

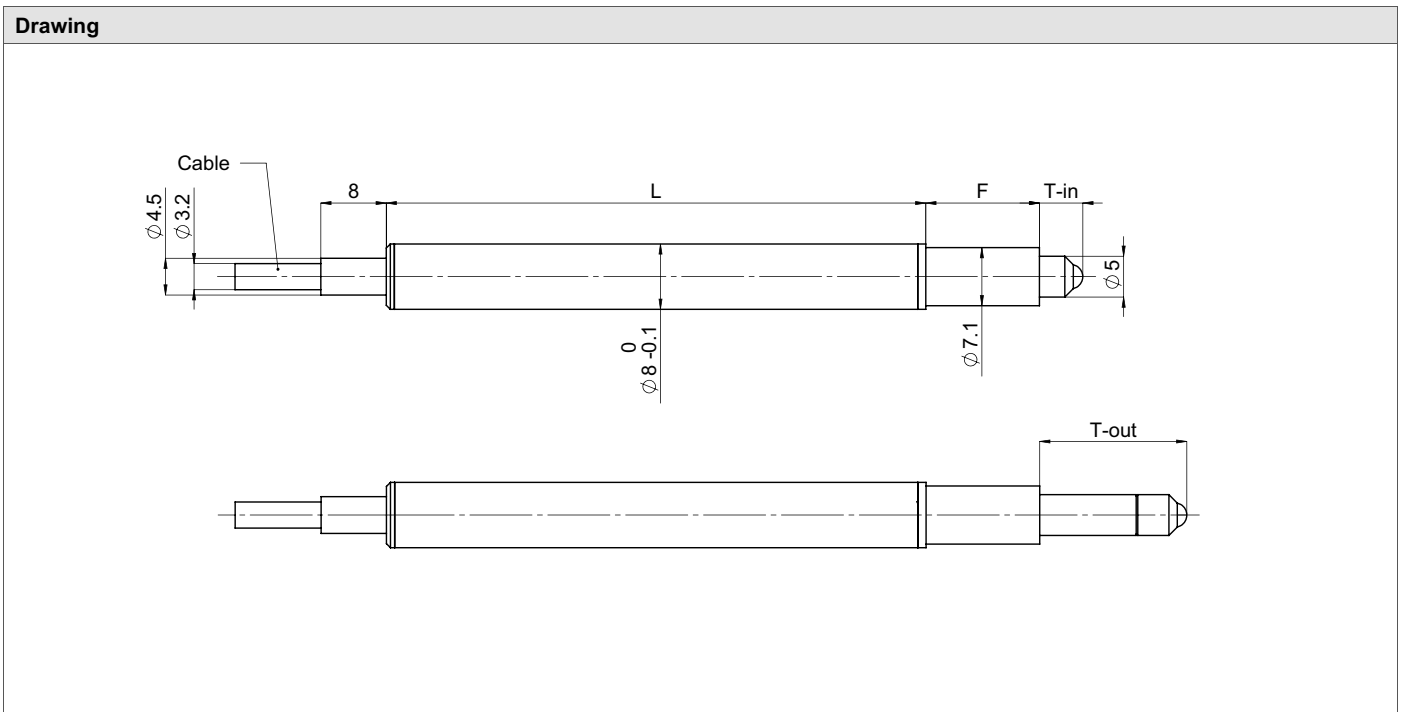
# Series LVDT-IKAT

## 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



Standard type				Dimensions (mm)			
Type	Core	Displacement	Connection	L Housing length	F Flange length	T-in Probe inner position	T-out Spring return outer position
IKAT-2-K	Spring return	$\pm 1$ (2mm)	Cable	44	14	5.5	10
IKAT-5-K		$\pm 2.5$ (5mm)		55			12
IKAT-10-K		$\pm 5$ (10mm)		66			10
IKAT-20-K		$\pm 10$ (20mm)		96	26.5	2.5	25.5

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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	1.5				[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 = 1MOhm				

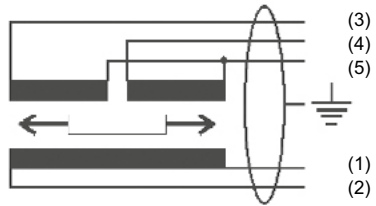
Mechanical Specification		
Housing material	Steel nickeling plated	
Core material	Nickel-Iron-Alloy	
Weight (with Cable)	30	[g]

Environments		
Rated temperature range	-25..+85	[°C]
Storage temperature range	-40..+85	[°C]
Degree of protection	IP65 (optional IP67, IP68)	
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 Centre	grey
Shield	Housing



Order code					
Series	Electronic	Operation	Stroke	Connection	Lin.-Tolerance*
IK = Housing Ø 8mm	A = AC	T = Spring return	2 = 2 mm 5 = 5 mm 10 = 10 mm 20 = 20 mm	K = Cable	*in case of <math>\pm 0.25\%</math>
Ordering example					
IK-	A-	T-	2-	K	
Options			Other on request		$\pm 0.25\%$

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> 