

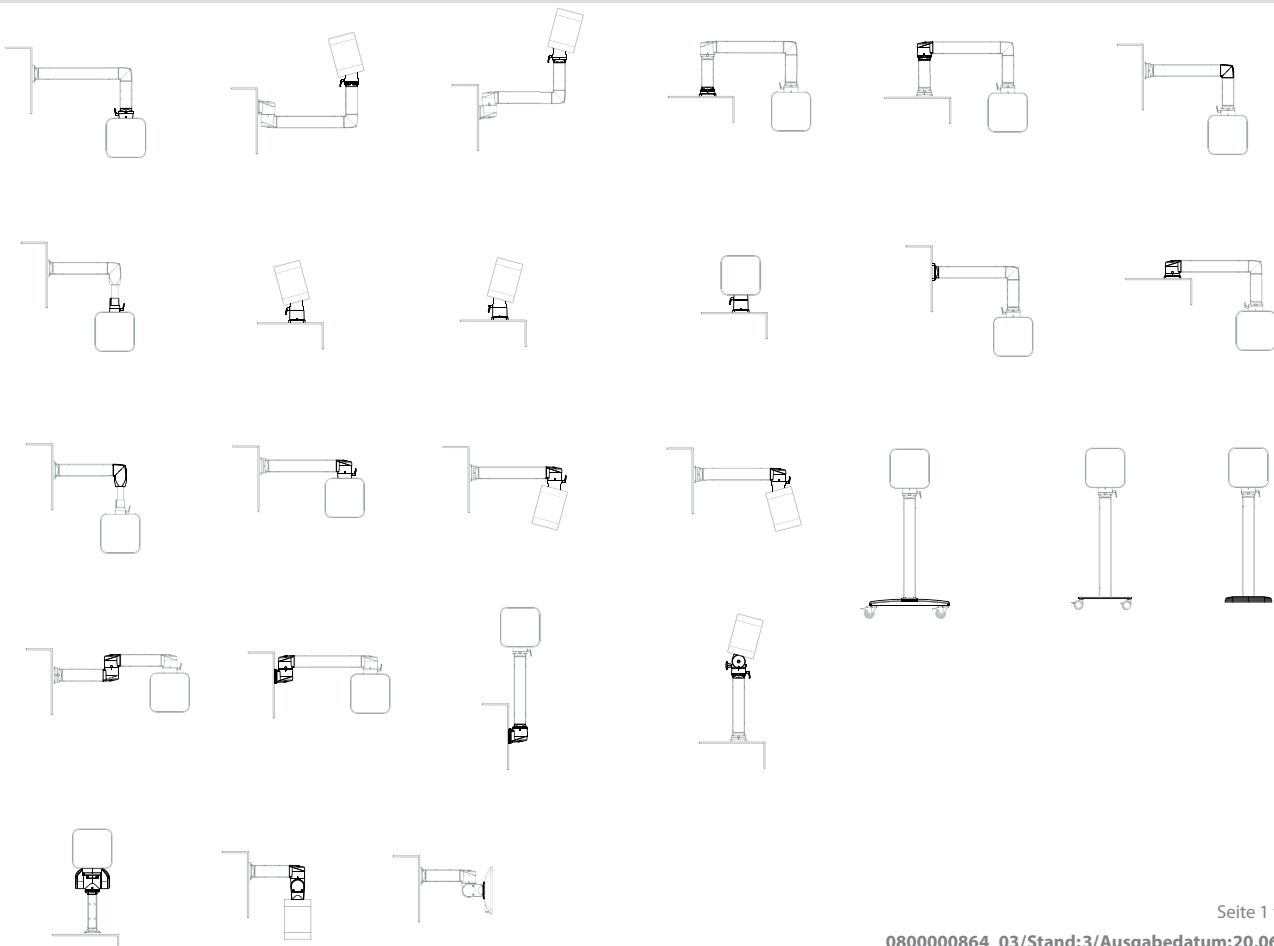
# Installation and Operating Instructions

## Supension System

SYSPEND 281-MAX



## Application examples



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1. Layout and use of the instructions
2. Safety instructions
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## 1 Layout and use of the instructions

All components that are not included in the delivery specification are shown in grey. The instructions do not necessarily follow the operating or installation sequence. Not all sections apply to every component.

Procedure:

- Identify the pictogram applicable for your application
- Start at the beginning and select the section applicable for your application, select the section by assigning the pictograms

