

# DRAW WIRE SENSOR



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## Series LX

### Key-Features:

- Low cost series for use in dry environments
- Available measurement ranges: 50 to 1250 mm
- Linearity up to  $\pm 0.1$  % of full scale
- Output signal: Potentiometer, or optical Incremental-Encoder (TTL)
- Low weight: 85 g
- Thermoplastic body
- Compact size
- Wire rope: jacketed stainless steel
- Easy installation

## TECHNICAL DATA

Model		LX-PA	LX-EP
Measurement Range MR	[mm]	50 to 1250 (see table below)	250 to 1250 (see Table below)
Sensor element		Potentiometer	Incremental Encoder
Protection class		IP40	
Voltage supply	[V]	max. 25	5, ±0.25
Current consumption	[mA]	-	max. 30
Resolution		depends on the signal quality of the reference voltage	up to 4.46 Pulses/mm (see table below) *
Linearity	[% MR]	±1, for MR up to 120 mm ±0.5, for MR up to 625 mm ±0.25, for MR up to 1250 mm	±0.1
Repeatability	[% MR]	±0.03	±0.015
Working temperature	[°C]	-25...+75	-40...+75
Output signal		0 to 1 kOhm, ±0.15 % (5 kOhm and 10 kOhm on request)	A/B signal, TTL compatible (not differential)
Wire rope		jacketed stainless steel, Ø 0.46 mm	
Housing material		thermoplastic body	
Weight	[g]	85	
Electrical connection		solder terminal (cable or connector output on request)	5 square pins
Life cycle		MR up to 120 mm: 1.000.000 full stroke cycles MR up to 625 mm: 250.000 full stroke cycles MR up to 1250 mm: 125.000 full stroke cycles	MR up to 625 mm: 2.000.000 full stroke cycles MR up to 1250 mm: 1.000.000 full stroke cycles

\* Resolution may be increased by a factor of four with interface electronics capable of quadrature times 4 counting mode.

Model	LX-PA-2	LX-PA-2,8	LX-PA-3,8	LX-PA-4,7	LX-PA-10	LX-PA-15	LX-PA-20	LX-PA-25	LX-PA-30	LX-PA-40	LX-PA-50
Measurement range	50	70	96	120	250	380	500	625	750	1000	1250
Output [mV/V/mm]	18.5	13.4	10.1	8.1	3.5	2.5	1.9	1.5	1.3	1	0.8
wire rope tension [N]	4.4	3.9	3.1	2.2	4.4	3.9	3.1	2.2	3.9	3.1	2.2

Model	LX-EP-10-2	LX-EP-15	LX-EP-20	LX-EP-25	LX-EP-30	LX-EP-40	LX-EP-50
Measurement range	250	380	500	625	750	1000	1250
Resolution [Pulses/mm] *	4.46	3.25	2.45	1.98	3.25	2.45	1.98
wire rope tension [N]	4.4	3.9	3.1	2.2	3.9	3.1	2.2

## ELECTRICAL CONNECTION

### LX-PA

- PIN1 / CCW: V+
- PIN2 / S,UX: cursor
- PIN3 / CW: V-, GND

LX-PA-10 to LX-PA-50

LX-PA-2 to LX-PA-4,7

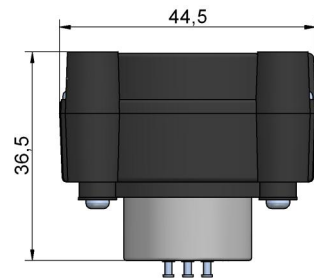
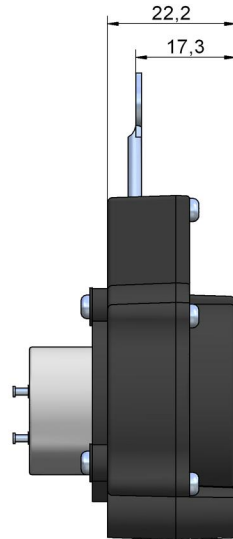
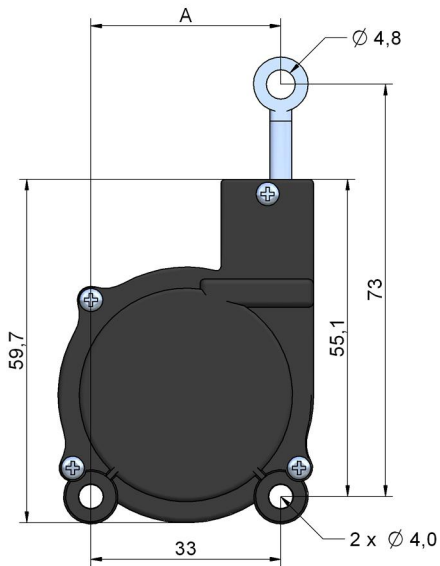
### LX-EP

