

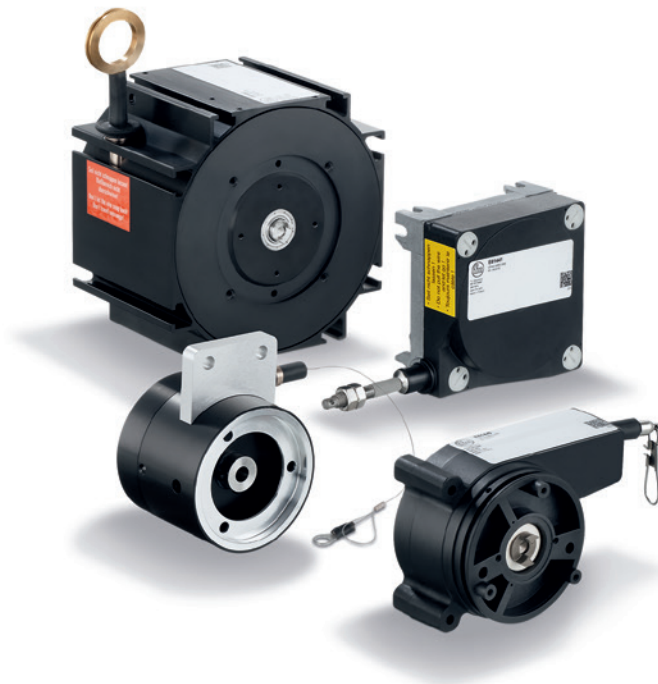


Sensors for motion control

# A safe choice: draw-wire mechanisms for encoders.



## Encoders

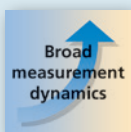
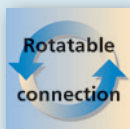
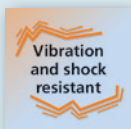


**Precise position detection including over long distances.**

**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						
<b>RMU300</b>	<b>RU3100</b>	<b>RM9007</b>	<b>RM3006</b>	<b>RMU400</b>	<b>RMU100</b>	<b>RMU200</b>
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

We reserve the right to make technical alterations without prior notice. · 04.2021