



further accessories  
Wire draw mechanism

MRA-F080-102D2

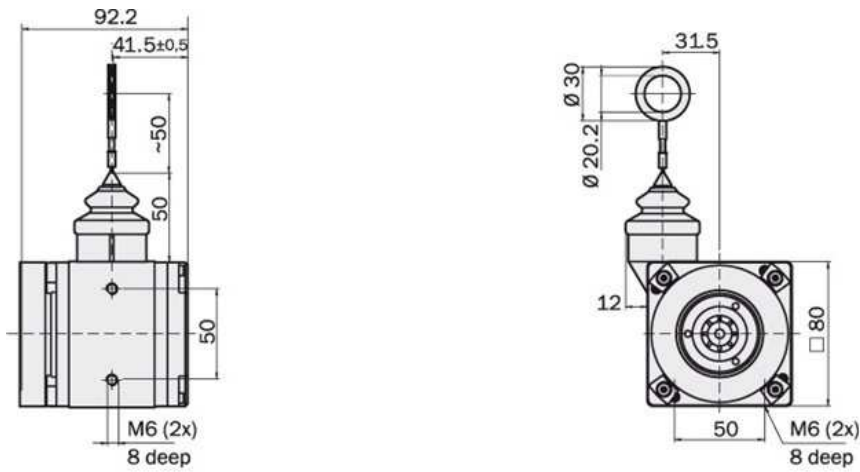
**Model Name** > [MRA-F080-102D2](#)  
**Part No.** > [6028625](#)

**Technical data**

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|--|--|
| Accessory group:                           | Wire draw mechanism  |
| Description:                               | Seilzugmechanik für Servoflansch mit 6 mm Welle, Messeildurchmesser: 1,35 mm, Lebensdauer: 1 Mio. Zyklen                               |
| Enclosure rating:                          | IP 50  |
| Weight:                                    | 1.3 kg   |
| Items supplied:                            | Ohne Encoder   |
| Measuring range:                           | 2 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. 10   |
| 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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