

## ExEIL580-SY

Solid shaft with synchro flange

每圈100至5000个脉冲

### 产品一览

- 尺寸 $\varnothing$ 58 mm
- 精确的光电感应
- 户外保护盒 TTL 或 HTL
- Synchro flange
- 轴向·径向或切向连接
- 每圈脉冲数高达5000
- 极强的抗冲击和抗振动性
- 选项0122, 通过22区防爆认证



### 技术数据

#### 技术数据 – 电气参数

电源电压	5 VDC $\pm$ 5% 8...30 VDC 4.75...30 VDC
反极性保护	是
短路保护	是 (HTL) 是 (TTL · 最长1秒和1个信号)
电流消耗 (无负载)	$\leq$ 70 mA
每圈脉冲数	100 ... 5000
相移	$90^\circ \pm 10^\circ$
占空比	40...60 %
参考信号	零脉冲 · 宽度 $90^\circ \pm 10\%$
感应原理	光电
输出频率	$\leq$ 300 kHz (TTL) $\leq$ 160 kHz (HTL)
输出信号	A+ · B+ · R+ · A- · B- · R-
输出方式	TTL/RS422 HTL/推挽式
抗干扰性	EN 61000-6-2
辐射干扰	EN 61000-6-3

#### 技术数据 – 机械参数

尺寸 (法兰)	$\varnothing$ 58 mm
轴类型	$\varnothing$ 6 x 10 mm · 实心轴带紧固面

#### 技术数据 – 机械参数

允许轴负载	$\leq$ 40 N 轴向 $\leq$ 80 N 径向
法兰	同步法兰
防护等级 (EN 60529)	IP 65
运行速度	$\leq$ 12000 rpm (+20 °C) $\leq$ 11000 rpm (+40 °C) $\leq$ 8000 rpm (+60 °C)
启动转矩	$\leq$ 0,015 Nm (+20 °C)
材质	外壳: 压铸铝 法兰: 铝 实心轴: 不锈钢
环境温度	-20...+60 °C
相对湿度	90% (不结露)
耐抗性	EN 60068-2-6 抗振动30 g · 10-2000 Hz EN 60068-2-27 抗冲击300 g · 6 ms
防爆认证	II 3 D Ex tc IIIC T135°C Dc X (粉尘): 特殊条件 "X"
连接	M12 法兰接头 · 8针 M23 法兰接头 · 12针 电缆
近似重量	300 g

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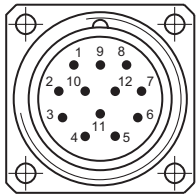
## 端子定义

### Flange connector M23, 12-pin / cable

Pin	Core color	Assignment
1	pink	B-
2	—	—
3	blue	R+
4	red	R-
5	green	A+
6	yellow	A-
7	—	—
8	grey	B+
9	—	—
10	white	GND
11	—	—
12	brown	UB

Screen: Connected to housing

Cable data: PVC, [4x2x0.14 mm<sup>2</sup>], bending radius >32.5 mm, outer diameter 6.5 mm



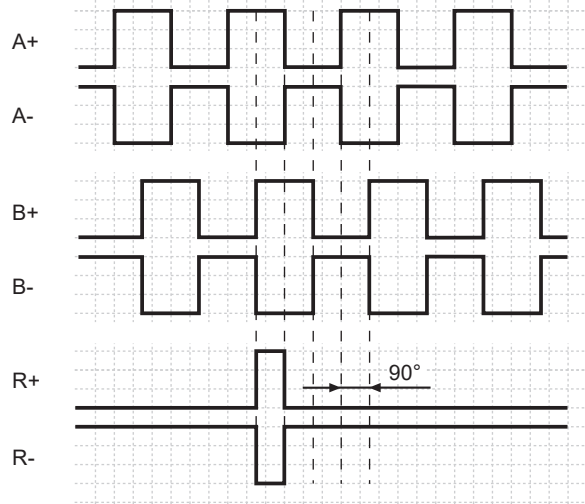
### Flange connector M12, 8-pin

Pin	Assignment
1	GND
2	UB
3	A+
4	A-
5	B+
6	B-
7	R+
8	R-



## 输出信号

Clockwise rotating direction when looking at flange.



