 DALI	x	x	x	x	x	x
71560	PRIMA LED 1.4ft CLASS II PCc 2600/840 DALI	71561	71563	71564	71565	71566	71567
71570	PRIMA LED 1.4ft CLASS II PCc 3200/840 DALI	71571	71573	71574	71575	71576	71577
71580	PRIMA LED 1.4ft CLASS II PCc 4400/840 DALI	71581	71583	71584	71585	71586	71587
71590	PRIMA LED 1.4ft CLASS II PCc 6400/840 DALI	71591	71593	x	x	x	x
71600	PRIMA LED 1.5ft CLASS II PCc 3250/840 DALI	71601	71603	71604	71605	71606	71607
71610	PRIMA LED 1.5ft CLASS II PCc 4000/840 DALI	71611	71613	71614	71615	71616	71617
71620	PRIMA LED 1.5ft CLASS II PCc 5500/840 DALI	71621	71623	71624	71625	71626	71627
71630	PRIMA LED 1.5ft CLASS II PCc 8000/840 DALI	71631	71633	x	x	x	x

Example of type marking: 71623 = PRIMA LED 1.5ft CLASS II PCc 5500/840 DALI **3F**

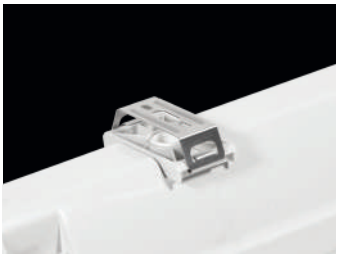
LEGEND

CLASS II 1F 1-phase 2 core through-wiring in the luminaire
CLASS II 3F 3-phase 4 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
CLASS II 3F Mxh 3-phase 4 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

DALI version with digital dimmable driver DALI
CLASS II DALI 1F 1-phase 4 core through-wiring in the luminaire
CLASS II DALI 3F 3-phase 6 core through-wiring in the luminaire
CLASS II DALI 3F Mxh 3-phase 6 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

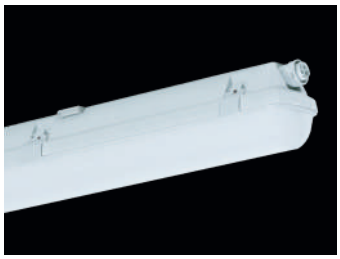
LIGHT FITTING ATTACHMENT

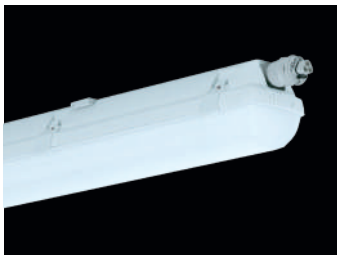
a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories



LIGHT FITTING DETAILED VIEW

PRIMA LED CLASS II


STUCCHI 37xx


WIELAND

PRIMA LED TRS

... for direct and indirect illumination.

USE

This luminaire, which features a clear base, is a perfect source of both direct and indirect illumination for spaces with low ceilings. The light fitting is suitable for industrial indoor and outdoor roofed spaces, warehouses, sports areas, workshops, garages, transport terminals, utility structures and laboratories without a danger of explosion of gas, dust and combustible fumes.

The light fitting is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have the increased resistance against deformation and impact.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic at installations in an aggressive environment.

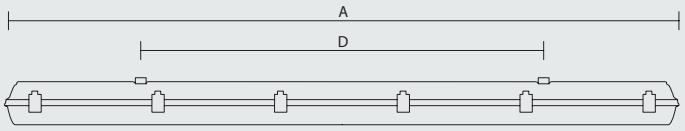
ADVANTAGES

- Light fitting protection **IP66**
- Maximum ambient temperature up to **t_a = 45 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: clear polycarbonate (PC) = high mechanical resistance
- Body: clear polycarbonate (PC) = high mechanical resistance
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25 °C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable version
- It can be delivered in Tunable White version at request
- Certification: ESČ, CB, HACCP

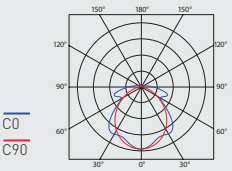
PRIMA LED TRS PC, PCc

TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: t_a = 45 °C,
- Maximum system efficacy: 156 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: clear polycarbonate (PC) = high mechanical resistence
- Body: clear polycarbonate (PC), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003) modified for indirect illumination
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5, or rubber (SBS)
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, three-pole (basic version), or screwed
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver or current driver DALI



PRIMA LED 1.5ft TRS PC



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
For ambient temperature t_a = 45 °C - body: clear polycarbonate - diffuser: clear polycarbonate									
PRIMA LED 1.2ft TRS PC 1300/840	45	1310	1170	8,2	143	22.2 / 19.8	1,0	662	350
PRIMA LED 1.2ft TRS PC 1600/840	45	1560	1390	9,8	142	22.8 / 18.4	1,0	662	350
PRIMA LED 1.2ft TRS PC 2200/840	40	2140	1900	13,2	144	23.9 / 19.5	1,0	662	350
PRIMA LED 1.4ft TRS PC 2600/840	45	2600	2310	16,1	143	22.3 / 18.1	1,8	1272	700
PRIMA LED 1.4ft TRS PC 3200/840	45	3100	2760	19,1	145	22.9 / 18.7	1,8	1272	700
PRIMA LED 1.4ft TRS PC 4400/840	40	4300	3830	26,0	147	24.1 / 19.9	1,8	1272	700
PRIMA LED 1.4ft TRS PC 6400/840	40	6120	5450	36,1	151	25.3 / 21.1	1,8	1272	700
PRIMA LED 1.5ft TRS PC 3250/840	45	3240	2880	19,5	148	22.3 / 18.2	2,1	1572	940
PRIMA LED 1.5ft TRS PC 4000/840	45	3850	3430	23,3	147	22.9 / 18.8	2,1	1572	940
PRIMA LED 1.5ft TRS PC 5500/840	40	5340	4750	31,9	149	24.1 / 19.9	2,1	1572	940
PRIMA LED 1.5ft TRS PC 8000/840	40	7780	6920	44,3	156	25.4 / 21.2	2,1	1572	940

88010 PRIMA LED 1.2ft TRS PC 1600/840 = suitable replacement for T8 fl. tube light fitting PRIMA 118 – 1×18W
88040 PRIMA LED 1.4ft TRS PC 3200/840 = suitable replacement for T8 fl. tube light fitting PRIMA 136 – 1×36W
88060 PRIMA LED 1.4ft TRS PC 6400/840 = suitable replacement for T8 fl. tube light fitting PRIMA 236 – 2×36W
88080 PRIMA LED 1.5ft TRS PC 4000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 158 – 1×58W
88100 PRIMA LED 1.5ft TRS PC 8000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 258 – 2×58W

PRIMA LED TRS PC

Plastic clips

Code	Type	1F	3F	DALI	DALI 1F	DALI 3F
88000	PRIMA LED 1.2ft TRS PC 1300/840	x	x	88220	x	x
88010	PRIMA LED 1.2ft TRS PC 1600/840	x	x	88230	x	x
88020	PRIMA LED 1.2ft TRS PC 2200/840	x	x	88240	x	x
88030	PRIMA LED 1.4ft TRS PC 2600/840	88031	88033	88250	88251	88253
88040	PRIMA LED 1.4ft TRS PC 3200/840	88041	88043	88260	88261	88263
88050	PRIMA LED 1.4ft TRS PC 4400/840	88051	88053	88270	88271	88273
88060	PRIMA LED 1.4ft TRS PC 6400/840	88061	88063	88280	88281	88283
88070	PRIMA LED 1.5ft TRS PC 3250/840	88071	88073	88290	88291	88293
88080	PRIMA LED 1.5ft TRS PC 4000/840	88081	88083	88300	88301	88303
88090	PRIMA LED 1.5ft TRS PC 5500/840	88091	88093	88310	88311	88313
88100	PRIMA LED 1.5ft TRS PC 8000/840	88101	88103	88320	88321	88323

PRIMA LED TRS PCc

Stainless clips (c)

Code	Type	1F	3F	DALI	DALI 1F	DALI 3F
88110	PRIMA LED 1.2ft TRS PCc 1300/840	x	x	88330	x	x
88120	PRIMA LED 1.2ft TRS PCc 1600/840	x	x	88340	x	x
88130	PRIMA LED 1.2ft TRS PCc 2200/840	x	x	88350	x	x
88140	PRIMA LED 1.4ft TRS PCc 2600/840	88141	88143	88360	88361	88363
88150	PRIMA LED 1.4ft TRS PCc 3200/840	88151	88153	88370	88371	88373
88160	PRIMA LED 1.4ft TRS PCc 4400/840	88161	88163	88380	88381	88383
88170	PRIMA LED 1.4ft TRS PCc 6400/840	88171	88173	88390	88391	88393
88180	PRIMA LED 1.5ft TRS PCc 3250/840	88181	88183	88400	88401	88403
88190	PRIMA LED 1.5ft TRS PCc 4000/840	88191	88193	88410	88411	88413
88200	PRIMA LED 1.5ft TRS PCc 5500/840	88201	88203	88420	88421	88423
88210	PRIMA LED 1.5ft TRS PCc 8000/840	88211	88213	88430	88431	88433

Example of type marking: 88363 = PRIMA LED 1.4ft TRS PCc 2600/840 **DALI 3F**

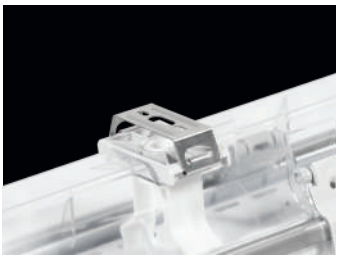
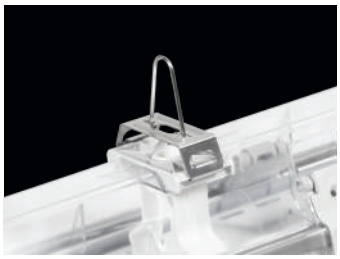
LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

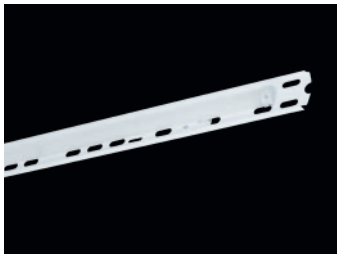
DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories

LIGHT FITTING DETAILED VIEW



PRIMA LED MAX

... for extreme temperatures -40 °C to +65 °C.

USE

The light fitting is suitable for indoor and outdoor spaces with roof with extreme ambient temperatures from **(-40 °C to +65 °C)**. The light fitting is destined mainly for heating stations, metallurgical lines, glass-works, as well as for freezers, cooling plants and other premises without danger of explosion of gases, dusts and flammable vapors.

The light fitting is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have the increased resistance against deformation and impact.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic at installations in an aggressive environment, see also page 367).

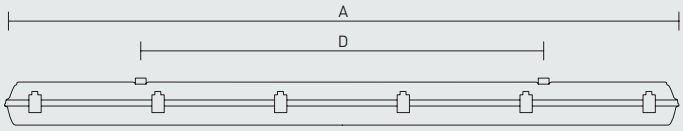
ADVANTAGES

- Light fitting protection **IP66**
- Minimum ambient temperature up to t_a **= -40 °C**
- Maximum ambient temperature up to t_a **= 65 °C**
- Lifetime: 50,000 hours / L80B10
- Possibility of using in even higher ambient temperatures under the condition of a shortened service life of the light fitting – parameters solved within a particular project
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate (PC) = high mechanical resistance
- Up to 45 % lower electricity consumption when compared to tubes T5
- Constant luminous flux even in ambient temperature of -40 °C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K
- Certification: HACCP

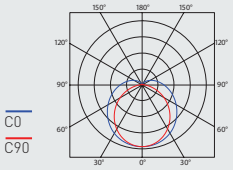
PRIMA LED MAX PCc

TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Minimum ambient temperature: t_a = -40 °C
- Maximum ambient temperature: t_a = 65 °C
- Lifetime: 50,000 hours / L80B10
- Possibility of using in even higher ambient temperatures under the condition of a shortened service life of the light fitting – parameters solved within a particular project
- Maximum system efficacy: 149 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate (PC), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Ventilation plug: type BVPB-01 made of polyamide, size M12 × 1.5
- Clips: stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5, or rubber (SBS)
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, five-pole (basic version), or screwed
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver



PRIMA LED MAX 1.5ft



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
For ambient temperature t_a = 65 °C - body: grey polycarbonate - diffuser: translucent polycarbonate									
PRIMA LED 1.5ft MAX PCc 4000/840	65	3850	3430	23,3	147	22.7 / 19.8	2,2	1572	940
PRIMA LED 1.5ft MAX PCc 5500/840	60	5340	4750	31,9	149	23.9 / 20.9	2,2	1572	940

PRIMA LED MAX PCc

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	DALI	DALI 3F
79910	PRIMA LED 1.5ft MAX PCc 4000/840	79911	79913	x	x	79915	79916
79900	PRIMA LED 1.5ft MAX PCc 5500/840	79901	79903	x	x	79905	79906

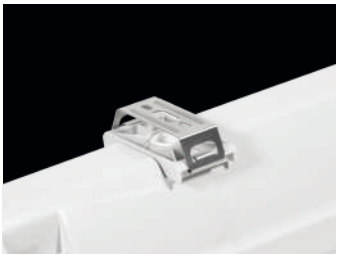
Example of type marking: 79903 = PRIMA LED MAX 1.5ft PCc 5500/840 **3F**

LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

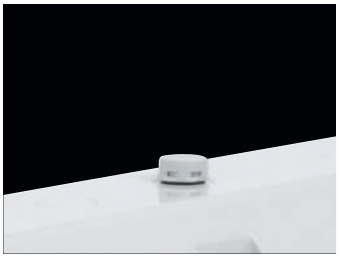
LIGHT FITTING ATTACHMENT

a) Directly to a ceiling with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories



LIGHT FITTING DETAILED VIEW

PRIMA LED MAX



PRIMA LED SNS

... dustproof, waterproof and impact-resistant.

USE

The light fitting is suitable for industrial indoor and outdoor roofed spaces, warehouses, sports areas, workshops, garages, transport terminals, utility structures and laboratories without a danger of explosion of gas, dust and combustible fumes.

The light fitting is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have the increased resistance against deformation and impact.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic at installations in an aggressive environment, see also page 367).

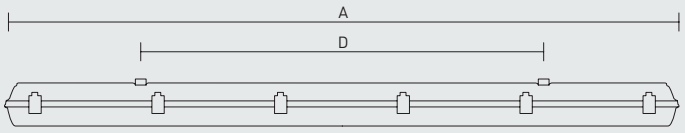
ADVANTAGES

- Light fitting protection IP66
- Maximum ambient temperature up to t_a = **45 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate (PC) = high mechanical resistance
- Up to 45 % lower electricity consumption when compared to tubes T5
- Current driver with the possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25 °C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- With built-in **microwave motion sensor**
- The possibility of setting the sensor using the DIP switch
- It can be delivered in dimmable or emergency version
- Certification: HACCP

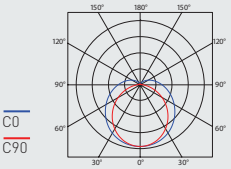
PRIMA LED SNS PC, PCc

TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: t_a = 45 °C, Maximum ambient temperature: t_a = 0-25 °C (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 156 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate (PC), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5, or rubber (SBS)
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, five-pole (basic version), or screwed
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver or digital dimmable driver DALI
- Motion sensor: 360° range, switch on height 1 – 6 m, time range 5 sec – 30 min, switch-on sensitivity 2 – 50 lux



PRIMA LED 1.4ft SNS PC



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
For ambient temperature t_a = 45 °C - body: grey polycarbonate - diffuser: translucent polycarbonate									
PRIMA LED 1.4ft SNS PC 2600/840	45	2600	2310	16,1	143	22.1 / 19.1	1,85	1272	700
PRIMA LED 1.4ft SNS PC 3200/840	45	3100	2760	19,1	145	22.7 / 19.7	1,85	1272	700
PRIMA LED 1.4ft SNS PC 4400/840	40	4300	3830	26,0	147	23.8 / 20.9	1,85	1272	700
PRIMA LED 1.4ft SNS PC 6400/840	40	6120	5450	36,1	151	25.1 / 22.1	1,85	1272	700
PRIMA LED 1.5ft SNS PC 3250/840	45	3240	2880	19,5	148	22.1 / 19.2	2,15	1572	940
PRIMA LED 1.5ft SNS PC 4000/840	45	3850	3430	23,3	147	22.7 / 19.8	2,15	1572	940
PRIMA LED 1.5ft SNS PC 5500/840	40	5340	4750	31,9	149	23.9 / 20.9	2,15	1572	940
PRIMA LED 1.5ft SNS PC 8000/840	40	7780	6920	44,3	156	25.2 / 22.2	2,15	1572	940

64050 PRIMA LED 1.4ft SNS PC 3200/840 = suitable replacement for T8 fl. tube light fitting PRIMA 136 – 1×36W
64460 PRIMA LED 1.4ft SNS PC 6400/840 = suitable replacement for T8 fl. tube light fitting PRIMA 236 – 2×36W
64080 PRIMA LED 1.5ft SNS PC 4000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 158 – 1×58W
64490 PRIMA LED 1.5ft SNS PC 8000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 258 – 2×58W

PRIMA LED SNS PC

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
64040	PRIMA LED 1.4ft SNS PC 2600/840	64140	64340	64044	64045	64344	64345
64050	PRIMA LED 1.4ft SNS PC 3200/840	64150	64350	64054	64055	64354	64355
64060	PRIMA LED 1.4ft SNS PC 4400/840	64160	64360	64064	64065	64364	64365
64460	PRIMA LED 1.4ft SNS PC 6400/840	64461	64462	x	x	x	x
64070	PRIMA LED 1.5ft SNS PC 3250/840	64170	64370	64074	64075	64374	64375
64080	PRIMA LED 1.5ft SNS PC 4000/840	64180	64380	64084	64085	64384	64385
64090	PRIMA LED 1.5ft SNS PC 5500/840	64190	64390	64094	64095	64394	64395
64490	PRIMA LED 1.5ft SNS PC 8000/840	64491	64492	x	x	x	x

PRIMA LED SNS PCc

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
64240	PRIMA LED 1.4ft SNS PCc 2600/840	64540	64640	64244	64245	64644	64645
64250	PRIMA LED 1.4ft SNS PCc 3200/840	64550	64650	64254	64255	64654	64655
64260	PRIMA LED 1.4ft SNS PCc 4400/840	64560	64660	64264	64265	64664	64665
64760	PRIMA LED 1.4ft SNS PCc 6400/840	64761	64762	x	x	x	x
64270	PRIMA LED 1.5ft SNS PCc 3250/840	64570	64670	64274	64275	64674	64675
64280	PRIMA LED 1.5ft SNS PCc 4000/840	64580	64680	64284	64285	64684	64685
64290	PRIMA LED 1.5ft SNS PCc 5500/840	64590	64690	64294	64295	64694	64695
64790	PRIMA LED 1.5ft SNS PCc 8000/840	64791	64792	x	x	x	x

Example of type marking: 64644 = PRIMA LED 1.4ft SNS PC 2600/840 **3F M1h**

PRIMA LED SNS PC CORRIDOR

Digital dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
64043	PRIMA LED 1.4ft SNS PC 2600/840 CORRIDOR	64143	64343	64047	x	64347	x
64053	PRIMA LED 1.4ft SNS PC 3200/840 CORRIDOR	64153	64353	64057	x	64357	x
64063	PRIMA LED 1.4ft SNS PC 4400/840 CORRIDOR	64163	64363	64067	x	64367	x
64073	PRIMA LED 1.5ft SNS PC 3250/840 CORRIDOR	64173	64373	64077	64078	64377	64378
64083	PRIMA LED 1.5ft SNS PC 4000/840 CORRIDOR	64183	64383	64087	64088	64387	64388
64093	PRIMA LED 1.5ft SNS PC 5500/840 CORRIDOR	64193	64393	64097	64098	64397	64398

PRIMA LED SNS PCc CORRIDOR

Digital dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
64243	PRIMA LED 1.4ft SNS PCc 2600/840 CORRIDOR	64543	64643	64247	x	64647	x
64253	PRIMA LED 1.4ft SNS PCc 3200/840 CORRIDOR	64553	64653	64257	x	64657	x
64263	PRIMA LED 1.4ft SNS PCc 4400/840 CORRIDOR	64563	64663	64267	x	64667	x
64273	PRIMA LED 1.5ft SNS PCc 3250/840 CORRIDOR	64573	64673	64277	64278	64677	64678
64283	PRIMA LED 1.5ft SNS PCc 4000/840 CORRIDOR	64583	64683	64287	64288	64687	64688
64293	PRIMA LED 1.5ft SNS PCc 5500/840 CORRIDOR	64593	64693	64297	64298	64697	64698

Example of type marking: 64693 = PRIMA LED 1.5ft SNS PCc 5500/840 CORRIDOR **3F**

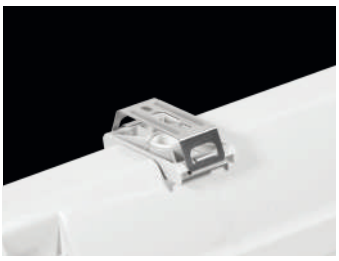
LEGEND

SNS 1F 1-phase 3 core through-wiring in the luminaire for connection of max. 5 slave luminaires
SNS 3F 3-phase 5 core through-wiring in the luminaire for connection of max. 5 slave luminaires (sensor connected to L3)
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
SNS 3F Mxh 3-phase 5 core through-wiring in the luminaire for connection of max. 5 slave luminaires (sensor and emergency unit connected to L3)

CORRIDOR version with digital dimmable driver DALI and set corridor function
CORRIDOR 1F 1-phase 5 core through-wiring in the luminaire for connection of max. 20 luminaires
CORRIDOR 3F 3-phase 7 core through-wiring in the luminaire for connection of max. 20 luminaires (sensor connected to L3)
CORRIDOR 3F Mxh 3-phase 7 core through-wiring in the luminaire for connection of max. 20 luminaires (sensor and emergency unit connected to L3)

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories



LIGHT FITTING DETAILED VIEW

PRIMA LED SNS

PRIMA LED Ex

... for explosion hazard environment group II, category 3 (zone 2, 22).

USE

The light fitting is suitable for the environment with a danger of explosion of gas, dust and combustible fumes. The light fittings meet the requirements of Government Decree 116/2016 Coll. and European Community Directive No.2014/34/EU.

The light fitting is certified for the environment:
Ⓔx II 3G Ex nR IIC T6 Gc
Ⓔx II 3D Ex tc IIIC T70°C Dc

The basic requirements for safety and health protection are secured by the verification of conformity with the standards according to ČSN EN 60079-15, ČSN EN 60079-0 and ČSN EN 60079-31.

The light fitting is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have the increased resistence against deformation and impact.

(It is necessary to consider exhalation in the air reducing the usability of the plastic at installations in an aggressive environment, see also page 367.

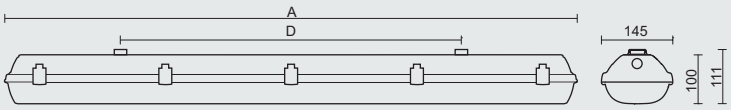
ADVANTAGES

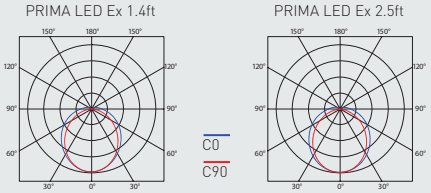
- Light fitting protection **IP66**
- Maximum ambient temperature up to **t_a = 60°C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate (PC) = high mechanical resistance
- Up to 45 % lower electricity consumption when compared to fluorescent tubes
- Current driver with the possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25 °C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K
- Clips: stainless steel + polyamide + 15 % glass fibre
- Through-wiring of up to 10 wires at body
- At request also versions according to the standard for EAC states (Russia, Kazakhstan, Belarus, Armenia)
- Certification: CB, TÜV CY 22 ATEX 0206610 X Issue: 02

PRIMA LED Ex PCc

TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: from -25 to 60 °C
- Maximum ambient temperature: from 0 to 50 °C (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 157 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate (PC), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: stainless steel + polyamide + 15 % glass fibre
- Cable glands: screwed M20 × 1,5 ATEX
- Distance part: polyamide + 10 % glass fibre, serves to suspend the reflector during assembly
- Terminal block: screwless, five-pole (version 1.4ft and 1.5ft), three-pole incl. earthing tape & screw for a perfect connection (basic version)
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver, halogen-free wires with higher temperature resistance





Type	Minimal and maximal ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
For ambient temperature t_a = 60 °C - body: grey polycarbonate - diffuser: translucent polycarbonate								
PRIMA LED Ex 1.2ft PCc 1600/840	-25|60	1840	1690	11	154	2,0	662	350
PRIMA LED Ex 1.2ft PCc 2200/840	-25|55	2560	2350	16	147	2,0	662	350
PRIMA LED Ex 1.4ft PCc 3200/840	-25|60	3620	3330	23	145	3,2	1272	700
PRIMA LED Ex 1.4ft PCc 4400/840	-25|55	5070	4660	31	150	3,3	1272	700
PRIMA LED Ex 1.4ft PCc 6400/840	-25|55	7300	6710	44	153	3,3	1272	700
PRIMA LED Ex 1.5ft PCc 4000/840	-25|60	4520	4150	27	154	4,1	1572	940
PRIMA LED Ex 1.5ft PCc 5500/840	-25|55	6320	5810	38	153	4,2	1572	940
PRIMA LED Ex 1.5ft PCc 8000/840	-25|55	9030	8300	53	157	4,2	1572	940
PRIMA LED Ex 2.2ft PCc 3200/840	-25|60	3620	3330	22	151	2,1	662	350
PRIMA LED Ex 2.2ft PCc 4400/840	-25|55	5120	4710	31	152	2,1	662	350
PRIMA LED Ex 2.4ft PCc 6400/840	-25|60	7300	6710	43	156	3,4	1272	700
PRIMA LED Ex 2.4ft PCc 8800/840	-25|55	10160	9340	60	156	3,5	1272	700
PRIMA LED Ex 2.4ft PCc 12800/840	-25|40	14490	13330	85	157	3,7	1272	700
PRIMA LED Ex 2.5ft PCc 8000/840	-25|60	9040	8310	54	154	4,3	1572	940
PRIMA LED Ex 2.5ft PCc 11000/840	-25|55	12050	11080	71	156	4,4	1572	940
PRIMA LED Ex 2.5ft PCc 16000/840	-25|40	17960	16520	106	156	4,6	1572	940
PRIMA LED Ex 2.5ft PCc 20000/840	-25|40	19200	17660	118	150	4,6	1572	940

14810 PRIMA LED Ex 1.4ft PCc 3200/840 = suitable replacement for PRIMA Ex 136 PCc E – 1 × 36 W
14830 PRIMA LED Ex 1.5ft PCc 4000/840 = suitable replacement for PRIMA Ex 158 PCc E – 1 × 58 W
14850 PRIMA LED Ex 2.4ft PCc 6400/840 = suitable replacement for PRIMA Ex 236 PCc E – 2 × 36 W
14870 PRIMA LED Ex 2.5ft PCc 8000/840 = suitable replacement for PRIMA Ex 258 PCc E – 2 × 58 W

Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
Version with emergency back-up source M1h, M3h								
PRIMA LED Ex 1.2ft PCc 1600/840 Mxh	0|45	1840	1690	11	154	2,5	662	350
PRIMA LED Ex 1.2ft PCc 2200/840 Mxh	0|45	2560	2350	16	147	2,5	662	350
PRIMA LED Ex 1.4ft PCc 3200/840 Mxh	0|50	3620	3330	23	145	3,7	1272	700
PRIMA LED Ex 1.4ft PCc 4400/840 Mxh	0|50	5070	4660	31	150	3,7	1272	700
PRIMA LED Ex 1.5ft PCc 4000/840 Mxh	0|50	4520	4150	27	154	4,6	1572	940
PRIMA LED Ex 1.5ft PCc 5500/840 Mxh	0|50	6320	5810	38	153	4,7	1572	940
PRIMA LED Ex 2.2ft PCc 3200/840 Mxh	0|40	3620	3330	22	151	2,6	662	350
PRIMA LED Ex 2.2ft PCc 4400/840 Mxh	0|35	5120	4710	31	152	2,6	662	350
PRIMA LED Ex 2.4ft PCc 6400/840 Mxh	0|45	7300	6710	43	156	3,9	1272	700
PRIMA LED Ex 2.4ft PCc 8800/840 Mxh	0|40	10160	9340	60	156	3,9	1272	700
PRIMA LED Ex 2.5ft PCc 8000/840 Mxh	0|45	9040	8310	54	154	4,8	1572	940
PRIMA LED Ex 2.5ft PCc 11000/840 Mxh	0|40	12050	11080	71	156	4,8	1572	940

Energy consumption of Mxh increased by 3 W until battery fully charged (max. 24 hours).

PRIMA LED Ex PCc

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
10628	PRIMA LED Ex 1.2ft PCc 1600/840	10638	10646	63853	63890	63863	63854
10629	PRIMA LED Ex 1.2ft PCc 2200/840	10639	10647	63882	63894	63868	63883
14810	PRIMA LED Ex 1.4ft PCc 3200/840	14811	14813	14814	14815	14817	14818
14820	PRIMA LED Ex 1.4ft PCc 4400/840	14821	14823	14824	14825	14827	14828
63850	PRIMA LED Ex 1.4ft PCc 6400/840	63888	63881	x	x	x	x
14830	PRIMA LED Ex 1.5ft PCc 4000/840	14831	14833	14834	14835	14837	14838
14840	PRIMA LED Ex 1.5ft PCc 5500/840	14841	14843	14844	14845	14847	14848
63860	PRIMA LED Ex 1.5ft PCc 8000/840	63892	63889	x	x	x	x
10633	PRIMA LED Ex 2.2ft PCc 3200/840	10642	10649	x	x	x	x
10637	PRIMA LED Ex 2.2ft PCc 4400/840	10643	10652	x	x	x	x
14850	PRIMA LED Ex 2.4ft PCc 6400/840	14851	14853	14854	14855	14857	14858
14860	PRIMA LED Ex 2.4ft PCc 8800/840	14861	14863	14864	14865	14867	14868
63865	PRIMA LED Ex 2.4ft PCc 12800/840	63861	63893	x	x	x	x
14870	PRIMA LED Ex 2.5ft PCc 8000/840	14871	14873	14874	14875	14877	14878
14880	PRIMA LED Ex 2.5ft PCc 11000/840	14881	14883	14884	14885	14887	14888
63851	PRIMA LED Ex 2.5ft PCc 16000/840	63866	63862	x	x	x	x
63880	PRIMA LED Ex 2.5ft PCc 20000/840	63852	63867	x	x	x	x

Example of type marking: 14853 = PRIMA LED Ex 2.4ft PCc 6400/840 **3F**

PRIMA LED Ex PCc DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
10658	PRIMA LED Ex 1.2ft PCc 1600/840 DALI	10672	x	63897	63872	x	x
10659	PRIMA LED Ex 1.2ft PCc 2200/840 DALI	10678	x	63901	63877	x	x
14910	PRIMA LED Ex 1.4ft PCc 3200/840 DALI	14911	14913	14914	14915	14917	14918
14920	PRIMA LED Ex 1.4ft PCc 4400/840 DALI	14921	14923	14924	14925	14927	14928
63891	PRIMA LED Ex 1.4ft PCc 6400/840 DALI	63870	63900	x	x	x	x
14930	PRIMA LED Ex 1.5ft PCc 4000/840 DALI	14931	14933	14934	14935	14937	14938
14940	PRIMA LED Ex 1.5ft PCc 5500/840 DALI	14941	14943	14944	14945	14947	14948
63895	PRIMA LED Ex 1.5ft PCc 8000/840 DALI	63875	63871	x	x	x	x
10668	PRIMA LED Ex 2.2ft PCc 3200/840 DALI	10682	x	x	x	x	x
10669	PRIMA LED Ex 2.2ft PCc 4400/840 DALI	10684	x	x	x	x	x
14950	PRIMA LED Ex 2.4ft PCc 6400/840 DALI	14951	14953	14954	14955	14957	14958
14960	PRIMA LED Ex 2.4ft PCc 8800/840 DALI	14961	14963	14964	14965	14967	14968
63864	PRIMA LED Ex 2.4ft PCc 12800/840 DALI	63856	63876	x	x	x	x
14970	PRIMA LED Ex 2.5ft PCc 8000/840 DALI	14971	14973	14974	14975	14977	14978
14980	PRIMA LED Ex 2.5ft PCc 11000/840 DALI	14981	14983	14984	14985	14987	14988
63869	PRIMA LED Ex 2.5ft PCc 16000/840 DALI	63884	63857	x	x	x	x
63855	PRIMA LED Ex 2.5ft PCc 20000/840 DALI	63896	63885	x	x	x	x

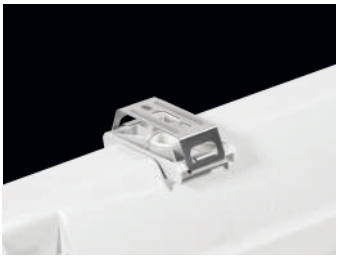
LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories



LIGHT FITTING DETAILED VIEW

PRIMA LED Ex

PRIMA LED TUBE

... dustproof, waterproof and impact-resistant.

USE

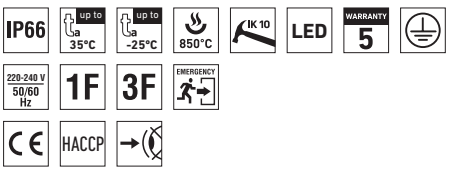
The light fitting is suitable for industrial indoor and outdoor roofed spaces, warehouses, sports areas, workshops, garages, transport terminals and utility structures without a danger of explosion of gas, dust and combustible fumes.

The light fitting is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have the increased resistance against deformation and impact.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic at installations in an aggressive environment, see also page 367).

ADVANTAGES

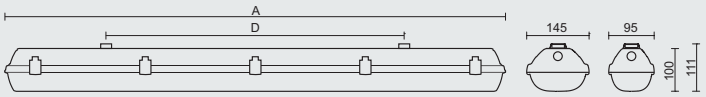
- Light fitting protection **IP66**
- Diffuser: transparent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate (PC) = high mechanical resistance
- Constant luminous flux even in ambient temperature of -25 °C
- Through-wiring of up to 10 wires at bodies of 2x120 and 2x150 type light fittings
- It can be delivered in emergency version



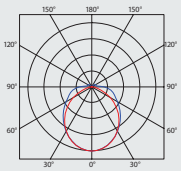
PRIMA LED TUBE PC, PCc

TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: t_a = 35 °C, Maximum ambient temperature: t_a = 0-25 °C (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 94 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Diffuser: transparent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate (PC), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: rubber (SBS)
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, three-pole (basic version)
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: for LED tubes Osram SubstiTUBE T8 EM Value 4000 K, 6500 K; lampholder G13

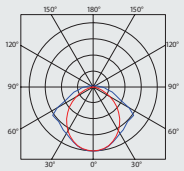


PRIMA LED TUBE 1x120



C0
C90

PRIMA LED TUBE 2x120



Type	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
For ambient temperature t_a = 35 °C - body: grey polycarbonate - diffuser: transparent polycarbonate - lampholder G13							
PRIMA LED TUBE 1x60 PC	800*	710	7,6	93	0,8	662	350
PRIMA LED TUBE 1x120 PC	1700*	1510	16,2	93	1,7	1272	700
PRIMA LED TUBE 1x150 PC	2000*	1780	19,1	93	1,9	1572	940
PRIMA LED TUBE 2x60 PC	1600*	1420	15,2	93	1,1	662	350
PRIMA LED TUBE 2x120 PC	3400*	3030	32,4	94	2,1	1272	700
PRIMA LED TUBE 2x150 PC	4000*	3560	38,2	93	2,5	1572	940

* - total luminous flux of the light fitting with Osram SubstiTUBE T8 EM Value sources

PRIMA LED TUBE PC

For LED tubes Osram SubstiTUBE T8 EM Value - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
37510	PRIMA LED TUBE 1x60 PC	37511	37513	x	x	x	x
37520	PRIMA LED TUBE 1x120 PC	37521	37523	x	x	x	x
37530	PRIMA LED TUBE 1x150 PC	37531	37533	x	x	x	x
37540	PRIMA LED TUBE 2x60 PC	37541	37543	37544	37545	37546	37547
37550	PRIMA LED TUBE 2x120 PC	37551	37553	37554	37555	37556	37557
37560	PRIMA LED TUBE 2x150 PC	37561	37563	37564	37565	37566	37567

PRIMA LED TUBE PCc

For LED tubes Osram SubstiTUBE T8 EM Value - stainless clips (c)

37610	PRIMA LED TUBE 1x60 PCc	37611	37613	x	x	x	x
37620	PRIMA LED TUBE 1x120 PCc	37621	37623	x	x	x	x
37630	PRIMA LED TUBE 1x150 PCc	37631	37633	x	x	x	x
37640	PRIMA LED TUBE 2x60 PCc	37641	37643	37644	37645	37646	37647
37650	PRIMA LED TUBE 2x120 PCc	37651	37653	37654	37655	37656	37657
37660	PRIMA LED TUBE 2x150 PCc	37661	37663	37664	37665	37666	37667

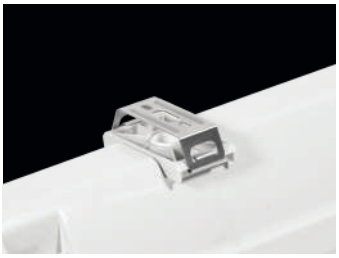
Example of type marking: 37653 = PRIMA LED TUBE 2x120 PCc **3F**

LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire
(L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories



LIGHT FITTING DETAILED VIEW

PRIMA LED TUBE

PRIMA LED TUBE SLIM

NEW

... dustproof, waterproof and impact-resistant.

USE

The light fitting is suitable for industrial indoor and outdoor roofed spaces, warehouses, sports areas, workshops, garages, transport terminals and utility structures without a danger of explosion of gas, dust and combustible fumes.

The light fitting is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have the increased resistance against deformation and impact.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic at installations in an aggressive environment, see also page 367).

