

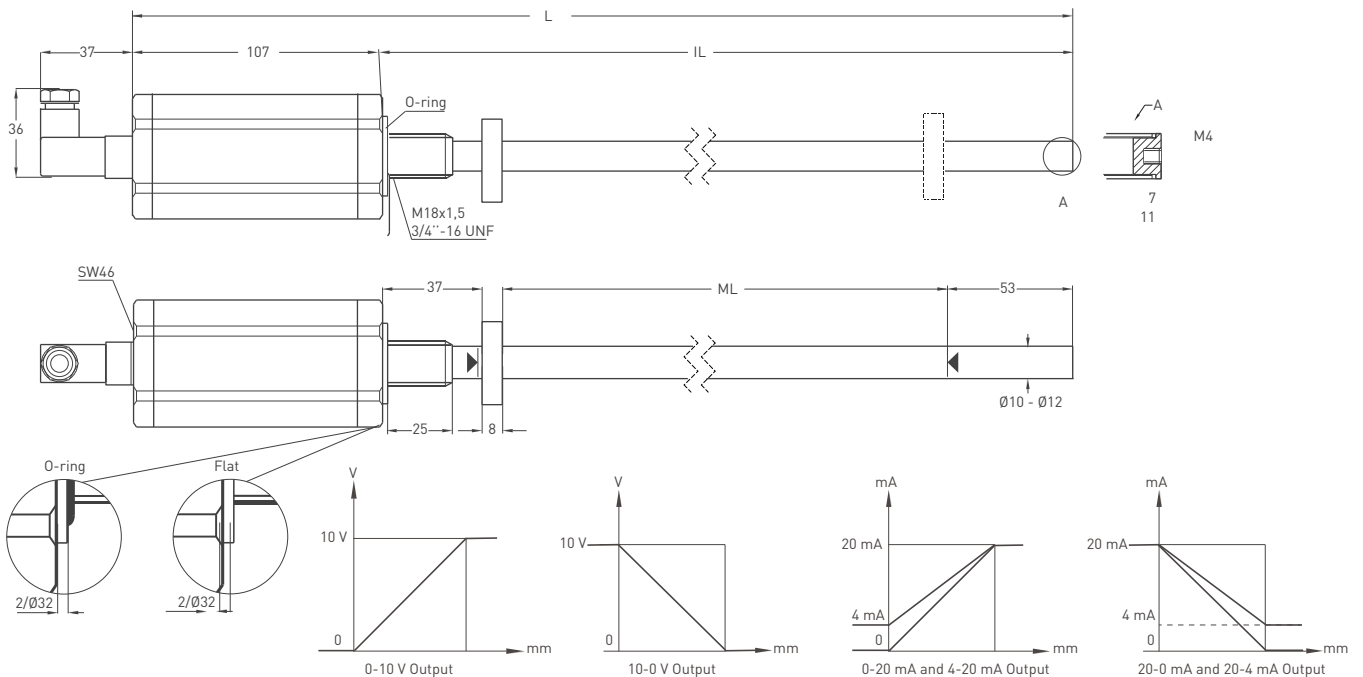
Non-Contact Magnetostrictive Position Sensor

- Measuring length 50 - 5000 mm
- 12 - 16 bit resolution
- Optional mechanical installation
- Speed information can be provided optionally.



Technical Specifications	
Measurement stroke	50 to 5000 mm
Resolution	12 - 16 bit DAC output
Repeatability	100 µm
Output	0-10V, 10-0V, 0-20 mA, 20-0 mA, 4-20 mA, 20-4 mA (Speed information can be provided optionally.)
Power supply	24 VDC (22 - 26 V)
Displacement speed	max. < 5 m/s
Linearity	50-100 mm < %1, 100-300 mm < %0.2, 300-500 mm < %0.1, 500-5000 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 30 min 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 601-1500mm, 1ms 1501-3000mm, 2ms 3001-5000mm, 3ms
Max. consumption	50 mA - 90 mA (depending on stroke length)
Max. output noise	< 5 mVpp
Max. output value	10.5 Volt
Reverse polarity protection	Up to -30 VDC
Overvoltage protection	Up to +30 VDC
Pressure rating	< 500 bar
Mounting	M18 x 1.5 or 3/4"-16 UNF O-ring or Flat
Case material	Profile :Anodized aluminium, Tube: Stainless steel, Caps: Stainless steel
Protection level	IP 65 - EN 60529
Operating temperature	-10°C ... +70°C
Storage temperature	-30°C ... +90°C

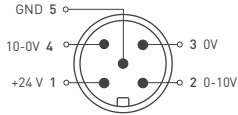
Mechanical Specifications



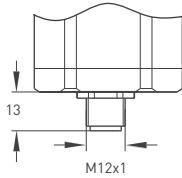
MST[mm]	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1100	1200	1300	1400	1500	1750	2000	2250	2500	3000	4000	5000		
ML (Measuring Length)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1100	1200	1300	1400	1500	1750	2000	2250	2500	3000	4000	5000		
IL (Installation Length)	148	198	248	298	348	398	448	498	548	598	648	698	748	798	848	898	948	998	1098	1198	1298	1398	1498	1598	1848	2098	2348	2686	3186	4186	5186		
L (Total Length)	255	305	355	405	455	505	555	605	655	705	755	805	855	905	955	1005	1055	1105	1205	1305	1405	1505	1605	1705	1955	2298	2548	2798	3318	4318	5318		
Dead Zone Calculation	37/53 mm																																

