

Model LCX

Draw Wire Solutions



Features

- Fast and easy encoder mounting
- Wire length options from 1 to 42.5 meters
- Linearity $\pm 0.05\%$ of full range (with encoder)
- Optional high corrosion protection
- Temperature range -20°C to 85°C
- Optional low temperature range of -40°C

Available in wire lengths from one meter to 42.5 meters, the LCX draw wire is compatible with the following 58 mm shafted encoders with clamping flange: absolute encoder Model A58SE, which offers EtherCAT® and PROFINET® communication protocols; Model A58SB, an absolute bus encoder that offers CANopen® or SSI communication protocols; Model 758, a highperformance incremental encoder; and the Model 858S, a stainless steel incremental encoder. Choose the right encoder and wire length for your application.

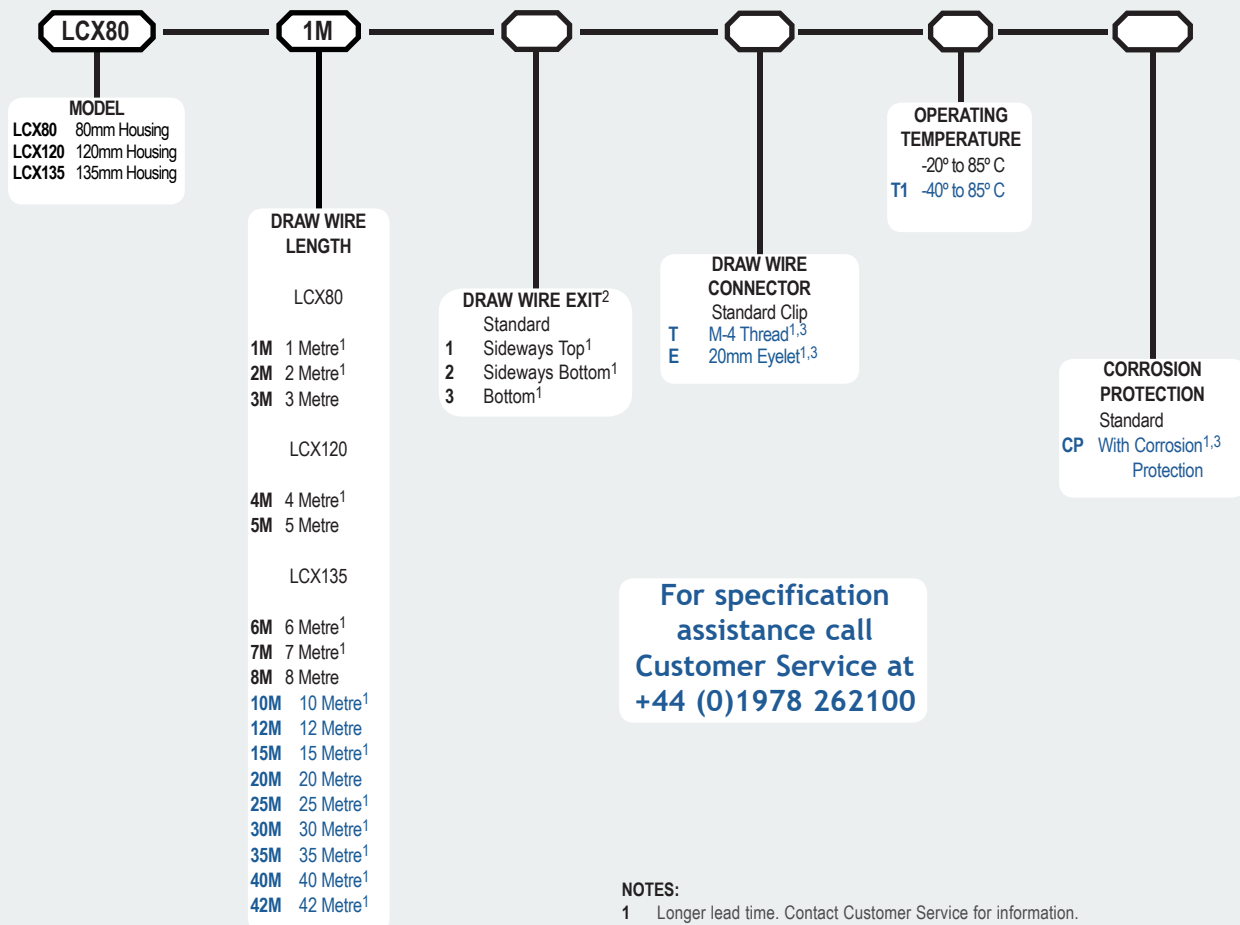
