

Incremental encoders

Micro series, with end shaft

Resolution 30...1024 pulses

GI321



GI321 with end shaft

Features

- Micro encoder with end shaft $\varnothing 4$ mm
- Resolution max. 1024 ppr
- Housing $\varnothing 24$ mm
- High rotation speed max. 10000 rpm
- Operating temperature range $-20...+85^{\circ}\text{C}$
- Integrated spring washer
- Cost-efficient mounting

Technical data - electrical ratings

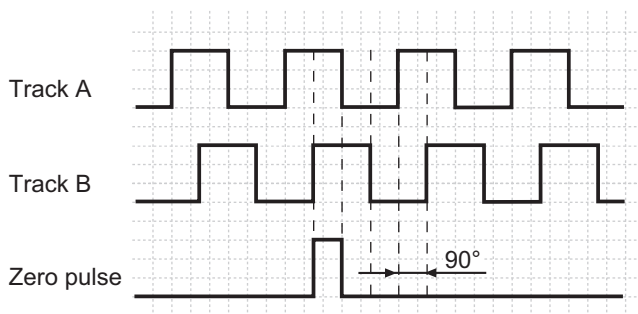
Voltage supply	5 VDC $\pm 5\%$ 8...30 VDC
Reverse polarity protection	Yes (8...30 VDC)
Consumption w/o load	≤ 25 mA
Resolution (steps/turn)	30...1024
Reference signal	Zero pulse, width 90°
Sensing method	Optical
Output frequency	≤ 100 kHz
Output signals	A 90° B, N
Output circuit	TTL linedriver Push-pull short-circuit proof
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-4

Technical data - mechanical design

Housing	$\varnothing 24$ mm
Shaft	$\varnothing 4$ mm end shaft
Protection DIN EN 60529	IP 54
Operating speed	≤ 10000 rpm
Starting torque	≤ 0.007 Nm
Material	Aluminium, bare
Operating temperature	$-20...+85^{\circ}\text{C}$
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
Weight approx.	50 g
Connection	Cable 1 m

Output signals

Clockwise rotating direction when looking at flange.



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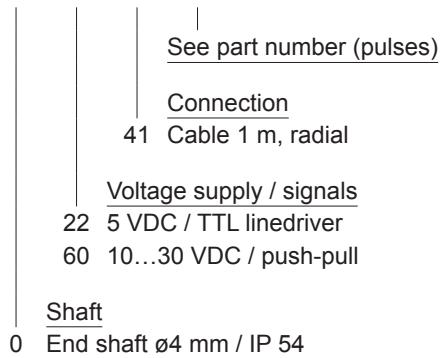
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Part number

GI321. 0 41



Terminal assignment

Core colour	Assignment
green	Track A
yellow	Track B
grey	Track N (zero pulse)
brown	UB
white	GND
transparent	Shield/Housing

Part number (pulses)

38 (30)	06 (200)	17 (600)
40 (60)	11 (300)	22 (1000)
41 (100)	13 (360)	23 (1024)

Other pulse numbers upon request.
Example: order key 23 = 1024 pulses

Dimensions