## 2 Safety Instructions

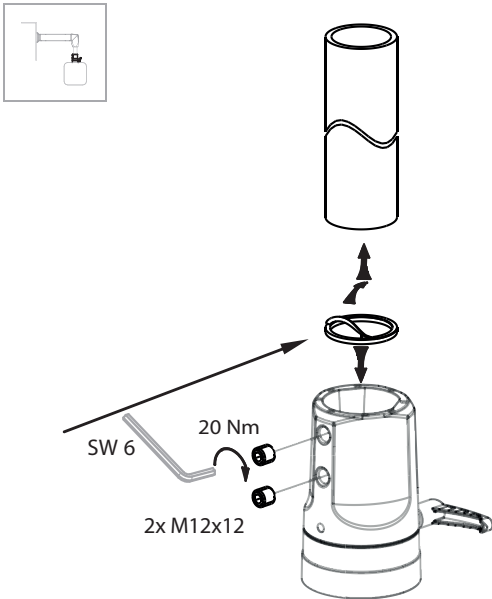


Risk of injury

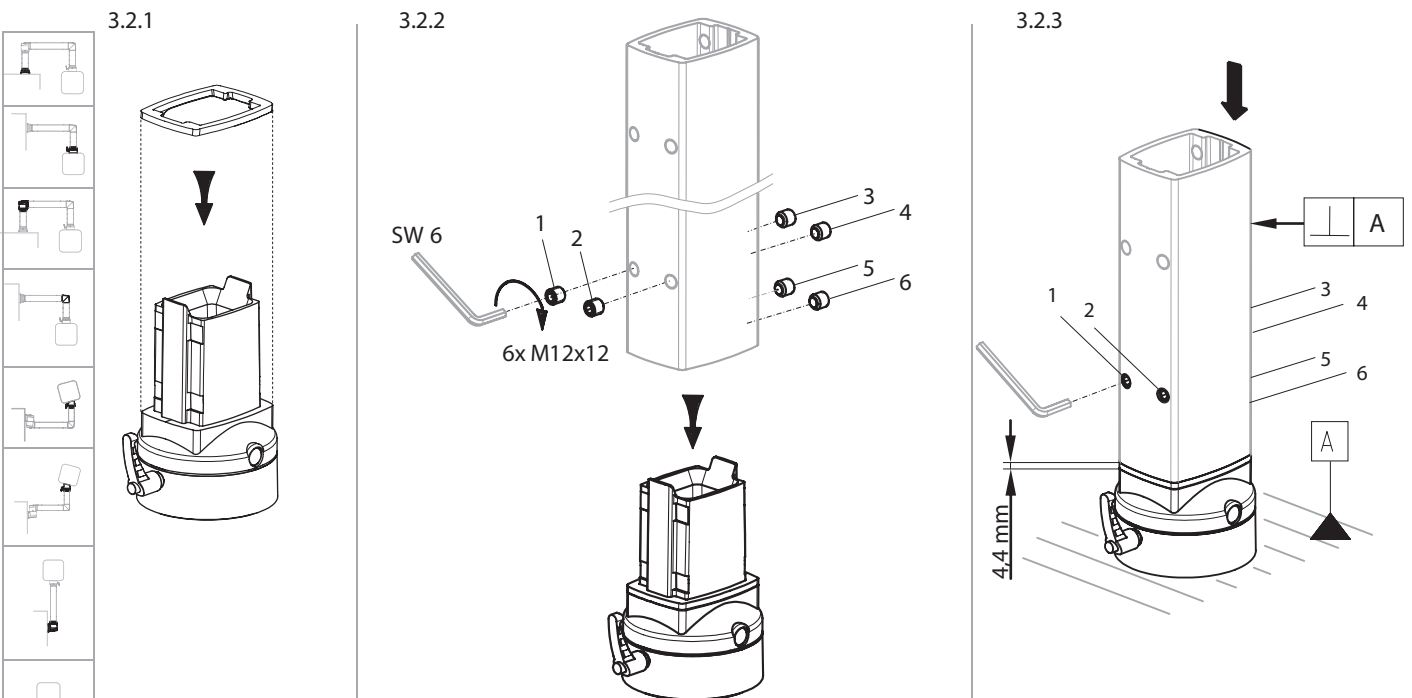
Caution ► Do not reach into tubes

### 3 Mounting of tube

#### 3.1 Round tube S2MFC48



#### 3.2 Vertical S2MFC, S2MRB, S2MWJV, S2ME, S2MER, S2MWF, S2MACB, S2MACF, S2MSCV

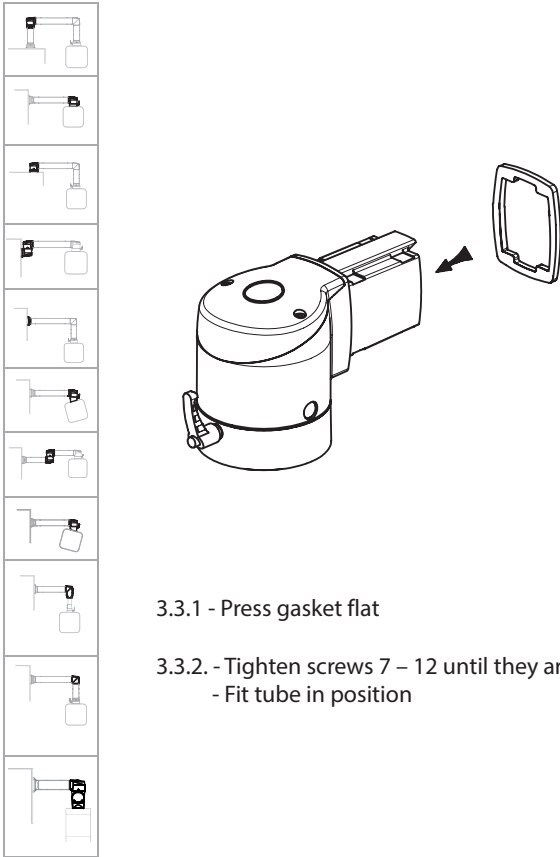


- 3.2.1 - Press gasket flat
- 3.2.2 - Tighten screws 1 – 6 until they are flush on the inside
  - Fit tube in position
- 3.2.3 - Press gasket with tube in axial direction while tightening screw 3 and 4 until there is no play
  - Maintain pressure while tightening screws 5 and 6 to 20 Nm
  - Align tube: see "Tube Alignment"
  - Firmly tighten screws in stages
  - Check that gap is max. 4.4 mm

### 3.3 Horizontal

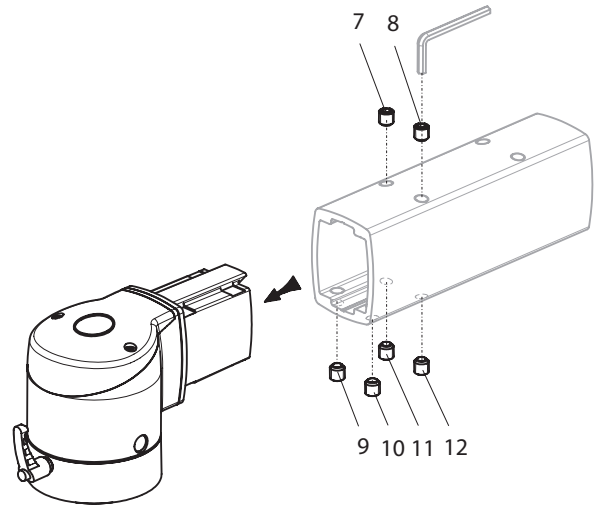
### S2MFEC, S2MSJ, S2MIJ, S2MWJH, S2MSCH

3.3.1



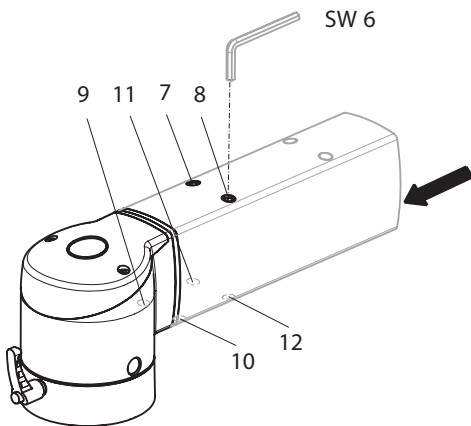
3.3.1 - Press gasket flat

3.3.2



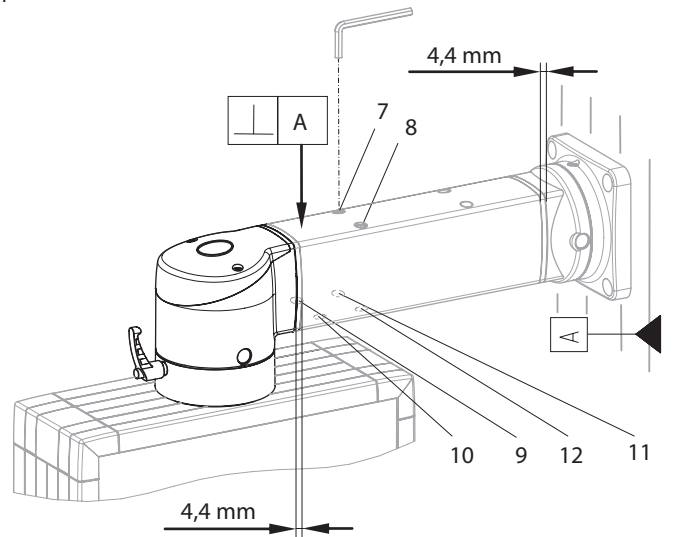
3.3.2 - Tighten screws 7 – 12 until they are  
- Fit tube in position

3.3.3



3.3.3 - Press gasket with tube in axial direction while tightening screw 11 and 12 until there is no play  
- Maintain pressure while tightening screws 9 and 10 to 20 Nm  
- Align tube (see Tube Alignment)

3.3.4



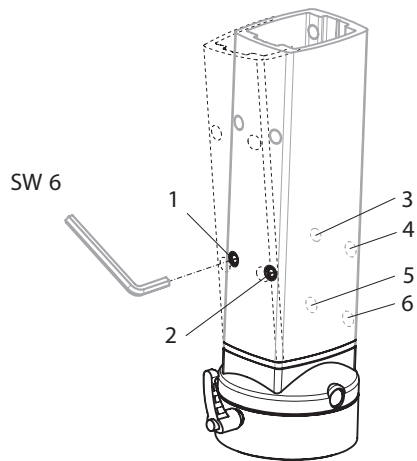
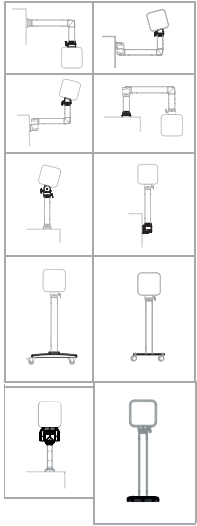
3.3.4 - Secure enclosure to tube  
- Align tube (see Tube Alignment)  
- Firmly tighten screws in stages  
- Check that gap is max. 4.4 mm

