

EN580E.IL-SU06.GA1H1.04096.K

Solid shaft with synchro flange, 4096 pulses per revolution

Article number: 11246003

Overview

- Size ø58 mm
- Precise optical sensing
- Output signal level HTL
- Pulses per revolution 4096
- High connection flexibility thanks to flexible connector M12



Technical data

Technical data - electrical ratings

| | |
|-----------------------------|-----------------------------|
| Voltage supply | 8...30 VDC |
| Reverse polarity protection | Yes |
| Short-circuit proof | Yes |
| Consumption w/o load | ≤70 mA |
| Pulses per revolution | 4096 |
| Phase shift | 90 ° ±10° |
| Duty cycle | 40...60 % |
| Reference signal | Zero pulse, width 90° ±10 % |
| Sensing method | Optical |
| Output frequency | ≤160 kHz (HTL) |
| Output signals | A+, B+, R+, A-, B-, R- |
| Output stages | HTL/push-pull |
| Interference immunity | EN 61000-6-2 |
| Emitted interference | EN 61000-6-4 |
| Approval | UL Class 2 |

Technical data - mechanical design

| | |
|-----------------------|-----------------------------------------------------------------------------|
| Size (flange) | ø58 mm |
| Shaft type | ø6 x 10 mm, solid shaft with flat |
| Admitted shaft load | ≤40 N axial ≤80 N radial |
| Flange | Synchro flange |
| Protection EN 60529 | IP 54 (flange side) IP 65 (housing side) |
| Operating speed | ≤6000 rpm (+25 °C) |
| Starting torque | ≤0.02 Nm |
| Material | Housing: aluminium Solid shaft: stainless steel |
| Operating temperature | -25...+100 °C (see general information) |
| Relative humidity | 95 % non-condensing |
| Resistance | EN 60068-2-6 Vibration 30 g, 10-2000 Hz EN 60068-2-27 Shock 100 g, 11 ms |
| Connection | Connector M12, 8-pin, flexible |
| Weight approx. | 300 g |

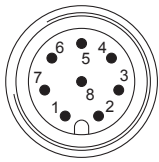
General information

Self-heating correlated to installation and ambient conditions as well as to electronics and supply voltage must be considered for precise thermal dimensioning. Operating the encoder close to the maximum limits requires measuring the real prevailing temperature at the encoder flange.

Terminal assignment

Connector M12, 8-pin

| Pin | Assignment |
|-----|------------|
| 1 | 0 V |
| 2 | +Vs |
| 3 | A+ |
| 4 | A- |
| 5 | B+ |
| 6 | B- |
| 7 | R+ |
| 8 | R- |



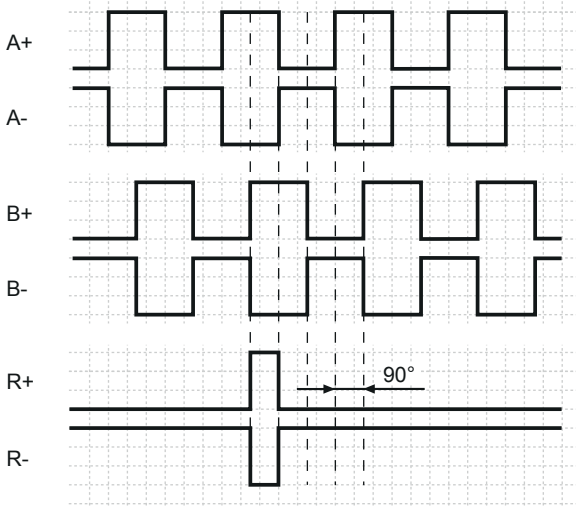
Trigger level

| Outputs | TTL/RS422 |
|-------------------|----------------------|
| Output level High | $\geq 2.5 \text{ V}$ |
| Output level Low | $\leq 0.5 \text{ V}$ |
| Load | $\leq 20 \text{ mA}$ |

| Outputs | HTL/Push-pull |
|-------------------|--------------------------|
| Output level High | $\geq U_B - 3 \text{ V}$ |
| Output level Low | $\leq 1.5 \text{ V}$ |
| Load | $\leq 20 \text{ mA}$ |

Output signals

Clockwise rotating direction when looking at flange.

