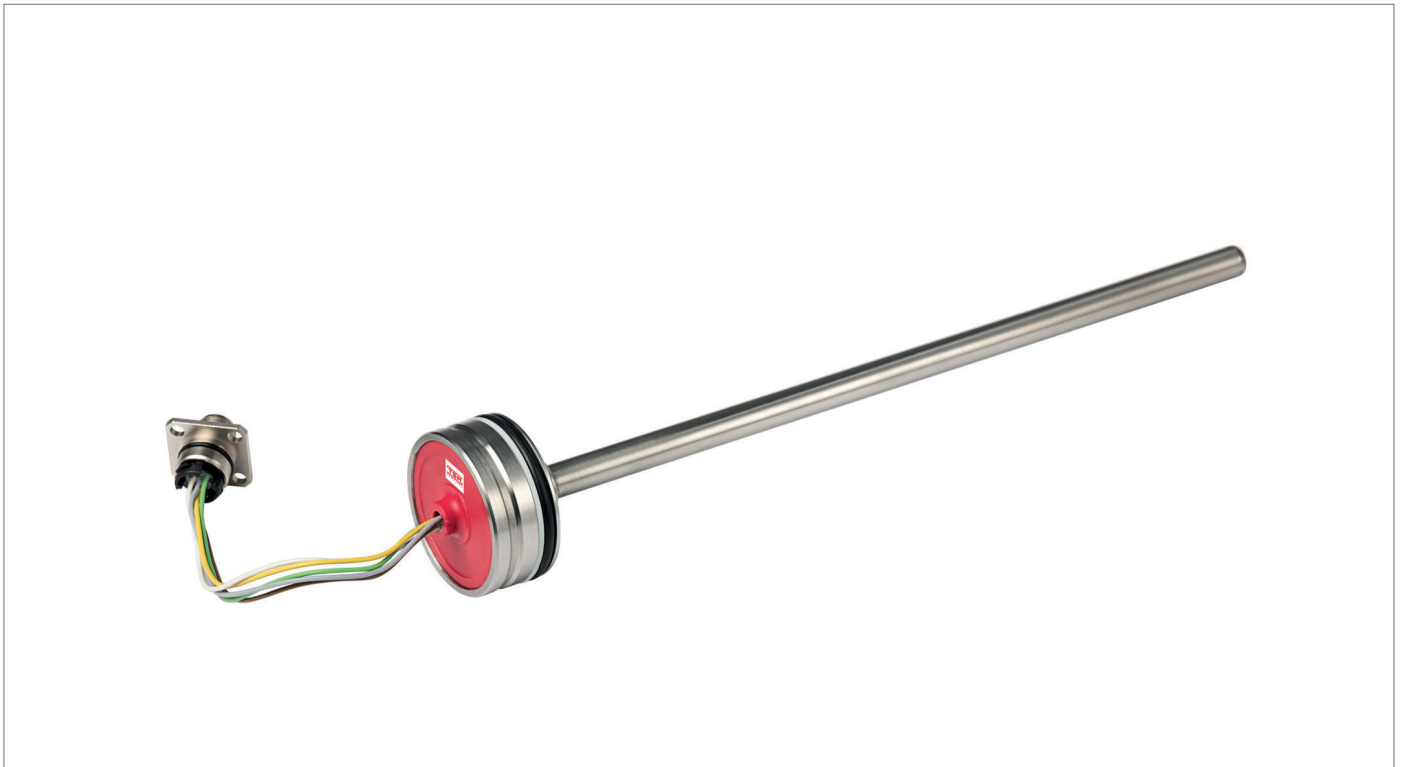


MAG300

MAGNETOSTRICTIVE

Measuring length absolute up to 3 m linear position transducer



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CHARACTERISTICS

- Measuring range from 100 to 3000mm
- For integration in pneumatic and hydraulic cylinders
- High Resistance to shock and vibration
- Plug-in flange
- Absolute output
- Working pressures up to 350bar
- Customizable cursor



ADVANTAGES

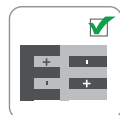
- Absolute Contactless linear position measurement
- High Resolution, High Linearity
- Unlimited mechanical life
- Designed for Welded and Tie-rod Cylinder Applications
- Rod, nipple and flange AISI 316
- Simple integration in cylinders with M12 plug-system