n.c. A V+  
GND B

A B

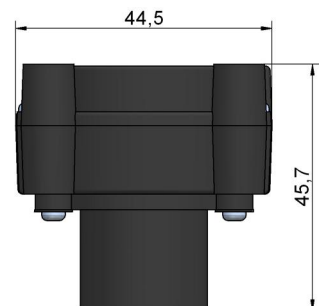
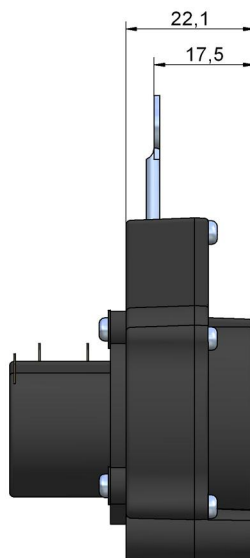
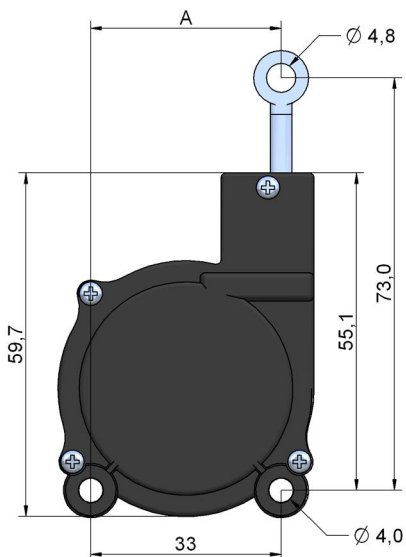
# TECHNICAL DRAWING

## LX-PA-2 to LX-PA-4,7



length A [mm]	measurement range [mm]
25.7	50
29.0	70
33.0	96
37.1	120

## LX-PA-10 to LX-PA-50

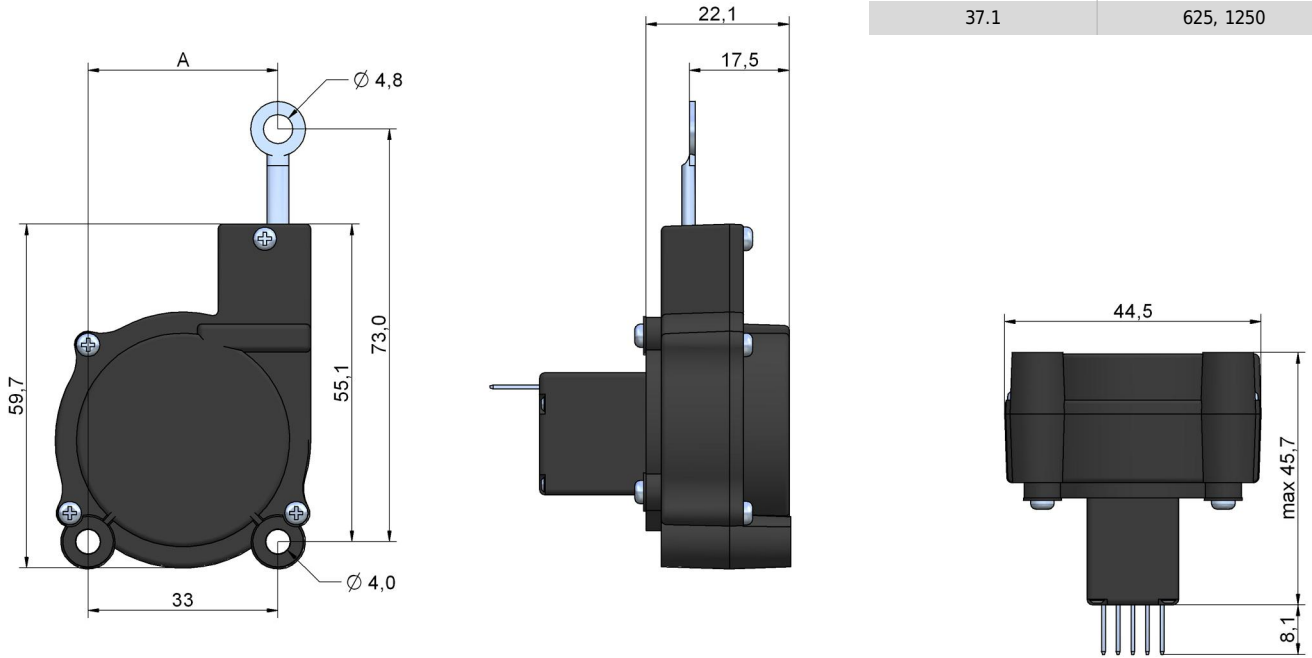


length A [mm]	measurement range [mm]
25.7	250
29.0	380, 750
33.0	500, 1000
37.1	625, 1250

# TECHNICAL DRAWING

## LX-EP

length A [mm]	measurement range [mm]
25.7	250
29.0	380, 750
33.0	500, 1000
37.1	625, 1250



# ACCESSORIES

## LX-Mount

