

### Model Number

ECN30PL-\*

Cable pull

### Features

- Robust aluminum drum housing
- Drum travel when cable retracted using threaded spindle
- Bellows with steel tip
- Wide range of mounting options
- Comprehensive accessories
- Up to 60 m of measuring cable
- Housing can be coated as an option (Hart Coat)
- Rust and acid-resistant measuring cable
- Very low hysteresis

### Description

Flexible cable pull designed to meet tough requirements in all fields of application.

## Technical Data

### General specifications

Device type	Premium Line
Measuring range	1000 ... 60000 mm
Construction type	80 mm, 130 mm, 190 mm

### Ambient conditions

Ambient temperature	-30 ... 70 °C (-22 ... 158 °F)
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### Mechanical specifications

Rope diameter	1.35 mm 0.81 mm ( at measuring length 50000 mm )
Degree of protection	IP64
Material	
Housing	anodized aluminum or Aluminum with Hart Coat coating
Rope	Stainless steel 1.4401/316
Life span	up to 10 <sup>6</sup> Cycles

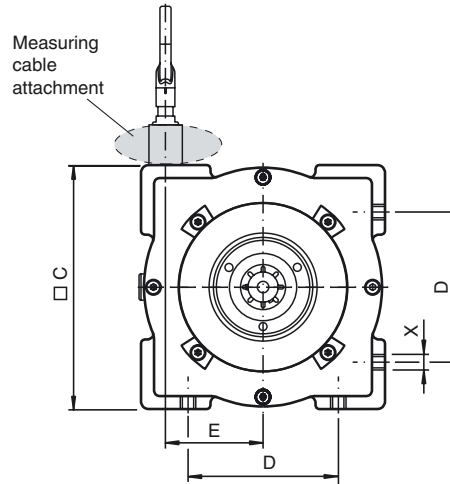
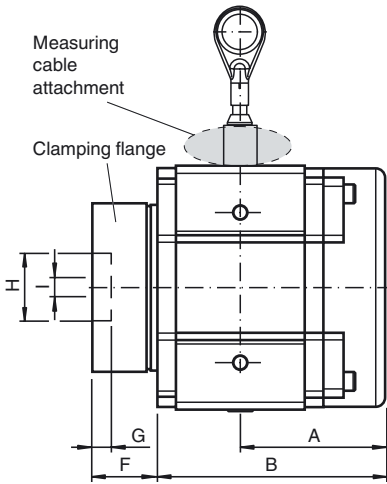
### General information

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
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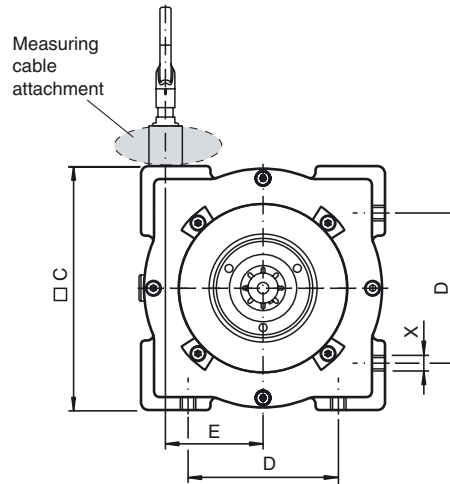
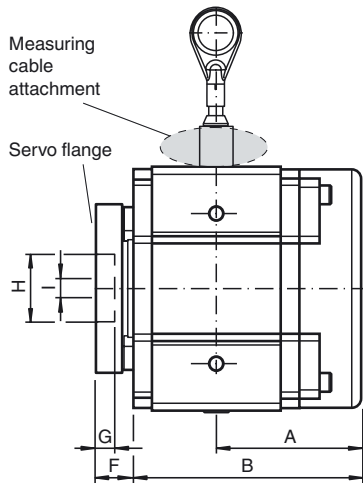
### Accessories

Optional accessories	#203843 SL-RP/GS80 Guide pulley, design 80
	#203844 SL-RP/GS130/GS190 Guide pulley, design 130/190
	#251600 SL-TRP/GS80 Double guide pulley, design 80
	#251602 SL-TRP/GS130 Double guide pulley, design 130/190
	#271371 SL-BA/GS80 Brush attachment, design 80
	#271373 SL-BA/GS130/GS190 Brush attachment, design 130/190
	#272502 SL-BCA Ball for ball joint

