

LINEARPOTI

Cylindrical displacement transducer with magnetic drag for contactless measurement



*Series
LMI & LME*

- ***Cursor type for contactless ring magnet***
- ***Suitable for harsh environment applications (IP68)***
- ***Sensing element separate with case***
- ***Up to 400 Bar for hydraulic cylinder***
- ***Speed displacement 5 m/s***
- ***Linearity 0,05%***
- ***Infinite resolution***
- ***Working temperature -30...+100°C***
- ***Life time > 25x10⁶ Meter or 100x10⁶ operations***

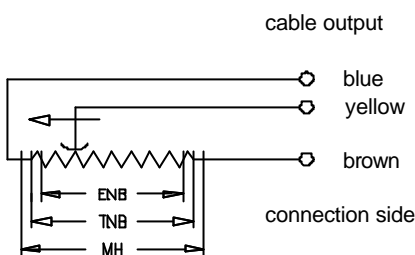
Technical Data

Range	50 - 1,000 mm	Max. application voltage	see table
Displacement speed	< 5 m/s	Max. cursor current in case of bad performances	< 0,1 μ A
Cursor dragging force	<0,5 N	Temp. Coeff. of the resistance	-200 \pm 200 ppm/ $^{\circ}$ C
max. acceleration	< 10m/s ² displacement	Actual temperature coefficient of the output voltage	<1,5 ppm/ $^{\circ}$ C
DIN vibration IEC68T2-27	12g, 10...2000 Hz	Electrical isolation	>100MO at 500V,1 bar,2s
Shock test DIN IEC68T2-27	50g, 11ms. Single shock	Dielectric strength	< 100 μ A at 500V~,50Hz, 2s,1bar
Linearity	see table	Working temperature	-30...+100 $^{\circ}$ C
Resolution	infinite	Storage temperature	-50...+120 $^{\circ}$ C
Tolerance on resistance	\pm 20%	Housing material	Aluminium, high grade steel (LMI)
Recommended cursor current	< 1 μ A	Mounting	flange/terminal plate
Max. permitted dissipation	<10 mA	Displacement sensitivity (no hysteresis)	0.05 to 0.1 mm
Dissipation at 40$^{\circ}$C (0W at 120$^{\circ}$C)	see table		
Protection LME 12	IP 67		
Protection LMI 12	IP 68, max.pressure 250 bar, 400 per peak		

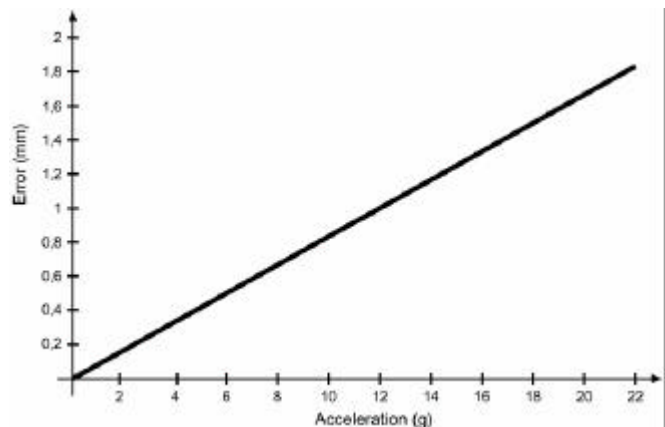
Electrical and Mechanical Data

Model		50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	
Useful electrical stroke	mm	Model																				
Theoretical electrical stroke (C.E.T.)	mm	E.N.W. + 1																				
Resistance (C.E.T.)	kOhm	5					10					20										
Independent linearity (within C.E.U.)	\pm %	0,1		0,05																		
Dissipation at 40 $^{\circ}$ C (0 W at 120 $^{\circ}$ C)	W	1	2	3																		
Max. application voltage	V	40	60																			
Mechanical stroke (C.M.)	mm	E.N.W. + 5																				
Case length (A) LMI 12	mm	E.N.W. + 94																				
Case length (A) LME 12	mm	E.N.W. +62																				

