

# Pre-flange for rotary encoder

## Model ZHF

Document no.: ZHF 13508 FE  
Date: 30.11.2020



- For radial bearing loads up to 500 N
- In aluminium or stainless steel 1.4305/1.4404
- Various shaft versions available
- Including fastening material
- Simple installation thanks to integrated play-free claw coupling
- For encoders with clamping flange Ø58 other flange designs on request
- Replaces in combination with the mounting bracket MW the bearing block LB

### Design and function

The ZHF pre-flange enables bearing loads of up to 500 N radially and 250 N axially, and protects the rotary encoder's bearing against overloading. To do this, it is simply mounted on the existing rotary encoder flange. A play-free coupling ensures the connection between the rotary encoder shaft and pre-flange shaft.

The pre-flange is manufactured from seawater-proof aluminium or stainless steel (1.4305 or 1.4404). The double mounting consists of two ball bearings sealed on both sides (2RS bearings). The coupling elements required for connection to the rotary encoder shaft are part of the scope of delivery. In combination with mounting angle MW-x-02 (data sheet [MZ10111](#)), the ZHF is compatible with the bearing bracket LB-01, LB-05 or LB-07.

### Technical data

- Operating speed: 10,000 rpm max.
- Moment of inertia (rotor): 30 gcm<sup>2</sup>
- Operating torque: ≤ 5 Ncm (at 20 °C)
- Starting torque: ≤ 4 Ncm
- Perm. shaft load: 500 N radially  
250 N axially
- Bearing service life: > 10<sup>8</sup> revolutions
- Weight: Approx. 0.4 kg (aluminium)  
Approx. 0.7 kg (stainless steel)
- Operating temperature range: - 40 °C to + 85 °C
- Storage temperature range: - 40 °C to + 85 °C

### Order number

ZHF	58 -	K	A -	K -	01
-----	------	---	-----	-----	----

#### Variants \*:

- 01 Standard
- 03 Inclusive mounting bracket

#### Rotary encoder flange:

- K Clamped flange, shaft 10 mm with flattened area
- KP Clamped flange, shaft 10 mm with feather key
- S Synchronizer flange, shaft 6 mm

#### Housing material:

- A Aluminium
- S Stainless steel 1.4305
- V Stainless steel 1.4404

#### Flange of the pre-flange:

- K Clamped flange, shaft 10 mm with flattened area
- KL Clamped flange, shaft 16 mm with woodruff key (like bearing bracket LB)
- KP Clamped flange, shaft 10 mm with feather key
- KZ Clamped flange, shaft for measurement gear

#### Design form:

- 58 Flange diameter

#### Model:

ZHF Pre-flange for rotary encoder

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

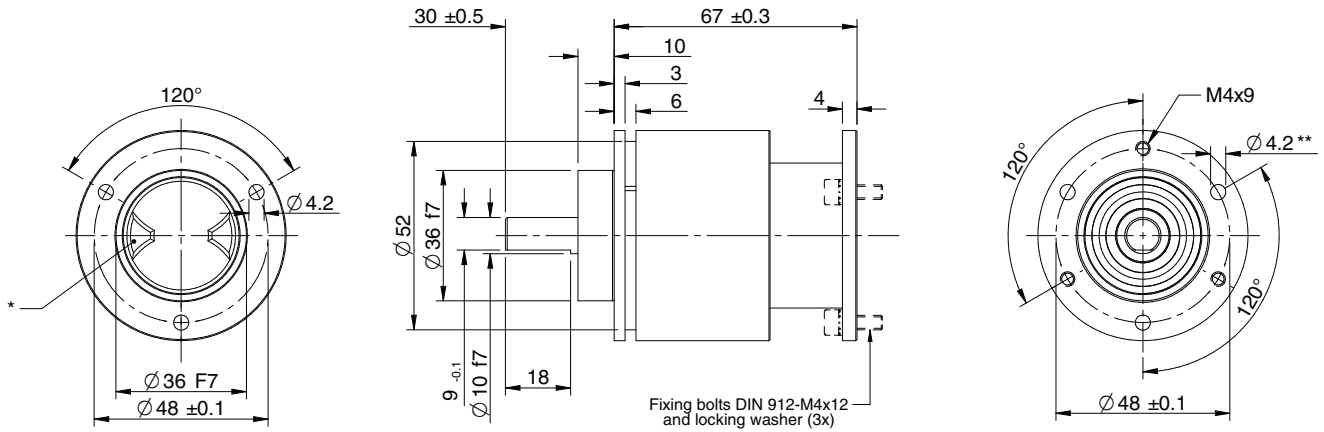
# Pre-flange for rotary encoder Model ZHF

