

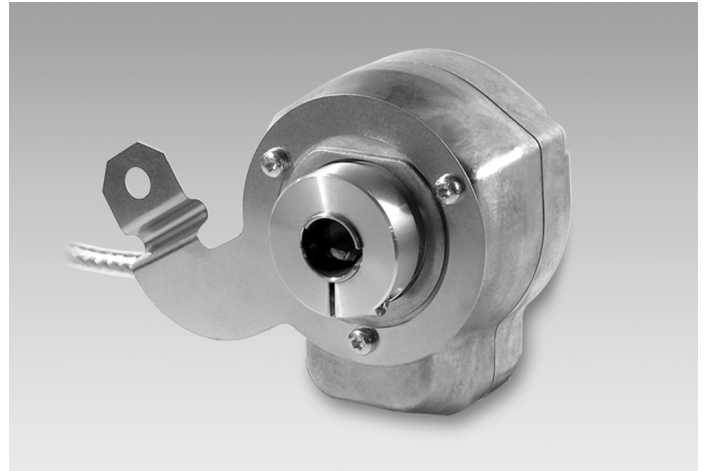
TIL Y 1

Blind hollow shaft $\varnothing 12$ mm

512...2048 pulses per revolution

Overview

- Encoder with blind hollow shaft $\varnothing 12$ mm
- Max. 2048 pulses per revolution
- V-Lock clamping
- Mounting by torque support
- TTL or HTL output signals
- Tangential cable output



Technical data

Technical data - electrical ratings

Voltage supply	5 VDC ± 5 % 8...26 VDC
Reverse polarity protection	Yes
Consumption w/o load	≤ 85 mA
Pulses per revolution	100 ... 2048
Reference signal	Zero pulse, width 90°
Sensing method	Optical
Output frequency	≤ 120 kHz
Output signals	A, B, N + inverted
Output stages	TTL linedriver (short-circuit proof) HTL push-pull (short-circuit proof)
Interference immunity	EN 61000-6-2
Emitted interference	EN 61000-6-3

Technical data - mechanical design

Size (flange)	60 x 72 mm
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Technical data - mechanical design

Shaft type	$\varnothing 12$ mm (blind hollow shaft)
Mounting kit	042
Protection EN 60529	IP 65
Operating speed	≤ 3000 rpm
Starting torque	≤ 0.01 Nm (+20 °C)
Material	Housing: aluminium Shaft: stainless steel
Operating temperature	-20...+85 °C
Relative humidity	90 % non-condensing
Resistance	EN 60068-2-6 Vibration 10 g, 55-2000 Hz EN 60068-2-27 Shock 100 g, 11 ms
Connection	Cable 0.6 m
Weight approx.	320 g

Optional

- Cable with connector

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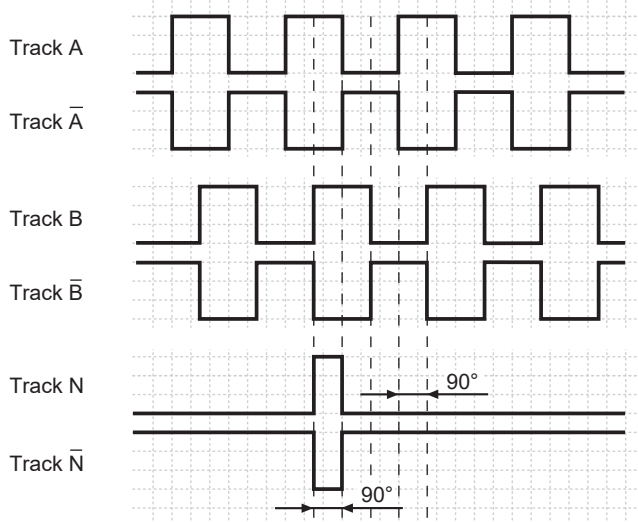
Terminal assignment

Core colour	Assignment
green	Track A
brown	Track A inv.
grey	Track B
black	Track B inv.
pink	Track N
white	Track N inv.
red	UB
blue	GND
transparent	Shield/Housing

Output signals

Clockwise rotation when looking at the mounting side.

NI-Output signals



Trigger level

Outputs	Linedriver
Output level High	≥ 2.4 V
Output level Low	≤ 0.5 V
Load	≤ 20 mA

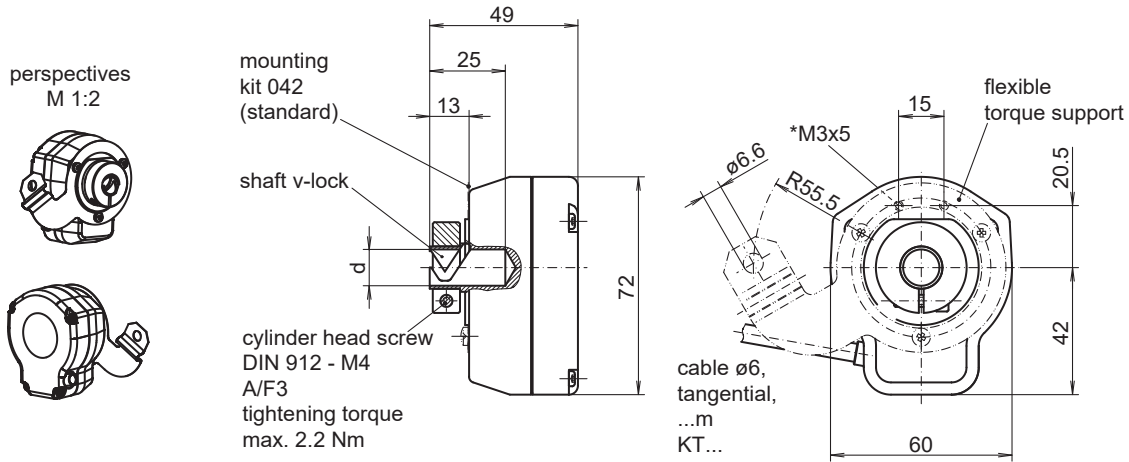
Outputs	Push-pull short-circuit proof
Output level High	$\geq UB - 3$ V
Output level Low	≤ 1.5 V
Load	≤ 20 mA

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Dimensions



TIL Y 1

Blind hollow shaft ø12 mm

512...2048 pulses per revolution

Ordering reference

	TIL Y 1	#####	#	NI	KT0.6	S	12	IP65	042
Product	TIL Y 1								
Pulse number									
512		512							
1024		1024							
2048		2048							
Voltage supply / signals									
5 VDC / TTL level, linedriver				T					
8...26 VDC / HTL level, push-pull				H					
Output signals									
A, A inv, B, B inv, N, N inv				NI					
Connection									
Cable 0.6 m, tangential, open cable end					KT0.6				
Operating temperature									
-20...+85 °C						S			
Blind hollow shaft									
ø12 mm							12		
Protection									
IP 65								IP65	
Mounting kit									
Mounting kit 042									042

Other pulse numbers on request.