## 4 Tube alignment

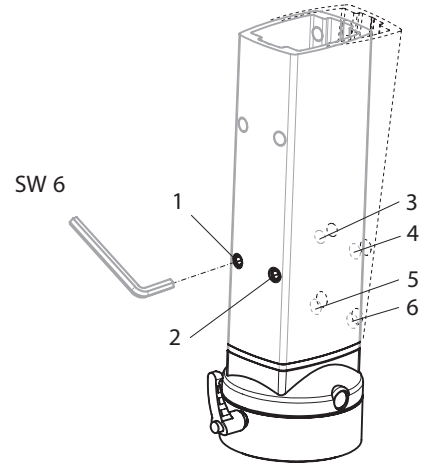
### 4.1 Vertical

S2MFC, S2MRB, S2MWJV, S2ME, S2MER, S2MWF, S2MACB, S2MACF, S2MSCV

#### 4.1.1



#### 4.1.2

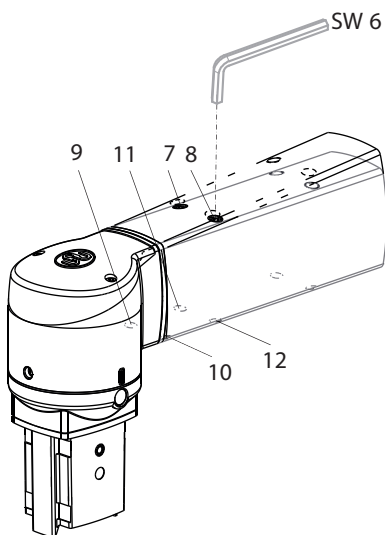
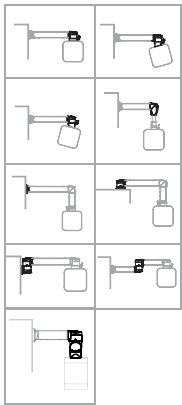


- 4.1.1 - Slacken off screws 3, 4  
 - Tighten screws 1, 2  
 4.1.2 - Tighten screws 3, 4  
 - Slacken off screws 1, 2

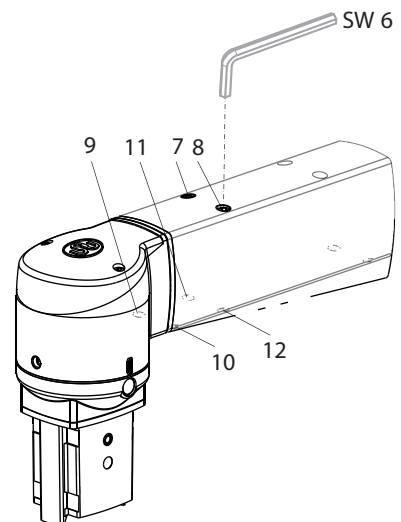
### 4.2 Horizontal Option 1

S2MFEC, S2MSJ, S2MIJ, S2MWJH, S2MSCH

#### 4.2.1

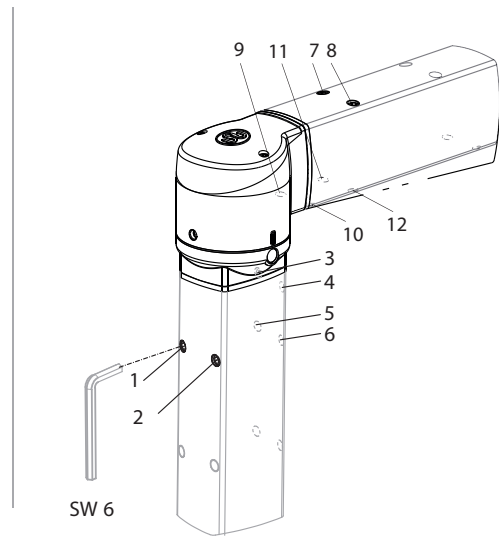
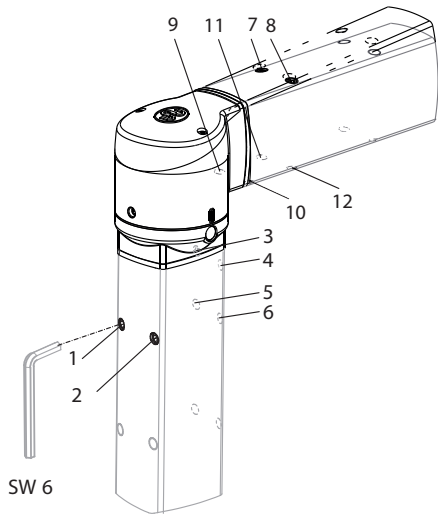
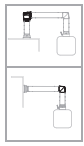


#### 4.2.2



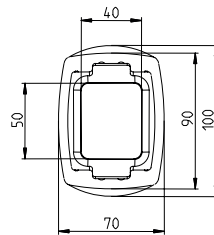
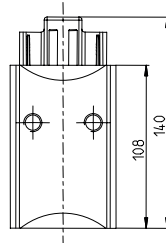
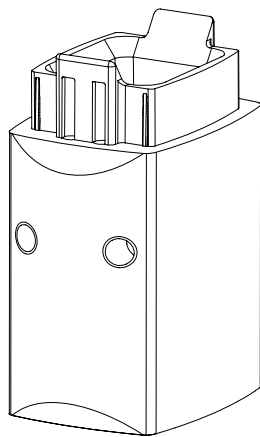
- 4.2.1 - Slacken off screws 11, 12  
 - Tighten screws 7, 8  
 4.2.2 - Tighten screws 11, 12  
 - Slacken off screws 7, 8

### 4.3 Horizontal



- 4.3.1 - Slacken off screws 5, 6 and tighten screws 1, 2  
and/or
- Slacken off screws 11, 12 and tighten screws 7, 8
- 4.3.2 - Tighten screws 5, 6 and slacken off screws 1, 2  
and/or
- Tighten screws 11, 12 and slacken off screws 7, 8

### 4.4 Tube adapter S2MTA



#### Suitable for...

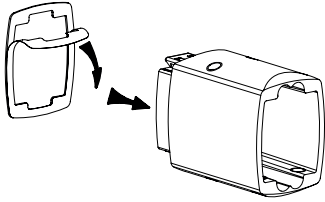
Coupling	Elbow - rotating	Elbow
Elbow coupling	Reduced elbow	

