

STATOR COUPLING / TORQUE SUPPORT - ZMS58



- 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.

STATOR COUPLING / TORQUE SUPPORT - ZMS58

ORDER CODE FORMAT

STANDARD VERSION

ZMS	58 -	S -	H1 -	K01
------------	-------------	------------	-------------	------------

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

SYNCHRO CLAMPS

ELECTRICAL DATA / RELATED TO THE NODE

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

Data sheet ZMS12939
 CE Declaration of Conformity ZE12467
 UKCA Declaration of Conformity ZE16569
 Reach compliant QS15286
 RoHS compliant QS13284

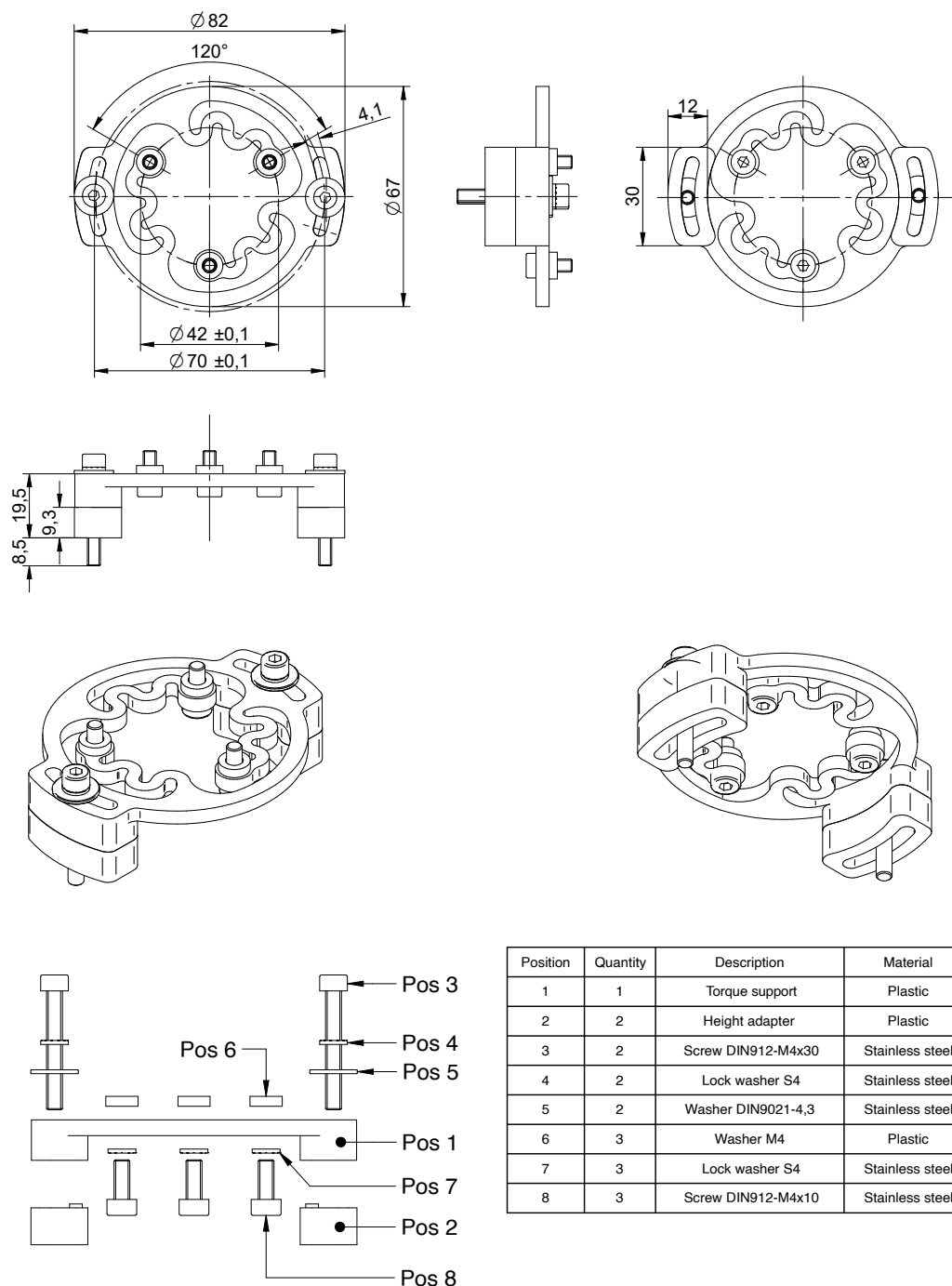
* The basic versions according to the data sheet bear the number 01. Deviations are identified with a variant number and are documented at EPC.

