

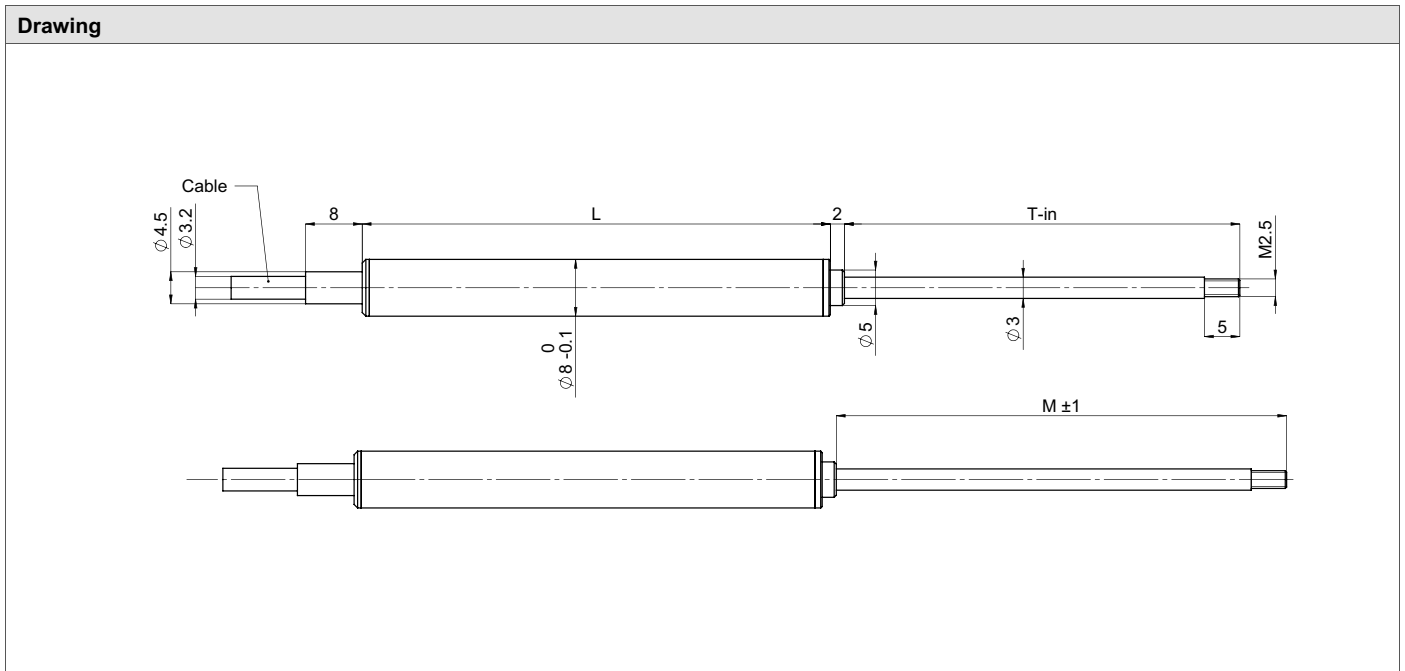
Series LVDT-IKAL

Inductive Displacement Sensor



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

- For rough environment
- Displacement 2mm up to 20mm
- Degree of protection IP65
- Housing Diameter 8mm
- Unguided armature



Standard types				Dimensions (mm)		
Type	Armature	Displacement	Connection	L Housing length	T-in Unguided armature inner position	M Middle of displacement
IKAL-2-K	Unguided	±1 (2mm)	Cable	44	63	67
IKAL-5-K		±2.5 (5mm)		55	49	60
IKAL-10-K		±5 (10mm)		66	56	63.5
IKAL-20-K		±10 (20mm)		96	42	56.5

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Electrical Specification					
Displacement	±1 (2)	±2.5 (5)	±5 (10)	±10 (20)	[mm]
Sensitivity	130	105	60	45	[mV/V/mm]
Linearity deviation	< ±0.5 (< ±0.25 optional)				[% F.S.]
Excitation voltage	1..3				[V RMS]
Excitation frequency	5..20				[kHz]
Input resistance typ.	90		120	200	[Ohm]
Input impedance typ.	700	460	850	1350	[Ohm]
Output impedance typ.	400		650	1100	[Ohm]
Temperature coefficient	±0.4				[% F.S./10K]
Calibrated at	3V RMS / 20 kHz RL = 1MΩ				

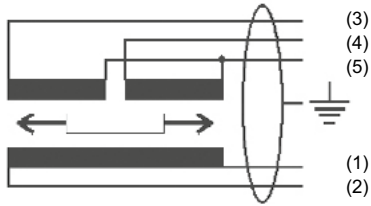
Mechanical Specification		
Housing material	Steel nickeling plated	
Core material	Nickel-Iron-Alloy / Ferrite	
Weight (with Cable)	30	[g]

Environments		
Rated temperature range	-25..+85	[°C]
Storage temperature range	-40..+85	[°C]
Degree of protection	IP65	
Impact resistance	200 g/2ms	DIN IEC68T2-27
Vibration resistance	10g / 2 Hz .. 2 kHz	DIN IEC68T2-6


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Connection (Cable 1m)	
Function	Color of cable
Primary 1	white
Primary 2	brown
Secondary 1	yellow
Secondary 2	green
Secondary 1, 2 Center	grey
Shield	Housing



Order code				
Series	int. electronics	Stroke	Connection	Lin.-Tolerance*
IK = housing Ø 8mm	A = AC	2 = ± 1 mm 5 = ± 2.5 mm 10 = ± 5 mm 20 = ± 10 mm	K = Cable	*in case of $\lt; \pm 0.25\%$
Ordering example				
IK-	A-	2-	K	
Options		Other on request		±0.25%

Electrical Accessories		
<p>Signal Conditioner DIN Rail Mount IMA2-LVDT</p> 	<p>Signal Conditioner Circuit Board Mount IVM-LVDT</p> 	<p>Signal Conditioner IP65 IMK-LVDT</p> 