

Incremental-Encoder IH 20

TR-VCE-TI-GB-0600
04/12 Revision 02
010101-00209999-9999



- + Incremental interface
- + Hollow shaft encoder for direct coupling to any drive shaft (Ø 20 mm)
- + Number of pulses per revolution up to 1.024

Characteristics

Supply Voltage	11 - 27 V DC
5 VDC	Upon request
Power Dissipation (No Load)	< 3 Watt
Output (11-27 V)	Push-Pull
- Maximum Current	max. 30 mA
- Incremental Signal	A, A neg., B, B neg. Channel A leads channel B when rotating in a clockwise direction.
- Marker Pulse	Z, Z neg., 1 pulse per revolution
- Output Frequency	30 kHz
- Rise Time of Edge	< 500 ns
Output (5 V)	Line Driver
- Maximum Current	max. 50 mA
- Incremental Signal	A, A neg., B; B neg. Channel A leads channel B when rotating in a clockwise direction.
- Marker Pulse	Z, Z neg., 1 pulse per revolution
- Output Frequency	100 kHz
- Rise Time of Edge	< 100 ns
Maximum Revolutions per Minute (RPM)	(Output Frequency [Hz] / PPR) x 60 seconds
Number of Pulses per Revolution (Standard)	1, 15, 25, 30, 60, 100, 200, 218, 360, 500, 600, 720, 800, 900, 1000, 1024
Other Resolutions	Upon request
Maximum Rotational Speed	6000 RPM
Maximum Load on Shaft	40 N Axial, 60 N Radial
Lifetime on Bearings	3.9 x 10 ¹⁰ Revolutions at:
- Operational Speed	3000 RPM
- Load on Shaft	20 N Axial, 30 N Radial (at end of shaft)
- Operating Temperature	60°C (140°F)
Maximum Angular Acceleration	≤ 10 ⁴ rad/s ²
Momentum of Inertia	2.5 x 10 ⁻⁶ kg m ²
Startup Momentum at 20°C (68°F)	2 Ncm
Weight	0.5 kg (1.1 lb.)

Subject to change

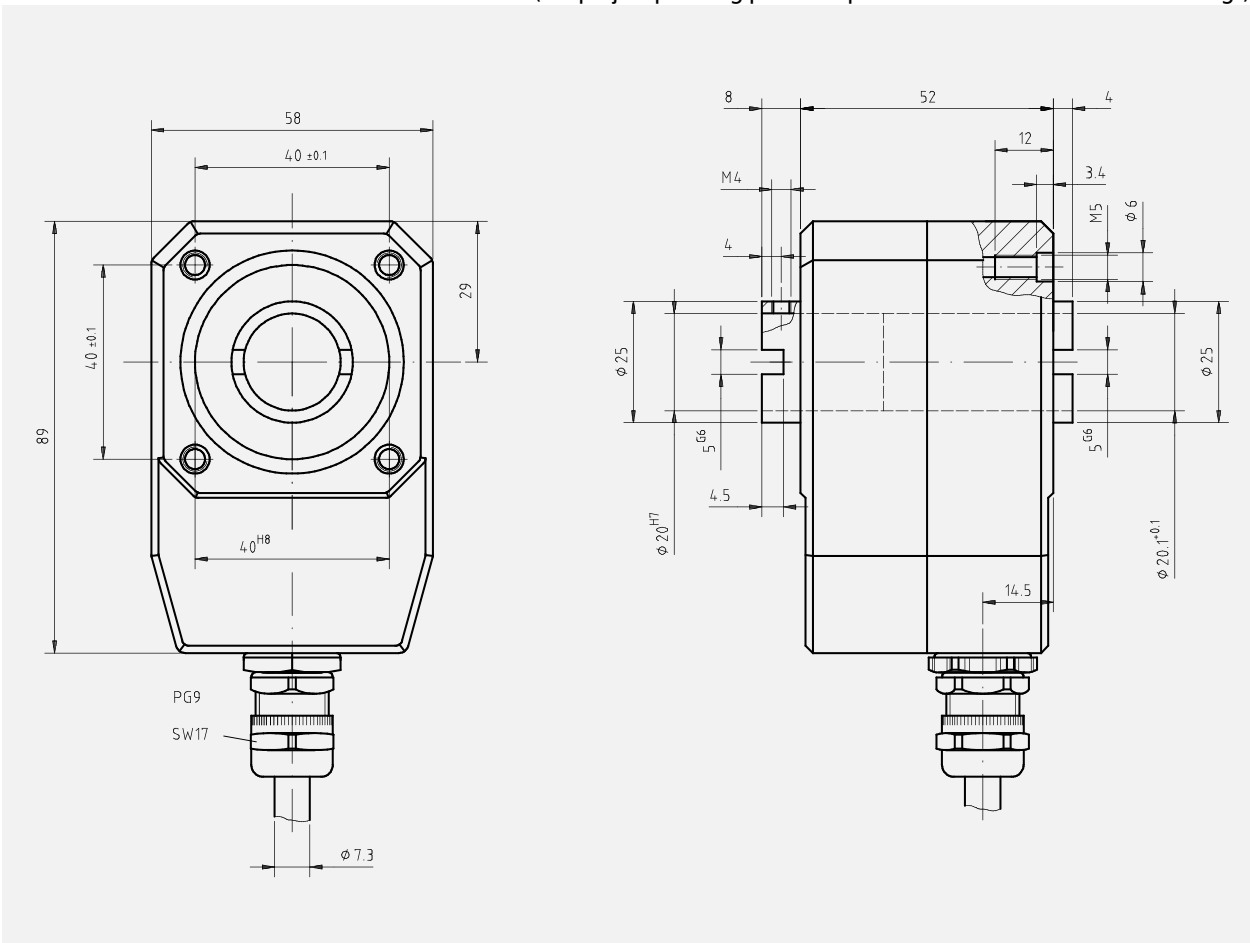
Environmental conditions

Vibration, DIN EN 60068-2-6: 1996	≤ 100 m/s ² , sine 50-2000 Hz
Shock, DIN EN 60068-2-27: 1995.....	≤ 1000 m/s ² , half-sine 11 ms
EMC	
- Immunity to disturbance, DIN EN 61000-6-2: 2006	
- Transient emissions, DIN EN 61000-6-3: 2007	
Operating Temperature.....	0° to 60°C (32°F to 140°F) (Option -20° to 70°C / -4°F to 158°F)
Extended Temperature (Optional)	-30° to +80°C (-22° to 176°F)
Relative humidity, DIN EN 60068-3-4: 2002	98 %, non condensing
Protection class, DIN EN 60529: 1991 *).....	IP 54

*) valid with screwed on mating connector and / or screwed together cable gland

Dimension drawing

(For project planning please request customized dimensional drawing!)



Subject to change