



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
Repeat accuracy	0.1 %
Hysteresis H	0.05 %
Linearity	± 0.1 %

Functional safety related parameters

B _{10d}	300000
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Ambient conditions

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

Rope diameter	1.35 mm
Bending radius	min. 17 mm
Breaking force	min. 1227 N
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

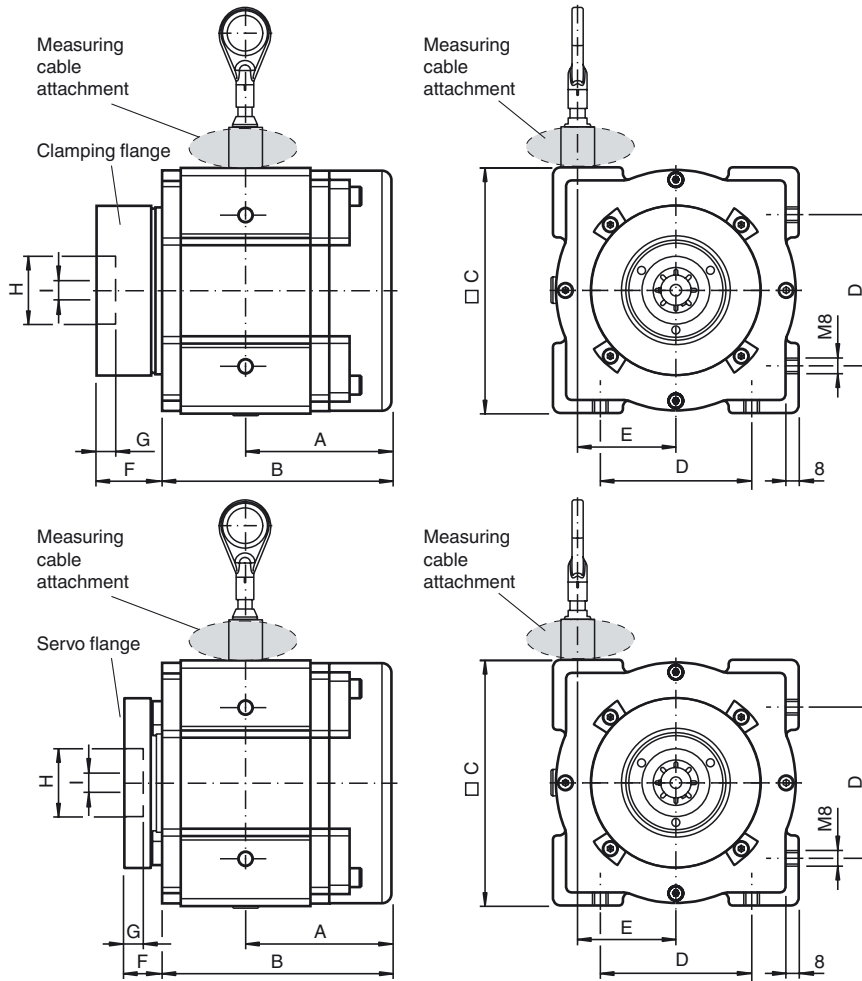
General information

