

# EN580E.IL-SU06.GA1S1.01024.K

Solid shaft with synchro flange, 1024 sinewave cycles per revolution

Article number: 11246007

## Overview

- Size  $\varnothing 58$  mm
- Precise optical sensing
- Output signal level SinCos
- Sinewave cycles per revolution 1024
- High connection flexibility thanks to flexible connector M12



## Technical data

### Technical data - electrical ratings

Voltage supply	5 VDC $\pm 5$ %
Reverse polarity protection	Yes
Short-circuit proof	Yes
Consumption w/o load	$\leq 70$ mA
Sinewave cycles per revolution	1024
Phase shift	$90^\circ \pm 10^\circ$
Sensing method	Optical
Output frequency	$\leq 180$ kHz (-3 dB)
Output signals	A+, B+, R+, A-, B-, R-
Output stages	SinCos 1 Vpp
Interference immunity	EN 61000-6-2
Emitted interference	EN 61000-6-4
Approval	UL-Listing: E217823

### Technical data - mechanical design

Size (flange)	$\varnothing 58$ mm
Shaft type	$\varnothing 6 \times 10$ mm, solid shaft with flat

### Technical data - mechanical design

Admitted shaft load	$\leq 40$ N axial $\leq 80$ N radial
Flange	Synchro flange
Protection EN 60529	IP 54 (flange side) IP 65 (housing side)
Operating speed	$\leq 6000$ rpm (+25 °C)
Starting torque	$\leq 0.02$ 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 $\pm 0.75$ mm - 10-58 Hz, 20 g - 58-2000 Hz EN 60068-2-27 Shock 100 g, 11 ms
Connection	Connector M12, 8-pin, flexible
Weight approx.	300 g

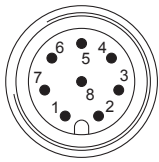
**General information**

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**

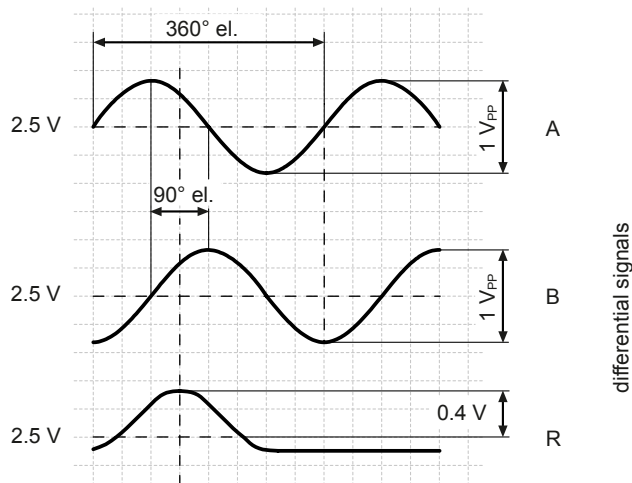
**Connector M12, 8-pin**

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



**Output signals**

Clockwise rotation when looking at flange.



**Output signal level**

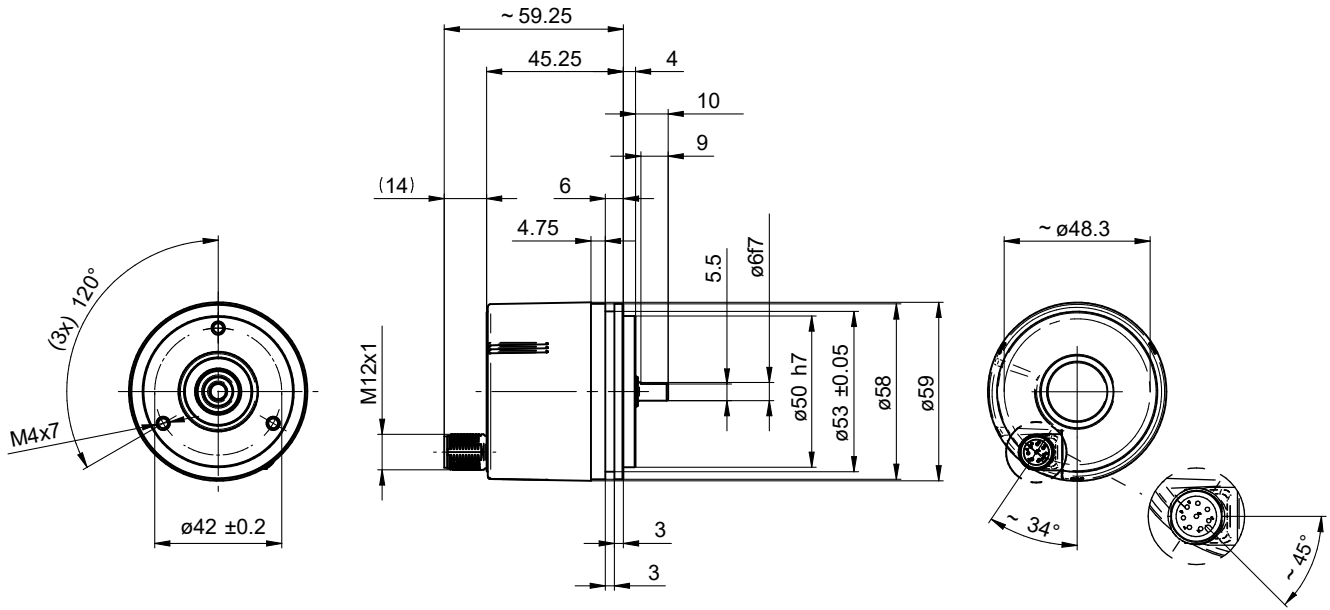
Outputs	Sine
Output amplitude A + B	1 V <sub>ss</sub> at Z <sub>0</sub> = 120 Ω
Output amplitude R	Appr. 0.4 V (useable part) at Z <sub>0</sub> = 120 Ω

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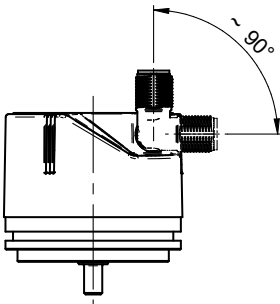
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## Dimensions



Synchro flange, connector M12



Synchro flange, flexible connector M12

**Accessories****Mounting accessories**

11050507	Bellows coupling (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
10117668	Set of eccentric fixings for mounting clamp (10117667)