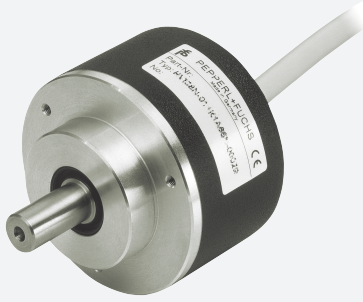


Incremental rotary encoder

RVS58N-*****Z



- Industrial standard housing Ø58 mm
- 1024 or 2048 signal periods
- Servo or clamping flange
- Temperature compensated, interpolateable voltage signals



Function

Compatibility says it all for this incremental rotary encoder.

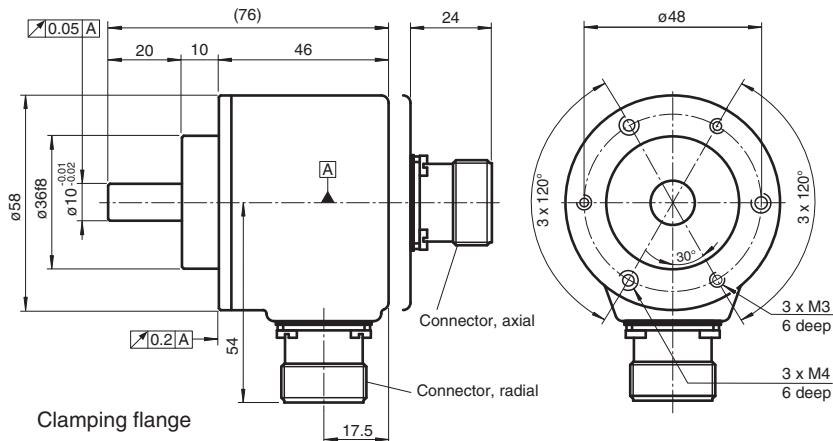
The RVS58 provides sinusoidal / cosinusoidal signals at a resolution of up to 2.048 signal periods per revolution. All six output channels are fitted for this incremental rotary encoder. It can thus be used universally in many different applications.

Focussing on the designs that are most often required has allowed us to offer rapid availability at an attractive price.

This incremental rotary encoder is available either in clamping flange design with a shaft 10 mm in diameter x20 mm or in servo flange design with a shaft 6 mm in diameter x10 mm.

The electrical connection is made by a 12-pin round plug connector. It is also possible to obtain a version with a cable connector.

Dimensions



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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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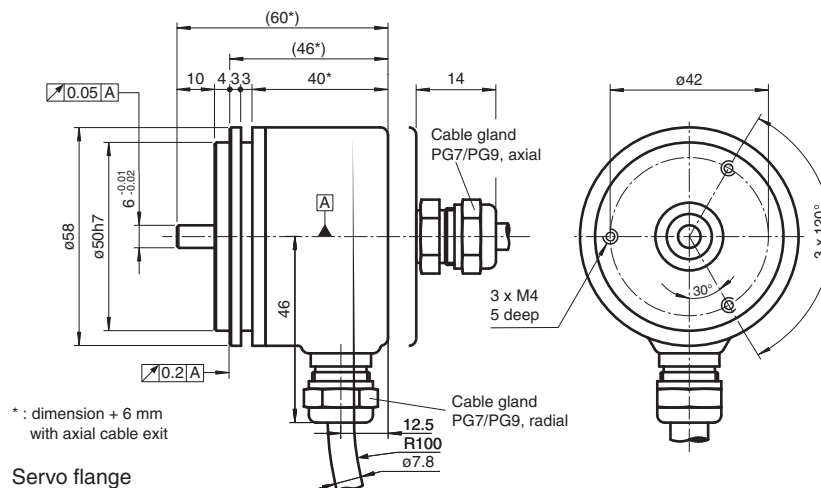
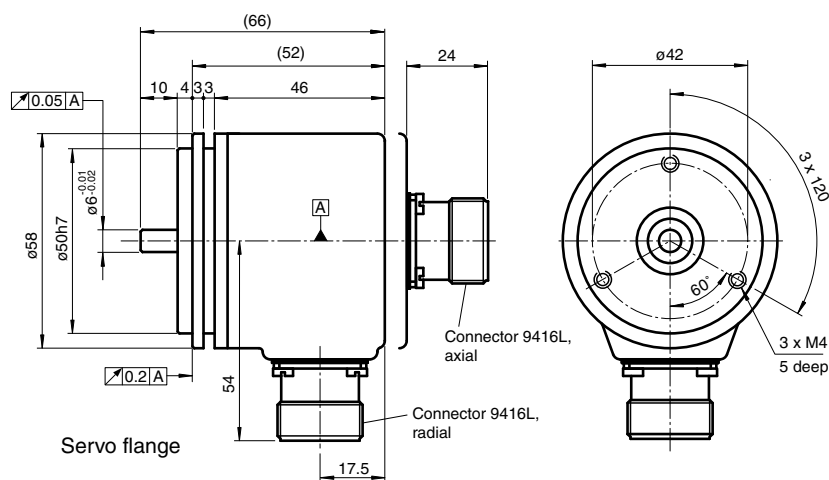
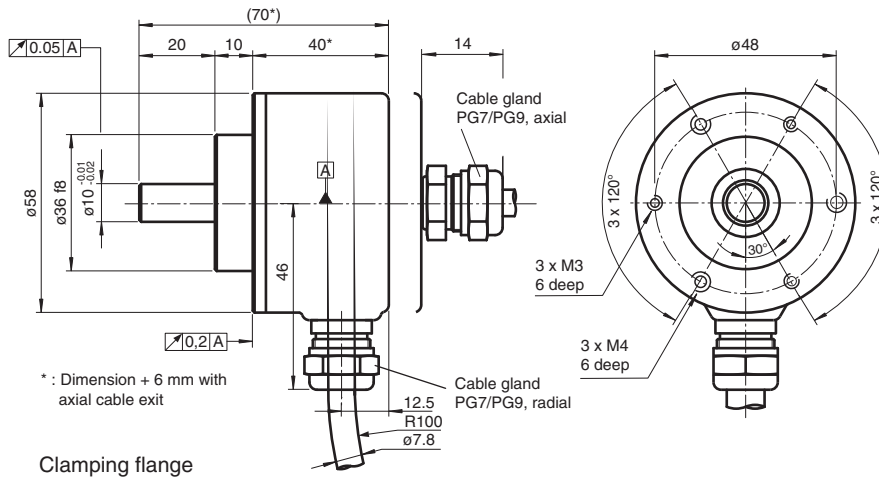
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PEPPERL+FUCHS