Scope of delivery	Shaft coupling for mounting a rotary encoder depending on the flange type , Mounting clips , 3 x M4 x 8 bolts for mounting the adapter , Sealing elements (various seals for mounting a rotary encoder) , Hexagon socket wrench, 1.3 AF
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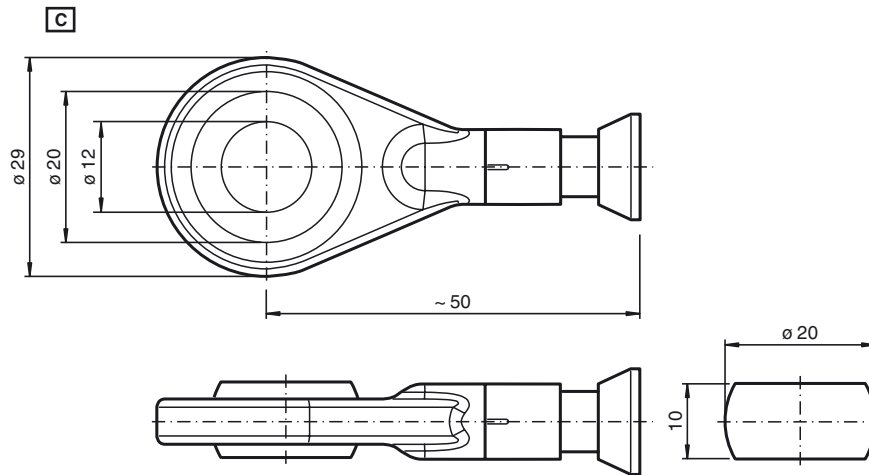
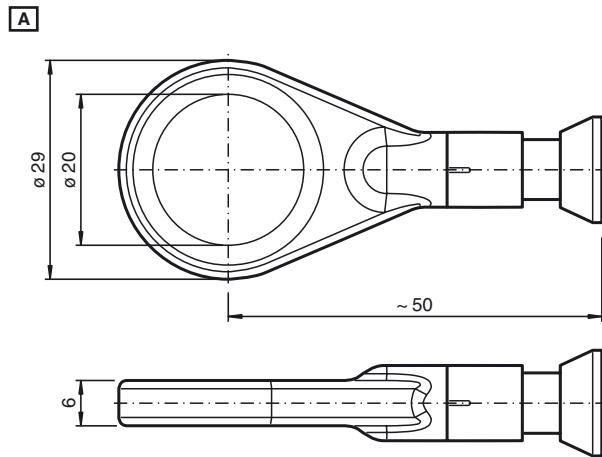
Accessories

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

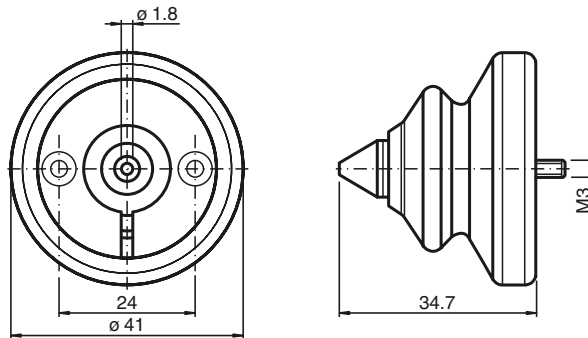
Dimensions



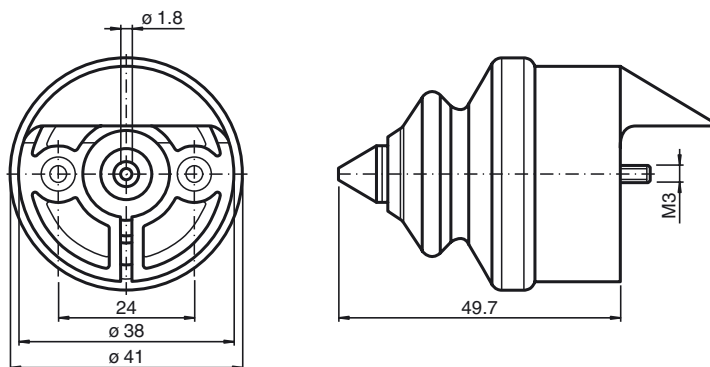
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1 For design 130/190