STATOR COUPLING / TORQUE SUPPORT - ZMS58

INSTALLATION DRAWINGS

TORQUE SUPPORT ZMS58-S-H1-K01

Dimensions in mm



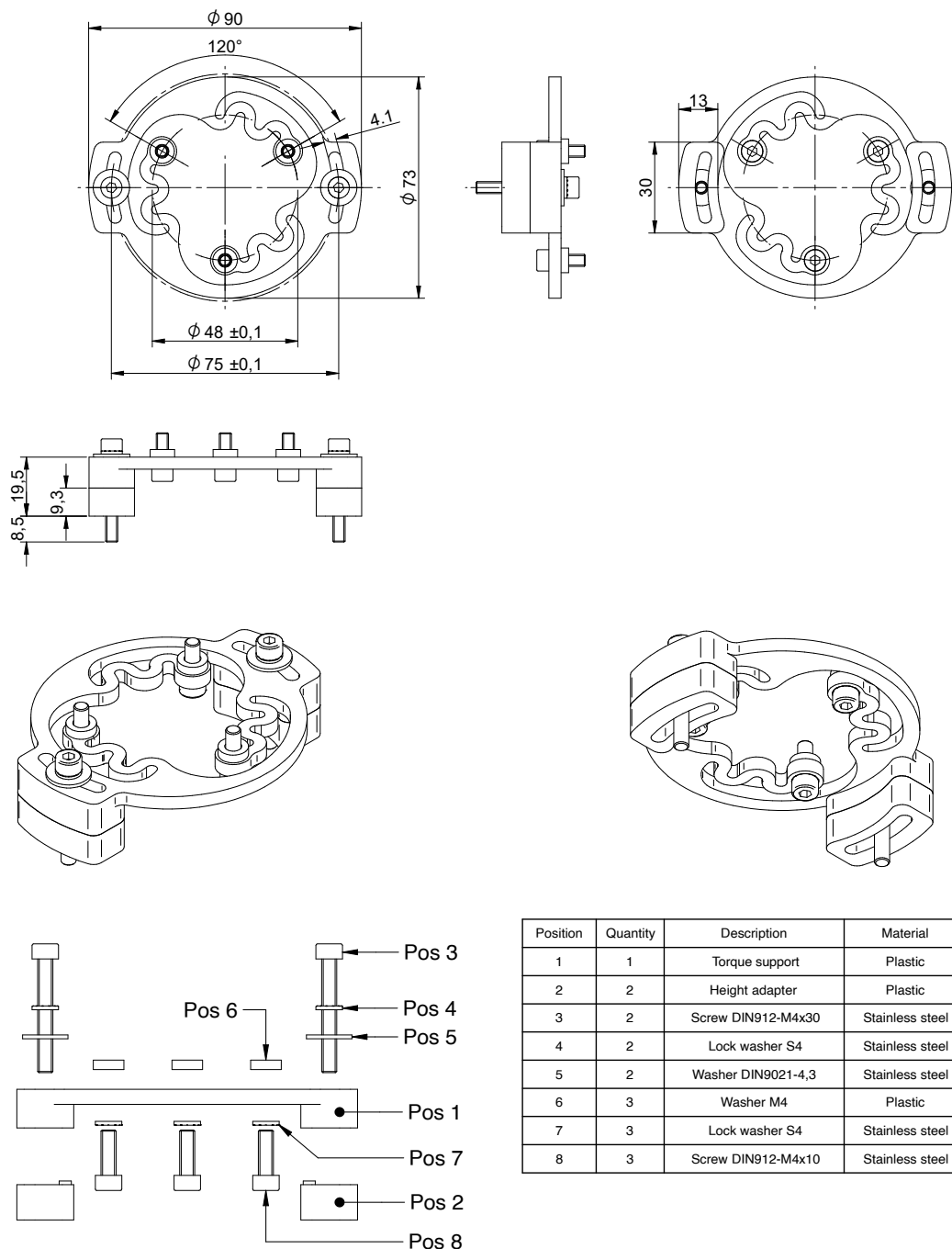
Position	Quantity	Description	Material
1	1	Torque support	Plastic
2	2	Height adapter	Plastic
3	2	Screw DIN912-M4x30	Stainless steel
4	2	Lock washer S4	Stainless steel
5	2	Washer DIN9021-4,3	Stainless steel
6	3	Washer M4	Plastic
7	3	Lock washer S4	Stainless steel
8	3	Screw DIN912-M4x10	Stainless steel

