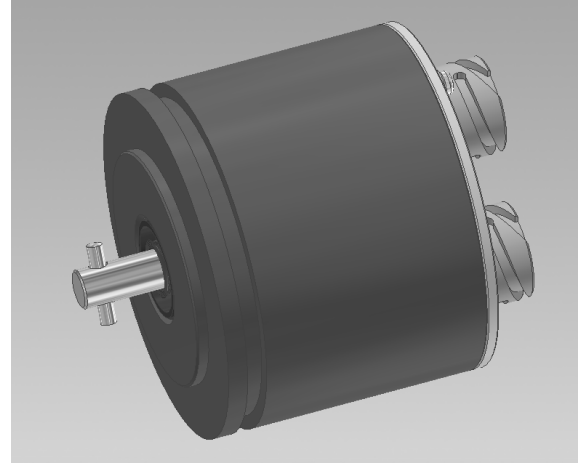


- Measuring range : 35 Revolutions
- Resolution : 12 bit (per turn)
- Output signal : CAN Open dual channel
- Excellent Linearity :  $\pm 0.0111^\circ$
- Excellent repetition accuracy :  $\pm 0.0056^\circ$
- Working temperature range :  $-40^\circ\text{C}$  to  $+85^\circ\text{C}$
- Absolute value



## Application

Due to its excellent technical specifications, the XTB90R is suitable for reliable measurements in harsh environments. It is optimized for use at slow drives.

## Technology

The angle information is captured by two independent magnetic measuring systems and made available via CANopen protocol.

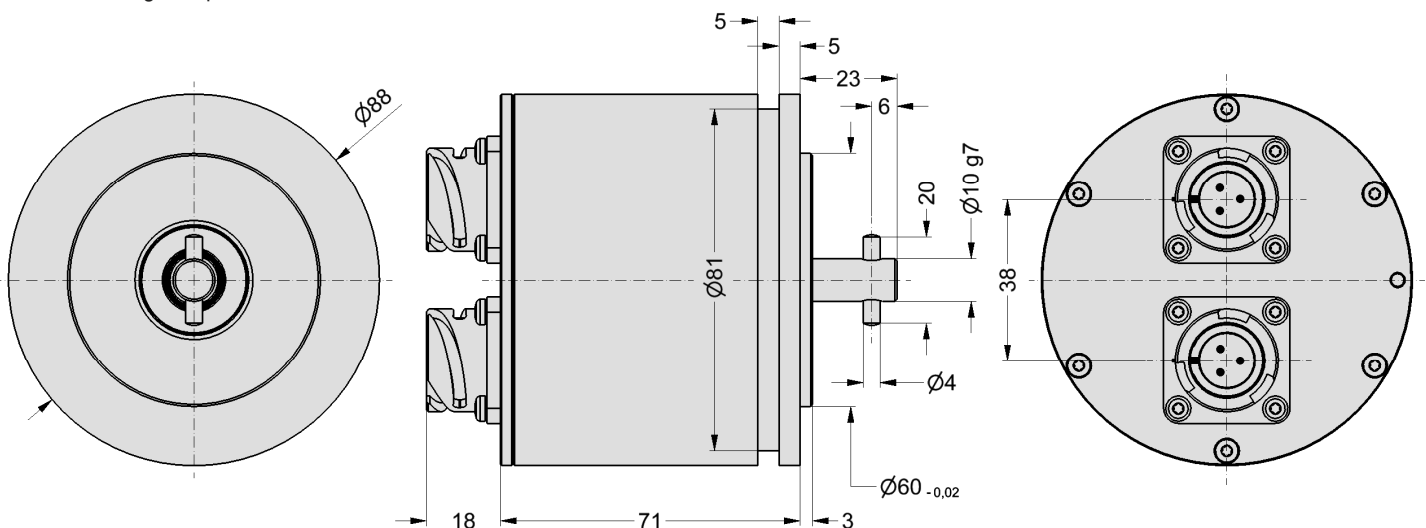
Revolutions are counted even during movement without power supply, therefore no data loss can occur.

## Dimension diagram

### Additional scope of delivery:

4x Spring lock ring B5, DIN 127, A2  
 4x Hexagon socket screw M5x20, DIN 912, A2  
 4x Mounting clamps

Connectors ITT-Cannon, 4-pole (2x)



## Assembly

- Anodized Aluminum-Housing, protection class IP 66
- Connector ITT-Cannon / 4-pole (2x) / protection class IP 67 (with screwed mating connector)
- For mounting the housing use the 4 enclosed mounting clamps and screws.

## Technical Data

### Electrical Data

Power supply :	24 V DC $\pm 20\%$
Power consumption :	typ. 30 mA per channel
Resolution (per turn)	12 bit (4096 steps)
Linearity :	$\pm 0.0111^\circ$
Repetition accuracy:	$\pm 0.0056^\circ$
Measuring range :	35 turns (12600°)
Bus Interface :	CAN 2.0B

### CANopen specifications

CANopen profile :	CiA 406 v 3.2 encoder profile (class 2 device)
PDOs :	2 Transmit PDOs
Baudrates :	10, 20, 50, <b>125</b> , 250, 500, 1000 kBaud
Supported features :	<ul style="list-style-type: none"><li>- Layer Setting Service (LSS)</li><li>- NMT-slave</li><li>- Heartbeat</li><li>- PDO Mapping</li><li>- Emergency Messages</li><li>- NMT startup</li><li>- Scaling</li></ul>

Internal Bus Termination : no

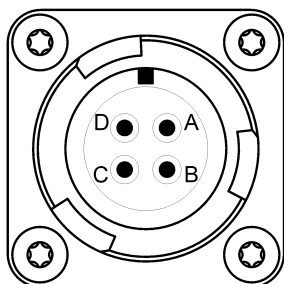
### Environmental Conditions

Operating Temperature :	-40 °C to +85 °C
Humidity :	5 % to 95 %

### Housing

Housing :	AlMgSi1 anodized (sea-water resistant)
Shaft / Coupling :	Stainless steel (sealed with rotary shaft sealing)
Bearing :	Roller-contact bearing
Protection class :	IP 66 (EN 60529)
Weight :	1,2 kg
Dimensions :	Ø88 x 71 mm

## Pin assignment



### Channel A :

A : Power supply  
B : GND  
C : CAN High  
D : CAN Low

### Channel B :

A : Power supply  
B : GND  
C : CAN High  
D : CAN Low