KNITTING

LGL

The consistent growth of the **Group** has been laying on its well-established philosophy which can be summarized by **4 pillars.**

Customer Care

Understanding customer's needs and problems is the key to develop effective solutions. Any new product is the result of the experience gained while working close to over 2000 customers during last 40 years.

Intellectual Property

All products, since LGL was established, have been designed and developed in our own R&D department which nowadays represents more than 10% of the total work force.

Efficiency
& low environmental impact

The commitment to sustainable management of resources embraces any step of the process, from design to production, and it's reflected also in the final product which delivers top performances along with high efficiency. Since 2011 our products are "Green Certified".

Continuous innovation

The path of innovation and updating of the corporate know-how, passes through technological assets in constant evolution, for the protection of which more than 200 international patents have been filed.

Who we are

LGL is a family-owned group which has its roots in Bergamo province, within one of the most relevant textile industrial districts. The Group, which can account for over 1 million yarn feeders installed since its foundation, comprises 3 companies.
LGL Electronics, established in 1982, is specialized in the development and manufacturing of electronic yarn feeders for weaving and knitting machines.
Elsy, also established in 1982, develops and produces electronics for the textile industry.
LGL Hangzhou which was established in 2004 to expand brand presence in Far East markets through dedicated production, sales and customer service.

member of
ACIMIT
ITALIAN TEXTILE MACHINERY

Yarn feeder featuring separate coils, suitable for all types of knitting machines or for textile machines requiring yarn feed-in with constant tension.
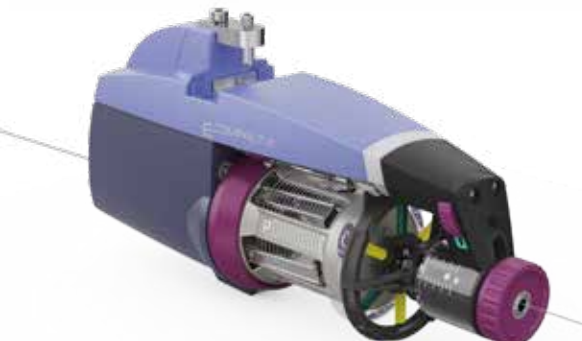
ECOMPACT2

Attivo

Coax

ECOPOWER2

Attivo

Coax

Features	Visible status light	
	Automatic speed adjustment	
	Winding reserve control	
	Empty bobbin "machine stop" function	
	Self calibration	
	Mechanical yarn output detection - machine stop	
	Easy setting of cams (large diameter machines) - YSC function	
Range of yarns	5 to 600 Den	5 to 800 Den
Spool body diameter	52 mm	69 mm
Tension range	0,5 to 25 cN	0,5 to 45 cN
Speed	up to 700 m/min	up to 1000 m/min
Braking systems	Coax, Attivo	Coax, Attivo, Brake
Coil separation	0,9 mm	1 mm
Max. power consumption	30 W	35 W
Power supply	AC, DC	
Communication	RS-485, CAN Bus, Modbus	
Weight	Coax 1,4 Kg	Coax 2,2 Kg
	Attivo 1,5 Kg	Attivo 2,3 Kg
		Brake 2,6 Kg

Certified

GREEN LABEL
SUSTAINABLE MACHINERY CERTIFICATION

Main applications
Large diamater Circular knitting, Socks, Seamlsess, Flat knitting

COAX

Manual tension adjustment.
Gurantees quick, easy and
repeatable setting.

ATTIVO & BRAKE

Tension is set through software. Attivo will keep the desired tension constant
over the time.
No tension changes due to different bobbins diameters.
No tension changes during transition from full to empty bobbin.
Tension set from 0 TO 50 cN with ATTIVO and up to 200 cN with Brake:.

0 TO 50 Attivo

0 TO 200 Brake

SPIN2

Yarn feeder featuring separate coils, suitable for all types of knitting machines or for textile machines requiring yarn feed-in with constant tension.
Dedicated wheels available depending on yarn properties or application.

