Data Sheet for Linear Sensors

Inductive Linear Transducer (LVDT) with integrated amplifier — Series EDC

- Good accuracy for small measuring strokes (2..50 mm)
- Cost-effective design
- Operational Temperature 0...60°C
- Protection grade IP40
- Integrated electronics
- Supply voltage 24 V
- Analogue output signals: 0..10 V / 0..20 mA / 4..20 mA

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

Electrical Data	EDC-2	EDC-10	EDC-20	EDC-50
Effective electrical travel 1.)	±1 mm	±5 mm	±10 mm	±25 mm
Linearity error	±0.75% F.S.			
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°C up to +60 °C			
Storage temperature	-30 °C up to +80 °C			
Protection grade (IEC60529)	IP40			
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.) Determined by climatic conditions according to IEC 68-1, para. 5.3.1 without load collectives

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Order Code								
Description	Selection: **standard=black/bold**, possible *options=grey/italic*							
Series:	**EDC**							
Design: **Probe with spring return** **With loose core**		**T** **L**						
Effective electrical travel: **2 mm** **10 mm** **20 mm** **50 mm**			**2** **10** **20** **50**					
Electrical connection: **Plug 5-pole**				**S**				
Supply voltage **24 V**					**24**			
Output signal: **0..20 mA** **0..10 V** **4..20 mA**						**20** **10** **42**		

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

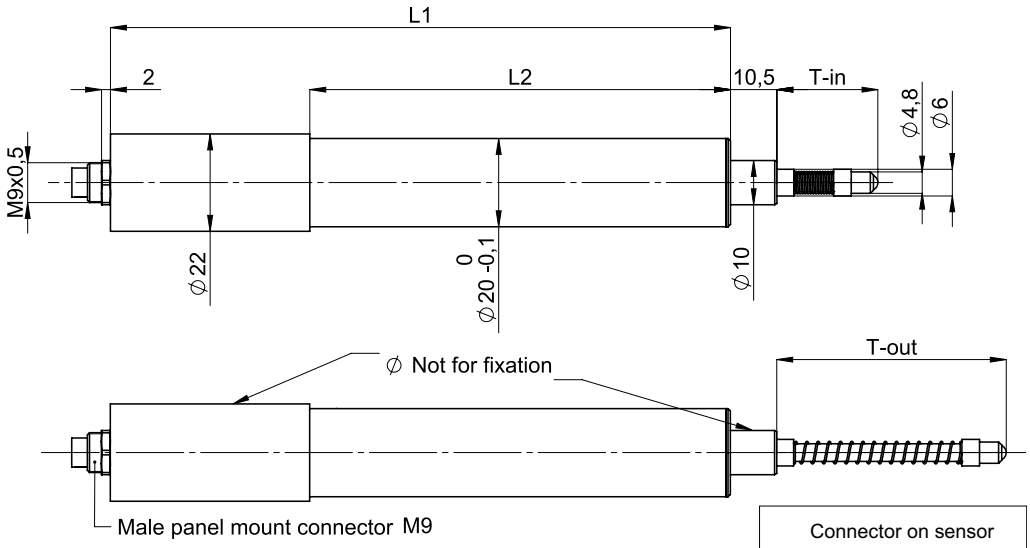
More connectors with and without cable on request. Take a look at data sheet STEM9 for connector without cable or STKM9 for connector with cable.

