

ITD 2 A 4 Y36

Blind hollow shaft $\varnothing 10$ to $\varnothing 14$ mm

2...60 pulses per revolution

Overview

- Encoder with blind hollow shaft $\varnothing 10...14$ mm
- Max. 60 pulses per revolution
- Optical sensing method
- Mounting by torque support
- TTL or HTL output signals
- Cable output radial



Technical data

Technical data - electrical ratings

Voltage supply	5 VDC ± 5 % 8...30 VDC
Reverse polarity protection	Yes
Consumption w/o load	≤ 100 mA
Pulses per revolution	2 ... 60
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)	$\varnothing 58$ mm
Shaft type	$\varnothing 10$ mm (blind hollow shaft) $\varnothing 12$ mm (blind hollow shaft) $\varnothing 14$ mm (blind hollow shaft)

Technical data - mechanical design

Mounting kit	006
Protection EN 60529	IP 65
Operating speed	≤ 8000 rpm
Starting torque	≤ 0.01 Nm (+20 °C)
Material	Housing: aluminium, black, powder-coated Shaft: stainless steel
Operating temperature	-20...+70 °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 1 m
Weight approx.	280 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
yellow	UB-Sense
violet	GND-Sense
transparent	Shield/Housing

Trigger level

Outputs	Linedriver
Output level High	≥ 2.4 V
Output level Low	≤ 0.5 V
Load	≤ 70 mA

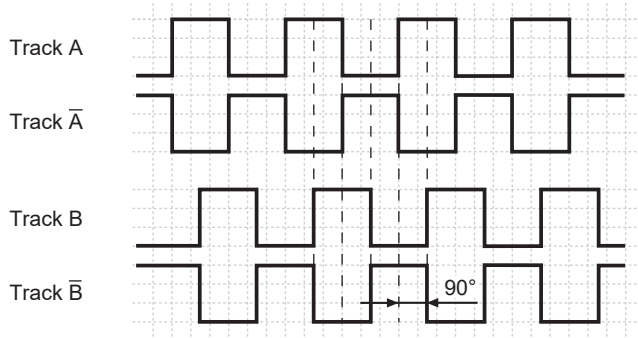
Outputs

Outputs	Push-pull short-circuit proof
Output level High	$\geq U_B - 3$ V
Output level Low	≤ 1.5 V
Load	≤ 70 mA

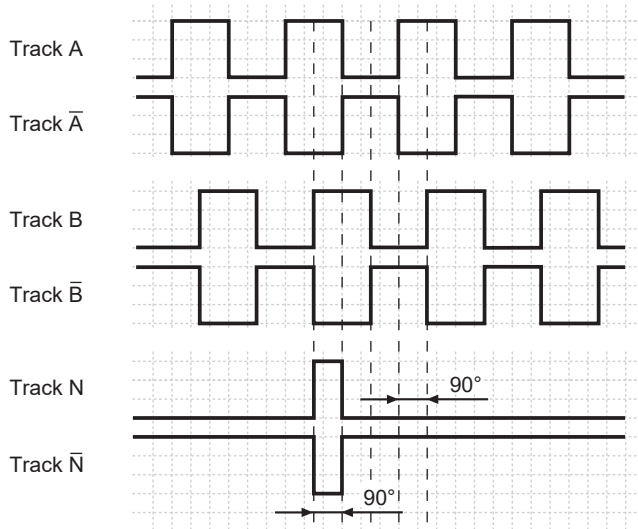
Output signals

Clockwise rotation when looking at the mounting side.

BI-Output signals



NI-Output signals



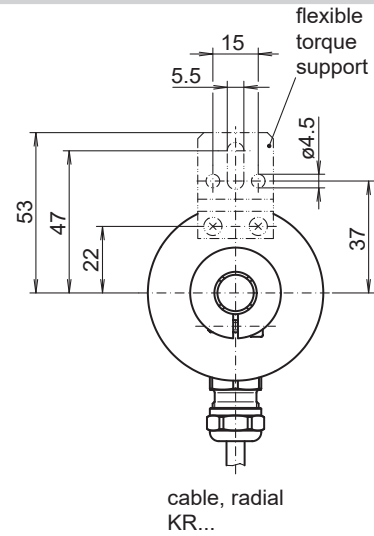
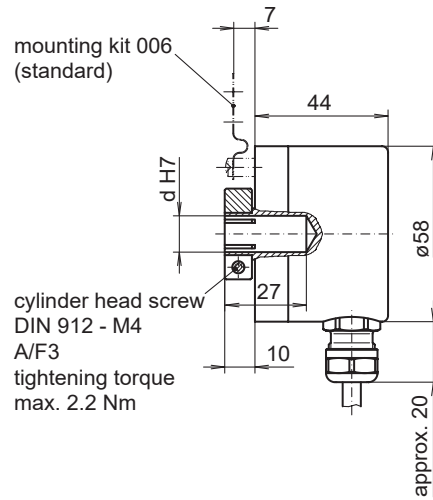
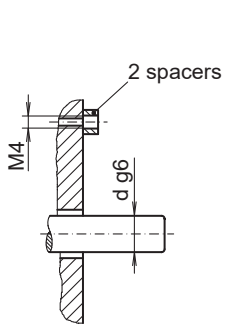
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Dimensions

mounting side
(proposition)



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Ordering reference

Product		ITD 2 A 4 Y36	#####	#	####	KR1	S	##	IP65	006
Pulse number		ITD 2 A 4 Y36								
2			2							
5			5							
10			10							
12			12							
14			14							
15			15							
16			16							
18			18							
20			20							
21			21							
23			23							
25			25							
30			30							
32			32							
50			50							
60			60							
Voltage supply / signals										
5 VDC / TTL level, linedriver					T					
8...30 VDC / HTL level, push-pull					H					
8...30 VDC / TTL level, linedriver					R					
Output signals										
A, A inv, B, B inv					BI					
A, A inv, B, B inv, N, N inv					NI					
Connection										
Cable 1 m, radial						KR1				
Operating temperature										
-20...+70 °C							S			
Blind hollow shaft										
ø10 mm									10	
ø12 mm									12	
ø14 mm									14	
Protection										
IP 65									IP65	
Mounting kit										
Mounting kit 006										006