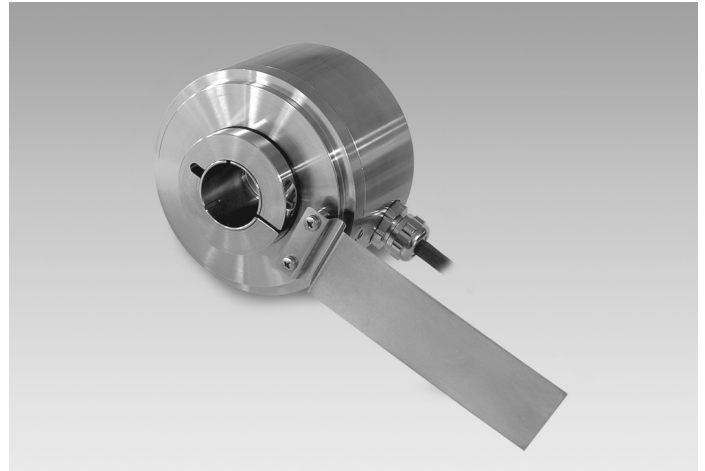


ITD 40 A 4 Y141

Blind hollow shaft $\varnothing 20$ to $\varnothing 27$ mm
200...2048 pulses per revolution

Overview

- Encoder with blind hollow shaft $\varnothing 20$... $\varnothing 27$ mm
- Max. 2048 pulses per revolution
- Optical sensing method
- Stainless steel design (1.4305)
- Mounting by torque support
- TTL or HTL output signals
- Cable output radial
- High protection



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	200 ... 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)	$\varnothing 89$ mm
Shaft type	$\varnothing 20$ mm (blind hollow shaft) $\varnothing 22$ mm (blind hollow shaft) $\varnothing 25$ mm (blind hollow shaft) $\varnothing 27$ mm (blind hollow shaft)

Technical data - mechanical design

Mounting kit	081
Protection EN 60529	IP 66
Operating speed	≤ 2500 rpm
Starting torque	≤ 0.02 Nm (+20 °C)
Material	Housing: stainless steel 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.	1850 g

Optional

- Cable with connector

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Terminal assignment

Core colour	Assignment
green	Track A
yellow	Track A inv.
grey	Track B
pink	Track B inv.
brown	Track N
white	Track N inv.
rot	UB
blue	GND
violet	UB-Sense
black	GND-Sense
transparent	Shield/Housing

Trigger level

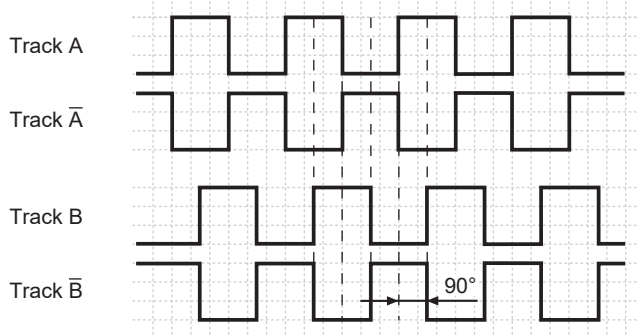
Outputs	Linedriver
Output level High	≥ 2.4 V
Output level Low	≤ 0.5 V
Load	≤ 70 mA

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

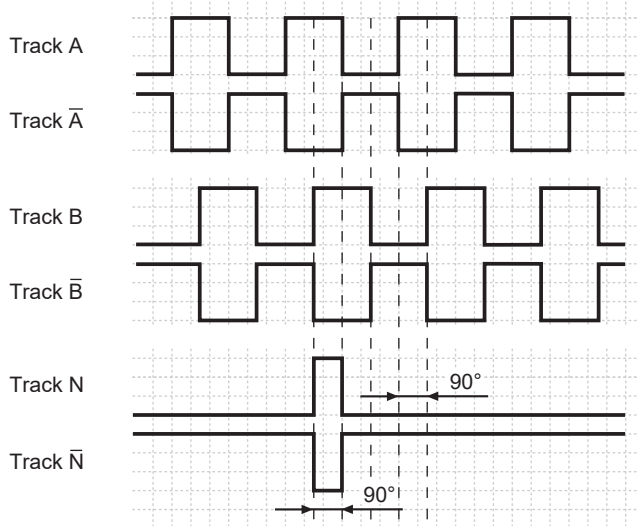
Output signals

Clockwise rotation when looking at the mounting side.

BI-Output signals



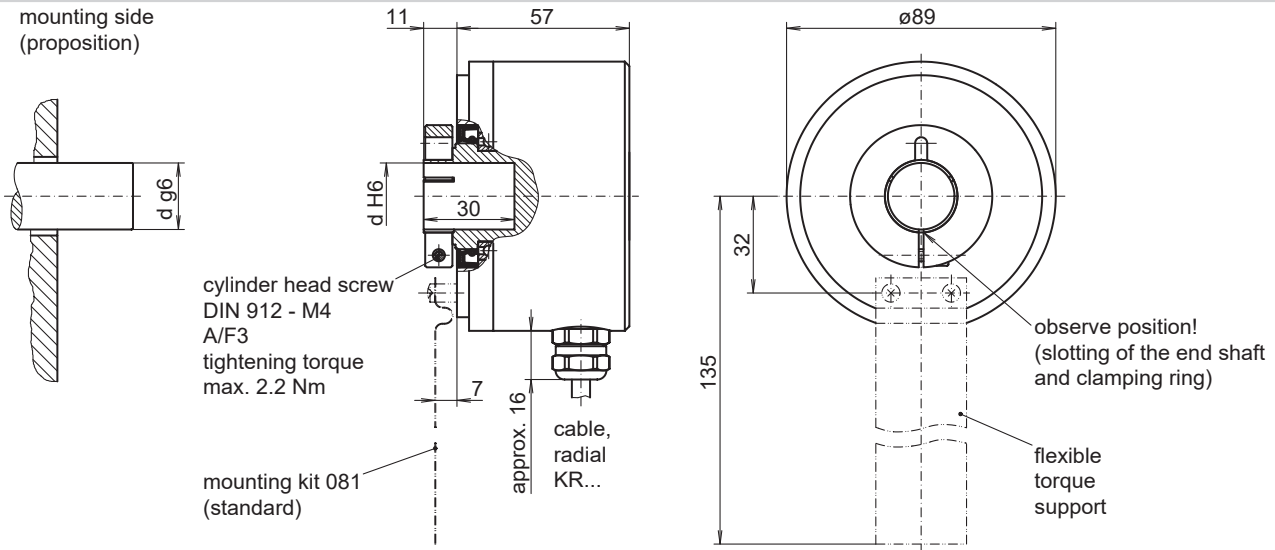
NI-Output signals



ITD 40 A 4 Y141

Blind hollow shaft $\varnothing 20$ to $\varnothing 27$ mm
200...2048 pulses per revolution

Dimensions



ITD 40 A 4 Y141

 Blind hollow shaft $\varnothing 20$ to $\varnothing 27$ mm
 200...2048 pulses per revolution

Ordering reference

		ITD 40 A 4 Y141	#####	#	####	KR1	S	##	IP66	081
Product		ITD 40 A 4 Y141								
		ITD 40 A 4 Y141								
Pulse number										
	200		200							
	360		360							
	500		500							
	512		512							
	720		720							
	1000		1000							
	1024		1024							
	2048		2048							
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										
	$\varnothing 20$ mm									20
	$\varnothing 22$ mm									22
	$\varnothing 25$ mm									25
	$\varnothing 27$ mm									27
Protection										
	IP 66									IP66
Mounting kit										
	Mounting kit 081									081