



further accessories  
Wire draw mechanism

MRA-F080-103D2

im0045462

**Model Name** > [MRA-F080-103D2](#)  
**Part No.** > [6030125](#)

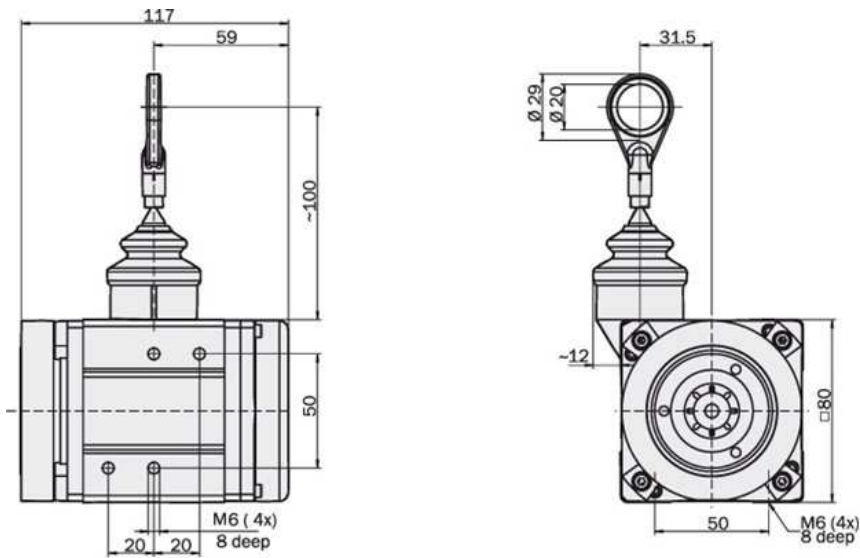
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**Technical data**

Accessory group:	Wire draw mechanism
Description:	Seilzugmechanik für Servoflansch mit 6 mm Welle, Messseildurchmesser: 1,35 mm, Lebensdauer: 1 Mio. Zyklen
Enclosure rating:	IP 50
Weight:	1.5 kg
Items supplied:	Ohne Encoder
Measuring range:	3 m
Spring return force:	≤ 6 N ... 14 N
Operating speed:	4 m/s
Drum housing:	Aluminum (anodised)
Drum diameter:	62.31 mm
Drum precision:	0.05 %
Material, spring housing:	Die-cast zinc
Number of revolutions before full pullout:	Ca. 15
Resolution:	To calculate the correct number of steps/number of encoder pulses for the required linear resolution, please click "linear resolution"
Ambient operating temperature:	-20 °C ... +70 °C

## Dimensional drawing



## Linear resolution

**Absolute encoders: determining the matching number of steps of the encoder for the required linear resolution**

$$\text{No. of encoder steps per revolution} = \frac{3.1416 \times (\text{drum diameter} + \text{wire diameter})}{\text{Linear resolution per measuring step}}$$

Example: required linear resolution 0.05 mm; wire draw mechanism 5 m

$$\text{No. of encoder steps per revolution} = \frac{3.1416 \times (105 \text{ mm} + 1.35 \text{ mm})}{0.05 \text{ mm}} = 6682$$

**Incremental encoders: determining the matching number of pulses of the encoder for the required linear resolution**

$$\text{No. of encoder pulses per revolution} = \frac{3.1416 \times (\text{drum diameter} + \text{wire diameter})}{4 \times \text{Linear resolution per measuring step}}$$

Example: required linear resolution 0.025 mm; wire draw mechanism 2 m

$$\text{No. of encoder pulses per revolution} = \frac{3.1416 \times (62.31 \text{ mm} + 1.35 \text{ mm})}{4 \times 0.025 \text{ mm}} = 2000$$

Based on the control counter evaluating the flanks of the A-B pulses.

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