## Installation drawings

**Design form 58 with clamped flange, order number: ZHF58-Kx-K-01**

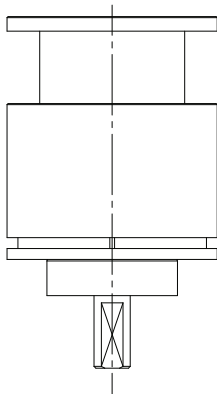
Shaft  $\varnothing$  10 mm with flattened area

Dimensions in mm



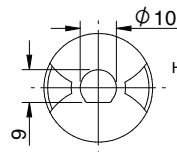
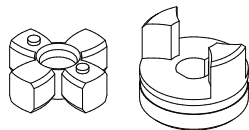
\* Shaft with integrated hub feature

\*\* Through bores for hex key



**Included with delivery:**

Sprocket wheel KK14 with hub 10T



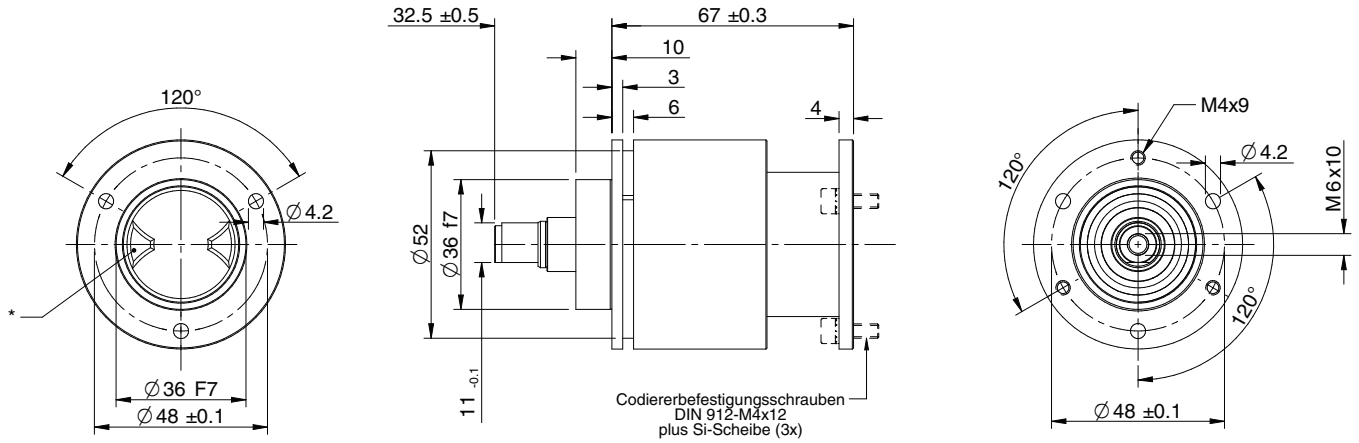
Hub 10T with inside diameter 10mm and flattening of 9mm

**Pre-flange for rotary encoder  
Model ZHF**

**Installation drawings**

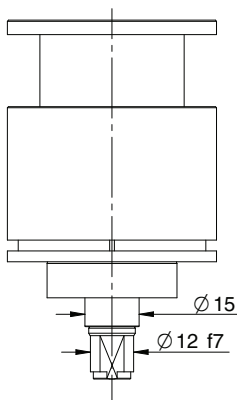
**Design form 58 with clamped flange and shaft for measurement gear, order number: ZHF58-KZx-K-01**  
Shaft  $\varnothing$  12 mm