Dimensions



Technical Data

General specifications

Detection type	photoelectric sampling
Pulse count	1024 and 2048

Functional safety related parameters

MTTF _d	1060 a
Mission Time (T _M)	20 a
L _{10h}	70 E+9 at 6000 rpm
Diagnostic Coverage (DC)	0 %

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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PEPPERL+FUCHS

Technical Data

Electrical specifications

Operating voltage	U_B	5 V $\pm$ 5 %
No-load supply current	I_0	max. 70 mA

Output

Output type		sine / cosine
Amplitude		1 V _{ss} $\pm$ 10 %
Load current		max. per channel 20 mA , short-circuit protected, reverse polarity protected
Output frequency		max. 200 kHz (3 dB limit)

Connection

Connector		type 9416 (M23), 12-pin, type 9416L (M23), 12-pin
Cable		Ø7.8 mm, 6 x 2 x 0.14 mm ² , 1 m

Standard conformity

Degree of protection		DIN EN 60529, IP65
Climatic testing		DIN EN 60068-2-78 , no moisture condensation
Emitted interference		EN 61000-6-4:2007/A1:2011
Noise immunity		EN 61000-6-2:2005
Shock resistance		DIN EN 60068-2-27, 100 g, 3 ms
Vibration resistance		DIN EN 60068-2-6, 10 g, 10 ... 2000 Hz

Approvals and certificates

UL approval		cULus Listed, General Purpose, Class 2 Power Source
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Ambient conditions

Operating temperature		-5 ... 80 °C (23 ... 176 °F) , movable cable -20 ... 80 °C (-4 ... 176 °F), fixed cable
Storage temperature		-40 ... 100 °C (-40 ... 212 °F)

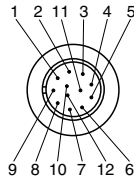
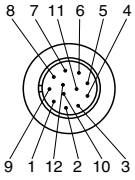
Mechanical specifications

Material		
Housing		powder coated aluminum
Flange		aluminum
Shaft		Stainless steel
Mass		approx. 350 g
Rotational speed		max. 12000 min ⁻¹
Moment of inertia		≤ 25 gcm ²
Starting torque		≤ 1.5 Ncm
Shaft load		
Axial		40 N at max. 6000 min ⁻¹ 10 N at max. 12000 min ⁻¹
Radial		60 N at max. 6000 min ⁻¹ 20 N at max. 12000 min ⁻¹

