

- **Stator coupling / torque support for coupling a rotary encoder with blind hole (single-sided hollow shaft) to the drive shaft**
- **The stator coupling consists of permanently elastic plastic and offers high vibration and shock resistance**
- **The design of the fret-like spring elements enables high torsional strength and torsional rigidity**
- **Compensation of axial and radial shaft misalignment between the encoder and drive shaft due to installation**
- **Can be retrofitted, as standard dimensions in the 58 encoder design range form the basis**
- **Operating temperature range: - 40 °C to + 85 °C**

KEY INFORMATION OVERVIEW

DESIGN & FUNCTION

The basic body, which is cut from permanently elastic plastic in one milling operation, contains three fret-like spring elements which guarantee the stator coupling's torsional strength and torsional rigidity.

The stator coupling is fastened to the hollow shaft rotary encoder using 3 Allen screws M4 and permanently inserted plastic shims on the face end via the tapped flange holes. The drive shaft is secured in position in the hollow shaft using a clamp ring. On the drive side, the height adapter is secured by means of 2 Allen screws M4.

FEATURES

The stator coupling fulfils the following tasks:

- Coupling of the drive shaft and rotary encoder shaft in terms of high torsional strength and torsional rigidity.
- Stator coupling as a spring mass system for highly accurate measuring systems.
- Compensation of radial and axial installation tolerances between the drive shaft and measurement shaft.
- Compensation of the angular offset between the drive shaft and measurement shaft.
- Variation of the axial space dimension between the drive unit and rotary encoder through the use of a height adapter - adaptive height adjustment.

ORDER CODE FORMAT

ZMS	58 -	S -	H1 -	K01	STANDARD VERSION
ZMS	Stator coupling / torque support ZMS				
58	Design form	58	Design form for encoders with Ø 58 mm		
S	Flange type of encoder	S K	Synchro flange Clamped flange		
H1	Height adapter 9 mm	H0 H1	No height adapter One height adapter on each mounting side		
K01	Mechanical variants * 01		Standard		

ACCESSORIES (SCOPE OF DELIVERY)

VERSION H0 (NO HEIGHT ADAPTER)

Allen screws M4x20, DIN 912, A2 2 pcs.
 Lock washer S 4,3, A2 2 pcs.
 Washer 4,3, DIN 9021, A2 2 pcs.

Allen screws M4x10, DIN 912, A2 3 pcs.
 Lock washer S 4,3, A2 3 pcs.
 Washer 4,3, PA 3 pcs.

VERSION H1 (WITH ONE HEIGHT ADAPTER)

Allen screws M4x30, DIN 912, A2 2 pcs.
 Lock washer S 4,3, A2 2 pcs.
 Washer 4,3, DIN 9021, A2 2 pcs.

Allen screws M4x10, DIN 912, A2 3 pcs.
 Lock washer S 4,3, A2 3 pcs.
 Washer 4,3, PA 3 pcs.

DOCUMENTATION

DOCUMENTATION

The following documents can be found in the Internet under www.twk.de/en in the documentation area, model ZMS.