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 operation temperature range (-25°C .. +85°C)

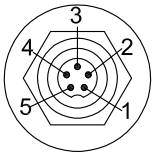
Drawing sensor

EDCT



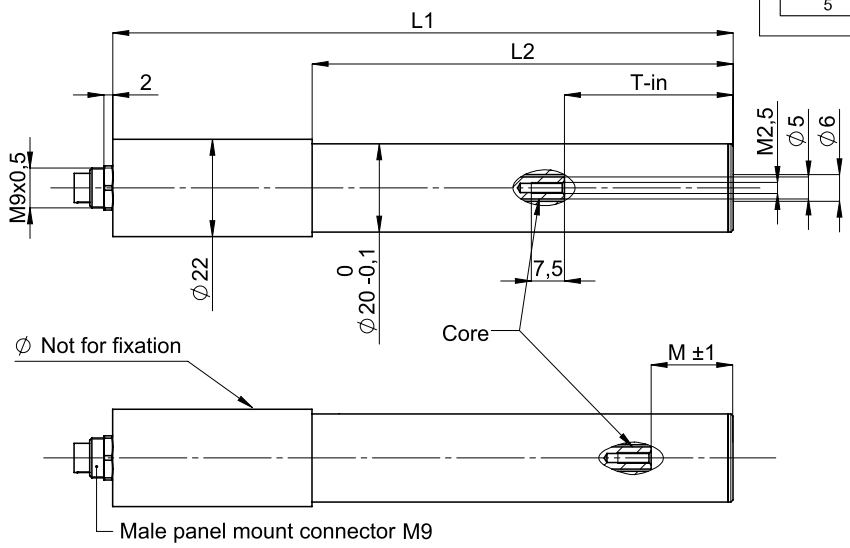
Dimensions [mm]	EDCT2	EDCT10	EDCT20	EDCT50
Effective electrical travel	±1	±5	±10	±25
L1 (housing lenght)	76	101	140	185
L2 (mounting length)	31	56	95	140
L T-in	27	23	23	28
L T-out	42	47	52	82

Connector on sensor



Pin	Function
1	N.C.
2	+24 supply
3	Signal minus
4	Signal plus
5	GND

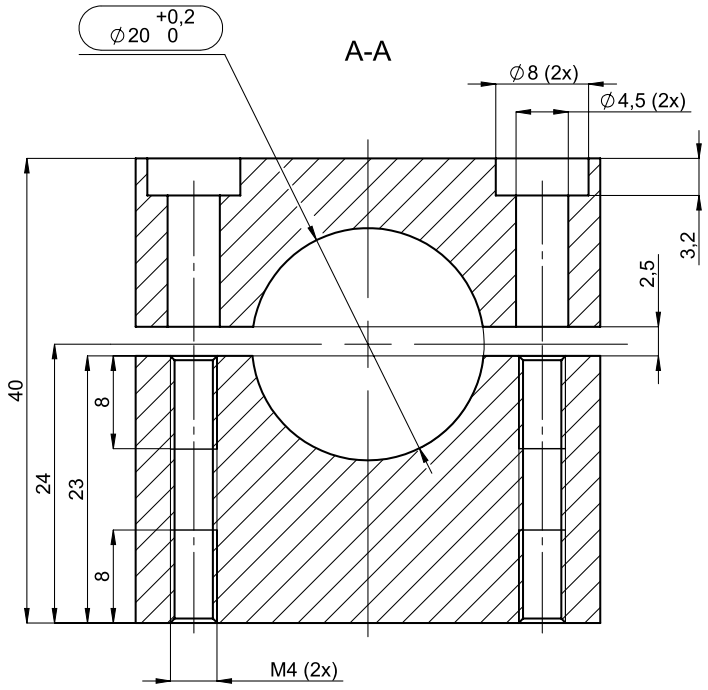
EDCL

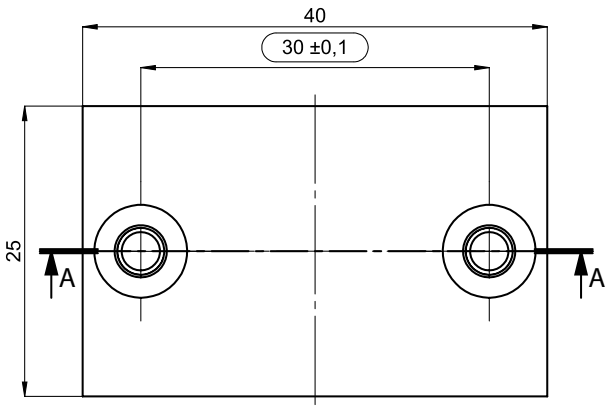


Dimensions in mm

Dimensions [mm]	EDCL2	EDCL10	EDCL20	EDCL50
Effective electrical travel	±1	±5	±10	±25
L1 (housing lenght)	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





