

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
- Cable or plug connection

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			
Material push rod	Stainless steel (Mu metal)			
Electrical connection	Round cable 1 m / plug 5-pin			
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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Order Code

Description	Selection: standard=black/bold, possible options=grey/cursive							
Series:	EDC							
Design: As a probe <i>Option with loose core</i>		T <i>L</i>						
Effective electrical travel: <i>Option 2 mm</i>								
10 mm				2				
20 mm				10				
50 mm				20				
				50				
Electrical connection: Plug 5-pole <i>Option cable 1 m</i> <i>Option cable length in m</i>								
					S <i>K</i> <i>Kx,xx</i>			
Supply voltage 24 V						24		
Output signal: 0..20 mA 0..10 V <i>Option 4..20 mA</i>							20 10 <i>24</i>	
Independent linearity: ±0,75% <i>Option ±0,5</i> <i>Option ±0,25</i>								- <i>L0,5</i> <i>L0,25</i>
Protection class: Standard IP65 <i>Option IP67</i>								- <i>IP67</i>

Accessory (not included in delivery):

- Mating connector 5-pole straight IP67
- Mating connector 5-pole angled IP67
- Mounting brackets
- Mounting flange
- Extension for armature (50..250 mm)

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

For example:

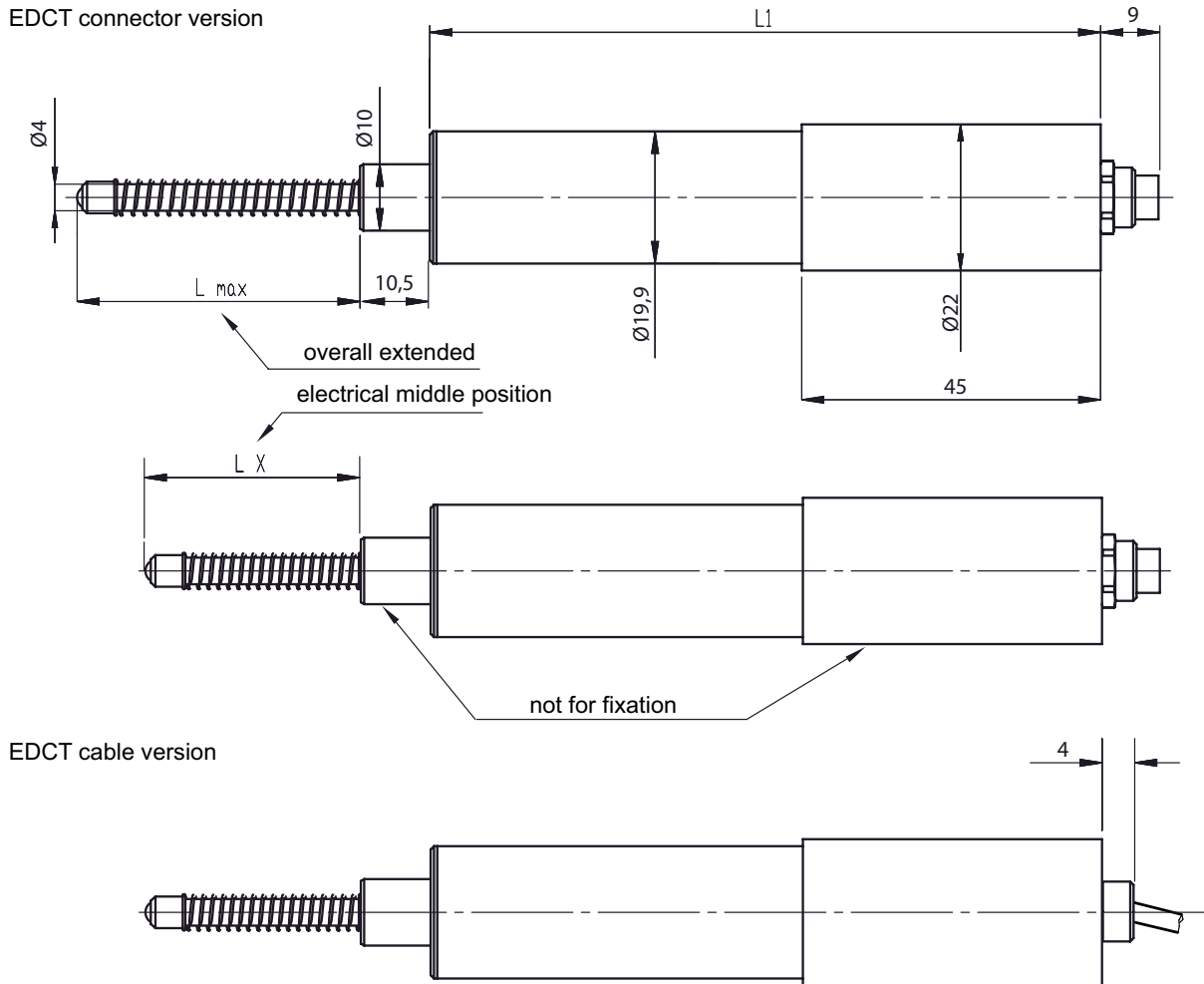
- Cable assemblies with and without connector
- Special probe, special axis length and much mores
- Extended temperature range (-25°C .. +85°C)