For winders

Waer-resistant

Slippery yarns

Yarn recovery

For elastic yarns

	Visible status light
	Quick reaction to set tension changes
	Quick reaction to machine speed changes without tension peaks on yarn
	Maximum torque available also at low speeds
Features	Yarn absorption measurement
	Ceramic tension sensor: guarantees accuracy, precision and reactiveness
	Automatic speed control up to 1400 m/min
	Yarn absorption speed measurement
	Yarn retreiving up to 150 mm
Range of yarns	Bare & covered elastomeric
Wheel diameter	50 mm
Tension range	0,5 to 100 cN
Coil separation	0 to 2 mm
Power consumption	Avg. 5 to 15 W
Power supply	24VDC ± 10% to 60VDC ± 10%
Communication	RS 485, CAN bus, MOD BUS
Interface	Integrated display & buttons

Main applications
Socks, seamless, Flat knitting, Winders
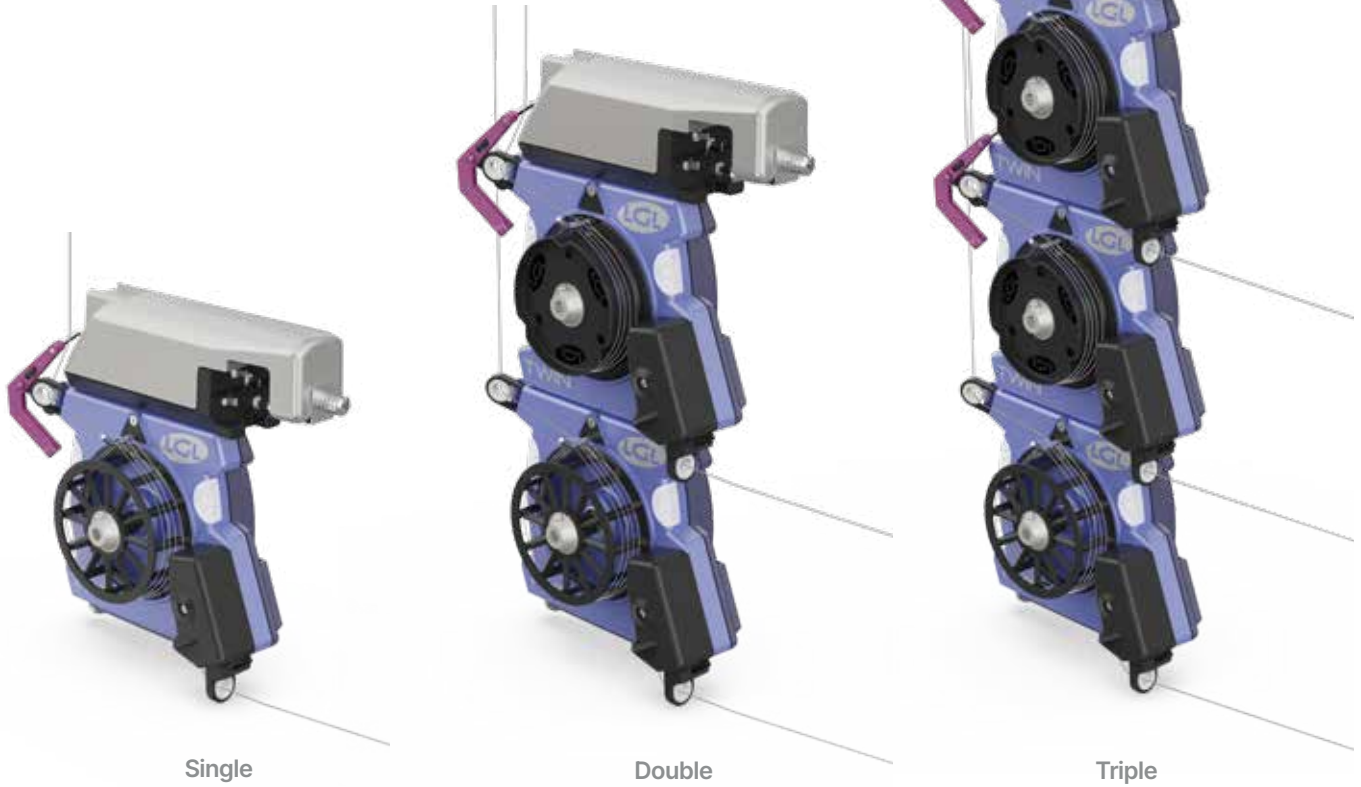
Certified

GREEN LABEL
SUSTAINABLE MACHINERY CERTIFICATION

TWIN

Up to 4 devices can be installed in a single cluster to save space and wiring- yarn recovery.
Dedicate wheel for rigid yarn allows yarn recovery function.