Round Connector

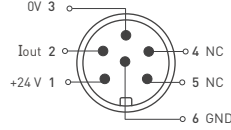
5 pin Connector configuration



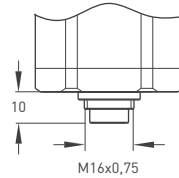
CN5 M12 (A) / M16 (B)
5 pin



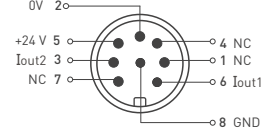
6 pin Connector configuration



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



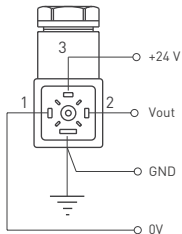
8 pin Connector configuration



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

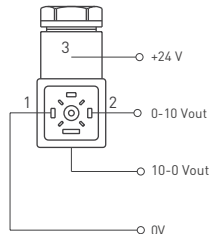
Hydraulic Type Connector

CH2



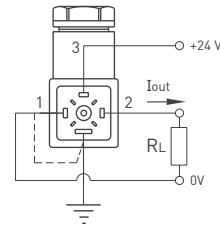
0-10V or 10-0V Output

CH2



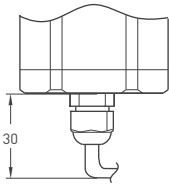
0-10V and 10-0V Output

CH2



0-20mA or 4-20mA Output

Cable



Voltage Output

+V : Brown
0V : Blue
0V sense : Black
Output 1 : White (0-10V)
Output 2 : Orange (10-0V)
Earth : Shield

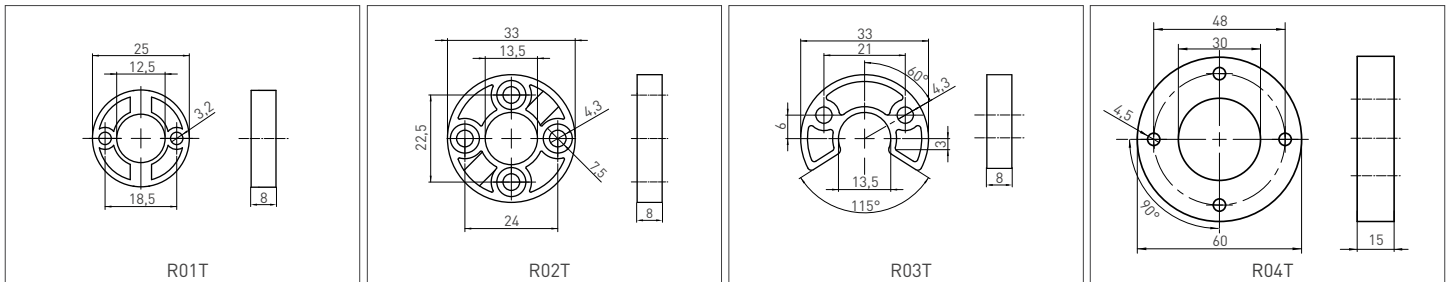
Current Output

+V : Brown
0V : Blue
0V sense : Black
Output 1 : White (Iout1)
Output 2 : Orange (Iout2)
Earth : Shield

Cable Length

1M : 1 meter (standard)
(Different cable length optional.)

Cursor



Ordering Procedure

Model	Measuring range	Rod & Thread	Sealing surface	Resolution	Cursor	Output1	Output2 (optional)	Connector / Cable	Dead zone
MST	900	E12	S	A	1R02T	V10	Sxxx	CH2	37/53
MST	50 - 5000 mm	E10 : Ø10, M18x1,5 E12 : Ø12, M18x1,5 U10 : Ø10, 3/4"-16 UNF U12 : Ø12, 3/4"-16 UNF	S: O-ring F: Flat	A: 16 bit B: 15 bit C: 14 bit D: 13 bit E: 12 bit	1R01T: 25 mm 1R02T: 33 mm 1R03T: 33 mm 1R04T: 60 mm 1R01T: 1 cursor 2R01T: 2 cursor	V10 : 0-10V I40 : 4-20mA 2V10 : 0-10V/0-10V 2I40 : 4-20mA/4-20mA V01 : 10-0V I04 : 20-4mA 2V01 : 10-0V/10-0V 2I04 : 20-4mA/20-4mA V11 : 0-10V/10-0V I41 : 4-20mA/20-4mA V50 : 0-5V I20 : 0-20mA 2V50 : 0-5V/0-5V 2I20 : 0-20mA/0-20mA V05 : 5-0V I02 : 20-0mA 2V05 : 5-0V/5-0V 2I02 : 20-0mA/20-0mA V51 : 0-5V/5-0V I21 : 0-20mA/20-0mA	Sxxx S : Speed xxx : max. speed [mm/s]	CH2: Hydraulic type (standard) CN5A: M12 CN5B: M16 CN6A: M12 CN6B: M16 CN8A: M12 CN8B: M16 1M:1 meter(standard) Different cable lengths acailable (optional)	≤ 2000 mm : 30/53 37/53 47/53 57/53 67/53 77/53 30/60 51/63 > 2000-3000 mm : 130/53 > 3000-5000 mm : 150/53

* T-coded sensors are used with T-coded cursors.