Incremental encoders

Micro series, with end shaft

Resolution 30...1024 pulses

GI321



GI321 with end shaft

Features

- **Micro encoder with end shaft ø4 mm**
- **Resolution max. 1024 ppr**
- **Housing ø24 mm**
- **High rotation speed max.10000 rpm**
- **Operating temperature range -20...+85°C**
- **Integrated spring washer**
- **Cost-efficient mounting**

Technical data - electrical ratings

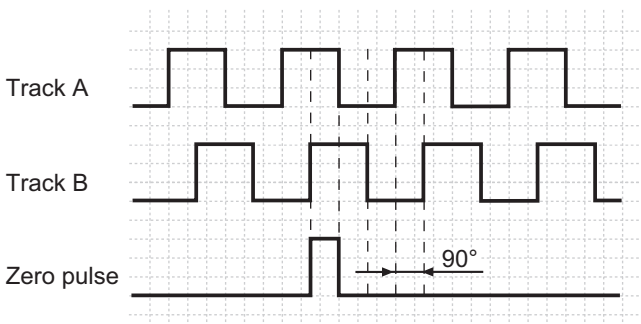
Voltage supply	5 VDC ±5 % 8...30 VDC
Reverse polarity protection	Yes (8...30 VDC)
Consumption w/o load	≤25 mA
Resolution (steps/turn)	30...1024
Reference signal	Zero pulse, width 90°
Sensing method	Optical
Output frequency	≤100 kHz
Output signals	A 90° B + N
Output circuit	TTL linedriver final stage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

Technical data - mechanical design

Housing	ø24 mm
Shaft	ø4 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 °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
E-connection	Cable 1 m

Output signals

Clockwise rotating direction when looking at flange.



30/10/2008 Subject to modification in technic and design. Errors and omissions excepted.

GI321

Part number

GI321. | **0** | | **41** | |

See part number (pulses)

E-connection
41 Cable 1 m, radial

Voltage supply / signals
22 5 VDC / TTL linedriver
60 10…30 VDC / push-pull

Shaft
0 End shaft ø4 mm IP 54

Terminal assignment

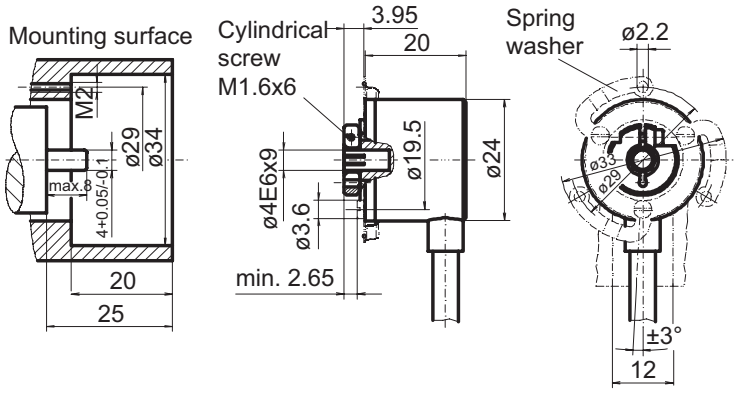
Core colour	Assignment
green	Track A
yellow	Track B
grey	Track N (zero pulse)
brown	UB
white	GND
transparent	Shield/Housing

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: ordering key 23 = 1024 pulses

Dimensions



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