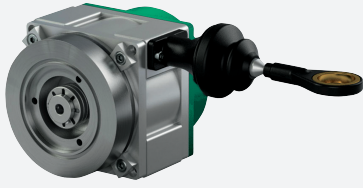


Cable pull

ECN21IL-*



- Robust aluminum drum housing
- Compact design
- Bellows with steel tip
- Wide range of mounting options
- Up to 5 m of measuring cable
- Rust and acid-resistant measuring cable
- Optionally with guide pulley

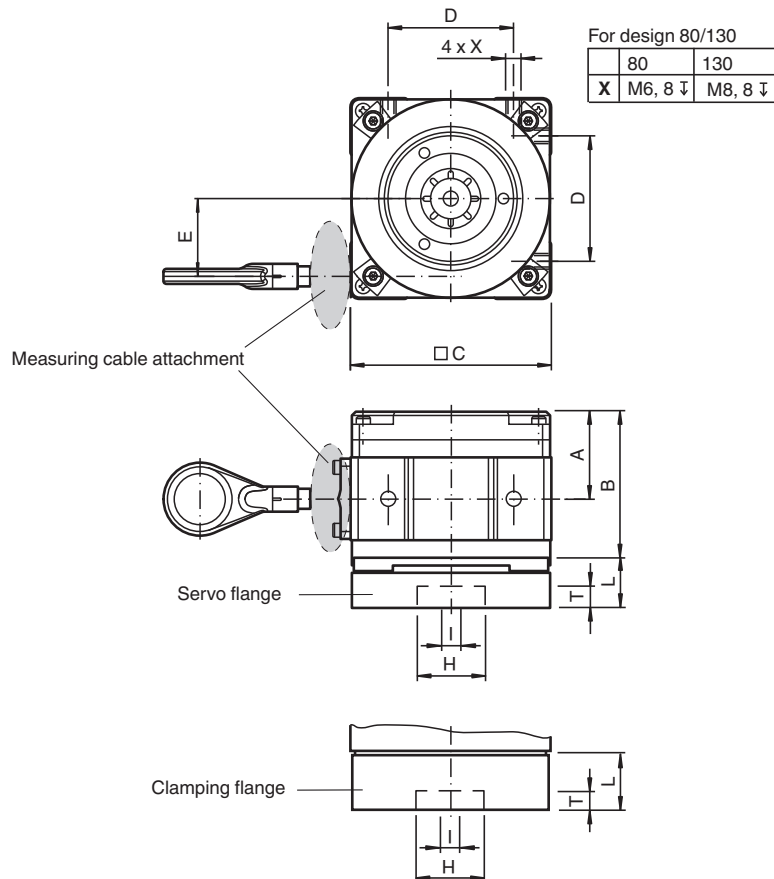
Cable pull

Function

Cable pull with a robust design to suit a wide range of requirements.

Dimensions

For design 80/130

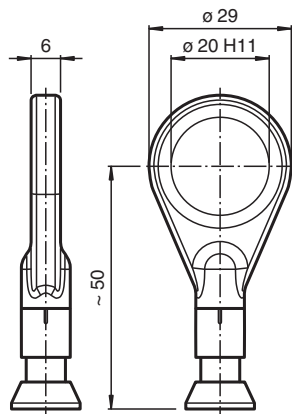


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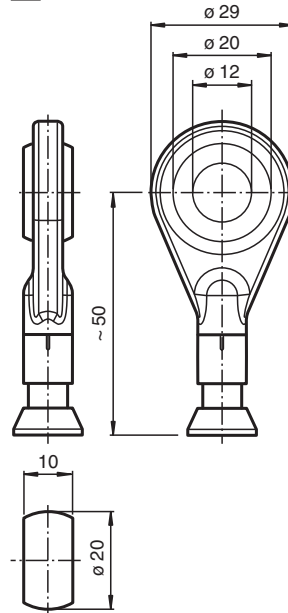
Dimensions