Common Applications

Robotics, Extrusion Presses, Textile Machinery, Control Gate Positioning, Theater Stages, Elevators, Gantry, Boom Cranes, Fork Lift Booms

The LCX Series of Draw Wire Solutions is manufactured for EPC/BEPC by our German technology partner.

Model LCX Ordering Guide

Blue type indicates price adder options. Not all configuration combinations may be available. Contact Customer Service for details.



For specification assistance call
 Customer Service at
 +44 (0)1978 262100

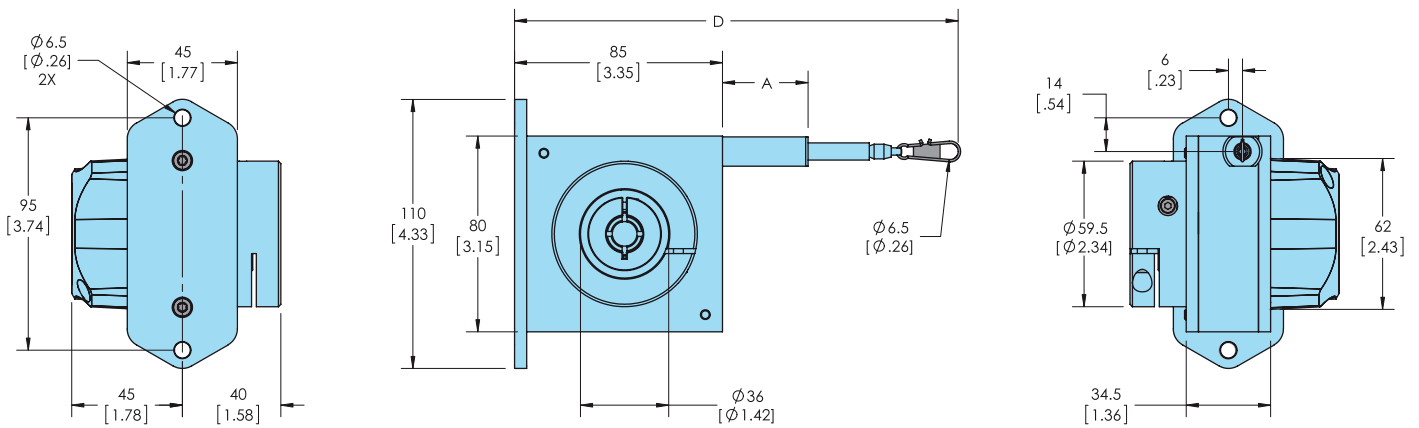
NOTES:

- ¹ Longer lead time. Contact Customer Service for information.
- ² For LCX135, draw wire exit orientation is determined by how draw wire unit is mounted.
- ³ Corrosion protection option cannot be combined with M4 thread or 20mm eyelet Draw Wire Connector options.

