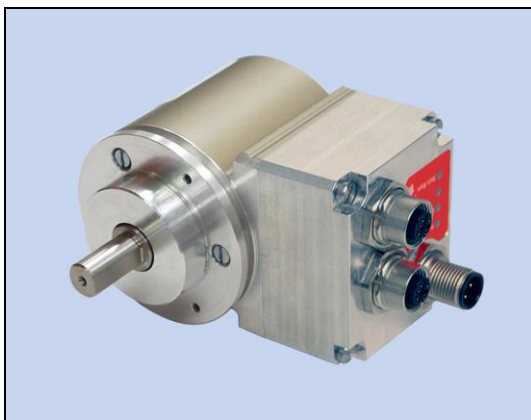
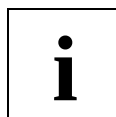
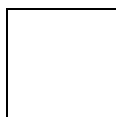
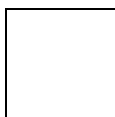
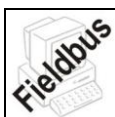


Absolute-Encoder CEV 58 S/M - ETC

Eglishalde 6
D-78647 Trossingen
Tel. +49 - (0) 74 25 / 228 - 0
Fax +49 - (0) 74 25 / 228 - 33
<http://www.tr-electronic.de>
Germany



- EtherCAT interface
- Type with solid shaft
- Modular product line
- Extensive parameter setting possibilities
- Special parameters upon request
- Short lead times
- Further interfaces available
- Modular construction for mechanical customizations

5.A

Characteristics

Supply voltage.....	11...27 VDC
Current consumption without load	< 300 mA
Total resolution ¹⁾	Multi-Turn: ≤ 33 Bit, Single-Turn: ≤ 15 Bit
Number of steps/revolution, standard ¹⁾	≤ 8.192
Number of steps/revolution, extended ¹⁾	≤ 32.768
Number of revolutions, standard ¹⁾	Multi-Turn: ≤ 4.096, Single-Turn: 1
Number of revolutions, extended ¹⁾	Multi-Turn: ≤ 256.000, Single-Turn: 1
EtherCAT	IEC 61158-1 – 6, IEC 61784-2
- Physical Layer	EtherCAT 100Base-TX, Fast Ethernet, ISO/IEC 8802-3
- Output code	Binary
- Device profile.....	CANopen over EtherCAT (CoE), CiA DS-406
- Distributed clocks	according to IEEE 1588
- Transmission rate	100 MBit/s
- Cycle time	100 µs
- Transmission	CAT-5 cable, shielded (STP), ISO/IEC 11801
- Parameter ¹⁾	Scaling parameters, Count direction, Preset value
- Data size for actual value on the bus	≤ 32 Bit
Mechanically permissible speed	≤ 12.000 min ⁻¹
Shaft load, at the shaft end	≤ 10 N axial, ≤ 20 N radial
Bearing life time	≥ 3.9 * 10 ¹⁰ revolutions at
- Speed	≤ 6.000 min ⁻¹
- Operating temperature	≤ 60 °C
- Shaft load, at the shaft end.....	≤ 5 N axial, ≤ 10 N radial
Permissible angular acceleration	≤ 10 ⁴ rad/s ²
Moment of inertia	typically 2.5 * 10 ⁻⁶ kg m ²
Start-up torque at 20°C	typically 2 Ncm
Mass.....	0.3 kg...0.5 kg

¹⁾ programmable parameter

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 11ms

EMC

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

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

Working temperature..... $0^\circ\text{C} \dots +60^\circ\text{C}$, optional $-20^\circ\text{C} \dots +70^\circ\text{C}$

Storage temperature..... $-30^\circ\text{C} \dots +80^\circ\text{C}$, dry

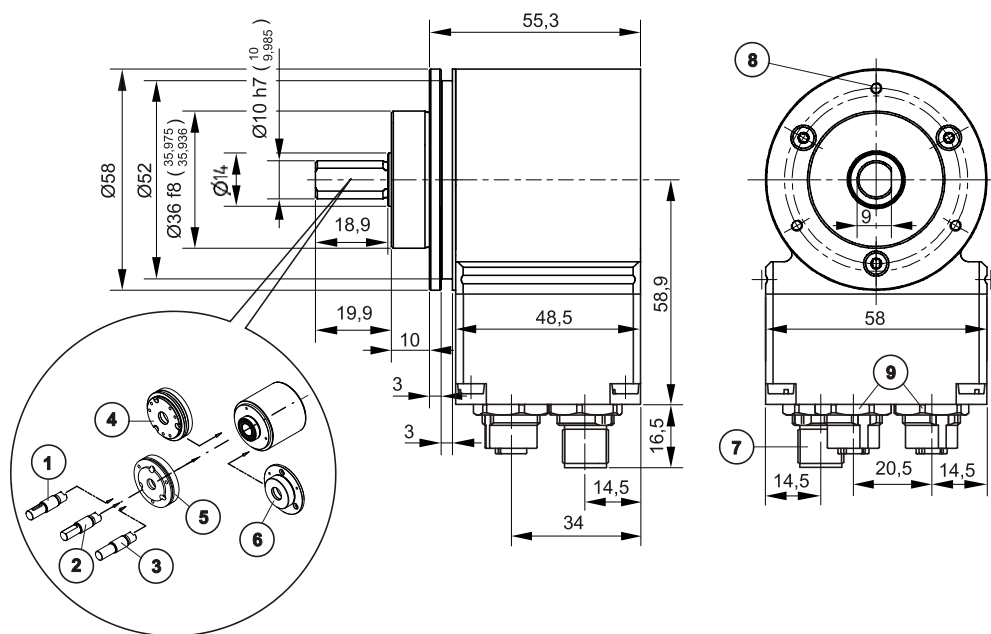
Relative humidity, DIN EN 60068-3-4: 2002 98 %, non condensing

Protection class, DIN EN 60529: 1991 ²⁾..... IP 65

²⁾ valid with screwed on mating connector and / or screwed together cable gland

Dimension drawing

(For project planning please request customized dimensional drawing !)



- | | |
|--|---|
| 1 Solid shaft with groove | 6 Servo flange with 36 mm ZB |
| 2 Solid shaft with flat | 7 4pin. M12-male-connector (Supply voltage) |
| 3 Solid shaft smooth | 8 3 x M3, 3 deep; TK (pitch circle) $\varnothing 48 \pm 0.2$ (3x120°) |
| 4 Synchronous flange with 50 mm ZB (centering ring) | 9 2 x 4pin. M12-connector d-coded female (PORT IN/OUT) |
| 5 Customized-flange with 45 mm ZB
or square flange with 31.75 mm ZB | |