Accessories

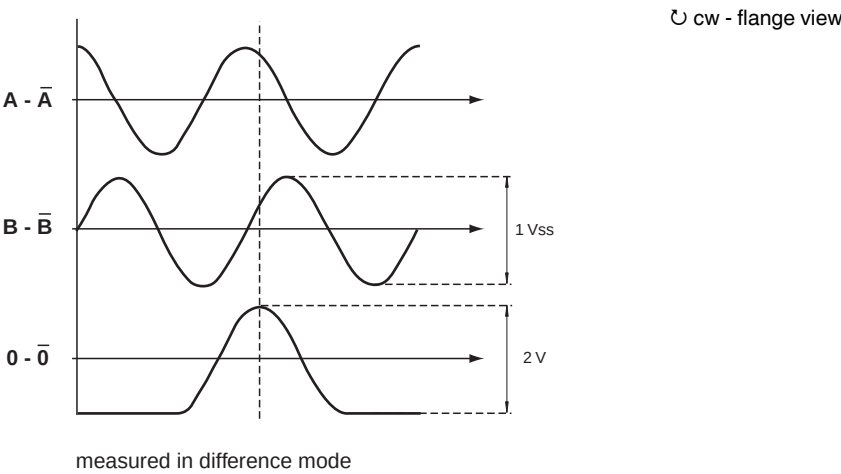
	9203	Angled flange
	9300	Mounting bracket for servo flange

Connection

Signal	Cable	Connector 9416	Connector 9416L
GND	White	10	10
U _b	Brown	12	12
A	Green	5	5
B	Grey	8	8
$\bar{A}$	Yellow	6	6
$\bar{B}$	Pink	1	1
0	Blue	3	3
$\bar{0}$	Red	4	4
U _b Sens	Violet	2	2
NC	Grey/Pink	7	7
Screen	-	Housing	Housing
NC	-	9	9
GND Sens	Black	11	11
			

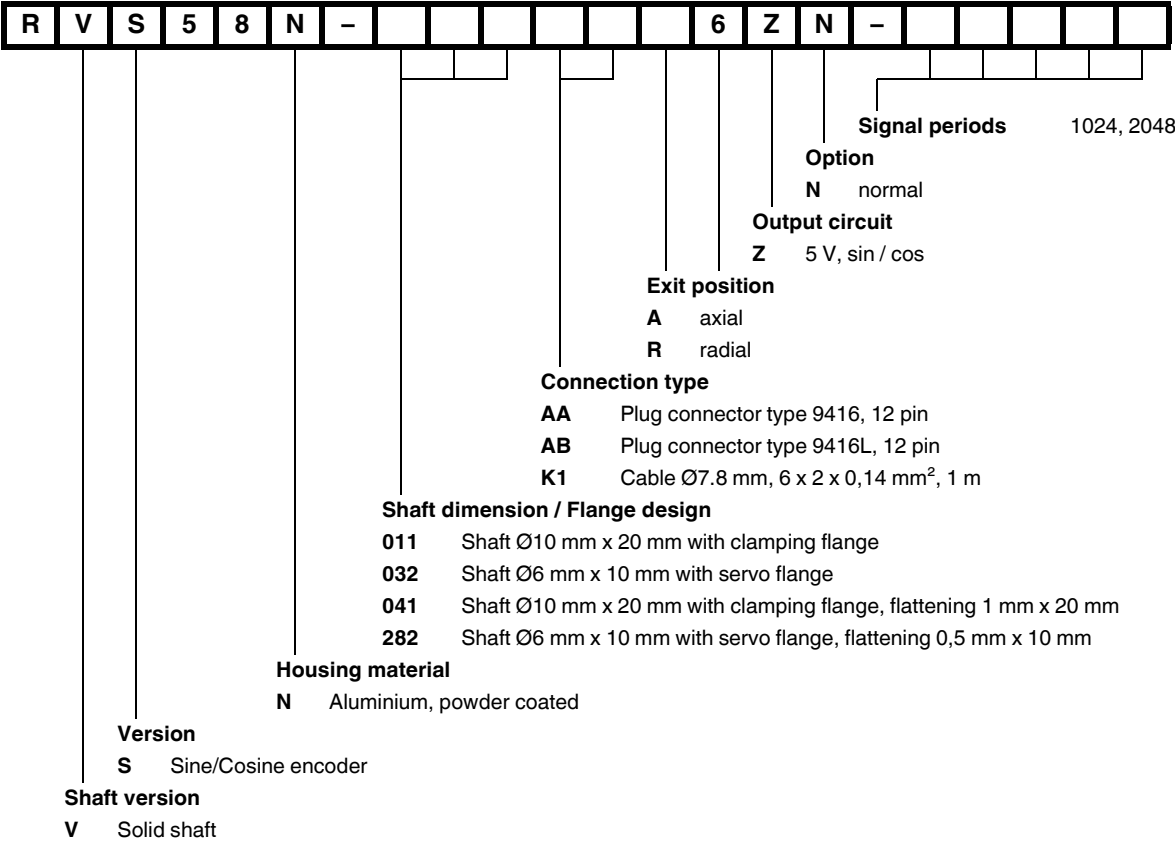
Operation

Signal outputs



Type Code

R	V	S	5	8	N	-						6	Z	N	-				
														Signal periods 1024, 2048					
														Option N normal					
														Output circuit Z 5 V, sin / cos					
														Signal output 6 A + B + 0 and $\bar{A}$ + $\bar{B}$ + $\bar{0}$					



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