

Incremental-Encoder IE 58 A

TR-VCE-TI-GB-0570
04/12 Revision 03
010101-00589999-9999



- + Incremental interface
- + Small compact design
- + Universal applications
- + Number of pulses per revolution 1 to 10 000

Characteristics

Supply Voltage	11-27 V DC or 5 VDC
Power Dissipation (No Load)	< 4 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	< 1000 PPR = 30 kHz, > 1000 PPR = 160 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	< 1000 PPR = 100 kHz, > 1000 PPR = 300 kHz
- Rise Time of Edge	< 100 ns
Maximum Revolutions per Minute (RPM)	(Output Frequency [Hz] / PPR) x 60 seconds
Number of Pulses Per Revolution	1 – 10 000
Maximum Rotational Speed	6000 RPM
Maximum Load on Shaft	10 N axial, 20 N radial (at end of shaft)
Lifetime on Bearings	3.9 x 10 ¹⁰ Revolutions at:
- Operational Speed	3000 RPM
- Operating Temperature	60 °C
Maximum Angular Acceleration	≤ 10 ⁴ rad/s ²
Momentum of Inertia	2.5 x 10 ⁻⁶ kg m ²
Startup Momentum 20°C (68° F)	2 Ncm
Standard Connector	PG 9 axial cable (pigtail), Different Cable Lengths on Request
Further Types of Connections / Connector Types	Upon Request
Weight	0.3 kg (0.7 lb.)

Subject to change

Environmental conditions

Vibration, DIN EN 60068-2-6: 1996 $\leq 100 \text{ m/s}^2$, sine 50-2000 Hz

Shock, DIN EN 60068-2-27: 1995 $\leq 1000 \text{ m/s}^2$, half-sine 11 ms

EMC

- Immunity to disturbance, DIN EN 61000-6-2: 2006

- Transient emissions, DIN EN 61000-6-3: 2007

Operating Temperature $0^\circ \text{ to } 70^\circ \text{C}$ ($32^\circ \text{F to } 158^\circ \text{F}$) (Option $-20^\circ \text{ to } +70^\circ \text{C}$) ($-4^\circ \text{F to } 158^\circ \text{F}$)

Extended Temperature (Optional) $-30^\circ \text{ to } +80^\circ \text{C}$ ($-22^\circ \text{ to } 176^\circ \text{F}$)

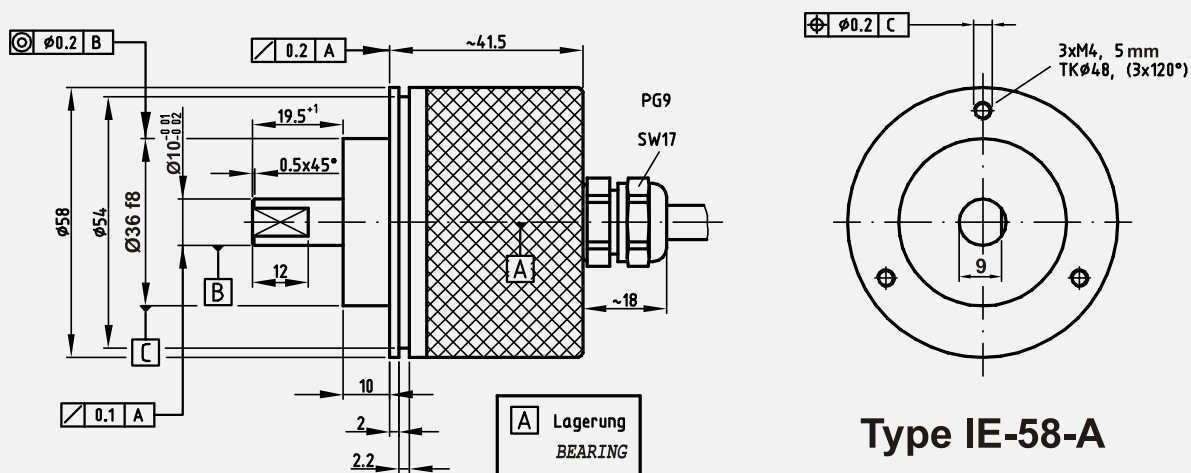
Relative humidity, DIN EN 60068-3-4: 2002 98 %, non condensing

Protection class, DIN EN 60529: 1991 *) IP 65

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

Dimension drawing

(For project planning please request customized dimensional drawing!)



Weitere Anschlussvarianten (radial), Steckerausführungen auf Anfrage /
Further types of connections (radial), type of connectors upon request