

Data Sheet for Linear Sensors

Inductive Linear Transducer (with electronics)

Series EDC



The EDC series is available in two designs. EDCT as probe with external spring device and EDCL with loose core.

- Very accurate for small measuring strokes (2..50 mm)
- In 2 designs (probe or loose core)
- For harsh environmental conditions (up to IP67)
- Supply voltage 24 V
- Output signals: 0..10 V / 0..20 mA / 4..20 mA

Electrical Data	EDC-2	EDC-10	EDC-20	EDC-50
Effective electrical travel 1.)	±1 mm	±5 mm	±10 mm	±25 mm
Independent linearity (best straight line) 1.)	±0,75% (±0,5% / ±0,25%)			
Output signal	0..10 V / 0..20 mA / 4..20 mA			
Limit frequency	100 Hz			
Supply voltage	24 V ±5 %			
Power consumption (no load)	≤50 mA (< 70 mA @ current output)			
Output load	> 10 kOhm (voltage output) / <500 Ohm (current output)			
Temperature coefficient	±0,4 % F.S./10K			
Ripple	< 20 mV RMS			

Mechanical Data, Environmental Conditions, Miscellaneous	EDC-2	EDC-10	EDC-20	EDC-50
Operational temperature	0..+60°C			
Storage temperature	-30..+80°C			
Protection grade (IEC60529)	IP65 (optional IP67)			
Vibration (IEC 68-2-6, Test Fc)	10 g (2..2000 Hz)			
Shock (IEC 68-2-27, Test Ea)	100 g, 2 ms			
Sensor length	76 ±1 mm	101 ±5 mm	140 ±10 mm	185 ±25 mm
Mass	ca. 85 g	ca. 120 g	ca. 175 g	ca. 240 g
Material housing	Steel nickel plated / polyamide PA6 (back cover)			
Material push rod	Stainless steel (Mu metal)			
Electrical connection	plug 5-pin (M9)			
Mounting parts (included in delivery)	Probe (EDCT), loose push rod (EDCL)			

1.) According IEC 60393

2.) Determined by climatic conditions according to IEC 68-1, para. 5.3.1 without load collectives

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Series EDC

Order Code

Description	Selection: standard=black/bold, possible options=grey/cursive						
Series:	EDC						
Design: Probe with spring return With loose core		T L					
Effective electrical travel:							
2 mm			2				
10 mm			10				
20 mm			20				
50 mm			50				
Electrical connection: Plug 5-pole				S			
Supply voltage 24 V					24		
Output signal:							
0..20 mA						20	
0..10 V						10	
4..20 mA						42	
Independent linearity: ±0,75%							-
<i>Option ±0,5</i>							<i>L0,5</i>
<i>Option ±0,25</i>							<i>L0,25</i>
Protection class: Standard IP65							-
<i>Option IP67</i>							<i>IP67</i>

Accessory (not included in delivery):

- Mating connector (STEM9) #111727: M9 thread, 5-pole, IP67, straight, not shielded (STE M9 5POL IP67 G NS)
- Mating connector (STEM9) #111835: M9 thread, 5-pole, IP67, angled, not shielded (STE M9 5POL IP67 W NS)
- Mounting bracket #106656: take a look at drawing in document
- Mounting flange #135132: take a look at drawing in document
- Extension for armature (50..315 mm) - take a look at drawing in document

More connectors with and without cable on request. Take a look at data sheet STEM9 for connector without cable or STKM9 for connector with cable.

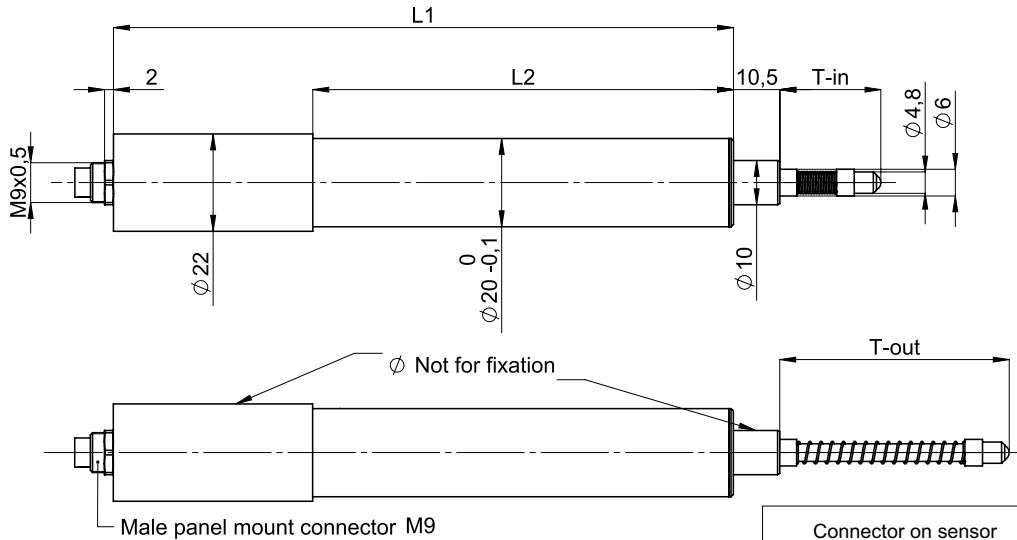
For higher quantities or on-going demand, additional options are available as described below on request