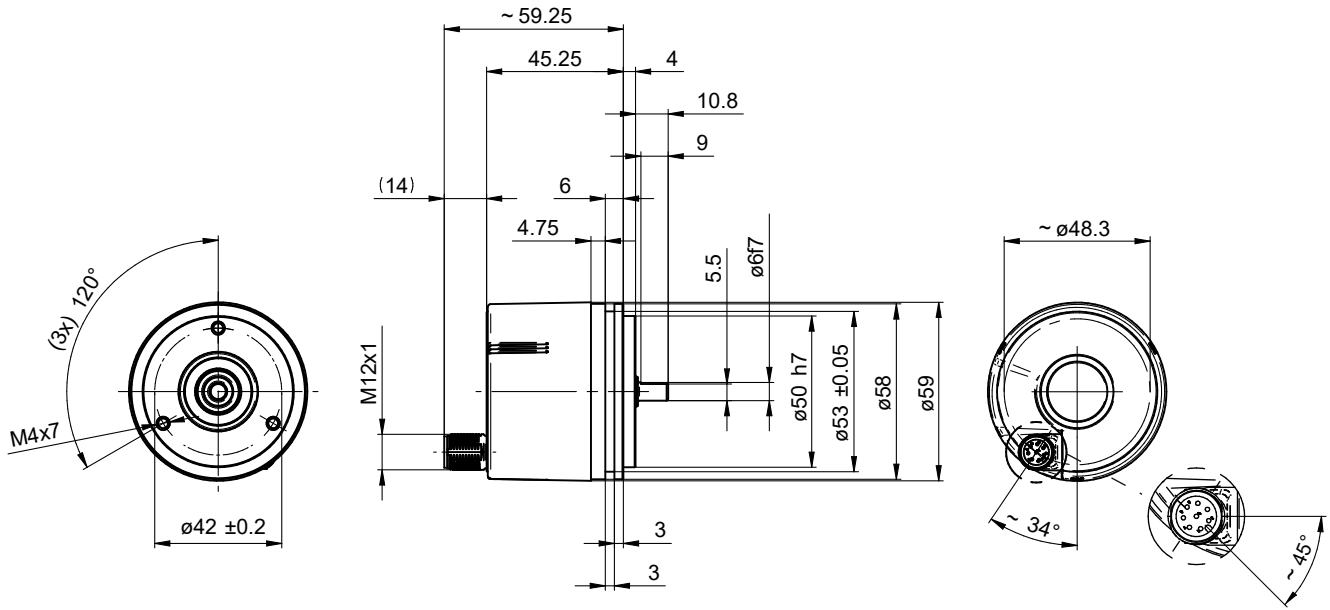


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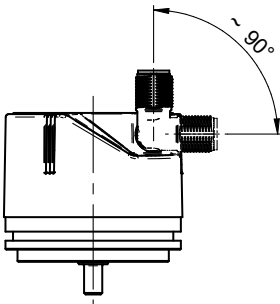
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Dimensions



Synchro flange, connector M12



Synchro flange, flexible connector M12

Accessories**Mounting accessories**

| | |
|----------|---------------------------------------------------------------|
| 11050507 | Bellows coupling aluminium/stainless steel D1=06 / D2=10 |
| 11065922 | Coupling CPS25 L=19 d1=10/d2=06 |
| 11065916 | Coupling CPS25 L=19 d1=06/d2=06 |
| 10141132 | Spring washer coupling D1=6 / D2=10 |
| 10141131 | Spring washer coupling D1=6 / D2=6 |
| 11069333 | Coupling CPS37 L=24 d1=06/d2=06 |
| 11069337 | Coupling CPS37 L=24 d1=10/d2=06 |
| 11065545 | Set of eccentric fixings type A |
| 10117667 | Mounting adaptor for encoders with synchro flange (Z 119.015) |