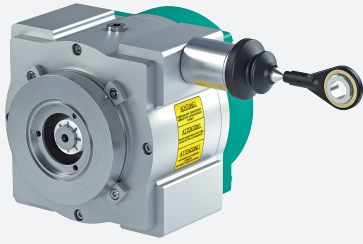


Cable pull

ECN30PL-*



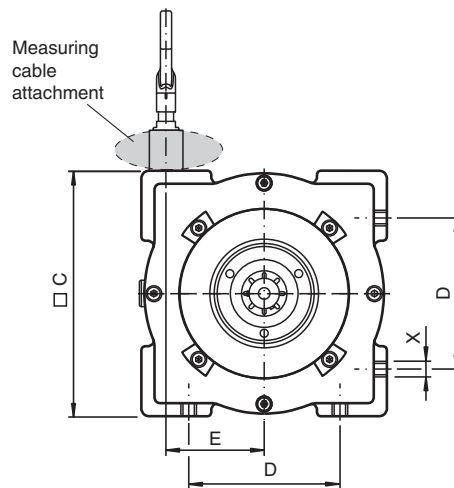
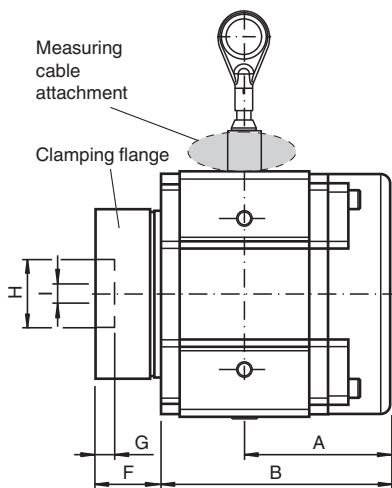
- Robust aluminum drum housing
- Drum travel when cable retracted using threaded spindle
- Bellows with steel tip
- Wide range of mounting options
- Comprehensive accessories
- Up to 60 m of measuring cable
- Housing can be coated as an option (Hart Coat)
- Rust and acid-resistant measuring cable
- Very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

Cable pull

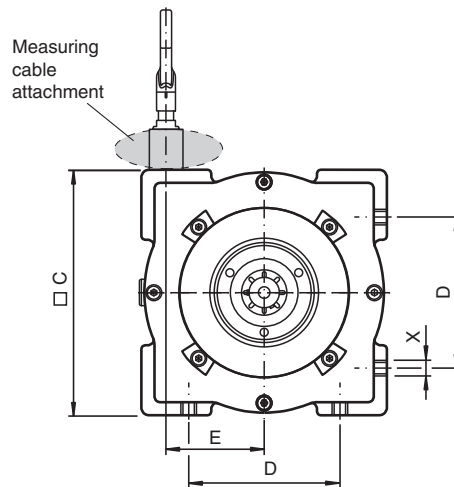
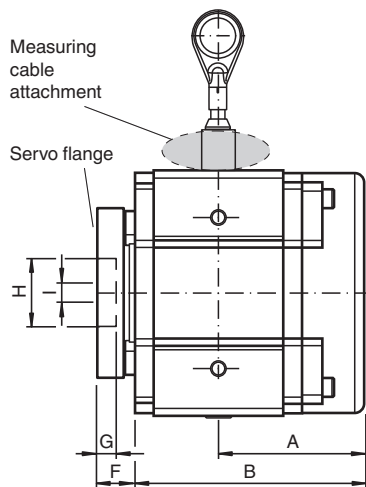
Function

