

# Motors & gearboxes.

Product range

Stainless steel



**dertec**<sup>®</sup>  
Designed to Perform

# Stainless steel Electric Motors.

A round, smooth housing,  
which simplifies cleaning and  
prevents bacterial growth.

IP69K

IE3, IE4 and IE5  
efficiency.



Duplex



Laser engraved  
tag plates.



Seals & O-rings made  
of special Engineered  
Foodgrade Material.

Dertec stainless steel motors are designed according to the highest levels in terms of hygiene and cleanability, we have managed to design a product that can be used under the most demanding conditions.

The design is smooth and round to prevent dirt build-up and makes them easy to clean. Special attention was paid to the shape of the terminal box and bearing shields to minimize dirt accumulation.

All our products are built to order, according to our customers' demands.



## Totally enclosed non ventilated



### FP3SS

Standard AC motor

IEC56 - 90

0,06 - 1,5 kW

2,4,6 Pole

Asynchronous & Synchronous



### FP3ENSS

AC Encoder motor

IEC71 - 80

0,18 - 0,75 kW

2,4,6 Pole

Asynchronous & Synchronous



### FP3EJSS

AC Brake motor

IEC63 - 90

0,12 - 1,5 kW

2,4,6 Pole

Asynchronous & Synchronous

## Totally enclosed fan cooled



### FP3SS

Standard AC motor

IEC80 - 160

0,75 - 18,5 kW

2,4,6 Pole

Asynchronous & Synchronous



### FP3ENSS

AC Encoder motor

IEC80 - 100

0,75 - 3 kW

2,4,6 Pole

Asynchronous & Synchronous



### FP3EJSS

AC Brake motor

IEC90 - 100

1,1 - 3 kW

2,4,6 Pole

Asynchronous & Synchronous

## Customized motors



### FP3SS Water Cooled

IEC63 - 90

0,12 - 1,5 kW

2,4,6 Pole

Asynchronous & Synchronous



### Motor for vertical use

IEC63 - 90

0,12 - 1,5 kW

2,4,6 Pole

Asynchronous & Synchronous



### Custom Solutions

When a standard motor doesn't fit you to your needs, we offer customer specific solutions. Specials shafts, motorflanges, different mountings etc.



# Stainless steel Gearboxes.

A round, smooth housing, which simplifies cleaning and prevents bacterial growth.



Stainless Steel AISI316 housing



Up to 94% efficiency



Laser engraved tag plates.



Duplex

Dertec gearboxes are specifically developed with hygiene and cleanability in mind. With a design that aims to minimize build-up of dirt, the shape contributes to less accumulation and adhesion of contaminants.

The high efficiency (92-94%) of the drive reduces energy consumption and contributes to a low surface temperature.



IP69K



Seals & O-rings made of special Engineered Foodgrade Material.

## Right Angle gearboxes



### FS(A) Serie

Helical worm gearbox  
4 Frame Sizes  
Shaft Ø: 20, 25, 30, 35, 40 & 45mm  
Ratio's: 6,8:1 > 217,41:1  
Max Torque: 520 Nm  
Max Power: 3,0 kW



### FKA Serie

Helical bevel gearbox  
5 Frame Sizes  
Shaft Ø: 30, 35, 40, 50 & 60mm  
Ratio's: 3,98:1 > 197,37:1  
Max Torque: 2700 Nm  
Max Power: 7,5 kW



### K-Serie

Bevel gearbox  
5 Frame Sizes  
Shaft Ø: 12, 15, 18, 20, 24, 25, 28, 32 & 35mm  
Ratio's: 1:1 > 6:1  
Max Torque: 660 Nm  
Max Power: 15 kW



### FVS Serie

Worm gearbox  
7 Frame Sizes  
Shaft Ø: 14, 18, 25, 28, 35 & 42mm  
Ratio's: 7,5:1 > 100:1  
Max Torque: 660 Nm  
Max Power: 7,5 kW



### FH Serie

Hypoid bevel gearbox  
4 Frame Sizes  
Shaft Ø: 20, 25, 30 & 35mm  
Ratio's: 7,5:1 > 300:1  
Max Torque: 500 Nm  
Max Power: 4,0 kW

## Accessories



### Open/Closed cover

Offers extra safety and water ingress protection.



### Torque arm

Gives you a perfect flexible mounting.



### Shrink disc

Friction-locked connections are the more powerful and reliable alternative to conventional key mountings.



# Stainless steel Gearboxes.

A round, smooth housing, which simplifies cleaning and prevents bacterial growth.

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AISI316 housing

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Up to 94% efficiency



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FR series helical gearboxes are being developed to achieve high torques, low energy consumption and thus a lower surface temperature. The case-hardened gears ensure a long lifetime and smooth running. The smart use of 2 stage or 3 stage gearing in the same housing offers a complete spectrum of ratio's.