For example:

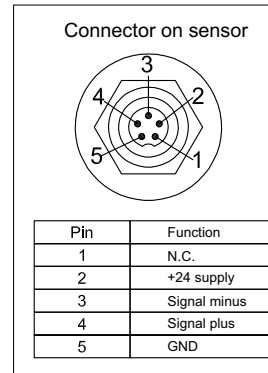
- Cable assemblies with and without connector
- Special probe, special axis length and much mores
- Extended temperature range (-25°C .. +85°C)

Drawing sensor

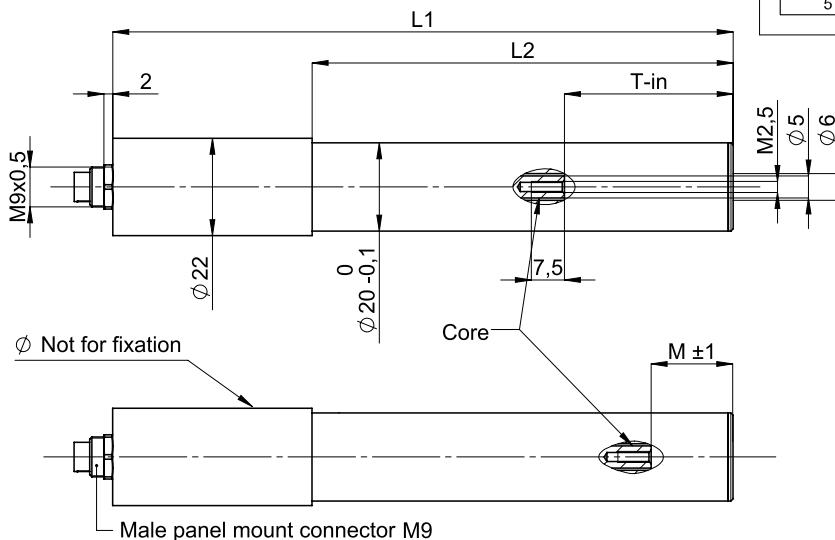
EDCT



Dimensions [mm]	EDCT2	EDCT10	EDCT20	EDCT50
Effective electrical travel	±1	±5	±10	±25
L1 (housing length)	76	101	140	185
L2 (mounting length)	31	56	95	140
L T-in	27	23	23	28
L T-out	42	47	52	82



