

Non-Contact Magnetostrictive Position Sensor In Cylinder Applications

ANALOG 4-20 mA

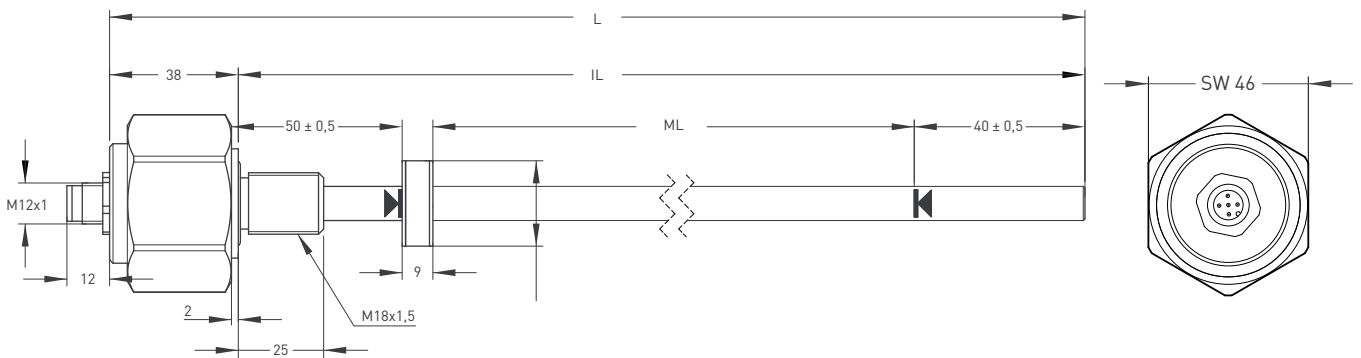
- Measuring length 50 - 3000 mm
- 15 bit resolution
- 0 - 20 mA, 4 - 20 mA output
- 24 VDC power supply



Technical Specifications

Measurement stroke	50 - 3000 mm
Resolution	15 bit DAC
Repeatability	100 µm
Output	0-20mA, 4-20mA
Power supply	24 VDC ±10%
Displacement speed	max. <5 m/s
Linearity	100 mm %1 100 - 500 mm %0,8 500 - 1000 mm %0,5 1000 - 2500 mm %0,2
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)
Update time	0-600mm, 0,5ms 600-1500mm, 1ms 1500-3000mm, 2ms
Max. consumption	< 50 mA - 90 mA (depending on stroke length)
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
Mounting	M18 x 1.5 or 3/4"-16 UNF O-ring
Case material	Profile : Stainless steel Tube: Stainless steel Caps: Anodized aluminium
Protection level	IP 67
Operating temperature	-10°C ... +70°C
Storage temperature	-30°C ... +90°C

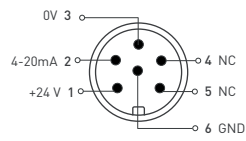
Mechanical Specifications



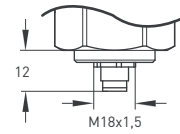
MSP (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1100	1200	1300	1400	1500	1750	2000	2250	2500	3000			
ML (Measuring Length)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1100	1200	1300	1400	1500	1750	2000	2250	2500	3000			
IL (Installation Length)	149	199	249	299	349	399	449	499	549	599	649	699	749	799	849	899	949	999	1099	1199	1299	1399	1499	1599	1849	2099	2349	2599	3099			
L (Total Length)	187	237	287	337	387	437	487	537	587	637	687	737	787	837	887	937	987	1037	1137	1237	1337	1437	1537	1637	1887	2137	2387	2637	3137			
Dead Zone Calculation	50 / 40																															

Round Connector

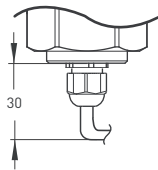
6 pin Female Connector Configuration



CN6 M12 [A] / M16 [B]
6 pin



Cable



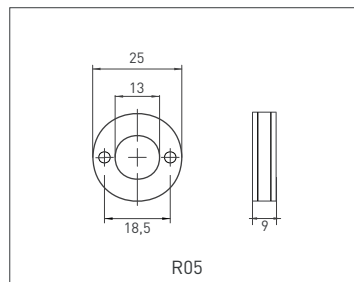
Current Output

+V : Brown
0V : Blue
0V sense : Black
Output 1 : White (Iout)
Earth : Shield

Cable Length

1 M : 1 meter (standard)
(other cable lengths available)

Cursor



Ordering Procedure

Model	Measuring range	Rod & Thread	Sealing surface	Resolution	Cursor	Output	Connector/Cable	Dead zone
MSPF	300	E10	S	B	1R05	V10	CN5A	50/40
MSPF	50 - 3000 mm	E10 : Ø10 M18x1,5 U10 : Ø10 3/4"-16 UNF E010 : Ø10 M24x1,5 EA10 : Ø10 M24x1,5 EB10 : Ø10 M30x2	S: O-ring F: Flat	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)	50/40