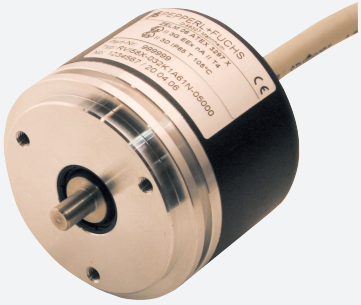


Incremental rotary encoder

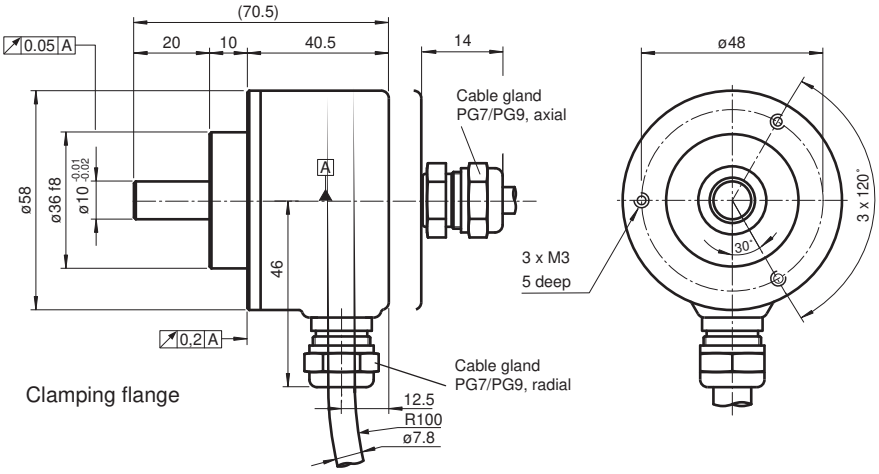
RVI58X-*******1

- Industrial standard housing Ø58 mm
- ATEX approval
- Up to 5000 ppr
- Servo or clamping flange
- 10 V ... 30 V with short-circuit proof push-pull output

Function

Compatibility says it all for this incremental rotary encoder.
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.
The pulse disk is designed in plastic up to 1500 pulses. Beyond that, glass is used.
This incremental rotary encoder is available either in clamping flange design with a shaft 10 mm in diameter x 20 mm or in servo flange design with a shaft 6 mm in diameter x 10 mm.
The electrical connection is made by a cable.
This incremental encoder is designed for operation in zone 2 and zone 22.

