



# ENAPART



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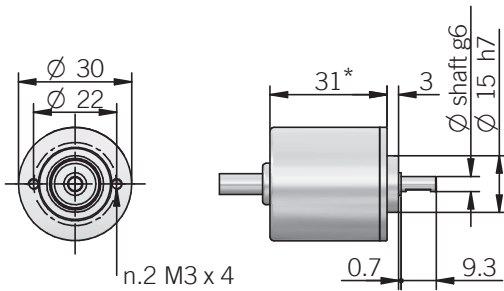
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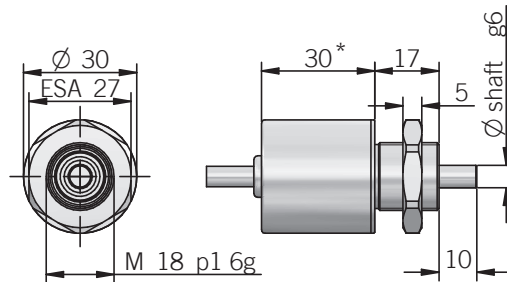


## EL - ER 30 E (axial output)



dimensions in mm

## EL - ER 30 H (axial output)



\* radial output + 2,3

## ELECTRICAL SPECIFICATIONS

|                                      |   |
|--------------------------------------|---|
| <b>Resolution</b>                    | from 1 to 2500 ppr  |
| <b>Power supply</b>                  | 5 = 4,5 ... 5,5 V DC<br>5/28 = 4,75 ... 28,6 V DC<br>8/24 = 7,6 ... 25,2 V DC (reverse polarity protection) |
| <b>Power draw without load</b>       | 800 mW  |
| <b>Max load current</b>              | N / C / P / PC = 50 mA / channel<br>L / RS = 20 mA / channel  |
| <b>Output type*</b>                  | NPN / NPN open collector / push-pull / line driver  |
| <b>Max output frequency</b>          | 100 kHz EL series<br>220 kHz ER series  |
| <b>Counting direction</b>            | A leads B clockwise (shaft view)  |
| <b>Electromagnetic compatibility</b> | IEC 61000-6-2<br>IEC 61000-6-4  |

\*output levels according to power supply, for further details please see under Technical basics section

## EL SERIES RESOLUTIONS

1 - 10 - 20 - 25 - 50 - 60 - 64 - 150

## ER SERIES RESOLUTIONS

100 - 128 - 200 - 250 - 256 - 300 - 360 - 400 - 500 - 512 - 600 - 625 - 720 - 800 - 1000 - 1024 - 1200 - 1250 - 1440 - 1600 - 2000 - 2048 - 2500

please directly contact our offices for other pulses, preferred resolutions in bold

## CONNECTIONS

| Function | Cable output<br>N / C / P / PC | Cable output<br>Line driver |
|----------|--------------------------------|-----------------------------|
| +V DC    | red                            | red                         |
| 0 V      | black                          | black                       |
| Ch. A    | green                          | green                       |
| Ch. A-   | /                              | brown                       |
| Ch. B    | yellow                         | yellow                      |
| Ch. B-   | /                              | orange                      |
| Ch. Z    | blue                           | blue                        |
| Ch. Z-   | /                              | white                       |
| ⊥        | shield                         | shield                      |

## MECHANICAL SPECIFICATIONS

|   |  |
|---|--|
| <b>Shaft diameter</b>                         | ∅ 4 / 6 mm   |
| <b>Enclosure rating</b>                       | IP 54 (IEC 60529)  |
| <b>Max rotation speed</b>                     | 3000 rpm   |
| <b>Max shaft load</b>                         | 5 N axial / radial   |
| <b>Shock</b>                                  | 50 G, 11 ms (IEC 60068-2-27)   |
| <b>Vibration</b>                              | 10 G, 10 ... 2000 Hz (IEC 60068-2-6)   |
| <b>Moment of inertia</b>                      | 0,05 x 10 <sup>-6</sup> kgm <sup>2</sup>   |
| <b>Starting torque<br/>(at +20°C / +68°F)</b> | < 0,005 Nm   |
| <b>Body material</b>                          | EN-AW 2011 aluminum  |
| <b>Shaft material</b>                         | 1.4305 / AISI 303 stainless steel  |
| <b>Housing material</b>                       | PA66 glass fiber reinforced  |
| <b>Bearings</b>                               | 2 ball bearings  |
| <b>Bearings life</b>                          | 10 <sup>9</sup> revolutions  |
| <b>Operating temperature</b>                  | -10° ... +60°C (+14° ... +140°F) EL series<br>-25° ... +85°C (-13° ... +185°F) ER series |
| <b>Storage temperature</b>                    | -25° ... +85°C (-13° ... +185°F)   |
| <b>Weight</b>                                 | 70 g (2,47 oz)   |