The footprint and shaft sizes are similar to commonly used standards in the market.

## Coaxial gearboxes



### FR Serie

Helical gearbox

3 Frame Sizes

Shaft  $\varnothing$ : 25, 30 & 35mm

Ratio's: 3,41:1 > 199,81:1

Max Torque: 600 Nm

Max Power: 7,5 kW

### FRX Serie

Single stage gearbox

3 Frame Sizes

Shaft  $\varnothing$ : 15, 20 & 25mm

Ratio's: 1,4:1 > 6:1

Max Torque: 150 Nm

Max Power: 7,5 kW

### FRC Serie

Helical gearbox

2 Frame Sizes

Shaft  $\varnothing$ : 20 & 25mm

Ratio's: 3,84:1 > 54,00:1

Max Torque: 200 Nm

Max Power: 1,5 kW



### FFA Serie

Parallel shaft gearbox

4 Frame Sizes

Shaft  $\varnothing$ : 30, 35, 40 & 50mm

Ratio's: 3,77:1 > 281,71:1

Max Torque: 1500 Nm

Max Power: 7,5 kW



### KR Serie

Speed ball variator

4 Frame Sizes

Shaft  $\varnothing$ : 11, 14, 19, 24mm

Ratio's: 2:1

Max Torque: 16 Nm

Max Power: 2,2 kW

## Accessories



### Secondary flange

Using flanges adds flexibility to your mounting.



### Solid secondary shaft

We supply insert shafts or fixed shafts to all hollow shaft gearboxes.



### Foot plate

Our external foot plate to transform the shaft mounted gears to foot mounting.



# Stainless steel Hygienic parts.

A round, smooth housing,  
which simplifies cleaning and  
prevents bacterial growth.



Stainless Steel  
AISI316 housing



Laser engraved  
tag plates.



Seals & O-rings made  
of special Engineered  
Foodgrade Material.

A complete range of stainless steel bearing units for the very challenging food and beverage industry. Regularly cleaning of the machinery means that the machines are frequently exposed to pressure washdowns with caustic, antibacterial cleaning agents. Dertec Signature line ball bearing units offer a range of bearing solutions for such demanding environments. Standard made in stainless steel 316, double sealed with O-rings and Hygienic seals.

The blue optical, detectable hygienic seals and stainless steel housing are made to EHEDGE hygienic guidelines.

## Hygienic bearing systems



### DHLASS F

4 Hole plain bearing

Bore: 20-50mm

Bearing Type: SA & SB



### DHLASS FB

3 Hole plain bearing

Bore: 20-50mm

Bearing Type: SA & SB



### DHLASS FL

2 Hole plain bearing

Bore: 20-50mm

Bearing Type: SA & SB



### DHLASS P & PA

Standing bearings

Bore: 20-50mm

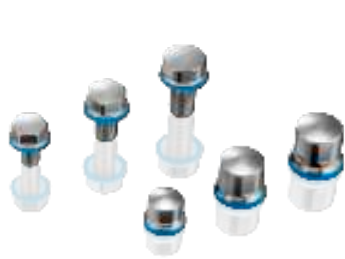
Bearing Type: SA & SB

## Hygienic parts



### Hygienic star knobs and handles

Engineered according to the latest  
hygienic guidelines and produced in  
AISI316 with blue silicon seals.



### Hygienic norm parts

Produced in AISI316 with silicon  
bonded seals these hygienic nuts,  
hygienic bolts and bonded seals  
are developed to reduce bacterial  
growth at maximum.



### Hygienic glands

These glands offer IP69 + EMC  
protection for your electric motor  
cable connection. For food safety  
the glands are being produced in  
AISI316 and blue silicon.





## An independent **company.**

Dertec is a second generation family company, founded in 2002. The first in-house production of stainless steel motors and gears started in 2008. In 2022, Dertec moved to a new and built to purpose building, where we have the possibility for further growth and development of our product range and global market leadership.

## Vision.

Innovative, hygienic solutions. Always one step ahead. Tailored to our customers. That's our goal. Years of experience, technical insight, focused on market demands, and great engagement with the customer. Qualities that have earned Dertec a leading position throughout the world. The company has developed strongly over the years and has grown into a global market player with a very clear defined expertise: innovative, hygienic, sustainable, and efficient.

## Driven **organization.**

The unique position of Dertec is thanks to our continuous efforts in research and development. Our team of professionals constantly strives for the best solution. Our innovative stainless steel solutions are developed and built in-house. Continuous market changes demand swift adaptation. Our engineering department makes a significant contribution to fully supporting our relationships with the most efficient hygienic solutions possible.

## Customer **first.**

Customer satisfaction is what matters most at Dertec. This also applies to partnership. No short-term investments, but long-lasting relationships. We are proud to work for leading companies all over the world. Dertec is a Dutch family-owned company, founded in 2002. Agile, with a friendly atmosphere and informal culture.







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