



Model Number

ECN10TL-*

Cable pull

Features

- **Solid yet lightweight plastic construction**
- **Compact, slim design (the shaft of the flange-mounted rotary encoder is used to provide the function of the drum bearing)**
- **Coupling-free adaptation**
- **Multitude of mounting possibilities**
- **Rust and acid-resistant measuring cable**
- **Very high level of linearity and repeatability**

Description

Lighter and more solid cable pull rotary encoder with flat housing design.

Technical data

General specifications

Device type	Target Line
Measuring range	3000 ... 10000 mm
Construction type	80 mm, 130 mm, 190 mm
Repeat accuracy	0.005 %
Hysteresis H	0.1 %
Linearity	± 0.01 %

Functional safety related parameters

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

Ambient conditions

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

Mechanical specifications

Rope diameter	0.55 mm
Bending radius	min. 14 mm
Breaking force	min. 330 N
Degree of protection	IP50
Material	
Housing	plastic , Lexan 920
Rope	Stainless steel 1.4401/316
Life span	up to 10 ⁶ Cycles

General information

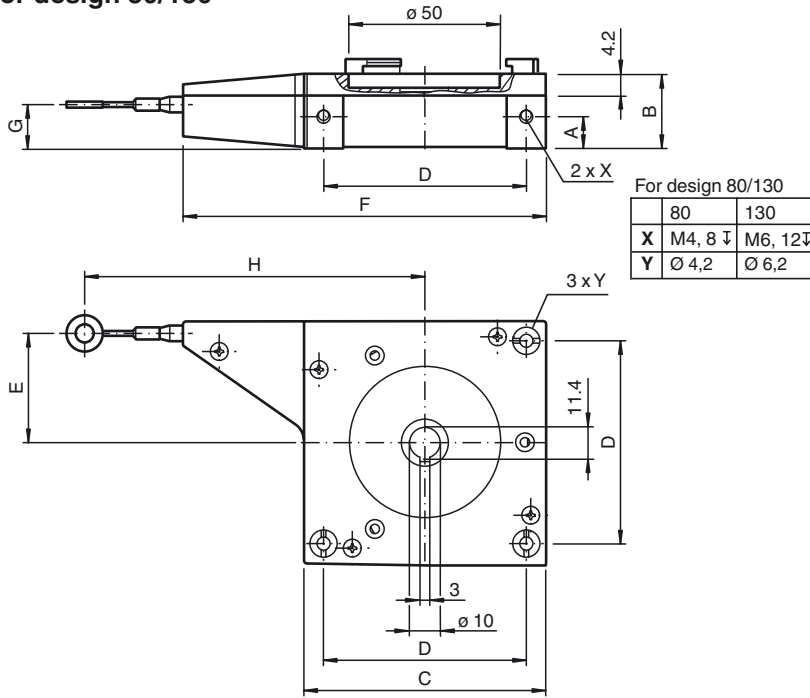
Scope of delivery	Shaft adapter for rotary encoder with shaft dimension Ø 6 mm x 10 mm up to 20 mm , adapter flange , Mounting clips , 3 x M4 x 8 bolts for mounting the adapter , Cover disk , Hexagon socket wrench, 1.3 AF
-------------------	---

Accessories

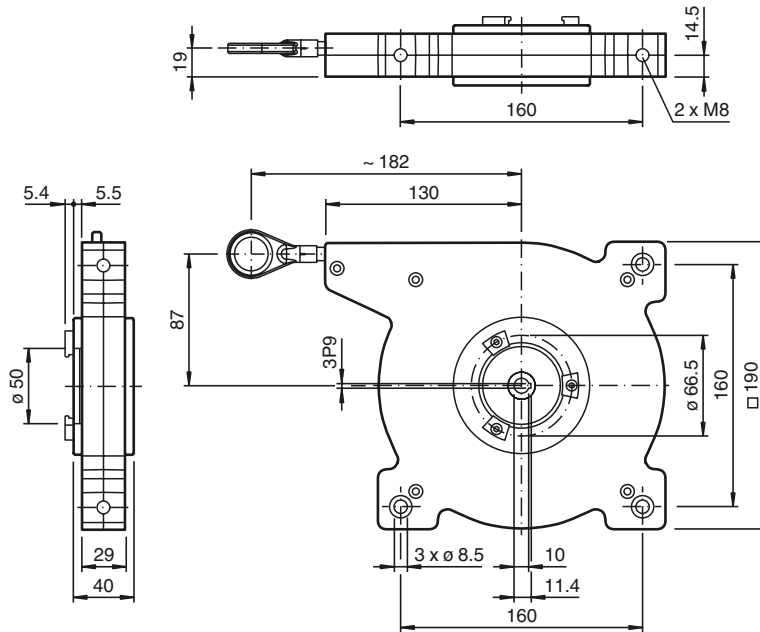
Optional accessories	#272502 SL-BCA Ball for ball joint
----------------------	--