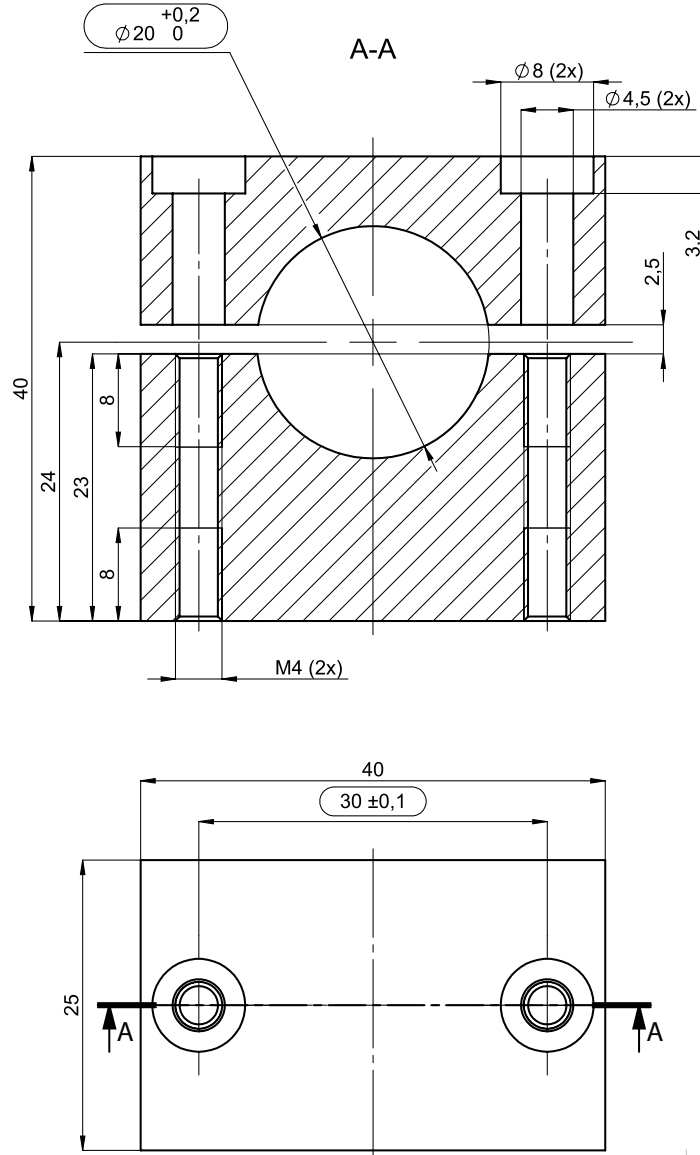
EDCL



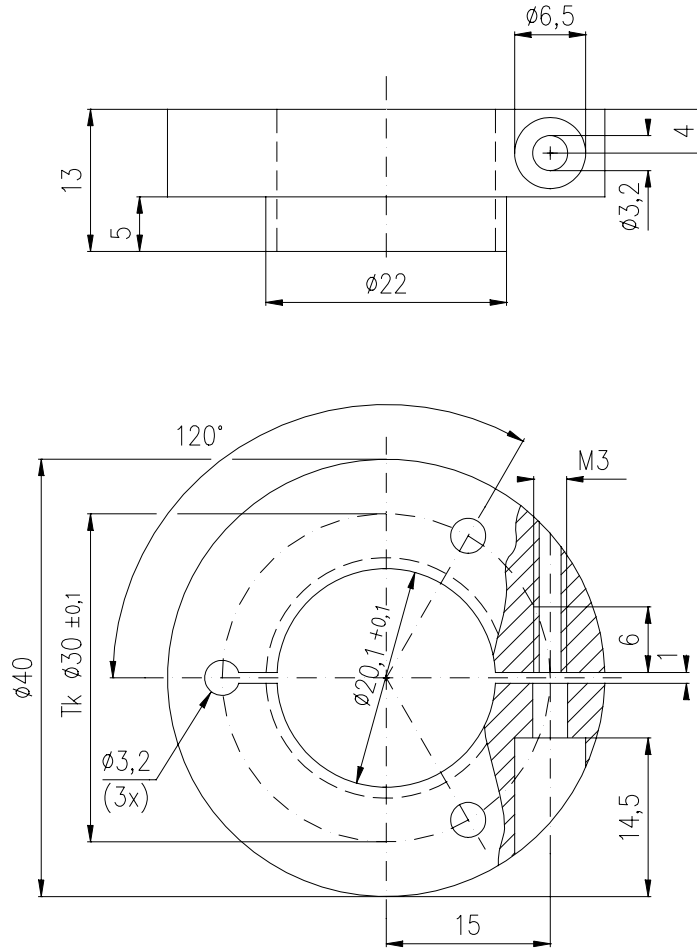
Dimensions in mm

Dimensions [mm]	EDCL2	EDCL10	EDCL20	EDCL50
Effective electrical travel	±1	±5	±10	±25
L1 (housing length)	76	101	140	185
L2 (mounting length)	31	56	95	140
L T-in	19	31	38	65
M (middle position)	9	15	18,5	32

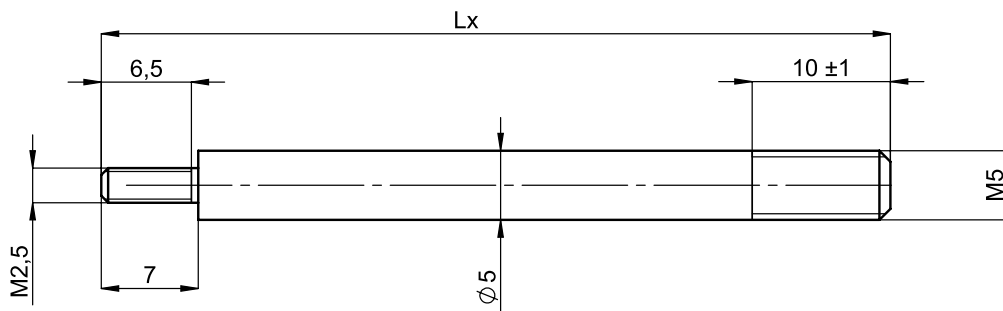
Drawing mounting bracket



Drawing mounting flange



Drawing extension for armature



Lx
57
77
87
94
157
257
322

Dimensions in mm