Model LCX80

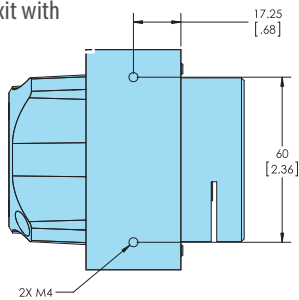
MODEL LCX80 SPECIFICATIONS

Encoder Requirements.....Clamping flange diameter 36 mm; Shaft diameter 10 mm; Shaft length 20 mm
 Measurement Range.....1 (1000 mm), 2 (2000 mm), 3 (3000 mm)
 Linearity.....± 0.05% (with encoder output)
 Sheave Circumference.....200 mm
 Extraction Force F_{min} 4.2 N to 5 N
 Extraction Force F_{max}1 m wire = 5.4 N; 2 - 3 m = 6.4 N
 Velocity V_{max}8 m/s
 Acceleration a_{max}8 m/s^v
 Weight700 g to 900 g, depending on the measurement range
 Housing.....Aluminum, anodized, spring case PA6
 Wire Material.....Flexible stainless steel wire
 Corrosion ProtectionStandard housing, V4A wire material, stainless steel bearings, and HARTCOAT® coating on wire drum
 Operating Temp-20° to 85° C or low temp option of -40° C

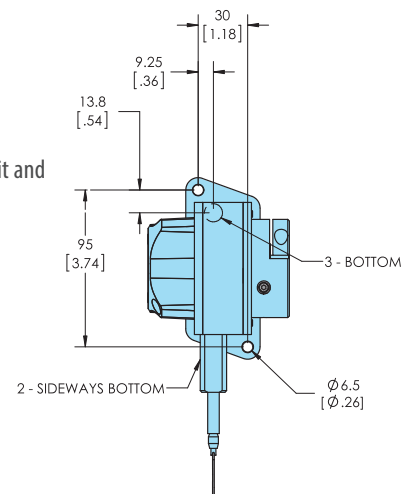


MEASUREMENT RANGE [MM]	A	D
1000 / 2000 [39.37/78.74]	21 [.83]	≈ 166 [6.54]
3000 [118.11]	35 [1.38]	≈ 180 [7.09]

Alternate mounting for standard wire exit and sideways top wire exit with mounting plate removed.



Mounting for bottom wire exit and sideways bottom exit.



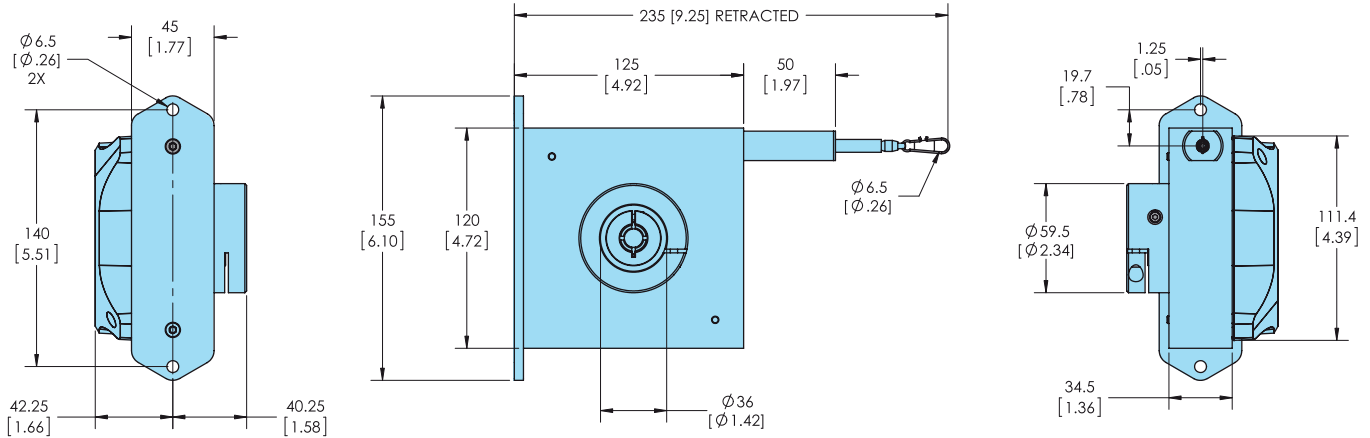
Note: All primary measurements and specifications in metric. Secondary standard measurements for reference only.