## 触发电平

Outputs	TTL/RS422
Output level High	≥2.5 V
Output level Low	≤0.5 V
Load	≤20 mA

Outputs	HTL/Push-pull
Output level High	≥UB -3 V
Output level Low	≤1.5 V
Load	≤20 mA

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## 防爆认证

 II 3 D Ex tc IIIC T135°C Dc X (dust)

### General- and Special conditions „X“:

#### Only put the device into operation if ...

- all necessary precautions have been taken by the operator to make sure device and connector are fully protected against mechanical impacts or shocks in compliance with EN 60079-0, section 26.4.2 (Special conditions „X“).
- the connection is mechanically or electrically secured to prevent any interrupt while the contact is live (Special conditions „X“).
- it has been ensured the electrical connection of product variants with cable outlet or cable couplings is outside zone 22 (Special conditions „X“).
- it has been ensured the maximum operating speed in relation to the ambient temperature is within the specifications on the table „Maximum rotation speed below“ (Special conditions „X“).
- the specifications on the product label match the on-site conditions for use in hazardous areas (EX) (device group, category, zone, temperature class resp. maximum surface temperature).
- the specifications on the product label comply with the prevailing grid conditions.
- the device shows no visible trace of damage (resulting from transport or storage), and
- it has been ensured no explosive atmosphere, oils, acids, gases, vapors, radiation etc. are present during installation.

Observe standard EN 60079-14 for installation and commissioning.

**Device operation must observe the installation and operating instructions. The intended use and application of the device comes under the relevant legislation as well as applicable directives and standards.**

### Maximum rotation speed

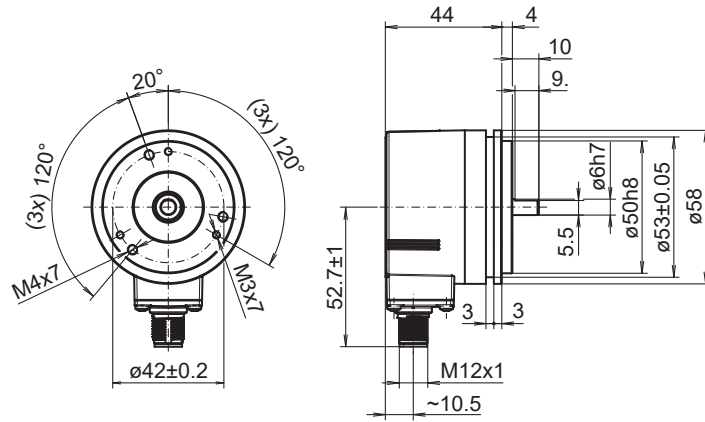
	ambient temperature	rotation speed
solid shaft	20 °C	≤ 12000 rpm
	40 °C	≤ 11000 rpm
	60 °C	≤ 8000 rpm
through hollow shaft	20 °C	≤ 6000 rpm
	40 °C	≤ 4500 rpm
	60 °C	≤ 2500 rpm
blind hollow shaft	20 °C	≤ 8000 rpm
	40 °C	≤ 8000 rpm
	60 °C	≤ 5000 rpm

# ExEIL580-SY

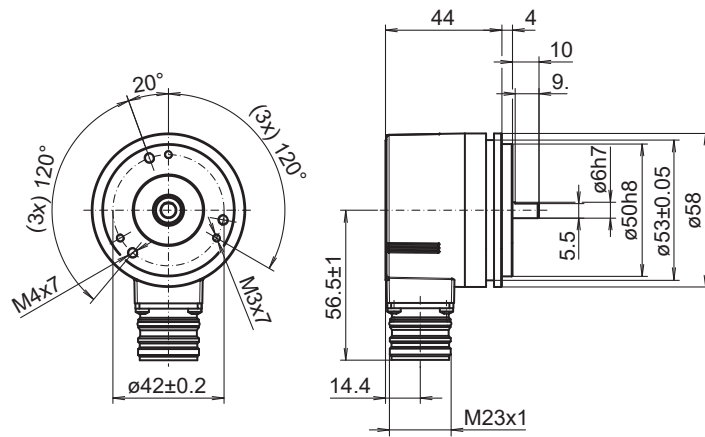
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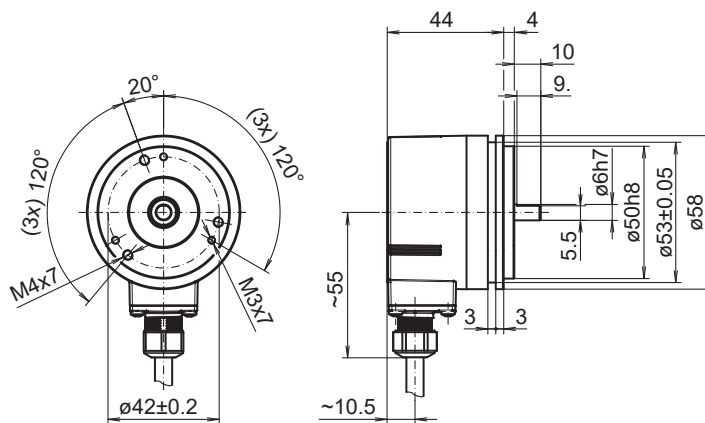
尺寸