Dimensions in mm

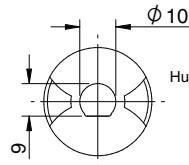
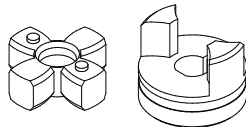


\* Shaft with integrated hub feature

\*\* Through bores for hex key



**Included with delivery:**  
Sprocket wheel KK14 with hub 10T



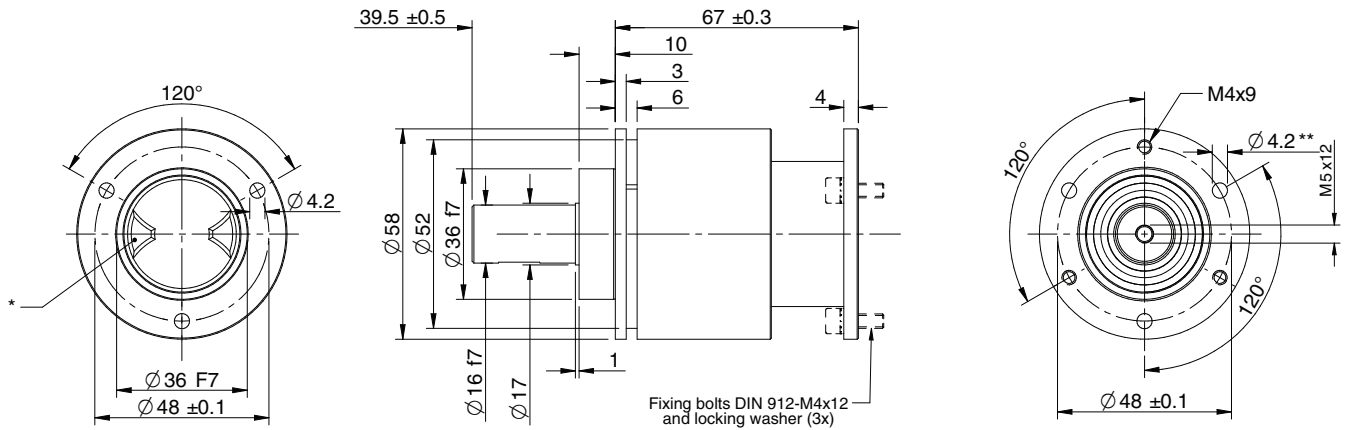
Hub 10T with inside diameter 10mm and flattening of 9mm

# Pre-flange for rotary encoder Model ZHF

## Installation drawings

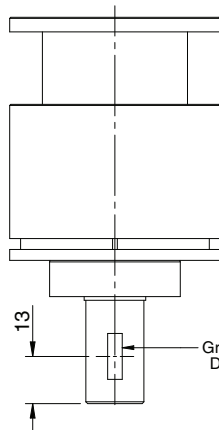
**Design form 58 with clamped flange and shaft like bearing bracket LB, order number: ZHF58-KLx-KP-01**  
Shaft  $\varnothing$  16 mm

Dimensions in mm

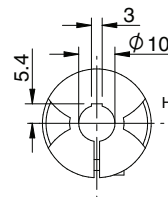
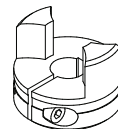
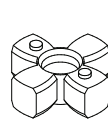