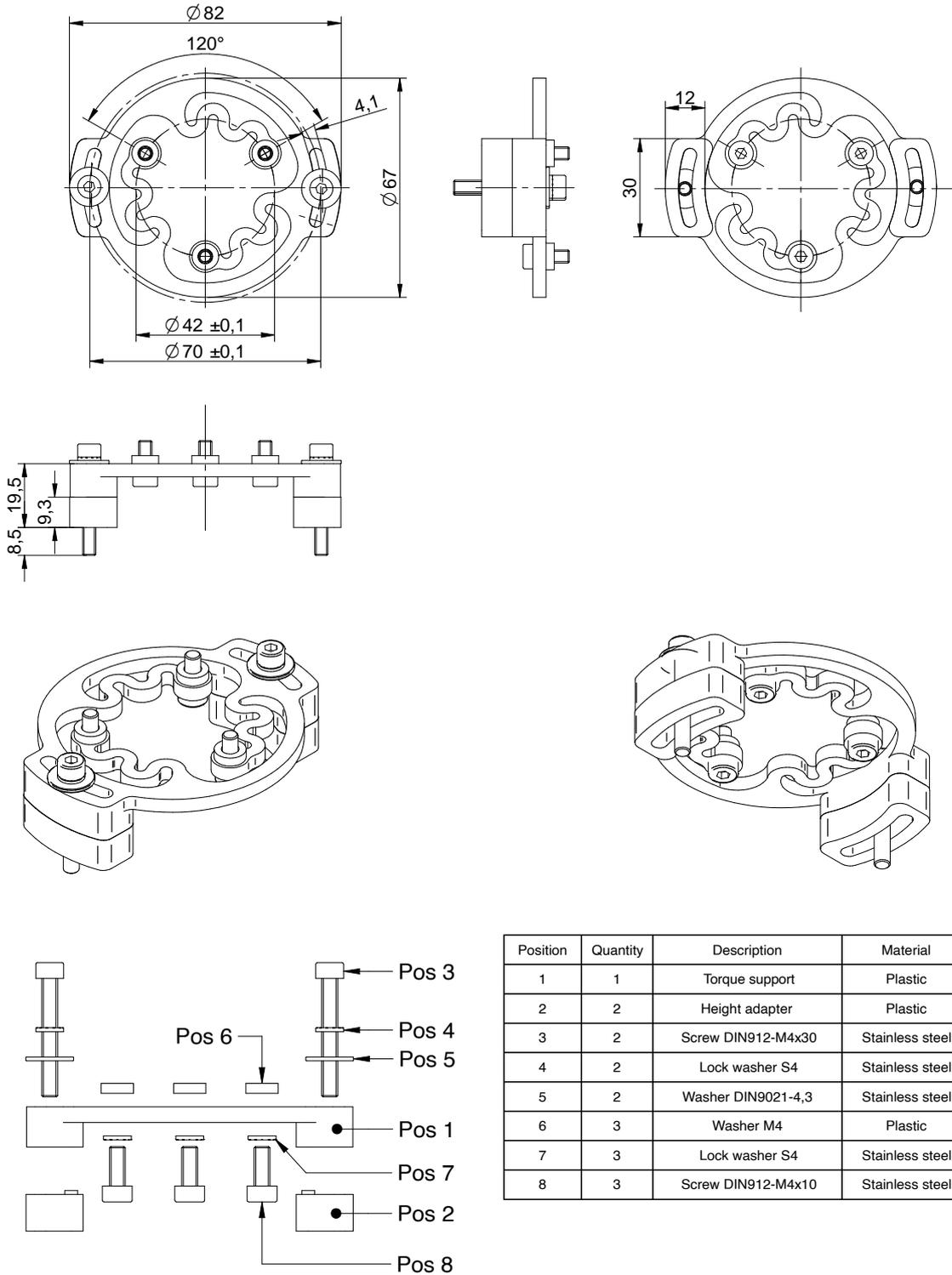
- Data sheet [ZMS12939](#)
- CE Declaration of Conformity [ZE12467](#)
- UKCA Declaration of Conformity [ZE16569](#)
- Reach compliant [QS15286](#)
- RoHS compliant [QS13284](#)

* The basic versions according to the data sheet bear the number 01. Deviations are identified with a variant number and are documented at TWK.