STATOR COUPLING / TORQUE SUPPORT - ZMS58

INSTALLATION DRAWINGS

TORQUE SUPPORT ZMS58-K-H1-K01

Dimensions in mm



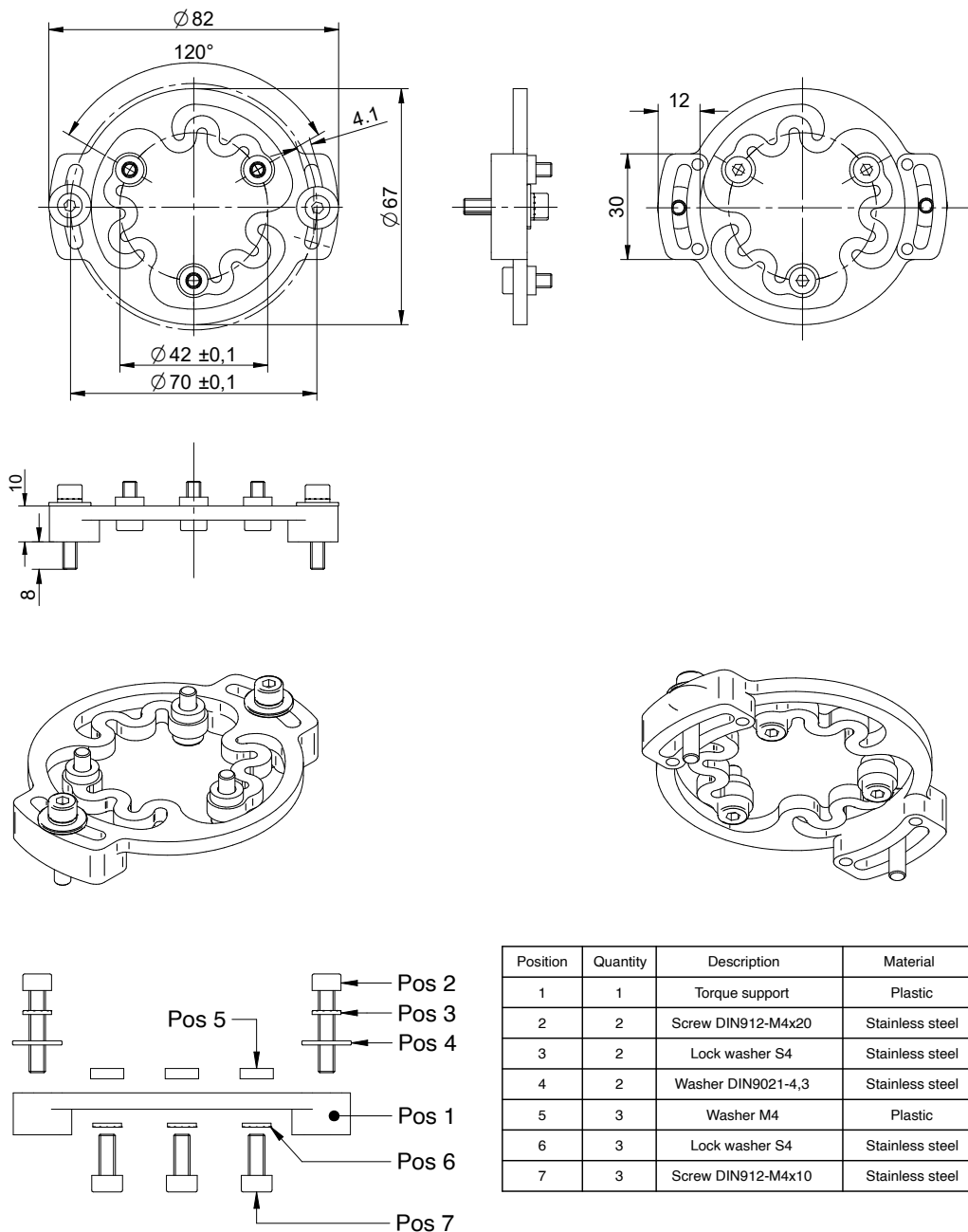
Position	Quantity	Description	Material
1	1	Torque support	Plastic
2	2	Height adapter	Plastic
3	2	Screw DIN912-M4x30	Stainless steel
4	2	Lock washer S4	Stainless steel
5	2	Washer DIN9021-4,3	Stainless steel
6	3	Washer M4	Plastic
7	3	Lock washer S4	Stainless steel
8	3	Screw DIN912-M4x10	Stainless steel