同步法兰 · 法兰接头M12, 径向



M23接头 · 径向



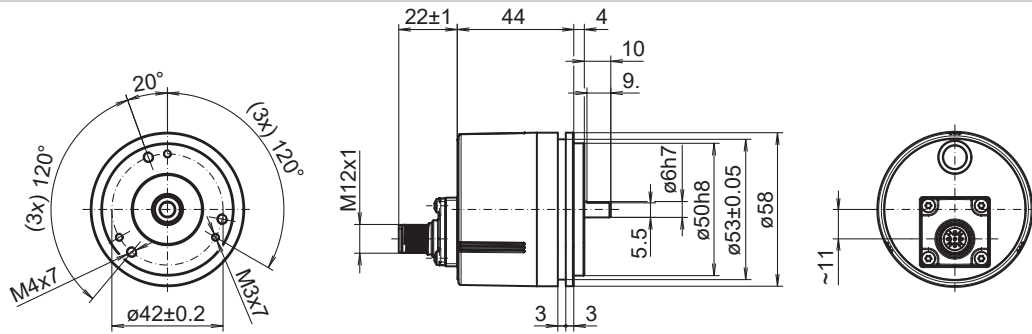
径向电缆出线

# ExEIL580-SY

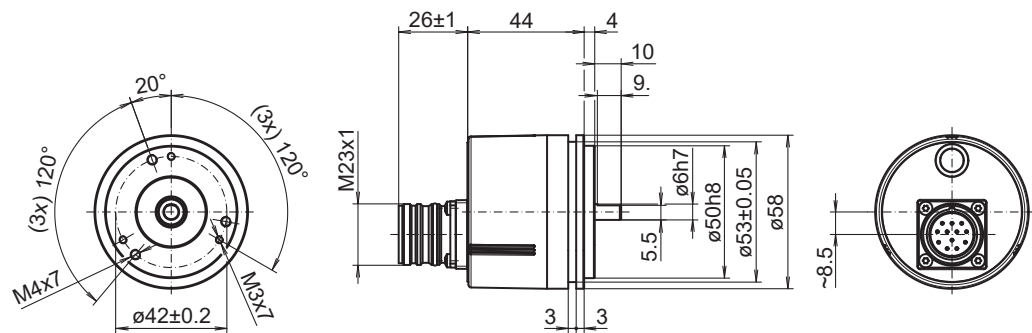
Solid shaft with synchro flange

每圈100至5000个脉冲

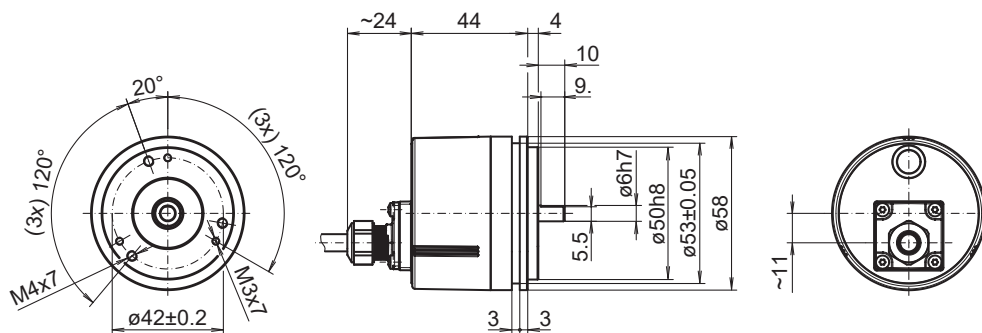
尺寸



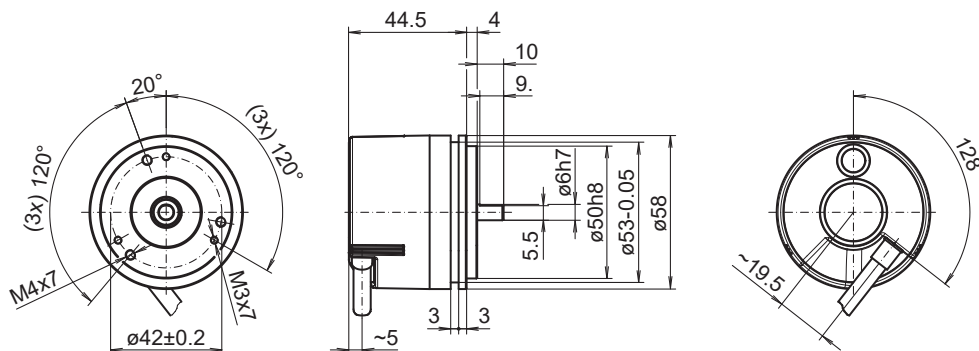
同步法兰·法兰接头M12, 轴向



M23接头·径向



轴向电缆出线



切向电缆出线

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**订货资料**

	ExEIL580	-	S	Y	##	.	5	##	#	.	####	.	F	/	0122
<b>Product</b>	ExEIL580														
<b>Shaft type</b>	Solid shaft			S											
<b>Flange (shaft)</b>	Synchro flange, centering collar ø50 x 4 mm, flute ø53 mm, pitch circle diameter ø42 - 3xM3/3xM4			Y											
<b>Shaft</b>	ø6 x 10 mm, with flat						06								
	ø3/8 x 4/5 (Ø9.525 x 20.32 mm), with flat						U3								
<b>Protection class</b>	IP 65														5
<b>Connection</b>	Flange socket axial, M12, 8-pin, male contacts, CCW														A
	Flange socket radial, M12, 8-pin, male contacts, CCW														B
	Flange socket axial, M23, 12-pin, male contacts, CCW														D
	Flange socket radial, M23, 12-pin, male contacts, CCW														F
	Cable radial, 2 m														L
	Cable tangential, 1 m														P
	Cable tangential, 2 m														Q
	Cable radial, 1 m														R
	Cable axial, 1 m														T
	Cable axial, 2 m														U