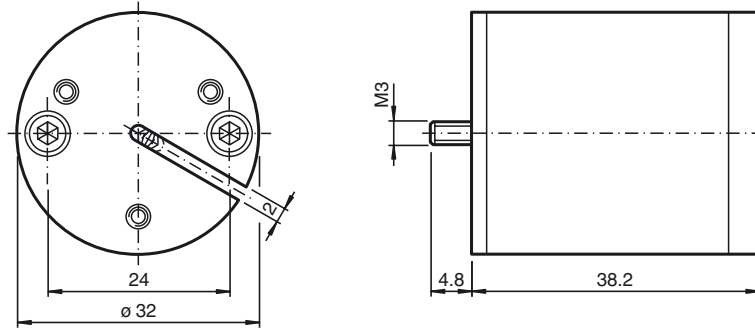


1 For design 80

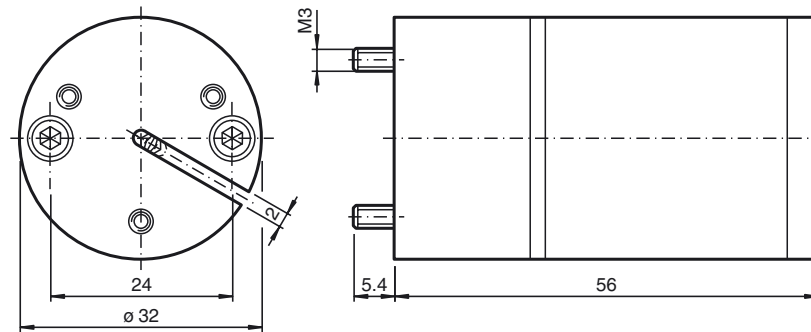


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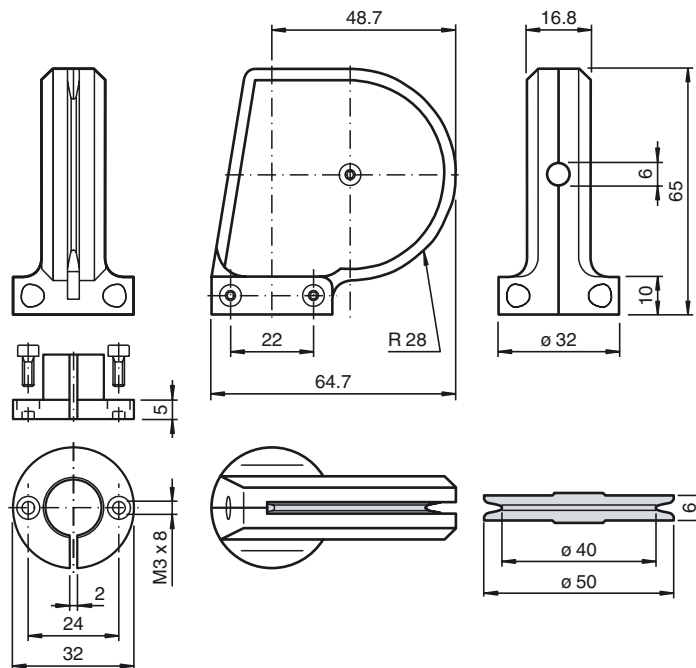
2 For design 130/190