#### Mechanical Data

Tube Adapter	GD-AI (RAL 7016 Standard)
Gasket	Neoprene

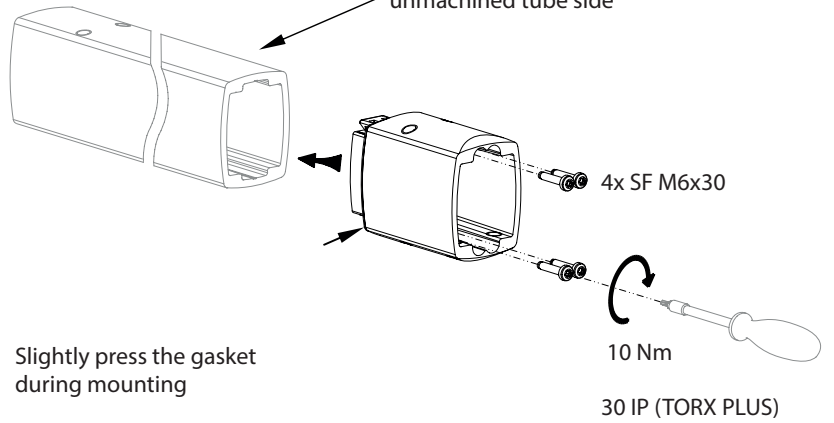
1

Glue the gasket



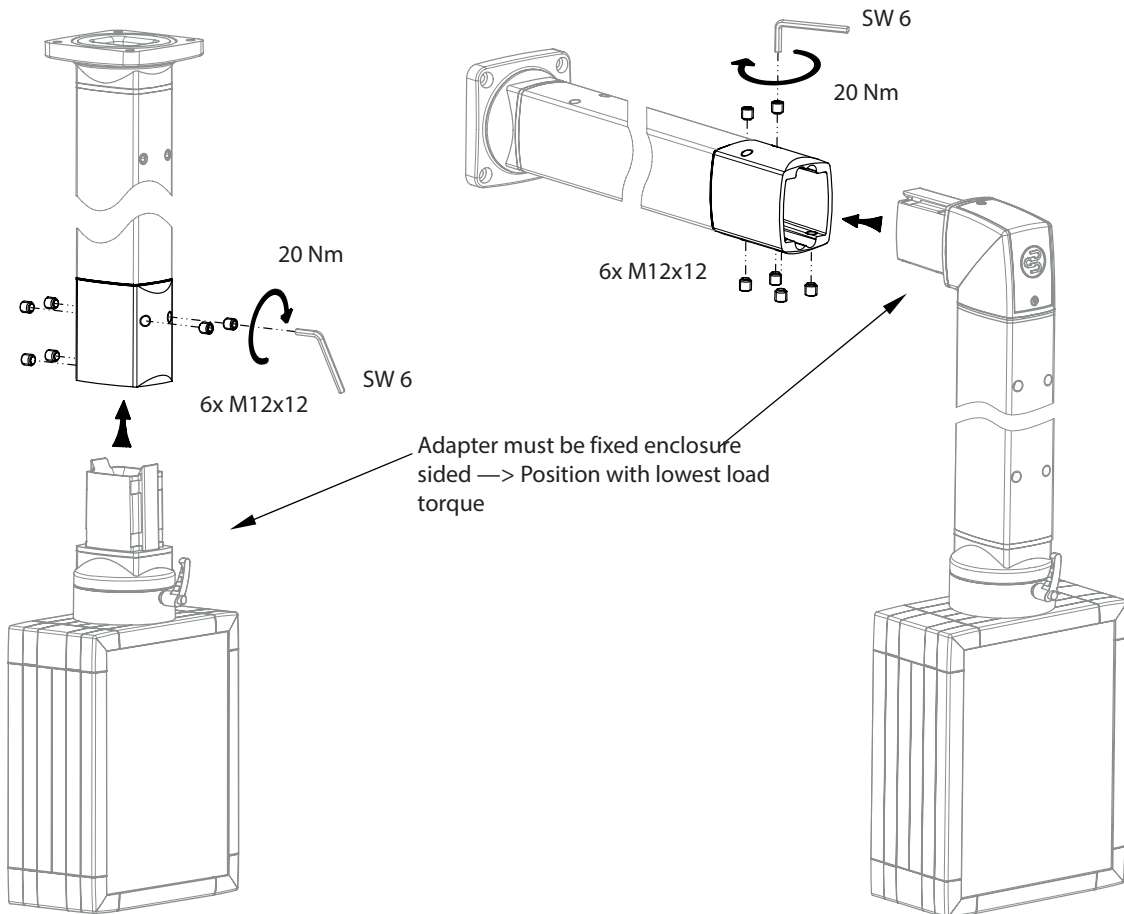
2

Assembly the adapter to the unmachined tube side

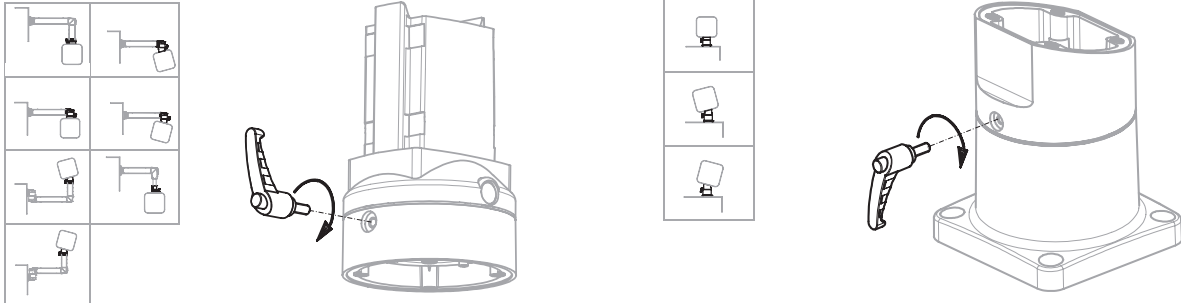


Slightly press the gasket during mounting

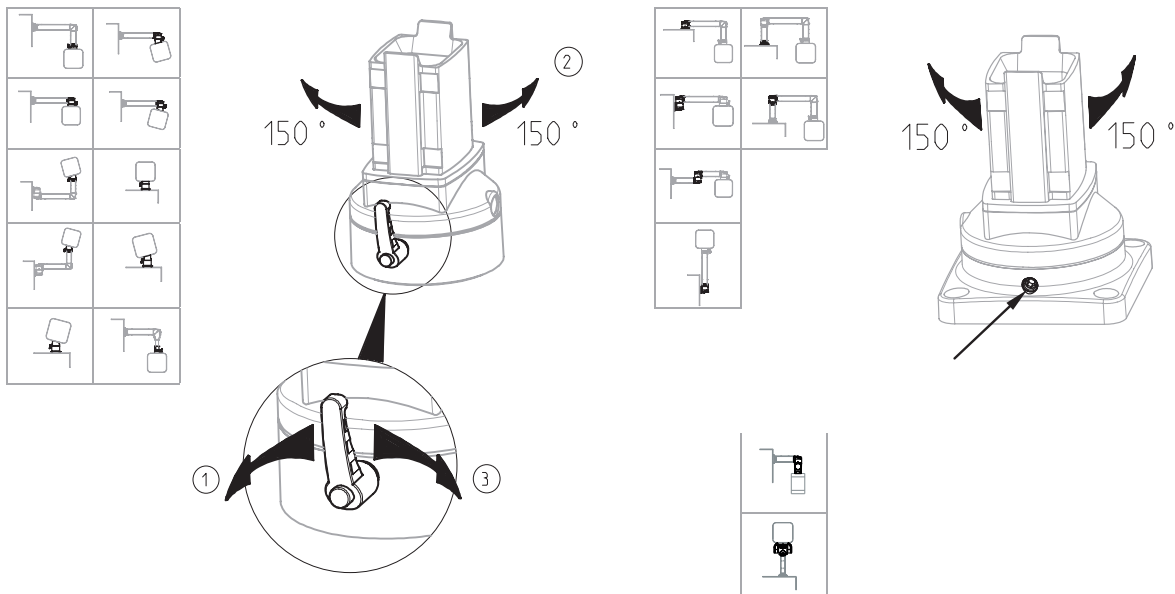
3



**5 To ascertain the lever screw in S2MFC, S2MFEC, S2MACB, S2MACF, S2MBC**

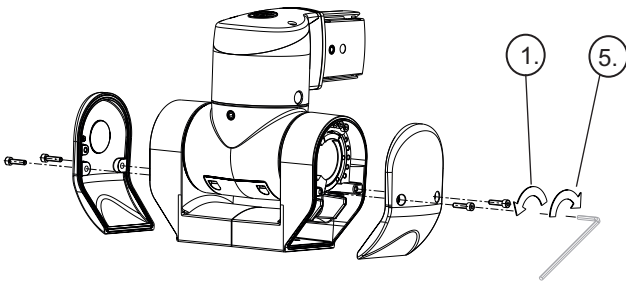
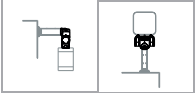


