

IMPRESS

SENSORS & SYSTEMS

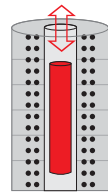
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Pressure - Temperature - Level - Flow - Analytical - Control - Indication - Data logging

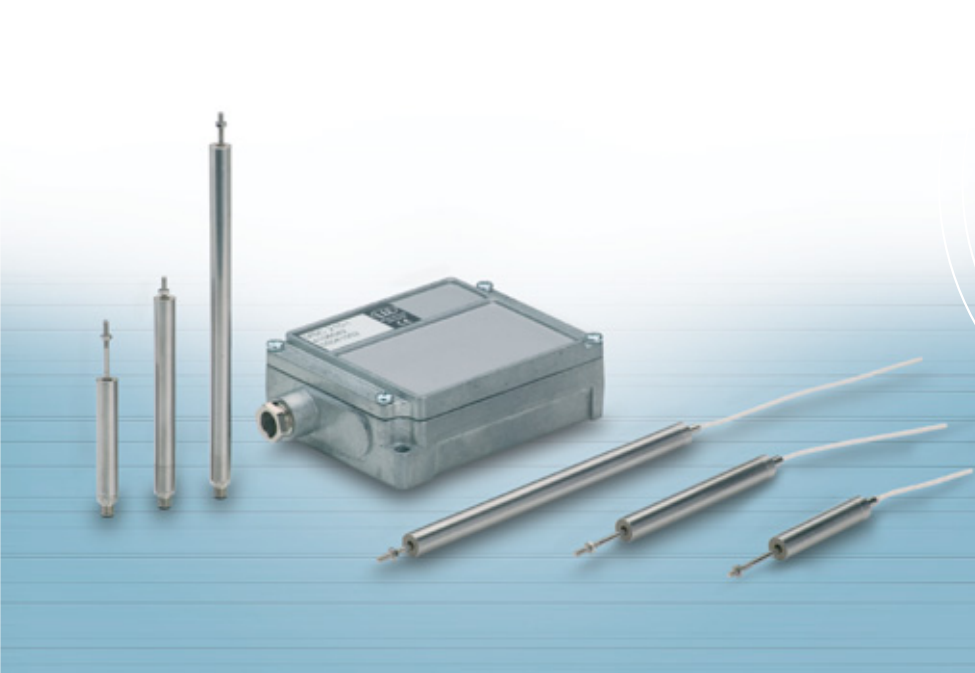
More Precision.

induSENSOR

Linear inductive displacement sensors



LIP series linear displacement sensors

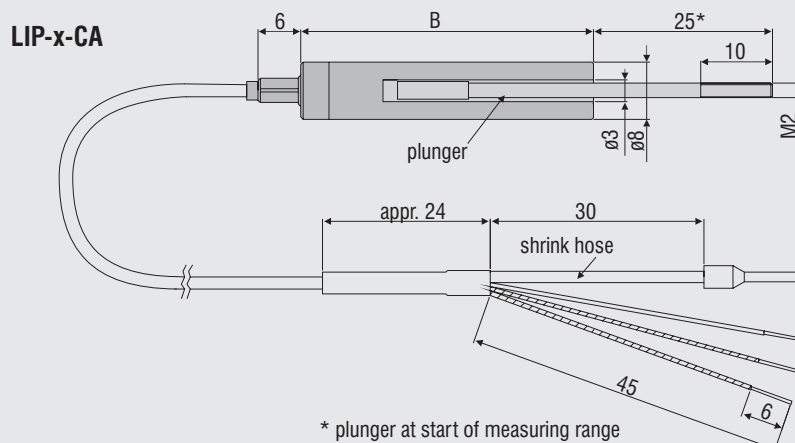


No wear and no maintenance
Excellent temperature stability
Operating temperature range up 160°C
Compact design - short installed length
Small sensor diameter
High measurement signal quality

The specific sensor configuration of the linear displacement sensors in the LIP series is characterized by a short, compact design with small diameter. Three connections are required as an interface to the sensor. The compact design and the small sensor diameter facilitate the installation of the measurement systems in locations where space is restricted.

Fields of use and applications

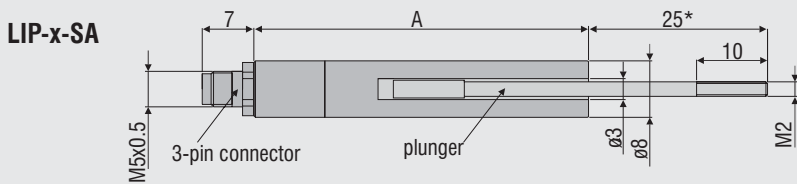
The inexpensive LIP sensors are also particularly suitable for large-scale installation under restricted spatial conditions and in industrial environments with a high measuring rate.



Model	A
LIP-10-CA	41 mm
LIP-25-CA	67 mm
LIP-50-CA	121 mm

Model	LIP-10-		LIP-25-		LIP-50-	
	SA	CA	SA	CA	SA	CA
Measuring range	10 mm		25 mm		50 mm	
Measuring principle	LIP - Sensor					
Linearity	typ. ± 0.25 % FSO		typ. ± 0.30 % FSO		typ. ± 0.35 % FSO	
	0.025 mm		0.075 mm		0.175 mm	
	max. ± 0.50 % FSO					
Excitation frequency	16 kHz		12 kHz		8 kHz	
Excitation amplitude	1 V _{eff}		1 V _{eff}		2.6 V _{eff}	
Sensitivity	51 mV/Vmm		21 mV/Vmm		5.5 mV/Vmm	
Temperature range	SA	storage -40 °C ... +80 °C / operation -15 °C ... +80 °C				
	CA	storage -40 °C ... +160 °C / operation -40 °C ... +160 °C				
Temperature stability	zero	± 30 ppm / °C				± 40 ppm / °C
	sensitivity	± 100 ppm / °C				± 150 ppm / °C
Housing (material)	ferromagnetic stainless steel					
Weight sensor (without plunger)	9 g	24 g	14 g	28 g	23 g	37 g
Weight plunger	1.5 g		2.2 g		3.5 g	
Sensor cable - minimum bending radius fixed / moved	8 / 15 mm	10 / 30 mm	8 / 15 mm	10 / 30 mm	8 / 15 mm	10 / 30 mm
Outer cable diameter	3.1 mm	1.8 mm	3.1 mm	1.8 mm	3.1 mm	1.8 mm
Protection class	IP 67					
Shock	IEC 68-2-29	40 g, 3000 shocks / axis				
	IEC 68-2-27	100 g radial, 300 g axial				
Vibration	IEC 68-2-6	5 Hz ... 44 Hz ± 2.5 mm / 44 Hz ... 500 Hz ± 20 g				
Electric connection	SA	3-pin connector (accessory cable, article 0157047/047, 3 or 5 m)				
	CA	integral axial cable (shielded), 3 m				

FSO = Full Scale Output SA = connector axial CA = cable axial



* plunger at start of measuring range

Model	A
LIP-10-SA	47 mm
LIP-25-SA	73 mm
LIP-50-SA	127 mm

More Precision.

Sensors and systems

for displacement, position and dimension

Sensors and measurement devices

for non-contact temperature measurement

Measurement systems

for online/offline quality control