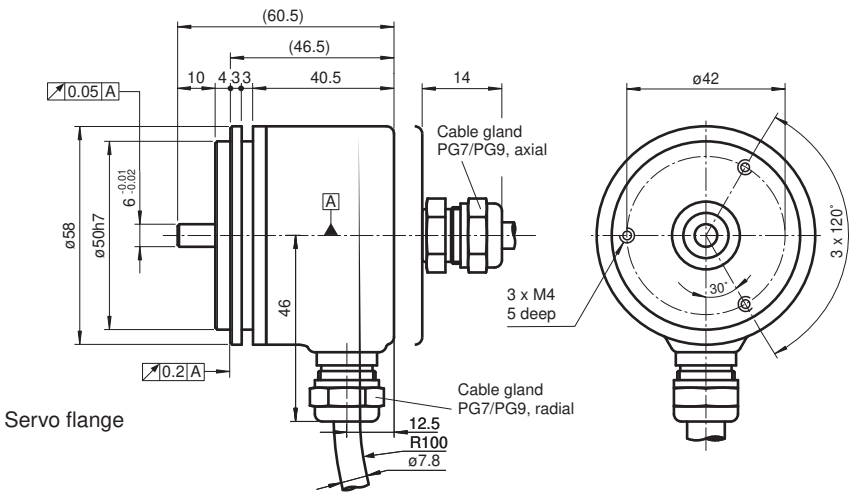
Dimensions



Clamping flange

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Dimensions



Technical Data

General specifications		
Detection type		photoelectric sampling
Pulse count		max. 5000
Functional safety related parameters		
$MTTF_d$		140 a
L_{10}		70 E+9 at 6000 rpm
Diagnostic Coverage (DC)		0 %
Electrical specifications		
Operating voltage	U_B	10 ... 30 V DC
No-load supply current	I_0	max. 60 mA
Output		
Output type		push-pull, incremental
Voltage drop	U_d	< 3 V
Load current		max. per channel 40 mA , short-circuit prtected (not with U_b), reverse polarity protected
Output frequency		max. 200 kHz
Rise time		400 ns
Connection		
Cable		Ø7.8 mm, 6 x 2 x 0.14 mm^2, 1 m
Standard conformity		
Degree of protection		DIN EN 60529, IP64
Climatic testing		DIN EN 60068-2-3, 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
Ambient conditions		
Operating temperature		
Glass disk		-30 ... 70 °C (-22 ... 158 °F) , cable, fixed installation
Plastic disk		-30 ... 60 °C (-22 ... 140 °F) , cable, fixed installation
Storage temperature		
Glass disk		-30 ... 70 °C (-22 ... 158 °F)
Plastic disk		-30 ... 70 °C (-22 ... 158 °F)
Mechanical specifications		
Material		

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Technical Data

Housing		powder coated aluminum
Flange		Aluminum
Shaft		Stainless steel
Mass		approx. 350 g
Rotational speed		max. 6000 min $^{-1}$
Moment of inertia		≤ 25 gcm^2
Starting torque		≤ 1.5 Ncm
Shaft load		
Axial		40 N
Radial		60 N
Dimensions		
Length		50.5 mm
Diameter		58 mm
Data for application in connection with hazardous areas		
ATEX marking		⟨Ex⟩ II 3G Ex nA IIB T4 Gc X ⟨Ex⟩ II 3D Ex tc IIIC T105°C Dc X
Certificate		PF 18 CERT 4775 X
Directive conformity		
Directive 2014/34/EU		EN IEC 60079-0:2018 , EN 60079-15:2010 , EN 60079-31:2014

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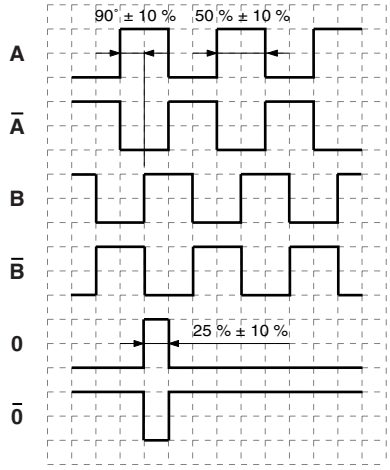
Connection

Signal	Cable Ø7.8 mm, 12-core
GND	White
U_b	Brown
A	Green
B	Grey
$\overline{A}$	Yellow
$\overline{B}$	Pink
0	Blue
$\overline{0}$	Red
NC	Grey/Pink
U_b Sens *)	Violet
GND Sens *)	Black
Screen	-

*) only for devices with 5 V supply and RS 422 interface

Operation

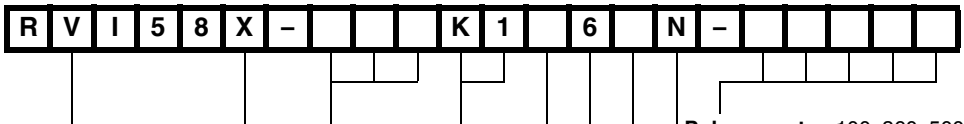
Signal outputs



↻ cw - with view onto the shaft

Type Code

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Pulse count 100, 360, 500, 512, 1000, 1024, 1250, 2048, 2500, 3600, 4096, 5000

Option
N normal

Output switching
1 10 V ... 30 V, push-pull
6 5 V, RS 422
X 10 V ... 30 V, RS 422

Signal output
6 A + B + 0 und $\overline{A}$ + $\overline{B}$ + $\overline{0}$

Exit position
A axial
R radial

Connection type
K1 Cable Ø7,8 mm, 6 x 2 x 0,14 mm^2, 1 m

Shaft dimension/flange version
011 Shaft Ø10 mm x 20 mm with clamping flange
032 Shaft Ø6 mm x 10 mm with servo flange

Housing material
X design for hazzardous areas

Shaft version
V Solid shaft

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