**6 Fine adjustment of the tightness**

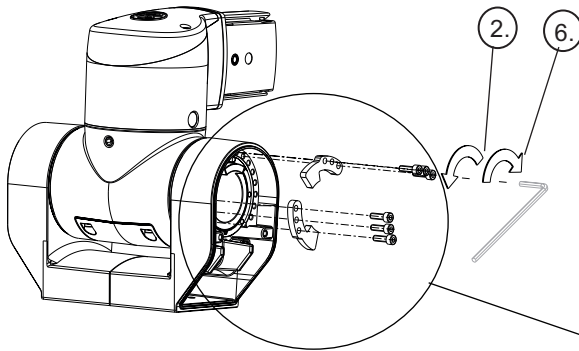




## 7 Attitude of the tightness of torque (M) Turn/ tilt coupling S2MCV, S2MCH

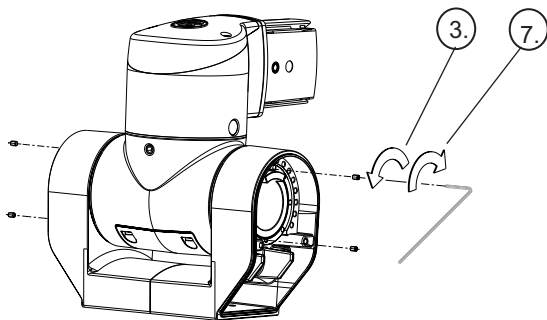
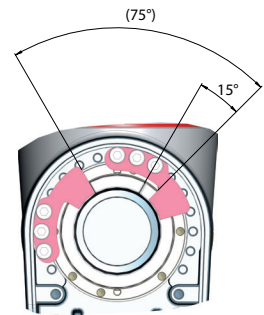
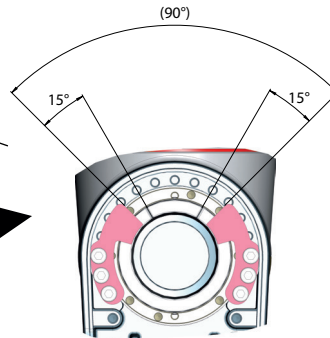


Unscrew the cover Pos.1  
Mount the cover Pos. 5

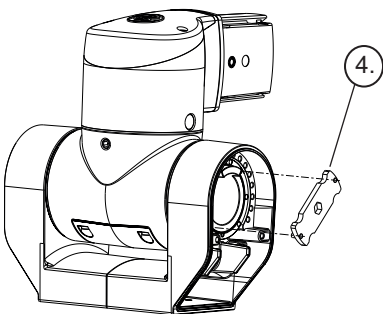


Unscrew the tilt angle limiter Pos.2  
Mount the tilt angle limiter Pos. 11

Application examples for tilt angle limiter

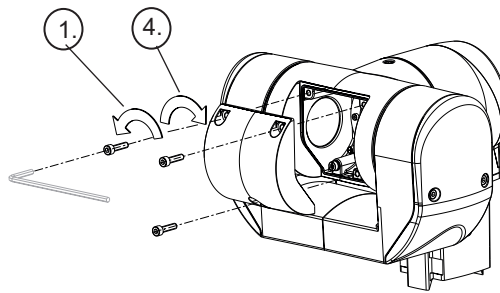


Unscrew the threaded pin M4 Pos. 3 /  
Screw the threaded pin M4 Pos. 7

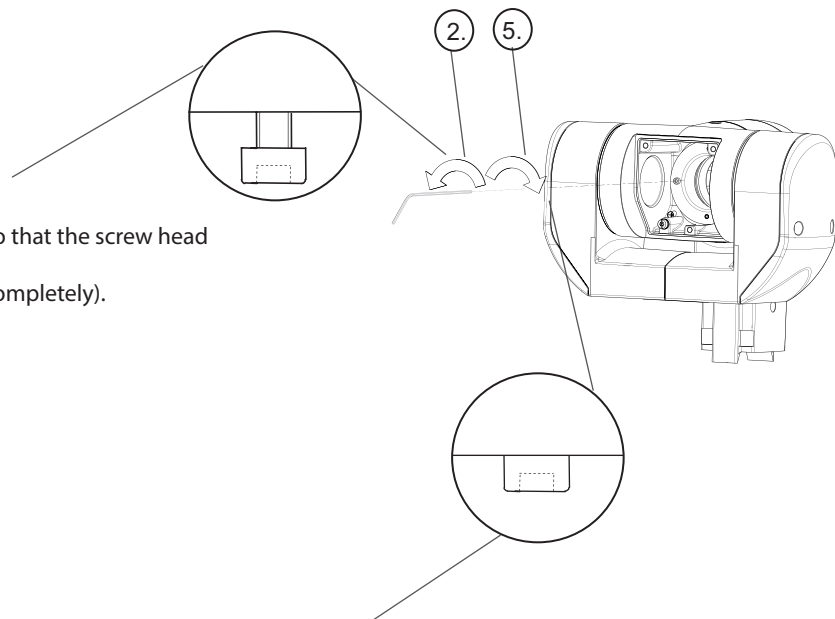


Loosen threaded nut with tool item  
no. 980 5422 000. Pos. 4 max. 1  
revolution anticlockwise. Set the desired  
inclination moment by tightening the  
threaded sleeve

Unscrew the cover Pos. 1  
Mount the cover Pos. 4

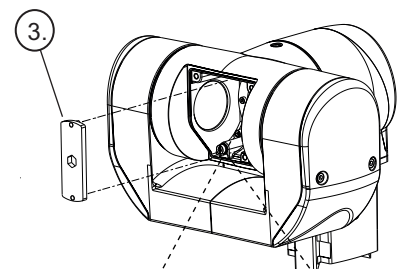


Loosen cylinder screws M3, so that the screw head lifts 2-3 mm. Pos. 2  
(Attention: Do not unscrew completely).



Screw the M3 screws as far as the stop and tighten at 1,5 Nm Pos. 5

Loosen the threaded sleeve anticlockwise with tool item no. 9805421000.  
Pos. 3 max. 1 revolution. Set the desired swing torque by tightening the threaded sleeve



Correct the position of the through holes (as Abb. 2 shows) by tightening clockwise. Attention: Not as shown in Abb. 3!

