

# Incremental encoders

Micro series, with shaft

Resolution 30...1024 pulses

## GI320



GI320 with shaft

### Features

- Micro encoder with shaft  $\varnothing 4$  mm
- Resolution max. 1024 ppr
- Housing  $\varnothing 24$  mm
- High rotation speed max. 18000 rpm
- Operating temperature range  $-20...+85^{\circ}\text{C}$

### Technical data - electrical ratings

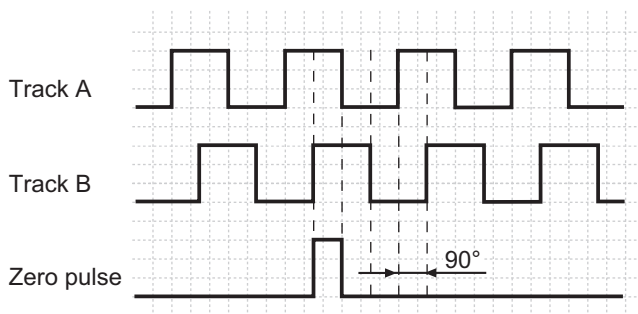
Voltage supply	5 VDC $\pm 5\%$ 8...30 VDC
Reverse polarity protection	Yes (8...30 VDC)
Consumption w/o load	$\leq 25$ mA
Resolution (steps/turn)	30...1024
Reference signal	Zero pulse, width $90^{\circ}$
Sensing method	Optical
Output frequency	$\leq 100$ kHz
Output signals	A $90^{\circ}$ B, N
Output circuit	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
Flange	Synchro flange
Protection DIN EN 60529	IP 54
Operating speed	$\leq 18000$ rpm
Starting torque	$\leq 0.006$ Nm
Admitted shaft load	$\leq 5$ N axial $\leq 8$ N radial
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.



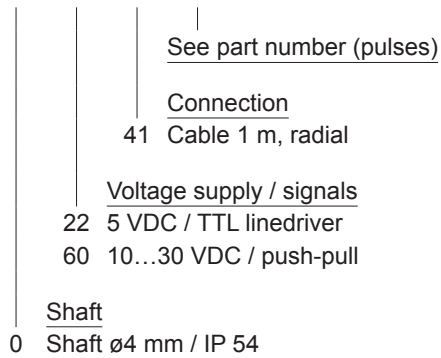
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## Part number

GI320. 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

