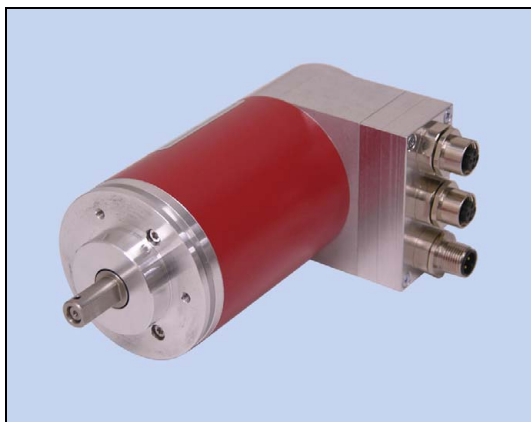
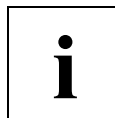
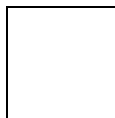
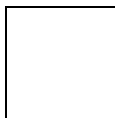
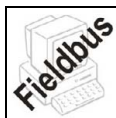


## Absolute-Encoder COV 65 S/M - ETC

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**
- **High resolution measuring system, up to 18 bit**
- **Modular product line**
- **Extensive parameter setting possibilities**
- **Special parameters upon request**
- **Further interfaces available**
- **Modular construction for mechanical customizations**

**5.A**

## Characteristics

Supply voltage.....	11...27 VDC
Current consumption without load .....	< 250 mA
Total resolution <sup>1)</sup> .....	Multi-Turn: ≤ 36 Bit, Single-Turn: ≤ 18 Bit
Number of steps/revolution <sup>1)</sup> .....	≤ 262.144
Number of revolutions, standard <sup>1)</sup> .....	Multi-Turn: ≤ 4.096, Single-Turn: 1
Number of revolutions, extended <sup>1)</sup> .....	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, without gear function.....	1 new position value / 100 μs
- Cycle time, with gear function.....	1 new position value / 250 μs
- Transmission .....	CAT-5 cable, shielded (STP), ISO/IEC 11801
- Parameter <sup>1)</sup> .....	Scaling parameters, Count direction, Preset value
Mechanically permissible speed .....	≤ 6.000 min <sup>-1</sup>
Shaft load, at the shaft end .....	≤ 40 N axial, ≤ 60 N radial
Bearing life time .....	≥ 3.9 * 10 <sup>10</sup> revolutions at
- Speed .....	≤ 3.000 min <sup>-1</sup>
- Operating temperature .....	≤ 60 °C
- Shaft load, at the shaft end.....	≤ 20 N axial, ≤ 30 N radial
Permissible angular acceleration .....	≤ 10 <sup>4</sup> rad/s <sup>2</sup>
Moment of inertia .....	typically 2.5 * 10 <sup>-6</sup> kg m <sup>2</sup>
Start-up torque at 20°C .....	typically 2 Ncm
Mass.....	typically 0.7 kg

<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

- Discharge of static electricity, DIN EN 61000-4-2: 2001
- Burst, DIN EN 61000-4-4: 2004
- Immunity to disturbance, DIN EN 61000-6-2: 2001

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

