

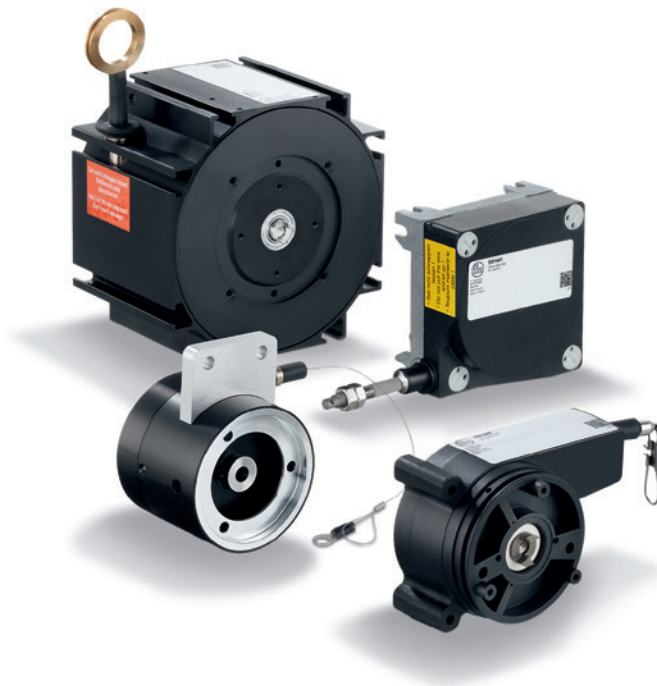


Sensors for motion control

A safe choice: draw-wire mechanisms for encoders.



Encoders

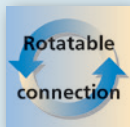
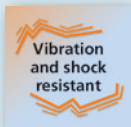


**Precise position detection
including over long distances.**

**High operational reliability
thanks to robust mechanical
construction even under
permanent strain.**

**Mechanically compatible
across manufacturers, for
encoders with synchro flange.**

**Compact design even with
rope spans up to 15 m.**



Exact positioning including over long distances

Draw-wire mechanisms for encoders are the ideal choice when positions must be accurately determined over straight distances. Examples of use range from short distances, for example with scissor lifts or fork lift trucks, to long distances, such as those covered by trolleys on crane booms or transport systems in high-bay warehouses.





Solid connection, robust against external influences

Advantage of the pulley principle: there is an uninterrupted connection between the encoder and the moving object. Adverse effects on distance detection e.g. caused by dirt with optical distance measurement, are mostly eliminated.

The mechanical components are designed for industrial, long-lasting use with up to 1 million pulls.

















Draw-wire mechanisms

| Design | Dimensions [mm] | Linearity [%] | Housing type/ Housing material | Rope spans up to * [m] | Order no. |
|---|--------------------|------------------|---|------------------------------|--------------|
|  | 80 x 48 x 82 | ± 0.02 | cylindrical / metal, aluminium, anodised | 1.9 | E61439 |
|  | 60 x 57 x 89 | ± 0.1 | cylindrical / PA | 2.4 | E61440 |
|  | 78 x 40 x 75 | ± 0.01 | rectangular / die-cast zinc, plastic | 3 | E61441 |
|  | 115 x 103 x 115 | ± 0.01 | rectangular / aluminium, anodised | 5 | E61442 |




* draw wire mechanisms with other lengths on request

Encoders



| Draw wire mechanisms in combination with encoder | | | | | | |
|---|---|---|---|--|---|---|
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| RMU300 | RU3100 | RM9007 | RM3006 | RMU400 | RMU100 | RMU200 |
| IO-Link multiturn, 31 bits | Incremental (IO-Link), 3 tracks | CANopen 24 bits | PROFIBUS 25 bits | SSI 24 bits | Analogue 4...20 mA | Analogue 0...10 V |

These encoder versions solve the majority of applications. In principle, other encoders with 58 mm diameter, synchro flange and 6 mm shaft diameter can also be used with the draw wire mechanisms. You will find further encoders at ifm.com.

Accessories

| Description | Order no. |
|---|--------------|
|  Pulley | E61445 |
|  IO-Link master Profinet, 4 ports | AL1100 |
|  IO-Link master, EtherNet/IP, 4 ports | AL1120 |

Connection technology

| Description | Order no. |
|---|--------------|
|  M12 socket, 5-pole, 5 m black, PUR cable | EVC545 |
|  M12 socket, 8-pole, 5 m black, PUR cable | E12403 |