

ITD 01 A 4 Y 1

Mini encoder with blind hollow shaft $\varnothing 4$ mm
30...1024 pulses per revolution

Overview

- Mini encoder with blind hollow shaft $\varnothing 4$ mm
- Max. 1024 pulses per revolution
- Optical sensing method
- Outer diameter $\varnothing 24$ mm
- TTL or HTL output signals
- Cable output radial
- Clamping ring torsion-proof



Technical data

Technical data - electrical ratings

Voltage supply	5 VDC ± 5 % 8...30 VDC
Reverse polarity protection	Yes
Consumption w/o load	≤ 25 mA
Pulses per revolution	30 ... 1024
Reference signal	Zero pulse, width 90°
Sensing method	Optical
Output frequency	≤ 100 kHz
Output signals	A 90° B, N
Output stages	TTL Push-pull short-circuit proof

Technical data - mechanical design

Size (flange)	$\varnothing 24$ mm
Shaft type	$\varnothing 4$ mm (blind hollow shaft)

Technical data - mechanical design

Mounting kit	101
Protection EN 60529	IP 54
Operating speed	≤ 10000 rpm
Starting torque	≤ 0.007 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 30 g, 11 ms
Connection	Cable 1 m
Weight approx.	50 g

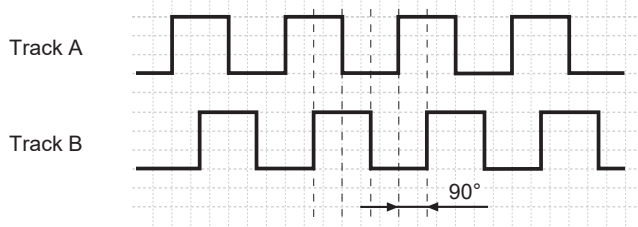
Terminal assignment

Core colour	Assignment
green	Track A
yellow	Track B
grey	Track N
brown	UB
white	GND
transparent	Shield/Housing

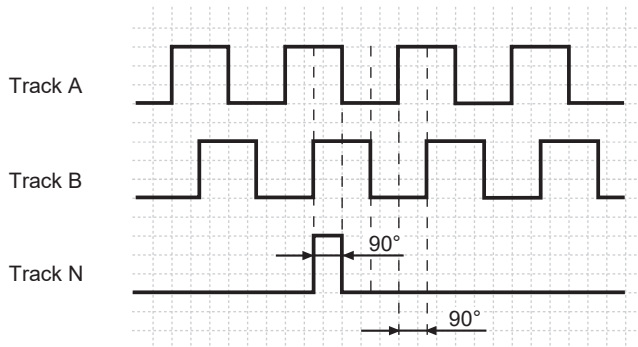
Output signals

Clockwise rotation when looking at the mounting side.

BX-Output signals



NX-Output signals



Trigger level

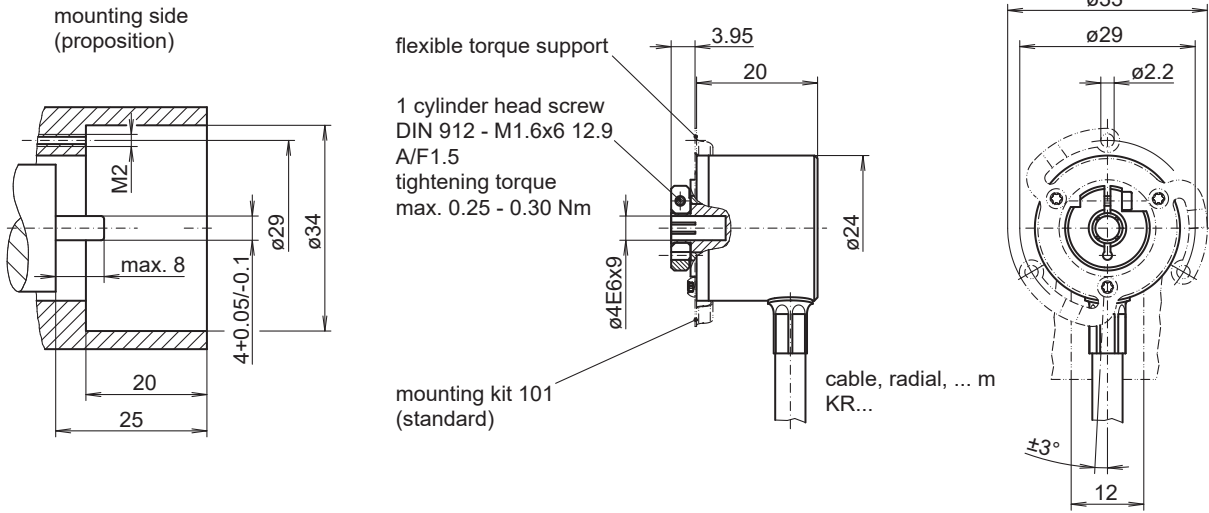
Outputs	Linedriver
Output level High	≥ 2.4 V
Output level Low	≤ 0.5 V
Load	≤ 30 mA

Outputs	Push-pull short-circuit proof
Output level High	$\geq UB - 3$ V
Output level Low	≤ 1.5 V
Load	≤ 30 mA

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Dimensions



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Ordering reference

	ITD 01 A 4 Y 1	#####	#	####	KR1	S	4	IP54	101
Product	ITD 01 A 4 Y 1								
	ITD 01 A 4 Y 1								
Pulse number									
30		30							
60		60							
100		100							
300		300							
360		360							
500		500							
600		600							
1000		1000							
1024		1024							
Voltage supply / signals									
5 VDC / TTL level, linedriver						T			
8...30 VDC / HTL level, push-pull						H			
Output signals									
A, B									BX
A, B, N									NX
Connection									
Cable 1 m, radial									KR1
Operating temperature									
-20...+85 °C									S
Blind hollow shaft									
$\varnothing 4$ mm									4
Protection									
IP 54									IP54
Mounting kit									
Mounting kit 101									101