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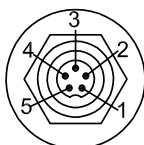
Drawing



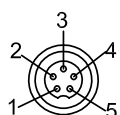
Dimensions	EDCT2	EDCT10	EDCT20	EDCT50
Effective electrical travel [mm]	±1	±5	±10	±25
L1	76	101	140	185
Lmax [±1,5 mm] overall extended	35	40	45	75
Lx [±1,5 mm] electrical middle position	28	27	28,5	45

Dimensions in mm

Connector on sensor



Mating connector on cable
LIYC Y 4 x 0,25 mm²



Pin	Function	Wire color
1	N.C.	N.C.
2	+24 supply	Brown
3	Signal minus	White
4	Signal plus	Green
5	GND	Yellow

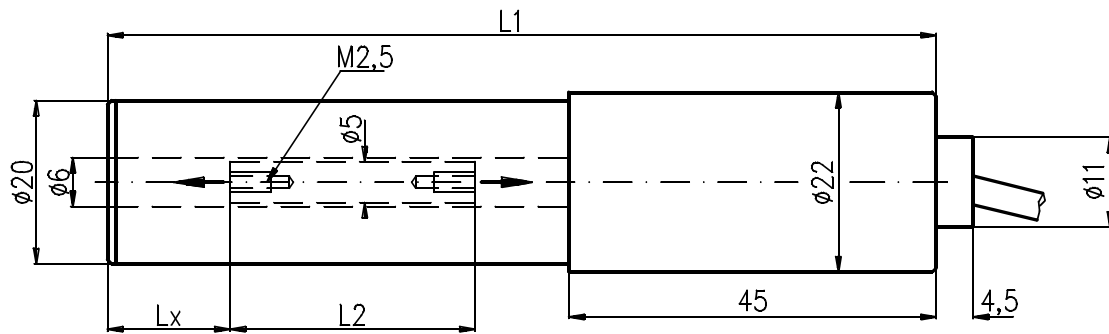
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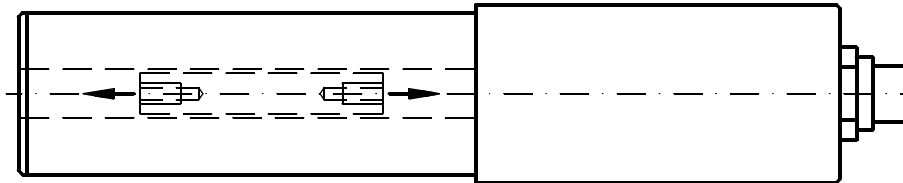
Series EDC

Drawing

EDCL cable version



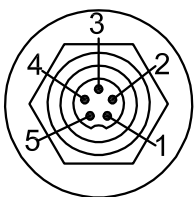
EDCL connector version



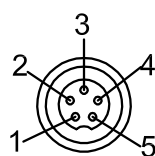
Dimensions	EDCL2	EDCL10	EDCL20	EDCL50
Effective electrical travel [mm]	±1	±5	±10	±25
L1	76	101	140	185
L2	17	30	62	80
Lx [±1,5 mm] electrical middle position	9	15	18	32

Dimensions in mm

Connector on sensor



Mating connector on cable
LIYCY 4 x 0,25 mm²



Pin	Function	Wire color
1	N.C.	N.C.
2	+24 supply	Brown
3	Signal minus	White
4	Signal plus	Green
5	GND	Yellow