

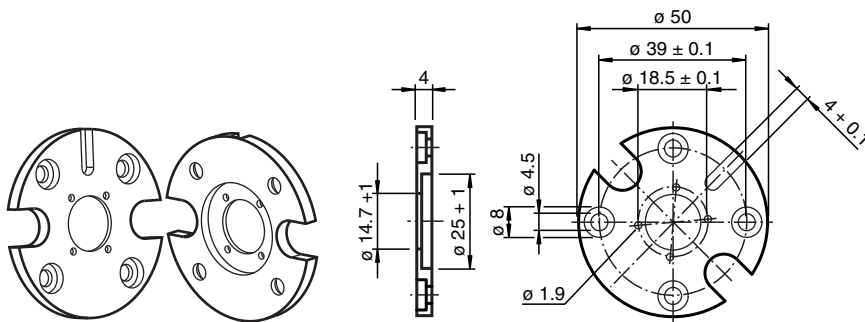
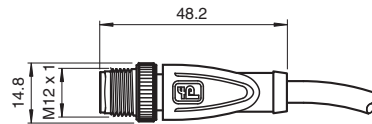
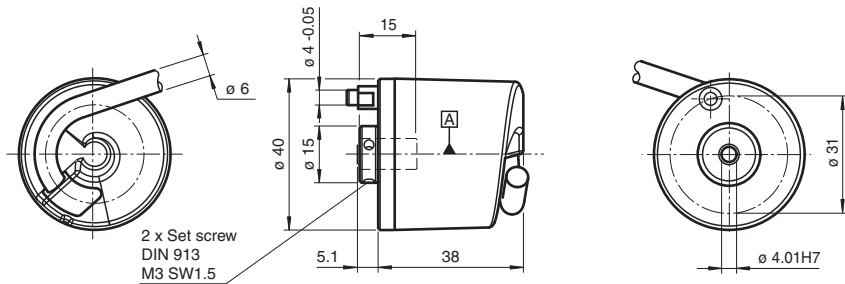
Incremental rotary encoder TSI40N-16ABCT2TN-01024



- Compact design
- 4.75 V ... 30 V with short-circuit proof push-pull output
- RS 422 functionality at 5 V operation
- Tangential cable outlet



Dimensions



Release date: 2022-04-08 Date of issue: 2022-12-12 Filename: 186684_eng.pdf

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

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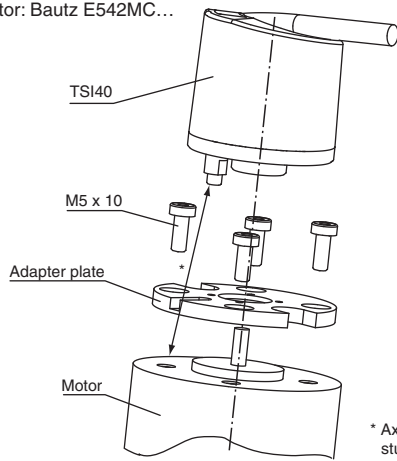
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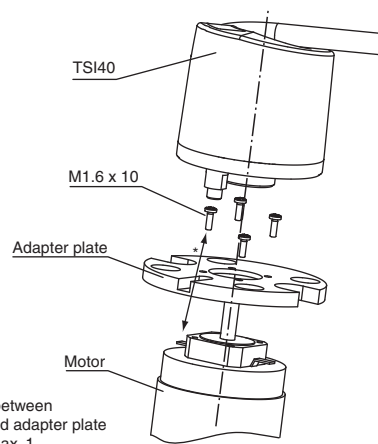
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Dimensions

Motor: Bautz E542MC...



Motor: Portescap 35NT2R...



* Axial level between stud bolt and adapter plate min. 0.5 - max. 1

Technical Data

General specifications			
Pulse count			1024
Electrical specifications			
Operating voltage	U_B	4.75 ... 30 V DC 5 V DC for RS-422	
No-load supply current	I_0	max. 55 mA	
Output			
Output type		push-pull, incremental or RS-422, incremental	
Voltage drop	U_d	≤ 2.5 V (< 2.5 V)	
Load current		max. per channel 30 mA , short-circuit protected (max. per channel 20 mA, conditionally short-circuit proof)	
Output frequency		max. 100 kHz (max. 100 kHz)	
Rise time		980 ns (225 ns)	
De-energized delay	t_{off}	980 ns (225 ns)	
Connection			
Connector		130 mm fixed cable with 4-pin, M12 x 1 connector	
Standard conformity			
Degree of protection		DIN EN 60529, IP54	
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, 6 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	
Maximum permissible ambient temperature		max. 60 °C (max. 140 °F)	
Ambient conditions			
Operating temperature		-10 ... 70 °C (14 ... 158 °F)	
Storage temperature		-25 ... 85 °C (-13 ... 185 °F)	
Mechanical specifications			
Material			
Housing		Polycarbonate	
Flange		3.1645 aluminum	
Shaft		Stainless steel 1.4305 / AISI 303	
Mass		approx. 180 g	
Rotational speed		max. 6000 min ⁻¹	
Moment of inertia		≤ 4.3 gcm ²	

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Technical Data

Starting torque	≤ 0.2 Ncm
Shaft load	
Angle offset	1 °
Axial offset	max. 1 mm
Life span	≥ 2 x 10 ⁹ revolutions (max. shaft loading)

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fa-info@sg.pepperl-fuchs.com **PEPPERL+FUCHS**

Function

The TVI40 continues the new economical target line of Pepperl+Fuchs with a recessed hollow shaft version. With a small outside diameter of 40 mm, the unit is ideal for use in industrial areas where very little space is available.

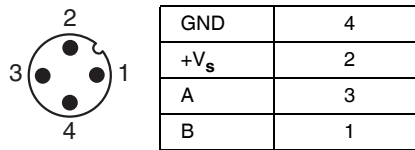
The technology of the rotary encoder is adapted to the new requirements of the rotary encoder market. Innovative fast technology with Opto-ASIC forms the central basis of the device. The rotary encoder is available with a pulse count of up to 1024 pulses per revolution.

The rotary encoder provides the ideal combination of non-sensitivity to temperature and high resolution.

The appearance of this rotary encoder is the tangential cable outlet. This ensures a buckling-free, carefully laying of the connection cable in tangential, radial or axial manner.

Connection

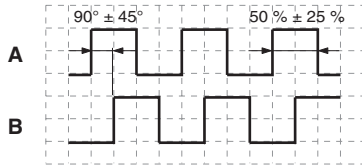
Electrical connection



Additional Information

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Signal outputs



↻ cw - with view

Order code

T	S	I	4	0	N	-	1	6	A	B	C	T	2	T	N	-	0	1	0	2	4
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Shaft version
 S Recessed hollow shaft

Housing material
 N Plastic

Shaft dimensions/flange type
 16A Recessed hollow shaft Ø4 mm x 15 mm

Connection type
 BC Pigtail with M12 x 1 connector, 4 pin. Cable 4 x 0.14 mm², 0.13 m

Exit position
 T tangential

Signal output
 2 A + B

Output switching
 T 4,75 V ... 30 V, push-pull

Temperature range
 N normal

Pulse count 1024

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