Model LCX120

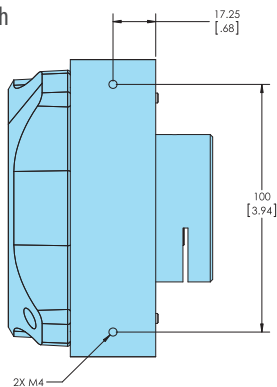


MODEL LCX120 SPECIFICATIONS

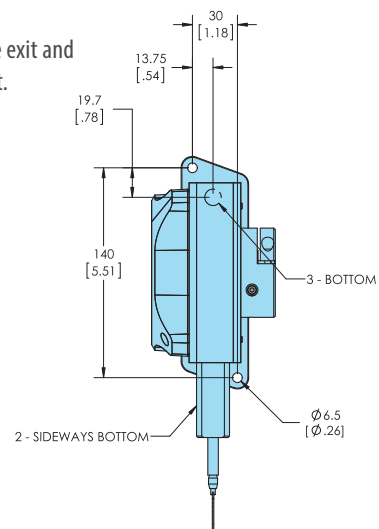
Encoder Requirements.....Clamping flange diameter 36 mm; Shaft diameter 10 mm; Shaft length 20 mm
 Measurement Range.....4 (4000 mm), 5 (5000 mm)
 Linearity..... $\pm 0.05\%$ (with encoder output)
 Sheave Circumference.....317.68 mm
 Extraction Force F_{min} 8 N
 Extraction Force F_{max} 4 m = 11 N; 5 m = 11.6 N
 Velocity V_{max} 8 m/s
 Acceleration a_{max} 8 m/s²
 Weight1300 g to 1600 g, depending on the measurement range
 HousingAluminum, anodized, spring case PA6
 Wire Material.....Flexible stainless steel wire
 Corrosion ProtectionStandard housing, V4A wire material, stainless steel bearings, and HARTCOAT® coating on wire drum
 Operating Temp-20° to 85° C or low temp option of -40° to 85° C



Alternate mounting for standard wire exit and sideways top wire exit with mounting plate removed.



Mounting for bottom wire exit and sideways bottom wire exit.



Note: All primary measurements and specifications in metric. Secondary standard measurements for reference only.