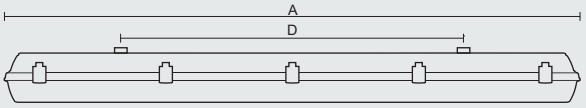
ADVANTAGES

- Light fitting protection **IP66**
- Diffuser: transparent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate (PC) = high mechanical resistance
- Constant luminous flux even in ambient temperature of -25 °C
- Through-wiring of up to 10 wires at bodies of 2x120 and 2x150 type light fittings
- It can be delivered in emergency version

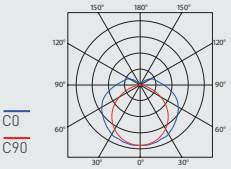
PRIMA LED TUBE SLIM PC, PCc

TECHNICAL DESCRIPTION

- Light fitting protection: **IP66**
- Maximum ambient temperature: t_a = **35 °C,** Maximum ambient temperature: t_a = 0-25 °C (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: **101 lm/W**
- The watt and lumen values can vary by ± 7,5 %
- Diffuser: transparent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate (PC), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: rubber (SBS)
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, three-pole (basic version)
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: for LED tubes Osram SubstiTUBE T8 EM Value 4000 K, 6500 K; lampholder G13



PRIMA LED TUBE SLIM 2x120



Code	Type	Luminous flux of LED modules [lm]*	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
	For ambient temperature t_a = 35 °C - body: grey polycarbonate - diffuser: transparent polycarbonate - lampholder G13							
11468	PRIMA LED TUBE SLIM 2x60 PC	1600*	1540	15,2	101	1,0	662	350
11469	PRIMA LED TUBE SLIM 2x120 PC	3400*	3260	32,4	101	2,0	1272	700
11470	PRIMA LED TUBE SLIM 2x150 PC	4000*	3840	38,2	101	2,4	1572	940

* - total luminous flux of the light fitting with Osram SubstiTUBE T8 EM Value sources

PRIMA LED TUBE SLIM PC

For LED tubes Osram SubstiTUBE T8 EM Value - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
11468	PRIMA LED TUBE SLIM 2x60 PC	11471	11474	11477	11480	11483	11486
11469	PRIMA LED TUBE SLIM 2x120 PC	11472	11475	11478	11481	11484	11487
11470	PRIMA LED TUBE SLIM 2x150 PC	11473	11476	11479	11482	11485	11488

PRIMA LED TUBE SLIM PCc

For LED tubes Osram SubstiTUBE T8 EM Value - stainless clips (c)

11489	PRIMA LED TUBE SLIM 2x60 PCc	11492	11495	11498	11501	11504	11507
11490	PRIMA LED TUBE SLIM 2x120 PCc	11493	11496	11499	11502	11505	11508
11491	PRIMA LED TUBE SLIM 2x150 PCc	11494	11497	11500	11503	11506	11509

Example of type marking: 11496 = PRIMA LED TUBE SLIM 2x120 PCc **3F**

LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire
(L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

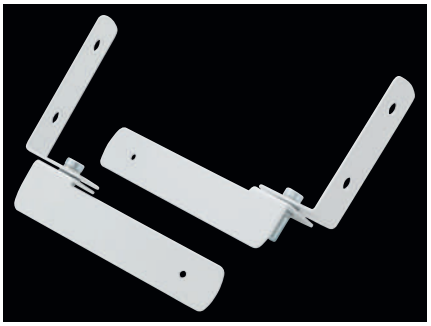
a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories

LIGHT FITTING DETAILED VIEW

PRIMA LED TUBE SLIM

BZ – side hanger

It serves to attach the light fitting to the wall with the possibility of its positioning.



Code	Type	Description	Weight [kg]
90002	BZ	side hanger with blocking (set for 1 light fitting)	0,4

Canalis busbar system connector

The connector enables a quick 1 phase or 3 phase interconnection of light fittings without their opening.

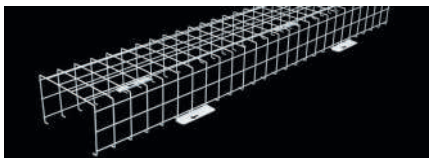
Code	Type	Description	Weight [kg]
79001	KBA 40 ZU	light fitting suspended holder - Canalis KBA system	0,1
70002	KBC 10 CC211	connector with 1 m cable - Canalis KBA system	0,2

Stucchi or Wieland connector

The connector enables a quick 1 phase or 3 phase interconnection of light fittings without their opening.

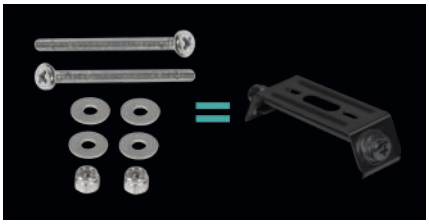
OM – protective grid

The metal grid protects the light fitting against mechanical damage and unauthorised handling. It is attached to the surface with the use of screws.
The surface is treated with the RAL 9003 powder-coated colour.



Code	Type	Description	Weight [kg]
11941	OM 218	protective grid for types 218, 214/224, x.2ft (700×220×130 mm)	1,0
11942	OM 236	protective grid for types 236, 228/254, x.4ft (1300×220×130 mm)	1,7
11943	OM 258	protective grid for types 258, 235/249/280, x.5ft (1600×220×130 mm)	2,0

Locking set for bracket G3



Code	Type	Description	Weight [kg]
11553	G3 SET	a locking set for G3 stainless steel bracket (bolts, nuts, washers)	0,2

CONCEPT RED

... for cows in the barns, chemically resistant.

USE

Cows barely detect a red light and therefore it is a perfect solution for illumination of barns when workers have to work with the animals during a time of the day when the cows have night. We know that cows need eight hours a day of darkness to be able to rest well. This solution saves you money and allows you to go on your rounds or carry out work without disturbing the cows.

It can be integrated into our INNOVA and FUTURA lighting.

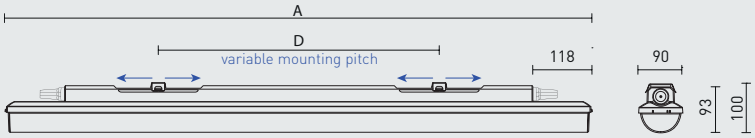
The light fixtures withstand exposure to chemically aggressive environments (ammonia in the air) typical of livestock farms.

The body made of ABS and the diffuser made of AC have increased chemical resistance.

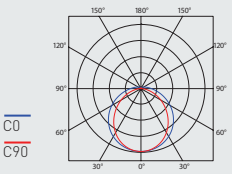
In addition to being protected against dust and humidity (IP66), the fixtures boast excellent thermal resistance, withstanding temperatures up to 50 °C.

IP69-rated, our INNOVA-range fittings may be washed using hot water (up to 80 °C).

INNOVA

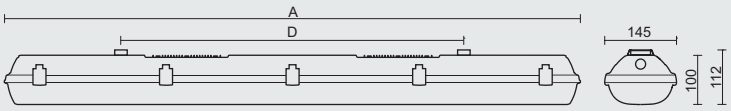


INNOVA 1.5ft ABS RED

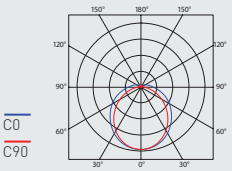


Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
EXAMPLE								
INNOVA 1.5ft ABS 4000/840	50	4000	3570	27	132	1,8	1455	700-980
INNOVA 1.5ft ABS 4000/840 RED	50	4000 / 620	3570 / 550	27 / 12	132 / 45	2,0	1455	700-980

FUTURA

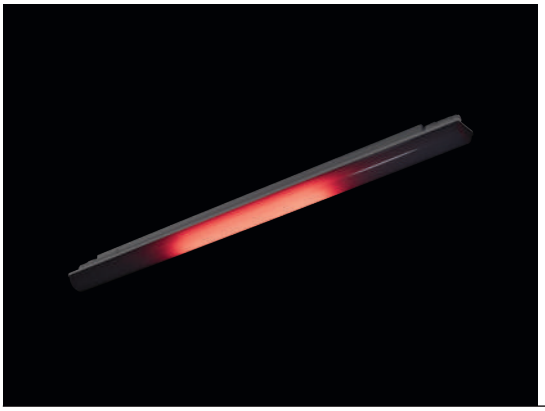


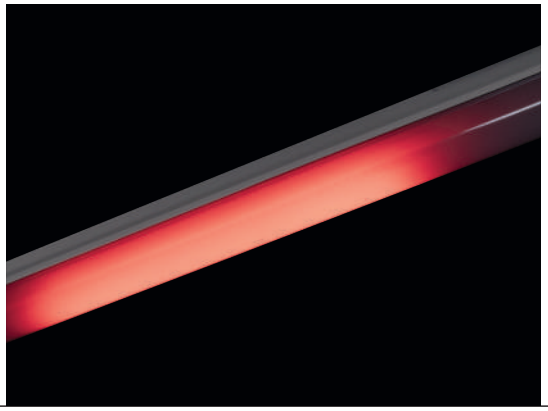
FUTURA 2.5ft ABS RED



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
EXAMPLE								
FUTURA 2.5ft ABS 11000/840	45	11000	9620	71	135	3,9	1452	940
FUTURA 2.5ft ABS 11000/840 RED	45	11000 / 620	9620 / 550	71 / 12	135 / 45	4,1	1452	940

LUMINAIRES FITTED WITH A RED LIGHT MODULE – DEMO





CONCEPT BLUE

... for poultry farms, chemically resistant.

USE

Light fixtures fitted with our special blue light producing LED module are primarily designed **to be used in poultry farms.** The benefit of this specific colour is it calms the poultry and suppresses aggressive its behavior.

The light fixtures contain only the blue light LED module.

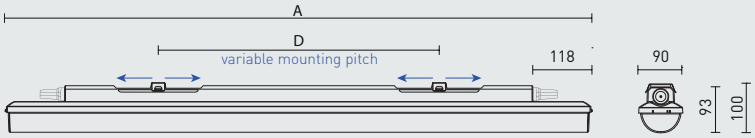
Our INNOVA, and FUTURA-range luminaires may be fitted with this module.

The light fixtures withstand exposure to chemically aggressive environments (ammonia in the air) typical of livestock farms.

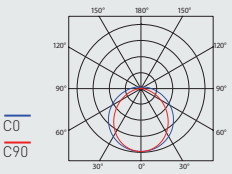
The body made of ABS and the diffuser made of AC have increased chemical resistance. In addition to being protected against dust and humidity (IP66), the fixtures boast excellent thermal resistance, withstanding temperatures up to 50 °C.

IP69-rated, our INNOVA-range fittings may be washed using hot water (up to 80 °C).

INNOVA

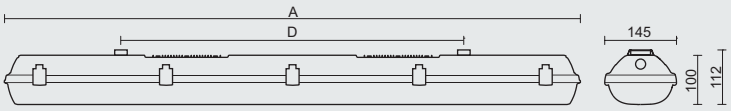


INNOVA 1.5ft ABS BLUE

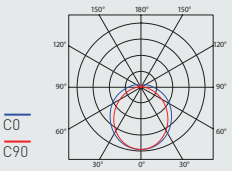


Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
EXAMPLE								
INNOVA 1.5ft ABS 4000/840	50	4000	3570	27	132	1,8	1455	700-980
INNOVA 1.5ft ABS 4000/840 BLUE	50	4000 / 640	3570 / 560	27 / 16	132 / 35	2,0	1455	700-980

FUTURA

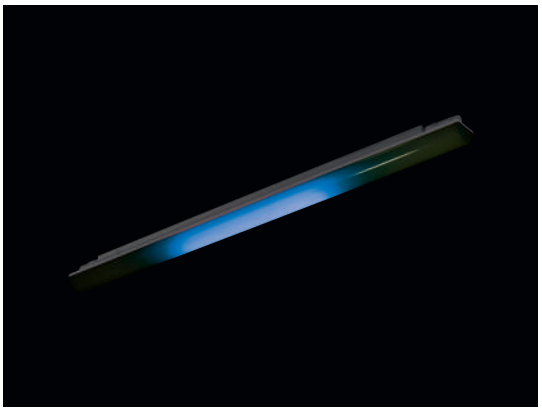


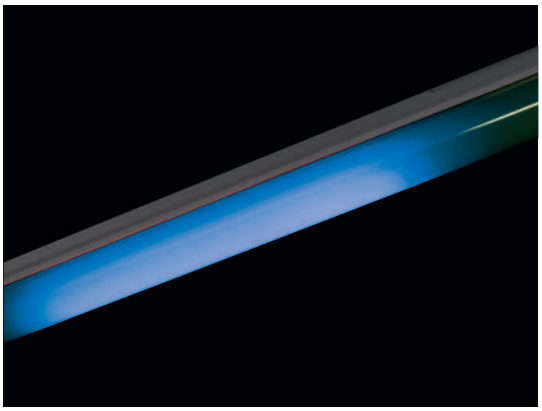
FUTURA 2.5ft ABS BLUE



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
EXAMPLE								
FUTURA 2.5ft ABS 11000/840	45	11000	9620	71	135	3,9	1452	940
FUTURA 2.5ft ABS 11000/840 BLUE	45	11000 / 640	9620 / 560	71 / 16	135 / 35	4,1	1452	940

LUMINAIRES FITTED WITH A BLUE LIGHT MODULE – DEMO





HUMAN CENTRIC LIGHTING

... to boost circadian rhythms.

INTRODUCING HUMAN CENTRIC LIGHTING

Ours is an era when people spend a big part of their day indoors in artificial light. Human centric lighting (HCL) is designed to mimic natural daylight as closely as possible to match the ideal circadian rhythms and thereby improve motivation and productivity, enhance concentration and promote well-being at workplace.

Adjustability of correlated colour temperature (CCT) to suit different tasks and times of day is a major benefit of HCL. While low CCT (warm) light helps users to calm down such as when facing high stress, cooler white light (high CCT) energizes and boosts productivity and creativity.

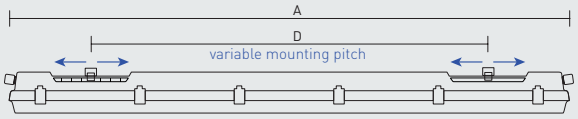
Here is how HCL works. Imagine you and your children are waking up on a Monday morning. Warm, lower intensity light at sunrise will give your family a soft start to the day while cooler light will help you concentrate at the important meeting later on. Switching back to warm light later in the afternoon is what people normally do because it promotes relaxation. However, if you have to work late today to meet a rapidly approaching deadline, sticking to cooler light longer will help you stay alert and creative. In contrast, a few hours later, with the children in bed and a productive day behind you, it is finally time to enjoy a bit of a me time, perhaps with a book in your lap. Whatever the way you choose to wind down before going to sleep, warm light will help you do just that. And it will take some of the strain off your eyes too.

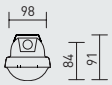
HCL is commonly used in offices, hospitals, schools, libraries and care homes but is recently also gaining popularity in residential spaces as well as in industrial and agricultural facilities.

SPECIFICATIONS

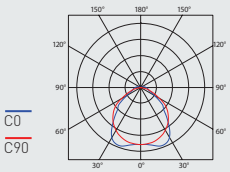
- Lifetime: 50,000 hours (L80B10)
- Constant light output (CLO) for the duration of the product's lifetime (if fitted with a DALI)
- Emergency version available
- Controlled through a mobile app installed on your smartphone or tablet
- Adjustable correlated colour temperature (CCT)
- Dimming
- Lighting planning with time programmes
- Creation of separately controlled groups and scenes possible
- Simple system adjustment and extension

NANOTTICA



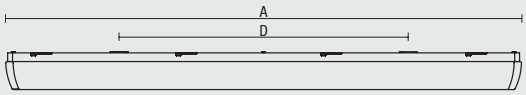


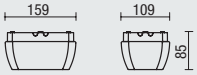
NANOTTICA 1.5ft ABS TW



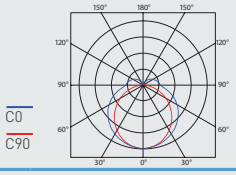
Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
EXAMPLE								
NANOTTICA 1.5ft ABSc 5500/827-865 TW	45	5500	4670	39	126	2,0	1455	970 - 1230

LINEA



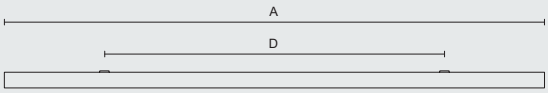


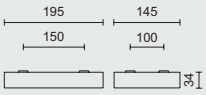
LINEA 1.4ft TW



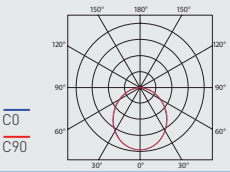
Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
EXAMPLE								
LINEA 1.4ft 4400/827-865 TW	35	4400	3720	30	124	1,9	1160	650

NAOS





NAOS 1.5ft TW



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
EXAMPLE								
NAOS 1.5ft 5500/827-865 TW	35	5500	4500	39	115	4,4	1460	1310

CRI > 80

Type	Luminous flux of LED modules [lm]	Power consumption [W]
CRI > 80		
Luminaire 1.2ft TW xx 2200/827-865	2200	16
Luminaire 1.4ft TW xx 4400/827-865	4400	31
Luminaire 1.5ft TW xx 5500/827-865	5500	39
Luminaire 2.2ft TW xx 4400/827-865	4400	31
Luminaire 2.4ft TW xx 8800/827-865	8800	62
Luminaire 2.5ft TW xx 11000/827-865	11000	78

Example: PRIMA LED 1.5ft TW PC 5500/827-865

CRI > 90

Type	Luminous flux of LED modules [lm]	Power consumption [W]
CRI > 90		
Luminaire 1.2ft TW xx 3200/927-965	3200	29
Luminaire 1.4ft TW xx 6400/927-965	6400	49
Luminaire 1.5ft TW xx 8000/927-965	8000	60

Example: NAOS 1.2ft TW 3200/927-965

LEGEND

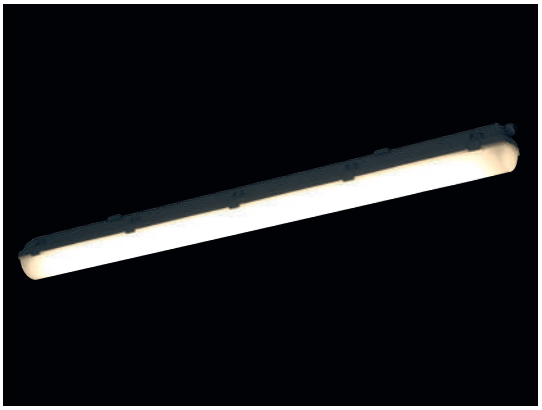
xx – materials (PC, ABS, applicable for the luminaires INNOVA, FUTURA and PRIMA LED)
TW – HUMAN CENTRIC LIGHTING

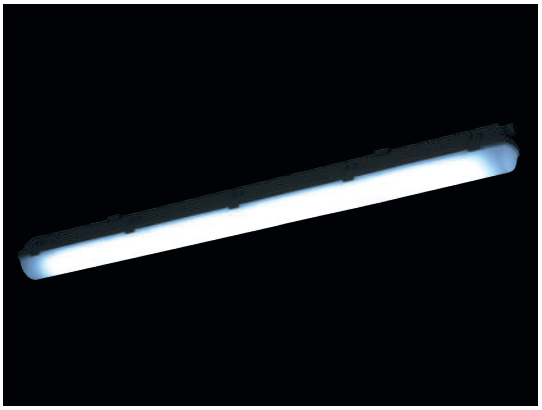
A TW module is available for most of our luminaires:

Industrial fittings:
NANOTTICA
INNOVA
FUTURA
PRIMA LED
PERUN SLIM
ALUMAX LED

Indoor fittings:
LINEA and LINEA SQUARE
BELTR LED
NAOS
LUXOR LED

LUMINAIRES FITTED WITH A TUNABLE WHITE LIGHT MODULE – DEMO





TrEx

INDUSTRIAL

STEEL / INOX

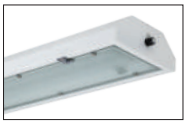
DUSTPROOF

WATERPROOF

TrEx – industrial metal LED light fitting for the environment with a danger of explosion

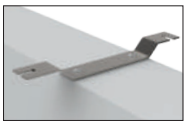
TrEx
page 228

IP66



TrEx
page 228

TrEx
ACCESSORIES
page 232



TrEx
ACCESSORIES
page 232

TrEx

... for explosion hazard environment group II, category 2 (zone 1, 21 and 2, 22).

USE

The metal light fitting with satinated tempered safety glass is suitable for environment with hazard of explosion of gases, vapours and dust for zones 1, 21 and 2,22. It meets the requirements of the European Community Directive No. 2014/34/EU. It is resistant against chemically aggressive environment, therefore it fits for industrial premises like chemical factories, plants for processing of gases and oil, power plants, army facilities, automotive factories, laboratories and other facilities of heavy and mechanical engineering. The light fitting in IP66 protection is resistant against dust and splashing water.

USE IN ENVIRONMENT WITH HAZARD OF EXPLOSION

TÜV CY 21 ATEX 0206562X	Light fitting with disconnector	Ex II 2G Ex db eb mb op is IIC T4 Gb
	Light fitting Mxh with disconnector	Ex II 2D Ex tb IIIC T68°C Db
	Light fitting without disconnector	Ex II 2G Ex eb mb op is IIC T4 Gb
	Light fitting Mxh without disconnector	Ex II 2D Ex tb IIIC T68°C Db
AR19ATEX131U	Ex battery box HM 4Ah	Ex II 2G Ex d IIC T4 Gb
TÜV CY 20 ATEX 0206368 U	Ex disconnector OT 2A-2C Ex d	Ex II 2G Ex db IIC Gb

The basic requirements for safety and health protection are secured by verification of conformity with EN 60079-0, EN 60079-7, EN 60079-18, EN 60079-1, EN 60079-28 and EN 60079-31.

ADVANTAGES

- Light fitting protection **IP66**
- High temperature resistance on a range from **t_a = -40 °C to t_a = 55 °C**
- For hazardous areas of zones 1, 21 and 2, 22
- Lifetime: 75 000 hours / L80B50 at t_a = 55°C, 110 000 hours / L70B50 at t_a = 55°C
- Cable glands: plastic ATEX M20 × 1,5, or metallic (INOX version on request)
- Wide fixing options including recessed frame for false ceiling
- Up to 45 % lower power consumption as compared to fluorescent tubes
- Constant luminous flux even at ambient temperature of -40°C
- Standard model CRI > 80: 4000 K, at request CRI > 80: 3000 K, 5000 K, 5700 K
- Optional through-wiring of up to 7 wires at reflector

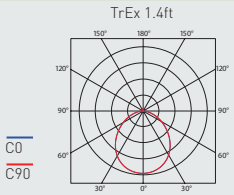
TrEx

TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Minimum ambient temperature: t_a = -40 °C
- Maximum ambient temperature: t_a = 55 °C
- Ambient temperature: t_a = 0 – 40 °C (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 147 lm/W
- CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 75 000 hours / L80B50 at t_a = 55 °C, 110 000 hours / L70B50 at t_a = 55°C
- Body: powder coated steel sheet RAL 9003, or INOX (AISI 304)
- Diffuser: satinated tempered safety glass
- Sealing: glued EPDM
- Cable glands: plastic ATEX M20 × 1,5, or metallic (INOX version on request)
- Terminal block: ATEX, screwless WAGO, Cable cross-section max: 4 mm^2
- Installation: the package includes suspensory eyes 2 × M6
- Electric equipment: LED modules, current driver, disconnector and Ex battery box with ATEX certificate
- The watt and lumen values can vary by ± 7,5 %

AT REQUEST

- CRI > 80: 3000 K, 5000 K, 5700 K
- Halogen-free wires
- Design modification for fixing and connecting in the false ceiling
- Diffuser: transparent tempered safety glass
- Cable glands: metal or armoured ATEX cable glands M20 × 1,5 or M25 × 1,5
- Increased number of cable entries on sides and in upper part of light fitting if recessed frame for false ceiling mounted



Type	Min. and max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	System input [W]	System efficiency [lm/W]	Net weight [kg]	A [mm]	D [mm]
Light fitting without a battery system								
TrEx 1.2ft 3200/840	-40 / 55	2800	2350	19	123	8,3	730	350
TrEx 1.2ft 4400/840	-40 / 55	4000	3360	27	124	8,3	730	350
TrEx 1.4ft 6400/840	-40 / 55	5600	4700	35	134	14,6	1300	700
TrEx 1.4ft 8800/840	-40 / 55	8000	6720	50	134	14,6	1300	700
TrEx 1.5ft 8000/840	-40 / 55	7000	5880	40	147	17,3	1580	700
TrEx 1.5ft 11000/840	-40 / 55	10000	8400	59	142	17,3	1580	700
TrEx 2.2ft 6400/840	-40 / 55	5600	4700	35	134	8,9	730	350
TrEx 2.2ft 8800/840	-40 / 50	8000	6720	50	134	8,9	730	350
TrEx 2.4ft 12800/840	-40 / 55	11200	9400	67	140	16,0	1300	700
TrEx 2.4ft 17600/840	-40 / 50	16000	13440	100	134	16,0	1300	700
TrEx 2.5ft 16000/840	-40 / 55	14000	11760	80	147	18,9	1580	700
TrEx 2.5ft 22000/840	-40 / 50	20000	16800	121	138	18,9	1580	700

Type	Min. and max. ambient temperature [°C]	Emergency light fluxof light fitting 1h [lm]	Emergency light fluxof light fitting 3h [lm]	Power in standby mode [W]	Battery type	Net weight [kg]
EM emergency lighting kit						
TrEx 1.2ft 4400/840 Mxh	0 / 40	990	630	2	NiCd HT	+1,3
TrEx 1.4ft 8800/840 Mxh	0 / 40	790	580	2	NiCd HT	+1,3

TrEx DIS

Light fitting with disconnector

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
10339	TrEx 1.2ft 3200/840 DIS	10357	10379	x	x	x	x
10341	TrEx 1.2ft 4400/840 DIS	10358	10382	10409	10429	10445	10451
10342	TrEx 1.4ft 6400/840 DIS	10359	10388	x	x	x	x
10343	TrEx 1.4ft 8800/840 DIS	10361	10389	10418	10438	10447	10453
10346	TrEx 1.5ft 8000/840 DIS	10362	10392	x	x	x	x
10347	TrEx 1.5ft 11000/840 DIS	10363	10398	x	x	x	x
10348	TrEx 2.2ft 6400/840 DIS	10366	10399	x	x	x	x
10349	TrEx 2.2ft 8800/840 DIS	10367	10402	x	x	x	x
10351	TrEx 2.4ft 12800/840 DIS	10368	10404	x	x	x	x
10352	TrEx 2.4ft 17600/840 DIS	10369	10405	x	x	x	x
10353	TrEx 2.5ft 16000/840 DIS	10372	10406	x	x	x	x
10356	TrEx 2.5ft 22000/840 DIS	10378	10407	x	x	x	x

TrEx

Light fitting without disconnector

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
10219	TrEx 1.2ft 3200/840	10237	10253	x	x	x	x
10222	TrEx 1.2ft 4400/840	10238	10256	10289	10298	10318	10334
10224	TrEx 1.4ft 6400/840	10239	10257	x	x	x	x
10225	TrEx 1.4ft 8800/840	10241	10258	10294	10302	10322	10336
10226	TrEx 1.5ft 8000/840	10242	10259	x	x	x	x
10227	TrEx 1.5ft 11000/840	10243	10262	x	x	x	x
10228	TrEx 2.2ft 6400/840	10246	10268	x	x	x	x
10229	TrEx 2.2ft 8800/840	10247	10269	x	x	x	x
10231	TrEx 2.4ft 12800/840	10248	10272	x	x	x	x
10232	TrEx 2.4ft 17600/840	10249	10278	x	x	x	x
10233	TrEx 2.5ft 16000/840	10251	10279	x	x	x	x
10236	TrEx 2.5ft 22000/840	10252	10282	x	x	x	x

TrEx DIS INOX

Light fitting with disconnector, body steel sheet grade AISI 304

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
10519	TrEx 1.2ft 3200/840 DIS INOX	10537	10572	x	x	x	x
10521	TrEx 1.2ft 4400/840 DIS INOX	10538	10574	10602	10616	10623	10632
10522	TrEx 1.4ft 6400/840 DIS INOX	10539	10575	x	x	x	x
10523	TrEx 1.4ft 8800/840 DIS INOX	10542	10576	10609	10618	10627	10636
10526	TrEx 1.5ft 8000/840 DIS INOX	10548	10577	x	x	x	x
10527	TrEx 1.5ft 11000/840 DIS INOX	10549	10578	x	x	x	x
10528	TrEx 2.2ft 6400/840 DIS INOX	10552	10579	x	x	x	x
10529	TrEx 2.2ft 8800/840 DIS INOX	10558	10582	x	x	x	x
10531	TrEx 2.4ft 12800/840 DIS INOX	10559	10588	x	x	x	x
10532	TrEx 2.4ft 17600/840 DIS INOX	10562	10589	x	x	x	x
10533	TrEx 2.5ft 16000/840 DIS INOX	10568	10592	x	x	x	x
10536	TrEx 2.5ft 22000/840 DIS INOX	10569	10598	x	x	x	x

TrEx INOX

Light fitting without disconnector, body steel sheet grade AISI 304

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
10456	TrEx 1.2ft 3200/840 INOX	10468	10480	x	x	x	x
10457	TrEx 1.2ft 4400/840 INOX	10469	10481	10493	10499	10505	10512
10458	TrEx 1.4ft 6400/840 INOX	10470	10482	x	x	x	x
10459	TrEx 1.4ft 8800/840 INOX	10471	10483	10495	10501	10507	10516
10460	TrEx 1.5ft 8000/840 INOX	10472	10484	x	x	x	x
10461	TrEx 1.5ft 11000/840 INOX	10473	10485	x	x	x	x
10462	TrEx 2.2ft 6400/840 INOX	10474	10486	x	x	x	x
10463	TrEx 2.2ft 8800/840 INOX	10475	10487	x	x	x	x
10464	TrEx 2.4ft 12800/840 INOX	10476	10488	x	x	x	x
10465	TrEx 2.4ft 17600/840 INOX	10477	10489	x	x	x	x
10466	TrEx 2.5ft 16000/840 INOX	10478	10490	x	x	x	x
10467	TrEx 2.5ft 22000/840 INOX	10479	10491	x	x	x	x

LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire
(L3 used for emergency unit unswitched power supply)

DIS – light fitting with disconnector

CERTIFICATION

TÜV CY 21 ATEX 0206562X - TrEx, TrEx Mxh

Directive		Standards
2014/34/EU	ATEX	EN 60079-0:2012 + A11:2013
		EN IEC 60079-0:2018
		EN 60079-1:2014
		EN 60079-7:2015
		EN 60079-18:2015
		EN 60079-28:2015
		EN 60079-31:2014
2014/35/EU	General requirements and standards	EN 60598-1:2015
		EN 60598-2-1:89
		EN 62471:2008
		EN 55015:2013
		EN 60598-2-22:2014
		EN 61547:2009
		EN 61000-3-2:14
		EN 61000-3-3:13
2011/65/EN	RoHS	EN 50581:2012

AR19ATEX131U - Ex battery box HM4Ah

Directive		Standards
2014/34/EU	ATEX	EN IEC 60079-0:2018
		EN 60079-1:2014

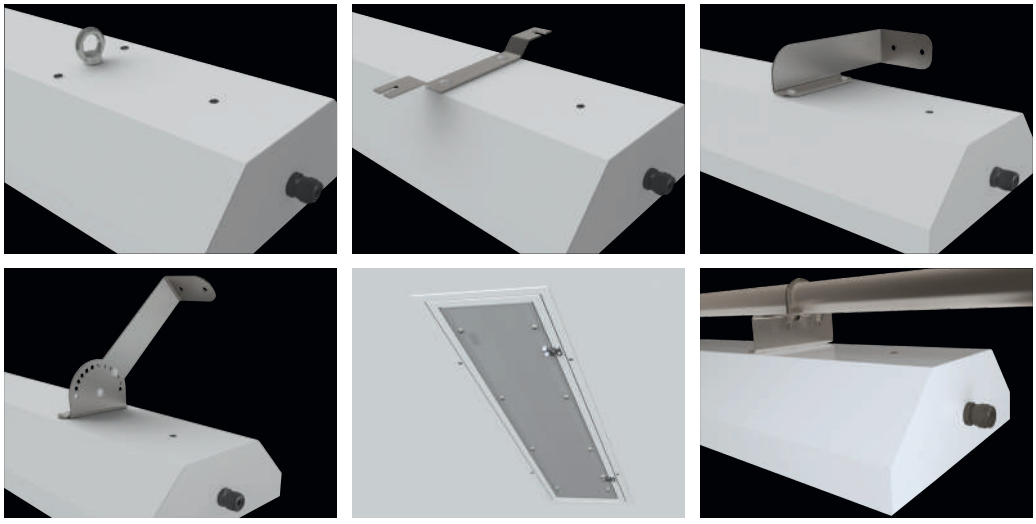
TÜV CY 20 ATEX 0206368 U - Ex disconnector OT 2A-2C Ex d

Directive		Standards
2014/34/EU	ATEX	EN IEC 60079-0:2018
		EN 60079-1:2014

	Identification of external influences	Classification of spaces	
		Identification	Establishment regulation
Hazard of explosion of flammable dust	BE3N1	ZONE 21, 22	EN 60079-17
			EN 60079-14
			EN 60079-10-2
Hazard of explosion of flammable gases and vapours	BE3N2	ZONE 1, 2	EN 60079-10-1
			EN 60079-14
			EN 60079-17

LIGHT FITTING ATTACHMENT

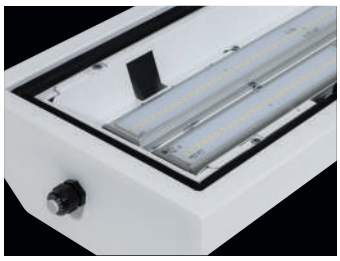
a) Suspension eyes 2×M6 - in standard model
b) Holders directly on the ceiling
c) Side suspensions on the wall
d) Adjustable side suspensions on the wall
e) Recessed frame for false ceiling
f) Holders on tube structures

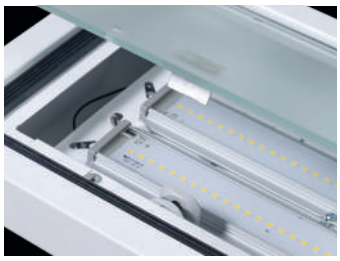


LIGHT FITTING DETAILED VIEW

TrEx

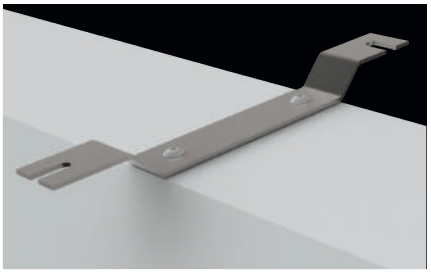
version with disconnector





Ceiling suspension

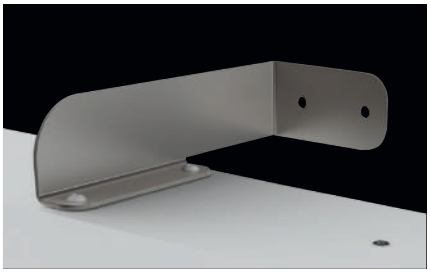
Serves for hanging the light fitting on the ceiling.



Code	Type	Description	Weight [kg]
62694	TrEx suspension 3	Metal holder for direct suspending on the ceiling. Holder - 2 pcs, screw M6×16 - 4 pcs assembly.	0,6
62695	TrEx suspension 3 INOX	Stainless-steel holder for direct suspending on the ceiling. Holder - 2 pcs, screw M6×16 - 4 pcs for assembling.	0,6

Side suspension

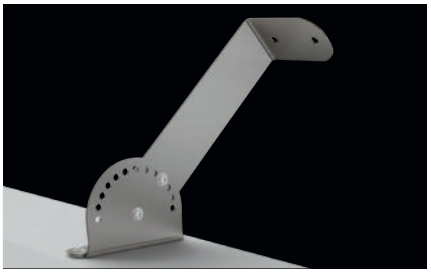
Serves for firm fixation of the light fitting on the wall.



Code	Type	Description	Weight [kg]
62690	TrEx suspension 1	Metal holder for direct suspension on the wall. Holder - 2 pcs, screw M6×16 - 4 pcs for assembling	1,4
62691	TrEx suspension 1 INOX	Stainless-steel holder for direct suspension on the wall. Holder - 2 pcs, screw M6×16 - 4 pcs for assembling	1,4

Adjustable side suspension

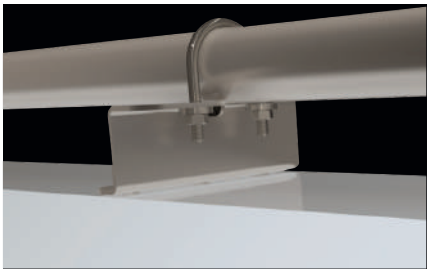
Serves for hanging the light fitting on the wall, ceiling, sloped surfaces, and enables positioning the light fitting from 0 to 90°, with a step of 15°.



Code	Type	Description	Weight [kg]
62692	TrEx suspension 2	Metal holder for direct suspending on the wall or ceiling. Holder - 2 pcs, screw M6×16 - 8 pcs for assembling.	1,5
62693	TrEx suspension 2 INOX	Stainless-steel holder for direct suspending on the wall and ceiling. Holder - 2 pcs, screw M6×16 - 8 pcs for assembling.	1,5

Pipeline holder

Serves for suspending the light fitting to tube structures with a diameter of ¾" – 2" by means of pipeline clamps.



Code	Type	Description	Weight [kg]
62696	TrEx holder	Metal holder for direct suspending on the tube structures. Holder - 2 pcs, screw M6×16 - 4 pcs, nut M8 - 4 pcs, washer 8.2 - 4 pcs, pipeline clamp ETR M8 - 2 pcs for assembling.	0,8
62697	TrEx holder INOX	Stainless-steel holder for direct suspending to tube structures. Holder - 2 pcs, screw M6×16 - 4 pcs, nut M8 - 4 pcs, washer 8.2 - 4 pcs, pipeline clamp ETR M8 - 2 pcs for assembling.	0,8

Recessed frame for false ceiling

Serves for fixing the light fitting into the false ceiling by means of a recessed frame and modified customize body. For ceiling thickness 0-24 mm.

Type	Description
TrEx fixture body with a frame	Raster ceiling mounted fixture body, frame, screw M6×16 - 4 pcs, screw M6×60 - 4 pcs, washer 6,2 - 4 pcs, suspension M6 for plasterboard - 4 pcs for assembling.

Please, contact our sales representative to order a raster ceiling mounted fixture body with a frame.

SAÍDA

PERUN SLIM

INDUSTRIAL

STAINLESS

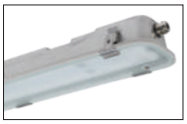
DUSTPROOF

WATERPROOF

PERUN SLIM – industrial metal LED light fitting

PERUN SLIM
page 236

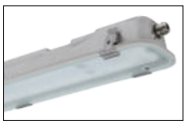
IP65



PERUN SLIM
page 236

PERUN SLIM Ex
page 239

IP65



PERUN SLIM Ex
page 239

PERUN SLIM

... stainless, dustproof, waterproof.

USE

The light fitting is suitable for industrial indoor and outdoor roofed spaces, warehouses, garages, workshops, sports areas, transport terminals, utility structures, agricultural operations and laboratories without a danger of explosion of gas, dust and combustible fumes.

The light fitting is resistant to deformation, dust, spouting water and have increased chemical resistance.

Characteristics of the used tempered glass and its shattering power are controlled by the ČSN EN 12150-1 standard. For applications where spontaneous fracture means a higher safety risk, we recommend to use the version with the safety film (SF).