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

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



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

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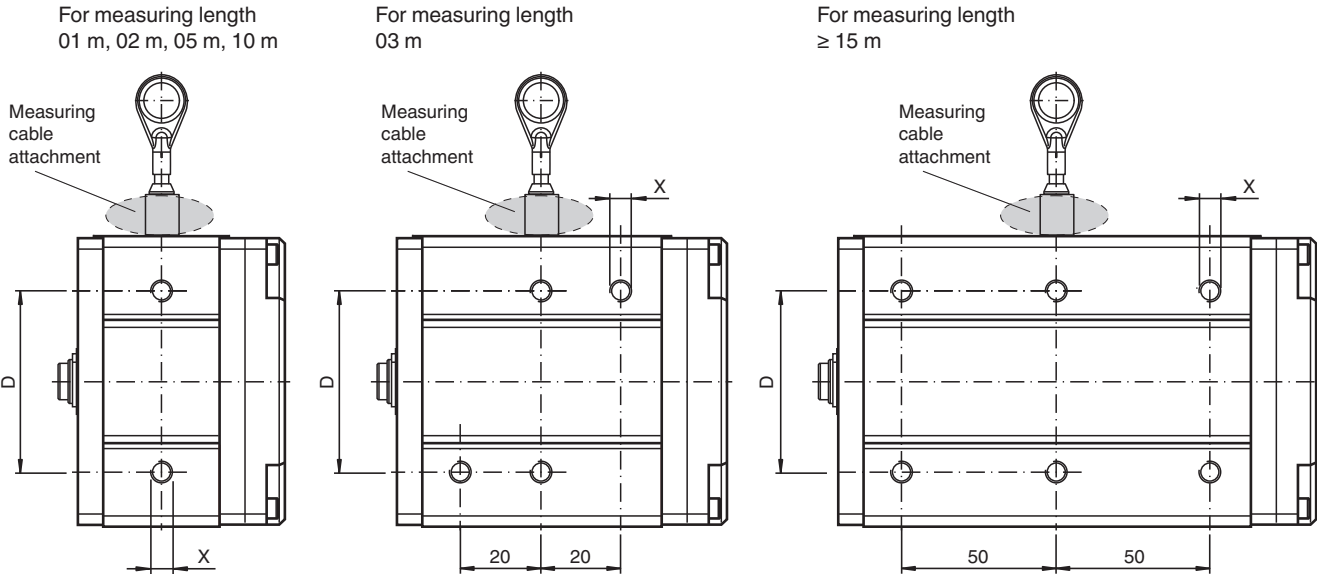
Germany: +49 621 776 1111
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

Dimensions

Threaded holes for mounting

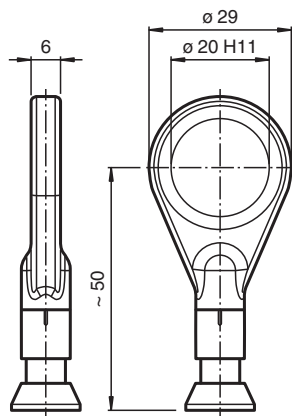


Measuring length	X
01 - 02	4 x M6 ↓8
03	8 x M6 ↓8
05 - 10	4 x M8 ↓8
15 - 30	12 x M8 ↓8
35 - 60	12 x M10 ↓11