Dimensions

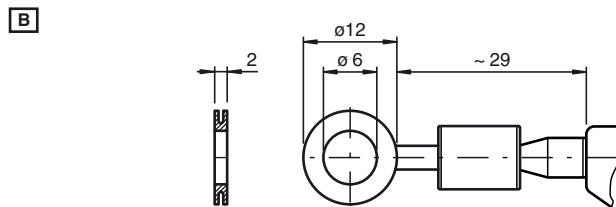
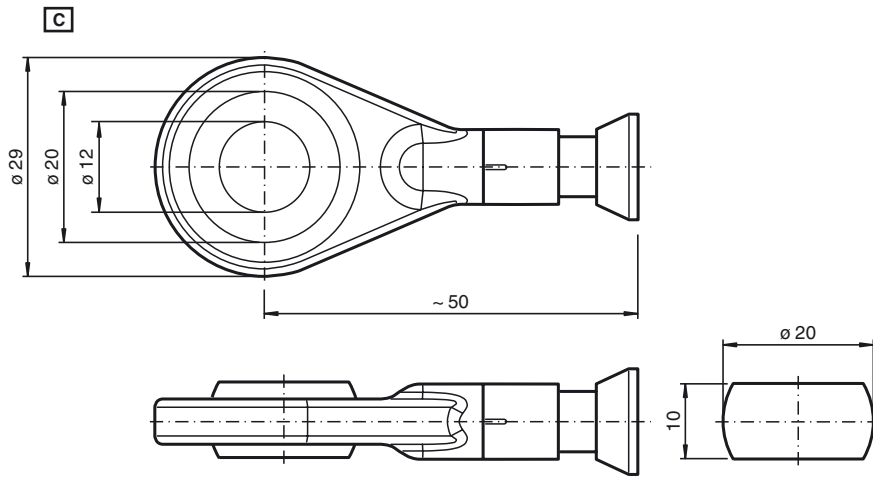
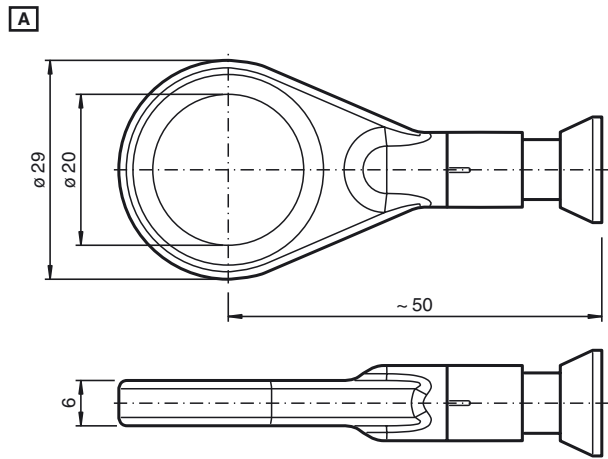
For design 80/130



For design 190



Release date: 2018-01-24 07:49 Date of issue: 2018-01-24 t174181_eng.xml



Release date: 2018-01-24 07:49 Date of issue: 2018-01-24 t174181_eng.xml

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

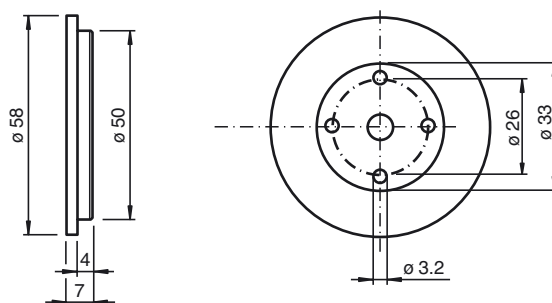
Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 4411
fa-info@de.pepperl-fuchs.com

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

X3



Variable Data and Dimensions

Technical Data	Design 80	Design 130	Design 190
Measuring length (in m)	03	05	10
Drum size (incl. cable) (in mm)	230	385	555
Repeatability	0.005%		0.3%
Hysteresis	0.1%		0.4%
Linearity	± 0.01%		± 0.5%
Retraction speed (in m/s)	6	3	4
Spring retraction force (in N)	5–6.3	4.5–7	9–12
Weight (in kg)	0.25	0.8	1.9
Dimensions (in mm)			
A	10.5	13	14.5
B	25	27	29
C	80	130	190
D	67	110	160
E	36	61	87
F	120	186	225
G	14.5	17	19
H	108	150	182

Release date: 2018-01-24 07:49 Date of issue: 2018-01-24 t174181_eng.xml

Model Number

E	C	N	1	0	T	L	-					N	P	-			
---	---	---	---	---	---	---	---	--	--	--	--	---	---	---	--	--	--

Flange type

- X1** Servo flange Ø 50 mm/42 mm/3 x M4; shaft Ø 6 mm x 10 mm
- X3** Servo flange Ø 33 mm/26 mm/4 x M3; shaft Ø 6 mm x 11.5 mm

Cable attachment

- A** Brass Ring PE (only with 10 m)
- B** Ring
- C** Ball Joint (only with 10 m)

Length of measuring cable

- 03** 3 m
- 05** 5 m
- 10** 10 m