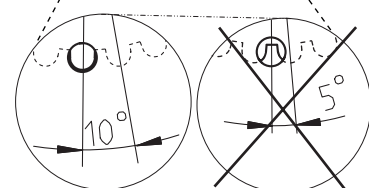
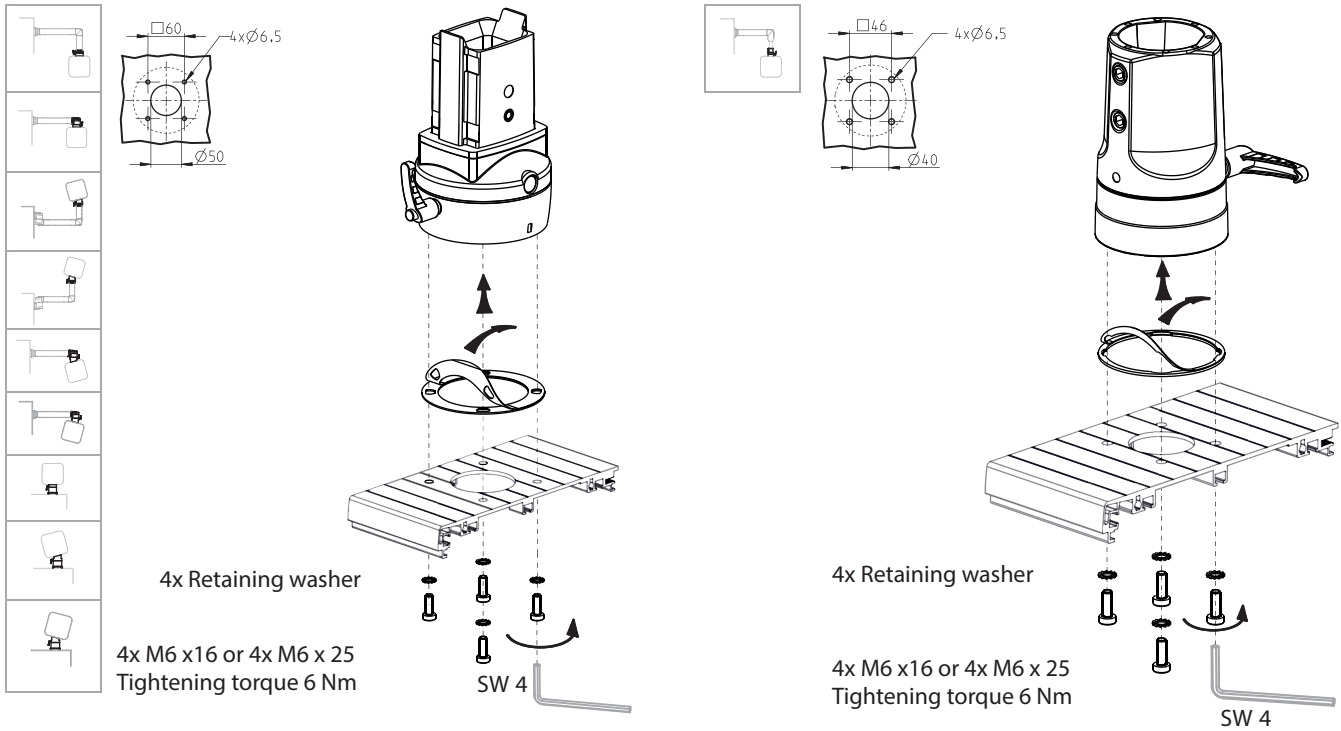


Abb.2

Abb.3

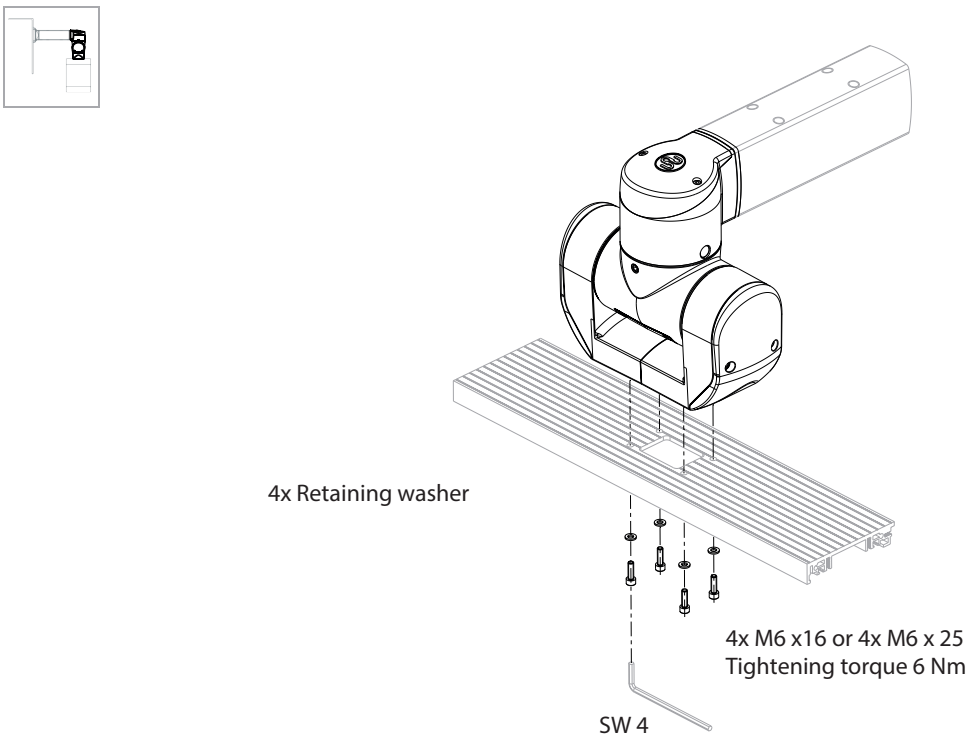
## 8 Fixing at enclosure

### 8.1 Standard



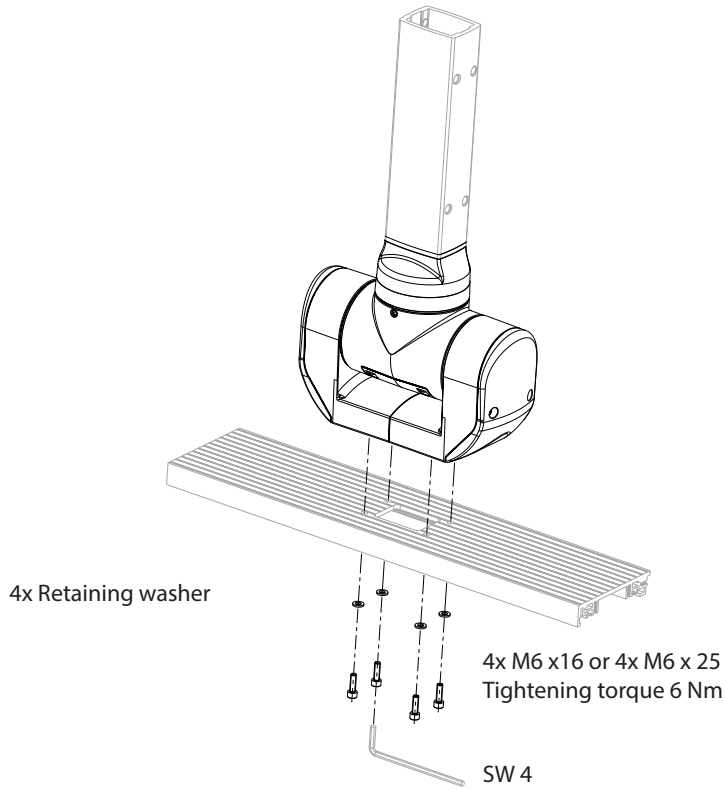
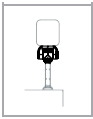
### 8.2 Turn/tilt coupling W