Electrical Connections

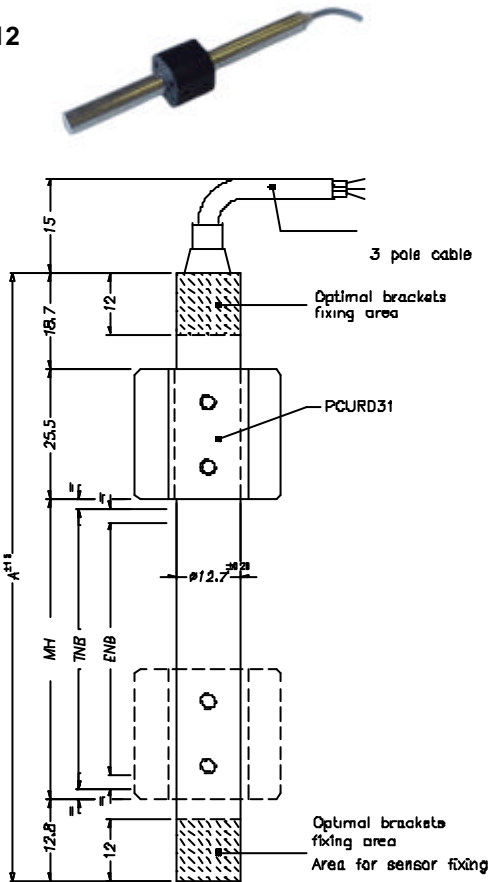


Tracking Error

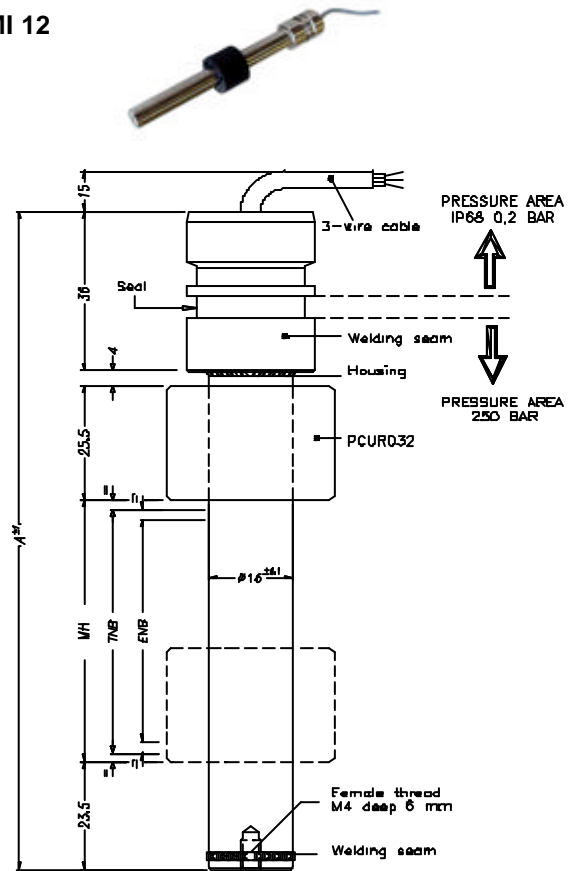


Dimensions and Electrical Data

LME 12



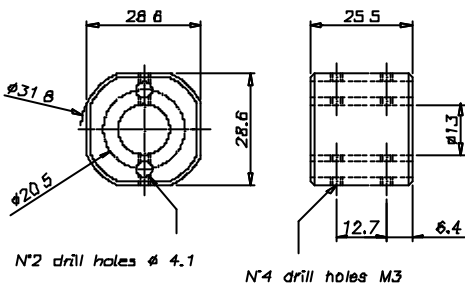
LMI 12



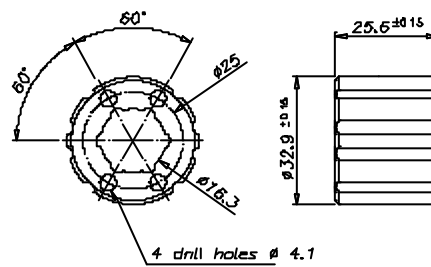
Assembly indication:

After installation of the sensor and putting on the magnet on the sensor, the unique magnet must be pushed entirely on the sensor (up to flange / cable connection) to link the transmitter element in the sensor with the magnet.

