

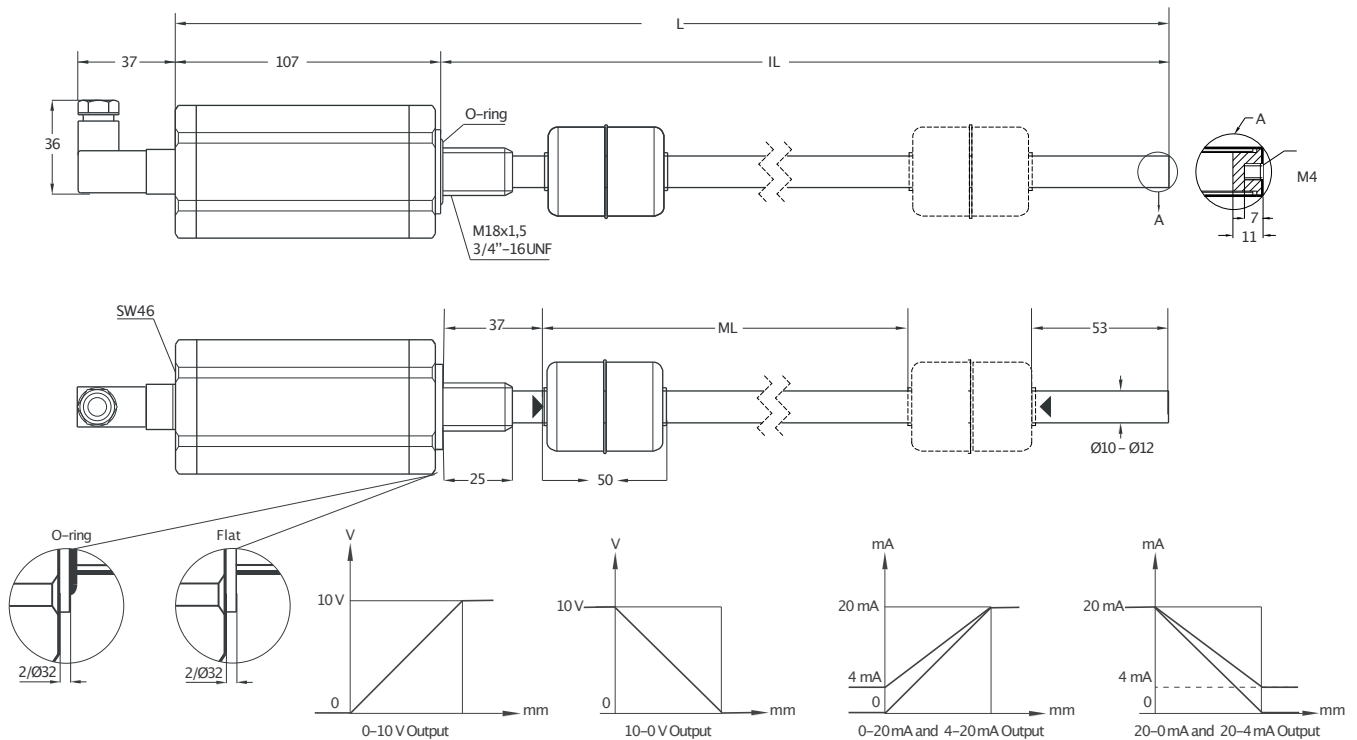
- Measuring length 50 – 5000mm
- 16 bit resolution
- 0 – 10V, 0 – 20 mA, 4 – 20 mA output
- 24 VDC supply voltage



#### Technical Specifications

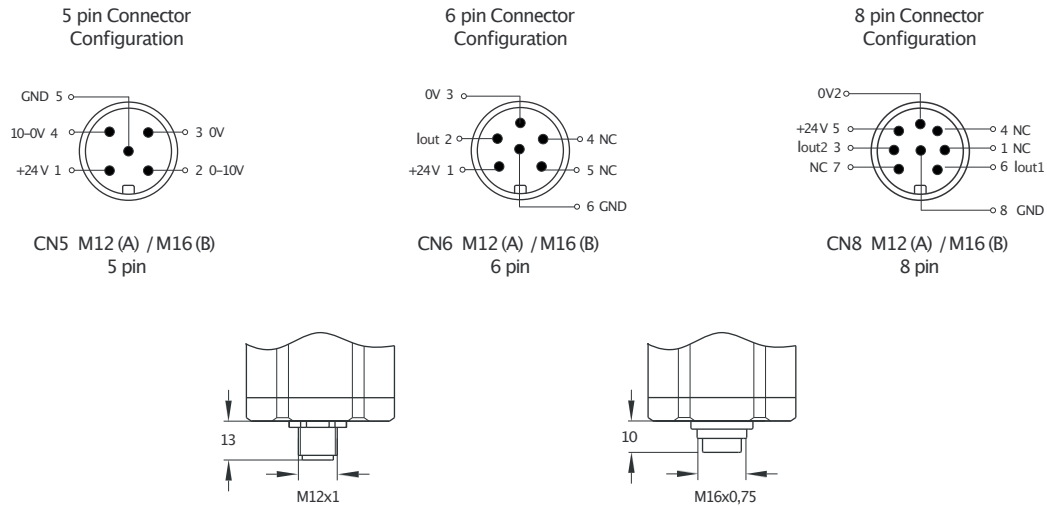
Measurement stroke	50 to 5000mm
Resolution	16 bit DAC output
Repeatability	±0,005%(full scale)
Output	0–10V, 10–0V, 0–20 mA, 20–0 mA, 4–20 mA, 20–4 mA
Power supply	24 VDC ±10%
Displacement speed	max. <5 m/s
Sampling rate	Up to 2 kHz (depending on stroke length)
Max. consumption	50 mA – 90 mA (depending on stroke length)
Max. output noise	<5mVpp
Linearity	Up to ±0,05%full scale (min. 100µm)
Vibration	EN 60068–2–6, 5–200 Hz 200 m/s <sup>2</sup> (20g) , 2h 30min each axis (x,y,z)
Shock	EN 60068–2–2:2007 500 m/s <sup>2</sup> (50g) , 11ms. (x,y,z axis)
Update time	1 ms (1000 mm up to), 2 ms (2000 mm up to), 3 ms (5000 mm up to)
Reverse polarity protection	Up to –30 VDC
Overvoltage protection	Up to +30VDC
Pressure rating	<500 bar
Mounting	M18 x 1.5 or 3/4"–16 UNF
Case material	Profile : Anodizedaluminium, Tube: Stainless steel, Caps : Stainless steel
Protection level	IP 65
Operating temperature	–10°C ... +70°C
Storage temperature	–30°C ... +90°C