Cable mounts

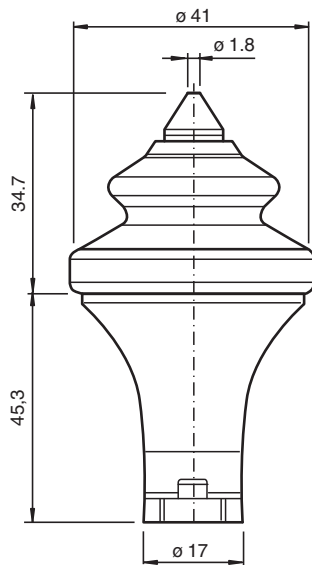
A Brass ring PE



C Ball joint



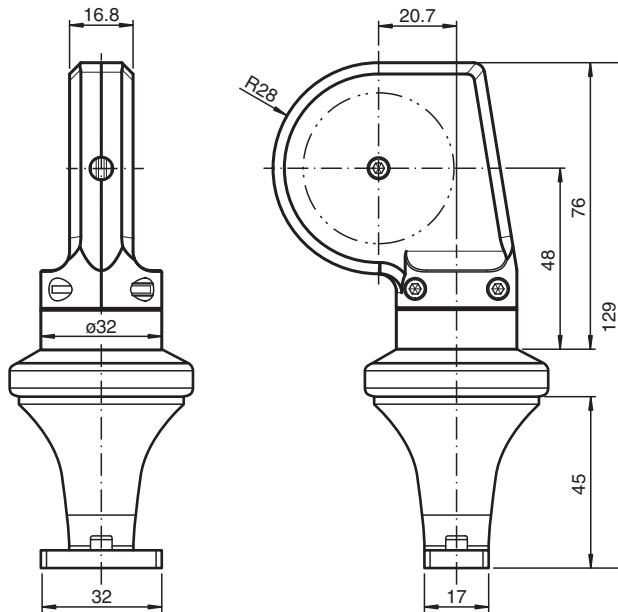
1 Bellows with steel tip



Release date: 2022-12-12 Date of issue: 2022-12-12 Filename: t192302_eng.pdf

Dimensions

4 Guide pulley



Technical Data

General specifications

| | |
|-------------------|------------------|
| Device type | Industrial Line |
| Measuring range | 2000 ... 5000 mm |
| Construction type | 80 mm, 130 mm |

Functional safety related parameters

| | |
|------------------|--------|
| B _{10d} | 300000 |
|------------------|--------|

Ambient conditions

| | |
|---------------------|--------------------------------|
| Ambient temperature | -30 ... 70 °C (-22 ... 158 °F) |
|---------------------|--------------------------------|

Mechanical specifications

| | |
|----------------------|------------------------------|
| Rope diameter | 0.55 mm |
| Retraction speed | 4 m/s |
| Degree of protection | IP64 |
| Material | |
| Housing | anodized aluminum |
| Rope | Stainless steel 1.4401/316 |
| Life span | up to 10 ⁶ Cycles |

General information

| | |
|-------------------|---|
| Scope of delivery | Shaft coupling for mounting a rotary encoder depending on the flange type , Mounting clips , bolts for mounting the adapter and a rotary encoder , Sealing elements (various seals for mounting a rotary encoder) , Hexagon socket wrench, 1.3 AF |
|-------------------|---|

Dimensions

Variable Data and Dimensions

| Technical Data | Design 80 | | Design 130 |
|---------------------------------|-----------|------|------------|
| Measuring length (in m) | 02 | 03 | 05 |
| Drum size (incl. cable) (in mm) | 200 | | 333.3 |
| Repeatability (max. in mm) | 0.2 | 0.3 | 0.5 |
| Hysteresis (max. in mm) | 1 | 1.5 | 1.5 |
| Spring retraction force (in N) | 8-14 | 7-11 | 15-21 |
| Weight (in kg) | 1.3 | 1.4 | 2.6 |
| Dimensions (in mm) | | | |
| A | 34.5 | 45.5 | 59.5 |
| B | 58 | 69 | 85.8 |
| C | 80 | | 130 |
| D | 50 | | 80 |
| E | 31 | | 52 |

Flange dimensions for adapting rotary encoders

| Design | 80 | 130 | 80 | 130 | 80 | 130 |
|----------------------------|--------------|-----|------|-----|-----------------|------|
| Flange type | Servo flange | | | | Clamping flange | |
| Designation | X1 | | X3 | | X2 | |
| H (= flange Ø) (in mm) | 50 | | 33 | | 36 | |
| Clamping circuit Ø (in mm) | 42 | | 26 | | 48 | |
| I (= shaft Ø) (in mm) | 6 | | 6 | | 10 | |
| Wavelength (in mm) | 10 | | 11.5 | | 20 | |
| Dimensions (in mm) | | | | | | |
| Length L | 20 | | 24 | 22 | 36.8 | 34.8 |
| Depth D | 3.8 | | 3 | 3 | 10 | 10 |

Type Code

Model Number

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|--|--|--|--|---|---|--|--|
| E | C | N | 2 | 1 | I | L | - | | | | | A | - | | |
|---|---|---|---|---|---|---|---|--|--|--|--|---|---|--|--|

Flange type

- X1** Servo flange Ø 50 mm/42 mm/3 x M4; shaft Ø 6 mm x 10 mm
- X2** Clamping flange Ø 36/48 mm/3 x M4; shaft; Ø 10 mm x 20 mm

Model Number

X3 Servo flange Ø 33 mm/26 mm/4 x M3; shaft Ø 6 mm x 11.5 mm

Material

A STD anodized aluminum

Attachment

1 Bellow tight steel tip

4 Guide pulley

Cable mounts

A Ring PE carrier

C Ball joint

Length of measuring cable

02 2 m

03 3 m

05 5 m