Single

Double

Triple

Features	Quick reaction to set tension changes
	Quick reaction to machine speed changes without tension peaks on yarn
	Maximum torque available also at low speeds
	Yarn consumption measurement
	Ceramic tension sensor: guarantees accuracy, precision and reactiveness
	Automatic speed control up to 1400 m/min
	Easy setting of machine cams (large diameter machines) - SYF fucntion
	Yarn retreiving up to 150 mm
Range of yarns	10 to 800 Den and Bare & covered elastomeric
Wheel diameter	43 mm
Tension range	0,5 to 50 cN (100 and 200 cN optional)
Coil separation	Adjustable
Power consumption	Avg. 5 to 15 W
Power supply	24VDC ± 10% to 60VDC ± 10%
Communication	CAN bus
Interface	Requires KYC/Feederlink

Yarn recovery

For elastic yarns

Main applications
Large Diameter Circular knitting, Warpers

Certified

GREEN LABEL
SUSTAINABLE MACHINERY CERTIFICATION

REEL

Yarn retrieving device to be installed on Ecopower2 or Ecompact2 feeders keeps yarn tension constant between feeder and machine Retrieve up to 1 m of yarn.

Load cell range	0 to 100 cN
Yarn range	5 to 800 Den
Communication	CAN BUS
Weight	220 g
Dimensions	152 × 65 × 82 mm

Main applications
Flat knitting

IFS Tension sensor

Yarn tension measurement sensor based on ILC (inductive Load Cell) technology. Its compact dimension allows the installation at any step of yarn process.

Available tension range	50-100-250-500-1000 cN
Supply voltage	12-24 VDC
Output voltage	0-10 VDC
Dimensions	50 × 27,5 × 29 mm

Key features

- **Low stress on the yarn**
  Internal geometry of the sensor has been designed to minimize the stress delivered to the yarn while passing through with no compromise on the measurement accuracy.
- **Not sensitive to dust**
  ILC technology allows reliable and prceise measure regardless of dust accumulation.

Main applications
Winders

KYC TOUCH

FEEDER LINK

Features		
	On-board machine control simultaneously all feeders installed. It allows the same functions by laptop/tablet (USB) and customer ERP (wifi - ethernet)	On-board machine control one-by-one any feeders installed. It allows simultaneous controll of all feeders by laptop/tablet
	Save and upload machine configuration	
	KLS - automatic machine stop upon yarn breakage detection after the feeder	
	YCM yarn consumption information	YCM (by laptop/tablet) yarn consumption information
	YCC - automatic machine stop if yarn consumption is out of a pre-set range	
	YSC - Synchronized yarn consumption for selected group of storage feeders	
	SYF - Synchronized yarn consumption for selected group of positive feeders	-
	Remote interactive Technical assistance	-
	Predictive maintenance	-
Main interface	7" touch screen	1" 1/4 LCD
Feeders compatibility	Ecompact2, Ecopower2, Twin, Spin	
Suitable for	Large diameter knitting machines Warping	Flat knitting, large diameter Socks & seamless machines
Available Connections to laptop	USB - ETHERNET - WI-FI	USB

Suggested applications

	Flat knitting	Sock	Seamless	Large Diameter	Warpers	Winders
Ecopower2 Coax	●	●	●	Eletronic jacquard		●
Ecopower2 Attivo		●	●	Eletronic jacquard		
Ecopower2 Brake				Eletronic jacquard		
Ecopower2 Reel	Recovery up to 70 cm					
Ecompact2 Coax	●	●	●	●		●
Ecompact2 Attivo	●	●	●	●		
Twin				Bare spandex	●	
Twin Recovery wheel	Recovery up to 15 cm	●		Hard yarns on fine gauges, striper		
Spin2		●	●			●
Spin2 Recovery wheel	Recovery up to 15 cm					