STATOR COUPLING / TORQUE SUPPORT - ZMS58

INSTALLATION DRAWINGS

TORQUE SUPPORT ZMS58-S-H0-K01

Dimensions in mm

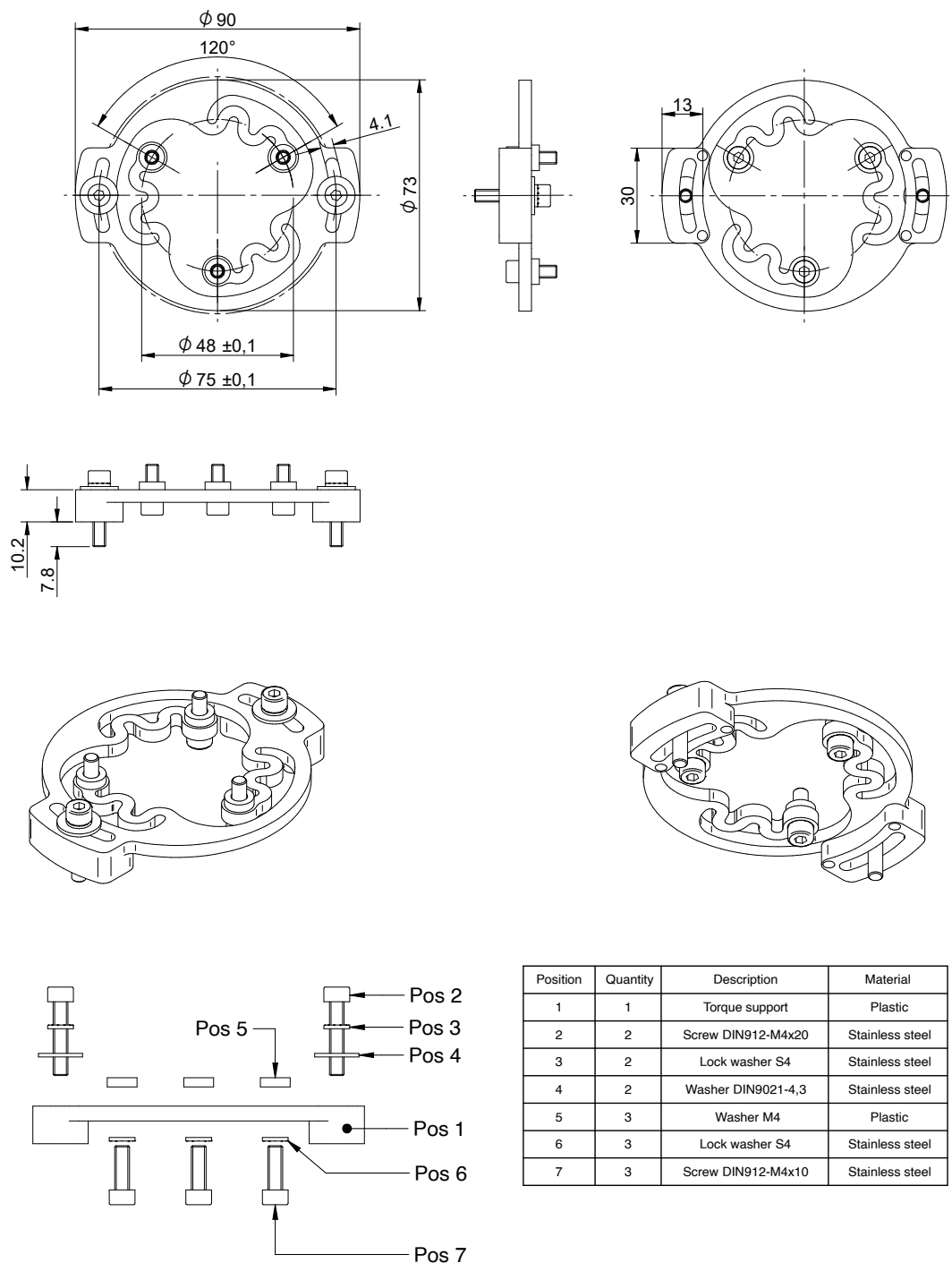


STATOR COUPLING / TORQUE SUPPORT - ZMS58

INSTALLATION DRAWINGS

TORQUE SUPPORT ZMS58-K-H0-K01

Dimensions in mm



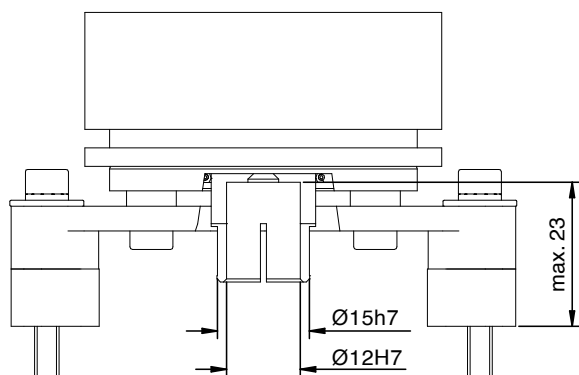
STATOR COUPLING / TORQUE SUPPORT - ZMS58

INSTALLATION DRAWINGS

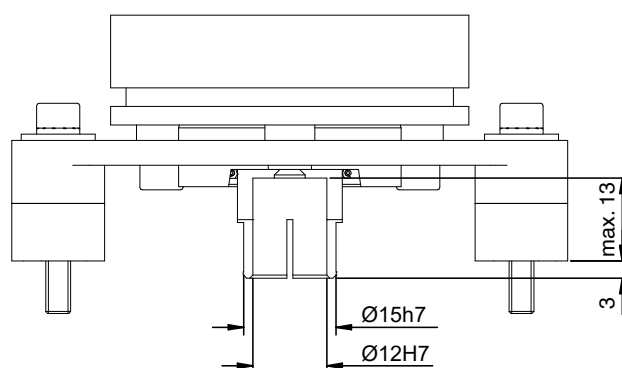