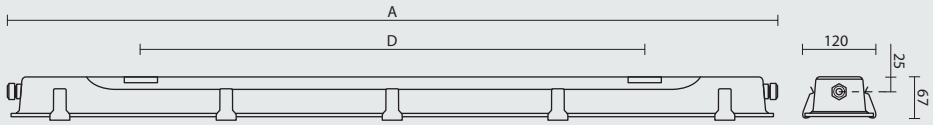
ADVANTAGES

- Light fitting protection **IP65**
- Maximum ambient temperature up to t_a = **45 °C**
- Lifetime: 50,000 hours / L90B10
- High chemical and mechanical robustness IK10
- Diffuser: satinated tempered safety glass
- Body: stainless sheet
- Up to 45 % lower electricity consumption when compared to tubes T5
- It can be delivered in dimmable or permanent emergency version M1h and M3hAt
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25 °C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K

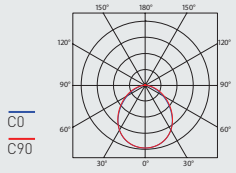
PERUN SLIM

TECHNICAL DESCRIPTION

- Light fitting protection: IP65
- Maximum ambient temperature: t_a = 45 °C, Maximum ambient temperature: t_a = 0-25 °C with a back-up power supply M1h, M3hAt
- Maximum system efficacy: 140 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: satinated tempered safety glass
- Possibility of delivery of the diffuser with a safety foil (SF)
- Possibility of delivery of an EM kit M1h with battery autotesting
- Body: stainless sheet, impact-resistant, chemically resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: stainless
- Sealing: silicone, at light fitting body
- Cable glands: PG 13.5 brass with surface treatment
- Terminal block: screwless, three-pole (basic version)
- The package includes: stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver or current driver DALI



PERUN SLIM 1.4ft



Type	Ambient temperature [°C]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Body: stainless sheet - diffuser: polished thermally toughened safety glass								
PERUN SLIM 1.2ft 1300/840	-25|45	1050	8,2	128	19.5 / 20.3	2,4	680	360
PERUN SLIM 1.2ft 1600/840	-25|45	1250	9,8	128	20.1 / 20.9	2,4	680	360
PERUN SLIM 1.2ft 2200/840	-25|45	1710	13,2	130	21.2 / 22.0	2,4	680	360
PERUN SLIM 1.4ft 2600/840	-25|45	2080	16,1	129	19.6 / 20.4	4,3	1290	850
PERUN SLIM 1.4ft 3200/840	-25|45	2480	19,1	130	20.2 / 21.1	4,3	1290	850
PERUN SLIM 1.4ft 4400/840	-25|45	3440	26,0	132	21.4 / 22.2	4,3	1290	850
PERUN SLIM 1.4ft 6400/840	-25|40	4900	36,1	136	22.6 / 23.4	4,3	1290	850
PERUN SLIM 1.5ft 3250/840	-25|45	2590	19,5	133	19.6 / 20.5	5,3	1600	1050
PERUN SLIM 1.5ft 4000/840	-25|45	3080	23,3	132	20.2 / 21.1	5,3	1600	1050
PERUN SLIM 1.5ft 5500/840	-25|45	4270	31,9	134	21.4 / 22.2	5,3	1600	1050
PERUN SLIM 1.5ft 8000/840	-25|40	6220	44,3	140	22.7 / 23.5	5,3	1600	1050

86720 PERUN SLIM 1.2ft 1600/840 = suitable replacement for T8 fl. tube light fitting PERUN 118 – 1×18 W
86750 PERUN SLIM 1.4ft 3200/840 = suitable replacement for T8 fl. tube light fitting PERUN 136 – 1×36 W
86770 PERUN SLIM 1.4ft 6400/840 = suitable replacement for T8 fl. tube light fitting PERUN 236 – 2×36 W
86790 PERUN SLIM 1.5ft 4000/840 = suitable replacement for T8 fl. tube light fitting PERUN 158 – 1×58 W
86810 PERUN SLIM 1.5ft 8000/840 = suitable replacement for T8 fl. tube light fitting PERUN 258 – 2×58 W

PERUN SLIM

Non-dimmable driver, diffuser: polished thermally toughened safety glass

Code	Type	1F	3F	M1h	M3hAt	3F M1h	3F M3hAt
86710	PERUN SLIM 1.2ft 1300/840	86711	86713	x	x	x	x
86720	PERUN SLIM 1.2ft 1600/840	86721	86723	x	x	x	x
86730	PERUN SLIM 1.2ft 2200/840	86731	86733	x	x	x	x
86740	PERUN SLIM 1.4ft 2600/840	86741	86743	86744	86745	86746	86747
86750	PERUN SLIM 1.4ft 3200/840	86751	86753	86754	86755	86756	86757
86760	PERUN SLIM 1.4ft 4400/840	86761	86763	86764	86765	86766	86767
86770	PERUN SLIM 1.4ft 6400/840	86771	86773	x	x	x	x
86780	PERUN SLIM 1.5ft 3250/840	86781	86783	86784	86785	86786	86787
86790	PERUN SLIM 1.5ft 4000/840	86791	86793	86794	86795	86796	86797
86800	PERUN SLIM 1.5ft 5500/840	86801	86803	86804	86805	86806	86807
86810	PERUN SLIM 1.5ft 8000/840	86811	86813	x	x	x	x

PERUN SLIM DALI

Digital dimmable driver DALI, diffuser: polished thermally toughened safety glass

Code	Type	1F	3F	M1h	M3hAt	3F M1h	3F M3hAt
86820	PERUN SLIM 1.2ft 1300/840 DALI	86821	x	x	x	x	x
86830	PERUN SLIM 1.2ft 1600/840 DALI	86831	x	x	x	x	x
86840	PERUN SLIM 1.2ft 2200/840 DALI	86841	x	x	x	x	x
86850	PERUN SLIM 1.4ft 2600/840 DALI	86851	86853	86854	86855	86856	86857
86860	PERUN SLIM 1.4ft 3200/840 DALI	86861	86863	86864	86865	86866	86867
86870	PERUN SLIM 1.4ft 4400/840 DALI	86871	86873	86874	86875	86876	86877
86880	PERUN SLIM 1.4ft 6400/840 DALI	86881	86883	x	x	x	x
86890	PERUN SLIM 1.5ft 3250/840 DALI	86891	86893	86894	86895	86896	86897
86900	PERUN SLIM 1.5ft 4000/840 DALI	86901	86903	86904	86905	86906	86907
86910	PERUN SLIM 1.5ft 5500/840 DALI	86911	86913	86914	86915	86916	86917
86920	PERUN SLIM 1.5ft 8000/840 DALI	86921	86923	x	x	x	x

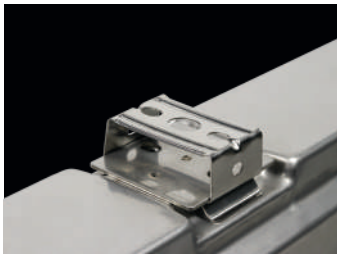
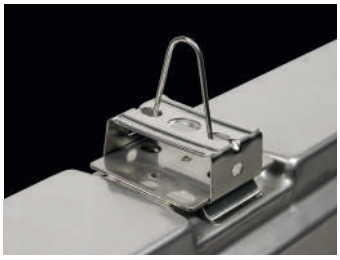
Example of type marking: 86916 = PERUN SLIM 1.5ft 5500/840 **3F M1h**

LEGEND

1F	1-phase 3 core through-wiring in the luminaire
3F	3-phase 5 core through-wiring in the luminaire
M1h	emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h	emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh	3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
DALI	version with digital dimmable driver DALI
DALI 1F	1-phase 5 core through-wiring in the luminaire
DALI 3F	3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh	3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks

LIGHT FITTING DETAILED VIEW

PERUN SLIM

PERUN SLIM Ex

NEW

... for explosion hazard environment group II, category 3 (zone 2, 22).

USE

The light fitting is suitable for the environment with a danger of explosion of gas, dust and combustible fumes. The light fittings meet the requirements of European Community Directive No.2014/34/EU.

The light fitting is certified for the environment:
Ɛx II 3G Ex nR IIC T6 Gc
Ɛx II 3D Ex tc IIIC T70°C Dc

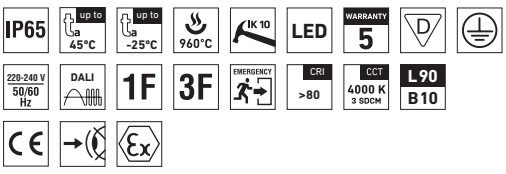
The basic requirements for safety and health protection are secured by the verification of conformity with the standards according to EN 60079-15, EN 60079-0 and EN 60079-31.

The light fitting is resistant to deformation, dust, spouting water and have increased chemical resistance.

Characteristics of the used tempered glass and its shattering power are controlled by the EN 12150-1 standard. For applications where spontaneous fracture means a higher safety risk.

ADVANTAGES

- Light fitting protection **IP65**
- Maximum ambient temperature up to t_a = **45 °C**
- Lifetime: 50,000 hours / L90B10
- High chemical and mechanical robustness IK10
- Diffuser: satinated tempered safety glass
- Body: stainless sheet
- Up to 45 % lower electricity consumption when compared to tubes T5
- It can be delivered in dimmable or permanent emergency version M3h
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25 °C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- Certification: TÜV CY 23 ATEX 0206818 X

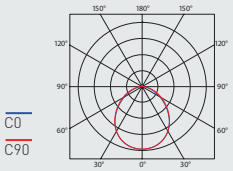


PERUN SLIM Ex

TECHNICAL DESCRIPTION

- Light fitting protection: IP65
- Maximum ambient temperature: t_a = 45 °C, Maximum ambient temperature: t_a = 0-35 °C with a back-up power supply M3h
- Maximum system efficacy: 141 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: satinated tempered safety glass
- Body: stainless sheet, impact-resistant, chemically resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: stainless
- Sealing: silicone, at light fitting body
- Cable glands: M20x1.5 ATEX - plastic, stainless or brass with surface treatment
- Terminal block: screwless, three-pole (basic version)
- The package includes: stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver or current driver DALI

PERUN SLIM Ex 1.4ft



Type	Ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Body: stainless sheet - diffuser: satinated tempered safety glass									
PERUN SLIM Ex 1.2ft 1600/840	-25|45	1820	1460	11,4	128	20.6 / 21.5	2,4	680	360
PERUN SLIM Ex 1.2ft 2200/840	-25|45	2500	2000	15,4	130	21.7 / 22.6	2,4	680	360
PERUN SLIM Ex 1.4ft 3200/840	-25|45	3620	2900	22,2	131	20.8 / 21.6	4,3	1290	850
PERUN SLIM Ex 1.4ft 4400/840	-25|45	5020	4020	30,3	133	21.9 / 22.7	4,3	1290	850
PERUN SLIM Ex 1.4ft 6400/840	-25|40	7140	5710	42,1	136	23.1 / 24.0	4,3	1290	850
PERUN SLIM Ex 1.4ft 8800/840	-25|40	10140	8110	57,9	140	24.3 / 25.2	4,3	1290	850
PERUN SLIM Ex 1.5ft 4000/840	-25|45	4490	3590	27,1	132	20.8 / 21.6	5,3	1600	1050
PERUN SLIM Ex 1.5ft 5500/840	-25|45	6230	4980	37,2	134	21.9 / 22.7	5,3	1600	1050
PERUN SLIM Ex 1.5ft 8000/840	-25|40	9080	7260	51,6	141	23.2 / 24.0	5,3	1600	1050
PERUN SLIM Ex 1.5ft 11000/840	-25|40	12310	9850	71,1	139	24.3 / 25.1	5,3	1600	1050

PERUN SLIM Ex

Non-dimmable driver, diffuser: polished thermally toughened safety glass

Code	Type	1F	3F	M3h	3F M3h
103435	PERUN SLIM Ex 1.2ft 1600/840	103445	103455	x	x
103436	PERUN SLIM Ex 1.2ft 2200/840	103446	103456	x	x
103437	PERUN SLIM Ex 1.4ft 3200/840	103447	103457	103465	103473
103438	PERUN SLIM Ex 1.4ft 4400/840	103448	103458	103466	103474
103439	PERUN SLIM Ex 1.4ft 6400/840	103449	103459	x	x
103440	PERUN SLIM Ex 1.4ft 8800/840	103450	103460	x	x
103441	PERUN SLIM Ex 1.5ft 4000/840	103451	103461	103469	103477
103442	PERUN SLIM Ex 1.5ft 5500/840	103452	103462	103470	103478
103443	PERUN SLIM Ex 1.5ft 8000/840	103453	103463	x	x
103444	PERUN SLIM Ex 1.5ft 11000/840	103454	103464	x	x

PERUN SLIM Ex DALI

Digital dimmable driver DALI, diffuser: polished thermally toughened safety glass

Code	Type	1F	3F	M3h	3F M3h
103481	PERUN SLIM Ex 1.2ft 1600/840 DALI	103491	103501	x	x
103482	PERUN SLIM Ex 1.2ft 2200/840 DALI	103492	103502	x	x
103483	PERUN SLIM Ex 1.4ft 3200/840 DALI	103493	103503	103511	103519
103484	PERUN SLIM Ex 1.4ft 4400/840 DALI	103494	103504	103512	103520
103485	PERUN SLIM Ex 1.4ft 6400/840 DALI	103495	103505	x	x
103486	PERUN SLIM Ex 1.4ft 8800/840 DALI	103496	103506	x	x
103487	PERUN SLIM Ex 1.5ft 4000/840 DALI	103497	103507	103515	103523
103488	PERUN SLIM Ex 1.5ft 5500/840 DALI	103498	103508	103516	103524
103489	PERUN SLIM Ex 1.5ft 8000/840 DALI	103499	103509	x	x
103490	PERUN SLIM Ex 1.5ft 11000/840 DALI	103500	103510	x	x

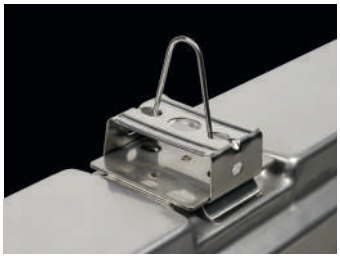
Example of type marking: 103478 = PERUN SLIM Ex 1.5ft 5500/840 **3F M3h**

LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F M3h 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F M3h 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks



LIGHT FITTING DETAILED VIEW

PERUN SLIM Ex

ALUMAX LED

INDUSTRIAL

DUSTPROOF

WATERPROOF

ALUMINIUM PROFILE

ALUMAX LED – industrial metal LED light fitting

ALUMAX LED
page 244

IP66

ALUMAX LED
page 244

ALUMAX LED FOR
EXTREME TEMPERATURES
page 247

IP66

ALUMAX LED MAX
page 247

ALUMAX LED
ACCESSORIES
page 250

ALUMAX LED
ACCESSORIES
page 250

ALUMAX LED

... aluminium, dustproof, waterproof, chemically resistant.

USE

The light fitting is suitable for industrial indoor and outdoor roofed spaces, warehouses, garages, workshops, sports areas, transport terminals, utility structures, agricultural operations and laboratories without a danger of explosion of gas, dust and combustible fumes.

The light fitting is resistant to deformation, dust, spouting water and chemically aggressive environment.

Characteristics of the used tempered glass and its shattering power are controlled by the ČSN EN 12150-1 standard.

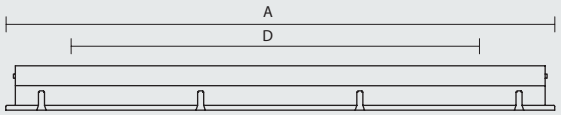
ADVANTAGES

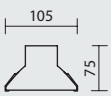
- Light fitting protection **IP66**
- Maximum ambient temperature up to t_a **=50 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: satinated tempered safety glass
- Body: grey aluminium profile, surface treated with powder-coated colour
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CL0)
- Constant luminous flux even in ambient temperature of -25 °C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Certification: ENEC, CB

ALUMAX LED

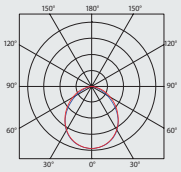
TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: t_a = 50 °C, Maximum ambient temperature: t_a = 0-25 °C with a back-up power supply M1h, M3h
- Maximum system efficacy: 132 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: satinated tempered safety glass
- Body: grey aluminium profile, surface treated with powder-coated colour
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: stainless
- Sealing: polyurethane (PUR) in body groove
- Side covers: grey aluminium alloy with plastic side plates for fixation and suspension of glass at assembly, surface treated with powder-coated colour
- Terminal block: screwless, three-pole (basic version)
- Cable glands: brass M18×1,5
- Installation: package contains stainless sheet suspension brackets and FeZn sliding hangers
- Electric equipment: LED modules, current driver or current driver DALI

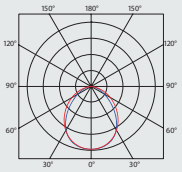




ALUMAX LED 1.5ft



ALUMAX LED 2.5ft



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
Diffuser made of tempered glass									
ALUMAX LED 1.2ft 1300/840	50	1310	1000	8,2	122	20.5 / 22.0	2,2	624	534
ALUMAX LED 1.2ft 1600/840	50	1560	1190	9,8	121	21.1 / 22.6	2,2	624	534
ALUMAX LED 1.2ft 2200/840	45	2140	1630	13,2	123	22.2 / 23.7	2,2	624	534
ALUMAX LED 1.4ft 2600/840	50	2600	1980	16,1	123	20.1 / 21.6	4,2	1224	1134
ALUMAX LED 1.4ft 3200/840	50	3100	2360	19,1	124	20.7 / 22.2	4,2	1224	1134
ALUMAX LED 1.4ft 4400/840	45	4300	3270	26,0	126	21.8 / 23.3	4,2	1224	1134
ALUMAX LED 1.5ft 3250/840	50	3240	2460	19,5	126	20.0 / 21.6	5,0	1524	1434
ALUMAX LED 1.5ft 4000/840	50	3850	2930	23,3	126	20.6 / 22.2	5,0	1524	1434
ALUMAX LED 1.5ft 5500/840	45	5340	4060	31,9	127	21.8 / 23.3	5,0	1524	1434
ALUMAX LED 2.2ft 2600/840	50	2600	1950	16,1	121	22.4 / 24.4	2,4	624	534
ALUMAX LED 2.2ft 3200/840	50	3100	2330	19,1	122	23.0 / 25.0	2,4	624	534
ALUMAX LED 2.2ft 4400/840	45	4300	3230	26,0	124	24.1 / 26.2	2,4	624	534
ALUMAX LED 2.4ft 5200/840	50	5230	3920	30,3	129	22.0 / 24.0	4,3	1224	1134
ALUMAX LED 2.4ft 6400/840	50	6240	4680	36,3	129	22.6 / 24.6	4,3	1224	1134
ALUMAX LED 2.4ft 8800/840	45	8690	6520	49,7	131	23.8 / 25.8	4,3	1224	1134
ALUMAX LED 2.5ft 6500/840	50	6500	4880	37,1	132	22.0 / 24.0	5,3	1524	1434
ALUMAX LED 2.5ft 8000/840	50	7770	5830	44,4	131	22.6 / 24.6	5,3	1524	1434
ALUMAX LED 2.5ft 11000/840	45	12310	9230	71,1	130	24.2 / 26.2	5,3	1524	1434

50450 ALUMAX LED 1.4ft 3200/840 = suitable replacement for ALUMAX 136 E – 1×36 W
50480 ALUMAX LED 1.5ft 4000/840 = suitable replacement for ALUMAX 158 E – 1×58 W
50550 ALUMAX LED 2.4ft 6400/840 = suitable replacement for ALUMAX 236 E – 2×36 W
50580 ALUMAX LED 2.5ft 8000/840 = suitable replacement for ALUMAX 258 E – 2×58 W

ALUMAX LED

Diffuser made of tempered glass, stainless clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
50410	ALUMAX LED 1.2ft 1300/840	x	x	50414	x	x	x
50420	ALUMAX LED 1.2ft 1600/840	x	x	50424	x	x	x
50430	ALUMAX LED 1.2ft 2200/840	x	x	50434	x	x	x
50440	ALUMAX LED 1.4ft 2600/840	50441	50443	50444	50445	50447	50448
50450	ALUMAX LED 1.4ft 3200/840	50451	50453	50454	50455	50457	50458
50460	ALUMAX LED 1.4ft 4400/840	50461	50463	50464	50465	50467	50468
50470	ALUMAX LED 1.5ft 3250/840	50471	50473	50474	50475	50477	50478
50480	ALUMAX LED 1.5ft 4000/840	50481	50483	50484	50485	50487	50488
50490	ALUMAX LED 1.5ft 5500/840	50491	50493	50494	50495	50497	50498
50510	ALUMAX LED 2.2ft 2600/840	x	x	50514	x	x	x
50520	ALUMAX LED 2.2ft 3200/840	x	x	50524	x	x	x
50530	ALUMAX LED 2.2ft 4400/840	x	x	50534	x	x	x
50540	ALUMAX LED 2.4ft 5200/840	50541	50543	50544	50545	50547	50548
50550	ALUMAX LED 2.4ft 6400/840	50551	50553	50554	50555	50557	50558
50560	ALUMAX LED 2.4ft 8800/840	50561	50563	x	x	x	x
50570	ALUMAX LED 2.5ft 6500/840	50571	50573	50574	50575	50577	50578
50580	ALUMAX LED 2.5ft 8000/840	50581	50583	50584	50585	50587	50588
50590	ALUMAX LED 2.5ft 11000/840	50591	50593	x	x	x	x

Example of type marking: 50555 = ALUMAX LED 2.4ft 6400/840 **M3h**

ALUMAX LED DALI

Digital dimmable driver DALI, diffuser made of tempered glass, stainless clips

Code	Type	3F	M1h	M3h	3F M1h	3F M3h
50610	ALUMAX LED 1.2ft 1300/840 DALI	x	50614	x	x	x
50620	ALUMAX LED 1.2ft 1600/840 DALI	x	50624	x	x	x
50630	ALUMAX LED 1.2ft 2200/840 DALI	x	50634	x	x	x
50640	ALUMAX LED 1.4ft 2600/840 DALI	50643	50644	50645	50647	50648
50650	ALUMAX LED 1.4ft 3200/840 DALI	50653	50654	50655	50657	50658
50660	ALUMAX LED 1.4ft 4400/840 DALI	50663	50664	50665	50667	50668
50670	ALUMAX LED 1.5ft 3250/840 DALI	50673	50674	50675	50677	50678
50680	ALUMAX LED 1.5ft 4000/840 DALI	50683	50684	50685	50687	50688
50690	ALUMAX LED 1.5ft 5500/840 DALI	50693	50694	50695	50697	50698
50710	ALUMAX LED 2.2ft 2600/840 DALI	x	x	x	x	x
50720	ALUMAX LED 2.2ft 3200/840 DALI	x	x	x	x	x
50730	ALUMAX LED 2.2ft 4400/840 DALI	x	x	x	x	x
50740	ALUMAX LED 2.4ft 5200/840 DALI	50743	50744	50745	50747	50748
50750	ALUMAX LED 2.4ft 6400/840 DALI	50753	50754	50755	50757	50758
50760	ALUMAX LED 2.4ft 8800/840 DALI	50763	x	x	x	x
50770	ALUMAX LED 2.5ft 6500/840 DALI	50773	50774	50775	50777	50778
50780	ALUMAX LED 2.5ft 8000/840 DALI	50783	50784	50785	50787	50788
50790	ALUMAX LED 2.5ft 11000/840 DALI	50793	x	x	x	x

Example of type marking: 50694 = ALUMAX LED 1.5ft 5500/840 DALI **M1h**

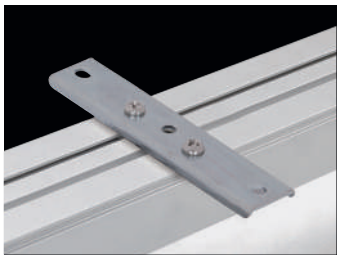
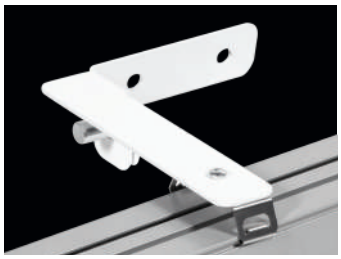
LEGEND

1F 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

DALI version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

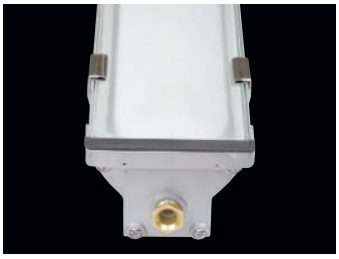
LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) To a ceiling or a wall with the use of FeZn sliding hangers in body groove
c) Attachment with the use of side hangers to the wall

LIGHT FITTING DETAILED VIEW

ALUMAX LED



ALUMAX LED MAX

... for extreme temperatures -40 °C to +75 °C.

USE

The light fitting is suitable for indoor and outdoor spaces with roof with extreme ambient temperatures from **(-40 °C to +75 °C)**. The light fitting is destined mainly for heating stations, metallurgical lines, glass-works, as well as for freezers, cooling plants and other premises without danger of explosion of gases, dusts and flammable vapors.

The light fitting is resistant to deformation, dust, spouting water and chemically aggressive environment.

Characteristics of the used tempered glass and its shattering power are controlled by the ČSN EN 12150-1 standard.

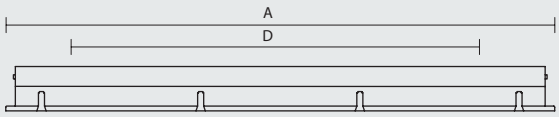
ADVANTAGES

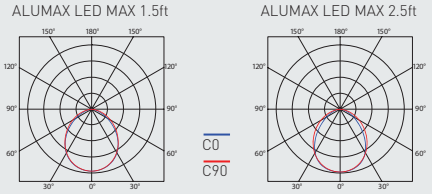
- Light fitting protection **IP66**
- Minimum ambient temperature up to **t_a = -40 °C**
- Maximum ambient temperature up to **t_a = 75 °C**
- Lifetime: 50,000 hours / L80B10
- Possibility of using in even higher ambient temperatures under the condition of a shortened service life of the light fitting – parameters solved within a particular project
- Diffuser: satinated tempered safety glass
- Body: grey aluminium profile, surface treated with powder-coated colour
- Up to 45 % lower electricity consumption when compared to tubes T5
- Constant luminous flux even in ambient temperature of -40 °C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K

ALUMAX LED MAX

TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Minimum ambient temperature: t_a = -40 °C
- Maximum ambient temperature: t_a = 75 °C
- Lifetime: 50,000 hours / L80B10
- Possibility of using in even higher ambient temperatures under the condition of a shortened service life of the light fitting – parameters solved within a particular project
- Maximum system efficacy: 131 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Diffuser: satinated tempered safety glass
- Body: grey aluminium profile, surface treated with powder-coated colour
- Reflector: steel sheet, white colour (RAL 9003)
- Ventilation plug: type BVPB-01 made of brass, size M12 × 1,5
- Side covers: grey aluminium alloy with plastic side plates for fixation and suspension of glass at assembly, surface treated with powder-coated colour
- Clips: stainless
- Sealing: polyurethane (PUR) in body groove
- Terminal block: screwless, three-pole (basic version)
- Cable glands: brass M18 × 1,5
- Installation: package contains stainless sheet suspension brackets and FeZn sliding hangers
- Electric equipment: LED modules, current driver





Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
For ambient temperature up to t_a = 75 °C - body: aluminum profile - diffuser: thermally toughened glass									
ALUMAX LED 1.5ft MAX 4000/840	75	3850	2930	23,3	126	20.6 / 22.2	5,0	1524	1434
ALUMAX LED 1.5ft MAX 5500/840	70	5340	4060	31,9	127	21.8 / 23.3	5,0	1524	1434
ALUMAX LED 2.4ft MAX 6400/840	70	6240	4680	36,3	129	22.6 / 24.6	4,3	1224	1134
ALUMAX LED 2.4ft MAX 8800/840	65	8690	6520	49,7	131	23.8 / 25.8	4,3	1224	1134
ALUMAX LED 2.5ft MAX 8000/840	70	7770	5830	44,4	131	22.6 / 24.6	5,3	1524	1434
ALUMAX LED 2.5ft MAX 11000/840	65	12310	9230	71,1	130	24.2 / 26.2	5,3	1524	1434

ALUMAX LED MAX

Diffuser: polished thermally toughened glass, stainless clips

Code	Type	1F	3F	M1h	M3h	DALI	DALI 3F
79730	ALUMAX LED 1.5ft MAX 4000/840	79731	79733	x	x	79735	79736
79700	ALUMAX LED 1.5ft MAX 5500/840	79701	79703	x	x	79705	79706
79740	ALUMAX LED 2.4ft MAX 6400/840	79741	79743	x	x	79745	79746
79710	ALUMAX LED 2.4ft MAX 8800/840	79711	79713	x	x	79715	79716
79750	ALUMAX LED 2.5ft MAX 8000/840	79751	79753	x	x	79755	79756
79720	ALUMAX LED 2.5ft MAX 11000/840	79721	79723	x	x	79725	79726

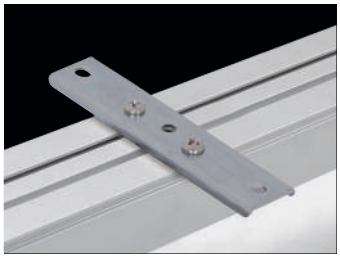
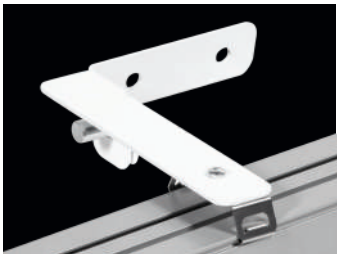
Example of type marking: 79713 = ALUMAX LED MAX 2.4ft 8800/840 **3F**

LEGEND

DALI – version with digital dimmable driver DALI
1F – 1 phase wiring cables for through-wiring
3F – 3 phase wiring cables for through-wiring

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) To a ceiling or a wall with the use of FeZn sliding hangers in body groove
c) Attachment with the use of side hangers to the wall

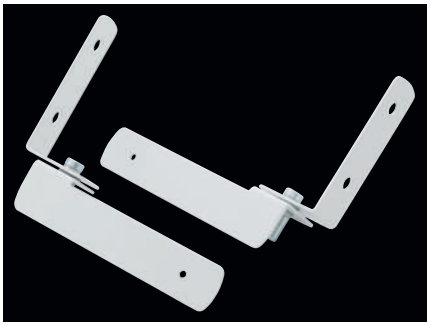



LIGHT FITTING DETAILED VIEW

ALUMAX LED MAX

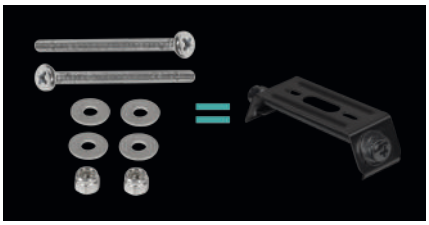
BZ – side hanger

It serves to attach the light fitting to the wall with the possibility of its positioning.



Code	Type	Description	Weight [kg]
90002	BZ	side hanger with blocking (set for 1 light fitting)	0,4

Locking set for bracket G3



Code	Type	Description	Weight [kg]
11553	G3 SET	a locking set for G3 stainless steel bracket (bolts, nuts, washers)	0,2

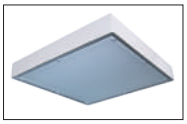
CANOPUS

INDUSTRIAL
METAL
FOR HIGH CEILINGS

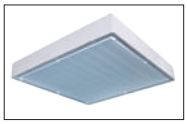
CANOPUS – industrial metal LED light fitting

CANOPUS
page 254

IP65



CANOPUS
page 255

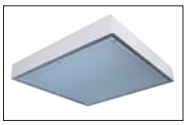


CANOPUS NB
page 257

CANOPUS NB TR
page 259

CANOPUS HE
page 261

IP65



CANOPUS HE
page 261

CANOPUS
ACCESSORIES
page 264

CANOPUS
ACCESSORIES
page 264

CANOPUS

... dustproof, waterproof, for high ceilings.

USE

The light fitting is suitable for large operations with high ceilings, industrial outdoor and indoor roofed spaces, warehouses, workshops, sports areas, transport terminals and utility structures without a danger of explosion of gas, dust and combustible fumes.

The light fitting is resistant to deformation, dust and splashing water.

Characteristics of the used tempered glass and its shattering power are controlled by the ČSN EN 12150-1 standard. For applications where spontaneous fracture means a higher safety risk, we recommend to use the version with the safety film (SF).

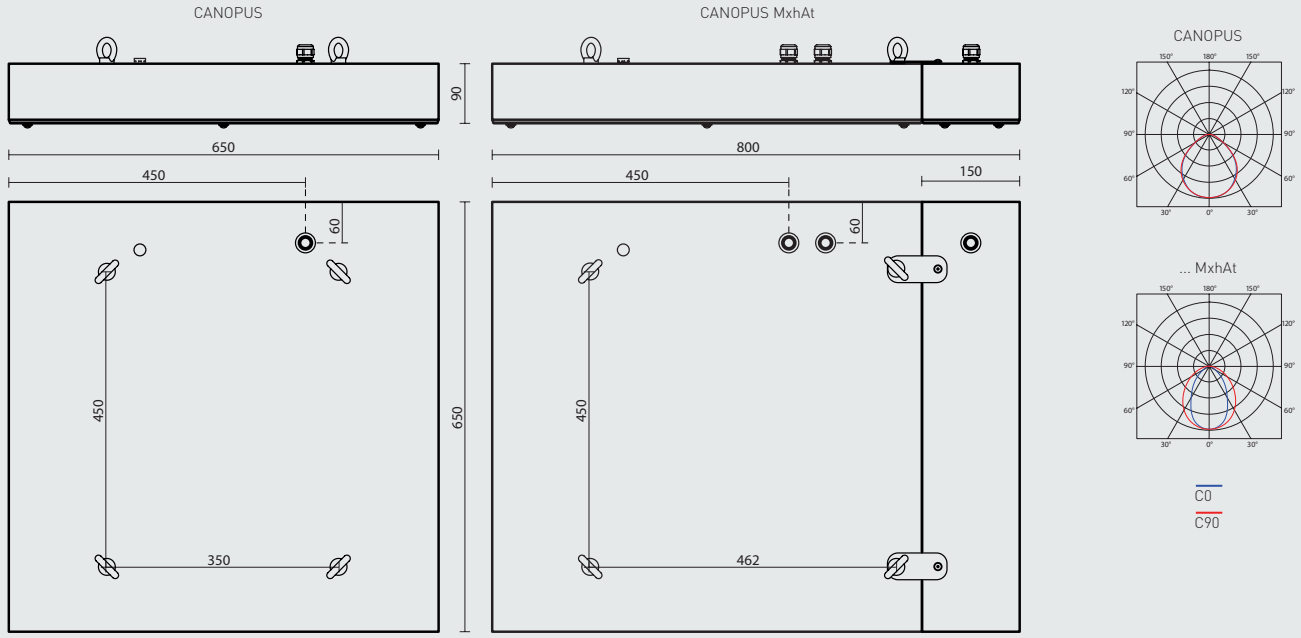
ADVANTAGES

- Light fitting protection **IP65**
- Maximum ambient temperature up to t_a **= 35 °C**
- Lifetime: 50,000 hours / L90B50
- High mechanical robustness IK10
- Diffuser: satinized or transparent tempered safety glass
- Body: steel sheet - white colour (RAL 9003), or inox AISI 304 at request
- Up to 45 % lower electricity consumption when compared to tubes T5
- Possibility of delivery either in a deemed or permanently emergency design M1hAt and M3hAt
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25 °C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- Easy installation with the help of supply connector with cable 0,4 m CYSY 3 × 1.5, without necessity of opening the light fitting
- Certification: ESČ, ENEC, CB, BALL-PROOF

CANOPUS

TECHNICAL DESCRIPTION

- Light fitting protection: IP65
- Maximum ambient temperature: t_a = 0-35 °C and for the design with a back-up power supply M1hAt, M3hAt
- Maximum system efficacy: 143 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B50
- Diffuser: satinized tempered safety glass
- Possibility of delivery of the diffuser with a safety foil (SF)
- EM kit with battery autotesting for M1hAt and M3hAt
- Body: steel sheet, white colour (RAL 9003), or inox AISI 304 at request
- Ventilation plug: type BVPB-01 made of polyamide, size M12 × 1.5
- Sealing: EPDM attached to light fitting body
- Terminal block: interconnecting connector, 0.4 m cable
- Installation: all versions delivered including suspension lugs (4 pcs)
- Electric equipment: LED modules, current driver or current driver DALI (2 – 3 pcs depending on type)



Type	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]
For ambient temperature t_a = 35 °C - body: steel sheet, white colour - diffuser: satinized tempered safety glass						
CANOPUS 22000/840	22450	18410	128,7	143	23.7 / 23.8	11,6
CANOPUS 26000/840	26880	22040	158,3	139	24.3 / 24.4	11,8
CANOPUS 30000/840	31360	25720	184,7	139	24.9 / 25.0	11,8

Type	Autonomy [hrs]	Emergency light flux of light fitting [lm]	Power in standby mode [W]	Battery type	Net weight [kg]
EM kit for permanent emergency lighting with battery autotesting - diffuser: satinized tempered safety glass					
M1hAt	1	440	1,5	$LiFePO_4$	+4,2
M3hAt	3	440	1,5	$LiFePO_4$	+4,4

CANOPUS

Code	Type	M1hAt	M3hAt	DALI	DALI M1hAt	DALI M3hAt
74010	CANOPUS 22000/840	74011	74013	74016	74017	74018
74020	CANOPUS 26000/840	74021	74023	74026	74027	74028
74030	CANOPUS 30000/840	74031	74033	74036	74037	74038

Example of type marking: 74036 = CANOPUS 30000/840 **DALI**

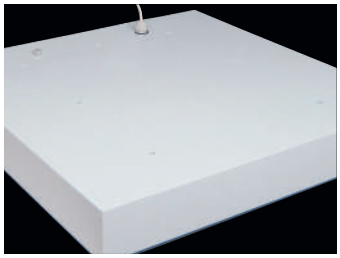
LEGEND

DALI – version with digital dimmable driver DALI (2 – 3 pcs)
M1hAt – emergency back-up source with operating time of 1 hour (SA) for permanent illumination with battery autotesting
M3hAt – emergency back-up source with operating time of 3 hours (SA) for permanent illumination with battery autotesting
Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

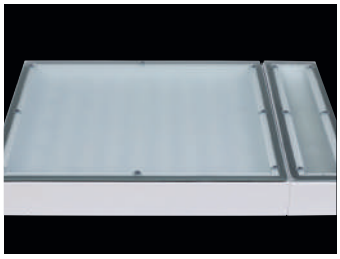
LIGHT FITTING ATTACHMENT

a) With help of suspension eyes of M6
b) With help of a holder directly to the ceiling
c) With the help of adjustable holder directly on the ceiling or on the wall
d) With help of a chain hinge

