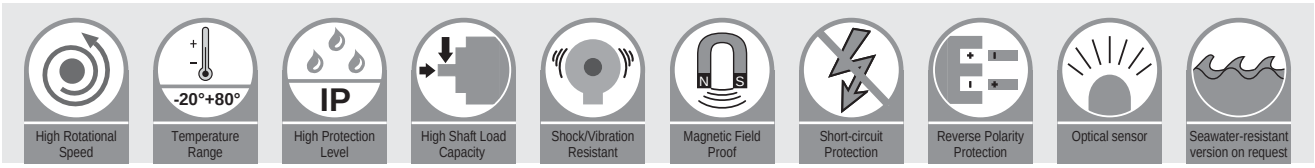
Incremental Encoders

Stainless-Steel 11-58SS

- Resistence to salt mist (IEC 60068-2-11) succeeded
- EHEDG: Tested hygienic design
- Highest mechanical saftey
- High resolution up to 25000 ppr
- Wide temperature range from -20°C up to +80°C



Highlight:

- 58 mm outer diameter, standard flanges
- Rugged stainless-steel housing
- Radial shaft sealing ring with no dead-room (PTFE)
- Resistence to salt mist (IEC 60068-2-11) succeeded
- High protection rating IP67 all around and IP69K(high pressure / steam cleaning)
- High pulse frequency up to 2 MHz

Mechanical characteristics	
Max. Speed	3600 rpm
Starting torque	≤ 1 Ncm (at 20 ℃)
Moment of intertia	≤ 20 gcm²
Shaft load capacity	Radial 100 N; Axial 100 N
Weight	Approx. 0.600 kg
Protection acc. to EN 60 529	IP 67 and IP69K
Working temperature range	--20 ℃ ... 80 ℃
Materials	Shaft/Flange/Housing:
	Stainless Steel V4A
Shock resistance acc. to EN 60068-2-29	1000 m/s^2 (6 ms)
Vibration resistance acc. to EN 60068-2-6	50 m/s^2 (10-2000 Hz)

SinCos Interface Electrical characteristics	
Output circuit	SinCos (1Vpp)
Power supply	5 VDC
Power consumption with inverted signal	max. 100 mA
Frequency	≤100 kHz
Permissible load / channel	Min. 120 Ohm
Short circuit protection	yes
Reverse polarity protection	no
UL approval	yes
CE compliant acc. to	EN 61326-1:2006; EN 61000-6-2:2006 ;
	EN 61000-6-3:2007

Electrical characteristics			
Output circuit	RS422	Push-pull	Push-pull(7272)
Power supply	5 VDC or 10 ... 30 VDC	10 ... 30 VDC	5 ... 30 VDC
Power consumption (no load)	Max. 70 mA*	Max. 70 mA*	Max. 70 mA*
Permissible load / channel	Max. 40 mA	Max. 40 mA	Max. 40 mA
Pulse frequency	Max. 200 kHz**	Max. 200 kHz**	Max. 200 kHz**
Signal level High	Min. 2.5 V	Min. U - 2.5V	Min. U - %10U
Signal level Low	Max. 0.5 V	Max. 2.5 V	Max. 2.5 V
Rising edge time tr	Max. 200 ns	Max. 1 µs	Max. 1 µs
Falling edge time tf	Max. 200 ns	Max. 1 µs	Max. 1 µs
Short circuit protection	yes	yes	no
Reverse polarity protection	no;10 ... 30 VDC yes	yes	yes
UL approval	yes	yes	yes
CE compliant acc. to	EN 61326-1:2006; EN 61000-6-2:2006 ; EN 61000-6-3:2007		

*: 100 mA when resolution ⩾ 10000ppr **: 2MHz when resolution ⩾ 10000ppr

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Terminal assignment

Signal	Ub	GND	A	$\overline{A}$	B	$\overline{B}$	Z	$\overline{Z}$	Shield
Cable（Colour）	BN	WH	GN	RD	YW	BK	GY	VT	Shield

Order Code
Shaft Version

11-58SS-X X X X-X X X X
Type ⓐ ⓑ ⓒ ⓓ ⓔ

ⓐ Flange
2 = Clamping flange，IP67

ⓑ Shaft
5 = ø 10 x 20 mm

ⓒ Output circuit / Power supply
1 = RS422 (with inverted signal) / 5 VDC
2 = RS422 (with inverted signal) / 10 ... 30 VDC
3 = Push-pull (without inverted signal) / 10 ... 30VDC
4 = Push-pull 7272 (with inverted signal)/ 5 ... 30 VDC
（Only for equal or less than 2500ppr）
5 = Push-pull (with inverted signal) / 10 ... 30VDC
6 = SinCos, 1Vpp (with inverted signal) / 5VDC

ⓓ Type of connection
1 = Axial cable, 2m(TPE)
2 = Radial cable, 2m

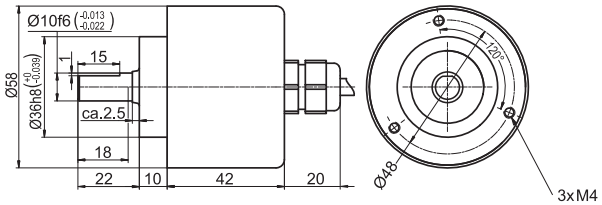
ⓔ Pulse rate
2,5,15,20,25, ... 100,120, ... 500,512, 600,720, ... 1000,1024,1200,1250, ... 3600,4096,5000, ... 10000, 12500, 20000,25000

1 Vpp Sin/Cos: 1024 2048

Other pulse rates on request

Dimensions

Shaft encoder：
Clamping flange，Ø 10 mm shaft，type of connection 1



Clamping flange，Ø 10 mm shaft，type of connection 2