

# EN580E.IL-SU06.GA1H1.02048.K

Solid shaft with synchro flange, 2048 pulses per revolution

Article number: 11246002

## Overview

- Size ø58 mm
- Precise optical sensing
- Output signal level HTL
- Pulses per revolution 2048
- 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	2048
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-Listing: E217823

### 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-



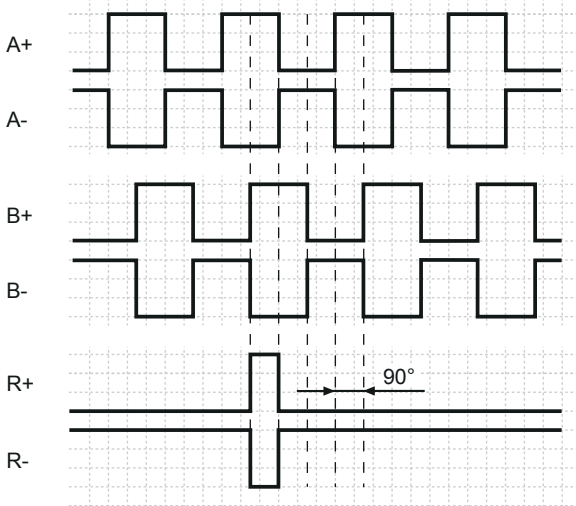
**Trigger level**

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.

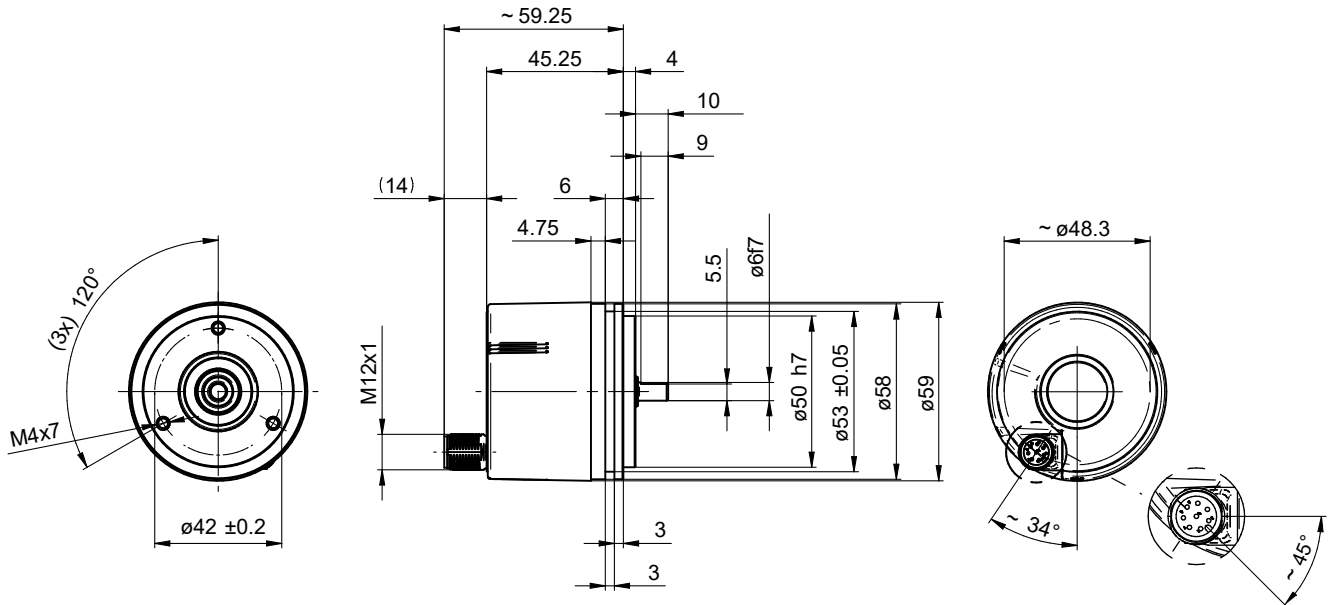


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## Dimensions



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)