LIGHT FITTING DETAILED VIEW



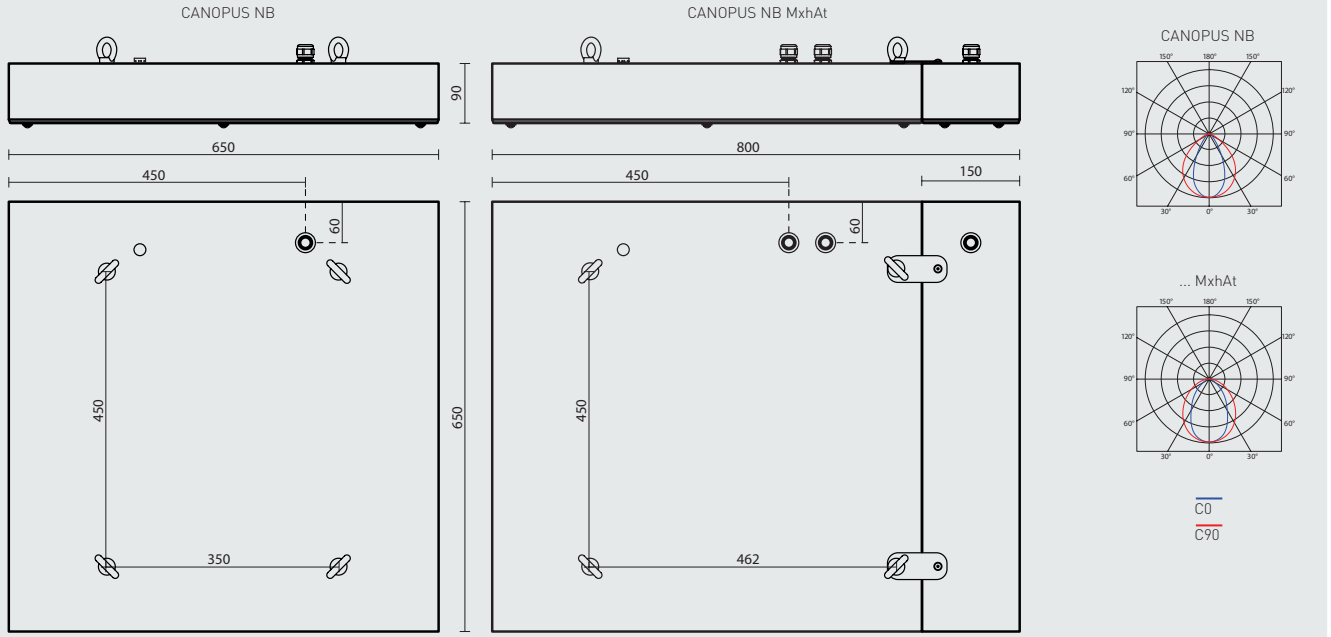
LIGHT FITTING DETAILED VIEW WITH AN EMERGENCY MODULE



CANOPUS NB

TECHNICAL DESCRIPTION

- Light fitting protection: IP65
- Maximum ambient temperature: t_a = 0-35 °C and for the design with a back-up power supply M1hAt, M3hAt
- Maximum system efficacy: 145 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B50
- Diffuser: satinized tempered safety glass
- Possibility of delivery of the diffuser with a safety foil (SF)
- EM kit with battery autotesting for M1hAt and M3hAt
- Reflector: parabolic polished aluminium with narrow emitting characteristics (NB - narrow beam)
- Body: steel sheet, white colour (RAL 9003), or inox AISI 304 at request
- Ventilation plug: type BVPB-01 made of polyamide, size M12 × 1.5
- Sealing: EPDM attached to light fitting body
- Terminal block: interconnecting connector, 0.4 m cable
- Installation: all versions delivered including suspension lugs (4 pcs)
- Electric equipment: LED modules, current driver or current driver DALI (2 – 3 pcs depending on type)



Type	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]
For ambient temperature t_a = 35 °C - body: steel sheet, white colour - diffuser: satinized tempered safety glass with parabolic reflector						
CANOPUS NB 22000/840	22450	18630	128,7	145	18.2 / 23.5	12,3
CANOPUS NB 26000/840	26880	22310	158,3	141	18.8 / 24.1	12,5
CANOPUS NB 30000/840	31360	26030	184,7	141	19.4 / 24.7	12,5

Type	Autonomy [hrs]	Emergency light flux of light fitting [lm]	Power in standby mode [W]	Battery type	Net weight [kg]
EM kit for permanent emergency lighting with battery autotesting - diffuser: satinized tempered safety glass					
M1hAt	1	440	1,5	$LiFePO_4$	+4,2
M3hAt	3	440	1,5	$LiFePO_4$	+4,4

CANOPUS NB

Code	Type	M1hAt	M3hAt	DALI	DALI M1hAt	DALI M3hAt
74110	CANOPUS NB 22000/840	74111	74113	74116	74117	74118
74120	CANOPUS NB 26000/840	74121	74123	74126	74127	74128
74130	CANOPUS NB 30000/840	74131	74133	74136	74137	74138

Example of type marking: 74136 = CANOPUS NB 30000/840 **DALI**

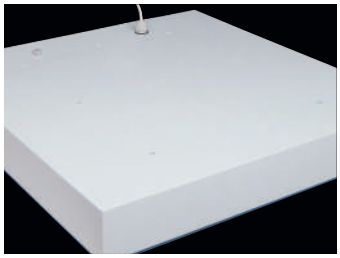
LEGEND

DALI – version with digital dimmable driver DALI (2 – 3 pcs)
M1hAt – emergency back-up source with operating time of 1 hour (SA) for permanent illumination with battery autotesting
M3hAt – emergency back-up source with operating time of 3 hours (SA) for permanent illumination with battery autotesting
Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

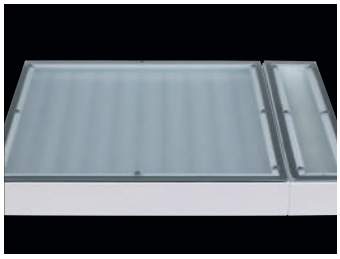
LIGHT FITTING ATTACHMENT

a) With help of suspension eyes of M6
b) With help of a holder directly to the ceiling
c) With the help of adjustable holder directly on the ceiling or on the wall
d) With help of a chain hinge

LIGHT FITTING DETAILED VIEW



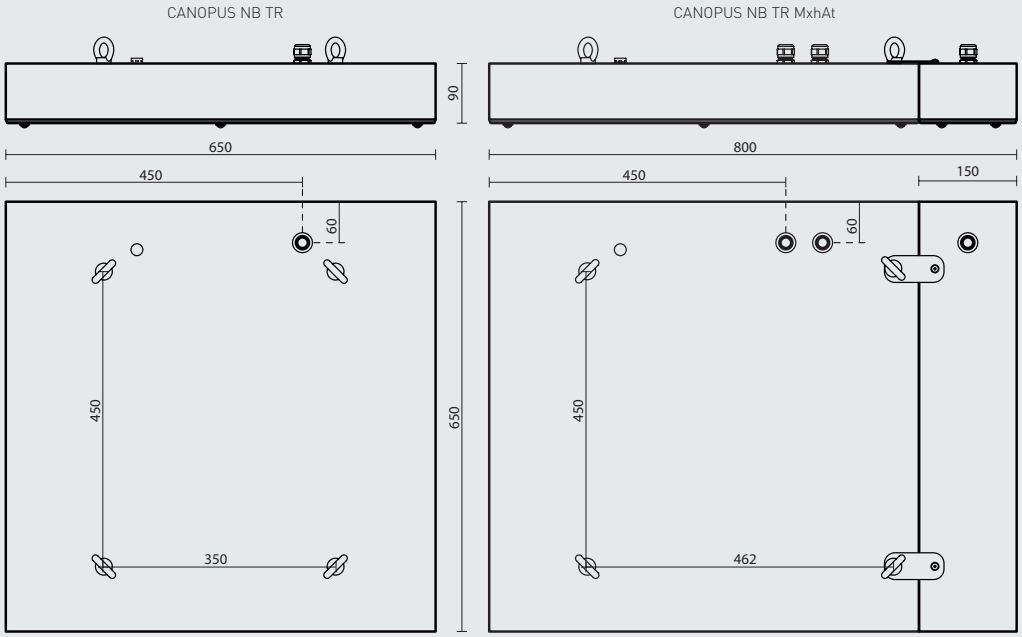
LIGHT FITTING DETAILED VIEW WITH AN EMERGENCY MODULE

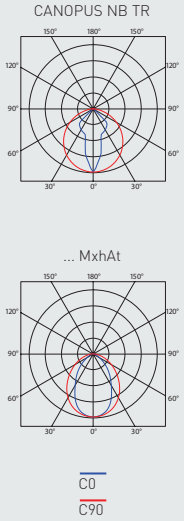


CANOPUS NB TR

TECHNICAL DESCRIPTION

- Light fitting protection: IP65
- Maximum ambient temperature: t_a = 0-35 °C and for the design with a back-up power supply M1hAt, M3hAt
- Maximum system efficacy: 154 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B50
- Diffuser: transparent tempered safety glass (TR)
- Possibility of delivery of the diffuser with a safety foil (SF)
- EM kit with battery autotesting for M1hAt and M3hAt
- Reflector: parabolic polished aluminium with narrow emitting characteristics (NB - narrow beam)
- Body: steel sheet, white colour (RAL 9003), or inox AISI 304 at request
- Ventilation plug: type BVPB-01 made of polyamide, size M12 × 1.5
- Sealing: EPDM attached to light fitting body
- Terminal block: interconnecting connector, 0.4 m cable
- Installation: all versions delivered including suspension lugs (4 pcs)
- Electric equipment: LED modules, current driver or current driver DALI (2 – 3 pcs depending on type)





Type	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]
For ambient temperature t_a = 35 °C - body: steel sheet, white colour - diffuser: tempered safety glass with parabolic reflector (TR)						
CANOPUS NB TR 22000/840	22450	19760	128,7	154	17.7 / 27.6	12,3
CANOPUS NB TR 26000/840	26880	23650	158,3	149	18.3 / 28.3	12,5
CANOPUS NB TR 30000/840	31360	27600	184,7	149	18.8 / 28.8	12,5

Type	Autonomy [hrs]	Emergency light flux of light fitting [lm]	Power in standby mode [W]	Battery type	Net weight [kg]
EM kit for permanent emergency lighting with battery autotesting - diffuser: satinized tempered safety glass					
M1hAt	1	440	1,5	$LiFePO_4$	+4,2
M3hAt	3	440	1,5	$LiFePO_4$	+4,4

CANOPUS NB TR

Code	Type	M1hAt	M3hAt	DALI	DALI M1hAt	DALI M3hAt
74210	CANOPUS NB TR 22000/840	74211	74213	74216	74217	74218
74220	CANOPUS NB TR 26000/840	74221	74223	74226	74227	74228
74230	CANOPUS NB TR 30000/840	74231	74233	74236	74237	74238

Example of type marking: 74236 = CANOPUS NB TR 30000/840 **DALI**

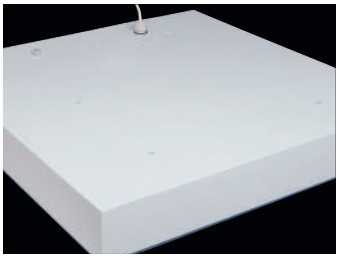
LEGEND

DALI – version with digital dimmable driver DALI (2 – 3 pcs)
M1hAt – emergency back-up source with operating time of 1 hour (SA) for permanent illumination with battery autotesting
M3hAt – emergency back-up source with operating time of 3 hours (SA) for permanent illumination with battery autotesting
Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

LIGHT FITTING ATTACHMENT

a) With help of suspension eyes of M6
b) With help of a holder directly to the ceiling
c) With the help of adjustable holder directly on the ceiling or on the wall
d) With help of a chain hinge

LIGHT FITTING DETAILED VIEW



LIGHT FITTING DETAILED VIEW WITH AN EMERGENCY MODULE

CANOPUS HE

... high efficiency, for high ceilings, with sulphur-resistant LED chips.

USE

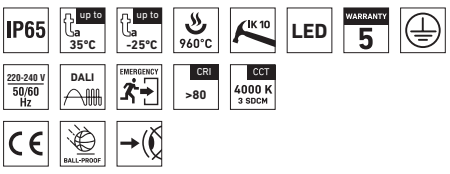
The light fitting is suitable for large operations with high ceilings, industrial outdoor and indoor roofed spaces, warehouses, workshops, sports areas, transport terminals and utility structures without a danger of explosion of gas, dust and combustible fumes.

The light fitting is resistant to deformation, dust and splashing water.

Characteristics of the used tempered glass and its shattering power are controlled by the ČSN EN 12150-1 standard. For applications where spontaneous fracture means a higher safety risk, we recommend to use the version with the safety film (SF).

ADVANTAGES

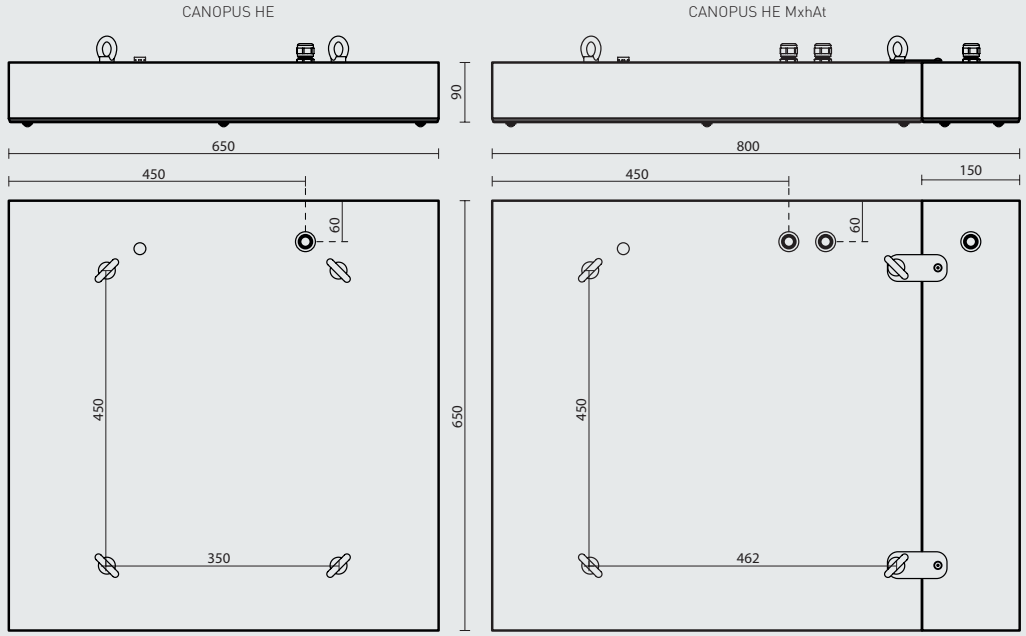
- Light fitting protection **IP65**
- Maximum ambient temperature up to **t_a = 35 °C**
- Lifetime: 50,000 hours / L90B50
- High mechanical robustness IK10
- Diffuser: satinized or transparent tempered safety glass
- Body: steel sheet - white colour (RAL 9003), or inox AISI 304 at request
- Up to 45 % lower electricity consumption when compared to tubes T5
- Possibility of delivery either in a deemed or permanently emergency design M1hAt and M3hAt
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25 °C
- Standard model - CRI > 80: 4000 K
- Easy installation with the help of supply connector with cable 0,4 m CYSY 3 × 1.5, without necessity of opening the light fitting
- **Chips with high sulphur resistance**
- Certification: BALL-PROOF

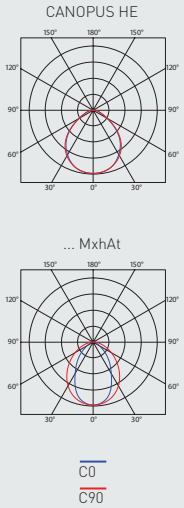


CANOPUS HE

TECHNICAL DESCRIPTION

- Light fitting protection: IP65
- Maximum ambient temperature: t_a = 0-35 °C and for the design with a back-up power supply M1hAt, M3hAt
- Maximum system efficacy: 157 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B50
- Diffuser: satinized tempered safety glass
- Possibility of delivery of the diffuser with a safety foil (SF)
- EM kit with battery autotesting for M1hAt and M3hAt
- Body: steel sheet, white colour (RAL 9003), or inox AISI 304 at request
- Ventilation plug: type BVPB-01 made of polyamide, size M12 × 1.5
- Sealing: EPDM attached to light fitting body
- Terminal block: interconnecting connector, 0.4 m cable
- Installation: all versions delivered including suspension lugs (4 pcs)
- Electric equipment: LED sulphur-resistant modules, current driver or current driver DALI (2 – 3 pcs depending on type)





Type	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]
For ambient temperature t_a = 35 °C - body: steel sheet, white colour - diffuser: satinized tempered safety glass						
CANOPUS HE 22000/840	23860	19570	126,5	155	23.9 / 24.0	11,6
CANOPUS HE 26000/840	30010	24610	156,7	157	24.7 / 24.8	11,8
CANOPUS HE 30000/840	35010	28710	182,9	157	25.3 / 25.4	11,8

Type	Autonomy [hrs]	Emergency light flux of light fitting [lm]	Power in standby mode [W]	Battery type	Net weight [kg]
EM kit for permanent emergency lighting with battery autotesting - diffuser: satinized tempered safety glass					
M1hAt	1	440	1,5	$LiFePO_4$	+4,2
M3hAt	3	440	1,5	$LiFePO_4$	+4,4

CANOPUS HE

Code	Type	M1hAt	M3hAt	DALI	DALI M1hAt	DALI M3hAt
74810	CANOPUS HE 22000/840	74811	74812	74813	74814	74815
74820	CANOPUS HE 26000/840	74821	74822	74823	74824	74825
74830	CANOPUS HE 30000/840	74831	74832	74833	74834	74835

Example of type marking: 74834 = CANOPUS HE 30000/840 **DALI M1hAt**

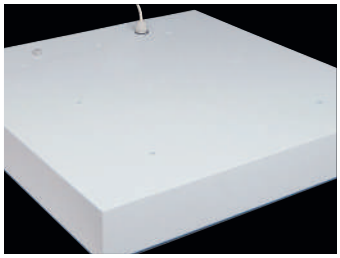
LEGEND

DALI – version with digital dimmable driver DALI (2 – 3 pcs)
M1hAt – emergency back-up source with operating time of 1 hour (SA) for permanent illumination with battery autotesting
M3hAt – emergency back-up source with operating time of 3 hours (SA) for permanent illumination with battery autotesting
Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

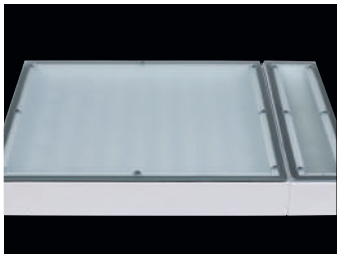
LIGHT FITTING ATTACHMENT

a) With help of suspension eyes of M6
b) With help of a holder directly to the ceiling
c) With the help of adjustable holder directly on the ceiling or on the wall
d) With help of a chain hinge

LIGHT FITTING DETAILED VIEW



LIGHT FITTING DETAILED VIEW WITH AN EMERGENCY MODULE



Ceiling holder

Serves to suspend the light fitting from the ceiling.

Code	Type	Description	Weight [kg]
50080	CANOPUS holder 1	Metal suspender for direct suspension from the ceiling. Screw M6 × 16 - 8 pcs for assembly.	2,3
50086	CANOPUS holder 1 INOX	Stainless-steel suspender for direct suspension from the ceiling. Screw M6 × 16 - 8 pcs for assembly.	2,3

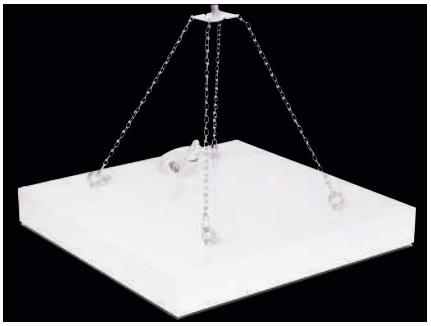
Adjustable holder

Serves to suspend the light fitting on the wall, ceiling and skew surface, allows adjusting the light fitting from 0-90°, by 15°.

Code	Type	Description	Weight [kg]
50081	CANOPUS holder 2	Metal adjustable holder for the ceiling and for the wall. Adjustment by 15° in a range of 0-90°. Screw M6 × 16 - 8 pcs for assembly.	3,0
50087	CANOPUS holder 2 INOX	Stainless-steel adjustable holder for the ceiling and for the wall. Adjustment by 15° in a range of 0-90°. Screw M6 × 16 - 8 pcs for assembly.	3,0

Chain suspender

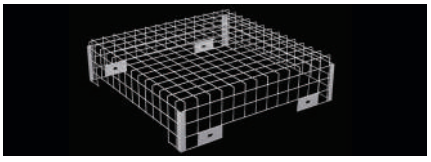
Serves to suspend the light fitting with the help of chains on a threaded rod or with the help of a lug on a hook.



Code	Type	Description	Weight [kg]
50082	CANOPUS suspender	Chain suspender with height 40 cm. (Suspender holder - 1 pc, lugs M6 - 4 pcs, snap-hooks - 4 pcs, chains - 4 pcs).	0,6
50088	CANOPUS suspender INOX	INOX chain suspender with height 40 cm. (Suspender holder - 1 pc, lugs M6 - 4 pcs, snap-hooks - 4 pcs, chains - 4 pcs).	0,6

Protective grille

The metal grille protects the light fitting against mechanical damage and tampering. It is fixed on the ceiling holder of the light fitting.
Surface finish with RAL 9003 powder coating.



Code	Type	Description	Weight [kg]
50083	CANOPUS protective grille	Metal protective grille (for variants without an emergency module) with mesh size 50×50 mm. (Protective basket, 2 threaded rods M10, 4 closed nuts M10, 4 distance tubes IRS16, 4 washers M10).	3,6
50085	CANOPUS Mxh protective grille	Metal protective grille (for variants with an emergency module) with mesh size 50×50 mm. (Protective basket, 2 threaded rods M10, 4 closed nuts M10, 4 distance tubes IRS16, 4 washers M10).	4,4

BATTENTI DA
SQUADRARE
MAHROS

LANUS

INDUSTRIAL

ALUMINIUM

DUSTPROOF

WATERPROOF

LANUS – industrial metal LED light fitting

LANUS SQUARE
page 268

IP66

LANUS SQUARE
page 268

LANUS ROUND
page 270

IP66

LANUS ROUND
page 270

LANUS SQUARE
ACCESSORIES
page 272

LANUS SQUARE
ACCESSORIES
page 272

LANUS SQUARE

NEW

... aluminium, dustproof, waterproof square light fitting

USE

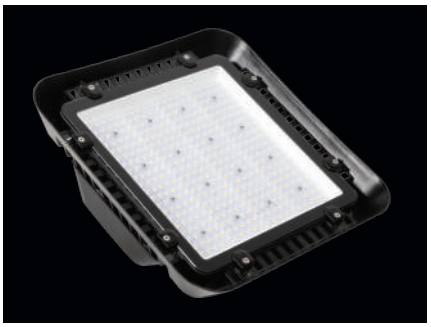
The light fixture is suitable for high halls, sports venues, advertising spaces and indoor and outdoor industrial spaces.

Characteristics of the used tempered glass and its shattering power are controlled by the ČSN EN 12150-1 standard. For applications where spontaneous fracture means a higher safety risk, we recommend to use the version with the safety film (SF).

ADVANTAGES

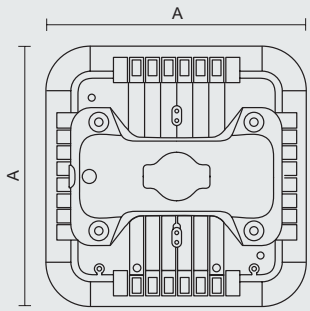
- Light fitting protection **IP66**
- Ambient temperature from **-40°C** to **35 °C**
- Lifetime: 50 000 hours / L80B10
- Ventilation membrane
- Body: aluminium alloy, graphite black (RAL 9001)
- Optical cover: clear heat-strengthened safety glass
- Constant luminous flux even in ambient temperature of -40 °C
- Standard model CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- Installation using a 0.4m 3-core 3x1mm2 CYSY cable
- Insulation: class I

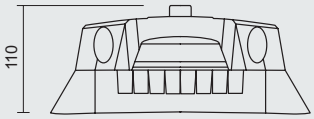
LANUS SQUARE

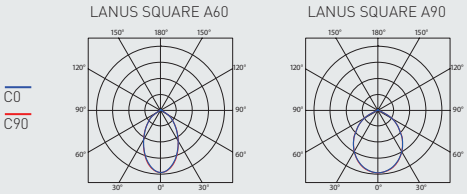


TECHNICAL DESCRIPTION

- Light fitting protection **IP66**
- Ambient temperature from **-40°C** to **35°C**
- Maximum system efficacy: **153** lm/W
- Lifetime: 50 000 hours / L80B10
- Body: aluminium alloy, graphite black (RAL 9001)
- Reflector cover: clear heat-strengthened safety glass
- Standard model CRI > 80: 4000 K
- Connection: a 0.4m 3-core 3x1mm2 CYSY cable
- Mounting: supplied with an eye bolt
- Electric equipment: LED modules,1-10V dimmable driver controlled by 2-core 2x1mm2 cable
- Beam angle: 60° or 90°
- The values stated for power consumption an luminous flux are in a tolerance of ± 7.5 %



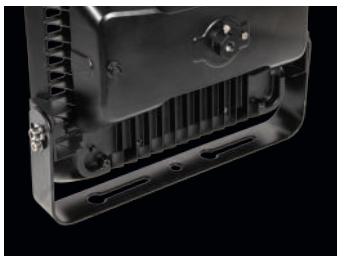


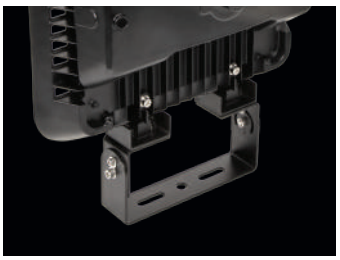


Code	Type	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]
	For ambient temperature t_a = 35 °C							
106905	LANUS SQUARE S 15000/840 A60	15510	14270	98,8	144	27.8 / 27.9	2,3	260
106907	LANUS SQUARE S 15000/840 A90	15510	14270	98,8	144	29.9 / 30.0	2,3	260
106906	LANUS SQUARE M 22000/840 A60	21970	20650	135,2	153	27.3 / 27.3	3,4	310
106908	LANUS SQUARE M 22000/840 A90	21970	20650	135,2	153	29.4 / 29.4	3,4	310

LIGHT FITTING ATTACHMENT

a) An eye bolt is supplied with the fitting
b) Ceiling/wall brackets – not included
c) Wall brackets – not included
d) Rope attachment set – not included





LANUS ROUND

NEW

... aluminium, dustproof, waterproof round light fitting

USE

The fitting is suitable for indoor industrial spaces, warehouses, sports halls and advertisement spaces.

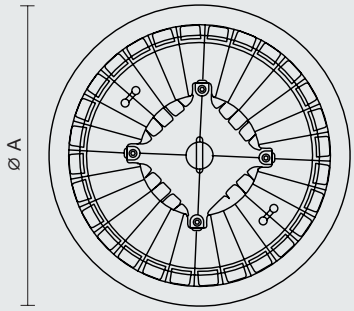
ADVANTAGES

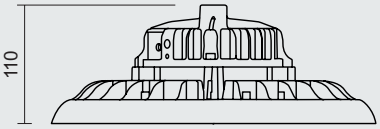
- Light fitting protection **IP66**
- Ambient temperature from **-40°C** to **40 °C**
- Lifetime: 50 000 hours / L80B10
- High **mechanical resistance IK10**
- Body: aluminium alloy, graphite black (RAL 9001)
- Optical cover: clear PMMA with integrated optics
- Constant luminous flux even in ambient temperature of -40 °C
- Standard model CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- Connection: a 0.4m 3-core 3x1mm2 CYSY cable
- Insulation: class I

LANUS ROUND

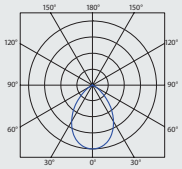
TECHNICAL DESCRIPTION

- Light fitting protection **IP66**
- Ambient temperature from **-40°C** to **40 °C**
- Maximum system efficacy: **155** lm/W
- Lifetime: 50 000 hours / L80B10
- Body: aluminium alloy, graphite black (RAL 9001)
- Reflector cover made of clear PMMA with integrated optics
- Standard model CRI > 80: 4000 K
- Connection: a 0.4m 3-core 3x1mm2 CYSY cable
- Mounting: supplied with an eye bolt
- Electric equipment: LED modules, 1-10V dimmable driver controlled by 2-core 2x0,5mm2 cable
- Beam angle: 60° or 90°
- The values stated for power consumption an luminous flux are in a tolerance of ± 7.5 %

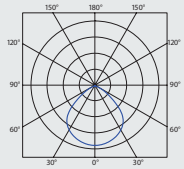




LANUS ROUND A60



LANUS ROUND A90



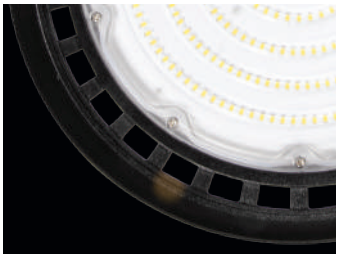
Code	Type	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]
	For ambient temperature t_a = 40 °C							
106901	LANUS ROUND S 15000/840 A60	15590	14340	94,8	151	26.5 / 26.5	2,1	300
106903	LANUS ROUND S 15000/840 A90	15590	14650	94,8	155	28.3 / 28.3	2,1	300
106902	LANUS ROUND M 25000/840 A60	24480	22520	148,5	152	27.0 / 27.0	2,6	345
106904	LANUS ROUND M 25000/840 A90	24480	23010	148,5	155	28.8 / 28.8	2,6	345

LIGHT FITTING ATTACHMENT

An eye bolt is supplied with the fitting.

LIGHT FITTING DETAILED VIEW

LANUS ROUND



Ceiling/wall mounting bracket

To attach the light fixture to the ceiling or a wall.

Code	Type	Description	Weight [kg]
106909	LANUS SQUARE S bracket 1	Ceiling/wall mounting bracket for LANUS SQUARE S fixture	0,43
106910	LANUS SQUARE M bracket 1	Ceiling/wall mounting bracket for LANUS SQUARE M fixture	0,54

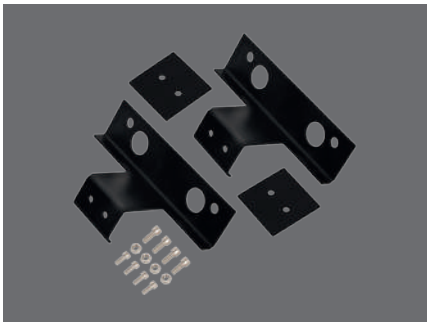
Wall mounting bracket

To attach the light fixture to a wall.

Code	Type	Description	Weight [kg]
106911	LANUS SQUARE S bracket 2	Wall mounting bracket for LANUS SQUARE S fixture	0,42
106912	LANUS SQUARE M bracket 2	Wall mounting bracket for LANUS SQUARE M fixture	0,54

Rope attachment set

To attach the fixture to a rope.



Code	Type	Description	Weight [kg]
106913	LANUS SQUARE S rope attachment set	Rope attachment set for LANUS SQUARE S fixture	0,80
106914	LANUS SQUARE M rope attachment set	Rope attachment set for LANUS SQUARE M fixture	0,92

12
13
14
7
6
5

LINEA

INDOOR

PLASTIC

SURFACE-MOUNTED

LINEA – indoor plastic LED light fitting

LINEA
page 276

IP54

LINEA
page 276

LINEA SQUARE
page 278

IP54

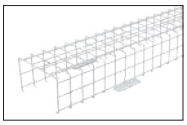
LINEA SQUARE
page 278

LINEA ROUND
page 280

IP54

LINEA ROUND
page 280

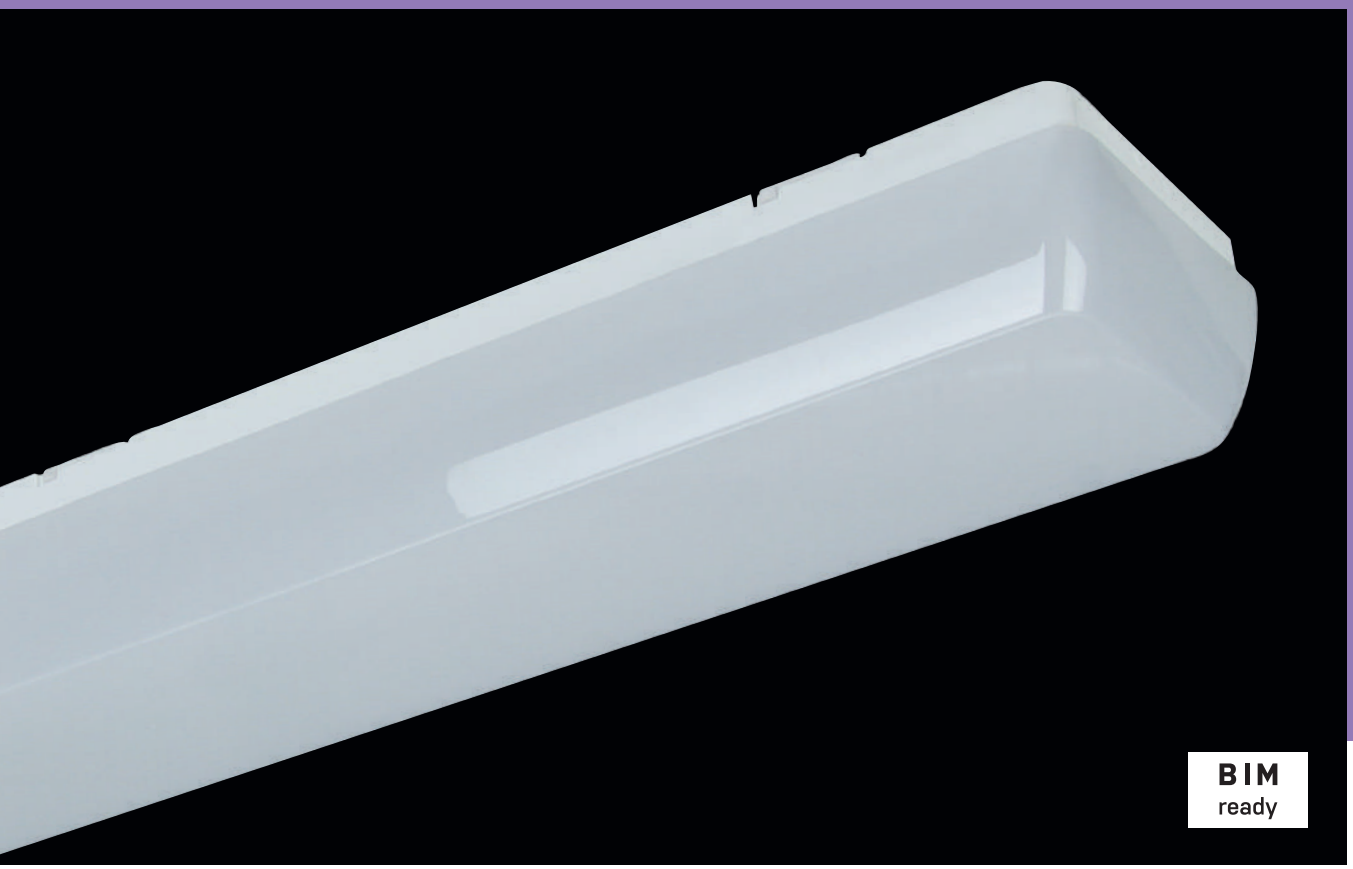
LINEA
ACCESSORIES
page 282



LINEA
ACCESSORIES
page 282

BIM ready
www.bim.lighting/en

LINEA



... indoor, surface-mounted, plastic.

USE

LINEA family is a perfect lighting solution of modern and technically functional illumination. It offers ceiling and wall-mounted luminaires with balanced shadowing and uniform light. Thanks to various sizes, individual premises as well as public buildings can be attractively illuminated.

The Linea light fitting line can be used as a comprehensive solution for lighting of office buildings, schools, hospitals, libraries, as well as individual lighting of flat interiors, corridors, sanitary and welfare facilities.

Thanks to its high luminous efficiency and low electricity consumption it is a suitable replacement for light fittings with fluorescent tubes.

T A
Č R
Technology Agency of the Czech Republic

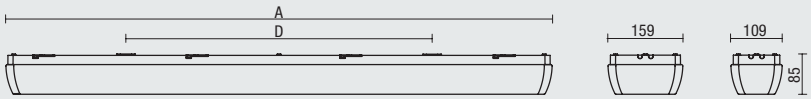
ADVANTAGES

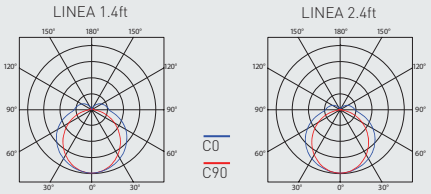
- Light fitting protection **IP54**
- Maximum ambient temperature up to t_a = **35 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC) = high light transmission
- Body: white polycarbonate (PC) = high mechanical resistance
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Certification: ESČ, ENEC, CB

LINEA

TECHNICAL DESCRIPTION

- Light fitting protection: IP54
- Maximum ambient temperature: t_a = 35 °C, Maximum ambient temperature: t_a = 0-25 °C (version with emergency back-up source for 1 or 3 hours; M1h, M3h with autotest)
- Maximum system efficacy: 143 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: white polycarbonate (PC), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Rotary cap: polyamide + 10 % glass fibre
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: rubber (SBS)
- Terminal block: screwless, three-pole (basic version)
- Electric equipment: LED modules, current driver or current driver DALI





Type	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
For ambient temperature t_a = 35 °C - body: white polycarbonate - diffuser: translucent polycarbonate								
LINEA 1.4ft 2600/840	2600	2180	16,1	135	20.1 / 18.4	1,9	1160	650
LINEA 1.4ft 3200/840	3100	2600	19,1	136	20.7 / 19.1	1,9	1160	650
LINEA 1.4ft 4400/840	4300	3610	26,0	139	21.8 / 20.2	1,9	1160	650
LINEA 2.4ft 5200/840	5230	4290	30,3	142	21.9 / 20.2	2,5	1160	650
LINEA 2.4ft 6400/840	6240	5120	36,3	141	22.5 / 20.8	2,5	1160	650
LINEA 2.4ft 8800/840	8690	7130	49,7	143	23.7 / 21.9	2,5	1160	650
LINEA 2.4ft SNS 5200/840	4710	3860	27,3	141	21.5 / 19.8	2,5	1160	650
LINEA 2.4ft SNS 6400/840	5620	4610	32,7	141	22.1 / 20.4	2,5	1160	650
LINEA 2.4ft SNS 8800/840	7760	6360	44,4	143	23.3 / 21.5	2,5	1160	650

63150 LINEA 1.4ft 3200/840 = suitable replacement for T8 fl. tube light fitting SM 136 – 1×36W
63160 LINEA 1.4ft 4400/840 = suitable replacement for T8 fl. tube light fitting SM 158 – 1×58W
63250 LINEA 2.4ft 6400/840 = suitable replacement for T8 fl. tube light fitting SM 236 – 2×36W
63260 LINEA 2.4ft 8800/840 = suitable replacement for T8 fl. tube light fitting SM 258 – 2×58W

LINEA

Diffuser made of translucent polycarbonate

Code	Type	M1h	M3h	DALI	DALI M1h	DALI M3h	SNS	CORRIDOR
63140	LINEA 1.4ft 2600/840	63144	x	63143	63147	x	x	x
63150	LINEA 1.4ft 3200/840	63154	x	63153	63157	x	x	x
63160	LINEA 1.4ft 4400/840	63164	x	63163	63167	x	x	x
63240	LINEA 2.4ft 5200/840	63244	63245	63243	63247	63246	63241	63248
63250	LINEA 2.4ft 6400/840	63254	63255	63253	63257	63256	63251	63258
63260	LINEA 2.4ft 8800/840	63264	63265	63263	63267	63266	63261	63268

LEGEND

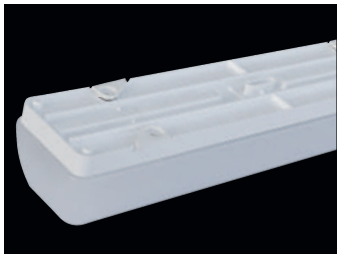
DALI – version with digital dimmable driver DALI
SNS – microwave motion sensor
CORRIDOR – version with digital dimmable driver DALI and set corridor function

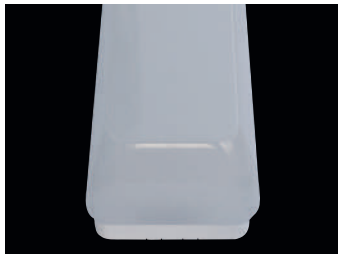
M1h – emergency back-up source with operating time of 1 hour (SA) for both permanent and emergency illumination with autotest
M3h – emergency back-up source with operating time of 3 hours (SA) for both permanent and emergency illumination with autotest
Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

LIGHT FITTING ATTACHMENT AND ITS DETAILED VIEW

Directly to a ceiling or a wall with the use of screws

LINEA





LINEA SQUARE

BIM ready

... interior square, plastic, surface-mounting.

