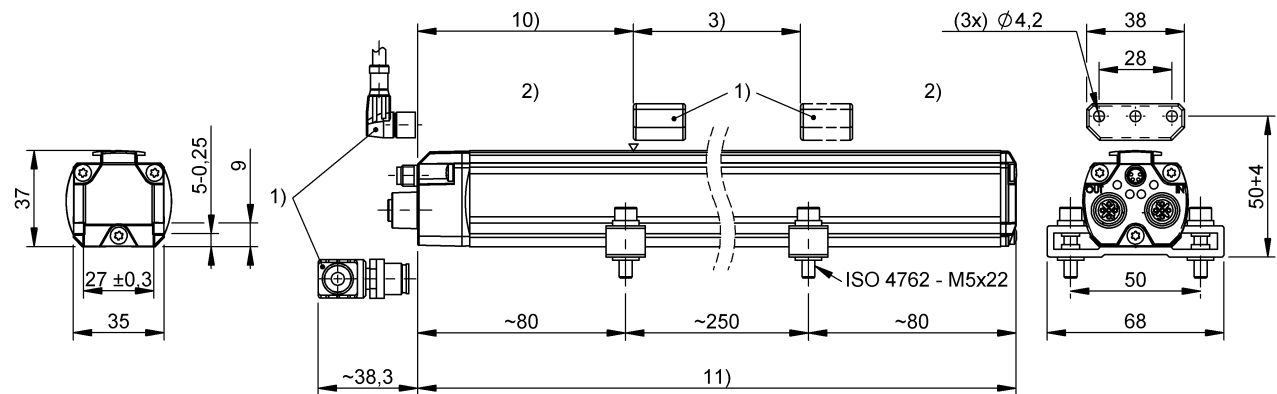




1) not included in scope of delivery, 2) Non-usable area, 3) Nominal length = Measuring length, 10) Null point, 11) Installation length



Basic features

Approval/Conformity	CE UKCA cULus WEEE
Magnets, number (factory setting)	1
Magnets, number max.	6

Electrical connection

Connection	Connector, M8x1, 4-pin
Connection 1	M8x1, 4-pin
Connection 2	M12x1, 4-pin, D-coded
Connection 3	M12x1, 4-pin, D-coded
Connection version	axial
Polarity reversal protected	Ub up to 36 V
Short-circuit protection	to GND

Electrical data

Current consumption max. at 24 V DC	120 mA
Galvanic isolation	yes / EtherNet
Inrush current	≤ 500 mA/10 ms
Operating voltage Ub	10...30 VDC
Output signal adjustable	yes
Output value	Position in μm
Overvoltage protection	Ub up to 36 V
Switch-on delay max.	5 s
Synchronous mode	yes, configurable
Voltage-proof up to (GND to housing)	500 V AC

Environmental conditions

Ambient temperature	-40...85 °C
EN 55016-2-3, Radiation	For industrial and residential use
EN 60068-2-27, Continuous shock	150 g, 2 ms
EN 60068-2-27, Shock	150 g, 6 ms
EN 60068-2-6, Vibration	20 g, 10...2000 Hz
EN 61000-4-2, ESD	Severity Level 3
EN 61000-4-3, RFI	Severity Level 3
EN 61000-4-4, Burst	Severity Level 3
EN 61000-4-5, Surge	Severity Level 2
EN 61000-4-6, High-frequency fields	Severity Level 3
EN 61000-4-8 Magnetic fields	Severity Level 4
IP rating	IP67, with connector
Relative humidity	≤ 90 %, non-condensing
Storage temperature	-40...100 °C
Temperature coefficient typ.	≤ 18 ppm/K at 50% of nominal stroke 500mm

Functional safety

MTTF (40 °C)	119 a
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Interface

Data format	32-bit signed
Interface	Profinet Encoder Profile V4.1
Process data, Master – Device	4 bytes
Prozess data, Device – Master	≥ 12 bytes

Material

Cover material	Aluminium, Die-cast, nickel plated
Housing material	Aluminium, Anodized
Housing material, surface protection	Anodized

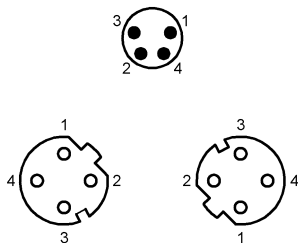
Mechanical data

Minimum distance of the magnets	65 mm
Mounting part	Mounting clamps
Null point	83.0 mm
Overall Length	556 mm

Range/Distance

Measuring length	400 mm
Non-linearity max.	$\pm 30 \mu\text{m}$
Repeat accuracy	$\leq \pm 5 \mu\text{m}$ (typical $\pm 2.5 \mu\text{m}$)
Repeatability	$\leq 30 \mu\text{m}$
Resolution, position	1 μm
Resolution, traverse speed	0.1 mm/s
Sampling frequency max.	710 Hz

Connector Drawings



Wiring Diagrams (Schematic)

Pin	Bus Connectors
1	TX+
2	RX+
3	TX-
4	RX-

Pin	Power Connector
1	+24 V DC
2	NC
3	0 V GND
4	NC