2 For design 80

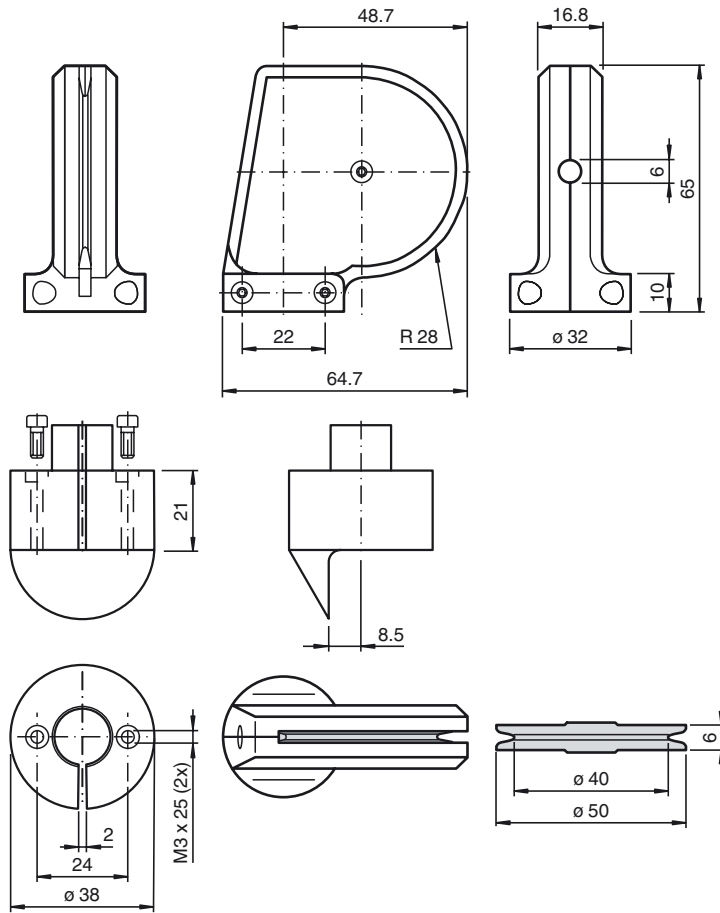


4 For design 130/190



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4 For design 80



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

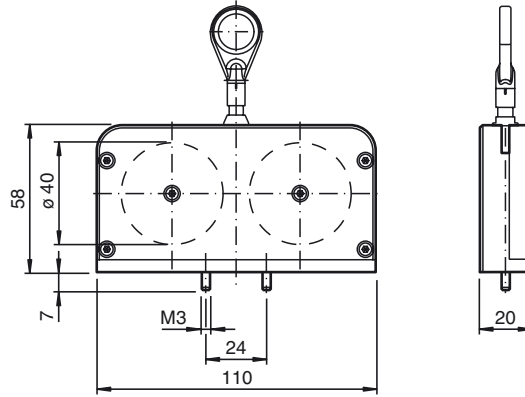
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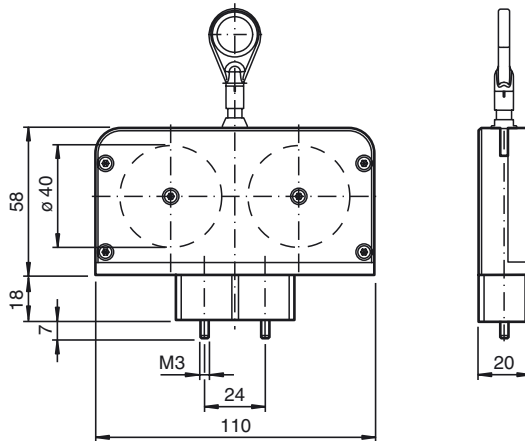
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5 For design 130/190



5 For design 80



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)	01	02	03	05	10	15	20	25	30	35	40	50	60
Drum size (incl. cable) (in mm)	200			334,1						491,5			
Retraction speed (in m/s)	8			8		6		3		4			
Spring retraction force (in N)	5-15			10-21	15-21	10-21	15-21	10-21	15-21	18-37			
Weight (in kg)	0,9	1,1	1,5	2,5	3,5	5	6	7,5	8,5	16	20	14,5	15,5
Dimensions (in mm)													
A	34	42	60	77	124	147	193	216	262	188	203	195	210
B	57	72	98	122	190	236	304	350	418	315	346	292	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	
Designation	X1		X2		X3	
H (= flange Ø) (in mm)	50		36		33	
Clamping circuit Ø (in mm)	42		48		26	

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I (= shaft Ø) (in mm)	6		10		6	
Wavelength (in mm)	10		20		11.5	
Dimensions (in mm)						
F	20	20	36.8	34.8	24	22
G	3.8	3.8	10	10	3.8	3.8

Measuring Cable Attachments

Dimensions (in mm)		Design 80		Design 130/design 190	
Attachment		Length	Width/Ø	Length	Width/Ø
1	Bellows	49.7	41/38	34.7	41
2	Brush attachment with bellows and steel tip	90.7	32	72.9	32
4	Guide pulley	86	32	70	32
5	Double guide pulley	110	58	110	58
		Design 80/130/190			
		Length			
8	Brush attachment + guide pulley	126		108.2	

Model Number

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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

- 1** Bellows with steel tip
- 2** Brush attachment with bellows and steel tip
- 4** Guide pulley
- 5** Double guide pulley
- 8** 2+4

Cable mounts

- A** Ring PE carrier
- C** Ball joint

Length of measuring cable

01-60 See table "Variable Data and Dimensions"