TORQUE SUPPORT - EXAMPLE APPLICATION

Dimensions in mm

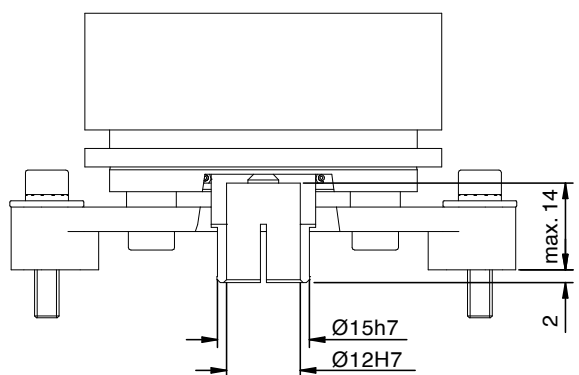
FLANGE Ø58-SX AND ZMS 58-S-H1-K01



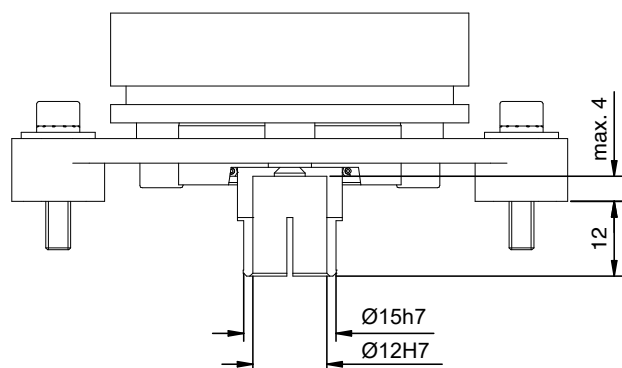
FLANGE Ø58-KX AND ZMS 58-K-H1-K01



FLANGE Ø58-SX AND ZMS 58-S-H0-K01



FLANGE Ø58-KX AND ZMS 58-K-H0-K01



STATOR COUPLING / TORQUE SUPPORT - ZMS58

INSTALLATION DRAWINGS

TORQUE SUPPORT - EXAMPLE APPLICATION - ENCODER WITH SYNCHRO FLANGE

Dimensions in mm

