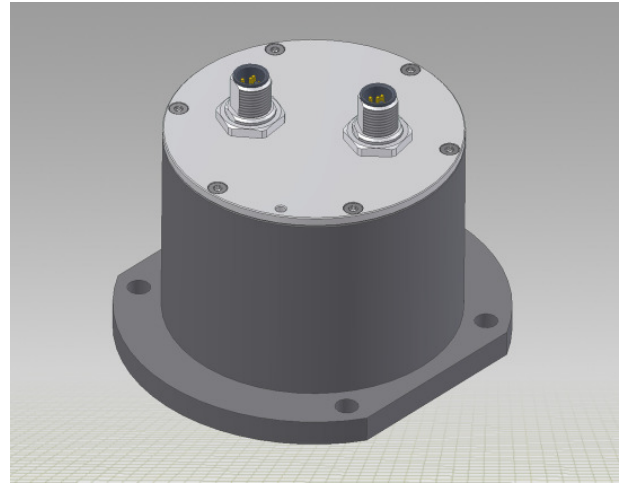


Angle sensor XTB90R

IBS-Part-No.: IBSMT65

- **Measuring range** : 1474560° (redundant)
- **Resolution** : 12 Bit (single-turn)
- **Output signal** : SSI (Gray Code)
- **Excellent Linearity** : ±0.0001 %
- **Excellent repetition accuracy** : ±0.0001 %
- **Working temperature range** : -40°C to +85°C



Application

Due to its excellent technical specifications, the sensor is suitable for multiple tasks. For example in angle measuring units or slew drives.

Technology

The angle information is captured by two independent magnetic measuring systems. Two independent measuring transducers convert the angle information into gray-code SSI-signals.

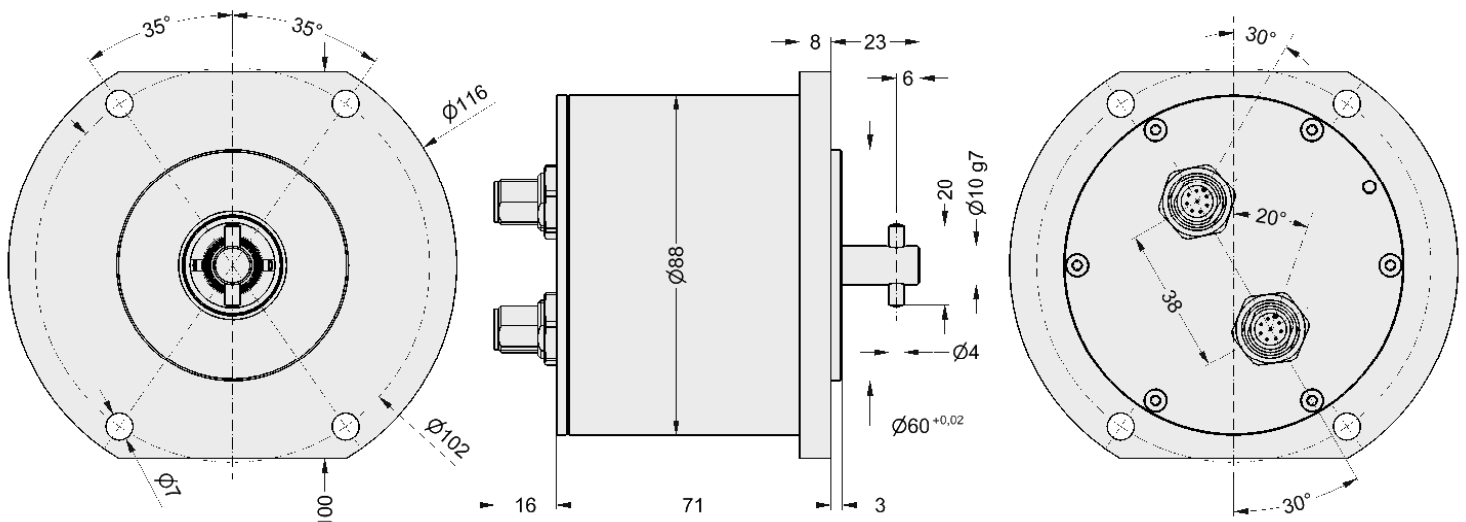
Dimensions

Connector M12, 8-pole (2x)

Additional scope of delivery:

4x Spring lock ring B5, DIN 127, A2

4x Hexagon socket screw M5x20, DIN 912, A2



Assembly

- Anodized Aluminum-Housing, protection class IP 67
- Connector M12 / 8-pole / protection class IP 67 (with screwed mating connector)
- For mounting the housing use the 4 enclosed screws.

Technical Data

Electrical Data

Power supply :	24 V DC ±20 %
Measuring range :	1474560° (4096 revolutions)
Resolution (per revolution)	12 Bit (4096 steps)
Data-Telegram :	25 Bit (range of values 0 - 16777215)
Interface :	SSI (redundant) (RS422 compatible)
Code :	Gray
Repetition accuracy:	±0.0001 %
Linearity :	±0.0001 %
Clock frequency :	100 kHz to max. 550 kHz
Monoflop-Time :	> 30 µs

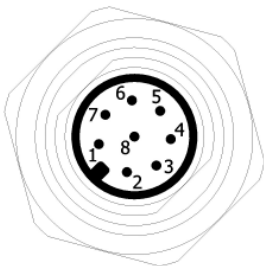
Environmental Conditions

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

Housing

Housing :	AlMgSi1 anodized (sea-water resistant)
Shaft / Coupling :	Stainless steel (sealed with)
Bearing :	Roller-contact bearing
Protection class :	IP 67 (EN 60529)
Weight :	1,5 kg
Dimensions :	Ø88 x 71 mm

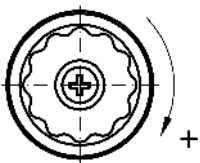
Pin assignment (for both plugs)



- | | |
|---------------------------------|---------------|
| 1 : GND | 5 : SSI Data+ |
| 2 : U _B Power supply | 6 : SSI Data- |
| 3 : SSI CLK+ | 7 : N.C. |
| 4 : SSI CLK- | 8 : N.C. |

Orientation of both plugs according to customer specification A.

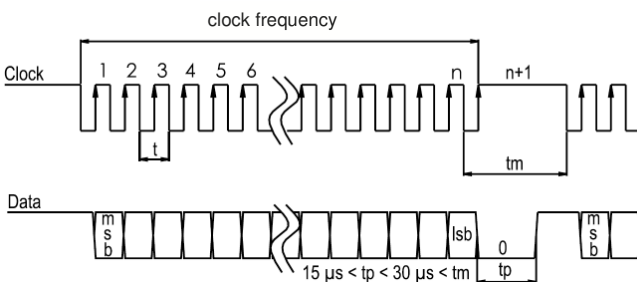
Sense of rotation



Clockwise shaft rotation: counting upwards
(looking on the top of the shaft)

Transmission protocol

single path transmission



multipath transmission