S2MSCH



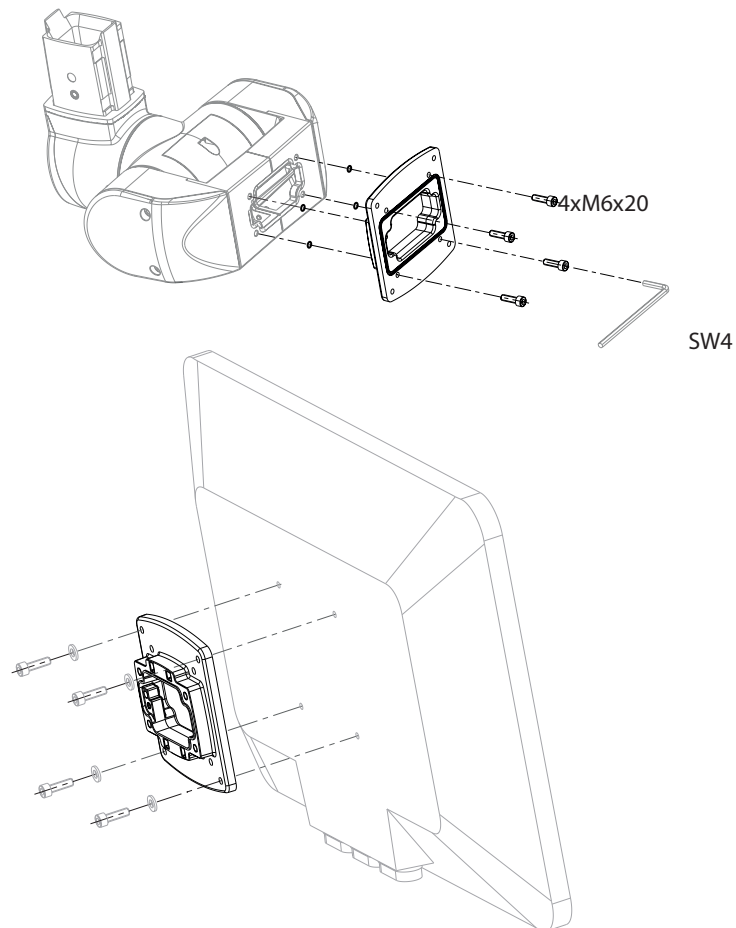
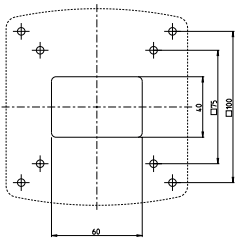
### 8.3 Turn/tilt coupling S

S2MSCV



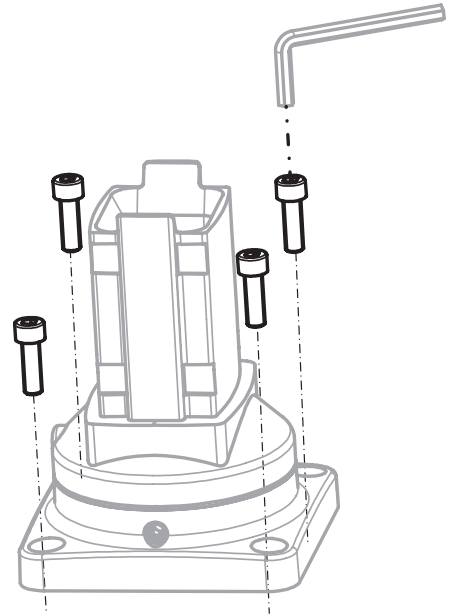
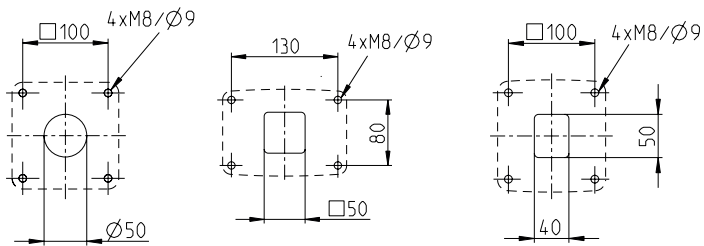
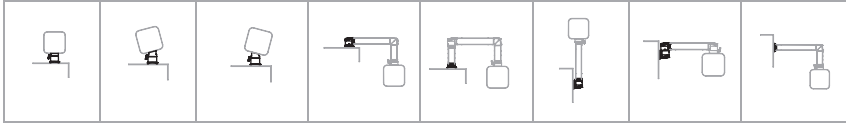
### 8.4 with adapter plate VESA 75/100

S2MVAP

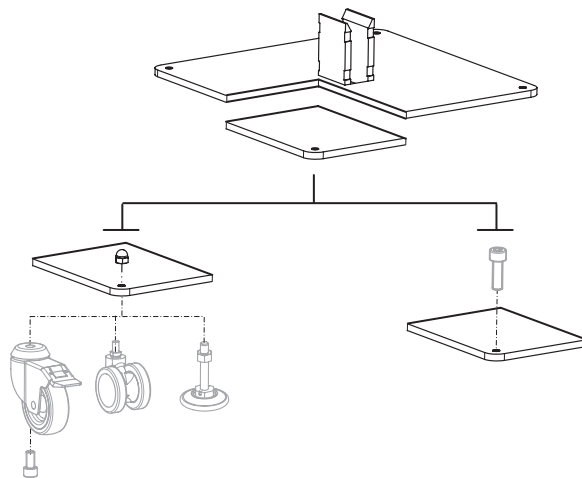
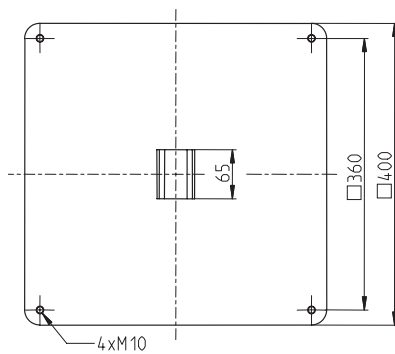


## 9 Mounting on building or machine

### 9.1 Standard

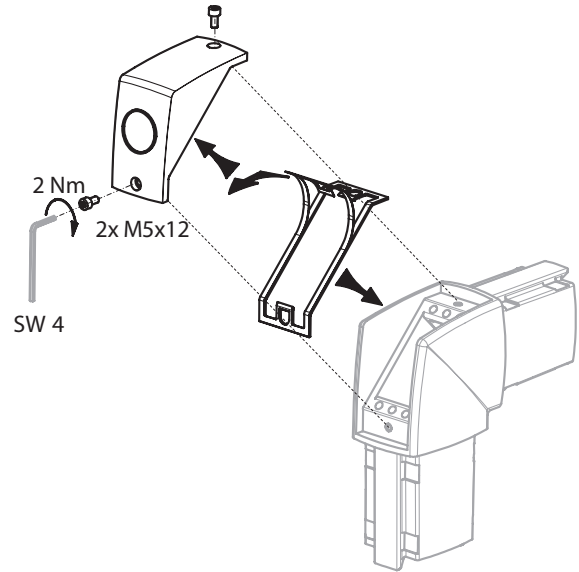
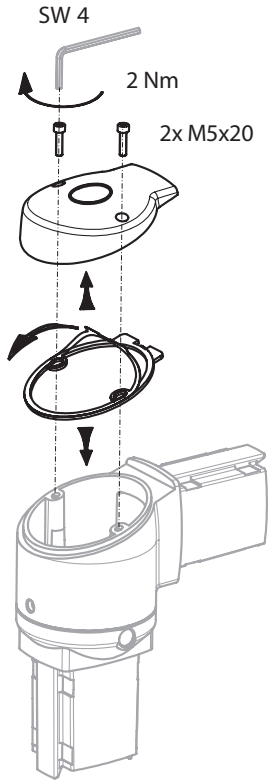
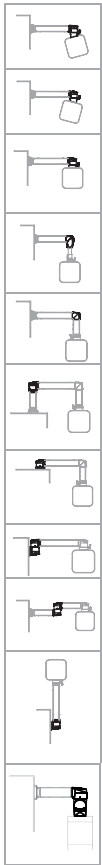


### 9.2 with small base S2MPBS



See "Accessories for Bases" Page 16

## 10 To crew link cap



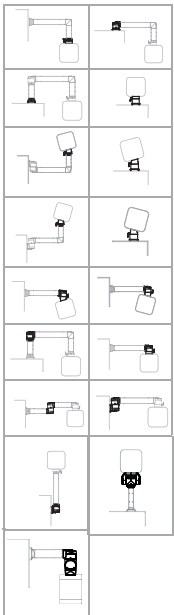
## 11 Accessories

Art No.