INSTALLATION DRAWINGS

TORQUE SUPPORT ZMS58-S-H1-K01

Dimensions in mm

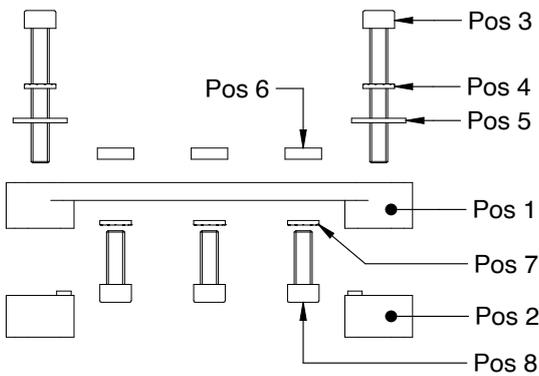
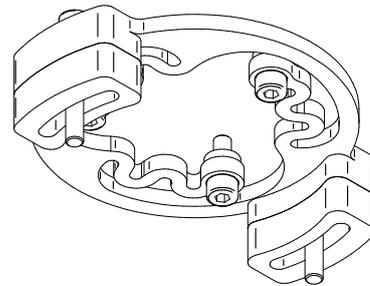
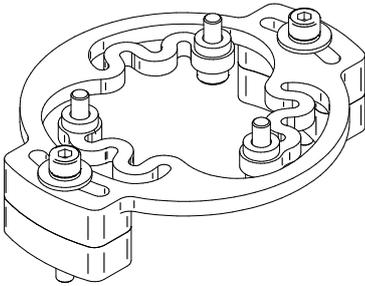
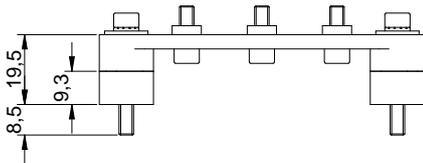
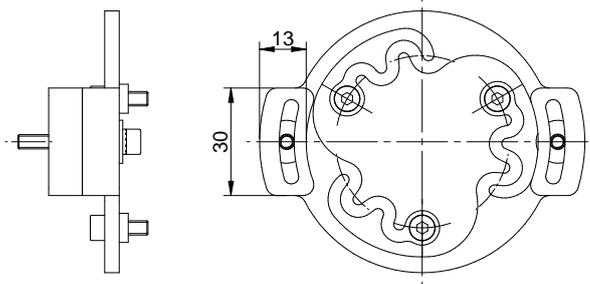
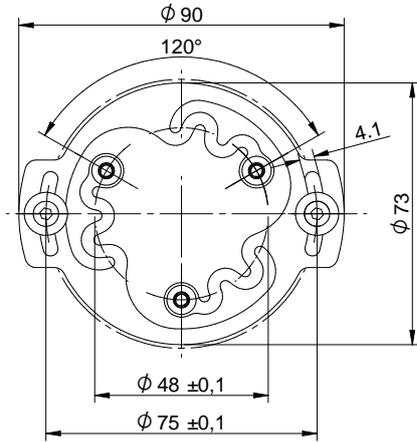


Position	Quantity	Description	Material
1	1	Torque support	Plastic
2	2	Height adapter	Plastic
3	2	Screw DIN912-M4x30	Stainless steel
4	2	Lock washer S4	Stainless steel
5	2	Washer DIN9021-4,3	Stainless steel
6	3	Washer M4	Plastic
7	3	Lock washer S4	Stainless steel
8	3	Screw DIN912-M4x10	Stainless steel