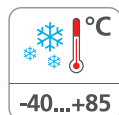
High protection level



Shock/vibration resistant



Reverse polarity protection



Wide range temperature



Analog output



Directive 2011/65/EU



EU conformity

MAG300

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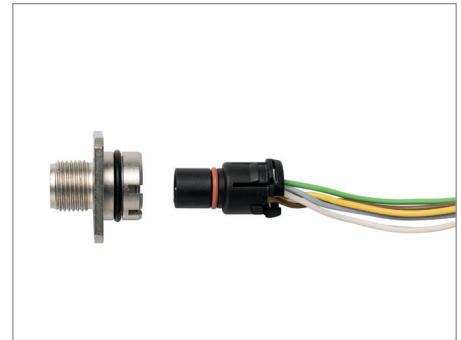
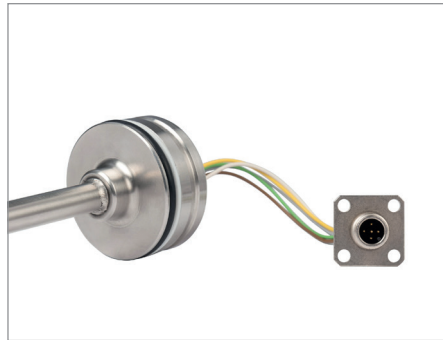
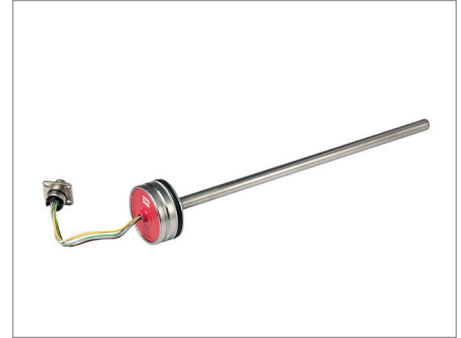
Measuring length absolute up to 3 m linear position transducer

PRODUCT DESCRIPTION

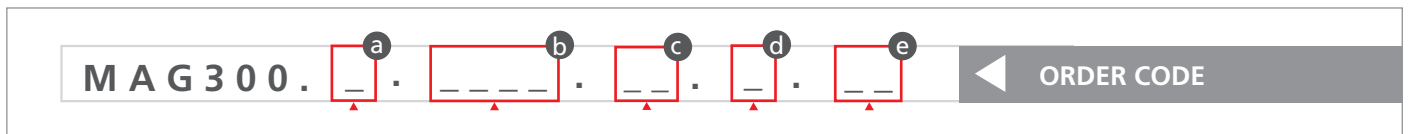
MAG300 is a magnetostrictive position transducer with flanged connection that installs completely inside oil-pressure cylinders. Its unique design, plus a wide range of cursor configurations, ensures easy installation and total compatibility with cylinder manufacturer specifications.

Working temperature from -40 to +85°C, working pressures up to 350 bar, high resistance to vibration and shock give the sensor the indispensable strength needed for heavy-duty use.

High performance in terms of transduction of measurement defined as linearity, hysteresis and repeatability.



PRODUCT CODE



a	Power supply
2	← = 10 ... 30 VDC

b	Measuring length
XXXX	← = mm (steps of 0100 mm)

c	Sensor Output
2	← = 0,5...4,5 VDC
33	← = 4,5...0,5 VDC
32	← = 0,25...4,75 VDC
34	← = 4,75... 0,25 VDC
7	← = 4...20 mA
35	← = 20...4 mA

d	Type of connection
26A	← = Plug system M12, 4-pin with wires 60mm
26B	← = Plug system M12, 4-pin with wires 150mm
26C	← = Plug system M12, 4-pin with wires 300mm

e	Cursor
X	← = none
0	← = Custom cursor
1	← = Standard cursor

MAG300

MAGNETOSTRICTIVE

Measuring length absolute up to 3 m linear position transducer

TECHNICAL SPECIFICATION

Measuring range	0,1...3 m
Magnetostrictive resolution	0.1 mm
Magnetostrictive Linearity	±0.04 % (F.S)
Magnetostrictive Repeatability	±0.005 % (F.S)
Operating Pressure	350 bars (peak max ... 500 bars)
Type of connection	Plug system M12, 4-pin
Protection	IP67 (provides IP69K environmental protection when installed in a cylinder)
Temperature range	-40°C ... +85°C [-40°F ...+185°F]
Temperature Coefficient	±0.005 % (F.S)/°C
Material	stainless steel AISI316
Rod Diameter	10 mm
Shock resistance	acc. to CEI EN 60068-2-27
Vibration resistance	acc. to CEI EN 60068-2-6:2009

OPERATING PRINCIPLE

The magnetostrictive effect on metallic wire or rod creates a change in length or volume of the wire or rod in the presence of a magnetic field. Ferromagnetic metals can have negative or positive magnetostrictive properties, for example they can shrink or stretch which in turn decreases or increases its volume. This effect is used in our magnetostrictive linear position sensors.