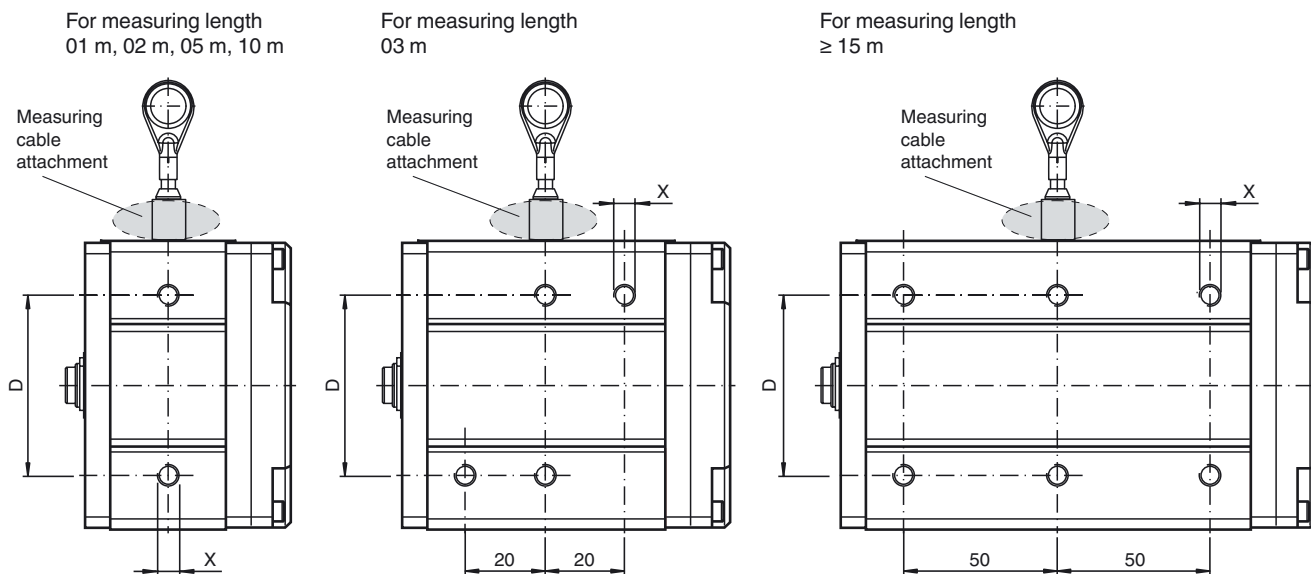
Dimensions



Measuring length	X
01 - 02	4 x M6 ↓8
03	8 x M6 ↓8
05 - 10	4 x M8 ↓8
15 - 30	12 x M8 ↓8
35 - 60	12 x M10 ↓11



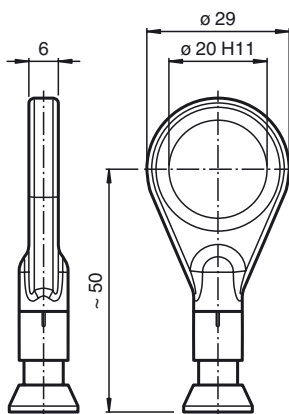
**Threaded holes for mounting**



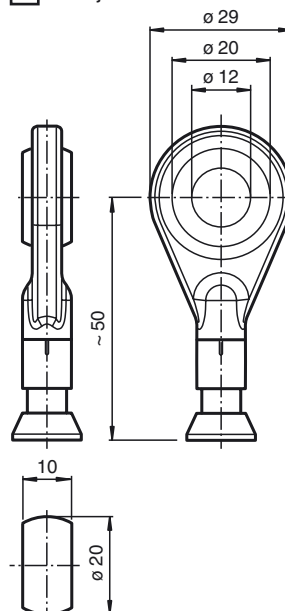
Measuring length	X
01 - 02	4 x M6 ↓8
03	8 x M6 ↓8
05 - 10	4 x M8 ↓8
15 - 30	12 x M8 ↓8
35 - 60	12 x M10 ↓11