USE

LINEA family is a perfect lighting solution of modern and technically functional illumination. It offers ceiling and wall-mounted luminaires with balanced shadowing and uniform light. Thanks to various sizes, individual premises as well as public buildings can be attractively illuminated.

The Linea light fitting line can be used as a comprehensive solution for lighting of office buildings, schools, hospitals, libraries, as well as individual lighting of flat interiors, corridors, sanitary and welfare facilities.

Thanks to its high luminous efficiency and low electricity consumption it is a suitable replacement for light fittings with fluorescent tubes.

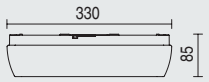
ADVANTAGES

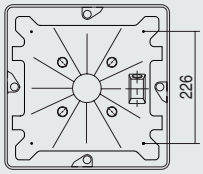
- Light fitting protection **IP54**
- Maximum ambient temperature up to t_a = **35 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC) = high light transmission
- Body: white polycarbonate (PC) = high mechanical resistance
- Up to 50 % lower electricity consumption when compared to compact fluorescent tubes
- In DALI version possibility of constant luminous flux for whole lifetime (CL0)
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Certification: ENEC, CB

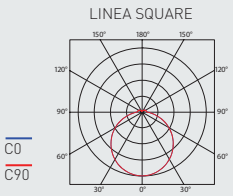
LINEA SQUARE

TECHNICAL DESCRIPTION

- Light fitting protection: IP54
- Maximum ambient temperature: t_a = 35 °C, Maximum ambient temperature: t_a = 0-25 °C (version with emergency back-up source for 1 or 3 hours; M1h, M3h with autotest)
- Maximum system efficacy: 139 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: white polycarbonate (PC), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Rotary cap: polyamide + 10 % glass fibre
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: rubber (SBS)
- Terminal block: screwless, three-pole (basic version)
- Electric equipment: LED modules, current driver or current driver DALI







Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]
For ambient temperature max. t_a = 35 °C - body: white polycarbonate - diffuser: translucent polycarbonate							
LINEA SQUARE 1550/840	35	1560	1250	9,0	139	18.8 / 18.8	1,4
LINEA SQUARE 1900/840	35	1930	1540	11,4	135	19.5 / 19.5	1,4
LINEA SQUARE 2200/840	35	2270	1820	13,7	133	20.1 / 20.1	1,4
LINEA SQUARE 2500/840	35	2540	2030	15,7	129	20.5 / 20.5	1,4
LINEA SQUARE 3600/840	30	3560	2850	23,1	123	21.6 / 21.6	1,5

63560 LINEA SQUARE 3600/840 = suitable replacement for compact fluorescent lamps 2×26 W

LINEA SQUARE

Diffuser made of translucent polycarbonate

Code	Type	M1h	M3h	DALI	DALI M1h	DALI M3h	SNS	SNS M1h	SNS M3h	CORRIDOR	CORRIDOR M1h	CORRIDOR M3h
63348	LINEA SQUARE 1550/840	63356	63360	x	x	x	63352	63365	63369	x	x	x
63349	LINEA SQUARE 1900/840	63357	63361	63374	63381	63384	63353	63366	63370	63377	63388	63392
63350	LINEA SQUARE 2200/840	63358	63362	63375	63382	63385	63354	63367	63371	63378	63389	63393
63351	LINEA SQUARE 2500/840	63359	63363	63376	63383	63386	63355	63368	63372	63379	63390	63394
63560	LINEA SQUARE 3600/840	63564	63364	63563	63567	63387	63561	63566	63373	63380	63391	63395

Example of type marking: 63376 = LINEA SQUARE 2500/840 **DALI**

LEGEND

DALI – version with digital dimmable driver DALI
SNS – microwave motion sensor
CORRIDOR – version with digital dimmable driver DALI and set corridor function

M1h – emergency back-up source with operating time of 1 hour (SA) for both permanent and emergency illumination with autotest
M3h – emergency back-up source with operating time of 3 hours (SA) for both permanent and emergency illumination with autotest
Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

LIGHT FITTING ATTACHMENT AND ITS DETAILED VIEW

Directly to a ceiling or a wall with the use of screws

LINEA SQUARE

LINEA ROUND

BIM ready

... interior circular, plastic, surface-mounting.

USE

LINEA family is a perfect lighting solution of modern and technically functional illumination. It offers ceiling and wall-mounted luminaires with balanced shadowing and uniform light. Thanks to various sizes, individual premises as well as public buildings can be attractively illuminated.

The Linea light fitting line can be used as a comprehensive solution for lighting of office buildings, schools, hospitals, libraries, as well as individual lighting of flat interiors, corridors, sanitary and welfare facilities.

Thanks to its high luminous efficiency and low electricity consumption it is a suitable replacement for light fittings with fluorescent tubes.

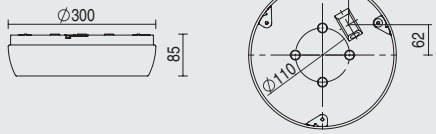
ADVANTAGES

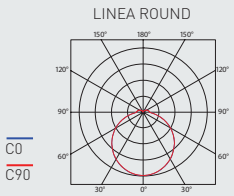
- Light fitting protection **IP54**
- Maximum ambient temperature up to **t_a = 35 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC) = high light transmission
- Body: white polycarbonate (PC) = high mechanical resistance
- Up to 50 % lower electricity consumption when compared to compact fluorescent tubes
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Certification: ENEC, CB

LINEA ROUND

TECHNICAL DESCRIPTION

- Light fitting protection: IP54
- Maximum ambient temperature: t_a = 35 °C, Maximum ambient temperature: t_a = 0-25 °C (version with emergency back-up source for 1 or 3 hours; M1h, M3h with autotest)
- Maximum system efficacy: 137 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: white polycarbonate (PC), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Rotary cap: polyamide + 10 % glass fibre
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: rubber (SBS)
- Terminal block: screwless, three-pole (basic version)
- Electric equipment: LED modules, current driver or current driver DALI





Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]
For ambient temperature max. t_a = 35 °C - body: white polycarbonate - diffuser: translucent polycarbonate							
LINEA ROUND 1550/840	35	1560	1230	9,0	137	20.1 / 20.1	1
LINEA ROUND 1900/840	35	1930	1520	11,4	133	20.8 / 20.8	1
LINEA ROUND 2200/840	35	2270	1790	13,7	131	21.4 / 21.4	1
LINEA ROUND 2500/840	35	2540	2010	15,7	128	21.8 / 21.8	1
LINEA ROUND 3600/840	30	3560	2810	23,1	122	23.0 / 23.0	1,1

63640 LINEA ROUND 3600/840 = suitable replacement for compact fluorescent lamps 2 × 26 W

LINEA ROUND

Diffuser made of translucent polycarbonate

Code	Type	M1h	M3h	DALI	DALI M1h	DALI M3h	SNS	SNS M1h	SNS M3h	CORRIDOR	CORRIDOR M1h	CORRIDOR M3h
63301	LINEA ROUND 1550/840	63309	63313	x	x	x	63305	63317	63321	x	x	x
63302	LINEA ROUND 1900/840	63310	63314	63326	63333	63336	63306	63318	63322	63329	63340	63344
63303	LINEA ROUND 2200/840	63311	63315	63327	63334	63337	63307	63319	63323	63330	63341	63345
63304	LINEA ROUND 2500/840	63312	63316	63328	63335	63338	63308	63320	63324	63331	63342	63346
63640	LINEA ROUND 3600/840	63664	63665	63663	63667	63339	63641	63646	63325	63332	63343	63347

Example of type marking: 63333 = LINEA ROUND 1900/840 **DALI M1h**

LEGEND

DALI – version with digital dimmable driver DALI
SNS – microwave motion sensor
CORRIDOR – version with digital dimmable driver DALI and set corridor function

M1h – emergency back-up source with operating time of 1 hour (SA) for both permanent and emergency illumination with autotest
M3h – emergency back-up source with operating time of 3 hours (SA) for both permanent and emergency illumination with autotest
Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

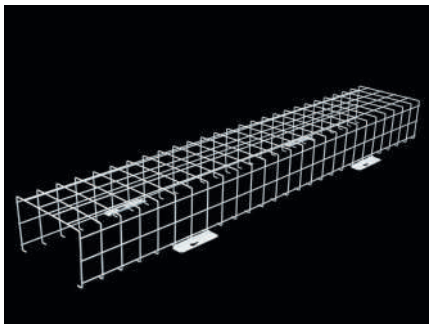
LIGHT FITTING ATTACHMENT AND ITS DETAILED VIEW

Directly to a ceiling or a wall with the use of screws

LINEA ROUND

OM – protective grid

The metal grid protects the light fitting against mechanical damage and unauthorised handling. It is attached to the surface with the use of screws.
The surface is treated with the RAL 9003 powder-coated colour.



Code	Type	Description	Weight [kg]
11942	OM 236	protective grid for types 236, 228/254, 2.4ft (1300×220×130 mm)	1,7

LUXOR LED

INDOOR

METAL

CEILING-MOUNTED

RASTER

LUXOR LED – indoor metal LED light fitting

LUXOR LED
page 286

IP40

LUXOR LED
page 286

LUXOR LED
ACCESSORIES
page 289

LUXOR LED
ACCESSORIES
page 289

LUXOR LED

... indoor metal.

USE

LUXOR LED is the perfect solution for office, education, halls, hospitals and shop & retail. Various sizes and three mounting methods are available.

It is the luminaire with highly specular parabolic louvre of glare-free effects, **UGR ‹19.**

LUXOR LED creates an atmosphere of well-being and can be used for daycare facilities too. LUXOR LED complies the European Lighting Standard EN 12461-1 and can also be used for day nurseries.

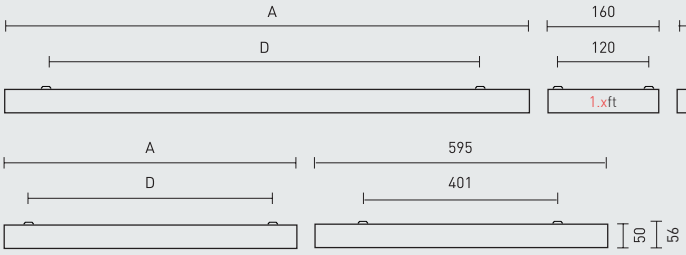
ADVANTAGES

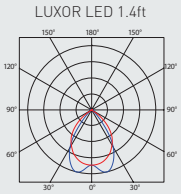
- Light fitting protection **IP40**
- Maximum ambient temperature up to **t_a = 35 °C**
- Lifetime: 50 000 hours / L90B10
- Optical system: shiny parabolic louvre, UGR ‹ 19
- Body: steel sheet, white (RAL 9003) or silver (RAL 9006) colour
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CL0)
- Standard model - CRI → 80: 4000 K
- At request CRI → 80: 3000 K, 5000 K, 6500 K, CRI → 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version

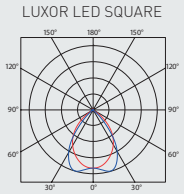
LUXOR LED

TECHNICAL DESCRIPTION

- Light fitting protection: IP40
- Maximum ambient temperature: t_a = 35 °C, Maximum ambient temperature: t_a = 0-25 °C version with emergency back-up source Mxh with autotest
- Maximum system efficacy: 112 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50 000 hours / L90B10
- Diffuser: shiny parabolical grid, UGR 19
- Body: steel sheet, white (RAL 9003) or silver (RAL 9006) colour
- Cable gland: rubber (SBS), white
- Terminal block: screwless, three-pole
- Cover secured by: magnets and plastic rivets
- Electric equipment: LED modules, current driver or current driver DAL







Type	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
For ambient temperature ta = 35 °C - body: steel sheet, white colour - diffuser shiny parabolical grid								
LUXOR LED 1.2ft 1600/840	1560	1000	9,8	102	12.6 / 15.5	2,7	664	450
LUXOR LED 1.4ft 3200/840	3100	1980	19,1	104	12.6 / 15.6	4,4	1224	1030
LUXOR LED 1.5ft 4000/840	3850	2460	23,3	106	12.6 / 15.6	5,2	1504	1310
LUXOR LED 2.2ft 3200/840	3100	1980	19,1	104	12.7 / 15.7	3,3	664	450
LUXOR LED 2.4ft 6400/840	6240	3990	36,3	110	12.8 / 15.8	5,5	1224	1030
LUXOR LED 2.5ft 8000/840	7770	4970	44,4	112	12.8 / 15.8	6,8	1504	1310
LUXOR LED SQUARE 6400/840	6240	3990	36,3	110	13.6 / 15.2	6,0	595	500

LUXOR LED

body lacquered steel sheet - white colour

Code	Type	M1h	M3h	DALI	DALI M1h	DALI M3h
102249	LUXOR LED 1.2ft 1600/840	102281	102288	102295	102302	102309
102250	LUXOR LED 1.4ft 3200/840	102282	102289	102296	102303	102310
102251	LUXOR LED 1.5ft 4000/840	102283	102290	102297	102304	102311
102252	LUXOR LED 2.2ft 3200/840	102284	102291	102298	102305	102312
102253	LUXOR LED 2.4ft 6400/840	102285	102292	102299	102306	102313
102254	LUXOR LED 2.5ft 8000/840	102286	102293	102300	102307	102314
102255	LUXOR LED SQUARE 6400/840	102287	102294	102301	102308	102315

Example of type marking: 102306 = LUXOR LED 2.4ft 6400/840 DALI M1h

LUXOR LED s

body lacquered steel sheet - silver colour (s)

Code	Type	M1h	M3h	DALI	DALI M1h	DALI M3h
102316	LUXOR LED 1.2ft 1600/840	102323	102330	102337	102344	102351
102317	LUXOR LED 1.4ft 3200/840	102324	102331	102338	102345	102352
102318	LUXOR LED 1.5ft 4000/840	102325	102332	102339	102346	102353
102319	LUXOR LED 2.2ft 3200/840	102326	102333	102340	102347	102354
102320	LUXOR LED 2.4ft 6400/840	102327	102334	102341	102348	102355
102321	LUXOR LED 2.5ft 8000/840	102328	102335	102342	102349	102356
102322	LUXOR LED SQUARE 6400/840	102329	102336	102343	102350	102357

Example of type marking: 102326 = LUXOR LED 2.2ft 4400/840 M1h s

LEGEND

s – silver colour RAL 9006
DALI – version with electronic and digitally dimmed ballast module operated via DALI protocol
M1h – emergency back-up source with operating time of 1 hour (SA) for both permanent and emergency illumination with autotest
M3h – emergency back-up source with operating time of 3 hour (SA) for both permanent and emergency illumination with autotest
Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

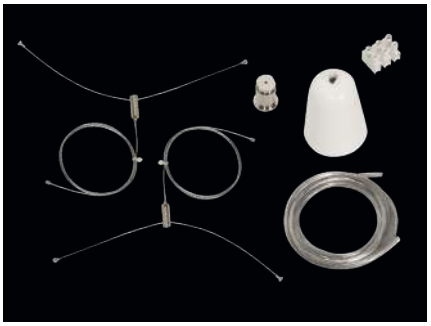
LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws
b) By suspending to a ceiling with the use of wire-cord suspensions
c) Installation into lower ceiling

LIGHT FITTING DETAILED VIEW

LUXOR LED

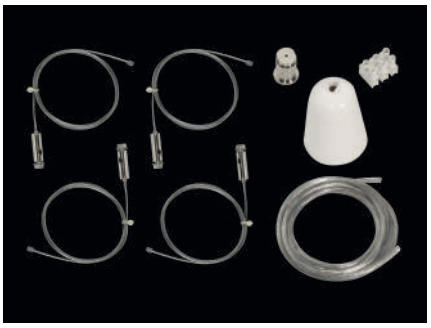
Ceiling suspender kit for LUXOR luminaires



Code	Type	Description	Weight [kg]
101344	ZL 1 - S3	a wire suspension kit with a maximum length of 1.5m to hang **single-line light fixtures (1.2ft, 1.4ft, 1.5ft)** including a **3-core** supply cable (a steel Y wire with a keyhole hanging bracket and a span of 150 mm including a ceiling wire holder clip – 2 pcs, supply cable, ceiling rose, three-pole terminal block)	0,2
101458	ZL 1 - S5	a wire suspension kit with a maximum length of 1.5m to hang **single-line light fixtures (1.2ft, 1.4ft, 1.5ft)** including a **5-core** supply cable (a steel Y wire with a keyhole hanging bracket and a span of 150 mm including a ceiling wire holder clip – 2 pcs, supply cable, ceiling rose, three-pole terminal block)	0,2

Code	Type	Description	Weight [kg]
101456	ZL 2 - S3	a wire suspension kit with a maximum length of 1.5m to hang **double-line light fixtures (2.2ft, 2.4ft, 2.5ft)** including a **3-core** supply cable (a steel Y wire with a keyhole hanging bracket and a span of 300 mm including a ceiling wire holder clip – 2 pcs, supply cable, ceiling rose, three-pole terminal block)	0,2
101494	ZL 2 - S5	a wire suspension kit with a maximum length of 1.5m to hang **double-line light fixtures (2.2ft, 2.4ft, 2.5ft)** including a **5-core** supply cable (a steel Y wire with a keyhole hanging bracket and a span of 300 mm including a ceiling wire holder clip – 2 pcs, supply cable, ceiling rose, three-pole terminal block)	0,2

Ceiling suspender kit for LUXOR SQUARE luminaires



Code	Type	Description	Weight [kg]
101457	ZL 3 - S3	a wire suspension kit with a maximum length of 1.5 m to hang **square light** fixtures including a **3-core** supply cable (a steel wire with a keyhole hanging bracket and a ceiling hook – 4 pcs, M5 bolt with a fan disc washer – 4pcs, supply cable, ceiling rose, three-pole terminal block)	0,2
101495	ZL 3 - S5	a wire suspension kit with a maximum length of 1.5 m to hang **square light** fixtures including a **5-core** supply cable (a steel wire with a keyhole hanging bracket and a ceiling hook – 4 pcs, M5 bolt with a fan disc washer – 4pcs, supply cable, ceiling rose, five-pole terminal block)	0,2

SB LED

INTERIOR

ALUMINUM

WALL/CEILING-MOUNTED

SB LED – interior aluminium LED fixture

SB LED
page 292

IP20

SB LED
page 292

SB LED

... indoor.

USE

The luminaire is an excellent choice for sanitary rooms, toilets, kitchen units, wall units, dressing rooms, worktops and shop windows.

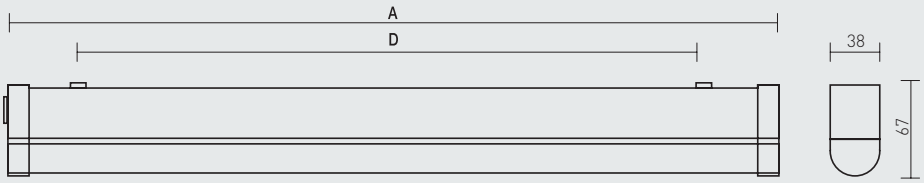
ADVANTAGES

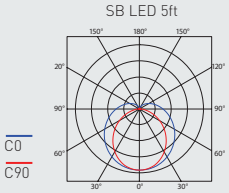
- Light fitting protection IP20
- Maximum ambient temperature up to ta = 35 °C
- Integrated switch in side plastic cover
- Packaging: white cover, scratch protection
- Sliding mounting spacers

SB LED

TECHNICAL DESCRIPTION

- Light fitting protection: IP20
- Maximum ambient temperature up to t_a = 35 °C
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: aluminium profile, white (RAL 9003)
- Terminal block: screwed, three-poles
- Side cover: white, plastic (ABS)
- Integrated switch in side plastic cover
- Electric equipment: LED modules, current driver
- Maximum system efficacy: 146 lm/W
- Lifetime: 50 000 hours / L90B10
- MacAdam = 3 SDCM
- The watt and lumen values can, in accordance with valid standards, vary by ± 7,5 %
- CRI → 80: 3000, 4000 K
- Sliding spacers (PA-GF)

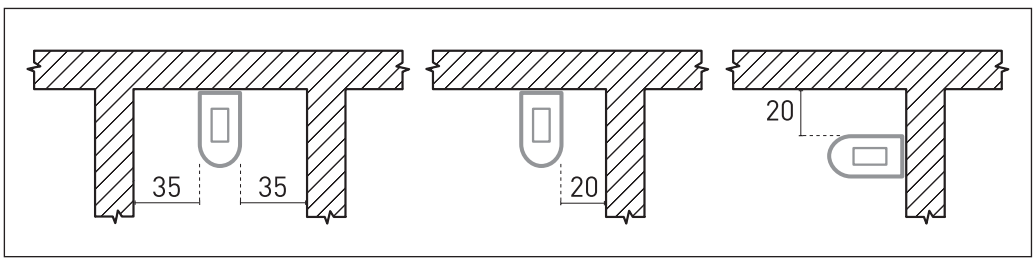




Code	Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
	For ambient temperature ta = 35 °C - body: aluminum profile of white color - diffuser translucent polycarbonate									
22415	SB LED 1.1ft 1100/840	35	1180	1070	9,0	119	27.1 / 25.0	0,4	360	230
22425	SB LED 1.2ft 2200/840	35	2340	2130	15,2	140	27.7 / 25.5	0,6	590	460
22435	SB LED 1.4ft 4400/840	35	4670	4250	29,8	143	27.7 / 25.5	1	1150	1020
22445	SB LED 1.5ft 5500/840	35	5890	5360	36,7	146	27.7 / 25.6	1,2	1430	1300

LIGHT FITTING ATTACHMENT

Directly to a ceiling or a wall with the use of screws



LYRA

INDOOR

PLASTIC

SURFACE-MOUNTED

LYRA – indoor plastic LED light fitting

LYRA
page 296

IP54

LYRA
page 296

LYRA

... fashionable for every interior.

USE

LYRA is round LED wall and ceiling – mounted fashionable luminaire for every interior.

It is perfect solution for rezidental zones, corridors, lounges, hotels, restaurants and entrance areas.

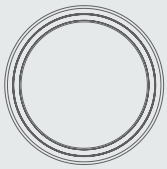
ADVANTAGES

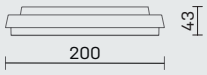
- Light fitting protection IP54
- Temperature resistance from ta -10 to 35 °C
- Lifetime: 50 000 hours / L80B50
- High mechanical resistence: IK10

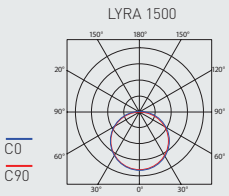
LYRA

TECHNICAL DESCRIPTION

- Light fitting protection: IP54
- Maximum ambient temperature: 35 °C
- Lifetime: 50 000 hours / L80B50
- Maximum light fitting efficiency: 113 lm/W
- CRI > 80: 4000 K
- CRI > 80: 3000 K
- Diffuser: translucent polycarbonate
- Body: polycarbonate
- Light source body: polycarbonate
- Electronic equipment: LED modules, fixed output driver
- The values stated for power consumption and luminous flux are in a tolerance of + - 7,5%







Code	Type	Max. ambient temperature [°C]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
	For ambient temperature max. t_a = 35 °C - body: polycarbonate - diffuser: translucent polycarbonate								
41001	LYRA 1500/840	35	1670	14,8	113	27.9 / 27.8	0,6	200	43
41002	LYRA 1500/830	35	1540	14,8	104	27.6 / 27.5	0,6	200	43

LIGHT FITTING ATTACHMENT AND ITS DETAILED VIEW

Directly to a ceiling or a wall with the use of screws

BELTR LED

INDOOR

PLASTIC

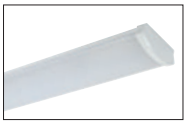
SURFACE-MOUNTED

BATTEN

BELTR LED – indoor plastic LED light fitting

BELTR LED
page 300

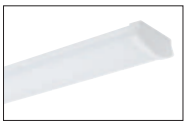
IP44



BELTR LED
page 300

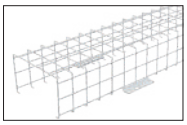
BELTR LED TUBE
page 303

IP40



BELTR LED TUBE
page 303

BELTR LED
ACCESSORIES
page 306



BELTR LED
ACCESSORIES
page 306

BELTR LED

... indoor, plastic, surface-mounted, batten.

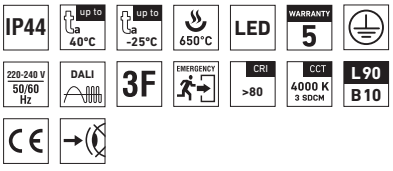
USE

The light fitting is suitable for offices, hallways, school interiors, libraries, lecture rooms, sanitary rooms, hospitals and passenger terminals.

Thanks to its high luminous efficiency and low electricity consumption it is a suitable replacement for light fittings with fluorescent tubes.

ADVANTAGES

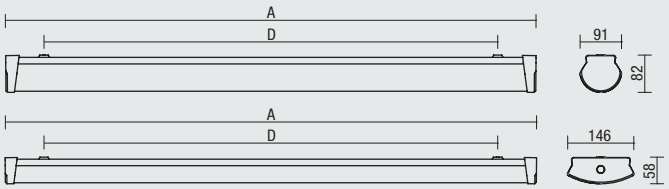
- Light fitting protection **IP44**
- Maximum ambient temperature up to **t_a = 40 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: steel sheet, white colour (RAL 9003)
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CL0)
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Possibility to through-wire individual light fittings to row with the use of external terminal blocks
- Certification: CE

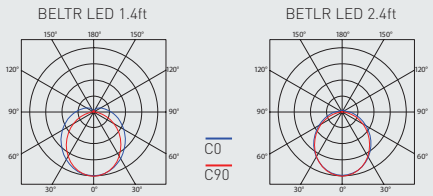


BELTR LED

TECHNICAL DESCRIPTION

- Light fitting protection: IP44
- Maximum ambient temperature: t_a = 40 °C, Maximum ambient temperature: t_a = 0-25 °C (version with emergency back-up source for 1 hour; M1h)
- Maximum system efficacy: 142 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: steel sheet, white colour (RAL 9003)
- Side covers: white (ABS), UV stable, with offsets allowing fixing the light fitting with enclosed screws M4 against tampering
- Cable gland: white, rubber
- Terminal block: screwless, three-pole (basic version)
- Electric equipment: LED modules, current driver or current driver DALI





Type	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
For ambient temperature t_a = 40 °C - body: steel sheet, white colour - diffuser: translucent polycarbonate								
BELTR LED 1.2ft 1300/840	1310	1060	8,2	129	21.0 / 18.5	0,8	610	500
BELTR LED 1.2ft 1600/840	1560	1260	9,8	129	21.7 / 18.9	0,8	610	500
BELTR LED 1.4ft 2600/840	2600	2110	16,1	131	21.1 / 18.8	1,5	1170	1000
BELTR LED 1.4ft 3200/840	3100	2510	19,1	131	21.7 / 19.2	1,4	1170	1000
BELTR LED 1.5ft 3250/840	3240	2620	19,5	134	21.1 / 18.8	1,9	1450	1000
BELTR LED 1.5ft 4000/840	3850	3120	23,3	134	21.7 / 19.3	1,8	1450	1000
BELTR LED 2.2ft 2600/840	2600	2110	16,1	131	22.2 / 21.1	1,5	610	500
BELTR LED 2.2ft 3200/840	3100	2510	19,1	131	22.8 / 21.7	1,3	610	500
BELTR LED 2.4ft 5200/840	5230	4240	30,3	140	22.3 / 21.3	2,4	1170	1000
BELTR LED 2.4ft 6400/840	6240	5050	36,3	139	22.9 / 21.9	2,3	1170	1000
BELTR LED 2.5ft 6500/840	6500	5270	37,1	142	22.3 / 21.4	3,1	1450	1000
BELTR LED 2.5ft 8000/840	7770	6290	44,4	142	22.9 / 22.0	2,9	1450	1000

106917 BELTR LED 1.2ft 1600/840 = suitable replacement for T8 fl. tube light fitting BELTR 118 - 1×18W
106919 BELTR LED 1.4ft 3200/840 = suitable replacement for T8 fl. tube light fitting BELTR 136 - 1×36W
106921 BELTR LED 1.5ft 4000/840 = suitable replacement for T8 fl. tube light fitting BELTR 158 - 1×58W
106923 BELTR LED 2.2ft 3200/840 = suitable replacement for T8 fl. tube light fitting BELTR 218 - 2×18W
106925 BELTR LED 2.4ft 6400/840 = suitable replacement for T8 fl. tube light fitting BELTR 236 - 2×36W
106927 BELTR LED 2.5ft 8000/840 = suitable replacement for T8 fl. tube light fitting BELTR 258 - 2×58W

BELTR LED

Kód	Typ	3F	M1h	3F M1h
106916	BELTR LED 1.2ft 1300/840	x	x	x
106917	BELTR LED 1.2ft 1600/840	x	x	x
106918	BELTR LED 1.4ft 2600/840	x	106934	x
106919	BELTR LED 1.4ft 3200/840	x	106935	x
106920	BELTR LED 1.5ft 3250/840	x	106936	x
106921	BELTR LED 1.5ft 4000/840	x	106937	x
106922	BELTR LED 2.2ft 2600/840	106928	x	x
106923	BELTR LED 2.2ft 3200/840	106929	x	x
106924	BELTR LED 2.4ft 5200/840	106930	106938	106942
106925	BELTR LED 2.4ft 6400/840	106931	106939	106943
106926	BELTR LED 2.5ft 6500/840	106932	106940	106944
106927	BELTR LED 2.5ft 8000/840	106933	106941	106945

Example of type marking: 106943 = BELTR LED 2.4ft 6400/840 **3F M1h**

BELTR LED DALI

Digitally dimmable DALI driver

Code	Type	3F	M1h	3F M1h
106946	BELTR LED 1.2ft 1300/840 DALI	x	x	x
106947	BELTR LED 1.2ft 1600/840 DALI	x	x	x
106948	BELTR LED 1.4ft 2600/840 DALI	x	106964	x
106949	BELTR LED 1.4ft 3200/840 DALI	x	106965	x
106950	BELTR LED 1.5ft 3250/840 DALI	x	106966	x
106951	BELTR LED 1.5ft 4000/840 DALI	x	106967	x
106952	BELTR LED 2.2ft 2600/840 DALI	106958	x	x
106953	BELTR LED 2.2ft 3200/840 DALI	106959	x	x
106954	BELTR LED 2.4ft 5200/840 DALI	106960	106968	106972
106955	BELTR LED 2.4ft 6400/840 DALI	106961	106969	106973
106956	BELTR LED 2.5ft 6500/840 DALI	106962	106970	106974
106957	BELTR LED 2.5ft 8000/840 DALI	106963	106971	106975

BELTR LED SNS

Microwave motion sensor

Code	Type	3F	M1h	3F M1h
106976	BELTR LED 2.2ft SNS 2600/840	106982	x	x
106977	BELTR LED 2.2ft SNS 3200/840	106983	x	x
106978	BELTR LED 2.4ft SNS 5200/840	106984	106990	106996
106979	BELTR LED 2.4ft SNS 6400/840	106985	106991	106997
106980	BELTR LED 2.5ft SNS 6500/840	106986	106992	106998
106981	BELTR LED 2.5ft SNS 8000/840	106987	106993	106999

Example of type marking: 106999 = BELTR LED 2.5ft SNS 8000/840 **3F M3h**

LEGEND

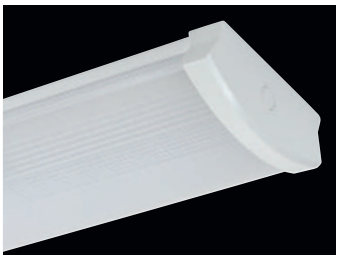
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
DALI version with digital dimmable driver DALI
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

Directly to a ceiling or a wall with the use of screws

LIGHT FITTING DETAILED VIEW

BELTR LED



BELTR LED TUBE

... indoor, plastic, surface-mounted, batten.

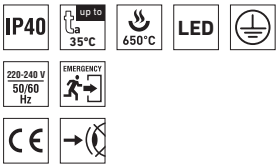
USE

The light fitting is suitable for offices, hallways, school interiors, libraries, lecture rooms, sanitary rooms, hospitals and passenger terminals.

Thanks to its high luminous efficiency and low electricity consumption it is a suitable replacement for light fittings with fluorescent tubes.

ADVANTAGES

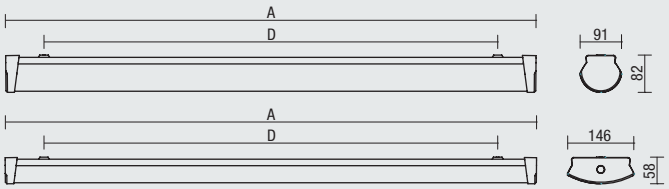
- Light fitting protection **IP40**
- Maximum ambient temperature up to **t_a = 35 °C**
- Diffuser: transparent polycarbonate = high mechanical resistance
- Body: steel sheet, white colour (RAL 9003)
- Up to 45 % lower electricity consumption when compared to tubes T5
- It can be delivered in emergency version



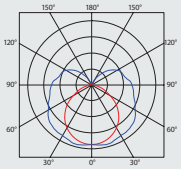
BELTR LED TUBE

TECHNICAL DESCRIPTION

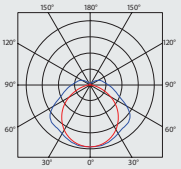
- Light fitting protection: IP40
- Maximum ambient temperature: t_a = 35 °C, Maximum ambient temperature: t_a = 0-25 °C (version with emergency back-up source for 1 hour; M1h)
- Maximum system efficacy: 86 lm/W
- MacAdam = 3 SDCM
- The watt and lumen values can vary by ± 7,5 %
- Diffuser: transparent polycarbonate, UV stable, impact-resistant
- Body: steel sheet, white colour (RAL 9003)
- Side covers: white (ABS), UV stable
- Cable gland: white, rubber
- Terminal block: screwless, three-pole (basic version)
- Electric equipment: for LED tubes Osram SubstiTUBE T8 EM Value 4000 K, 6500 K; lampholder G13



BELTR LED TUBE 1x120



BELTR LED TUBE 2x120



Type	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
For ambient temperature ta = 35 °C - body: steel sheet, white colour - diffuser: translucent polycarbonate - lampholder G13							
BELTR LED TUBE 1x60 PC	800*	650	7,6	86	0,5	635	450
BELTR LED TUBE 1x120 PC	1700*	1380	16,2	85	0,9	1245	900
BELTR LED TUBE 1x150 PC	2000*	1620	19,1	85	1,1	1545	900
BELTR LED TUBE 2x60 PC	1600*	1300	15,2	86	0,8	635	450
BELTR LED TUBE 2x120 PC	3400*	2750	32,4	85	1,4	1245	900
BELTR LED TUBE 2x150 PC	4000*	3240	38,2	85	1,7	1545	900

* - total luminous flux of the light fitting with Osram SubstiTUBE T8 EM Value sources

BELTR LED TUBE

For LED tubes Osram SubstiTUBE T8 EM Value

Code	Type	1F	3F	M1h	M3h
37110	BELTR LED TUBE 1x60	x	x	x	x
37120	BELTR LED TUBE 1x120	x	x	x	x
37130	BELTR LED TUBE 1x150	x	x	x	x
37140	BELTR LED TUBE 2x60	x	x	37144	37145
37150	BELTR LED TUBE 2x120	x	x	37154	37155
37160	BELTR LED TUBE 2x150	x	x	37164	37165

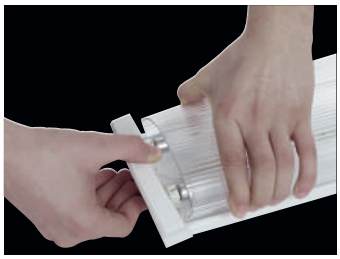
Example of type marking: 37164 = BELTR LED TUBE 2x150 **M1h**

LEGEND

1F – 1 phase wiring cables for through-wiring
3F – 3 phase wiring cables for through-wiring
M1h – emergency back-up source with operating time of 1 hour (SA) for both permanent and emergency illumination
M3h – emergency back-up source with operating time of 3 hours (SA) for both permanent and emergency illumination
Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

LIGHT FITTING ATTACHMENT

Directly to a ceiling or a wall with the use of screws

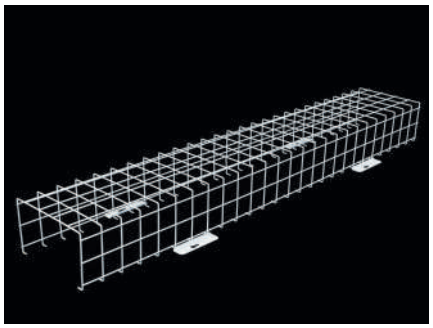


LIGHT FITTING DETAILED VIEW

BELTR LED TUBE

OM – protective grid

The metal grid protects the light fitting against mechanical damage and unauthorised handling. It is attached to the surface with the use of screws.
The surface is treated with the RAL 9003 powder-coated colour.



Code	Type	Description	Weight [kg]
11941	OM 218	protective grid for types 218, 214/224, 2.2ft (700×220×130 mm)	1,0
11942	OM 236	protective grid for types 236, 228/254, 2.4ft (1300×220×130 mm)	1,7
11943	OM 258	protective grid for types 258, 235/249/280, 2.5ft (1600×220×130 mm)	2,0

NAOS

INDOOR

METAL

NAOS – indoor metal LED light fitting

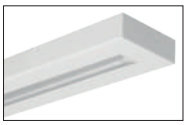
NAOS
page 310

IP40

NAOS
page 310

NAOS AS
page 313

IP40



NAOS AS
page 313

NAOS SQUARE
page 315

IP40

NAOS SQUARE
page 315

NAOS MPR
page 317

IP40

NAOS MPR
page 317

NAOS SQUARE MPR
page 320

IP40

NAOS SQUARE MPR
page 320

NAOS
ACCESSORIES
page 322

NAOS
ACCESSORIES
page 322

NAOS

... indoor, metal.

USE

Advanced lamp with low profile of total height of 34 mm only.

Body of the lamp is made of painted metal sheet and it is supplemented with acryl diffuser sandblasted on both sides.