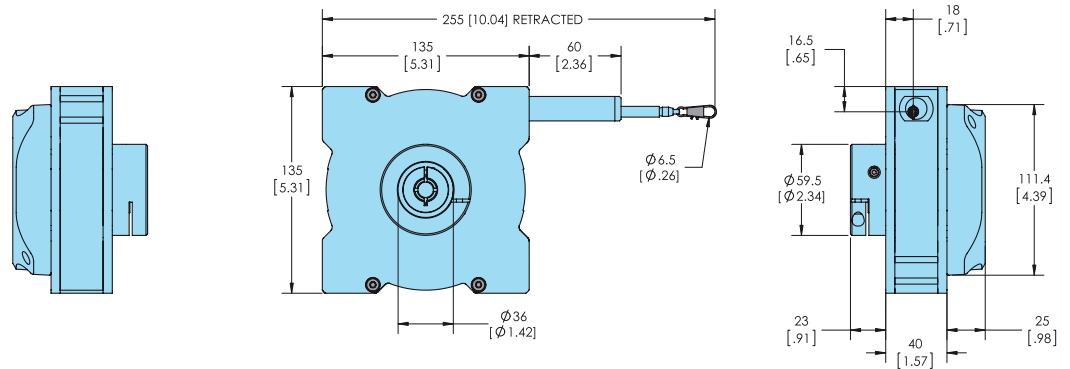
Model LCX135

MODEL LCX135 SPECIFICATIONS

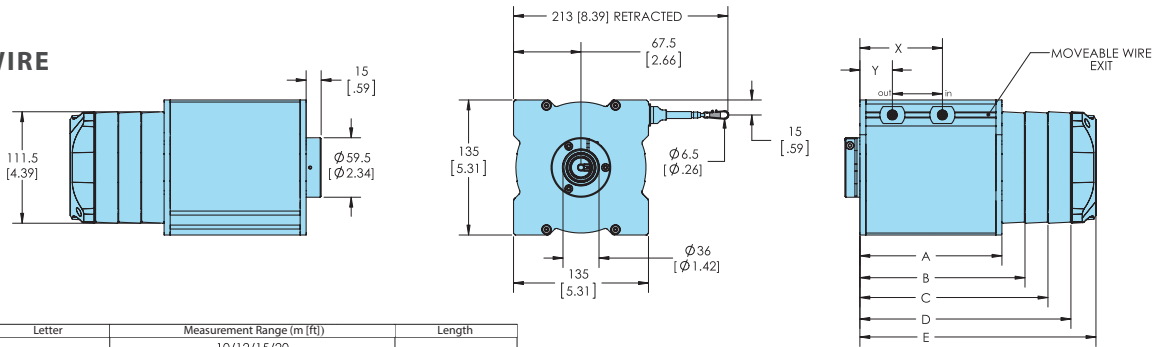
Encoder Requirements.....Clamping flange diameter 36 mm; Shaft diameter 10 mm; Shaft length 20 mm
 Measurement Range.....6 m, 7 m, 8 m, 10 m, 12 m, 15 m, 20 m, 25 m, 30 m, 35 m, 40 m, 42.5 m
 Linearity.....± 0.05% (with encoder output)
 Sheave Circumference.....6 - 8 m, 357.14 mm, 10 m to 42.5 m, 333.33 mm
 Extraction Force F_{min}4.2 N to 5 N
 Extraction Force F_{max}6 m wire = 7.8 N; 7 or 8 m = 8.2 N; 10 - 12 m = 7.2 N; 15 m = 11.2 N; 20 m = 9.2 N;
 25 m = 11.4 N; 30 m = 9.6 N; 35 m = 11.6 N; 40 - 42.5 m = 9 N
 Velocity V_{max}6 - 8 m wire = 8m/s; 10 - 15 m = 6 m/s; 20 - 42.5 m = 5 m/s
 Acceleration a_{max}6 - 8 m wire = 120 m/s²; 10 - 15 m = 80 m/s²; 20 - 42.5 m = 60 m/s²
 Weight3200 g to 5000 g, depending on the measurement range
 Housing.....Aluminum, anodized, spring case PA6
 Wire Material.....Flexible stainless steel wire
 Corrosion ProtectionStandard housing, V4A wire material, stainless steel bearings, and HARTCOAT® coating on wire drum
 Operating Temp-20° to 85° C or low temp option of -40° to 85° C



SHOWN WITH 8 M WIRE



SHOWN WITH 10 M WIRE

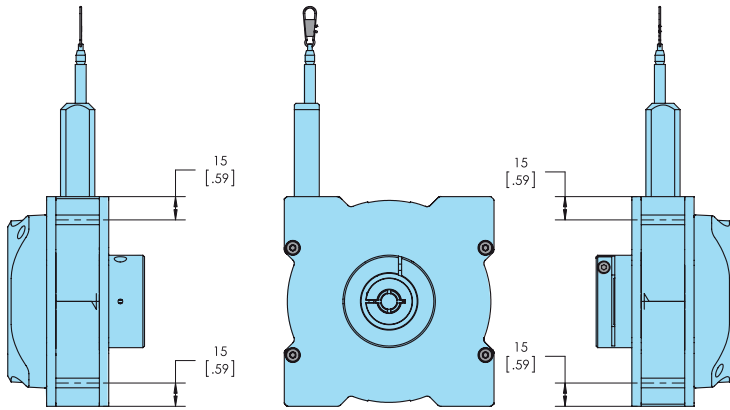


Letter	Measurement Range (m (ft))	Length
A	10/12/15/20 [32.8/39.4/49.2/65.6]	112 [4.41]
A	25/30/35/40/42.5 [82.0/98.4/114.8/131.2/139.4]	142 [5.59]
B	10/12 [32.8/39.4]	137 [5.39]
C	15/20 [49.2/65.6]	160 [6.30]
D	25/30 [82.0/98.4]	213 [8.39]
E	35/40/42.5 [114.8/131.2/139.4]	236 [9.29]