\* Shaft with integrated hub feature

\*\* Through bores for hex key



Included with delivery:  
Sprocket wheel KK14 with hub 10N



Hub 10N with inside diameter 10mm and groove for feather key

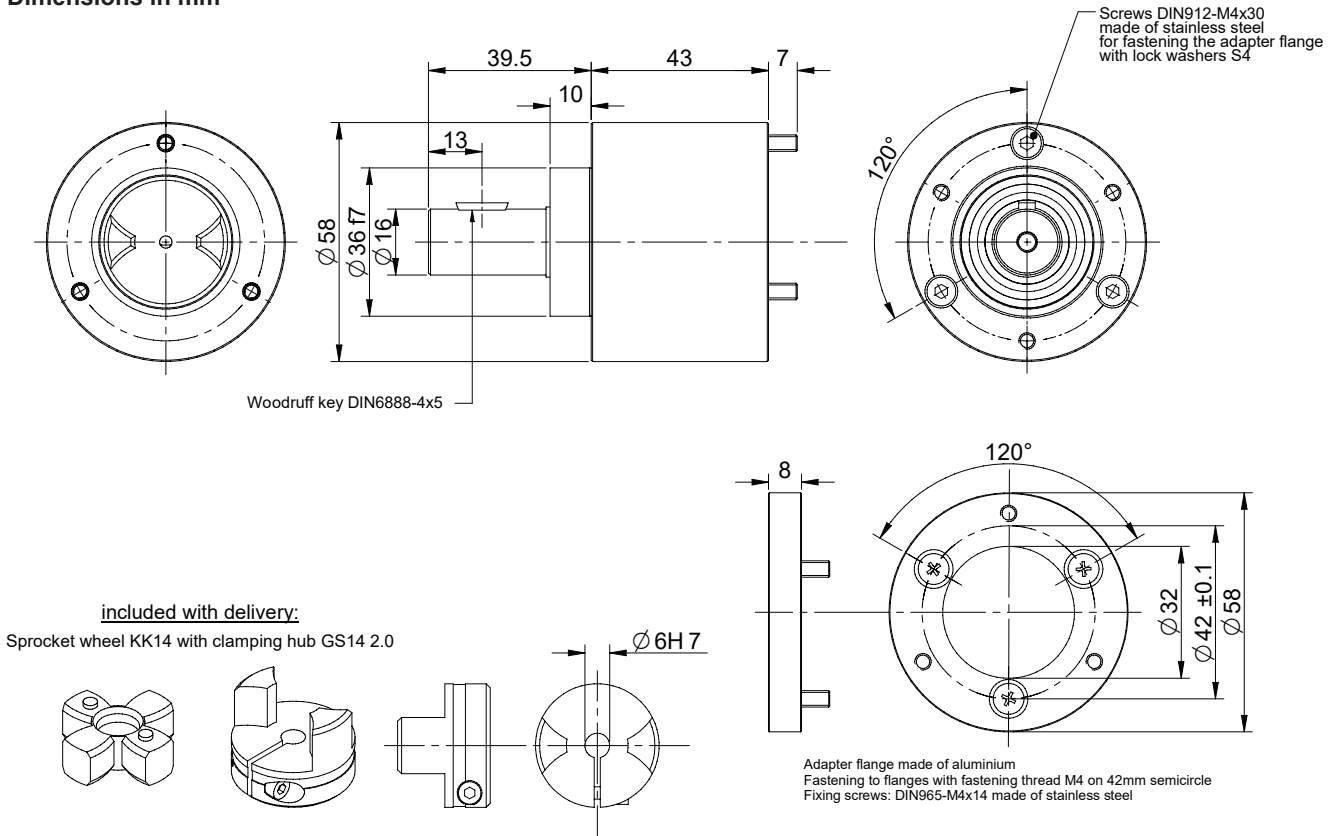
**Pre-flange for rotary encoder  
Model ZHF**