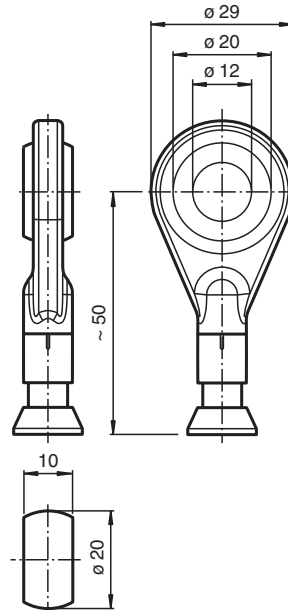
Dimensions

Cable mounts

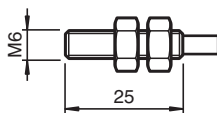
A Brass ring PE



C Ball joint

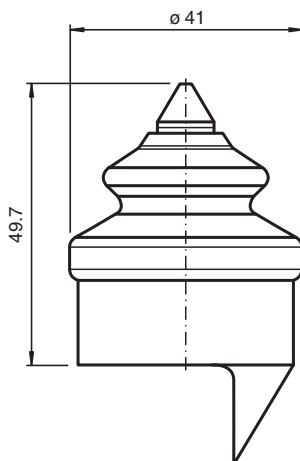


D Headless screw

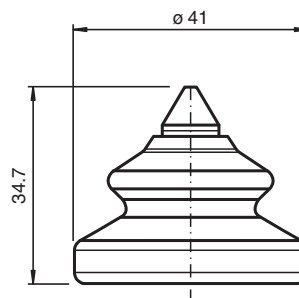


1 Attachment bellows

For design 80



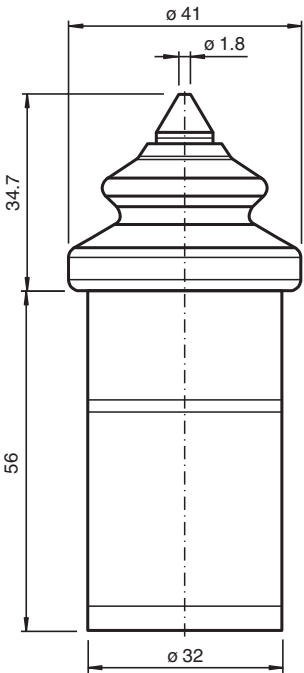
For design 130/190



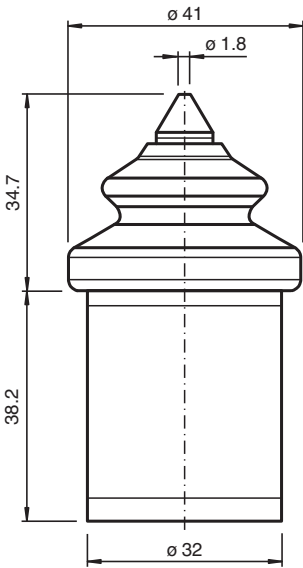
Dimensions

2 Brush attachment with bellows and steel

For design 80



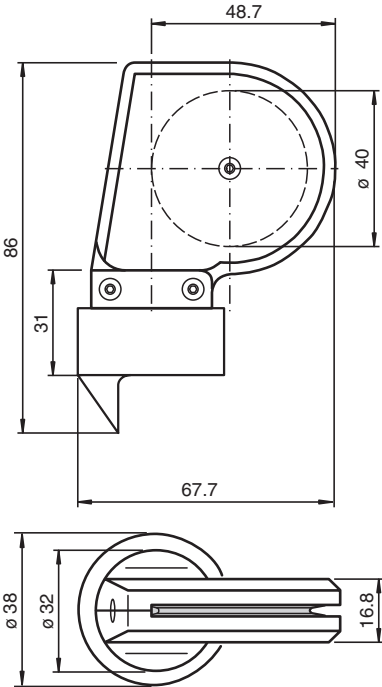
For design 130/190



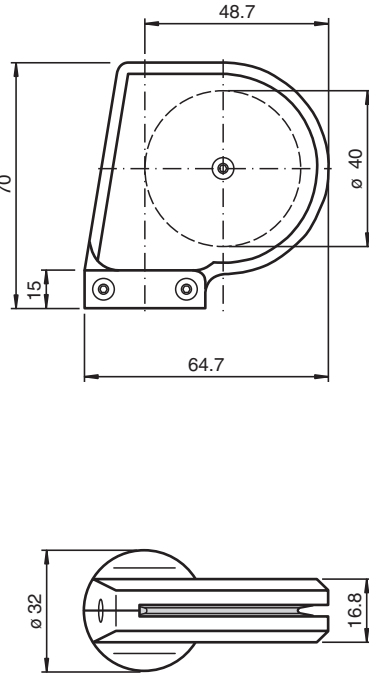
Dimensions

4 Guide pulley

For design 80



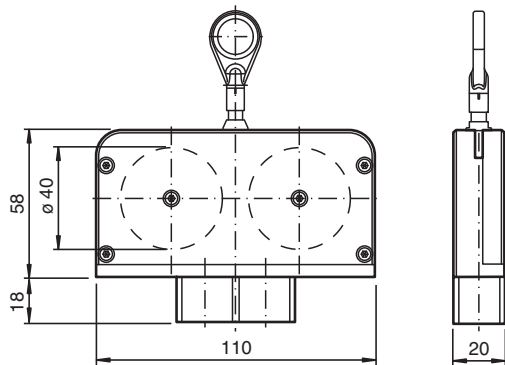
For design 130/190



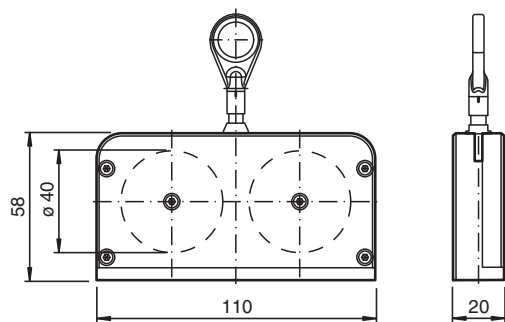
Dimensions

5 Double guide pulley

For design 80



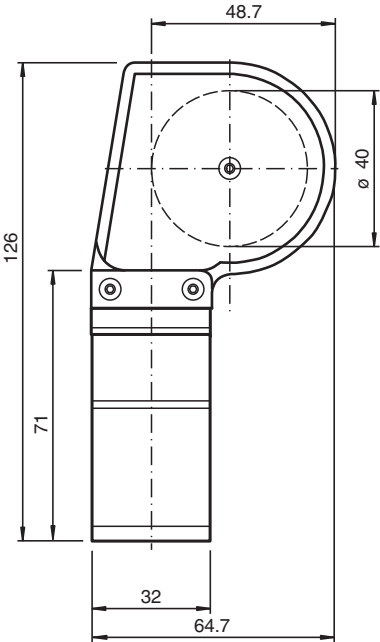
For design 130/190



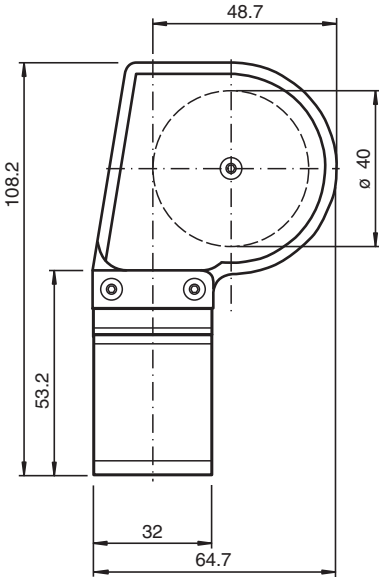
Dimensions

8 Brush attachment with guide pulley

For design 80



For design 130/190



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)
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 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
Accessories		

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Technical Data

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
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Dimensions

Variable Data and Dimensions

Technical Data	Design 80			Design 130						Design 190			
Max. measuring length (in mm)	01	02	03	05	10	15	20	25	30	35	40	50	60
