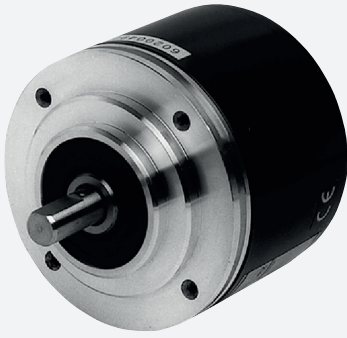


Incremental rotary encoder

RVI78



- Sturdy design
- Up to 5000 ppr
- 10 V ... 30 V with short-circuit proof push-pull output

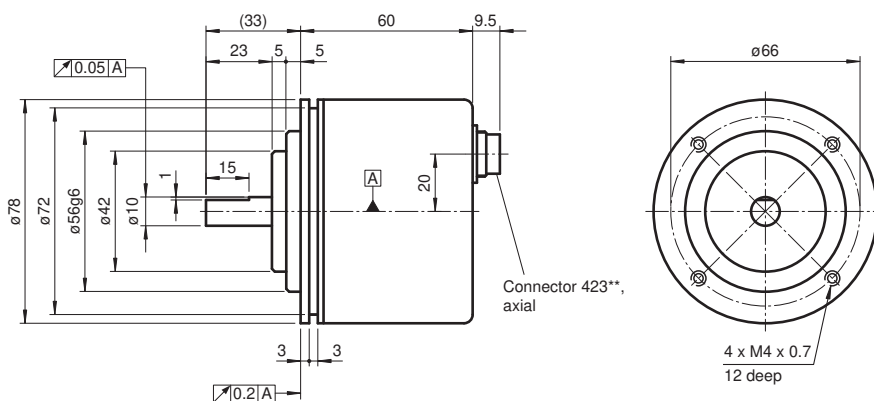
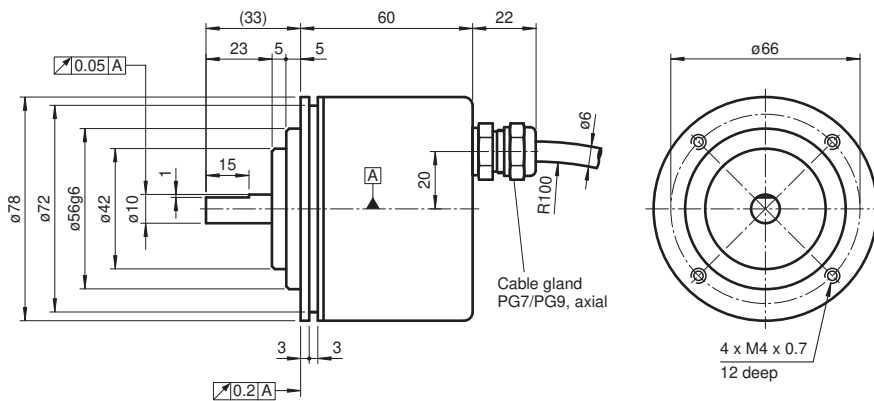


Function

One special feature of this incremental rotary encoder is the mechanical versatility of the flange. The rotary encoder has a centering shoulder with a diameter of 42 mm and one with a diameter of 56 mm. In addition to the four M4 holes, the encoder has a servo infeed on the circumference. This allows you to make a slight adjustment to the reference point of the incremental rotary encoder by turning the housing. The clamping element that grips into the servo infeed ensures that the incremental rotary encoder stays firmly in place without slipping out of adjustment.

The pulse disk is designed in plastic up to 1500 pulses. Beyond that, glass is used.

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

Technical Data

General specifications		
Pulse count		max. 5000
Electrical specifications		
Operating voltage	U_B	10 ... 30 V DC
No-load supply current	I_0	max. 80 mA
Output		
Output type		push-pull, incremental
Voltage drop	U_d	< 4 V
Load current		max. per channel 40 mA , short-circuit protected, reverse polarity protected
Output frequency		max. 100 kHz
Rise time		250 ns
De-energized delay	t_{off}	250 ns
Connection		
Connector		type 42306 (M16), 6-pin
Cable		Ø6 mm, 5 x 0.38 mm ² , 2 m
Standard conformity		
Degree of protection		DIN EN 60529, IP65
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
Ambient conditions		
Operating temperature		
Glass disk		-20 ... 70 °C (-4 ... 158 °F)
Plastic disk		-20 ... 60 °C (-4 ... 140 °F)
Storage temperature		
Glass disk		-40 ... 70 °C (-40 ... 158 °F)
Plastic disk		-40 ... 60 °C (-40 ... 140 °F)
Mechanical specifications		
Material		
Housing		powder coated aluminum
Flange		3.1645 aluminum
Shaft		Stainless steel 1.4305 / AISI 303
Mass		
Rotational speed		max. 6000 min ⁻¹
Moment of inertia		100 gcm ²
Starting torque		≤ 1.5 Ncm
Shaft load		
Axial		50 N
Radial		100 N

Accessories

	9312-3	Synchro clamping element
	9278	Angled flange
	42306A	Female connector, field-attachable
















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Accessories

	42306B	Female cordset
	KW-10/10	Helical coupling
	9401 10*10	Spring steel coupling
	9401 10*12	Spring steel coupling
	9404 10*10	Spring disk coupling
	9409 10*10	Bellows coupling
	9410 10*10	Precision coupling
	9101, 10	Measuring wheel for shaft diameter 10 mm
	9102, 10	Measuring wheel for shaft diameter 10 mm
	9103, 10	Measuring wheel for shaft diameter 10 mm
	9108, 10	Measuring wheel for shaft diameter 10 mm
	9109, 10	Measuring wheel for shaft diameter 10 mm
	9110, 10	Measuring wheel for shaft diameter 10 mm
	9112, 10	Measuring wheel for shaft diameter 10 mm
	9113, 10	Measuring wheel for shaft diameter 10 mm

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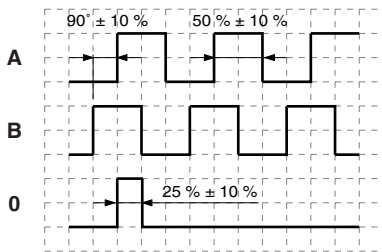
Connection

Signal	Cable Ø6 mm, 5-core	Connector 42306, 6-pin
GND	Black	5
+U _b	Red	4
A	Green	1
B	White	2
0	Yellow	3
Screen	-	Housing



Operation

Signal outputs



↻ cw - with view onto the shaft

Type Code

R V I 7 8 N - 1 0 C A 3 1 N - - - - -

Pulse count 60, 100, 120, 200, 250, 256, 300, 314, 360, 400, 500, 512, 600, 720, 900, 1000, 1024, 1200, 1250, 1500, 1800, 2000, 2048, 2400, 2500, 3000, 3600, 4000, 4096, 5000

Option

N Normal

Output switching

1 10 V ... 30 V, push-pull

Signal output

3 A + B + 0

Cable exit

A Axial

Connection type

AL Connector type 42306, 6-pin

K2 Cable Ø6 mm, 5 x 0.38 mm², 2 m

Flange version

C Clamping flange

Shaft dimension

10 Shaft Ø10 mm x 23 mm

Housing material

N Aluminium, powder coated

Shaft version

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V Solid shaft

Pulse count 60, 100, 120, 200, 250, 256,
300, 314, 360, 400, 500, 512,
600, 720, 900, 1000, 1024,
1200, 1250, 1500, 1800,
2000, 2048, 2400, 2500,
3000, 3600, 4000, 4096, 5000

Option

N Normal

Output switching

1 10 V ... 30 V, push-pull

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