INSTALLATION DRAWINGS

TORQUE SUPPORT ZMS58-K-H1-K01

Dimensions in mm

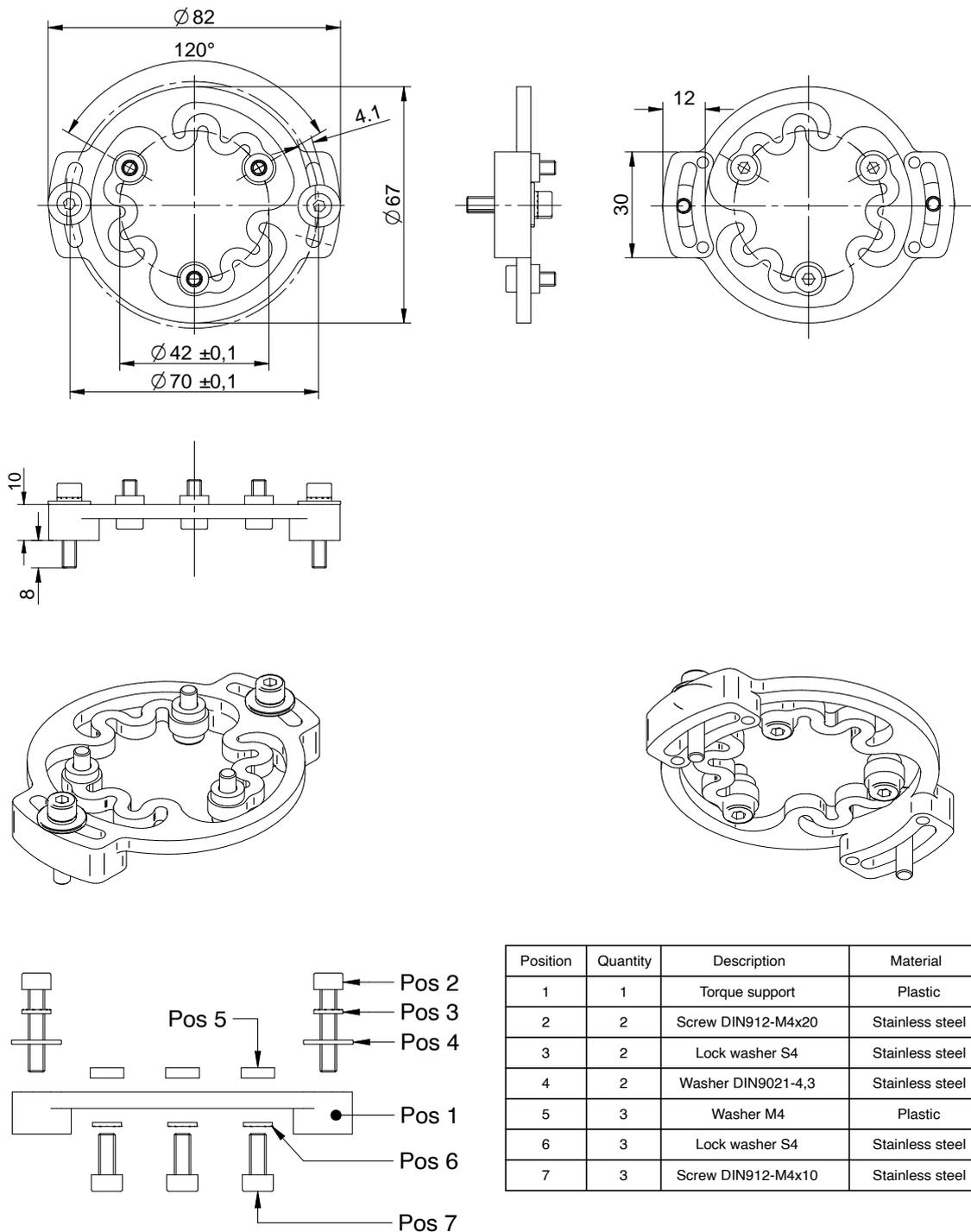


Position	Quantity	Description	Material
1	1	Torque support	Plastic
2	2	Height adapter	Plastic
3	2	Screw DIN912-M4x30	Stainless steel
4	2	Lock washer S4	Stainless steel
5	2	Washer DIN9021-4,3	Stainless steel
6	3	Washer M4	Plastic
7	3	Lock washer S4	Stainless steel
8	3	Screw DIN912-M4x10	Stainless steel