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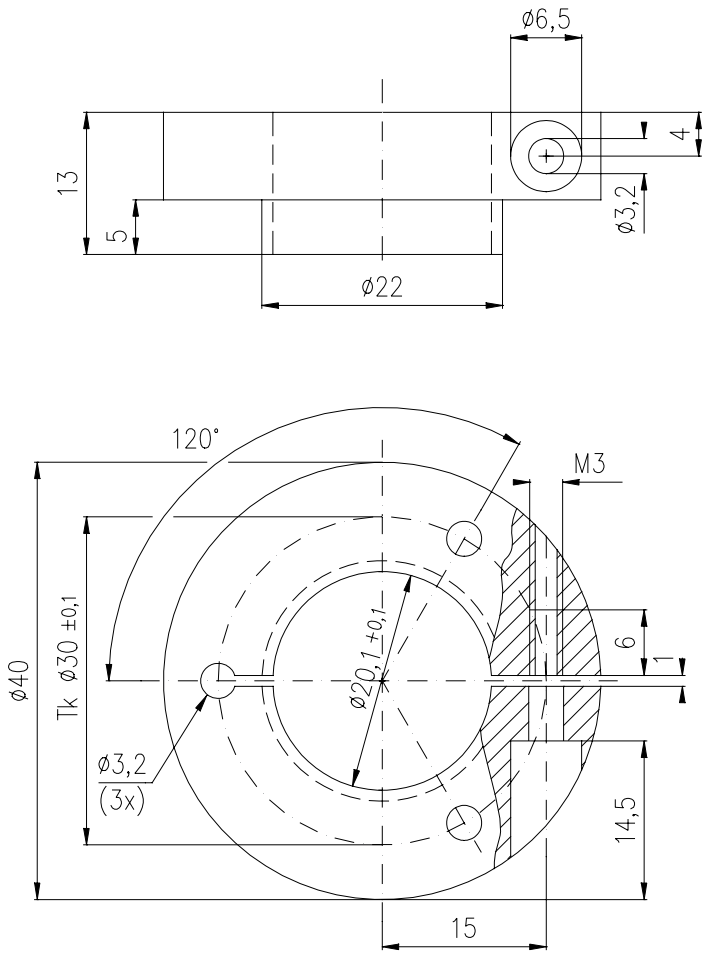
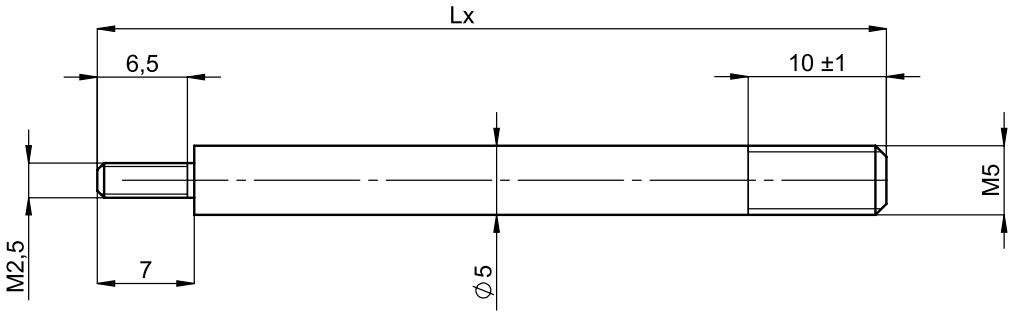
Drawing mounting flange



Drawing extension for armature



Lx
57
77
87
94
157
257
322

Dimensions in mm