**Cable mounts**

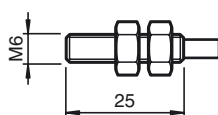
**A** Brass ring PE



**C** Ball joint



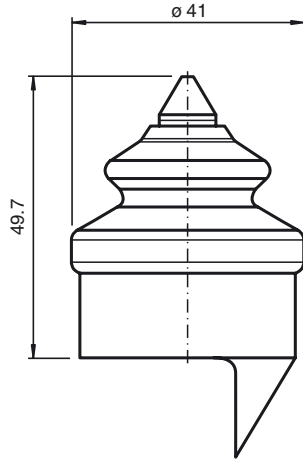
**D** Headless screw



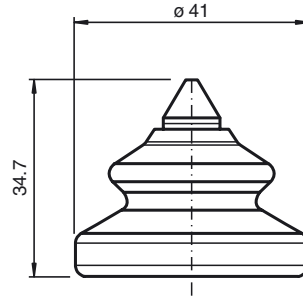
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**1 Attachment bellows**

For design 80

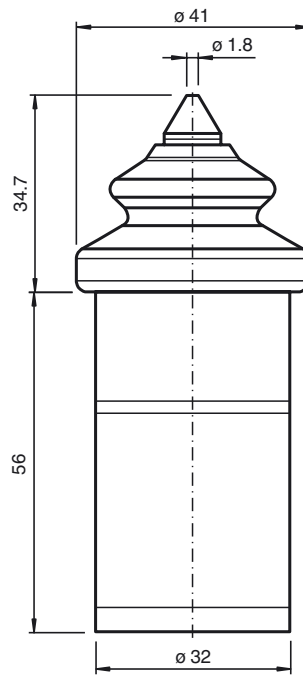


For design 130/190

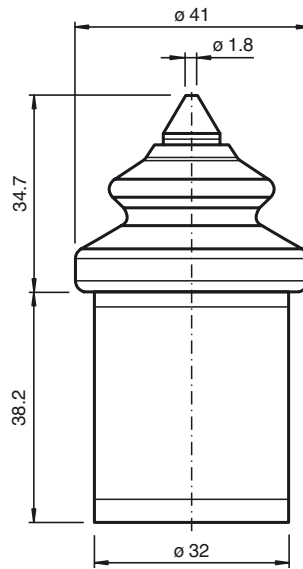


**2 Brush attachment with bellows and steel**

For design 80



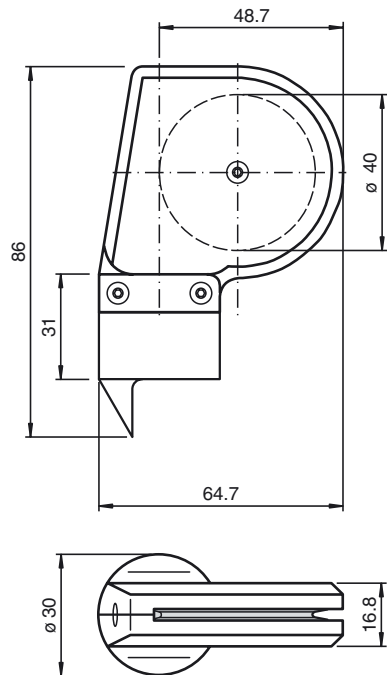
For design 130/190



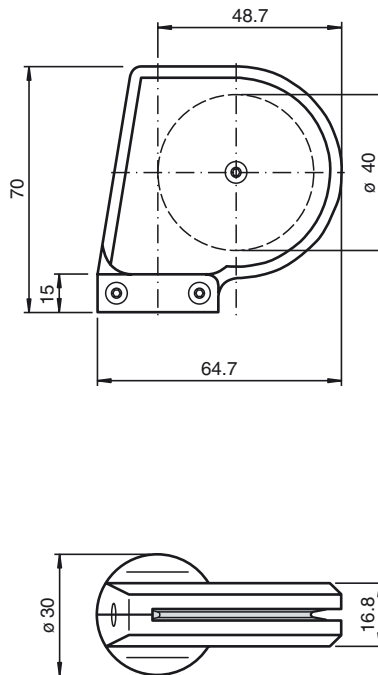
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**4 Guide pulley**