The light fitting is suitable for offices, hallways, school interiors, libraries, lecture rooms, sanitary rooms, hospitals and passenger terminals.

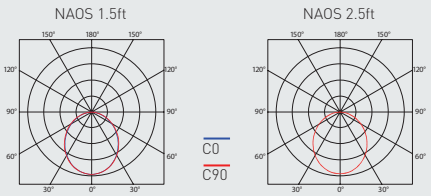
ADVANTAGES

- Light fitting protection **IP40**
- Maximum ambient temperature up to t_a **= 35 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: acryl (PMMA) sandblasted on both sides
- Body: steel sheet, white (RAL 9003) or silver (RAL 9006) colour
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Certification: ESČ

NAOS

TECHNICAL DESCRIPTION

- Light fitting protection: IP40
- Maximum ambient temperature: t_a = 35 °C, Maximum ambient temperature: t_a = 0-25 °C (version with emergency back-up source for 1 hour; M1h)
- Maximum system efficacy: 146 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: acryl (PMMA) sandblasted on both sides
- Body: steel sheet, white (RAL 9003) or silver (RAL 9006) colour
- Cable gland: rubber (SBS), white
- Terminal block: screwless, five-pole
- Securing of the cover: by the means of magnets
- Electric equipment: LED modules, current driver or current driver DALI



Type	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
For ambient temperature t_a = 35 °C - body: steel sheet, white colour - diffuser made of sandblasted opalised acryl								
NAOS 1.2ft 1300/840	1310	1060	8,2	129	23.2 / 23.6	2,0	620	470
NAOS 1.2ft 1600/840	1560	1260	9,8	129	23.9 / 24.2	2,0	620	470
NAOS 1.4ft 2600/840	2600	2110	16,1	131	23.3 / 23.6	3,7	1180	1030
NAOS 1.4ft 3200/840	3100	2510	19,1	131	23.9 / 24.2	3,7	1180	1030
NAOS 1.5ft 3250/840	3240	2620	19,5	134	23.3 / 23.6	4,4	1460	1310
NAOS 1.5ft 4000/840	3850	3120	23,3	134	23.9 / 24.2	4,4	1460	1310
NAOS 2.2ft 2600/840	2600	2160	16,1	134	24.1 / 24.3	2,6	620	470
NAOS 2.2ft 3200/840	3100	2570	19,1	135	24.7 / 24.9	2,6	620	470
NAOS 2.4ft 5200/840	5230	4340	30,3	143	24.1 / 24.4	4,6	1180	1030
NAOS 2.4ft 6400/840	6240	5180	36,3	143	24.8 / 25.0	4,6	1180	1030
NAOS 2.5ft 6500/840	6500	5400	37,1	146	24.1 / 24.4	5,5	1460	1310
NAOS 2.5ft 8000/840	7770	6450	44,4	145	24.7 / 25.0	5,5	1460	1310

95050 NAOS 1.4ft 3200/840 = suitable replacement for T5 fl. tube light fitting LUXOR 154 OP ET5 – 1×54 W
95140 NAOS 2.4ft 6400/840 = suitable replacement for T5 fl. tube light fitting LUXOR 254 OP ET5 – 2×54 W

NAOS

Diffuser made from sandblasted opalised acryl, **white colour**

Code	Type	M1h	DALI	DALI M1h
95010	NAOS 1.2ft 1300/840	95013	95015	95016
95020	NAOS 1.2ft 1600/840	95023	95025	95026
95040	NAOS 1.4ft 2600/840	95043	95045	95046
95050	NAOS 1.4ft 3200/840	95053	95055	95056
95070	NAOS 1.5ft 3250/840	95073	95075	95076
95080	NAOS 1.5ft 4000/840	95083	95085	95086
95100	NAOS 2.2ft 2600/840	95103	95105	95106
95110	NAOS 2.2ft 3200/840	95113	95115	95116
95130	NAOS 2.4ft 5200/840	95133	95135	95136
95140	NAOS 2.4ft 6400/840	95143	95145	95146
95160	NAOS 2.5ft 6500/840	95163	95165	95166
95170	NAOS 2.5ft 8000/840	95173	95175	95176

Example of type marking: 95146 = NAOS 2.4ft 6400/840 **DALI M1h**

NAOS s

Diffuser made from sandblasted opalised acryl, silver colour (s)

Code	Type	M1h	DALI	DALI M1h
95310	NAOS 1.2ft 1300/840 s	95313	95315	95316
95320	NAOS 1.2ft 1600/840 s	95323	95325	95326
95340	NAOS 1.4ft 2600/840 s	95343	95345	95346
95350	NAOS 1.4ft 3200/840 s	95353	95355	95356
95370	NAOS 1.5ft 3250/840 s	95373	95375	95376
95380	NAOS 1.5ft 4000/840 s	95383	95385	95386
95400	NAOS 2.2ft 2600/840 s	95403	95405	95406
95410	NAOS 2.2ft 3200/840 s	95413	95415	95416
95430	NAOS 2.4ft 5200/840 s	95433	95435	95436
95440	NAOS 2.4ft 6400/840 s	95443	95445	95446
95460	NAOS 2.5ft 6500/840 s	95463	95465	95466
95470	NAOS 2.5ft 8000/840 s	95473	95475	95476

Example of type marking: 95413 = NAOS 2.2ft 3200/840 **M1h** s

LEGEND

s – silver colour RAL 9006
DALI – version with electronic and digitally dimmed ballast module operated via DALI protocol
M1h – emergency back-up source with operating time of 1 hour (SA) for both permanent and emergency illumination

Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws
b) By suspending to a ceiling with the use of wire-cord suspensions

LIGHT FITTING DETAILED VIEW

NAOS

NAOS AS

... indoor, metal, asymmetrical.

USE

Advanced lamp with low profile of total height of 34 mm only.

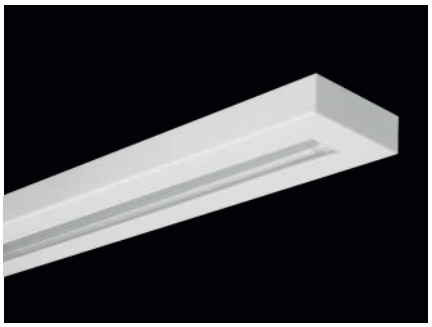
Made of painted metal, the luminaire body is complemented by an asymmetrical diffusor made of acrylic.

The fixture is a perfect choice for indoor areas, such as schools (including as a dedicated luminaire placed above the board to highlight the area), libraries, auditoriums and exhibition spaces.

ADVANTAGES

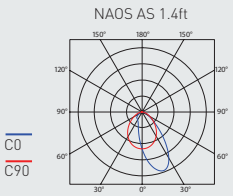
- Light fitting protection **IP40**
- Maximum ambient temperature up to $\mathbf{t_a = 35\ °C}$
- Lifetime: 50,000 hours / L90B10
- Diffusor: asymmetrical acrylic (PMMA)
- Body: steel sheet, white (RAL 9003) or silver (RAL 9006) colour
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CL0)
- Standard model - CRI > 80: 4000 K
- It can be delivered in dimmable version
- Certification: ESČ

NAOS AS



TECHNICAL DESCRIPTION

- Light fitting protection: IP40
- Maximum ambient temperature: t_a = 35 °C
- Maximum system efficacy: 147 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffusor: asymmetrical acrylic (PMMA)
- Body: steel sheet, white (RAL 9003) or silver (RAL 9006) colour
- Cable gland: rubber (SBS), white
- Terminal block: screwless, five-pole
- Securing of the cover: by the means of magnets
- Electric equipment: LED modules, current driver or current driver DALI



Type	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
For ambient temperature t_a = 35 °C - body: steel sheet, white colour - diffusor: asymmetrical acrylic							
NAOS 1.4ft AS 6400/840	6360	5720	38,8	147	2,9	1218	1030

NAOS AS

Asymmetrical acrylic diffusor, white colour

Code	Type	DALI
10192	NAOS 1.4ft AS 6400/840	10198

NAOS AS s

Asymmetrical acrylic diffusor, silver colour (s)

Code	Type	DALI
10455	NAOS 1.4ft AS 6400/840 s	10492

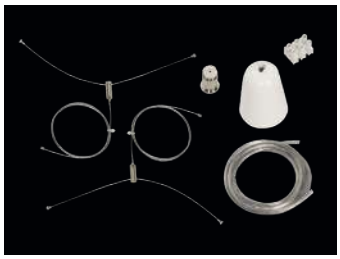
LEGEND

s – silver colour RAL 9006

DALI – version with electronic and digitally dimmed ballast module operated via DALI protocol

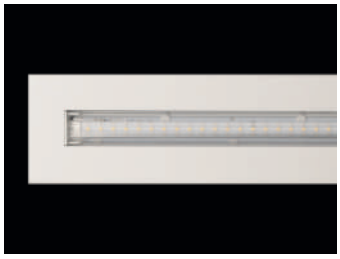
LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws
b) By suspending to a ceiling with the use of wire-cord suspensions



LIGHT FITTING DETAILED VIEW

NAOS AS



NAOS SQUARE

... indoor, square, metal.

USE

Advanced lamp with low profile of total height of 34 mm only.

Body of the lamp is made of painted metal sheet and it is supplemented with acryl diffuser sand-blasted on both sides.

The light fitting is suitable for offices, hallways, school interiors, libraries, lecture rooms, sanitary rooms, hospitals and passenger terminals.

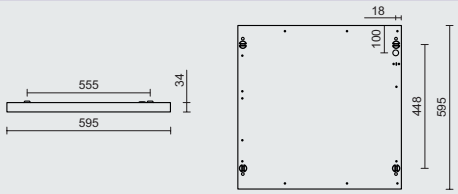
ADVANTAGES

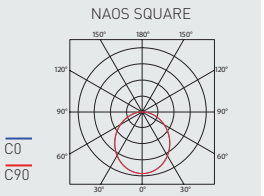
- Light fitting protection **IP40**
- Maximum ambient temperature up to t_a **= 35 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: acryl (PMMA) sandblasted on both sides
- Body: steel sheet, white (RAL 9003) or silver (RAL 9006) colour
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Certification: ESČ

NAOS SQUARE

TECHNICAL DESCRIPTION

- Light fitting protection: IP40
- Maximum ambient temperature: t_a = 35 °C, Maximum ambient temperature: t_a = 0-25 °C (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 143 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: acryl (PMMA) sandblasted on both sides
- Body: steel sheet, white (RAL 9003) or silver (RAL 9006) colour
- Cable gland: rubber (SBS), white
- Terminal block: screwless, five-pole
- Securing of the cover: by the means of magnets
- Electric equipment: LED modules, current driver or current driver DALI





Type	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]
For ambient temperature t_a = 35 °C - body: steel sheet, white colour - diffuser made of sandblasted opalised acryl						
NAOS SQUARE 5200/840	5230	4340	30,3	143	21.2 / 21.3	5,7
NAOS SQUARE 6400/840	6240	5180	36,3	143	21.8 / 22.0	5,7

95710 NAOS SQUARE 5200/840 = suitable replacement surface mounted or recessed fluorescent light fittings 4×18W a 4×14W

NAOS SQUARE

Diffuser made from sandblasted opalised acryl, white colour

Code	Type	M1h	M3h	DALI	DALI M1h	DALI M3h
95710	NAOS SQUARE 5200/840	95713	95714	95715	95716	95717
95720	NAOS SQUARE 6400/840	95723	95724	95725	95726	95727

NAOS SQUARE s

Diffuser made from sandblasted opalised acryl, silver colour (s)

Code	Type	M1h	M3h	DALI	DALI M1h	DALI M3h
95750	NAOS SQUARE 5200/840 s	95753	95754	95755	95756	95757
95760	NAOS SQUARE 6400/840 s	95763	95764	95765	95766	95767

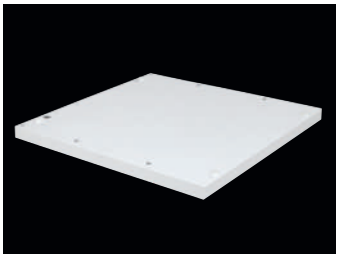
Example of type marking: 95756 = NAOS SQUARE 5200/840 **DALI M1h** s

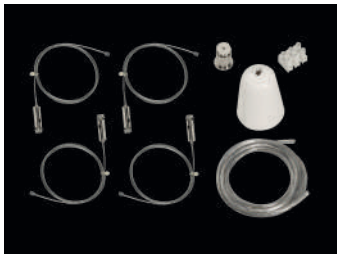
LEGEND

s – silver colour RAL 9006
DALI – version with electronic and digitally dimmed ballast module operated via DALI protocol
M1h – emergency back-up source with operating time of 1 hour (SA) for both permanent and emergency illumination
Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

LIGHT FITTING ATTACHMENT

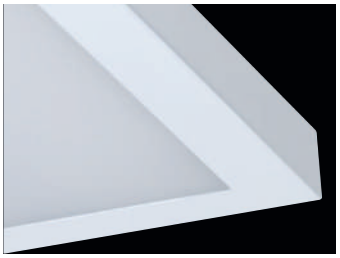
a) Directly to a ceiling or a wall with the use of screws
b) By suspending to a ceiling with the use of wire-cord suspensions
c) Installation into 600 × 600 mm grid lower ceiling





LIGHT FITTING DETAILED VIEW

NAOS SQUARE



NAOS MPR

... indoor, metal, with low UGR.

USE

Advanced lamp **with low profile** of total height of **34 mm only**.

The light fitting is suitable for offices, hallways, school interiors, libraries, lecture rooms, sanitary rooms, hospitals and passenger terminals.

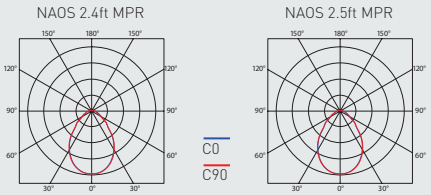
ADVANTAGES

- Light fitting protection **IP40**
- Maximum ambient temperature up to t_a **= 35 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: multi-layer micropyramid optics (MPR) with UGR < 19
- Body: steel sheet, white (RAL 9003) or silver (RAL 9006) colour
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Certification: ESČ

NAOS MPR

TECHNICAL DESCRIPTION

- Light fitting protection: IP40
- Maximum ambient temperature: t_a = 35 °C, Maximum ambient temperature: t_a = 0-25 °C (version with emergency back-up source for 1 hour; M1h)
- Maximum system efficacy: 137 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: multi-layer micropyramid optics MPR for light distribution without glare according to EN 12464-1 with UGR < 19
- Body: steel sheet, white (RAL 9003) or silver (RAL 9006) colour
- Cable gland: rubber (SBS), white
- Terminal block: screwless, five-pole
- Securing of the cover: by the means of magnets
- Electric equipment: LED modules, current driver or current driver DALI



Type	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]	D [mm]
For environment temperature t_a = 35 °C - body made of white steel sheet - diffuser made of multilayer micropyramid optics								
NAOS 2.4ft MPR 5200/840	5230	4080	30,3	135	18.5 / 18.6	6,1	1180	1030
NAOS 2.5ft MPR 6500/840	6500	5070	37,1	137	18.5 / 18.6	7,6	1460	1310

95510 NAOS 2.4ft MPR 5200/840 = suitable replacement for T5 fl. tube light fitting LUXOR 235 OP ET5 – 2×35W
95520 NAOS 2.4ft MPR 6500/840 = suitable replacement for T5 fl. tube light fitting LUXOR 249 OP ET5 – 2×49W

NAOS MPR

Diffuser with multilayer micropyramid optics, white colour

Code	Type	M1h	DALI	DALI M1h
95510	NAOS 2.4ft MPR 5200/840	95513	95515	95516
95520	NAOS 2.5ft MPR 6500/840	95523	95525	95526

NAOS MPR s

Diffuser with multilayer micropyramid optics, silver colour (s)

Code	Type	M1h	DALI	DALI M1h
95610	NAOS 2.4ft MPR 5200/840 s	95613	95615	95616
95620	NAOS 2.5ft MPR 6500/840 s	95623	95625	95626

Example of type marking: 95626 = NAOS 2.5ft MPR 6500/840 **DALI M1h**

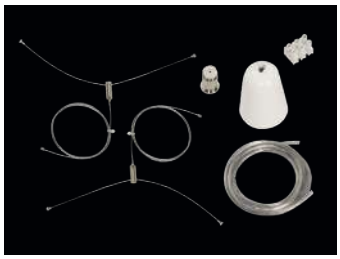
LEGEND

s – silver colour RAL 9006
DALI – version with electronic and digitally dimmed ballast module operated via DALI protocol
M1h – emergency back-up source with operating time of 1 hour (SA) for both permanent and emergency illumination

Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws
b) By suspending to a ceiling with the use of wire-cord suspensions



LIGHT FITTING DETAILED VIEW

NAOS MPR

NAOS SQUARE MPR

... indoor, square, metal, with low UGR.

USE

Advanced lamp **with low profile** of total height of **34 mm only**.

The light fitting is suitable for offices, hallways, school interiors, libraries, lecture rooms, sanitary rooms, hospitals and passenger terminals.

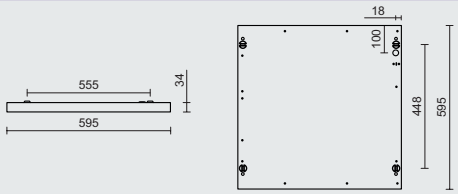
ADVANTAGES

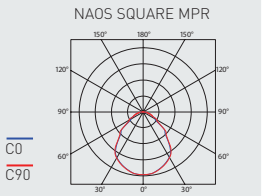
- Light fitting protection **IP40**
- Maximum ambient temperature up to t_a **= 35 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: multi-layer micropyramid optics (MPR) with UGR < 19
- Body: steel sheet, white (RAL 9003) or silver (RAL 9006) colour
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Certification: ESČ

NAOS SQUARE MPR

TECHNICAL DESCRIPTION

- Light fitting protection: IP40
- Maximum ambient temperature: t_a = 35 °C, Maximum ambient temperature: t_a = 0-25 °C (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 135 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: multi-layer micropyramid optics MPR for light distribution without glare according to EN 12464-1 with UGR < 19
- Body: steel sheet, white (RAL 9003) or silver (RAL 9006) colour
- Cable gland: rubber (SBS), white
- Terminal block: screwless, five-pole
- Securing of the cover: by the means of magnets
- Electric equipment: LED modules, current driver or current driver DALI





Type	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]
For environment temperature t_a = 35 °C - body made of white steel sheet - diffuser made of multilayer micropyramid optics						
NAOS SQUARE MPR 5200/840	5230	4080	30,3	135	18.3 / 18.7	5,7

95810 NAOS SQUARE MPR 5200/840 = suitable replacement surface mounted or recessed fluorescent light fittings 4×18 W a 4×14 W

NAOS SQUARE MPR

Diffuser with multilayer micropyramid optics, white colour

Code	Type	M1h	M3h	DALI	DALI M1h	DALI M3h
95810	NAOS SQUARE MPR 5200/840	95813	95814	95815	95816	95817

NAOS SQUARE MPR s

Diffuser with multilayer micropyramid optics, silver colour (s)

Code	Type	M1h	M3h	DALI	DALI M1h	DALI M3h
95850	NAOS SQUARE MPR 5200/840 s	95853	95854	95855	95856	95857

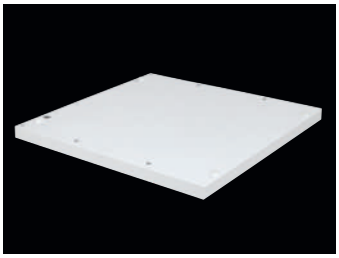
Example of type marking: 95856 = NAOS SQUARE MPR 5200/840 **DALI M1h** s

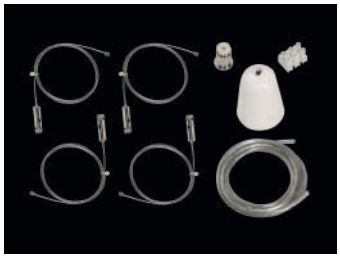
LEGEND

s – silver colour RAL 9006
DALI – version with electronic and digitally dimmed ballast module operated via DALI protocol
M1h – emergency back-up source with operating time of 1 hour (SA) for both permanent and emergency illumination
Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

LIGHT FITTING ATTACHMENT

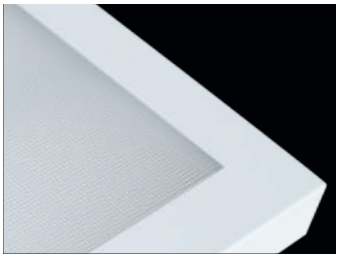
a) Directly to a ceiling or a wall with the use of screws
b) By suspending to a ceiling with the use of wire-cord suspensions
c) Installation into 600 × 600 mm grid lower ceiling



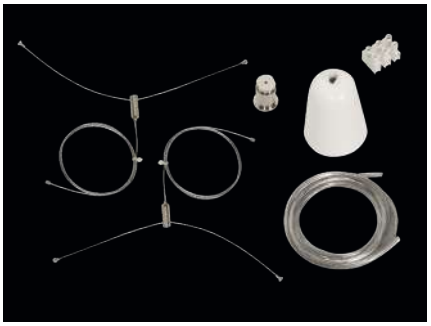


LIGHT FITTING DETAILED VIEW

NAOS SQUARE MPR



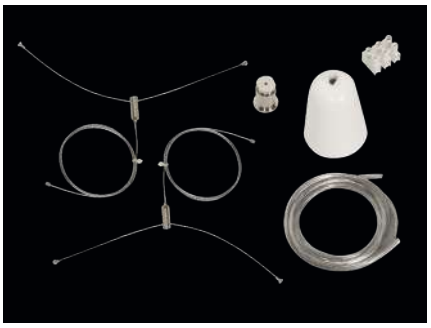
Ceiling suspender kit for NAOS, NAOS AS luminaires



Code	Type	Description	Weight [kg]
101344	ZL 1 - S3	a wire suspension kit with a maximum length of 1.5m to hang **single-line light fixtures (1.2ft, 1.4ft, 1.5ft)** including a **3-core** supply cable (a steel Y wire with a keyhole hanging bracket and a span of 150 mm including a ceiling wire holder clip – 2 pcs, supply cable, ceiling rose, three-pole terminal block)	0,2
101458	ZL 1 - S5	a wire suspension kit with a maximum length of 1.5m to hang **single-line light fixtures (1.2ft, 1.4ft, 1.5ft)** including a **5-core** supply cable (a steel Y wire with a keyhole hanging bracket and a span of 150 mm including a ceiling wire holder clip – 2 pcs, supply cable, ceiling rose, three-pole terminal block)	0,2

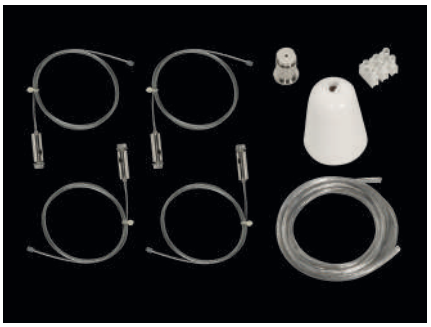
Code	Type	Description	Weight [kg]
101456	ZL 2 - S3	a wire suspension kit with a maximum length of 1.5m to hang **double-line light fixtures (2.2ft, 2.4ft, 2.5ft)** including a **3-core** supply cable (a steel Y wire with a keyhole hanging bracket and a span of 300 mm including a ceiling wire holder clip – 2 pcs, supply cable, ceiling rose, three-pole terminal block)	0,2
101494	ZL 2 - S5	a wire suspension kit with a maximum length of 1.5m to hang **double-line light fixtures (2.2ft, 2.4ft, 2.5ft)** including a **5-core** supply cable (a steel Y wire with a keyhole hanging bracket and a span of 300 mm including a ceiling wire holder clip – 2 pcs, supply cable, ceiling rose, three-pole terminal block)	0,2

Ceiling suspender kit for NAOS MPR luminaires



Code	Type	Description	Weight [kg]
101456	ZL 2 - S3	a wire suspension kit with a maximum length of 1.5m to hang **double-line light fixtures (2.2ft, 2.4ft, 2.5ft)** including a **3-core** supply cable (a steel Y wire with a keyhole hanging bracket and a span of 300 mm including a ceiling wire holder clip – 2 pcs, supply cable, ceiling rose, three-pole terminal block)	0,2
101494	ZL 2 - S5	a wire suspension kit with a maximum length of 1.5m to hang **double-line light fixtures (2.2ft, 2.4ft, 2.5ft)** including a **5-core** supply cable (a steel Y wire with a keyhole hanging bracket and a span of 300 mm including a ceiling wire holder clip – 2 pcs, supply cable, ceiling rose, three-pole terminal block)	0,2

Ceiling suspender kit for NAOS SQUARE, NAOS SQUARE MPR luminaires



Code	Type	Description	Weight [kg]
101457	ZL 3 - S3	a wire suspension kit with a maximum length of 1.5 m to hang **square light** fixtures including a **3-core** supply cable (a steel wire with a keyhole hanging bracket and a ceiling hook – 4 pcs, M5 bolt with a fan disc washer – 4pcs, supply cable, ceiling rose, three-pole terminal block)	0,2
101495	ZL 3 - S5	a wire suspension kit with a maximum length of 1.5 m to hang **square light** fixtures including a **5-core** supply cable (a steel wire with a keyhole hanging bracket and a ceiling hook – 4 pcs, M5 bolt with a fan disc washer – 4pcs, supply cable, ceiling rose, five-pole terminal block)	0,2

MO SLIM

INDOOR

BATTEN

MO SLIM – indoor batten LED light fittings

MO SLIM
page 326

MO SLIM
page 326

IP20

MO SLIM

... indoor suspended LED light fitting.

USE

Interior light fitting from aluminum profile and PC of diffuser It is suitable for selling premises, offices, corridors, entrance and terminal halls, interiors of schools, lecture rooms and hospitals. The light fittings can be easy connected to different lengths and shapes.

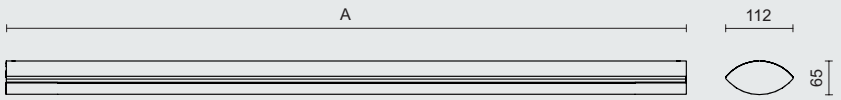
ADVANTAGES

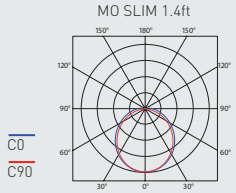
- Light fitting protection **IP20**
- Maximum ambient temperature up to t_a **= 35 °C**
- Lifetime: 50,000 hours / L90B10
- Possibility of connection of light fittings to required lengths and shapes
- Diffuser: translucent polycarbonate (PC)
- Body: aluminium profile, white (RAL 9003) or silver (RAL 9006) colour
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CL0)
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or permanent emergency version M1h and M3hAt
- Through-wiring in basic version

MO SLIM

TECHNICAL DESCRIPTION

- Light fitting protection: IP20
- Maximum ambient temperature: t_a = 35 °C, Maximum ambient temperature: t_a = 0-25 °C (version with emergency back-up source M1h a M3hAt)
- Maximum system efficacy: 151 lm/W
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC)
- Body: aluminium profile, white (RAL 9003) or silver (RAL 9006) colour
- Reflector: steel sheet, white colour (RAL 9003)
- Terminal block: 2x screwless-type, five-poles, three-phase connection
- Electric equipment: LED modules, current driver or current driver DALI
- The package does not include end caps, connecting pieces or suspension. Accessories must **always** be ordered for installation.





Type	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/ transverse	Net weight [kg]	A [mm]
For ambient temperature t_a = 35 °C - aluminum profile of white color - diffuser: translucent polycarbonate							
MO SLIM 1.2ft 1300/840	1310	1130	8,2	138	23.3 / 22.1	1,7	570
MO SLIM 1.2ft 1600/840	1560	1340	9,8	137	23.9 / 22.7	1,7	570
MO SLIM 1.2ft 2200/840	2140	1840	13,2	139	25.0 / 23.8	1,7	570
MO SLIM 1.4ft 2600/840	2600	2240	16,1	139	23.3 / 22.1	2,9	1130
MO SLIM 1.4ft 3200/840	3100	2670	19,1	140	23.9 / 22.7	2,9	1130
MO SLIM 1.4ft 4400/840	4300	3700	26,0	142	25.0 / 23.8	2,9	1130
MO SLIM 1.4ft 6400/840	6120	5260	36,1	146	26.2 / 25.1	2,9	1130
MO SLIM 1.5ft 3250/840	3240	2790	19,5	143	23.2 / 22.1	3,4	1410
MO SLIM 1.5ft 4000/840	3850	3310	23,3	142	23.8 / 22.7	3,4	1410
MO SLIM 1.5ft 5500/840	5340	4590	31,9	144	25.0 / 23.8	3,4	1410
MO SLIM 1.5ft 8000/840	7780	6690	44,3	151	26.3 / 25.1	3,4	1410

MO SLIM

Body: white colour (RAL 9003)

Code	Type	M1h	M3hAt	DALI	DALI M1h	DALI M3hAt
63873	MO SLIM 1.2ft 1300/840	x	x	63917	x	x
63878	MO SLIM 1.2ft 1600/840	x	x	63922	x	x
63859	MO SLIM 1.2ft 2200/840	x	x	63908	x	x
63887	MO SLIM 1.4ft 2600/840	63905	63943	63937	63910	63951
63899	MO SLIM 1.4ft 3200/840	63934	63947	63945	63938	63955
63903	MO SLIM 1.4ft 4400/840	63942	63916	63949	63950	63926
63874	MO SLIM 1.4ft 6400/840	63946	63921	63918	63954	63931
63879	MO SLIM 1.5ft 3250/840	63915	63907	63923	63925	63912
63904	MO SLIM 1.5ft 4000/840	63920	63936	63909	63930	63940
63914	MO SLIM 1.5ft 5500/840	63906	63944	63924	63911	63952
63919	MO SLIM 1.5ft 8000/840	63935	63948	63929	63939	63956

MO SLIM s

Body: silver colour (RAL 9006)

Code	Type	M1h	M3hAt	DALI	DALI M1h	DALI M3hAt
63927	MO SLIM 1.2ft 1300/840 s	x	x	10619	x	x
63932	MO SLIM 1.2ft 1600/840 s	x	x	10621	x	x
63913	MO SLIM 1.2ft 2200/840 s	x	x	10622	x	x
63941	MO SLIM 1.4ft 2600/840 s	10502	10517	10626	10762	10789
63953	MO SLIM 1.4ft 3200/840 s	10503	10518	10751	10768	10792
63957	MO SLIM 1.4ft 4400/840 s	10504	10599	10752	10769	10794
63928	MO SLIM 1.4ft 6400/840 s	10506	10608	10753	10772	10795
63933	MO SLIM 1.5ft 3250/840 s	10508	10612	10756	10778	10796
10497	MO SLIM 1.5ft 4000/840 s	10509	10614	10757	10779	10797
10498	MO SLIM 1.5ft 5500/840 s	10511	10615	10758	10782	10798
10500	MO SLIM 1.5ft 8000/840 s	10513	10617	10759	10788	10799

Example of type marking: 63921 = MO SLIM 1.4ft 6400/840 **M3hAt**

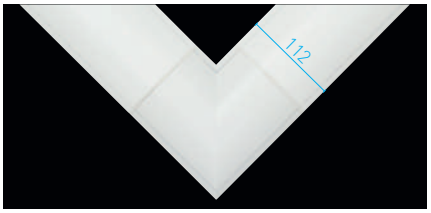
LEGEND

s – silver colour RAL 9006
DALI – version with electronic and digitally dimmed ballast module operated via DALI protocol
M1h – emergency back-up source with operating time of 1 hour (SA) for both permanent and emergency illumination
M3hAt – emergency back-up source with operating time of 1 hour (SA) for both permanent and emergency illumination with battery autotesting
Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

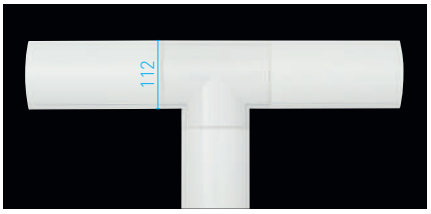
LIGHT FITTING DETAILED VIEW

MO SLIM

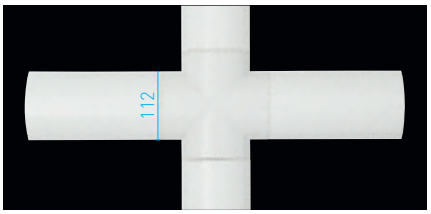
Code	Type	Description	Weight [kg]
10802	MO SLIM - S	direct connection of light fittings into row, white RAL 9003	0,5
10809	MO SLIM - S s	direct connection of light fittings into row, silver RAL 9006	0,5



Code	Type	Description	Weight [kg]
10808	MO SLIM - L	connection of light fittings in L shape with angle of 90°, white RAL 9003	0,6
10812	MO SLIM - L s	connection of light fittings in L shape with angle of 90°, silver RAL 9006	0,6



Code	Type	Description	Weight [kg]
10822	MO SLIM - T	connection of light fittings in T shape with angle of 90°, white RAL 9003	0,6
10828	MO SLIM - T s	connection of light fittings in T shape with angle of 90°, silver RAL 9006	0,6



Code	Type	Description	Weight [kg]
10829	MO SLIM - X	connection of light fittings in X shape with angle of 90°, white RAL 9003	0,6
10832	MO SLIM - X s	connection of light fittings in X shape with angle of 90°, silver RAL 9006	0,6

Code	Type	Description	Weight [kg]
10818	MO SLIM - K	plastic end cap, white RAL 9003	0,3
10819	MO SLIM - K s	plastic end cap, silver RAL 9006	0,3

Code	Type	Description	Weight [kg]
16101	Z4 - F1	wire-cord suspensions and joints, white RAL 9003	0,1
16102	Z4 - F1 s	wire-cord suspensions and joints, silver RAL 9006	0,1

Code	Type	Description	Weight [kg]
16104	Z4	wire-cord suspension and joint	0,1

EMERGENCY LED

PRIMA

FUTURA

PERUN SLIM

BELTR LED

HELIOS LED

PLEXI LED

PRIMA LED – plastic emergency LED light fitting

PRIMA LED NM
page 332

IP66

PRIMA LED NM
page 332

PRIMA LED Ex NM
page 335

FUTURA – plastic emergency LED light fitting

FUTURA NM
page 337

IP66

FUTURA NM
page 337

PRIMA – plastic emergency LED light fitting

PRIMA NM
page 340

IP66

PRIMA NM
page 340

PERUN SLIM – metal emergency LED light fitting

PERUN SLIM Ex NM
page 343

IP65

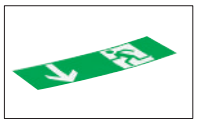
PERUN SLIM Ex NM
page 343

BELTR LED NM – plastic emergency LED light fitting

BELTR LED NM
page 346

IP40

BELTR LED NM
page 346



BELTR LED NM
ACCESSORIES
page 354

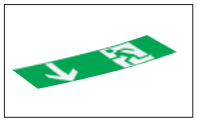
HELIOS LED – all-plastic emergency LED light fitting

HELIOS LED
page 349

IP42 IP65

HELIOS LED
page 350

HELIOS DS LED
page 351



HELIOS LED
ACCESSORIES
page 354

PLEXI LED – emergency LED light fitting for installation into plasterboard lower ceilings

PLEXI LED
page 352

IP20

PLEXI LED
page 352

PLEXI LED
ACCESSORIES
page 354

PRIMA LED NM

... emergency.

USE

Non-maintained emergency luminaire for escape routes, available for use in high ambient temperature, t_a = 50 °C, is intended by its function and shape primarily for being in a set with Prima LED and Innova light fittings.

It is recommended for escape routes of interior industrial rooms, storage halls, sports premises, agricultural buildings and laboratories without hazard of explosion of gases, dusts and flammable vapours.

It is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have increased resistance against deformation and impact.

Atmosphere emissions must be considered, as they may reduce the usability of plastics at installation in aggressive environment, see p. 367.

