

MMST

Magnetostrictive Position Sensor

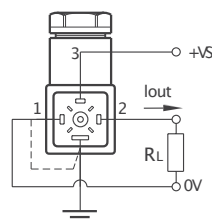
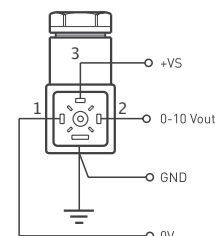
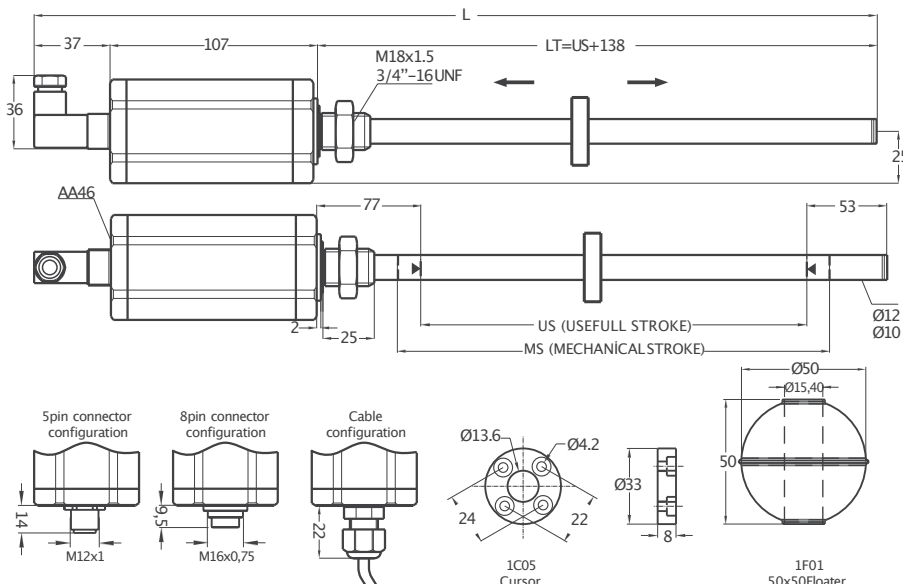
- Measuring range 100–5000mm
- 16 bit resolution
- Output 0...10 V, 0...20 mA, 4...20 mA
10...0 V, 20...0 mA, 20...4 mA
- 24 VDC power supply



Technical specifications

Measurement stroke	100 to 5000 mm
Resolution	16 bit DAC output
Repeatability	±0,005%(full scale)
Output	0...10 V, 4...20 mA, 0...20 mA, 10...0 V, 20...4 mA, 20...0 mA
Power supply	24 VDC ±10%
Displacement speed	<10 m/s
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)
Sampling rate	up to 2 kHz (depending on stroke length)
Max. consumption	50 mA – 90 mA (depending on stroke length)
Max. output noise	<5 mVpp
Max. output value	10.5 Volt
Linearity	±0,02%full scale (min. 100µm)
Update time	0,5 ms up to 1000m 0,8 ms up to 2000m
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"-16UNF
Housing material	Profile: Anodizedaluminium Tube:Stainless steel Caps: Stainless steel
Protection level	IP 65 – EN 60529

Mechanical specifications



MMST (mm)	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
US Usefull Stroke	108	158	208	258	308	358	408	458	508	558	608	658	708	758	808	858	908	1008	1108	1208	1308	1408	1508	1758	2008	2258	2508	3008	4008	5008
MS Mechanical Stroke	128	178	228	278	328	378	428	478	528	578	628	678	728	778	828	878	928	1028	1128	1228	1328	1428	1528	1778	2028	2278	2528	3028	4028	5028
LT	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1138	1238	1338	1438	1538	1638	1888	2138	2388	2638	3138	4138	5138
Total Length	372	422	472	522	572	622	672	722	772	822	872	922	972	1022	1072	1122	1172	1272	1372	1472	1572	1672	1772	2022	2272	2522	2772	3272	4272	5272

Model	Measurement stroke (mm)	Rod & Thread	Linearity (%)	Output		Cursor	Connector / Cable	Dead Zone
(example) MMST	900	E12	A	V10		1C	C2	37/53
MMST	100 ... 5000 mm	E10: Ø10, M18x1,5 E12: Ø12, M18x1,5 U10: Ø10, 3/4"-16UNF U12: Ø12, 3/4"-16UNF	A: 16 bit B: 15 bit C: 14 bit D: 13 bit E: 12 bit	V10: 0 – 10 V V01: 10–0 V I40 : 4 – 20 mA I20 : 0–20mA I04 : 20–4mA	V11: 0 – 10V/10–0V I41 : 4 – 20 mA /20–4mA I21 : 0–20mA/20–0mA	1C04: 25mm 1C05: 33mm 1F01: 50mm	C2 : 4 pin connector C5 : 5 pin connector (M12x1) C8 : 8 pin connector (M16x0,75) 1M : 1 meter cable 2M5 : 2,5 meter cable	37/53 47/53 57/53 67/53 77/53