

Incremental encoder series G1000

Application Characteristics

- The compact solution to achieve a high resolution of rotating motion. Improving the measurement response at very low speed.
- Connection to an open shaft end by a flexible coupling.
- Easy run with low torque and low inertia.
- Speed range 0 ...6000 RPM.
- Operational in both directions. Optionally available with dual trace for direction detecting by D224.1S2

Function principle

Optoelectronic scanning of an incorporated disc.

Preference resolution value

(number of pulses per revolution)

60 – 100 – 360 – 500 – 1000 – 2500 pulses per rev.

Mechanical specifications

Shaft diameter: 10 mm

Maximum speed: 6000 rpm

Maximum allowable load to the shaft: radial 20 N
axial 15 N

Drive torque: 2 Ncm

Inertia: 30 gcm²

Weight: approx. 0.5 kg

Protection grade IP 65 (not for use in high humidity).

Electrical specifications

Supply 11... 28 volts DC / < 60 ma (as provided by our units for permanent installation)

Max. signal frequency: 50 kHz

Signal Output

Square wave with level equal to supply minus 2 volts.

Max pull-up load 40 ma.

Standard single trace,

optional dual trace with approx 90 ° shift, and 1 key pulse.

Connection

Plug-in socket on top of enclosure.

Pin Nos:

1 = common zero

2 = + supply

3 = signal output (main trace)

4 = second trace (if provided)

5 = key pulse (if provided)

Available Accessories

Plug-in connector (ordering No. 9412).

Flexible coupling to 10 mm shaft diameter

(ordering No. U1A001/10).

Angular mounting flange: (ordering No. U3A003).

Ordering Information

Single trace version: **G1000/**_____

Dual trace + key pulse : **G1000/**_____ - 20

Number of pulses per revolution _____

Required accessories as listed above.

Also available are versions with tightened 12 mm shaft and those with a hollow shaft. Please ask for data sheets.