

ITD 20 A 4 Y36

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

50...1024 pulses per revolution

Overview

- Encoder with blind hollow shaft $\varnothing 10$...14 mm
- Max. 1024 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	50 ... 1024
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
brown	Track A
green	Track A inv.
grey	Track B
pink	Track B inv.
red	Track N
black	Track N inv.
brown 0,5 mm ²	UB
white 0,5 mm ²	GND
blue	UB-Sense
white	GND-Sense
transparent	Shield/Housing

Trigger level

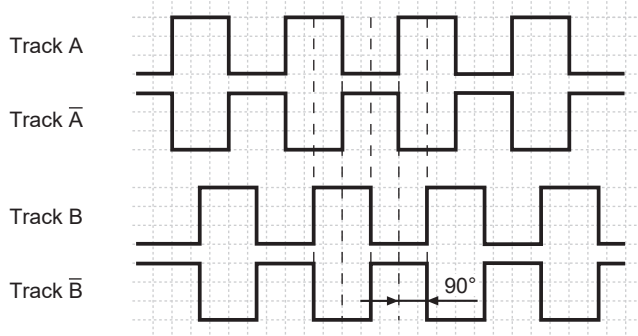
Outputs	Linedriver
Output level High	≥ 2.4 V
Output level Low	≤ 0.5 V
Load	≤ 70 mA

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

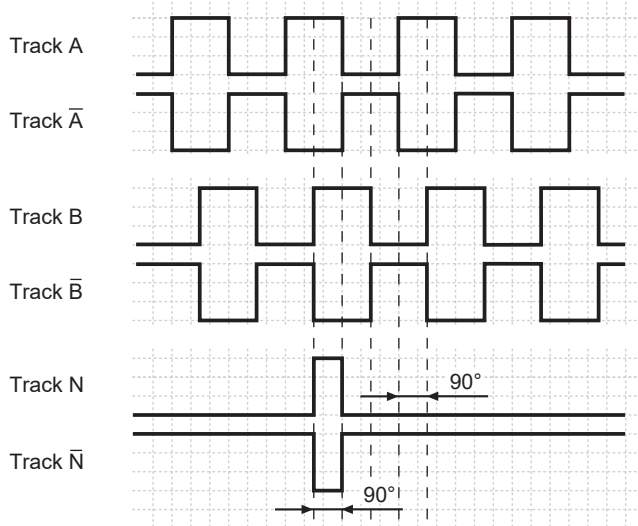
Output signals

Clockwise rotation when looking at the mounting side.

BI-Output signals



NI-Output signals



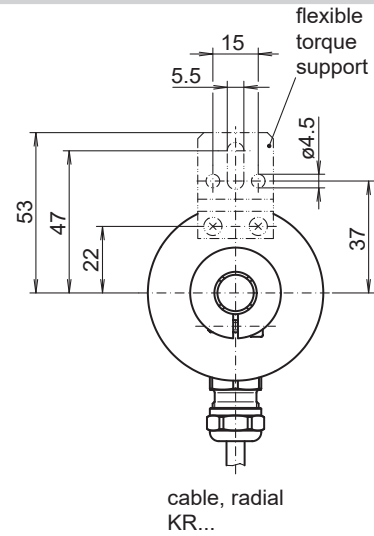
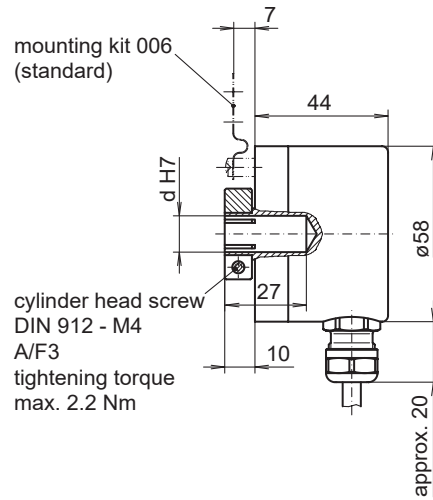
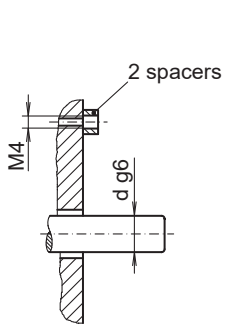
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Dimensions

mounting side
(proposition)



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Ordering reference

Product		ITD 20 A 4 Y36	#####	#	####	KR1	S	##	IP65	006
Pulse number		ITD 20 A 4 Y36								
50			50							
60			60							
64			64							
88			88							
90			90							
100			100							
120			120							
128			128							
200			200							
250			250							
254			254							
256			256							
360			360							
400			400							
500			500							
512			512							
600			600							
1000			1000							
1024			1024							
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