



Incremental rotary encoder THI40P-1CAK2R6TN-01024

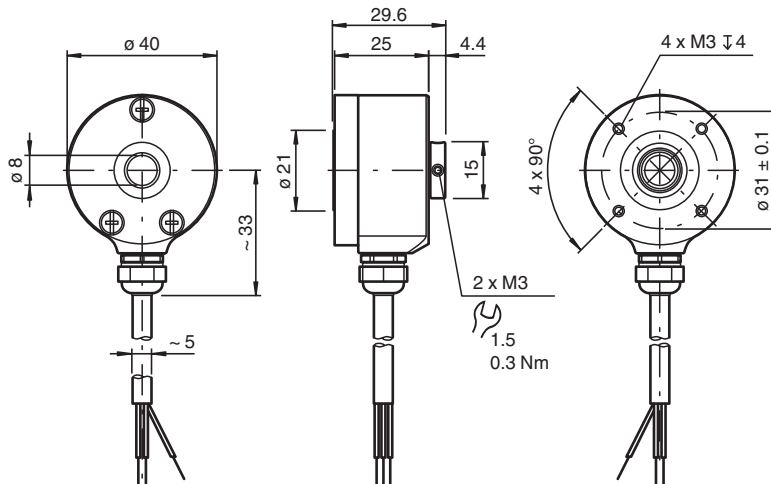
- Compact design
- 1024 ppr
- 4.75 V ... 30 V with short-circuit proof push-pull output
- Degree of protection IP65



Function

The THI40 continues the new economical target line of Pepperl+Fuchs. 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.

Dimensions



Technical Data

General specifications

Detection type	photoelectric sampling
Pulse count	1024

Electrical specifications

Operating voltage	U_B	4.75 ... 30 V DC
No-load supply current	I_0	max. 55 mA

Output

Output type		push-pull, incremental
Voltage drop	U _d	≤ 2.5 V
Load current		max. per channel 30 mA , short-circuit protected
Output frequency		max. 100 kHz
Rise time		980 ns

Technical Data

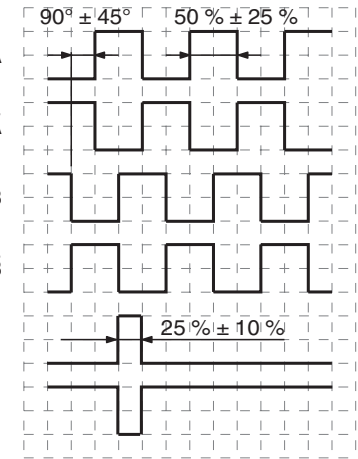
De-energized delay	t_{off}	980 ns
Connection		
Cable		Ø5 mm, 8 x 0.08 mm ² , 2 m
Standard conformity		
Degree of protection		DIN EN 60529, IP65
Climatic testing		DIN EN 60068-2-3, no moisture condensation
Emitted interference		EN 61000-6-4:2007/A1:2011
Noise immunity		EN 61000-6-2:2005
Shock resistance		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 ... 60 °C (14 ... 140 °F)
Storage temperature		-25 ... 85 °C (-13 ... 185 °F)
Mechanical specifications		
Material		
Housing		Aluminum
Flange		Aluminum
Shaft		Stainless steel
Mass		approx. 160 g
Rotational speed		max. 6000 min ⁻¹
Moment of inertia		≤ 5 gcm ²
Starting torque		≤ 1 Ncm

Connection

Signal	Cable, 8-core
GND	White
+U _b	Brown
A	Green
B	Grey
$\bar{A}$	Yellow
$\bar{B}$	Pink
0	Blue
$\bar{0}$	Red
Screen	-

Operation

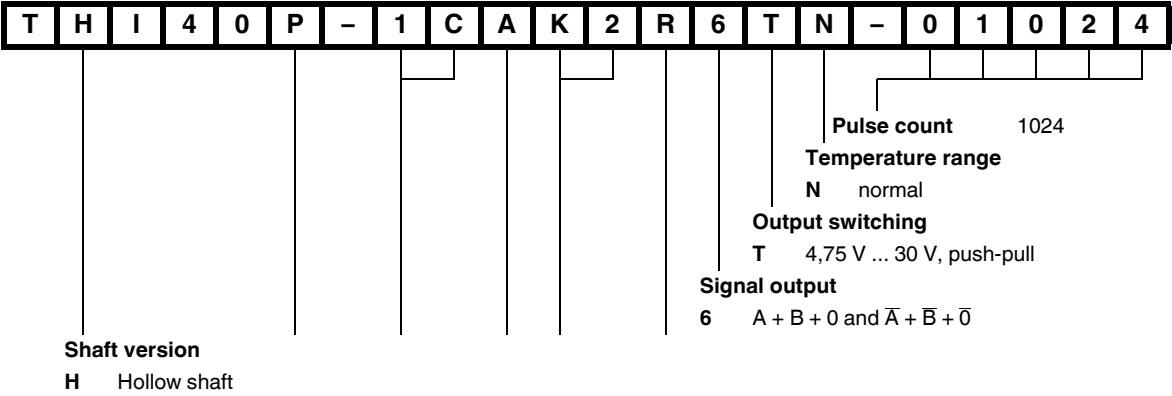
Signal outputs



↻ cw - with view onto the shaft

Type Code

T	H	I	4	0	P	-	1	C	A	K	2	R	6	T	N	-	0	1	0	2	4
																Pulse count	1024				
																Temperature range	N normal				
																Output switching	T 4,75 V ... 30 V, push-pull				
																Signal output	6 A + B + 0 and $\bar{A}$ + $\bar{B}$ + $\bar{0}$				
																Exit position	R radial				
																Connection type	K2 cable Ø5 mm, 8 x 0.08 mm ² , 2 m				
																Flange type	A Hollow shaft				
																Shaft dimensions	1C Hollow shaft Ø8 mm, clamping ring at cover side				
																Housing material	P Aluminium IP65				



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