INSTALLATION DRAWINGS

TORQUE SUPPORT ZMS58-S-H0-K01

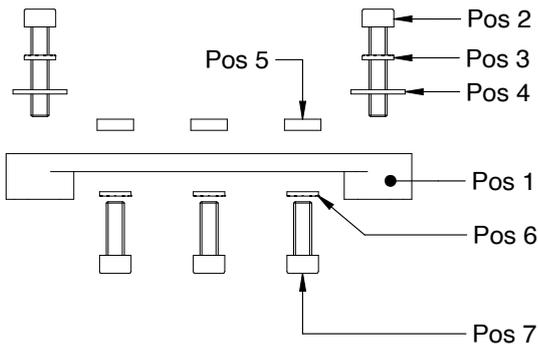
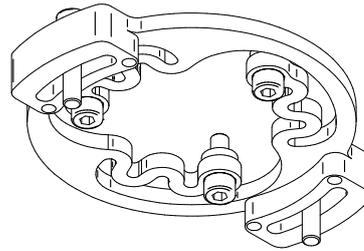
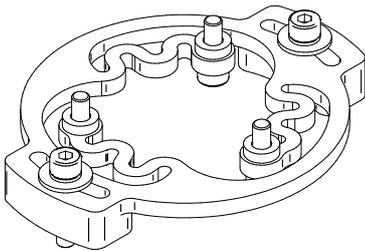
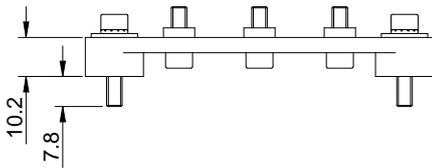
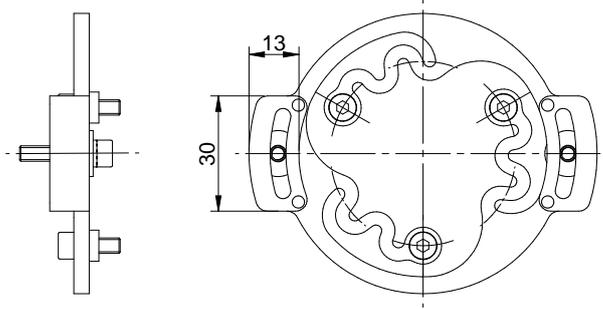
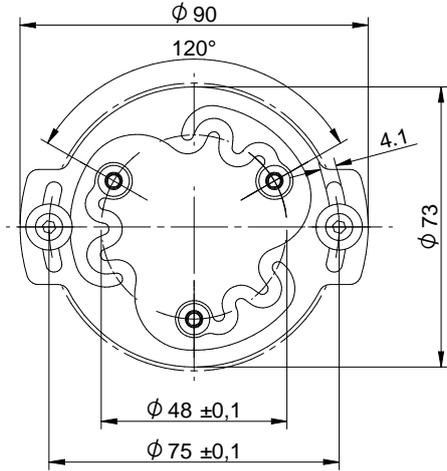
Dimensions in mm



INSTALLATION DRAWINGS

TORQUE SUPPORT ZMS58-K-H0-K01

Dimensions in mm



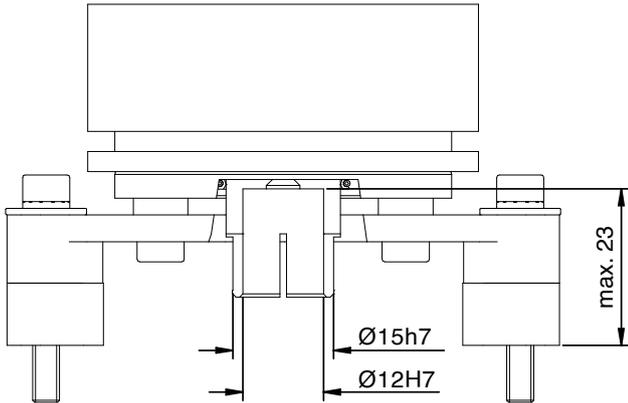
Position	Quantity	Description	Material
1	1	Torque support	Plastic
2	2	Screw DIN912-M4x20	Stainless steel
3	2	Lock washer S4	Stainless steel
4	2	Washer DIN9021-4,3	Stainless steel
5	3	Washer M4	Plastic
6	3	Lock washer S4	Stainless steel
7	3	Screw DIN912-M4x10	Stainless steel