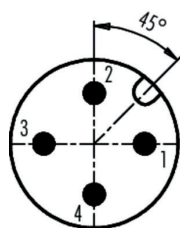


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ELECTRICAL CHARACTERISTICS

Power supply	10 ... 30 V DC
Reverse polarity protection	YES
Electromagnetic compatibility	acc. to EN 61000-6-2, EN 61000-6-4
CE compliant	acc. to EMC guideline 2014/30/EU RoHS guideline 2011/65/EU

ELECTRICAL CONNECTION M12 X 4 PINS



Pinout

1	+Vin
2	n.c.
3	GND
4	V / I out

MAG300

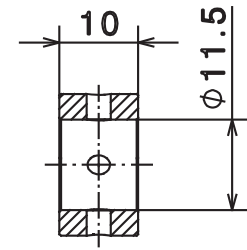
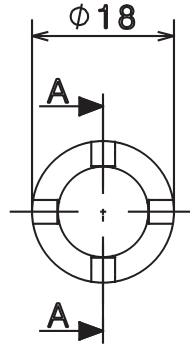
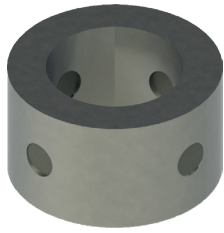
MAGNETOSTRICTIVE

Measuring length absolute up to 3 m linear position transducer



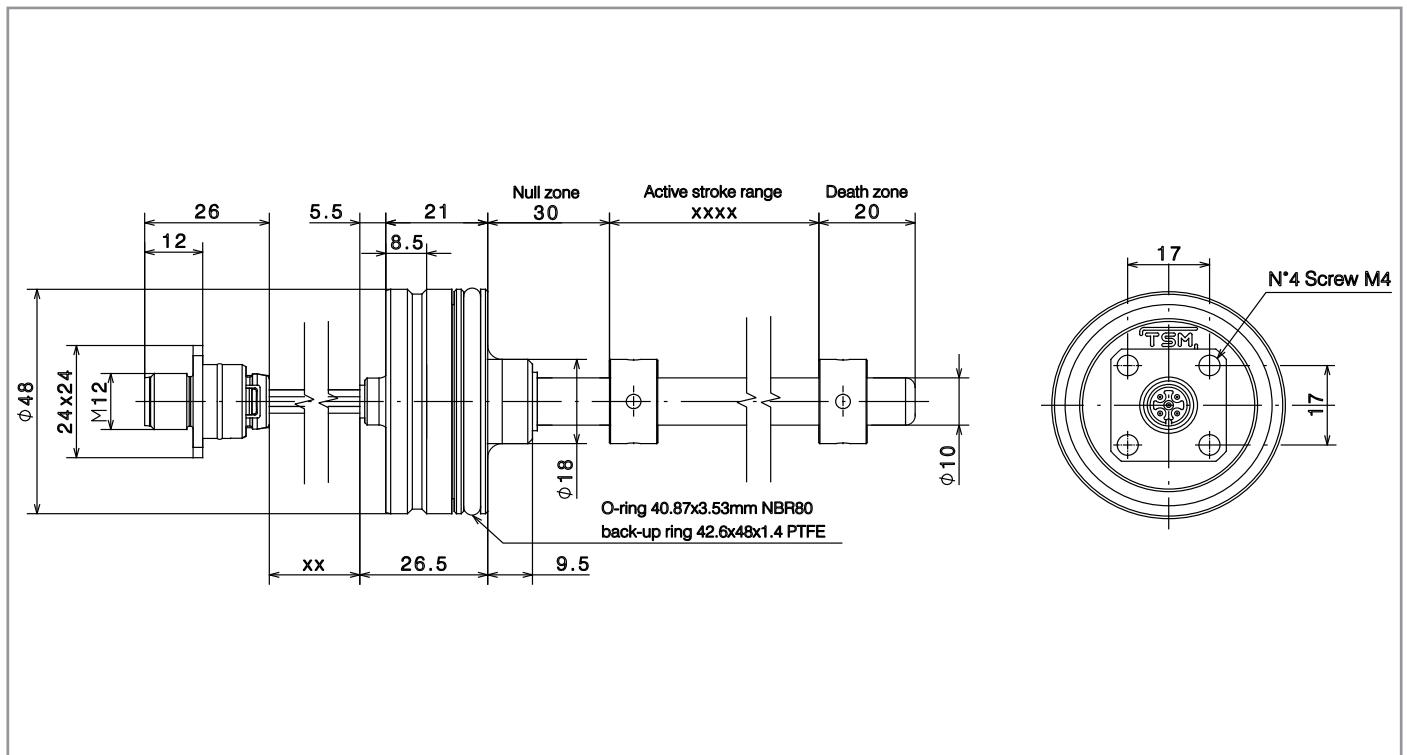
TYPE OF MAGNET

1] Cursor STD



Section A-A

DIMENSIONS [mm]



