



### Model Number

**SL3001-X1/GS80**

Cable pull

### Features

- **Direct length and position measurement**
- **High accuracy of measurement**
- **Simple installation**
- **Sturdy construction**
- **Long lifetime**

### Description

The combination of a multiturn absolute rotary encoder and a cable pull is ideal for positioning applications where easy installation and low costs are required.

Pepperl+Fuchs cable pulls incorporate a high precision measuring drum with extremely robust spring return, around which a highly flexible stainless steel is wound. The rotary movement of the measuring drum is transferred to the flanged multiturn absolute rotary encoder via a play-free coupling.

## Technical data

### General specifications

Measuring range	1000 mm
Travel speed	max. 4 m/s
Acceleration	max. 40 m/s <sup>2</sup>
Drum perimeter	200 mm
Linearity error	typ. 0.1 % / 0.5 %
Resolution	200 mm / steps per revolution of mounted encoder

### Ambient conditions

Ambient temperature	-30 ... 70 °C (-22 ... 158 °F)
Shock resistance	25 g

### Mechanical specifications

Shaft dimensions Ø x l	6 mm x 10 mm , servo flange
Rope diameter	1.35 mm
Tension force at rope	5 ... 15 N
Protection degree	IP65

### Material

Housing	anodized aluminium
Rope	Stainless steel 1.4401/316
Mass	900 g

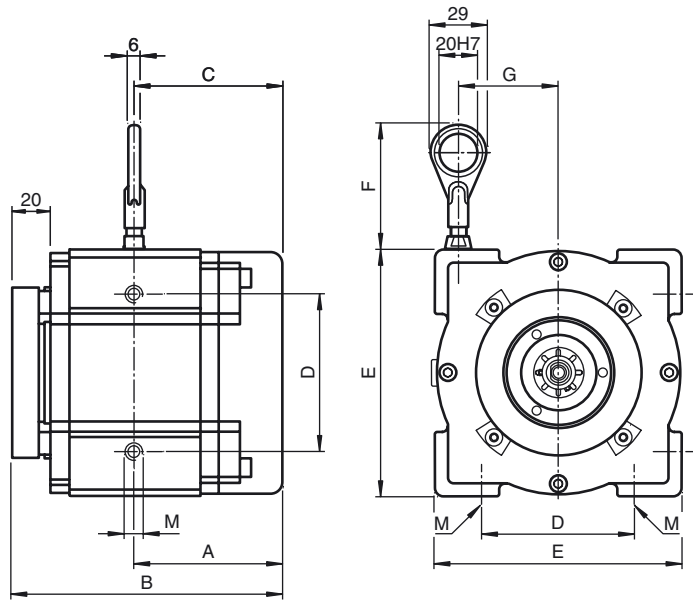
### Dimensions

A	34 mm
B	77 mm
C	34 mm
D	50 mm
E	80 mm
F	approx. 60 mm
G	31.5 mm
M	M6 x 7
Life span	10 <sup>6</sup> Cycles

### General information

Scope of delivery	Cable pull , Coupling
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**Dimensions**



**Accessories**

**SL-RP/GS80**  
Guide pulley

**Order Code**

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**Options (can be combined)**

- /F with rubber gaiter
- /DF with double spring assembly
- /HC with hard coating

**Housing width / housing height [mm]**

- 80** 80 mm x 80 mm (up to 3 m cable length)
- 130** 130 mm x 130 mm (5 m ... 30 m cable length)
- 190** 190 mm x 190 mm (from 40 m cable length)

**Encoder shaft / encoder flange**

- X1** solid shaft  $\varnothing 6$  mm x 10 mm, synchro flange
- X2** solid shaft  $\varnothing 10$  mm x 20 mm, clamping flange

**Cable length**

- 01** 1 m
- 02** 2 m
- 03** 3 m
- 05** 5 m
- 10** 10 m
- 15** 15 m
- 20** 20 m
- 25** 25 m
- 30** 30 m
- 40** 40 m
- 50** 50 m

**Example:**

SL3001-X1/GS80/F/DF/HC

Cable pull, series 30