INSTALLATION DRAWINGS

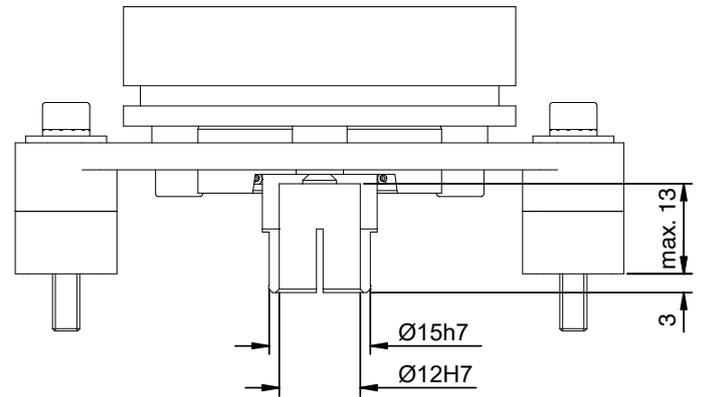
TORQUE SUPPORT - EXAMPLE APPLICATION

Dimensions in mm

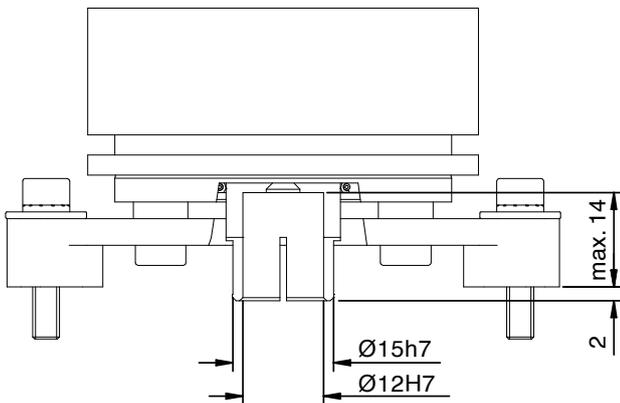
FLANGE Ø58-SX AND ZMS 58-S-H1-K01



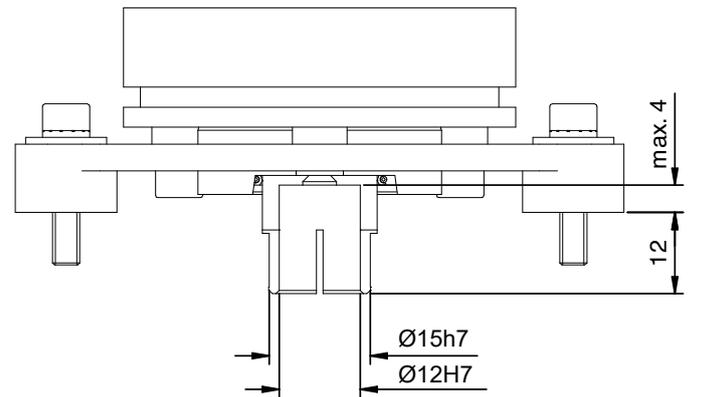
FLANGE Ø58-KX AND ZMS 58-K-H1-K01



FLANGE Ø58-SX AND ZMS 58-S-H0-K01



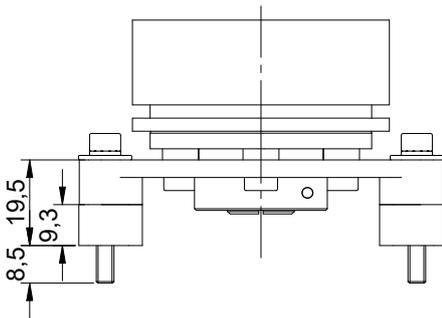
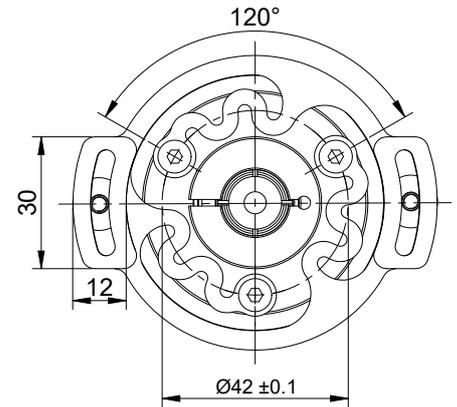
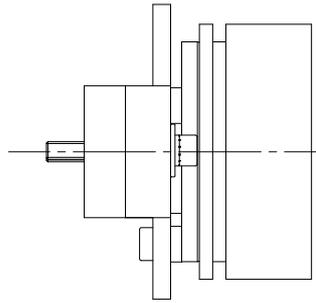
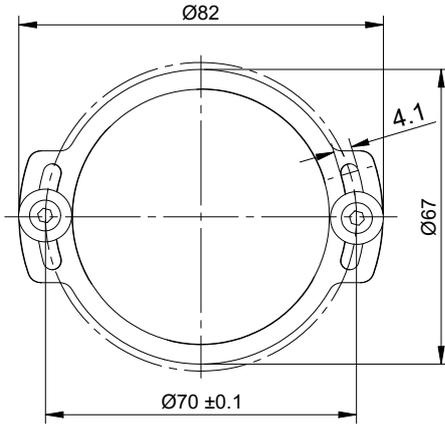
FLANGE Ø58-KX AND ZMS 58-K-H0-K01



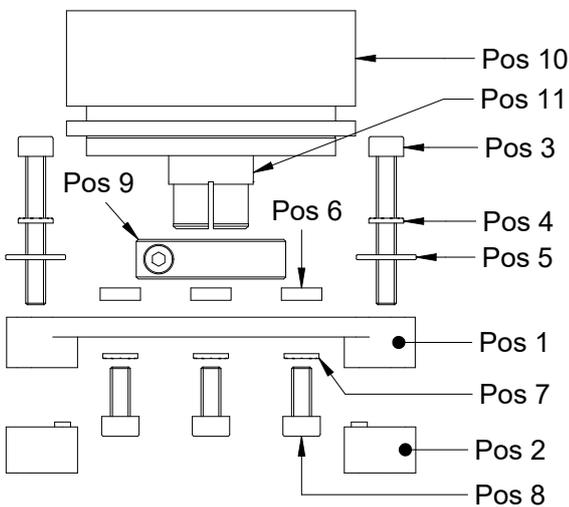
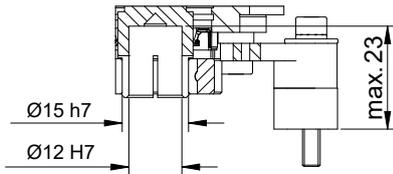
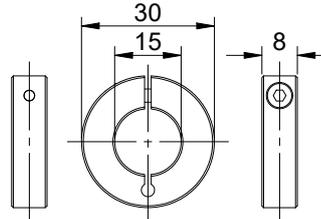
INSTALLATION DRAWINGS

TORQUE SUPPORT - EXAMPLE APPLICATION - ENCODER WITH SYNCHRO FLANGE

Dimensions in mm



Aluminum clamping ring



Position	Quantity	Description	Material
1	1	Torque support	Plastic
2	2	Height adapter	Plastic
3	2	Screw DIN912-M4x30	Stainless steel
4	2	Lock washer S4	Stainless steel
5	2	Washer DIN9021-4,3	Stainless steel
6	3	Washer M4	Plastic
7	3	Lock washer S4	Stainless steel
8	3	Screw DIN912-M4x10	Stainless steel
9	1	Clamping ring 15x30x8	Aluminium
10	1	Synchro flange ø58	Aluminium
11	1	Clamping shaft	Stainless steel