#### Mechanical Specifications

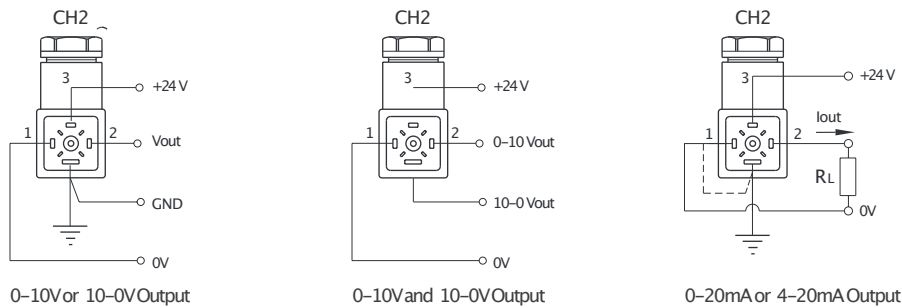


MMSTL (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1100	1200	1300	1400	1500	1750	2000	2250	2500	3000	4000	5000		
ML (Measuring Length)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1100	1200	1300	1400	1500	1750	2000	2250	2500	3000	4000	5000		
IL (Installation Length)	190	240	290	340	390	440	490	540	590	640	690	740	790	840	890	940	990	1040	1140	1240	1340	1440	1540	1640	1890	2140	2390	2728	3228	4228	5228		
L (Total Length)	297	347	397	447	497	547	597	647	697	747	797	847	897	947	997	1047	1097	1147	1247	1347	1447	1547	1647	1747	1997	2340	2590	2840	3360	4360	5360		
Dead Zone Calculation	37/53 mm																																

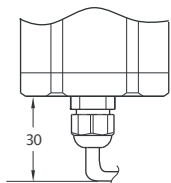
## Round Connector



## Hydraulic Type Connector



## Cable



### Voltage Output

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

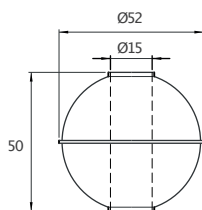
### Current Output

+V : Brown  
 0V : Blue  
 0V Sense : Black  
 Output 1 : White (lout 1)  
 Output 2 : Orange (lout 2)  
 Earth : Shield

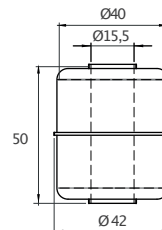
### Cable Length

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

## Cursor



**F01**  
 Floater  
 Ø 50x50 mm  
 Stainless steel  
 (MST/MSP/MSTL)



**F02**  
 Floater  
 Ø 50x40 mm  
 Stainless steel  
 (MST/MSP/MSTL)

## Ordering Procedure

Model	Measuring range	Rod & Thread	Sealing surface	Resolution	Cursor	Output	Connector / Cable	Dead zone
MMSTL	900	E12	S	A	F01	V10	CH2	37/53
MMSTL	50 - 5000mm	E10 : Ø10, M18x1,5 E12 : Ø12, M18x1,5 U10 : Ø10, 3/4"-16UNF U12 : Ø12, 3/4"-16UNF EO10 : Ø10, M24x1,5 EO12 : Ø12, M24x1,5 EA10 : Ø10, M24x1,5 EA12 : Ø12, M24x1,5 EB10 : Ø10, M30x2 EB12 : Ø12, M30x2	S: O-ring F: Flat	A: 16 bit B: 15 bit C: 14 bit D: 13 bit E: 12 bit	F01 Ø50x50mm F02 Ø50x40mm F03 Ø50x35mm	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<	CH1 : Hidrolik type CN5A : M12 CN5B : M16 CN6A : M12 CN6B : M16 CN8A : M12 CN8B : M16 1M : 1 meter 2M5 : 2,5 meter	≤2000 mm 30/53 37/53 47/53 57/63 67/63 77/53 30/60 51/63 >2000-3000 mm 130/53 >3000-5000 mm 150/53