

## 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 $\pm 5$ % 8...30 VDC
Reverse polarity protection	Yes
Consumption w/o load	$\leq 25$ mA
Pulses per revolution	30 ... 1024
Reference signal	Zero pulse, width 90°
Sensing method	Optical
Output frequency	$\leq 100$ 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	$\leq 10000$ rpm
Starting torque	$\leq 0.007$ 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

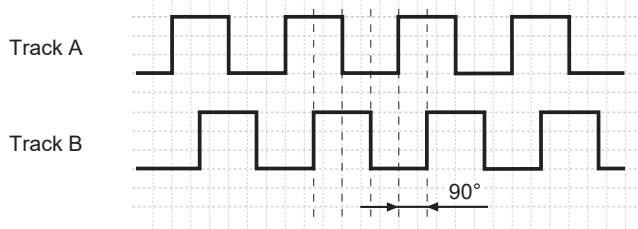
**Terminal assignment**

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

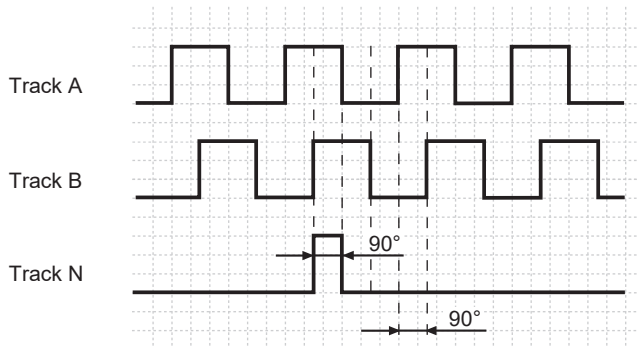
**Output signals**

Clockwise rotation when looking at the mounting side.

BX-Output signals



NX-Output signals



**Trigger level**

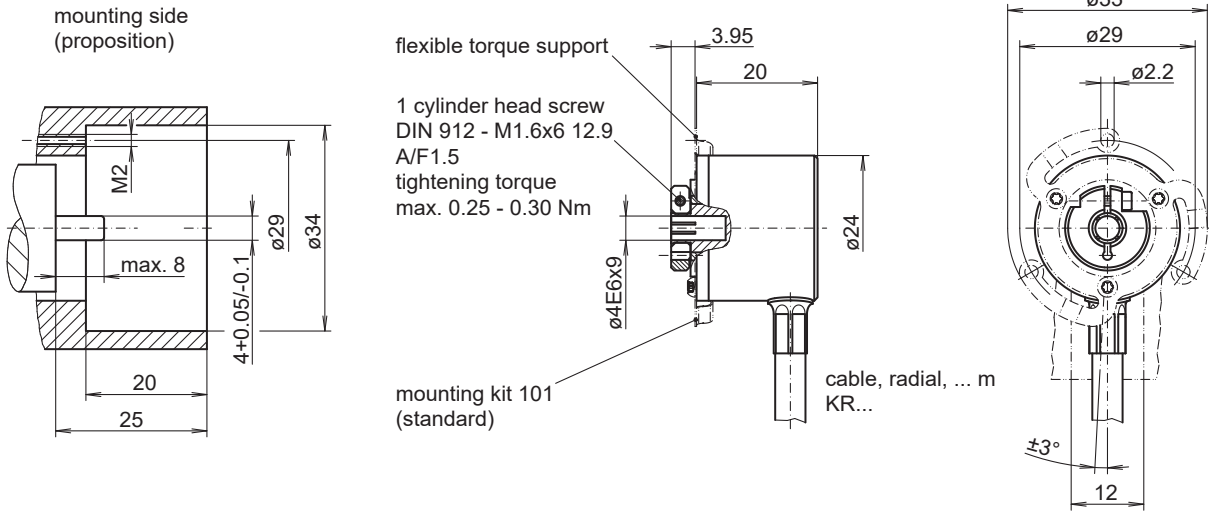
Outputs	Linedriver
Output level High	$\geq 2.4$ V
Output level Low	$\leq 0.5$ V
Load	$\leq 30$ mA

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

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## Dimensions



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**Ordering reference**

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