<b>Voltage supply / output</b>	5 VDC, TTL/RS422, 6 channel														E
	8...30 VDC, TTL/RS422, 6 channel (Vout=5V)														H
	8...30 VDC, HTL/push pull, 6 channel														N
	4,75...30 VDC, HTL/push pull, 6 channel (Vout=Vin)														Q

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### 订货资料

ExEIL580 - S Y ## . 5 ## # . ##### . F / 0122

#### Pulse number

100	100
120	120
150	150
200	200
250	250
256	256
300	300
360	360
400	400
500	500
512	512
600	600
720	720
800	800
900	900
1000	1000
1024	1024
1200	1200
1250	1250
1440	1440
1500	1500
1800	1800
2000	2000
2048	2048
2500	2500
3000	3000
3600	3600
4000	4000
4096	4096
5000	5000

#### Operating temperature

-20...+60 °C

F

#### Optionen BT

ATEX Zone 22

0122

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### 附件

#### 安装附件

11065916	联轴器 CPS25 L=19 d1=06/d2=06
11065917	联轴器 CPS25 L=19 d1=06/d2=08
11065922	联轴器 CPS25 L=19 d1=10/d2=06
11065926	联轴器 CPS25 L=19 d1=11/d2=06
11065928	联轴器 CPS25 L=19 d1=12/d2=06
10141131	弹簧垫圈联轴器 D1=6 / D2=6 (Z 121.C02)
10141132	弹簧垫圈联轴器 D1=6 / D2=10 (Z 121.C01)
11034139	弹簧垫圈联轴器 D1=6 / D2=16 (Z 121.C05)
11050507	铝制/不锈钢波纹管联轴器 D1=06 / D2=10
10117667	同步法兰型编码器用安装适配器 (Z 119.015)
10117668	用于夹紧安装的偏心紧固件组合 (10117667) · 配 3个偏心紧固件 (含螺栓和螺母)
11065545	偏心紧固件组合 ( A型 )
10158124	同步法兰型编码器用轴承法兰 (Z 119.035)