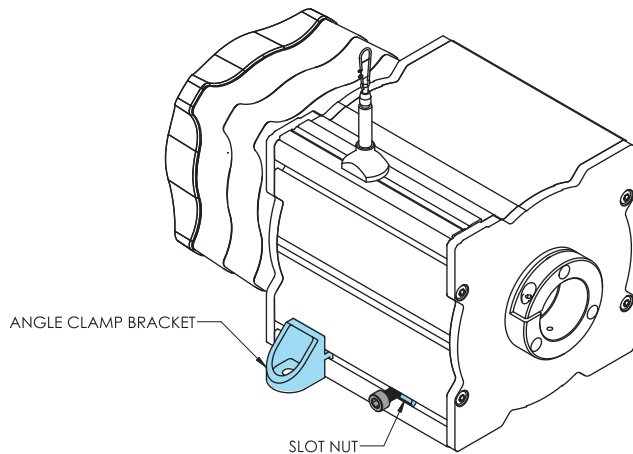
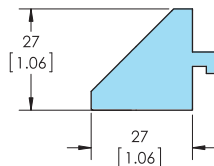
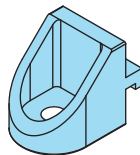
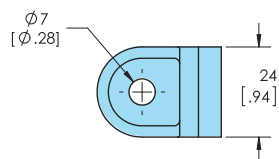
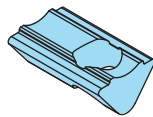
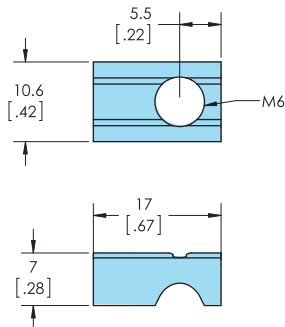
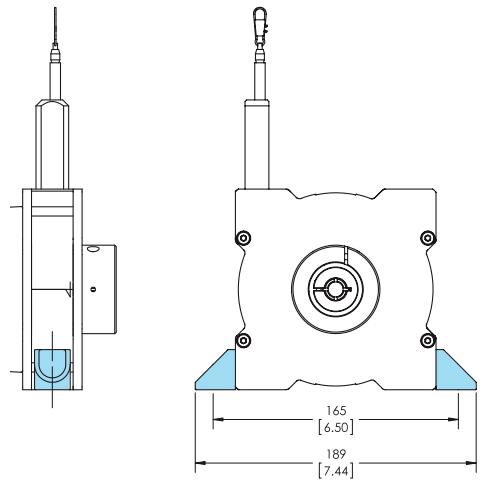
POSITION ROPE OUTLET AT...	10m (32.8ft)	12m (39.4ft)	15m (49.2ft)	20m (65.6ft)	25m (82.0ft)	30m (98.4ft)	35m (114.8ft)	40m (131.2ft)	42.5m (139.4ft)
...start of measurement range (X)	35.5 [1.39]	38.5 [1.51]	43 [1.70]	50.5 [1.98]	58 [2.28]	65.5 [2.58]	73 [2.87]	80.5 [3.17]	84 [3.30]
...start of measurement range (Y)	20.5 [0.80]	20.5 [0.80]	20.5 [0.80]	20.5 [0.80]	20.5 [0.80]	20.5 [0.80]	20.5 [0.80]	20.5 [0.80]	20.5 [0.80]

Note: All primary measurements and specifications in metric. Secondary standard measurements for reference only.

