

Incremental-Encoder IE 58 U

TR-VCE-TI-GB-0572
04/12 Revision 01
010101-00589999-9999



- + Incremental interface
- + Type with solid shaft
- + Small compact design
- + Universal applications
- + Number of pulses per revolution up to 4.096, others upon request

Characteristics

Supply Voltage	11-27 V DC or 5V DC
Power Dissipation (No Load).....	< 0,8 Watt
Output (11-27 V).....	Push-Pull
- Maximum Current	30 mA
- Incremental Signal	A, A neg., B, B neg. Channel A leads channel B when rotating in a clockwise direction
- Marker Pulse (option)	Z, Z neg., 1 pulse per revolution
- Cut-Off Frequency.....	160 kHz
- Rise Time of Edge.....	< 500 ns
Output (5 V)	Line Driver
- Maximum Current	50 mA
- Incremental Signal	A, A neg., B; B neg. Channel A leads channel B when rotating in a clockwise direction
- Marker Pulse (option)	Z, Z neg., 1 pulse per revolution
- Cut-Off Frequency	> 300 kHz
- Rise Time of Edge.....	< 100 ns
Maximum Revolutions per Minute (RPM)	$(\text{Cut-Off Frequency [Hz]} / \text{PPR}) \times 60 \text{ min}^{-1}$
Number of Pulses Per Revolution	7, 10, 18, 20, 32, 40, 50, 60, 64, 100, 125, 128, 180, 200, 250, 300, 360, 360, 400, 440, 500, 512, 700, 900, 1000, 1024, 1250, 1500, 1885, 2000, 2048, 2500, 2600, 3600, 4000, 4096 further on request
Maximum Rotational Speed	12.000 min^{-1}
Maximum Load on Shaft	10 N axial, 20 N radial (at end of shaft)
Lifetime on Bearings.....	min. $3,9 \times 10^{10}$ revolutions at:
- Operational Speed	6.000 min^{-1}
- Operating Temperature.....	60°C
Maximum Angular Acceleration.....	$\leq 10^4 \text{ rad/s}^2$
Momentum of Inertia	approx. $2,5 \times 10^{-6} \text{ kg m}^2$
Startup Momentum at 20°C (68°F)	approx. 2 Ncm
Standard Connection.....	12 pin Contact-Bullet-Connector, radial
Further Types of Connections / Connector Types.....	Upon Request
Weight	approx. 0,3 kg

Subject to change

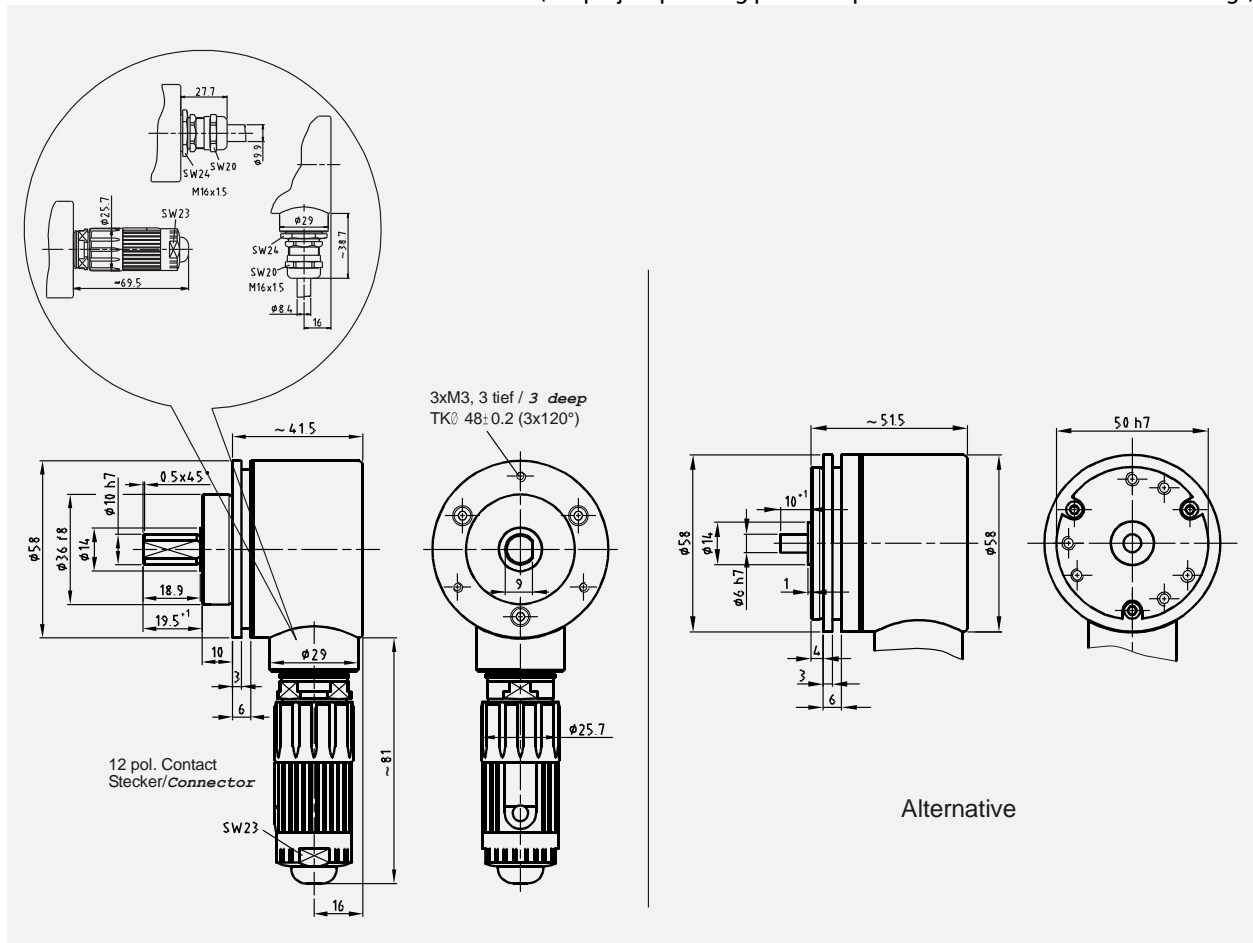
Environmental conditions

Vibration, DIN EN 60068-2-6: 1996 $\leq 100 \text{ m/s}^2$, sine 59-2000 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..... - 20 to + 85°C
 Storage Temperature..... - 30 to + 80°C
 Relative humidity, DIN EN 60068-3-4: 2002 98 %, non condensing
 Protection class, DIN EN 60529: 1991 *)..... IP 67

*) 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