

Non-Contact Magnetostrictive Position Sensor In Cylinder Applications

ANALOG mA

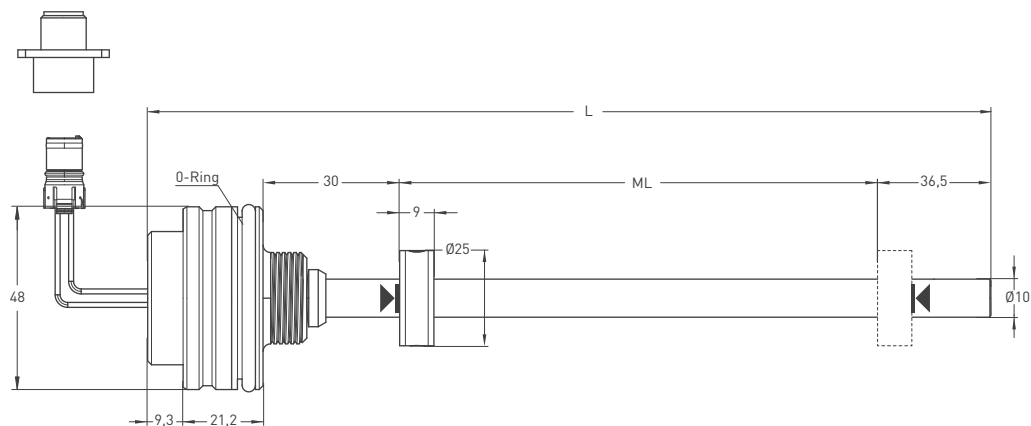
- Measuring length 50 - 1500 mm
- 15 bit resolution
- 0 - 20 mA, 4 - 20 mA output
- 24 VDC power supply



Technical Specifications

Measurement stroke	50 - 1500 mm
Resolution	15 bit DAC output
Repeatability	<100 µm
Output	0-20mA, 20-0mA, 4-20mA, 20-4mA
Power supply	24 VDC ±10%
Displacement speed	max. <5 m/s
Linearity	50-100 mm < %1, 100-300 mm < %0.2, 300-500 mm < %0.1, 500-1500 mm > %0.05
Sampling rate	Up to 2 kHz (depending on stroke length)
Vibration	EN 60068-2-6, 5-200 Hz 200 m/s ² [20g], 2h 30min each axis (x,y,z)
Shock	EN 60068-2-2:2007 500 m/s ² [50g], 11ms. (x,y,z axis)
Max. consumption	< 50 mA - 90 mA
Max. output noise	< 5 mVpp
Load resistance	max. 500 Ohm
Reverse polarity protection	Up to -30 VDC
Overvoltage protection	Up to +30 VDC
Pressure rating	< 500 bar
Sealing	O-ring: NBR Backup Ring: PTFE
Case material	Cable cap :Anodized aluminium Tube: Stainless steel (AISI 316L) Caps: Stainless steel (AISI 303)
Protection level	IP 67
Operating temperature	-20°C ... +70°C
Storage temperature	-30°C ... +90°C
Temperature coefficient	25µm / °K

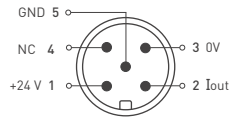
Mechanical Specifications



MSP (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1100	1200	1300	1400	1500
ML (Measuring length)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1100	1200	1300	1400	1500
L (Total length)	147	197	247	297	347	397	447	497	547	597	647	697	747	797	847	897	947	997	1097	1197	1297	1397	1497	1597
Dead zone calculation	30/36,5																							

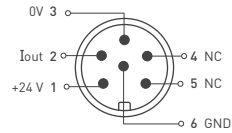
Connector

5 pin Connector
Configuration



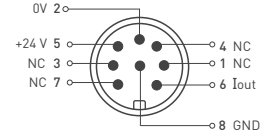
CN5 M12 (A) / M16 (B)
5 pin

6 pin Connector
Configuration



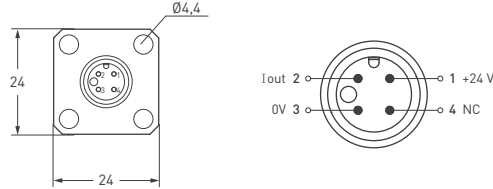
CN6 M12 (A) / M16 (B)
6 pin

8 pin Connector
Configuration

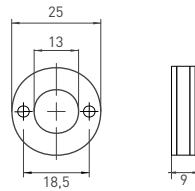


CN8 M12 (A) / M16 (B)
8 pin

4 pin Male Connector
Configuration



Cursor



R05

Ordering Procedure

Model	Measuring range	Rod & Thread	Resolution	Cursor	Output	Connector/Cable	Dead zone
MSP	300	E10	B	1R05	I40	CN5A	30/36,5
MSP	50 - 1500 mm	E010 : Ø10	B : 15 bit	R05: 25 mm	I40 : 4-20mA I04 : 20-4mA I20 : 0-20mA I02 : 20-0mA	CN5A : M12 CN5B : M16 CN6A : M12 CN6B : M16 CN8A : M12 CN8B : M16 1M: 1 meter (standard)	≤ 1500 mm 30/36,5