POSITIONS OF GROOVES FOR MOUNTING



ANGLE CLAMP BRACKETS SPACING



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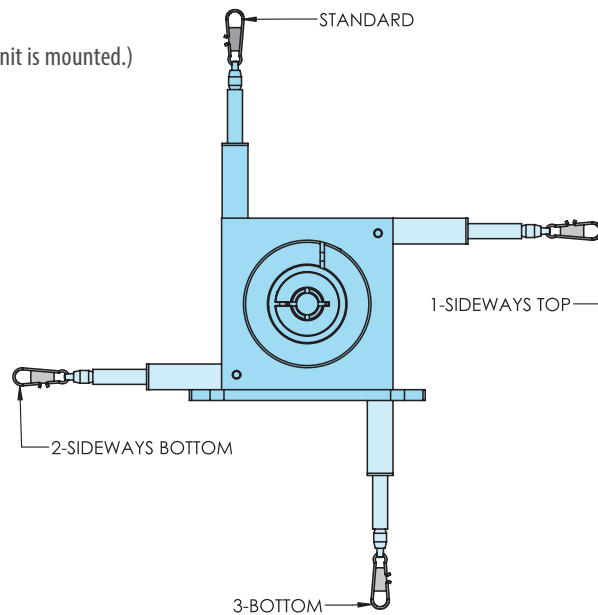
Wire Exit Locations For LCX80 and LCX120

WIRE EXIT LOCATION FOR LCX80 AND LCX120

(For LCX135, draw wire exit orientation is determined by how draw wire unit is mounted.)

DRAW WIRE EXIT

- Standard
- 1 Sideways top
- 2 Sideways bottom
- 3 Bottom



DRAW WIRE CONNECTORS

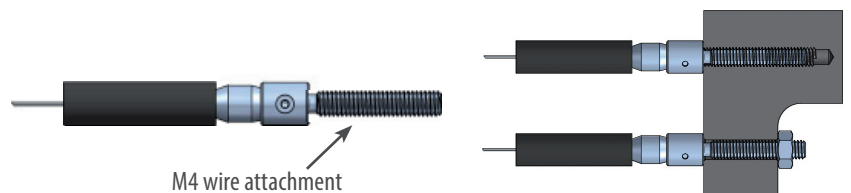
STANDARD

Wire attached with clip.



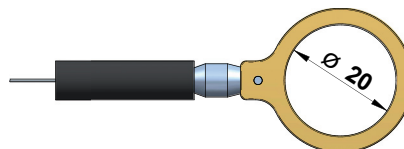
M4 THREAD

Pivoted wire attached by screw thread M4. Length: 22 mm. Ideal for attachment to through holes or threaded holes M4.



20 MM EYELET

The end of the wire is equipped with an eyelet instead of a clip. Inside diameter: 20 mm



Model LCX Accessories

DEFLECTION PULLEY

The wire must be extracted from the draw wire unit in line with the exit axis. The maximum deviation off the exit axis is 3°. A deflection pulley allows a change in the direction of the wire. Several pulleys may be used. The wire clip must not be guided over the deflection pulley.

