

Sine encoders

End shaft $\varnothing 20$ to $\varnothing 27$ mm

Resolution 1024, 2048 pulses

ITD 42 A 4 Y141



ITD 42 A 4 Y141 with end shaft

Technical data - electrical ratings

Voltage supply	5 VDC ± 10 % 8...30 VDC
Reverse polarity protection	Yes
Consumption w/o load	≤ 90 mA
Resolution (steps/turn)	1024...2048
Sensing method	Optical
Output frequency	≤ 180 kHz (-3 dB)
Output signals	A, B, 0
Output circuit	Sine/cosine 1 Vpp

Features

- Encoder with end shaft $\varnothing 20$ -27 mm
- Resolution max. 2048 ppr
- Sine output signals 1 Vpp
- Mounting by torque support
- Cable output radial

Optional

- Cable with connector

Technical data - mechanical design

Dimensions (flange)	$\varnothing 89$ mm
Shaft	$\varnothing 20$ mm end shaft $\varnothing 27$ mm end shaft $\varnothing 25$ mm end shaft $\varnothing 22$ mm end shaft
Motor shaft tolerance	0.25 mm axial 0.1 mm radial
Mounting kit variant	081
Protection DIN EN 60529	IP 67
Operating speed	≤ 2500 rpm
Starting torque	≤ 0.02 Nm
Materials	Housing: stainless steel 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.	1850 g

Sine encoders

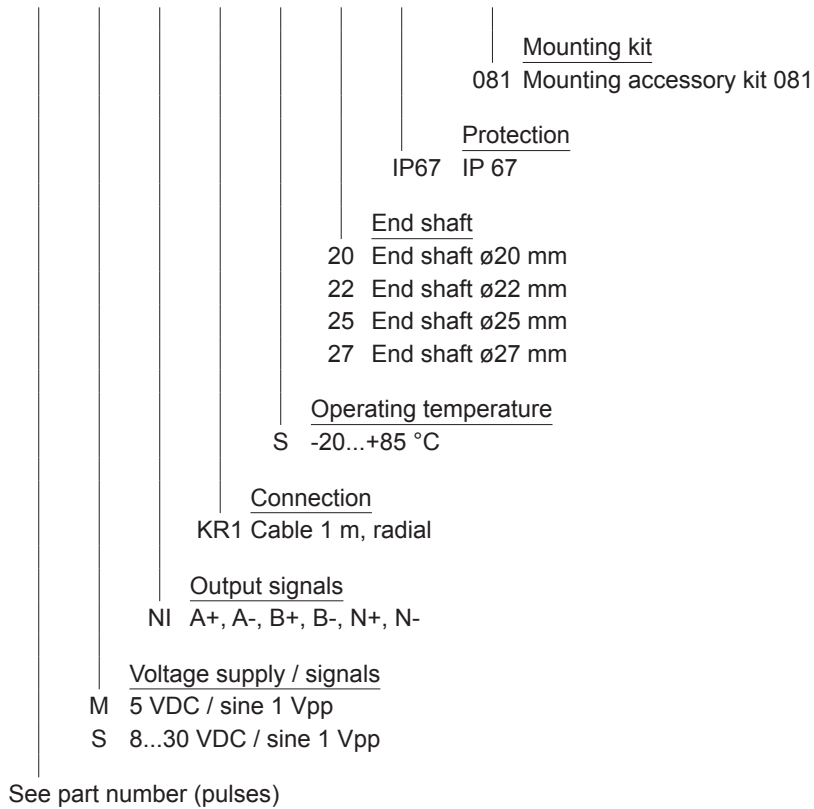
End shaft $\varnothing 20$ to $\varnothing 27$ mm
Resolution 1024, 2048 pulses

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Part number

ITD 42 A 4 Y141

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Part number (pulses)

1024 | 2048

Sine encoders

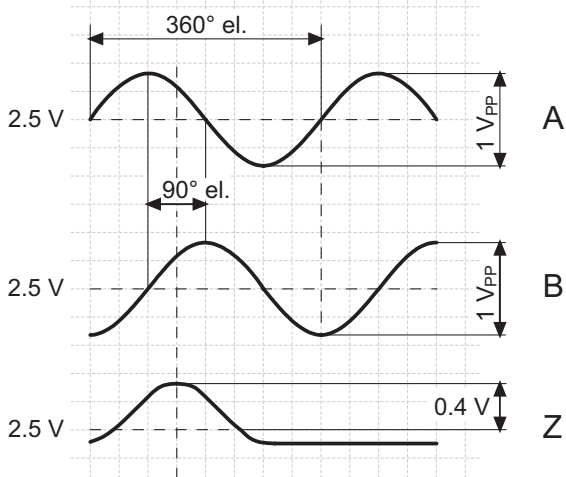
End shaft $\varnothing 20$ to $\varnothing 27$ mm

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Output signals

Clockwise rotation when looking at the mounting side.



differential signals

Terminal assignment

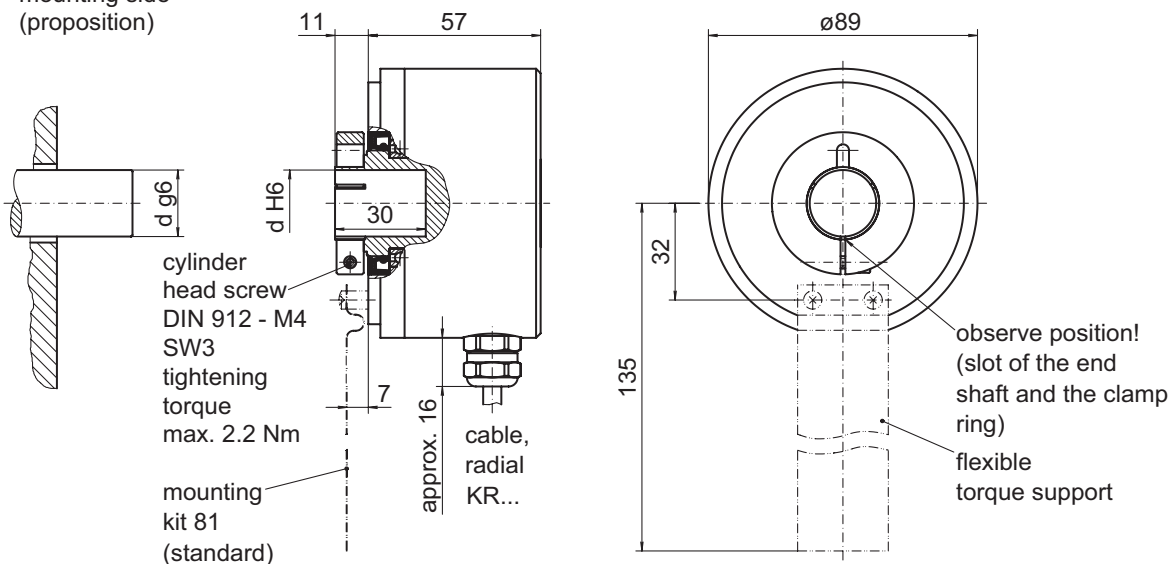
Core colour	Assignment
green	Track A +
yellow	Track A -
grey	Track B +
pink	Track B -
brown	Track N +
white	Track N -
red	UB
blue	GND
violet	UB-Sense
black	GND-Sense
transparent	Shield/Housing

Trigger 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)



026- 5 Y141

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