Incremental encoders

Shaft with clamping or synchro flange, PTB approved

Resolution 50 or 500 pulses

GPI0W



GPI0W with clamping flange

Features

- **Encoder with shaft ø10 mm or ø6 mm**
- **PTB approved**
- **Clamping flange or synchro flange**
- **High rotation speed max.10000 rpm**
- **Compact design**
- **High resistance to shock and vibrations**

Technical data - electrical ratings

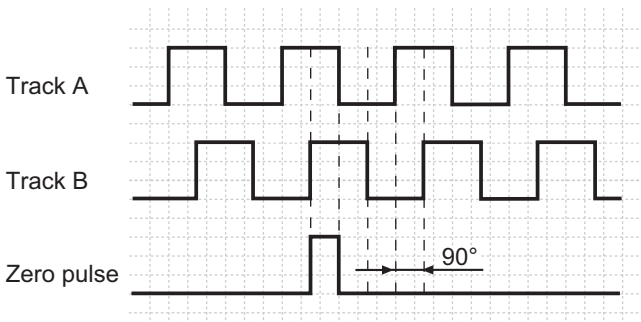
Voltage supply	10...30 VDC
Reverse polarity protection	Yes
Consumption w/o load	≤30 mA (24 VDC)
Resolution (steps/turn)	50...500
Reference signal	Zero pulse, width 90°
Sensing method	Optical
Output frequency	≤150 kHz
Output signals	A 90° B + N
Output circuit	Push-pull short-circuit proof
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-4
Approval	UL approval / E63076

Technical data - mechanical design

Housing	ø58 mm
Shaft	ø6 mm (synchro flange) ø10 mm (clamping flange)
Flange	Clamping or synchro flange
Protection DIN EN 60529	IP 54
Operating speed	≤10000 rpm
Starting torque	≤0.015 Nm IP 54
Rotor moment of inertia	14.5 gcm²
Admitted shaft load	≤20 N axial ≤40 N radial
Materials	Housing: aluminium Flange: aluminium
Operating temperature	-25...+85 °C
Relative humidity	95 % non-condensing
Resistance	DIN EN 60068-2-6 Vibration 10 g, 16-2000 Hz DIN EN 60068-2-27 Shock 200 g, 6 ms
Weight approx.	250 g
E-connection	Cable

Output signals

Clockwise rotating direction when looking at flange.



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

GPI0W

Part number

GPI0W. | | **10** | | |

See part number (pulses)

E-connection
- 12 Cable 2 m, axial
- 14 Cable 5 m, axial
- 16 Cable 10 m, axial
- 22 Cable 2 m, radial
- 24 Cable 5 m radial
- 26 Cable 10 m, radial

Voltage supply / signals
- 10 10...30 VDC / push-pull

Flange / Shaft
- 0 Clamping flange, mounting M3 / ø10 mm
- 1 Clamping flange, mounting M4 / ø10 mm
- 5 Synchro flange, mounting M4 / ø6 mm

Part number (pulses)

39 (50)	15 (500)

Example: ordering key 15 = 500 pulses.

Accessories

Mounting accessories (page %S)

Z 119.006	Eccentric fixing, single
Z 119.013	Adaptor plate for clamping flange for modification into synchro flange
Z 119.015	Mounting adaptor for synchro flange
Z 119.017	Mounting angle for clamping flange
Z 119.025	Adaptor plate for clamping flange, mounting by eccentric fixings (order separately)
Z 119.035	Bearing flange for encoders with synchro flange

Terminal assignment

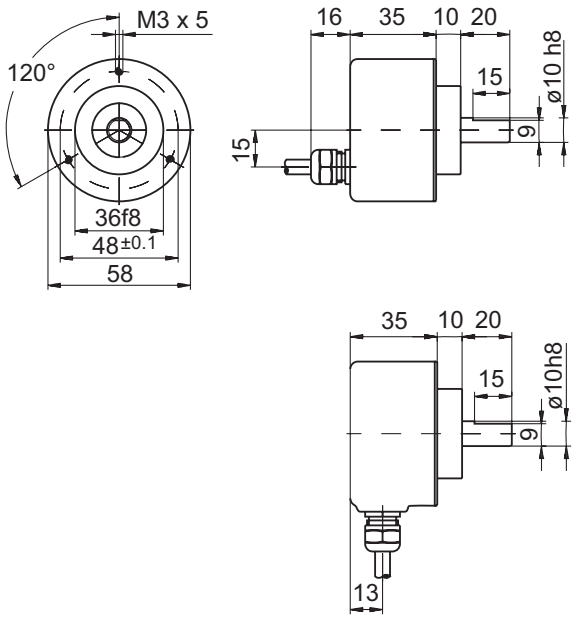
Core colour	Assignment
green	Track N (zero pulse)
blue	Track A
beige	Track B
black	GND (0 V)
brown	UB

Trigger level

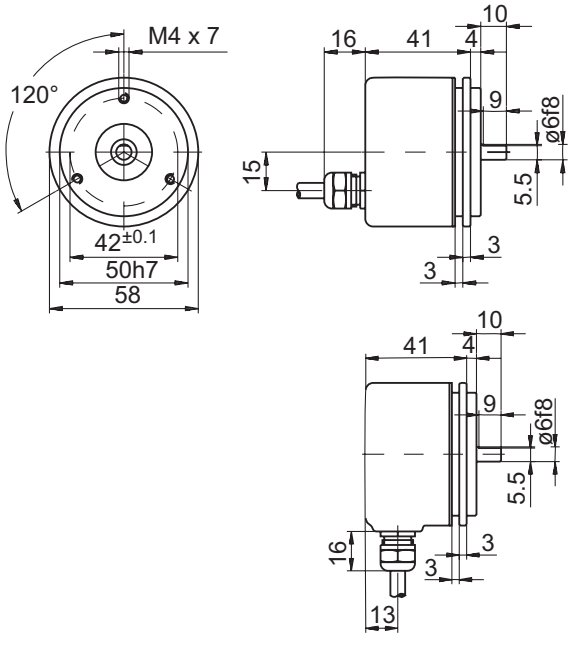
Outputs	**Push-pull** circuit-proof
Output level High	>UB -3 V (I = -20 mA)
Output level Low	<0.5 V (I = 20 mA)
Load High	<20 mA
Load Low	<20 mA

Dimensions

Clamping flange



Sychro flange



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