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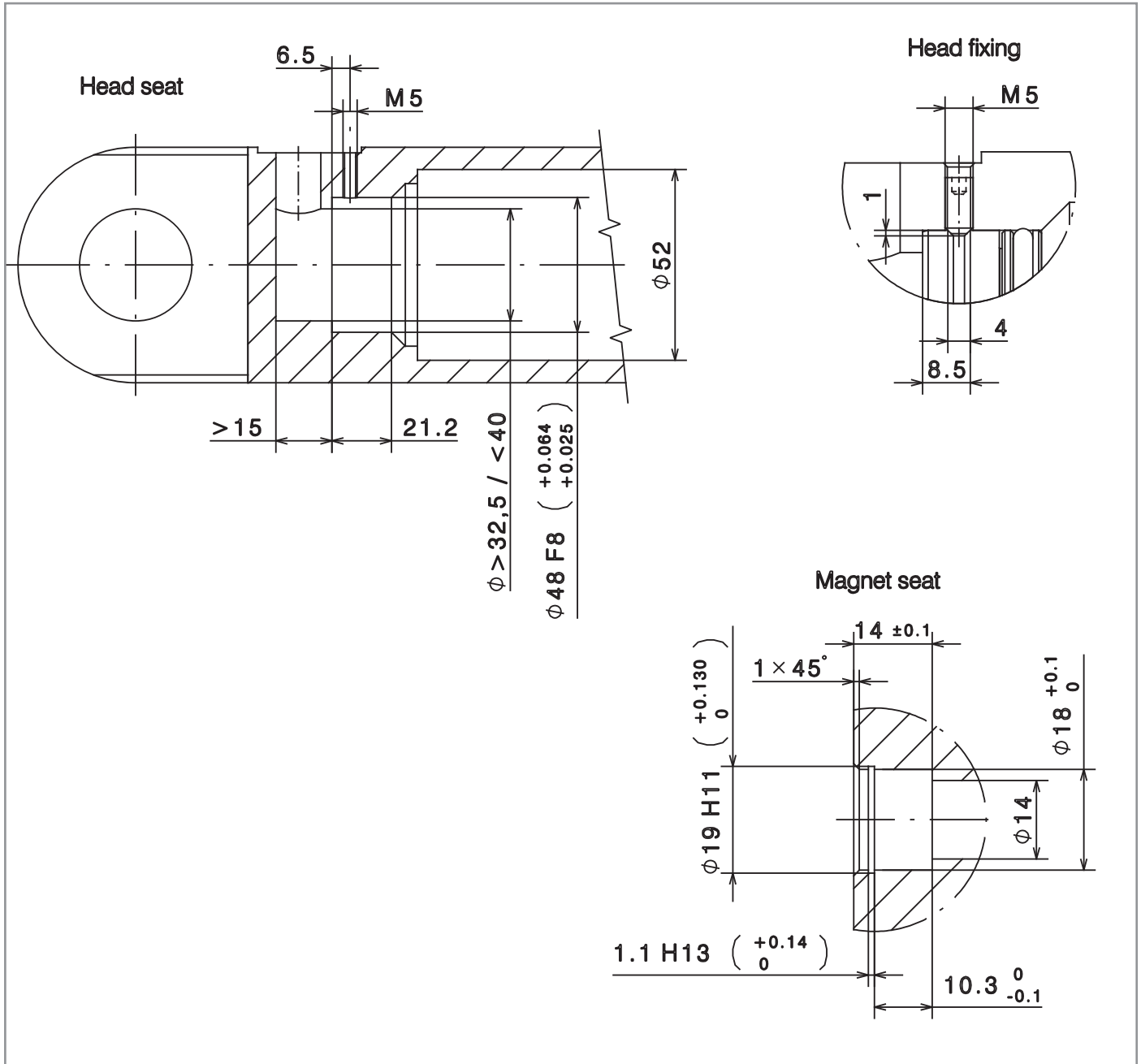
MAG300

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DIMENSIONS [mm]



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