


Series LVDT-ISDL

Displacement Sensor, integrated signal conditioner

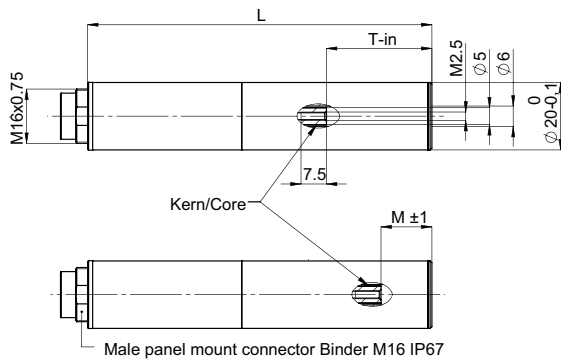
 Housing Ø20  mA Output



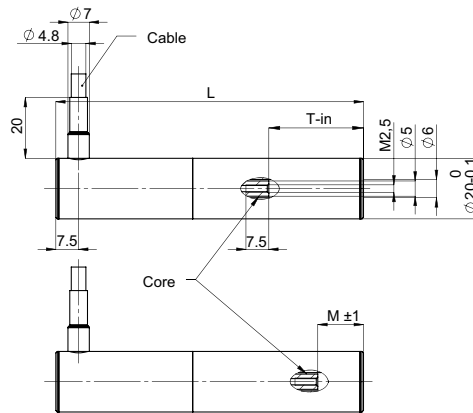
The displacement sensors operate according to the principle of the differential transformer.

- For rough environment
- Displacement: 2mm up to 200mm
- Degree of protection IP65 (optional IP67, IP68)
- Housing Diameter 20mm

Drawing (Connector)



Drawing (Cable)



Standard types

Dimensions (mm)

Type	Armature	Displacement	Connection	Supply voltage	Output signal	L1	L2	Lx (±1.5mm) elec. zero position
ISDL-2-S-24XX	Unguided	±1 (2mm)	Connector	24 (±20%) VDC	XX 05 = 0..5 VDC 10 = 0..10 VDC 55 = ±5 VDC 11 = ±10 VDC 20 = 0..20 mA 42 = 4..20 mA	76	17	9
ISDL-5-S-24XX		±2.5 (5mm)				87	23	11.5
ISDL-10-S-24XX		±5 (10mm)				101	30	15
ISDL-20-S-24XX		±10 (20mm)				140	62	18
ISDL-50-S-24XX		±25 (50mm)				185	80	32
ISDL-100-S-24XX		±50 (100mm)				327	130	81
ISDL-200-S-24XX		±100 (200mm)				497	230	116
ISDL-2-K-24XX	Unguided	±1 (2mm)	Cable	24 (±20%) VDC	XX 05 = 0..5 VDC 10 = 0..10 VDC 55 = ±5 VDC 11 = ±10 VDC 20 = 0..20 mA 42 = 4..20 mA	76	17	9
ISDL-5-K-24XX		±2.5 (5mm)				87	23	11.5
ISDL-10-K-24XX		±5 (10mm)				101	30	15
ISDL-20-K-24XX		±10 (20mm)				140	62	18
ISDL-50-K-24XX		±25 (50mm)				185	80	32
ISDL-100-K-24XX		±50 (100mm)				327	130	81
ISDL-200-K-24XX		±100 (200mm)				497	230	116

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Electrical Specification								
Displacement	±1 (2)	±2.5 (5)	±5 (10)	±10 (20)	±25 (50)	±50 (100)	±100 (200)	[mm]
Linearity deviation	< ±0.5 (< ±0.25 optional)					< ±1		[% F.S.]
Supply voltage	24 (±20%) / ±15 (±5%)							[VDC]
Current consumption	±20/20 (±40/40 current output)							[mA]
Output signal	0..5 V / ±5 V / 0..10 V / ±10 V* / 0..20 mA / 4..20 mA							
Output load	>10 kOhm voltage output / <500 Ohm current output							
Output noise (Ripple)	<10							[mV RMS]
Cut of frequency (-3 dB)	100							[Hz]
Temperature coefficient	±0.4							[% F.S./10K]





Mechanical Specification								
Housing material	Steel nickeling plated							
Core material	Nickel-Iron-Alloy							
Weight (with Cable/Plug)	110/65	125/100	151/125	215/190	280/255	480/455	710/685	[g]
Weight core	2	3.2	4.5	10	13	33	39	[g]

Environments			
Rated temperature range	0 .. +60		[°C]
Storage temperature range	-30 .. +80		[°C]
Degree of protection	IP65 (optional IP67, IP68) (not available for „KD“ version) (only with mounted plug)		
Impact resistance	100g, 2ms		
Vibration resistance	10g / 2 Hz .. 2 kHz		

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Connection (Cable 1m)			
for cable connection	for plug connection		
Colour of cable	PIN	Excitation voltage ± 15 VDC	Excitation voltage 24VDC
yellow	1	-15 VDC	N.C.
brown	2	+15 VDC	+24 VDC
white	3	Signal GND	
green	4	Output	
grey	5	Excitation GND	
Housing	Shield	Shield	

Order code					
Series	Displacement	Connection	Supply voltage	Output signal	Linearity deviation*
ISDL-	20-	S-	24	10	
Standard	2 = 2mm 5 = 5mm 10 = 10mm 20 = 20mm 50 = 50mm 100 = 100mm 200 = 200mm	S = plug K = cable (1 meter)	24 = 24 V DC 15 = ± 15 VDC	05 = 0..5 VDC 10 = 0..10 VDC 55 = ± 5 VDC 11 = ± 10 VDC 20 = 0..20 mA 42 = 4..20 mA	*in case of $< \pm 0.5\%$
Options	Other on request	Length K2 = length 2m			$\pm 0.25\%$ $\pm 0.1\%$

Mechanical Accessories			
Mountingback for $\varnothing 20$ mm	Mountingflange for $\varnothing 20$ mm	Extension for armature	Measuring pin
			

Subject to change without prior notice.

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