

Sine encoders

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

1024...5000 sinewave cycles per turn

ITD 22 A 4 Y36



ITD 22 A 4 Y36 with blind hollow shaft

Technical data - electrical ratings

Voltage supply	5 VDC ± 10 % 8...30 VDC
Reverse polarity protection	Yes
Consumption w/o load	≤ 90 mA
Sinewave cycles per turn	1024...5000
Sensing method	Optical
Output frequency	≤ 180 kHz (-3 dB)
Output signals	A, B, 0
Output stage	SinCos 1 Vpp

Features

- Encoder with blind hollow shaft $\varnothing 10$...14 mm
- Max. 5000 sinewaves cycles per turn
- Sine output signals 1 Vpp
- Mounting by torque support
- Compact design
- Cable output radial

Optional

- Cable with connector

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)
Motor shaft tolerance	0.25 mm axial 0.1 mm radial
Mounting kit	006
Protection DIN EN 60529	IP 65
Operating speed	≤ 8000 rpm
Starting torque	≤ 0.01 Nm (+20 °C)
Materials	Housing: aluminium, black, powder-coated Shaft: stainless steel
Operating temperature	-20...+85 °C
Relative humidity	90 % non-condensing
Resistance	DIN EN 60068-2-6 Vibration 10 g, 55-2000 Hz DIN EN 60068-2-27 Shock 30 g, 11 ms
Connection	Cable 1 m
Weight approx.	280 g

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Part number

ITD 22 A 4 Y36

		NI	KR1	S		IP65	006
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Mounting kit
006 Mounting accessory kit 006

Protection
IP65 IP 65

Blind hollow shaft
10 ø10 mm
12 ø12 mm
14 ø14 mm

Operating temperature
S -20...+85 °C

Connection
KR1 Cable 1 m, radial

Output signals
NI A+, A-, B+, B-, N+, N-

Voltage supply / signals
M 5 VDC / sine 1 Vpp
S 8...30 VDC / sine 1 Vpp

Sinewave cycles - see table

Sinewave cycles

1024	2048	4572	5000
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Sine encoders

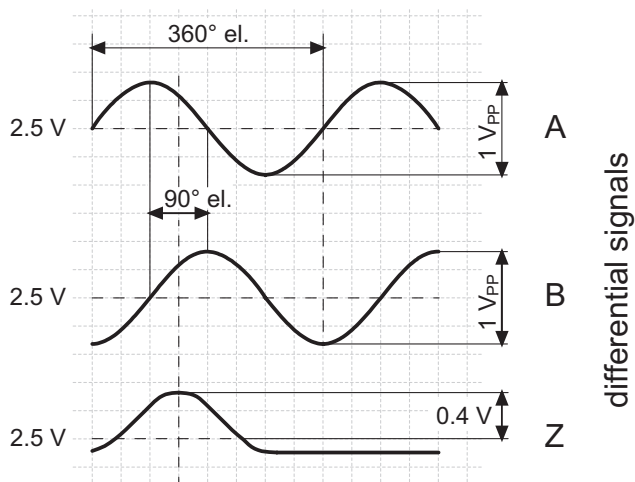
Blind hollow shaft $\varnothing 10$ to $\varnothing 14$ mm

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Output signals

Clockwise rotation when looking at the mounting side.



Terminal assignment

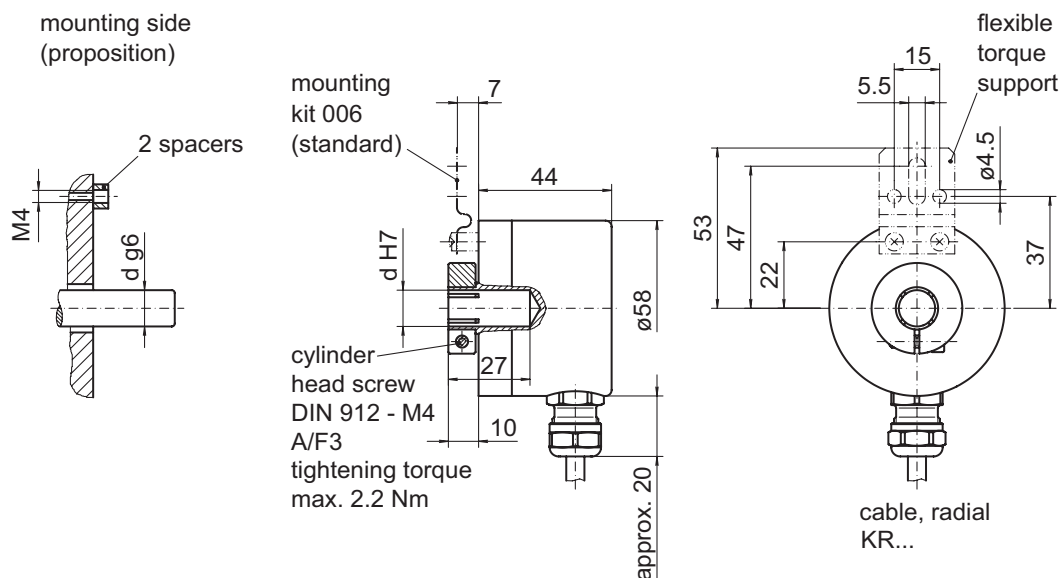
Core colour	Assignment
brown	Track A +
green	Track A -
grey	Track B +
pink	Track B -
red	Track N +
black	Track N -
brown 0,5 mm ²	UB
white 0,5 mm ²	GND
blue	UB-Sense
white	GND-Sense
transparent	Shield/Housing

Output signal level

Outputs	Sine
Output amplitude A + B	1 V _{PP} at Z ₀ = 120 Ω
Output amplitude N	approx. 0,4 V (useable part) at Z ₀ = 120 Ω

Dimensions

mounting side
(proposition)



029- 1 Y36

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