Material foot: Anodized aluminium

Material wire wheel: POM-C

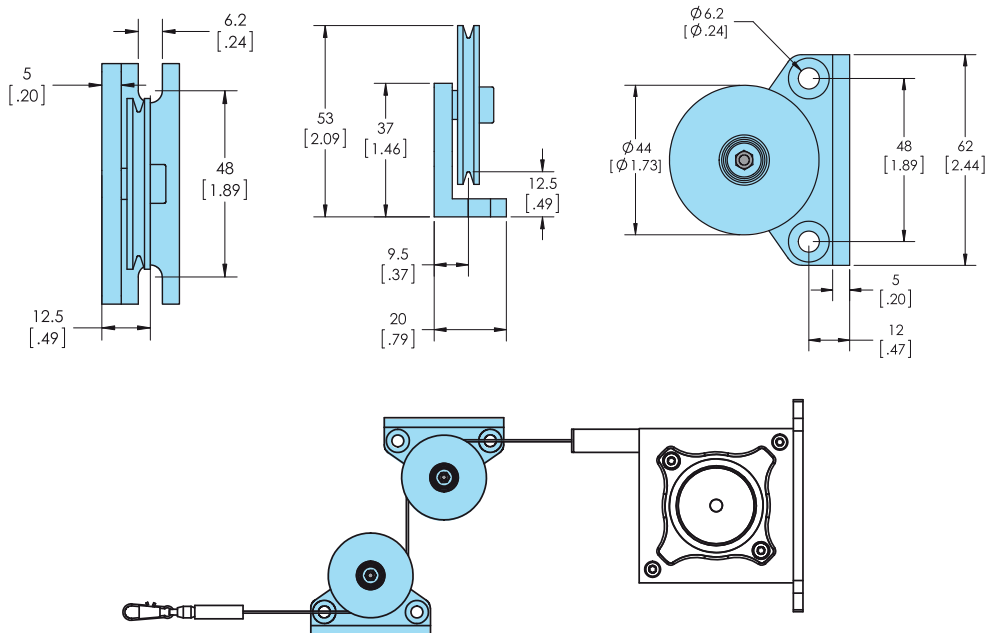
Mounting: By 2 hexagon socket or countersunk screws M6, vertical or horizontal mounting is possible.

Ball bearings: With special low temperature grease and RS-sealing.

Temperature: -40° to 80° C

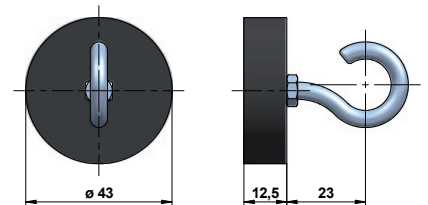


BEPC stock #097001



MAGNETIC CLAMP

Use the magnetic clamp to quickly attach the wire to metallic objects without any assembly time. A rubber coating provides gentle contact (e. g. on painted surfaces) and prevents slipping due to vibration. The magnet consists of a neodymium core for an increased magnetic force of 260 N. The hook makes it easy to attach the wire clip.



BEPC stock #097002

Note: All primary measurements and specifications in metric. Secondary standard measurements for reference only.

Model LCX Encoder Options Table



MODEL TYPE

A58SE
Ethernet Ready
Absolute Encoder

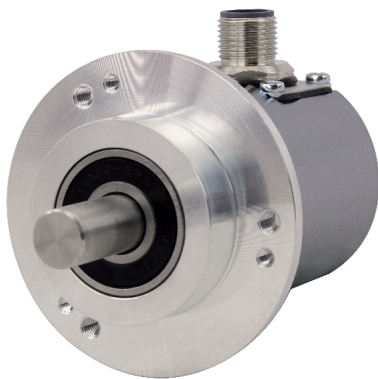


CHOOSE OPTIONS 10mm Shaft

MH Clamping Flange

Choose either EtherCAT or ProfiNet
Communication Protocol

Visit our website or contact sales
for the relevant datasheet for more
details.



MODEL TYPE

A58SB
BUS
Absolute Encoder



CHOOSE OPTIONS 10mm Shaft

MH Clamping Flange

Choose either CANopen or SSI
Communication Protocol

Visit our website or contact sales
for the relevant datasheet for more
details.



MODEL TYPE

758
High Performance
Incremental
Shaft Encoder

CHOOSE OPTIONS 10mm Shaft

Clamping Flange (20 Type)

Visit our website or contact sales
for the relevant datasheet for more
details.



MODEL TYPE

858S
Stainless Steel
Incremental
Shaft Encoder

CHOOSE OPTIONS 10mm Shaft

Clamping Flange (20 Type)

Visit our website or contact sales
for the relevant datasheet for more
details.