**Installation drawings**

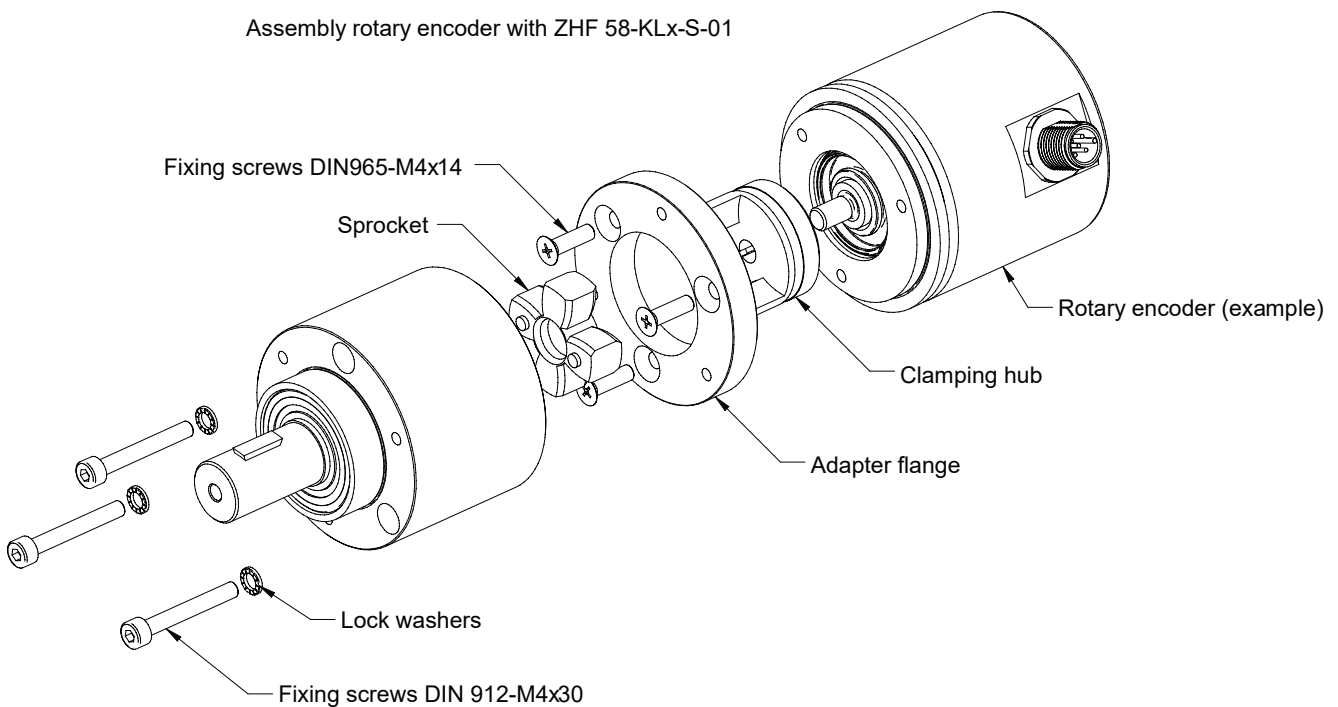
**Design form 58 with clamped flange and shaft like bearing bracket LB, order number: ZHF58-KLx-S-01**  
Shaft  $\varnothing$  16 mm

For encoders with synchronizer flange and 6 mm shaft (e.g. TRT58-SA...T01)