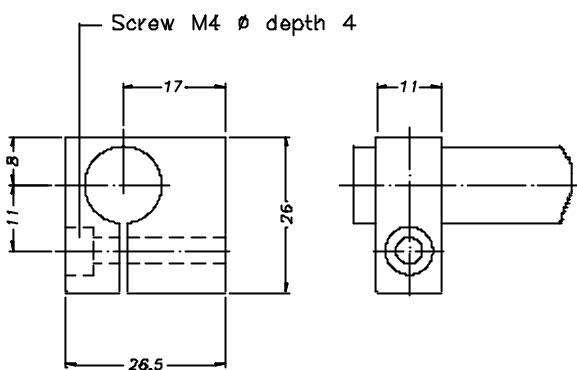
PCUR032 Cursor



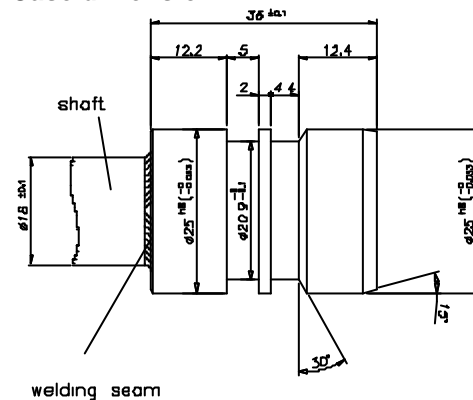
PCUR031 Cursor



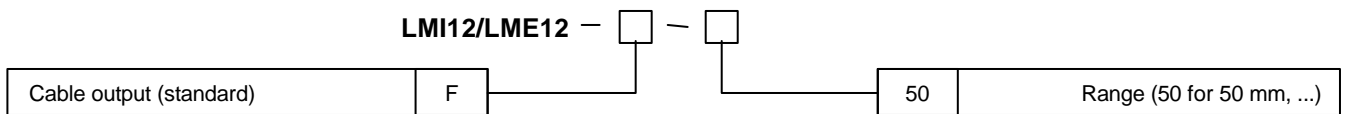
STA001 Brackets



Case dimension



Order Code



Price List

Range	Type	Price	Type	Price
50 mm	LME12-F-50	180 €	LMI12-F-50	210 €
100 mm	LME12-F-100	190 €	LMI12-F-100	220 €
150 mm	LME12-F-150	200 €	LMI12-F-150	230 €
200 mm	LME12-F-200	210 €	LMI12-F-200	245 €
250 mm	LME12-F-250	220 €	LMI12-F-250	255 €
300 mm	LME12-F-300	235 €	LMI12-F-300	270 €
350 mm	LME12-F-350	240 €	LMI12-F-350	280 €
400 mm	LME12-F-400	250 €	LMI12-F-400	290 €
450 mm	LME12-F-450	260 €	LMI12-F-450	300 €
500 mm	LME12-F-500	265 €	LMI12-F-500	310 €
550 mm	LME12-F-550	270 €	LMI12-F-550	320 €
600 mm	LME12-F-600	280 €	LMI12-F-600	330 €
650 mm	LME12-F-650	290 €	LMI12-F-650	340 €
700 mm	LME12-F-700	300 €	LMI12-F-700	350 €
750 mm	LME12-F-750	310 €	LMI12-F-750	360 €
800 mm	LME12-F-800	330 €	LMI12-F-800	370 €
850 mm	LME12-F-850	340 €	LMI12-F-850	380 €
900 mm	LME12-F-900	350 €	LMI12-F-900	400 €
950 mm	LME12-F-950	360 €	LMI12-F-950	410 €
1000 mm	LME12-F-1000	370 €	LMI12-F-1000	420 €

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