

ITD 75 A 4

Through hollow shaft $\varnothing 60$ to $\varnothing 85$ mm

1000...2500 pulses per revolution

Overview

- Encoder with through hollow shaft max. $\varnothing 85$ mm
- Max. 2500 pulses per revolution
- Optical sensing method
- Mounting hole circle $\varnothing 162$ mm
- TTL or HTL output signals
- Without own bearings
- 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	1000 ... 2500
Output signals	A, B, N + inverted
Output stages	TTL linedriver (short-circuit proof) HTL push-pull (short-circuit proof)
Reference signal	Zero pulse, width 90°
Output frequency	≤ 120 kHz
Sensing method	Optical
Interference immunity	EN 61000-6-2
Emitted interference	EN 61000-6-3

Technical data - mechanical design

Size (flange)	$\varnothing 150$ mm
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Technical data - mechanical design

Shaft type	$\varnothing 60$... $\varnothing 85$ mm (through hollow shaft)
Motor shaft tolerance	0.2 mm axial 0.2 mm radial
Protection EN 60529	IP 54
Operating speed	≤ 3000 rpm
Material	Housing: aluminium Shaft: aluminium
Operating temperature	-20 ... $+70$ °C
Relative humidity	90 %
Resistance	EN 60068-2-6 Vibration 10 g, 55-2000 Hz EN 60068-2-27 Shock 100 g, 11 ms
Weight approx.	1500 g
Connection	Cable 1 m

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

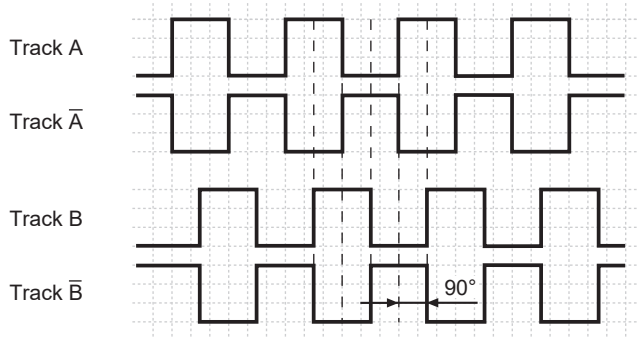
Outputs	Linedriver
Output level High	≥ 2.4 V
Output level Low	≤ 0.5 V
Load	≤ 70 mA

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

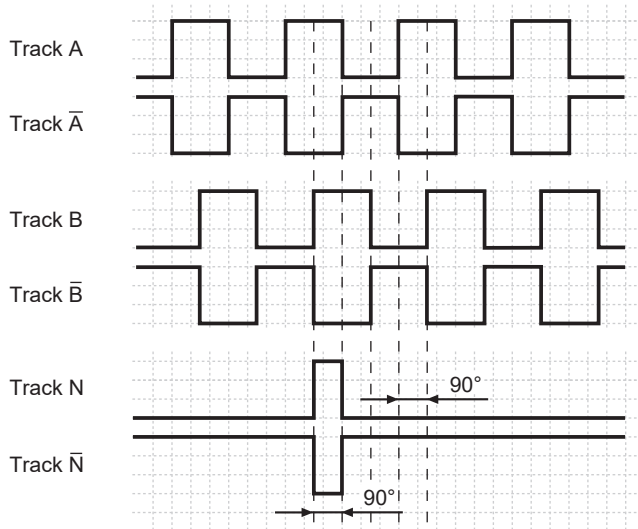
Output signals

Clockwise rotation when looking at the mounting side.

BI-Output signals



NI-Output signals

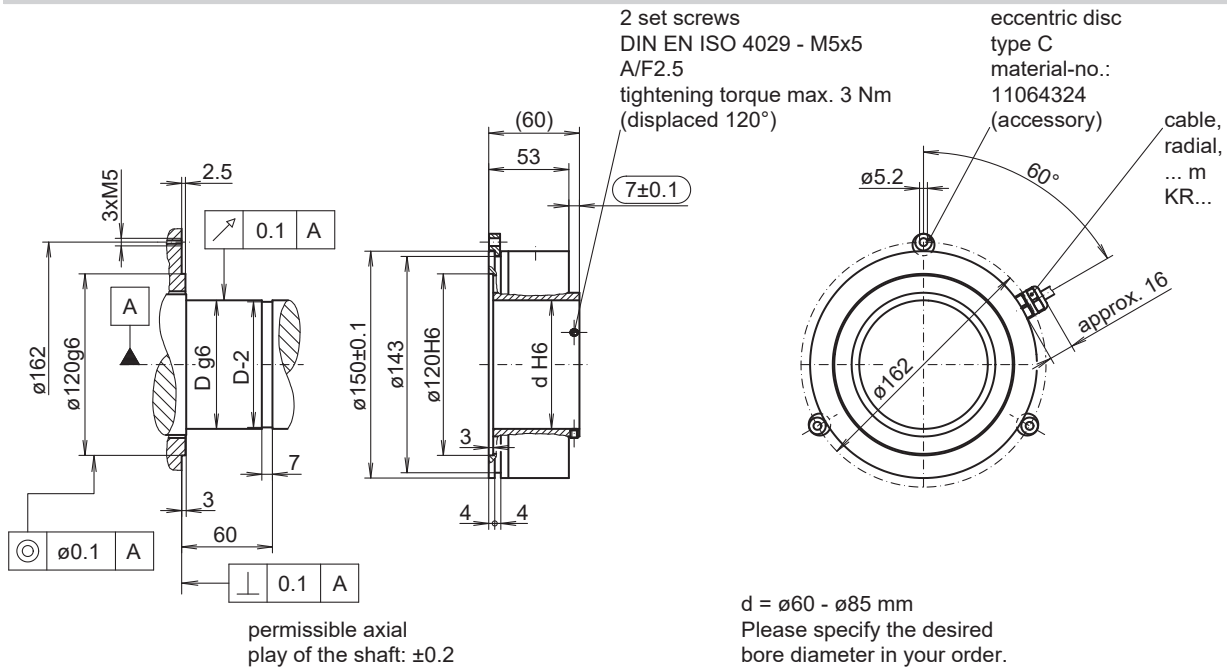


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Dimensions



025- 6

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Ordering reference

	ITD 75 A 4	#####	#	####	KR1	S	##	IP54
Product	ITD 75 A 4							
Pulse number								
1000		1000						
1024		1024						
2048		2048						
2500		2500						
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	
Through hollow shaft								
$\varnothing 60$ mm								60
$\varnothing 65$ mm								65
$\varnothing 70$ mm								70
$\varnothing 75$ mm								75
$\varnothing 80$ mm								80
$\varnothing 85$ mm								85
Protection								
IP 54								IP54