Dimensions in mm



Assembly rotary encoder with ZHF 58-KLx-S-01



## Pre-flange for rotary encoder Model ZHF

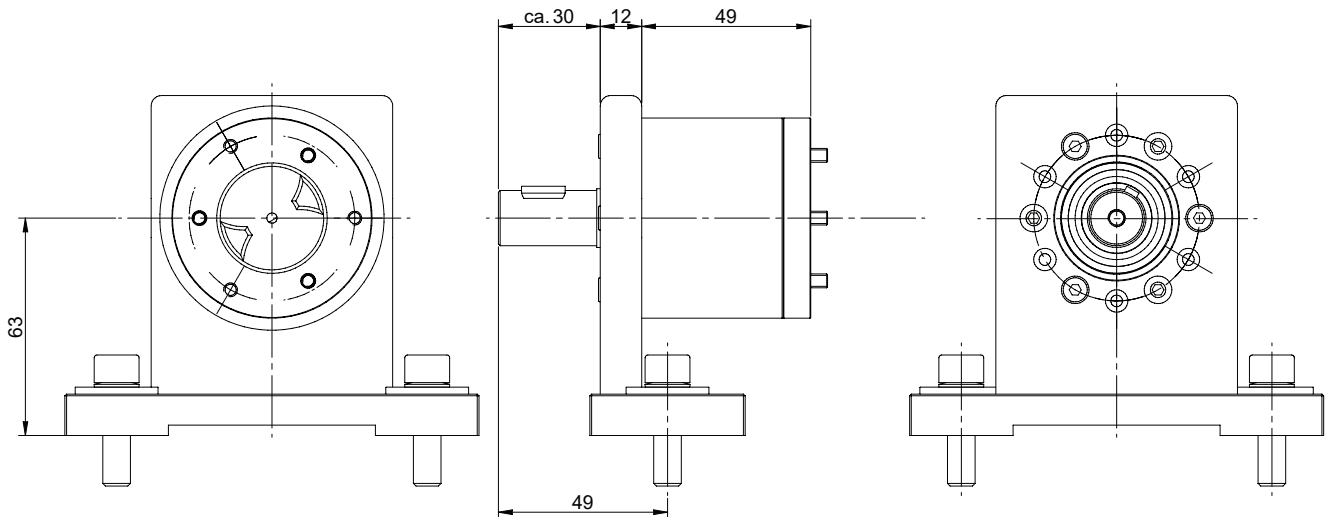
### Installation drawings

#### Pre-flange ZHF with mounting bracket MW-x-02, order number: ZHF58-KLx-S-03

Shaft  $\varnothing$  16 mm, compatible with bearing bracket LB01, for encoder with synchronizer flange and 6mm shaft (Tx58-Sx...)

For a detailed drawing of the mounting bracket MW-x-02 see datasheet [MZ10111](#)

#### Dimensions in mm



## Pre-flange for rotary encoder Model ZHF

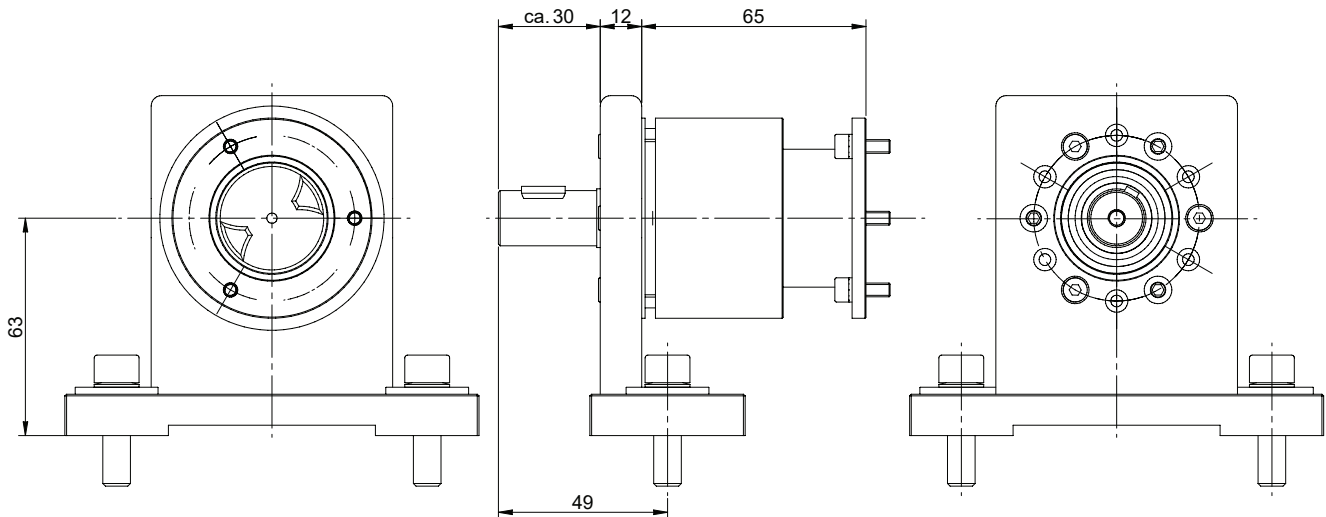
### Installation drawings

#### Pre-flange ZHF with mounting bracket MW-x-02, order number: ZHF58-KLx-KP-03

Shaft  $\varnothing$  16 mm, compatible with bearing bracket LB07, for encoder with clamping flange and 10 mm shaft with feather key (Txx58-KPx...)

For a detailed drawing of the mounting bracket MW-x-02 see datasheet [MZ10111](#)

#### Dimensions in mm



#### Note:

The version ZHF58-KLx-K-03 for encoders with 10 shaft without feather key is compatible with the bearing block LB05