KNITTING



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 innovatior

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

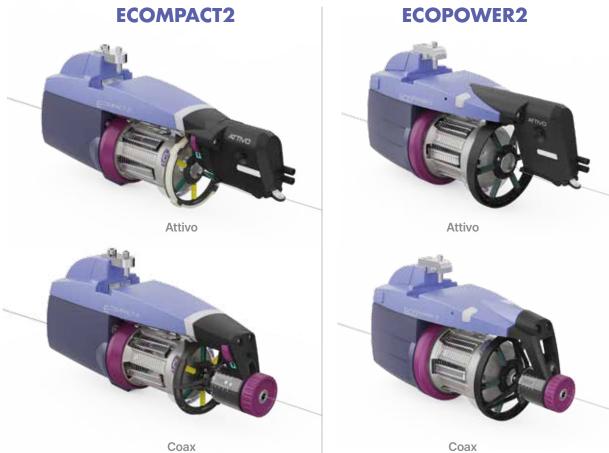
LGL is a family-owned group which has its roots in Bergamo province, within one of the most relevant textile industrial districts. The Group, which can account for over 1 million yarn feeders installed since its foundation, comprises 3 companies.

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.







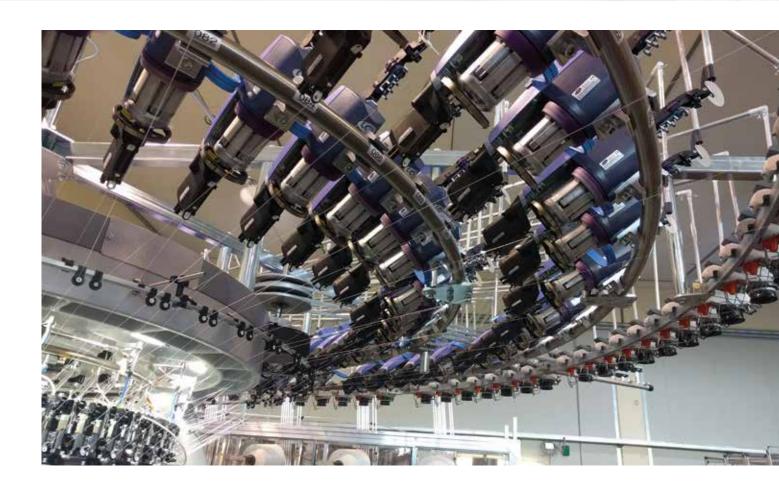
Yarn feeder featuring separate coils, suitable for all types of knitting machines or for textile machines requiring yarn feed-in with constant tension.

| | Visible status light | | | | | | | | |
|------------------------|---|---------------------|--|--|--|--|--|--|--|
| | Automatic speed adjustment | | | | | | | | |
| | Winding reserve control | | | | | | | | |
| Features | 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 | A | C, DC | | | | | | | |
| Communication | | | | | | | | | |
| | Coax 1,4 Kg | Coax 2,2 Kg | | | | | | | |
| Weight | Attivo 1,5 Kg | Attivo 2,3 Kg | | | | | | | |
| | | Brake 2,6 Kg | | | | | | | |

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.



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

Main applications Socks, seamless, Flat knitting, Winders

Certified





For winders



Waer-resistant



Slippery yarns



Yarn recovery

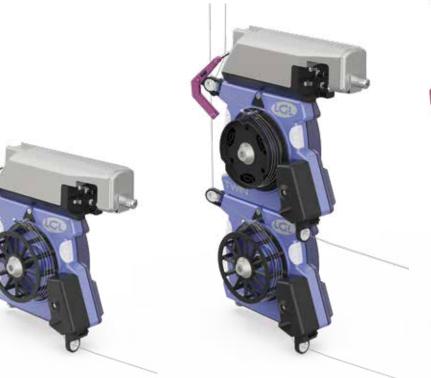


For elastic yarns



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.



<image>

Single

Double

| | 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 | | | | | | |
| Features | 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 | | | | | | |
| | | | | | | | |





Triple

Yarn recovery



For elastic yarns

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

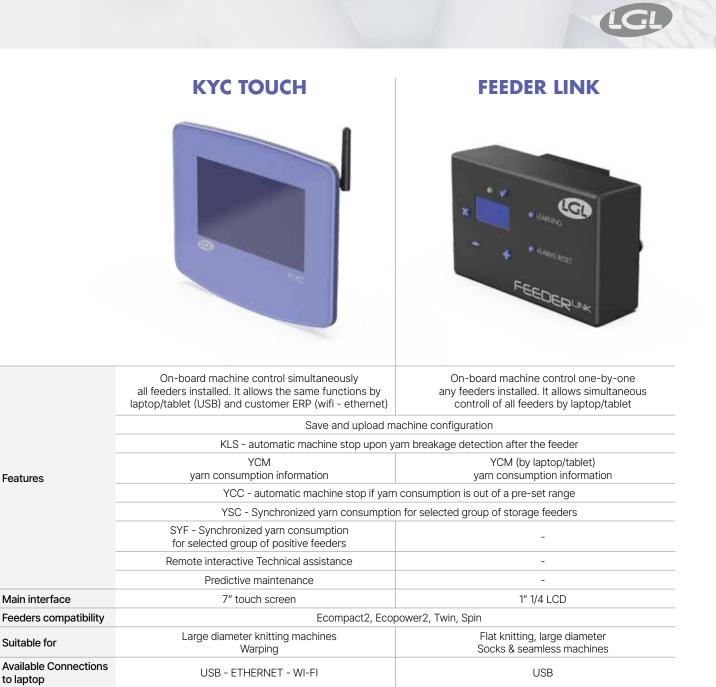
Internal geometry of the sensor has been designed to minimize the stress delivered to the yarn while passing through with no compromise on the measurement accuracy.

Not sensitive to dust

ILC technology allows reliable and prceise measure regardless of dust accumulation.

Main applications Winders





| Al Feeders Of | THUR AR TO | Weic | | | | | | | | | | | | | | _ | | | | | |
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Suggested applications



| | Flat knitting | Sock | Seamless | Large Diameter | Warpers | Winders |
|----------------------|-------------------------|------|----------|--|---------|---------|
| Ecopower2 Coax | ٠ | • | ٠ | Eletronic jacquard | | • |
| Ecopower2 Attivo | | • | ٠ | Eletronic jacquard | | |
| Ecopower2 Brake | | | | Eletronic jacquard | | |
| Ecopower2 Reel | Recovery up to 70 cm | | | | | |
| Ecompact2 Coax | • | • | • | • | | • |
| Ecompact2 Attivo | ٠ | ٠ | ٠ | ٠ | | |
| Twin | | | | Bare spandex | ٠ | |
| Twin Recovery wheel | Recovery up to 15 cm | • | | Hard yarns on fine gauges, striper | | |
| Spin2 | | • | • | | | • |
| Spin2 Recovery wheel | Recovery up to 15 cm | | | | | |





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