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)	4			4						4			
Spring retraction force (in N)	11 ... 14	8 ... 4	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	1.4	2.5	3.5	5	6	7.5	8.5	16	20	16	15.5

Dimensions (in mm)	Design 80			Design 130						Design 190			
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			

Dimensions

Flange Dimensions for Adapting Rotary Encoders

Design	80	130/190	80	130/190	80	130/190
Flange type	Servo flange		Clamping flange		Servo flange	
Designation	X1		X2		X3	
H (= flange Ø) (in mm)	50		36		33	
Clamping circuit Ø (in mm)	42		48		26	
I (= shaft Ø) (in mm)	6		10		6	
Shaft length (in mm)	10		20		11.5	

Dimensions (in mm)	80	130/190	80	130/190	80	130/190
F	20	20	36.8	34.8	24	22
G	3.8	3.8	10	10	3.8	3.8

Type Code

Model Number

E	C	N	3	0	P	L	-						-		
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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

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

Material

A STD anodized aluminum

H Aluminum, Hart Coat coating

Attachment

N No attachment (only for 60 m)

for 1 to 50 m:

1 Bellows with steel tip

2 Brush attachment with bellows and steel tip

4 Guide pulley

5 Double guide pulley

8 Brush attachment with guide pulley

Cable mounts

A Ring PE carrier

C Ball joint (only with material A)

D Headless screw

Length of measuring cable

01-60 See table "Variable Data and Dimensions"

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