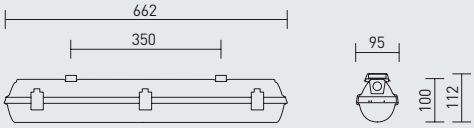
ADVANTAGES

- Light fitting protection **IP66**
- High thermal resistance ranging **from t_a = 0 °C to t_a = 50 °C** also for basic Ni-Cd battery type
- LED module lifetime: 50 000 hours / L80B20
- Luminous flux of the light fitting: **440 lm**
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate (PC) = high mechanical resistance
- Emergency module **1h or 3h**
- Optional selection of EM kit with battery autotest
- Integrated diode for indication of correct operation
- Optional selection of battery type between **Ni-Cd** or **$LiFePO_4$**
- Low energy consumption in StandBy mode
- Optional selection of connection between **cable gland** or **connector**
- Insulation class II

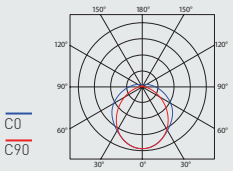
PRIMA LED PC, PCc

TECHNICAL DESCRIPTION

- Light fitting protection: **IP66**
- Maximum ambient temperature: **t_a = 50 °C**
- LED module lifetime: 50 000 hours / L80B20
- Luminous flux of the light fitting: **440 lm**
- Maximum light fitting efficiency: 133 lm/W
- **CRI > 80: 6500 K**
- MacAdam = 3 SDCM
- Diffuser: translucent PC (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- Reflector: white steel sheet (RAL 9003)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foam-filled body groove
- Light fitting connection: **cable gland PG 13,5 / 16** or **connector**
- Distance holder: polyamide + 10 % glass fibre
- Electric equipment:
  EM kit including Ni-Cd battery without autotest, LED module
  EM kit including $LiFePO_4$ battery with autotest, LED module
- The package includes: stainless hooks and stainless brackets
- 1-year warranty for battery, 2-year warranty for EM kit (unit + LED module)
- The above stated values of power consumption and luminous flux are within a tolerance of ± 7,5 %



PRIMA LED 1.2ft PC



Type	Autonomy [hrs]	Luminous flux of light fitting [lm]	Power in emergency mode [W]	Light fitting efficiency [lm/W]	Battery type	Power in standby mode [W]	Charging time [hrs]	Power in charging mode [W]	Net weight [kg]
Non-maintained emergency luminaire without autotest									
PRIMA LED 1.2ft PC NM1h	1	440	4,5	98	Ni-Cd	1,5	24	9	1,2
PRIMA LED 1.2ft PC NM3h	3	440	4,5	98	Ni-Cd	1,5	24	9	1,4
Non-maintained emergency luminaire with autotest									
PRIMA LED 1.2ft PC NM1hAt	1	440	3,3	133	$LiFePO_4$	0,7	12	3,5	1,2
PRIMA LED 1.2ft PC NM3hAt	3	440	3,3	133	$LiFePO_4$	0,7	12	3,5	1,4

PRIMA LED PC with cable glands

Non-maintained emergency luminaire without autotest - cable glands PG 13,5 / 16 - plastic clips

Type	NM1h	3F NM1h	DALI 3F NM1h	NM3h	3F NM3h	DALI 3F NM3h
PRIMA LED 1.2ft PC ...	62210	62211	x	62213	62214	x

Non-maintained emergency luminaire with autotest - cable glands PG 13,5 / 16 - plastic clips

Type	NM1hAt	3F NM1hAt	DALI 3F NM1hAt	NM3hAt	3F NM3hAt	DALI 3F NM3hAt
PRIMA LED 1.2ft PC ...	62220	62221	x	62223	62224	x

PRIMA LED PCc with cable glands

Non-maintained emergency luminaire without autotest - cable glands PG 13,5 / 16 - stainless clips (c)

Type	NM1h	3F NM1h	DALI 3F NM1h	NM3h	3F NM3h	DALI 3F NM3h
PRIMA LED 1.2ft PCc ...	62230	62231	x	62233	62234	x

Non-maintained emergency luminaire with autotest - cable glands PG 13,5 / 16 - stainless clips (c)

Type	NM1hAt	3F NM1hAt	DALI 3F NM1hAt	NM3hAt	3F NM3hAt	DALI 3F NM3hAt
PRIMA LED 1.2ft PCc ...	62240	62241	x	62243	62244	x

PRIMA LED PC with connectors

Non-maintained emergency luminaire without autotest - interconnecting connectors - plastic clips

Type	L1 2x5P NM1h	L3 2x5P NM1h	L1 2x7P NM1h	L1 2x5P NM3h	L3 2x5P NM3h	L1 2x7P NM3h
PRIMA LED 1.2ft PC ...	62250	62251	62252	62253	62254	62255

Non-maintained emergency luminaire with autotest - interconnecting connectors - plastic clips

Type	L1 2x5P NM1hAt	L3 2x5P NM1hAt	L1 2x7P NM1hAt	L1 2x5P NM3hAt	L3 2x5P NM3hAt	L1 2x7P NM3hAt
PRIMA LED 1.2ft PC ...	62260	62261	62262	62263	62264	62265

PRIMA LED PCc with connectors

Non-maintained emergency luminaire without autotest - interconnecting connectors - stainless clips (c)

Type	L1 2x5P NM1h	L3 2x5P NM1h	L1 2x7P NM1h	L1 2x5P NM3h	L3 2x5P NM3h	L1 2x7P NM3h
PRIMA LED 1.2ft PCc ...	62270	62271	62272	62273	62274	62275

Non-maintained emergency luminaire with autotest - interconnecting connectors - stainless clips (c)

Type	L1 2x5P NM1hAt	L3 2x5P NM1hAt	L1 2x7P NM1hAt	L1 2x5P NM3hAt	L3 2x5P NM3hAt	L1 2x7P NM3hAt
PRIMA LED 1.2ft PCc ...	62280	62281	62282	62283	62284	62285

LEGEND

NM1h – non-maintained emergency luminaire, operation time 1 hour
3F NM1h – non-maintained emergency luminaire, operation time 1 hour, 5-wire throughwiring (3F)
DALI 3F NM1h – non-maintained emergency luminaire, operation time 1 hour, 7-wire throughwiring (DALI 3F)
NM3h – non-maintained emergency luminaire, operation time 3 hours
3F NM3h – non-maintained emergency luminaire, operation time 3 hours, 5-wire throughwiring (3F)
DALI 3F NM3h – non-maintained emergency luminaire, operation time 3 hours, 7-wire throughwiring (DALI 3F)

L1 2x5P NM1h – non-maintained emergency luminaire, 2x5P connectors and 5-wire throughwiring (3F), operation time 1 hour, line connection, power supply from L1
L3 2x5P NM1h – non-maintained emergency luminaire, 2x5P connectors and 5-wire throughwiring (3F), operation time 1 hour, line connection, power supply from L3
L1 2x7P NM1h – non-maintained emergency luminaire, 2x7P connectors and 7-wire throughwiring (DALI 3F), operation time 1 hour, line connection, power supply from L1
L1 2x5P NM3h – non-maintained emergency luminaire, 2x5P connectors and 5-wire throughwiring (3F), operation time 3 hours, line connection, power supply from L1
L3 2x5P NM3h – non-maintained emergency luminaire, 2x5P connectors and 5-wire throughwiring (3F), operation time 3 hours, line connection, power supply from L3
L1 2x7P NM3h – non-maintained emergency luminaire, 2x7P connectors and 7-wire throughwiring (DALI 3F), operation time 3 hours, line connection, power supply from L1

...At – version with battery autotest

Module signalling without autotest

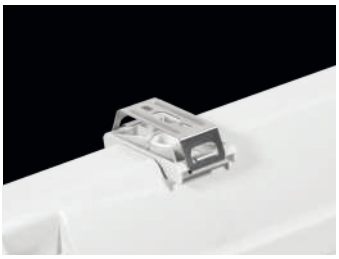
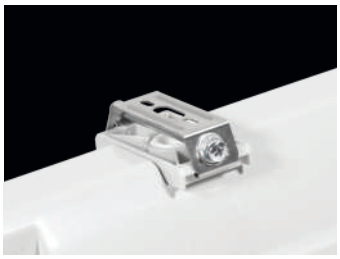
LED colour	Information
● green	
flashing	battery charging
-	running test/emergency mode

Module signalling with autotest (At)

LED colour		Information
● green	● red	
flashing	-	battery charging
-	flashing	defective LED module
-	shining	defective battery
-	-	running test/emergency mode

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks

LIGHT FITTING DETAILED VIEW

PRIMA LED PC

PRIMA LED Ex NM

... emergency and orientation.

USE

Non-maintained emergency luminaire for escape routes, available for use in high ambient temperature, t_a = 50 °C, is intended by its function and shape primarily for being in a set with Prima LED Ex light fittings.

The light fitting is suitable for the environment with a danger of explosion of gas, dust and combustible fumes. The light fittings meet the requirements of Government Decree 116/2016 Coll. and European Community Directive 2014/34/EU.

The basic requirements for safety and health protection are secured by the verification of conformity with the standards according to EN 60079-15, EN 60079-0 and EN 60079-31.

It is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have increased resistance against deformation and impact.

Atmosphere emissions must be considered, as they may reduce the usability of plastics at installation in aggressive environment, see p. 367.

ADVANTAGES

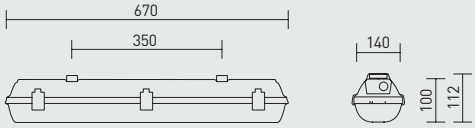
- Light fitting protection **IP66**
- High thermal resistance ranging **from t_a = 0 °C to t_a = 50 °C** also for basic Ni-Cd battery type
- LED module lifetime: 50 000 hours / L80B20
- Luminous flux of the light fitting: **440 lm**
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate (PC) = high mechanical resistance
- Emergency module **1h or 3h**
- Integrated diode for indication of correct operation
- Low energy consumption in StandBy mode
- Certification: TÜV CY 22 ATEX 0206610 X Issue: 01

The light fitting is certified for the environment:
Ex II 3G Ex nR IIC T6 Gc
Ex II 3D Ex tc IIIC T70°C Dc

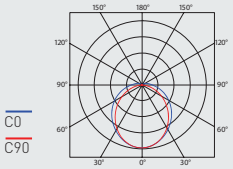
PRIMA LED Ex PCc

TECHNICAL DESCRIPTION

- Light fitting protection: **IP66**
- Maximum ambient temperature: **t_a = 50 °C**
- LED module lifetime: 50 000 hours / L80B20
- Luminous flux of the light fitting: **440 lm**
- **CRI > 80: 6500 K**
- MacAdam = 3 SDCM
- Diffuser: translucent PC (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- Reflector: white steel sheet (RAL 9003)
- Clips: stainless steel + polyamide
- Sealing: polyurethane (PUR), foam-filled body groove
- Light fitting connection: **cable gland M20x1,5 ATEX**
- Distance holder: polyamide + 10 % glass fibre
- Electric equipment: **EM kit including Ni-Cd battery without autotest, LED module**
- The package includes: stainless hooks and stainless brackets
- 1-year warranty for battery, 2-year warranty for EM kit (unit + LED module)
- The above stated values of power consumption and luminous flux are within a tolerance of ± 7,5 %
- Pictogram: optional accessory



PRIMA LED Ex 1.2ft PC



Type	Autonomy [hrs]	Luminous flux of light fitting [lm]	Power in emergency mode [W]	Battery type	Power in standby mode [W]	Charging time [hrs]	Power in charging mode [W]	Net weight [kg]
Non-maintained emergency luminaire without autotest								
PRIMA LED Ex 1.2ft PCc NM1h	1	440	7	Ni-Cd	1,5	24	2	1,6
PRIMA LED Ex 1.2ft PCc NM3h	3	440	7	Ni-Cd	1,5	24	2	1,8

PRIMA LED Ex PCc with cable glands

Non-maintained emergency luminaire without autotest - cable glands M20x1,5 ATEX - stainless clips (c)

Type	NM1h	3F NM1h	NM3h	3F NM3h
PRIMA LED Ex 1.2ft PCc ...	63848	x	63849	x

LEGEND

NM1h – non-maintained emergency luminaire, operation time 1 hour
3F NM1h – non-maintained emergency luminaire, operation time 1 hour, 5-wire throughwiring (3F)

NM3h – non-maintained emergency luminaire, operation time 3 hours
3F NM3h – non-maintained emergency luminaire, operation time 3 hours, 5-wire throughwiring (3F)

Module signalling without autotest

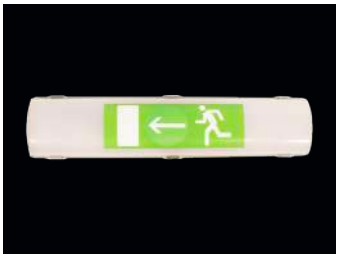
LED colour	Information
● green	
flashing	battery charging
-	running test/emergency mode

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks

LIGHT FITTING DETAILED VIEW

PRIMA LED Ex PCc



FUTURA NM

... emergency.

USE

Non-maintained emergency luminaire for escape routes, available for use in high ambient temperature, t_a = 50 °C, is intended by its function and shape primarily for being in a set with Futura and Innova light fittings.

It is recommended for escape routes of interior industrial rooms, storage halls, sports premises, agricultural buildings and laboratories without hazard of explosion of gases, dusts and flammable vapours.

It is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have increased resistance against deformation and impact.

Atmosphere emissions must be considered, as they may reduce the usability of plastics at installation in aggressive environment, see p. 367.

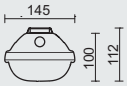
ADVANTAGES

- Light fitting protection **IP66**
- High thermal resistance ranging **from t_a = 0 °C to t_a = 50 °C** also for basic Ni-Cd battery type
- LED module lifetime: 50 000 hours / L80B20
- Luminous flux of the light fitting: **440 lm**
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate (PC) = high mechanical resistance
- Emergency module **1h or 3h**
- Optional selection of EM kit with battery autotest
- Integrated diode for indication of correct operation
- Optional selection of battery type between **Ni-Cd** or **$LiFePO_4$**
- Low energy consumption in StandBy mode
- Optional selection of connection between **cable gland** or **connector**
- Insulation class II

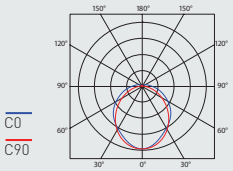
FUTURA PC, PCc

TECHNICAL DESCRIPTION

- Light fitting protection: **IP66**
- Maximum ambient temperature: **t_a = 50 °C**
- LED module lifetime: 50 000 hours / L80B20
- Luminous flux of the light fitting: **440 lm**
- Maximum light fitting efficiency: 133 lm/W
- **CRI > 80: 6500 K**
- MacAdam = 3 SDCM
- Diffuser: translucent PC (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- Reflector: white steel sheet (RAL 9003)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foam-filled body groove
- Light fitting connection: **cable gland PG 13,5 / 16** or **connector**
- Distance holder: polyamide + 10 % glass fibre
- Electric equipment:
  EM kit including Ni-Cd battery without autotest, LED module
  EM kit including $LiFePO_4$ battery with autotest, LED module
- The package includes: stainless hooks and stainless brackets
- 1-year warranty for battery, 2-year warranty for EM kit (unit + LED module)
- The above stated values of power consumption and luminous flux are within a tolerance of ± 7,5 %



FUTURA 2.2ft PC



Type	Autonomy [hrs]	Luminous flux of light fitting [lm]	Power in emergency mode [W]	Light fitting efficiency [lm/W]	Battery type	Power in standby mode [W]	Charging time [hrs]	Power in charging mode [W]	Net weight [kg]
Non-maintained emergency luminaire without autotest									
FUTURA 2.2ft PC NM1h	1	440	4,5	98	Ni-Cd	1,5	24	9	1,2
FUTURA 2.2ft PC NM3h	3	440	4,5	98	Ni-Cd	1,5	24	9	1,4
Non-maintained emergency luminaire with autotest									
FUTURA 2.2ft PC NM1hAt	1	440	3,3	133	$LiFePO_4$	0,7	12	3,5	1,2
FUTURA 2.2ft PC NM3hAt	3	440	3,3	133	$LiFePO_4$	0,7	12	3,5	1,4

FUTURA PC with cable glands

Non-maintained emergency luminaire without autotest - cable glands PG 13,5 / 16 - plastic clips

Type	NM1h	3F NM1h	NM3h	3F NM3h
FUTURA 2.2ft PC ...	62410	62411	62413	62414

Non-maintained emergency luminaire with autotest - cable glands PG 13,5 / 16 - plastic clips

Type	NM1hAt	3F NM1hAt	NM3hAt	3F NM3hAt
FUTURA 2.2ft PC ...	62420	62421	62423	62424

FUTURA PC with cable glands

Non-maintained emergency luminaire without autotest - cable glands PG 13,5 / 16 - stainless clips (c)

Type	NM1h	3F NM1h	NM3h	3F NM3h
FUTURA 2.2ft PCc ...	62430	62431	62433	62434

Non-maintained emergency luminaire with autotest - cable glands PG 13,5 / 16 - stainless clips (c)

Type	NM1hAt	3F NM1hAt	NM3hAt	3F NM3hAt
FUTURA 2.2ft PCc ...	62440	62441	62443	62444

LEGEND

NM1h – non-maintained emergency luminaire, operation time 1 hour
3F NM1h – non-maintained emergency luminaire, operation time 1 hour, 5-wire throughwiring (3F)
NM3h – non-maintained emergency luminaire, operation time 3 hours
3F NM3h – non-maintained emergency luminaire, operation time 3 hours, 5-wire throughwiring (3F)

...At – version with battery autotest

Module signalling without autotest

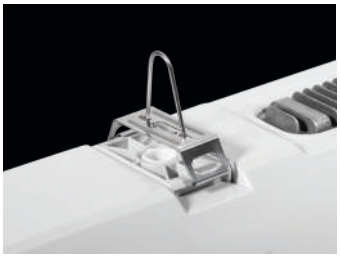
LED colour	Information
● green	
flashing	battery charging
-	running test/emergency mode

Module signalling with autotest (At)

LED colour		Information
● green	● red	
flashing	-	battery charging
-	flashing	defective LED module
-	shining	defective battery
-	-	running test/emergency mode

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks



LIGHT FITTING DETAILED VIEW

FUTURA PC

PRIMA NM

... emergency.

USE

Non-maintained emergency luminaire for escape routes, available for use in high ambient temperature, t_a = 50 °C, is intended by its function and shape primarily for being in a set with PRIMA and NANOTTICA light fittings.

It is recommended for escape routes of interior industrial rooms, storage halls, sports premises, agricultural buildings and laboratories without hazard of explosion of gases, dusts and flammable vapours.

It is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have increased resistance against deformation and impact.

Atmosphere emissions must be considered, as they may reduce the usability of plastics at installation in aggressive environment, see p. 367.

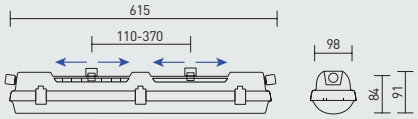
ADVANTAGES

- Light fitting protection **IP66**
- High thermal resistance ranging **from t_a = 0 °C to t_a = 50 °C** also for basic Ni-Cd battery type
- LED module lifetime: 50 000 hours / L80B20
- Luminous flux of the light fitting: **440 lm**
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate (PC) = high mechanical resistance
- Emergency module **1h or 3h**
- Integrated diode for indication of correct operation
- Low energy consumption in StandBy mode

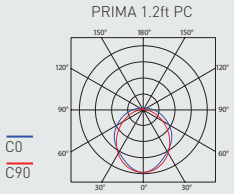
PRIMA PC, PCc

TECHNICAL DESCRIPTION

- Light fitting protection: **IP66**
- Maximum ambient temperature: **t_a = 50 °C**
- LED module lifetime: 50 000 hours / L80B20
- Luminous flux of the light fitting: **440 lm**
- Maximum light fitting efficiency: 133 lm/W
- **CRI > 80: 6500 K**
- MacAdam = 3 SDCM
- Diffuser: translucent PC (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- Reflector: white steel sheet (RAL 9003)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foam-filled body groove
- Light fitting connection: **cable gland PG 13,5**
- Electric equipment:
  EM kit including Ni-Cd battery without autotest, LED module
  EM kit including $LiFePO_4$ battery with autotest, LED module
- The package includes: stainless hooks and stainless brackets
- 1-year warranty for battery, 2-year warranty for EM kit (unit + LED module)
- The above stated values of power consumption and luminous flux are within a tolerance of ± 7,5 %



PRIMA 1.2ft PC



Type	Autonomy [hrs]	Luminous flux of light fitting [lm]	Power in emergency mode [W]	Light fitting efficiency [lm/W]	Battery type	Power in standby mode [W]	Charging time [hrs]	Power in charging mode [W]	Net weight [kg]
Non-maintained emergency luminaire without autotest									
PRIMA 1.2ft PC NM1h	1	440	4,5	98	Ni-Cd	1,5	24	9	1,2
Non-maintained emergency luminaire with autotest									
PRIMA 1.2ft PC NM1hAt	1	440	3,3	133	$LiFePO_4$	0,7	12	3,5	1,2

PRIMA PC with cable glands

Non-maintained emergency luminaire without autotest - cable glands PG 13,5 - plastic clips

Tye	NM1h	3F NM1h
PRIMA 1.2ft PC ...	106617	106619

Non-maintained emergency luminaire with autotest - cable glands PG 13,5 - plastic clips

Type	NM3hAt	3F NM3hAt
PRIMA 1.2ft PC ...	106618	106620

PRIMA PCc with cable glands

Non-maintained emergency luminaire without autotest - cable glands PG 13,5 - stainless clips (c)

Type	NM1h	3F NM1h
PRIMA 1.2ft PCc ...	106621	106623

Non-maintained emergency luminaire with autotest - cable glands PG 13,5 - stainless clips (c)

Type	NM3hAt	3F NM3hAt
PRIMA 1.2ft PCc ...	106622	106624

LEGEND

NM1h – non-maintained emergency luminaire, operation time 1 hour
3F NM1h At – non-maintained emergency luminaire, operation time 1 hour, 5-wire throughwiring (3F), version with battery autotest
NM3h – non-maintained emergency luminaire, operation time 3 hours
3F NM3hAt – non-maintained emergency luminaire, operation time 3 hours, 5-wire throughwiring (3F), version with battery autotest

Module signalling without autotest

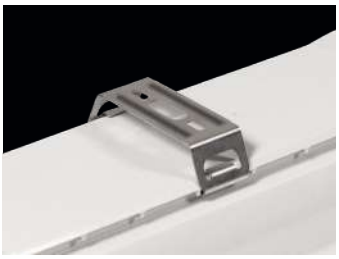
LED colour	Information
● green	
flashing	battery charging
-	running test/emergency mode

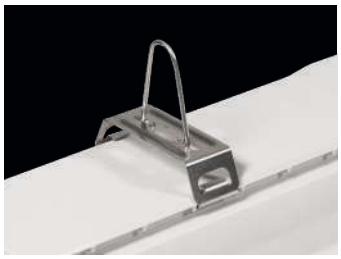
Module signalling with autotest (At)

LED colour		Information
● green	● red	
flashing	-	battery charging
-	flashing	defective LED module
-	shining	defective battery
-	-	running test/emergency mode

LIGHT FITTING ATTACHMENT

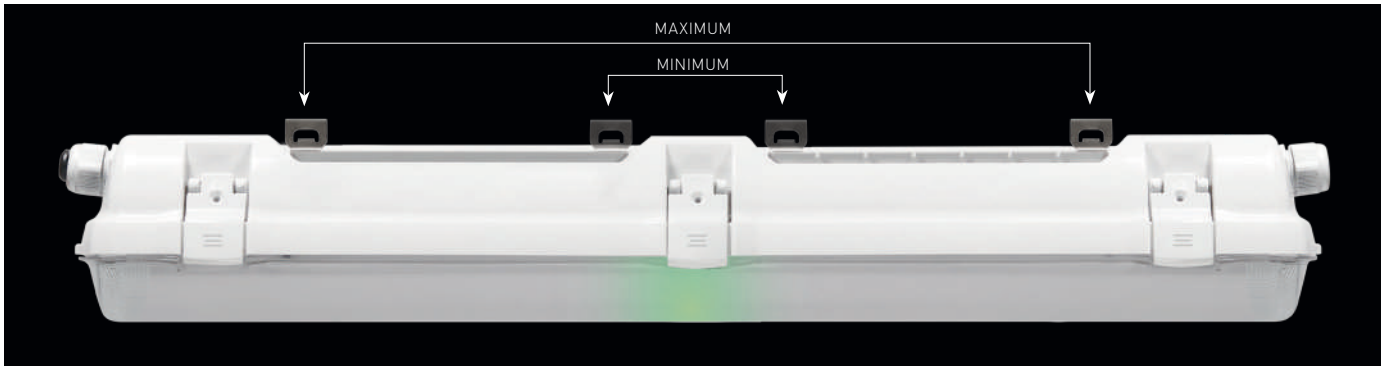
a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall





VARIABLE INSTALLATION PITCH

PRIMA NM



LIGHT FITTING DETAILED VIEW

PRIMA NM

PERUN SLIM Ex NM

NEW

... emergency and orientation.

USE

Non-maintained emergency luminaire for escape routes is intended by its function and shape primarily for being in a set with PERUN SLIM Ex light fittings.

The light fitting is suitable for the environment with a danger of explosion of gas, dust and combustible fumes. The light fittings meet the requirements of European Community Directive No.2014/34/EU.

The basic requirements for safety and health protection are secured by the verification of conformity with the standards according to EN 60079-15, EN 60079-0 and EN 60079-31.

The light fitting is resistant to deformation, dust, spouting water and have increased chemical resistance.

Characteristics of the used tempered glass and its shattering power are controlled by the EN 12150-1 standard. For applications where spontaneous fracture means a higher safety risk.

ADVANTAGES

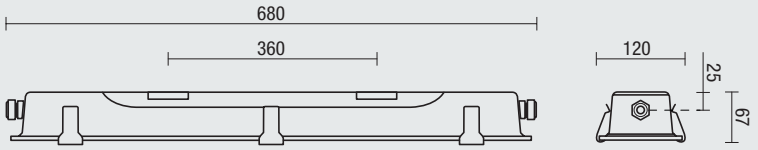
- Light fitting protection **IP65**
- High thermal resistance ranging **from t_a = 0 °C to t_a = 35 °C** also for basic Ni-Cd battery type
- LED module lifetime: 50 000 hours / L80B20
- Luminous flux of the light fitting: **410 lm**
- Diffuser: satinated tempered safety glass
- Body: stainless sheet
- Emergency module **3h**
- Integrated diode for indication of correct operation
- Low energy consumption in StandBy mode
- Certification: TÜV CY 23 ATEX 0206818 X

The light fitting is certified for the environment:
- Ex II 3G Ex nR IIC T6 Gc
- Ex II 3D Ex tc IIIC T70°C Dc

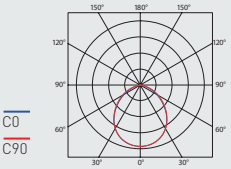
PERUN SLIM Ex NM

TECHNICAL DESCRIPTION

- Light fitting protection: **IP65**
- Maximum ambient temperature: **t_a = 35 °C**
- LED module lifetime: 50 000 hours / L80B20
- Luminous flux of the light fitting: **410 lm**
- **CRI > 80: 6500 K**
- MacAdam = 3 SDCM
- Diffuser: satinated tempered safety glass
- Body: stainless sheet, impact-resistant, chemically resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: stainless
- Sealing: silicone, at light fitting body
- Cable glands: **M20x1.5 ATEX** - plastic, stainless or brass with surface treatment
- Electric equipment:
  EM kit including Ni-Cd battery without autotest, LED module
- The package includes: stainless hooks and stainless brackets
- 1-year warranty for battery, 2-year warranty for EM kit (unit + LED module)
- The above stated values of power consumption and luminous flux are within a tolerance of ± 7,5 %
- Pictogram: optional accessory



PERUN SLIM Ex 1.2ft NM



Type	Autonomy [hrs]	Luminous flux of light fitting [lm]	Power in emergency mode [W]	Battery type	Power in standby mode [W]	Charging time [hrs]	Power in charging mode [W]	Net weight [kg]
Non-maintained emergency luminaire without autotest								
PERUN SLIM Ex 1.2ft NM3h	3	410	7	Ni-Cd	1,5	24	2	1,8

PERUN SLIM Ex NM **with cable glands**

Non-maintained emergency luminaire without autotest - cable glands M20x1,5

Type	NM3h	3F NM3h
PERUN SLIM Ex 1.2ft ...	103527	x

LEGEND

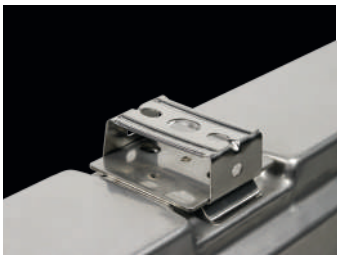
NM3h – non-maintained emergency luminaire, operation time 3 hours
3F NM3h – non-maintained emergency luminaire, operation time 3 hours, 5-wire throughwiring (3F)

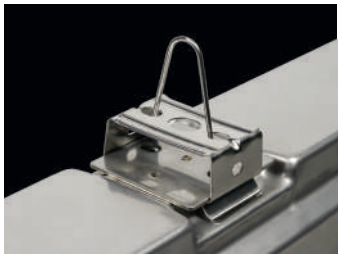
Module signalling without autotest

LED colour	Information
● green	
flashing	battery charging
-	running test/emergency mode

LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks

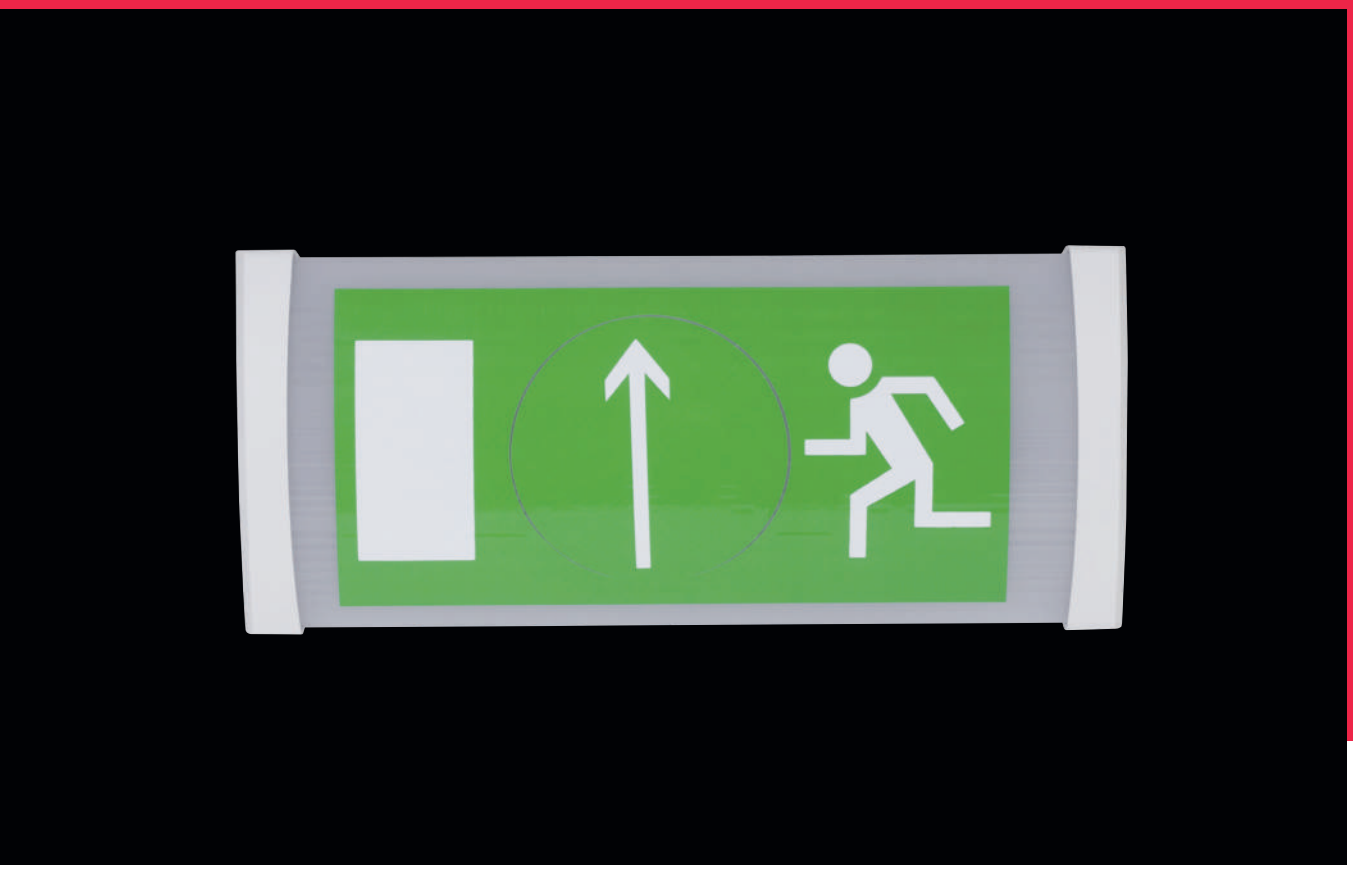




LIGHT FITTING DETAILED VIEW

PERUN SLIM Ex NM

BELTR LED NM



... emergency and orientation.

USE

The light fitting is suitable for emergency and orientation illumination of hallways, offices, warehouses.

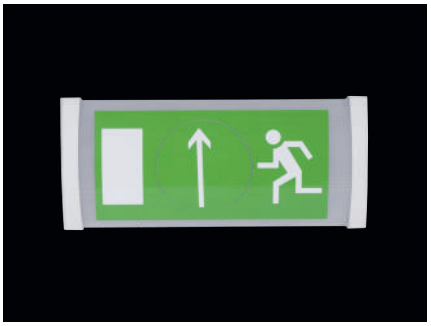
Non-maintained emergency luminaire for escape routes, available for use in high ambient temperature, t_a = 40 °C.

Atmosphere emissions must be considered, as they may reduce the usability of plastics at installation in aggressive environment, see p. 367.

ADVANTAGES

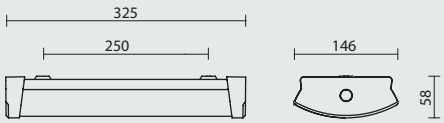
- Light fitting protection **IP40**
- High thermal resistance ranging **from t_a = 0 °C to t_a = 40 °C** also for basic Ni-Cd battery type
- LED module lifetime: 50 000 hours / L80B20
- Luminous flux of the light fitting: **440 lm**
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: steel sheet, white colour (RAL 9003)
- Emergency module **1h or 3h**
- Optional selection of EM kit with battery autotest
- Integrated diode for indication of correct operation
- Optional selection of battery type between **Ni-Cd** or **$LiFePO_4$**
- Low energy consumption in StandBy mode

BELTR LED NM, NMAt

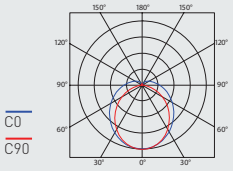


TECHNICAL DESCRIPTION

- Recognizing distance: 25 m
- Light fitting protection: **IP40**
- Maximum ambient temperature: **t_a = 40 °C**
- LED module lifetime: 50 000 hours / L80B20
- Luminous flux of the light fitting: **440 lm**
- Maximum light fitting efficiency: 135 lm/W
- **CRI > 80: 6500 K**
- MacAdam = 3 SDCM
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: steel sheet, white colour (RAL 9003)
- Cable gland: white, rubber
- Electric equipment:
  EM kit including Ni-Cd battery without autotest, LED module
  EM kit including $LiFePO_4$ battery with autotest, LED module
- 1-year warranty for battery, 2-year warranty for EM kit (unit + LED module)
- The above stated values of power consumption and luminous flux are within a tolerance of ± 7,5 %
- Pictogram: optional accessory



BELTR LED NM



Type	Autonomy [hrs]	Luminous flux of light fitting [lm]	Power in emergency mode [W]	Light fitting efficiency [lm/W]	Battery type	Power in standby mode [W]	Charging time [hrs]	Power in charging mode [W]	Net weight [kg]
Non-maintained emergency luminaire without autotest									
BELTR LED 2.1ft NM1h	1	440	4,5	98	Ni-Cd	1,5	24	9	1,2
BELTR LED 2.1ft NM3h	3	440	4,5	98	Ni-Cd	1,5	24	9	1,4
Non-maintained emergency luminaire with autotest									
BELTR LED 2.1ft NM1hAt	1	440	3,3	135	$LiFePO_4$	0,7	12	3,5	1,2
BELTR LED 2.1ft NM3hAt	3	440	3,3	135	$LiFePO_4$	0,7	12	3,5	1,4

BELTR LED NM, NMAt

Non-maintained emergency luminaire without autotest

Type	NM1h	NM3h
BELTR LED 2.1ft NM	54510	54520

Non-maintained emergency luminaire with autotest

Type	NM1hAt	NM3hAt
BELTR LED 2.1ft NMAt	54530	54540

LEGEND

NM1h – non-maintained emergency luminaire, operation time 1 hour
NM3h – non-maintained emergency luminaire, operation time 3 hours

...At – version with battery autotest

Module signalling without autotest

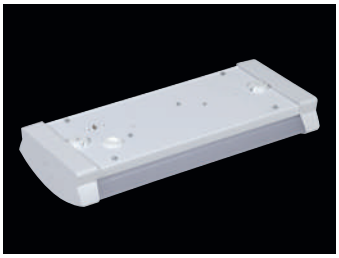
LED colour	Information
● green	
flashing	battery charging
-	running test/emergency mode

Module signalling with autotest (At)

LED colour		Information
● green	● red	
flashing	-	battery charging
-	flashing	defective LED module
-	shining	defective battery
-	-	running test/emergency mode

LIGHT FITTING ATTACHMENT

Directly to a ceiling or a wall with the use of screws



LIGHT FITTING DETAILED VIEW

BELTR LED NM, NMAt

HELIOS LED

... emergency and orientation.

USE

The light fitting is suitable for emergency and orientation illumination of hallways, offices, warehouses and production shop floors.

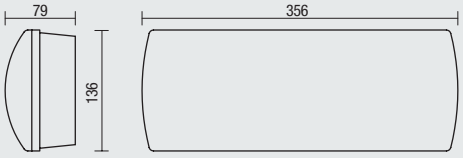
ADVANTAGES

- Emergency module **1 hr or 3 hrs**
- High-temperature **Ni-Cd HT** battery (M1h and M3h), or $LiFePO_4$ battery for version with self-test (M1hAt and M3hAt)
- LED indicator of correct operation
- Electronic protection against complete battery discharge
- Possible connection for both permanent (SA) and emergency (SE) lighting
- Light fitting protection **IP42 or IP65**
- High thermal resistance ranging **from t_a = 0 °C to t_a = 40 °C** also for basic Ni-Cd battery type
- Insulation: Class 2

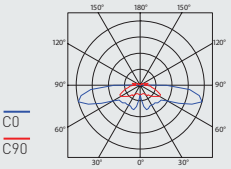
HELIOS LED

TECHNICAL DESCRIPTION

- Recognizing distance: 25 m
- Light fitting protection: IP42 or IP65
- Maximum ambient temperature: t_a = 40 °C
- Diffuser: opalized polycarbonate, UV stable
- Body: white polycarbonate
- Reflector: white polycarbonate
- MacAdam = 3 SDCM
- Diffuser and body connected: by screws
- Charging:
  M1h and M3h variants max. 24 h,
  M1hAt and M3hAt variant max. 12 h
- Electric equipment: driver, emergency module 1h or 3h; M1h and M3h variants including Ni-Cd HT battery (3,6V); M1hAt and M3hAt variants including $LiFePO_4$ (6,4V)
- Pictogram: optional accessory



HELIOS LED



Code	Type	Autonomy [hrs]	Luminous flux of light fitting [lm]	Power in emergency mode [W]	Light fitting efficiency [lm/W]	Battery type	Charging time [hrs]	Net weight [kg]
	Diffuser made of opalized polycarbonate - emergency standby source for both permanent (SA) and emergency (SE) lighting							
43518	HELIOS LED 101 M1h	1	80	1	80	Ni-Cd HT	24	1,1
43511	HELIOS LED 102 M1h	1	150	2	75	Ni-Cd HT	24	1,2
43618	HELIOS LED IP65 101 M1h	1	80	1	80	Ni-Cd HT	24	1,2
43611	HELIOS LED IP65 102 M1h	1	150	2	75	Ni-Cd HT	24	1,2
43538	HELIOS LED 101 M3h	3	80	1	80	Ni-Cd HT	24	1,2
43531	HELIOS LED 102 M3h	3	150	2	75	Ni-Cd HT	24	1,4
43638	HELIOS LED IP65 101 M3h	3	80	1	80	Ni-Cd HT	24	1,2
43631	HELIOS LED IP65 102 M3h	3	150	2	75	Ni-Cd HT	24	1,4
	Diffuser made of opalized polycarbonate - emergency standby source for both permanent (SA) and emergency (SE) lighting with autotest							
43548	HELIOS LED 101 M1hAt	1	80	1	80	$LiFePO_4$	12	1,1
43541	HELIOS LED 102 M1hAt	1	150	2	75	$LiFePO_4$	12	1,2
43648	HELIOS LED IP65 101 M1hAt	1	80	1	80	$LiFePO_4$	12	1,1
43641	HELIOS LED IP65 102 M1hAt	1	150	2	75	$LiFePO_4$	12	1,1
43568	HELIOS LED 101 M3hAt	3	80	1	80	$LiFePO_4$	12	1,1
43561	HELIOS LED 102 M3hAt	3	150	2	75	$LiFePO_4$	12	1,3
43668	HELIOS LED IP65 101 M3hAt	3	80	1	80	$LiFePO_4$	12	1,1
43661	HELIOS LED IP65 102 M3hAt	3	150	2	75	$LiFePO_4$	12	1,2

Example of type marking: 43638 = HELIOS LED IP65 101 **M3h**

LEGEND

M1–3h – emergency standby source with operation time 1–3 hours for both permanent (SA) and emergency (SE) lighting
M1–3hAt – emergency standby source with operation time 1–3 hours for both permanent (SA) and emergency (SE) lighting with autotest
Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

Module signalling without autotest

LED colour	Information
● green	
flashing	battery charging
-	running test/emergency mode

Module signalling with autotest (At)

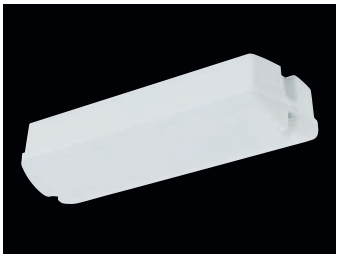
LED colour		Information
● green	● red	
flashing	-	battery charging
-	flashing	defective LED module
-	shining	defective battery
-	-	running test/emergency mode

LIGHT FITTING ATTACHMENT

Directly to a ceiling or a wall with the use of screws

LIGHT FITTING DETAILED VIEW

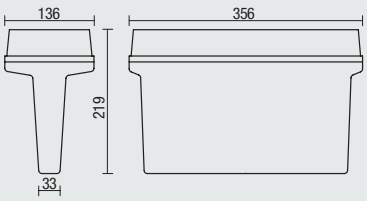
HELIOS LED

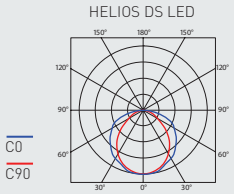


HELIOS DS LED

TECHNICAL DESCRIPTION

- Recognizing distance: 25 m
- Light fitting protection: IP42 or IP65
- Maximum ambient temperature: t_a = 40 °C
- Diffuser: opalized polycarbonate, UV stable
- Body: white polycarbonate
- MacAdam = 3 SDCM
- Reflector: white polycarbonate
- Diffuser and body connected: by screws
- Charging:
  M1h and M3h variants max. 24 h,
  M1hAt and M3hAt variant max. 12 h
- Electric equipment: driver, emergency module 1h or 3h; M1h and M3h variants including Ni-Cd HT battery (3,6V); M1hAt and M3hAt variants including $LiFePO_4$ (6,4V)
- Pictogram: optional accessory





Code	Type	Autonomy [hrs]	Luminous flux of light fitting [lm]	Power in emergency mode [W]	Light fitting efficiency [lm/W]	Battery type	Charging time [hrs]	Net weight [kg]
	Diffuser made of opalized polycarbonate - emergency standby source for both permanent (SA) and emergency (SE) lighting							
43718	HELIOS DS LED 101 M1h	1	80	1	80	Ni-Cd HT	24	1,3
43711	HELIOS DS LED 102 M1h	1	150	2	75	Ni-Cd HT	24	1,4
43818	HELIOS DS LED IP65 101 M1h	1	80	1	80	Ni-Cd HT	24	1,4
43811	HELIOS DS LED IP65 102 M1h	1	150	2	75	Ni-Cd HT	24	1,4
43738	HELIOS DS LED 101 M3h	3	80	1	80	Ni-Cd HT	24	1,4
43731	HELIOS DS LED 102 M3h	3	150	2	75	Ni-Cd HT	24	1,6
43838	HELIOS DS LED IP65 101 M3h	3	80	1	80	Ni-Cd HT	24	1,4
43831	HELIOS DS LED IP65 102 M3h	3	150	2	75	Ni-Cd HT	24	1,6
	Diffuser made of opalized polycarbonate - emergency standby source for both permanent (SA) and emergency (SE) lighting with autotest							
43748	HELIOS DS LED 101 M1hAt	1	80	1	80	$LiFePO_4$	12	1,3
43741	HELIOS DS LED 102 M1hAt	1	150	2	75	$LiFePO_4$	12	1,4
43848	HELIOS DS LED IP65 101 M1hAt	1	80	1	80	$LiFePO_4$	12	1,3
43841	HELIOS DS LED IP65 102 M1hAt	1	150	2	75	$LiFePO_4$	12	1,3
43768	HELIOS DS LED 101 M3hAt	3	80	1	80	$LiFePO_4$	12	1,3
43761	HELIOS DS LED 102 M3hAt	3	150	2	75	$LiFePO_4$	12	1,5
43868	HELIOS DS LED IP65 101 M3hAt	3	80	1	80	$LiFePO_4$	12	1,3
43861	HELIOS DS LED IP65 102 M3hAt	3	150	2	75	$LiFePO_4$	12	1,4

Example of type marking: 43838 = HELIOS DS LED IP65 101 **M3h**

LEGEND

M1–3h – emergency standby source with operation time 1–3 hours for both permanent (SA) and emergency (SE) lighting
M1–3hAt – emergency standby source with operation time 1–3 hours for both permanent (SA) and emergency (SE) lighting with autotest
Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

Module signalling without autotest

LED colour	Information
● green	
flashing	battery charging
-	running test/emergency mode

Module signalling with autotest (At)

LED colour		Information
● green	● red	
flashing	-	battery charging
-	flashing	defective LED module
-	shining	defective battery
-	-	running test/emergency mode

LIGHT FITTING ATTACHMENT

Directly to a ceiling or a wall with the use of screws

LIGHT FITTING DETAILED VIEW

HELIOS DS LED

PLEXI LED

... emergency and orientation, into lower ceilings.

