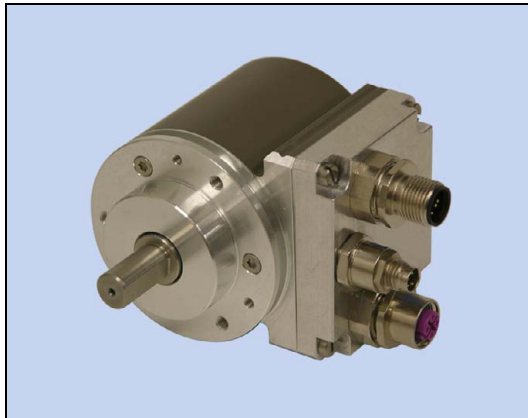
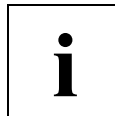
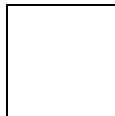
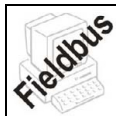


## Absolute-Encoder CEV 58 S/M - ETC

Eglisshalde 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**
- **Very compact and small construction**
- **Rugged standard solution**
- **Economical alternative to the CE series**
- **Short lead times**
- **Further interfaces available**

**5.A**

## Characteristics

Supply voltage.....	11...27 VDC
Current consumption without load .....	< 300 mA
Total resolution <sup>1)</sup> .....	Multi-Turn: ≤ 30 Bit, Single-Turn: ≤ 15 Bit
Number of steps/revolution <sup>1)</sup> .....	≤ 32.768
Number of revolutions, standard <sup>1)</sup> .....	Multi-Turn: ≤ 4.096, Single-Turn: 1
Number of revolutions, extended <sup>1)</sup> .....	Multi-Turn: ≤ 32.768, 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 times .....	62.5 µs...32 ms
- Transmission .....	CAT-5 cable, shielded (STP), ISO/IEC 11801
- Parameter <sup>1)</sup> .....	Scaling parameters, Count direction, Preset value
Mechanically permissible speed .....	≤ 12.000 min <sup>-1</sup>
Shaft load, at the shaft end .....	≤ 10 N axial, ≤ 20 N radial
Bearing life time .....	≥ 3.9 * 10 <sup>10</sup> revolutions at
- Speed .....	≤ 6.000 min <sup>-1</sup>
- Operating temperature .....	≤ 60 °C
- Shaft load, at the shaft end.....	≤ 5 N axial, ≤ 10 N radial
Permissible angular acceleration .....	≤ 10 <sup>4</sup> rad/s <sup>2</sup>
Moment of inertia .....	typically 1.3 * 10 <sup>-6</sup> kg m <sup>2</sup>
Start-up torque at 20°C .....	typically 2 Ncm
Mass.....	typically 0.3 kg
Programming, alternative .....	WINDOWS <sup>®</sup> compatible, TRWinProg

<sup>1)</sup> 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  
- Transient emissions, DIN EN 61000-6-3: 2007  
- Immunity to disturbance, DIN EN 61000-6-2: 2006  
Working temperature.....  $0 \text{ }^\circ\text{C} \dots +60 \text{ }^\circ\text{C}$ , optional  $-20 \text{ }^\circ\text{C} \dots +70 \text{ }^\circ\text{C}$   
Storage temperature.....  $-30 \text{ }^\circ\text{C} \dots +80 \text{ }^\circ\text{C}$ , dry  
Relative humidity, DIN EN 60068-3-4: 2002 ..... 98 %, non condensing  
Protection class, DIN EN 60529: 1991 <sup>2)</sup>..... IP 65

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

### Dimension drawing