For design 80



For design 130/190



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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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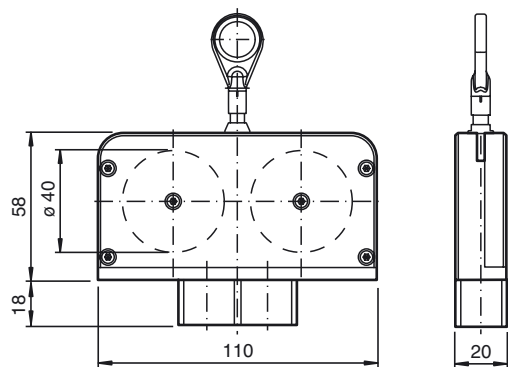
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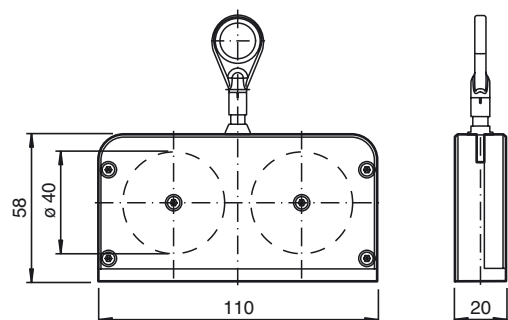
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**5 Double guide pulley**

For design 80



For design 130/190



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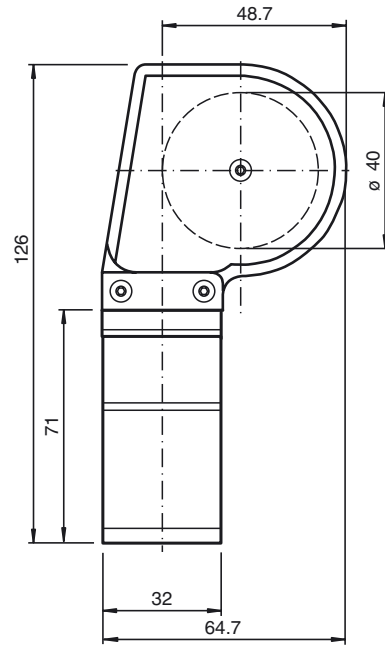
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Germany: +49 621 776 1111  
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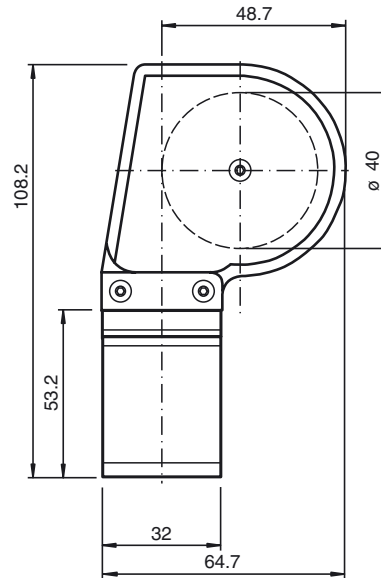
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**8 Brush attachment with guide pulley**

For design 80



For design 130/190



**Variable Data and Dimensions**

Technical Data	Design 80			Design 130						Design 190			
	01	02	03	05	10	15	20	25	30	35	40	50	60
Max. measuring length (in m)													
Drum size (incl. cable) (in mm)	200			334.1						491.5, 489.8, 491.5			
Repeatability (max. in mm)	0.2	0.2	0.3	0.5	1	1.5	2	2.5	3	6	6	6	7
Hysteresis (max. in mm)	1	1	1.5	2	4	5	6	7	8	10	10	10	15
Linearity	± 0.1%			± 0.1%						± 0.1%			
Retraction speed (in m/s)	8			8		6		3		4			
Spring retraction force (in N)	11-14	8-14	7-11	15-21	8-13	15-21	8-13	15-21	8-13	20-37	18-37	20-37	18-37
Weight (in kg)	0.9	1.1	1.5	2.5	3.5	5	6	7.5	8.5	16	20	16	15.5
<b>Dimensions (in mm)</b>													
A	34	42	60	77	124	147	193	216	262	188	203	215	210
B	57	72	98	122	190	236	304	350	418	315	346	342	322
C	80			130						190			
D	50			80						140			
E	31,5			52						79			

**Flange Dimensions for Adapting Rotary Encoders**

Design	80	130/190	80	130/190	80	130/190
Flange type	Servo flange		Clamping flange		Servo flange	

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