USE

The light fitting is suitable for emergency illumination of hallways and offices. It is intended for installation into plasterboard lower ceilings.

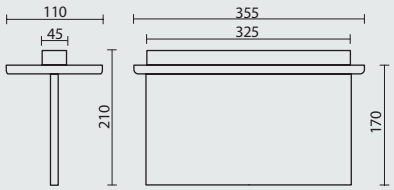
ADVANTAGES

- Emergency module **1 hr or 3 hrs**
- High-temperature **Ni-Cd HT** battery (M1h and M3h), or $LiFePO_4$ battery for version with self-test (M1hAt and M3hAt)
- LED indicator of correct operation
- Electronic protection against complete battery discharge
- Possible connection for both permanent (SA) and emergency (SE) lighting
- Light fitting protection **IP20**
- High thermal resistance ranging **from t_a = 0 °C to t_a = 40 °C** also for basic Ni-Cd battery type
- Insulation: Class 1

PLEXI LED

TECHNICAL DESCRIPTION

- Recognizing distance: 30 m
- Light fitting protection: IP20
- Maximum ambient temperature: t_a = 40 °C
- Diffuser: transparent plexi glass, UV stable
- Body: steel sheet, silver (RAL 9006)
- MacAdam = 3 SDCM
- Charging:
  M1h and M3h variants max. 24 h,
  M1hAt and M3hAt variant max. 12 h
- Electric equipment: driver, emergency module 1h or 3h; M1h and M3h variants including Ni-Cd HT battery (3,6V); M1hAt and M3hAt variants including $LiFePO_4$ (6,4V)
- Pictogram: optional accessory



Code	Type	Autonomy [hrs]	Power in emergency mode [W]	Battery type	Charging time [hrs]	Net weight [kg]
	Diffuser made of transparent plexi glass - emergency standby source for emergency (SE) lighting					
41519	PLEXI LED 101 NM1h	1	1	Ni-Cd HT	24	2,1
41539	PLEXI LED 101 NM3h	3	1	Ni-Cd HT	24	2,2
	Diffuser made of transparent plexi glass - emergency standby source for both permanent (SA) and emergency (SE) lighting					
41518	PLEXI LED 101 M1h	1	1	Ni-Cd HT	24	2,0
41538	PLEXI LED 101 M3h	3	1	Ni-Cd HT	24	2,1
	Diffuser made of transparent plexi glass - emergency standby source for both permanent (SA) and emergency (SE) lighting with autotest					
41548	PLEXI LED 101 M1hAt	1	1	$LiFePO_4$	12	2,0
41568	PLEXI LED 101 M3hAt	3	1	$LiFePO_4$	12	2,1
	Diffuser made of transparent plexi glass - driver for central battery supply AC/DC (CB = central battery)					
41578	PLEXI LED 101 CB	-	1	-	-	2,1

Example of type marking: 41538 = PLEXI LED **M3h**

LEGEND

M1–3h – emergency back-up source with operating time of 1 - 3 hours (SA) for both permanent and emergency illumination
M1–3hAt – emergency back-up source with operating time of 1 - 3 hours (SA) for both permanent and emergency illumination with autotest
NM1–3h – emergency back-up source with operating time of 1 - 3 hours (SE) for emergency (non-maintained) illumination
CB – for central battery power supply AC/DC (CB = central battery)
Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

Module signalling without autotest

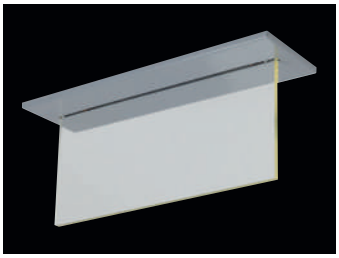
LED colour	Information
● green	
flashing	battery charging
-	running test/emergency mode

Module signalling with autotest (At)

LED colour		Information
● green	● red	
flashing	-	battery charging
-	flashing	defective LED module
-	shining	defective battery
-	-	running test/emergency mode

LIGHT FITTING ATTACHMENT

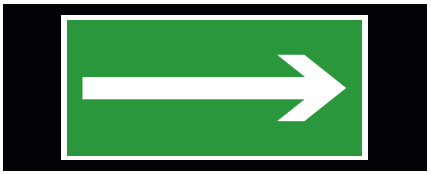
Recessed into plasterboard lower ceilings



LIGHT FITTING DETAILED VIEW

PLEXI LED

Stickers with pictograms for emergency light fittings

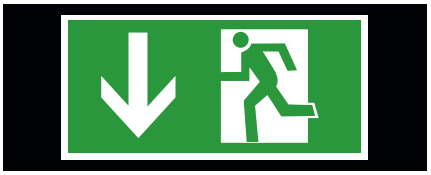


Code	Type	Description	Dimensions [mm]
43901	Pictogram 01 HE	for HELIOS and BELTR LED NM types - 25 m distance	125 × 250
41901	Pictogram 01 PL	for PLEXI type - 30 m distance	150 × 300

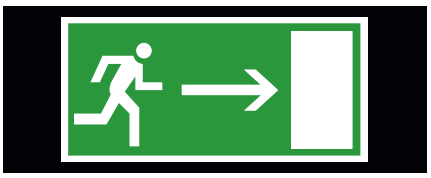
Code	Type	Description	Dimensions [mm]
43902	Pictogram 02 HE	for HELIOS and BELTR LED NM types - 25 m distance	125 × 250
41902	Pictogram 02 PL	for PLEXI type - 30 m distance	150 × 300

Code	Type	Description	Dimensions [mm]
43904	Pictogram 04 HE	for HELIOS and BELTR LED NM types - 25 m distance	125 × 250
41904	Pictogram 04 PL	for PLEXI type - 30 m distance	150 × 300

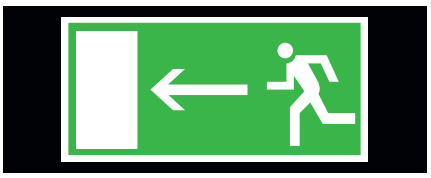
Code	Type	Description	Dimensions [mm]
43905	Pictogram 05 HE	for HELIOS and BELTR LED NM types - 25 m distance	125 × 250
41905	Pictogram 05 PL	for PLEXI type - 30 m distance	150 × 300



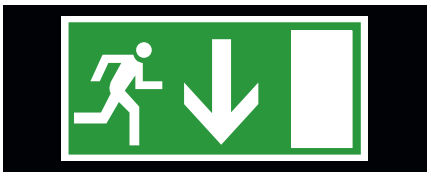
Code	Type	Description	Dimensions [mm]
43906	Pictogram 06 HE	for HELIOS and BELTR LED NM types - 25 m distance	125 × 250
41906	Pictogram 06 PL	for PLEXI type - 30 m distance	150 × 300



Code	Type	Description	Dimensions [mm]
43907	Pictogram 07 HE	for HELIOS and BELTR LED NM types e - 25 m distance	125 × 250
41907	Pictogram 07 PL	for PLEXI type - 30 m distance	150 × 300

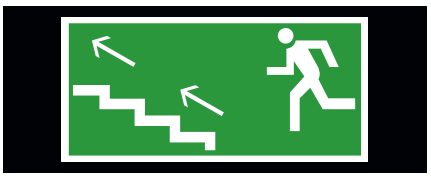


Code	Type	Description	Dimensions [mm]
43908	Pictogram 08 HE	for HELIOS and BELTR LED NM types - 25 m distance	125 × 250
41908	Pictogram 08 PL	for PLEXI type - 30 m distance	150 × 300

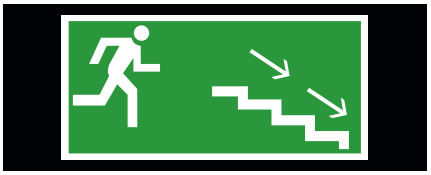


Code	Type	Description	Dimensions [mm]
43909	Pictogram 09 HE	for HELIOS and BELTR LED NM types - 25 m distance	125 × 250
41909	Pictogram 09 PL	for PLEXI type - 30 m distance	150 × 300

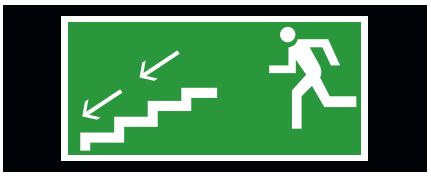
Code	Type	Description	Dimensions [mm]
43910	Pictogram 10 HE	for HELIOS and BELTR LED NM types - 25 m distance	125 × 250
41910	Pictogram 10 PL	for PLEXI type - 30 m distance	150 × 300



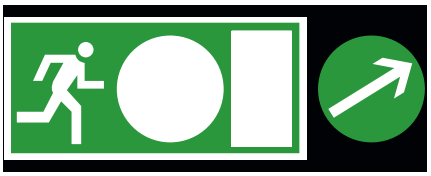
Code	Type	Description	Dimensions [mm]
43911	Pictogram 11 HE	for HELIOS and BELTR LED NM types - 25 m distance	125 × 250
41911	Pictogram 11 PL	for PLEXI type - 30 m distance	150 × 300



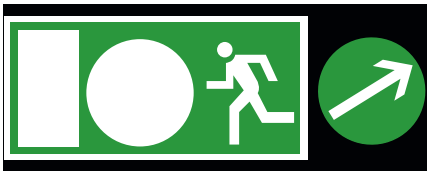
Code	Type	Description	Dimensions [mm]
43912	Pictogram 12 HE	for HELIOS and BELTR LED NM types - 25 m distance	125 × 250
41912	Pictogram 12 PL	for PLEXI type - 30 m distance	150 × 300



Code	Type	Description	Dimensions [mm]
43913	Pictogram 13 HE	for HELIOS and BELTR LED NM types - 25 m distance	125 × 250
41913	Pictogram 13 PL	for PLEXI type - 30 m distance	150 × 300

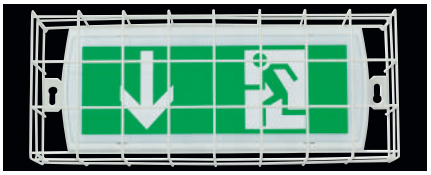


Code	Type	Description	Dimensions [mm]
43914	Pictogram 14 HE	for HELIOS and BELTR LED NM types - 25 m distance	125 × 250
41914	Pictogram 14 PL	for PLEXI type - 30 m distance	150 × 300
42914	Pictogram 14 TG	for PRIMA LED Ex NM type - 20 m distance	100 x 300



Code	Type	Description	Dimensions [mm]
43915	Pictogram 15 HE	for HELIOS and BELTR LED NM types - 25 m distance	125 × 250
41915	Pictogram 15 PL	for PLEXI type - 30 m distance	150 × 300
42915	Pictogram 15 TG	for PRIMA LED Ex NM type - 20 m distance	100 x 300

Protective grid



Code	Type	Description	Weight [kg]
43900	OM-HE, TG	protective grid for HELIOS types	0.4

LIGHTING MANAGEMENT

MANAGEMENT
FOR SIMPLE AND LARGE
LIGHTING SYSTEMS

LIGHTING MANAGEMENT

This innovative system brings a new trend in lighting control. It expands the existing advantages of LED technology by allowing easy control and creation of a variety of lighting scenes. The system is designed for simple as well as complex lighting solutions for offices, corridors and halls. The systems make it possible to regulate lighting based on daylight level, occupancy as well as tunable white and RGB requirements.

DALIeco

Our DALIeco system is designed for simple installations.

Designed for:

- offices
- showrooms
- conference rooms
- corridors
- school classrooms

DALIeco CONTROL

Advantages:

- unit features two DALI circuits (a total of 16 fixtures may be connected to each DALI circuit)
- up to 4 light sensors may be connected
- controlled by a regular button, or an IR remote control
- small dimensions (suitable to be placed in light fixtures)
- the Touch DIM function substituted in problematic installations
- predefined operating modes ensure simplified switch-on process
- the corridor function may be set

Components for DALIeco:

DALIeco LS/PD LI

- regulation of lighting based on daylight level and occupancy
- recessed and surface-mounted installation possible

User Remote

- infra-red remote control
- 4 lighting scenes may be saved and recalled
- up to 15 independently controlled systems due to adaptable IR coding

DALIeco REMOTE

- configuration and switching on of lighting management systems by a remote control

DALIeco BT RTC

Our DALIeco BT RTC system is designed for simple installati

Designed for:

- offices
- showrooms
- corridors
- training rooms

DALIeco BT RTC

Advantages:

- up to 32 fixtures may be controlled
- tunable white fully supported (device type 8)
- in-built clock for time plans + human centric lighting with up to 24 points
- controlled by a mobile phone or a regular button
- up to 4 separately controlled groups – lighting scenes created easily using an app (Android or iOS)
- small dimensions (suitable to be placed in light fixtures)
- up to 4 sensors and 4 buttons

Components for DALIeco BT RTC:

DALIeco LS/PD CI G2

- regulation of lighting based on daylight level and occupancy
- recessed and surface-mounted installation possible

DALI PRO PB Coupler

- 4 independent push-button inputs
- standard buttons and switches may be used

basicDIM Wireless

Our basicDIM Wireless system is designed for simple installations as well as for medium-size installations where lighting regulation is required but the existing cabling must be retained.

Designed for:

- offices
- showrooms
- conference rooms
- restaurants

Advantages:

- automatic creation of wireless communication with up to 250 units
- may be controlled/set by a mobile app
- wireless connection of light fixtures using an app
- no external gateway required for communication
- firmware easily updated

Components for basicDIM Wireless:

basicDIM Wireless Module G2

- when placed in a fixture, the fixture becomes wireless

basicDIM Wireless Sensor 5DP 38rc

- regulation of lighting based on daylight level and occupancy
- power supply
- parts and accessories that correspond to installation type (surface-mounted, recessed)
- covers to limit motion detection
- perfect for installation height not exceeding 4 m

basicDIM Wireless User Interface

- battery-powered wall-mounted control panel
- 4 lighting scenes may be saved and recalled
- dimming and CCT adjustment possible

sceneCOM S

Our sceneCOM S system is suitable for a majority of installations.

Designed for:

- offices
- restaurants
- assembly and production halls
- warehouses
- shop floors

sceneCOM S Controller

Advantages:

- up to 64 fixtures may be controlled
- certified as a DALI-2 device
- small dimensions (may be placed under a wall-mounted switch)
- simple addressing using a mobile app
- time plans may be set
- tunable white fully supported (device type 8)
- up to 16 groups may be created and up to 16 scenes may be saved
- 4 independent inputs for buttons
- power supply ensured by DALI

Components for sceneCOM S:

DALI XC G3 CWM 30 DA2

- 4 independent programmable inputs
- to be installed under a wall-mounted switch

DALI PS3

- DALI-2 (70 mA) power supply
- small dimensions

MSensor G3 PIR 10DPI WH

- monitoring of the surrounding areas and motion detection
- parts and accessories that correspond to installation type (surface-mounted, recessed)
- designed for installation height up to 5, 10 or 16 m depending on sensor type

REMOTECONTROL IR6

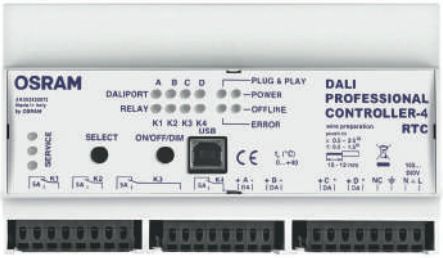
- infra-red remote control

DALI PROFESSIONAL

Our DALI PROFESSIONAL system is primarily intended for large installations.

Designed for:

- offices
- restaurants
- assembly and production halls
- warehouses
- shop floors



DALI PRO CONT-4-RTC

Advantages:

- 4 DALI circuits – each circuit allows up to 64 fixtures to be controlled
- 16 groups may be created and 16 scenes may be saved in each DALI circuit.
- 4 programmable relays (4x5 A) integrated in the controller
- integrated clock to manage events
- weekly planning possible
- may easily be mounted on a DIN rail
- plug-and-play configuration for instant use without setting

Components for DALI PROFESSIONAL:

DALI PRO COUPLER

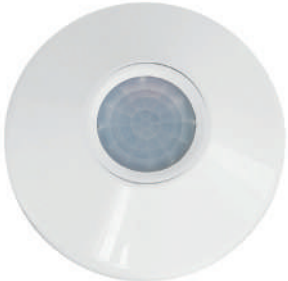
- 4 independent programmable inputs
- standard buttons and switches may be used

DALI HIGH BAY ADAPTER

- integrated lighting control sensor
- regulation of lighting for installation heights up to 13 m
- direct connection to DALI

HIGH BAY

- energy savings up to 35 % (compared to manual switching)
- motion sensor with a switch contact (adjustable power-off dela



EXIT

ORIENTATIONAL CHART OF ARRANGEMENT OF EMERGENCY LIGHT FITTINGS

NANOTTICA

Installation height [m]					
2,0	3,5	8,5	8,9	9,2	3,8
2,5	3,9	9,4	9,9	10,3	4,3
3,0	4,3	10,3	10,8	11,2	4,7
3,5	4,6	11,1	11,6	12,0	5,0
4,0	4,8	11,9	12,4	12,8	5,1
5,0	5,0	13,2	13,6	14,1	5,4
6,0	5,2	13,8	14,3	14,8	5,4

FUTURA

4,1	9,3	9,0	8,6	3,7
4,3	11,2	10,8	10,3	4,1
4,6	12,0	11,5	11,1	4,3
4,8	12,6	12,1	11,7	4,5
4,9	13,1	12,7	12,2	4,7
5,2	13,7	13,1	12,7	4,9
5,3	14,0	13,5	13,2	5,1

PRIMA LED

Installation height [m]					
2,0	4,1	9,6	8,8	8,0	3,5
2,5	4,5	11,4	10,5	9,6	3,9
3,0	4,6	12,2	11,3	10,3	4,1
3,5	4,8	12,8	11,9	11,0	4,3
4,0	4,9	13,3	12,4	11,5	4,4
5,0	5,2	13,7	13,0	12,3	4,6
6,0	5,4	14,1	13,3	12,8	4,8

ALUMAX LED

3,1	6,7	7,3	7,7	3,4
3,4	8,3	9,0	9,4	4,0
3,7	9,1	9,8	10,3	4,3
4,0	9,8	10,5	11,2	4,6
4,1	10,4	11,2	11,9	4,7
4,6	11,2	12,1	12,8	5,2
4,8	12,1	13,1	13,7	5,4

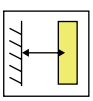
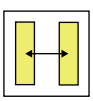
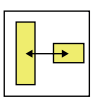
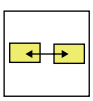
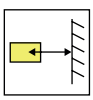
PERUN SLIM

Installation height [m]					
2,0	3,6	8,1	8,3	8,6	3,7
2,5	4,0	9,8	10,1	10,3	4,1
3,0	4,3	10,6	10,9	11,1	4,4
3,5	4,5	11,4	11,6	11,8	4,6
4,0	4,6	12,0	12,2	12,4	4,7
5,0	4,9	12,6	12,7	13,1	5,0
6,0	5,1	13,2	13,3	13,7	5,2

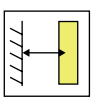
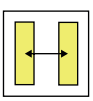
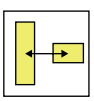
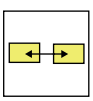
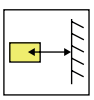
CANOPUS

3,0	5,9	7,1	8,0	4,1
3,3	7,4	8,8	10,0	4,5
3,7	8,8	10,3	11,9	4,8
3,9	9,6	11,1	12,7	5,0
4,1	10,2	11,8	13,4	5,3
4,6	11,3	12,9	14,6	5,7
4,7	12,2	13,8	15,5	5,9

NAOS MPR

Installation height [m]					
2,0	3,2	7,4	7,4	7,5	3,2
2,5	3,4	8,7	8,6	8,5	3,5
3,0	3,8	9,3	9,2	9,2	3,8
3,5	4,1	9,9	10,0	10,0	4,1
4,0	4,3	10,5	10,6	10,7	4,2

NAOS

				
3,3	8,4	8,5	8,6	3,4
3,7	9,2	9,3	9,4	3,7
3,8	10,0	10,0	10,0	3,8
4,0	10,4	10,5	10,6	4,0
4,1	10,9	10,9	11,0	4,1

ORIENTATIONAL CHART OF ARRANGEMENT OF EMERGENCY LIGHT FITTINGS

LINEA Square

Installation height [m]					
2,0	3,8	9,5	9,5	9,5	3,8
2,0	4,2	10,4	10,4	10,4	4,2
3,0	4,3	11,2	11,1	11,1	4,3
3,0	4,5	11,8	11,8	11,7	4,5
4,0	4,6	12,3	12,3	12,3	4,6

LINEA Round

3,8	9,5	9,5	9,5	3,8
4,0	10,4	10,4	10,4	4,0
4,3	11,1	11,1	11,1	4,3
4,5	11,7	11,7	11,7	4,5
4,6	12,2	12,2	12,2	4,6

LINEA

Installation height [m]					
2,0	3,4	9,0	8,4	7,7	3,0
2,5	3,7	9,7	9,0	8,3	3,3
3,0	3,8	10,2	9,6	8,9	3,3
3,5	3,8	10,7	10,0	9,3	3,3
4,0	3,8	10,9	10,2	9,5	3,4

BELTR LED

Installation height [m]					
2,0	3,4	8,5	8,3	7,8	3,2
2,5	3,7	9,3	9,1	8,7	3,4
3,0	3,8	10,0	9,8	9,3	3,7
3,5	4,0	10,5	10,3	9,8	3,7
4,0	4,1	11,0	10,8	10,3	3,8

MO SLIM

4,0	9,8	8,7	7,7	3,2
4,2	10,6	9,6	8,5	3,5
4,5	11,4	10,3	9,3	3,8
4,7	12,0	11,0	10,0	4,0
4,8	12,5	11,5	10,5	4,2

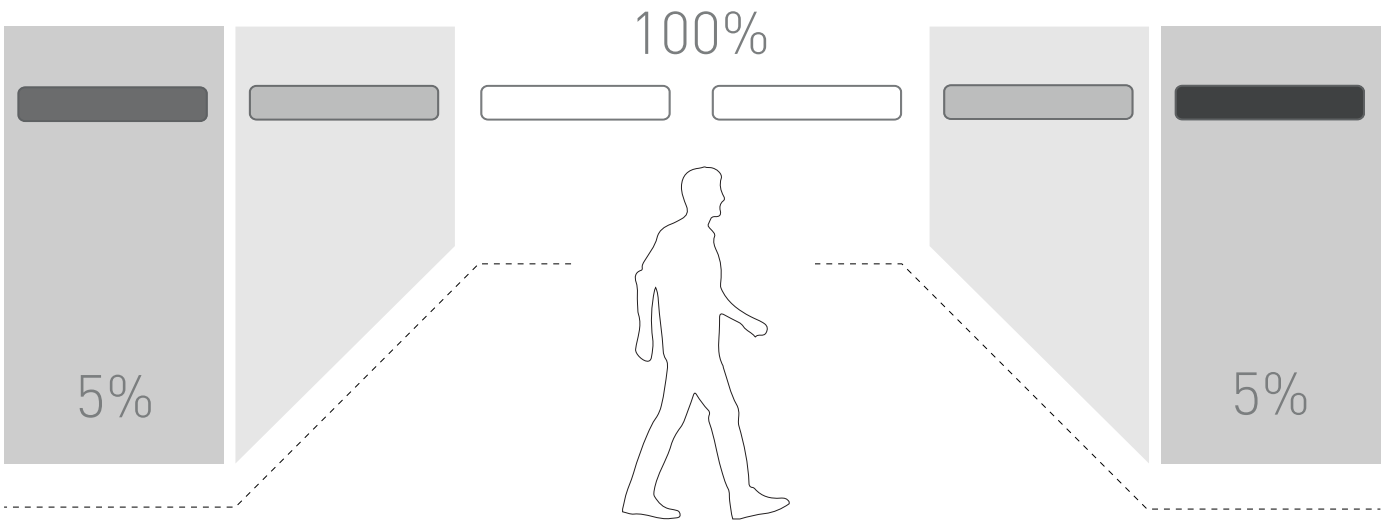
The table of distances is based on the following parameters:

- Maintenance factor: 0.80
- Emergency lighting factor: 1.00
- Minimum illuminance in axis: 1 lx
- Minimum illuminance at half-width of escape route: 0.50 lx
- Evenness in axis max. 40 : 1
- Escape route width: 2.00 m

CORRIDOR FUNCTION

Corridor function refers to controlling lighting based on whether motion has been detected.

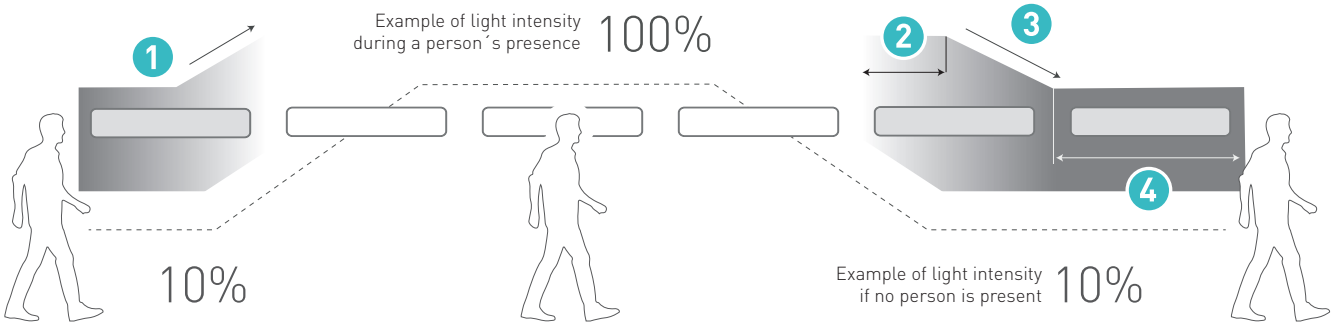
This is achieved by connecting a regular motion detector to the ballast (with a relay, no triak). Combining the use of such a sensor and the function of the ballast makes it possible to control a single fixture or an entire set of luminaires. Light intensity increases when a person enters the room. When the person has left, the motion detector is set to turn off with a delay, resulting in an automatic reduction of light intensity.



Corridor function is a perfect choice for spaces that require permanent illumination due to security reasons. These include e.g. public buildings, extensive residential complexes, parking houses and lots, pedestrian underpasses and underground railway stations. Light intensity in such spaces is normally low but increases if more light is required.

LED drivers feature a variety of profiles, allowing them to provide the best output under a range of conditions. It is necessary to have the LED driver programmed in order to set the corridor function. Alternatively, a lighting control system may be used to change the parameters.

Profiles are defined by a variety of values (corridor mode):



1. Attack time: time that starts to run once occupancy has been detected. Light intensity increases during this period of time until it reaches the occupancy value (default 0,7s to 100%).

2. Start time: time that starts to run once occupancy is no longer detected (120s). If a person occupying the space is detected during this period of time, start time is reset and starts to run again from zero. If no occupancy is detected during attack time, reduction time will be triggered.

3. Reduction time: period of time during which light intensity is reduced from occupancy value to non-occupancy value (default 32s from 100% to 10%).

4. Turn-off delay time: period of time for which non-occupancy value is maintained. Turn-off delay time may vary based on the profile selected or it may remain undefined (never turns off).

5. Non-occupancy value: light intensity when no person occupies the space (default 10%).

6. Occupancy value: light intensity when one or more persons occupy the space (default 100%).

A user may choose to opt for a digital signal controller (DSI or DALI) anytime without having to replace the luminaire or provide additional control lines.

MERRYTEK MC030S E occupancy sensor: a settings example
It is possible to set sensor data precisely for every application by selecting a combination of DIP switch variables.

DIP Switch settings

Recognition area (sensitivity)

	1	2	3	
I	ON	ON	ON	100%
II	-	ON	ON	75%
III	ON	-	ON	50%
IV	-	-	ON	25%
V	-	-	ON	25%

Daylight threshold

	7	8	9	
I	ON	ON	ON	2 Lux
II	ON	ON	-	10 Lux
III	-	ON	-	25 Lux
IV	ON	-	-	50 Lux
V	-	-	-	*Disabled

Activation time

	7	8	9	
	4	5	6	
I	ON	ON	ON	5s
II	-	ON	ON	30s
III	ON	-	ON	90s
IV	-	-	ON	3 min
V	ON	ON	-	20 min
VI	-	-	-	30 min

*Disabled means daylight sensor is out of order. Once motion has been detected, the switch turns on the fixture regardless of the light intensity of the surroundings.

Source colour rendering correct choice		Warm white					White				Daylight			
	Shot light													Horti-cultural
Light colour	79	29	827	927	830	930	25	33	840	940	950	865	965	54
CIE division		3	1B	1A	1B	1A	2A	2B	1B	1A	1A	1B	1A	2A
Shop - foodstuff					●				●					
Shop - meat	●								●					
Shop - textiles, leather				●		●				●				
Hairdressers', beauty salons				●		●				●				
Workshops, mechanics									●			●		
Printing										●	●		●	
Warehouses									●					
Paintshops									●			●		
Colour testing											●		●	
Growing of plants														●
Households, restaurants			●	●										
Offices, school rooms					●				●					
Museums						●				●				
Hospital rooms				●		●								
Consulting rooms										●				
Sporting facilities					●				●					
Outdoor illumination		●						●						●

● Recommended Permissible

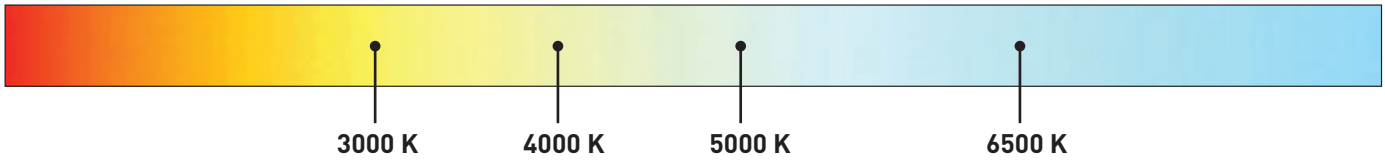
CRI - COLOUR RENDERING INDEX

It determines the colour sensation accuracy at other than daily lighting. It is given at the scale from 0 to 100; the higher the value, the better. The standard colour rendering index of TREVOS LED light fittings is 80, or 90 upon request.

CCT - CHROMATICITY TEMPERATURE

It determines the colour spectrum of the light (it is given in Kelvin - K).

The optimal lighting values are perceived as white light - about 5.000 - 7.000 K (5.000 K - common daylight); higher values are perceived as a light with blue shade, while lower values as a light with yellow to red shade. The standard chromaticity temperature of TREVOS LED light fittings is 4.000 K, or 3.000, 5.000 or 6.500 K up on request.



CHEMICAL RESISTANCE OF SELECTED MATERIALS

Environment	Maximum concentration	Polycarbonate/ PC			Acrylate/AC (SAN, PMMA)			ABS			Aluminium/Al			Polyamide (PA6/66)			INOX AISI 304		
		Resistance			Resistance			Resistance			Resistance			Resistance			Resistance		
		yes	partially	no	yes	partially	no	yes	partially	no	yes	partially	no	yes	partially	no	yes	partially	no
Aceton (ketones)				●			●			●	●			●			●		
Aniline			●				●			●		●			●		●		
Ammonia	5%			●	●			●				●		●					●
Benzaldehyde							●			●					●		●		
Benzene				●			●			●		●				●	●		
Diethylether (ethers)				●		●				●	●			●					●
Potassium nitrate	40%	●			●			●				●			●				●
Ethanol (alcohols)	50%	●				●			●			●		●			●		
Ethylacetate (esters)				●			●			●		●			●		●		
Ethyl alcohol		●				●		●				●		●			●		
Phenol				●			●			●	●					●	●		
Glycerine			●		●						●			●			●		
Heptane						●				●	●						●		
Ammonium hydroxide	25%				●				●			●					●		
Sodium hydroxide - base	60%			●	●			●					●		●			●	
Sodium chloride - salt solution	15%	●			●			●				●		●				●	
Sulphur chloride and Calcium chloride		●			●			●					●	●					●
Carbon tetrachloride and Chloric ether				●			●			●		●							●
Iron dichloride		●			●			●					●					●	
Arsenic acid and Oleic acid		●			●			●					●	●					●
Citric acid	20%	●			●			●				●			●				●
Nitric acid	20%		●			●			●				●			●		●	
Nitric acid	50%			●			●			●			●			●	●		
Phosphoric acid	30%		●		●			●								●		●	
Hydrochlorid acid	5%	●			●			●			●					●			●
Hydrochlorid acid	35%			●			●			●		●				●			●
Chromic acid	40%		●			●			●			●				●			●
Formic acid	30%			●		●			●				●			●		●	
Acetic acid	10%	●			●				●			●			●			●	
Sulphuric acid	30%	●			●				●				●			●			●
Methanol				●			●			●		●			●		●		
Fuel oil			●			●		●			●			●			●		
Mineral oil			●		●			●			●			●			●		
Vegetable oil			●		●			●			●				●		●		
Rape oil			●		●				●		●			●			●		
Lamp oil			●			●			●		●			●			●		
Hydrogen peroxide	30%	●			●			●			●					●	●		
Ammonium sulphate	15%	●			●			●			●			●				●	
Toluene				●			●			●	●			●			●		
Turpentine oil										●		●					●		
Trichlorethylene				●			●			●		●			●		●		
Sodium carbonate	20%	●			●			●				●		●			●		
Aliphatic hydrocarbons		●			●				●		●			●			●		
Aromatic hydrocarbons				●			●			●	●			●			●		
Alkali				●	●			●			●						●		

APPROXIMATE VALUES OF LIGHT FITTING MAINTENANCE FACTOR (LMF)

IP65, IP66 light fittings – NANOTTICA, INNOVA, FUTURA, PRIMA LED, TREX, PERUN SLIM, ALUMAX LED, CANOPUS, LINEA					
	Cleaning intervals in years				
Environment	**1,0**	**1,5**	**2,0**	**2,5**	**3,0**
Very clean	0,96	0,93	0,93	0,92	0,92
Clean	0,94	0,91	0,91	0,90	0,90
Common (optional)	0,90	0,88	0,86	0,85	0,84
Dirty (optional)	0,86	0,83	0,81	0,80	0,79

IP20, IP40 light fittings – BELTR LED, MO SLIM					
	Cleaning intervals in years				
Environment	**1,0**	**1,5**	**2,0**	**2,5**	**3,0**
Very clean	0,94	0,93	0,91	0,9	0,89
Clean	0,88	0,85	0,83	0,81	0,79
Common (optional)	0,82	0,79	0,77	0,75	0,73
Dirty (optional)	0,77	0,73	0,71	0,68	0,65

The table includes only approximate values that may not match the maintenance values achievable for a specific device.

Only damp microfiber cloth can be used for cleaning.

TREVOS, a. s.
Nova Ves 34 — 511 01 Turnov
Czech Republic

trevos.eu

catalogue 2024, version 01
8 590515 000357

PLEASE FOLLOW US!