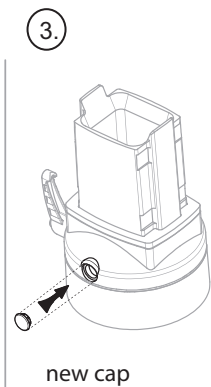
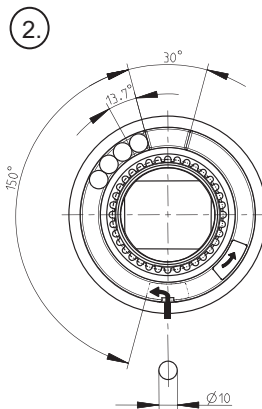
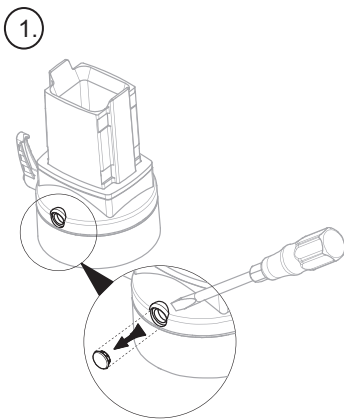
S2MRL

Type

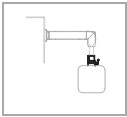
Rotation limiters



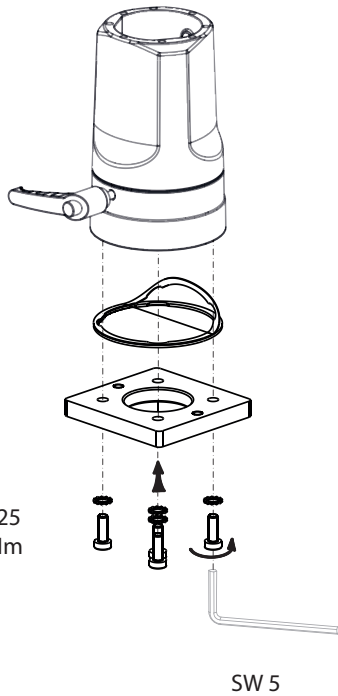
Scope of supply  
1x Cap  
10x Bills



$x^\circ = \text{Rotation}$   
 $n = \text{Number of bills per side}$   
 $x^\circ = 150^\circ - (n \times 13,7^\circ)$



1.

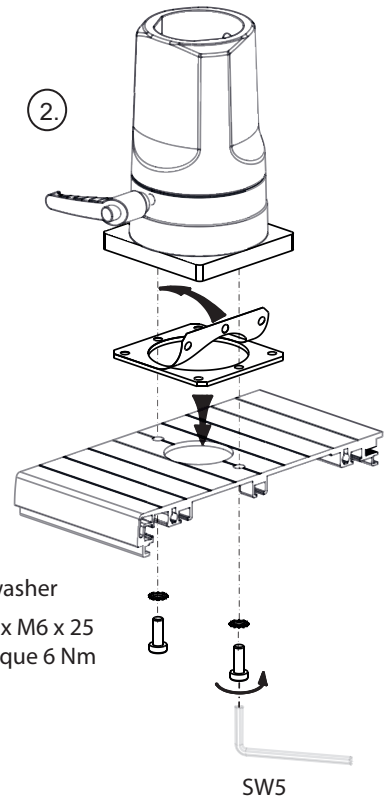


4x Retaining washer

4x M6 x16 or 4x M6 x 25  
Tightening torque 6 Nm

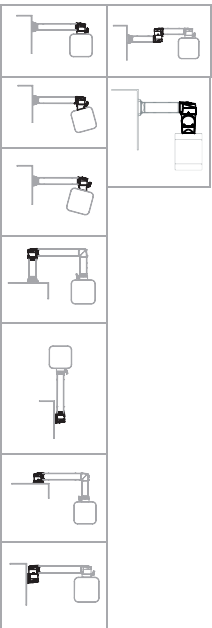
SW 5

2.

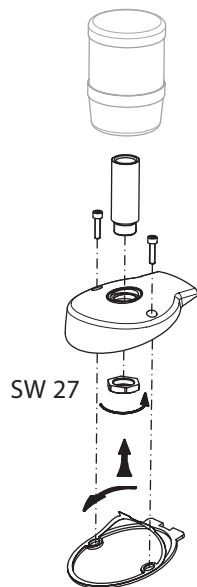


2x Retaining washer  
2x M6 x16 or 2x M6 x 25  
Tightening torque 6 Nm

SW5

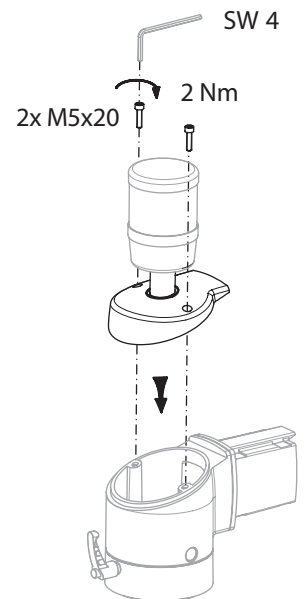


1.



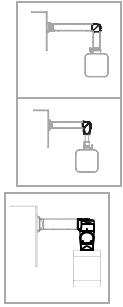
SW 27

2.

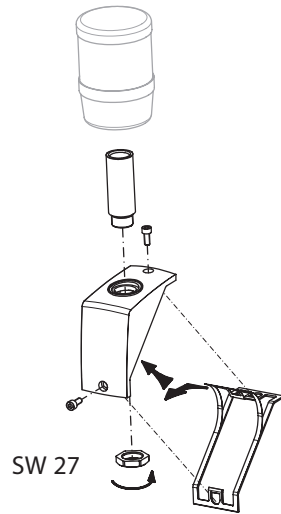


2x M5x20 2 Nm

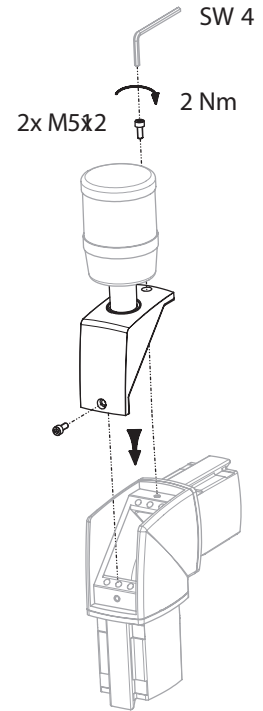
SW 4



①



②

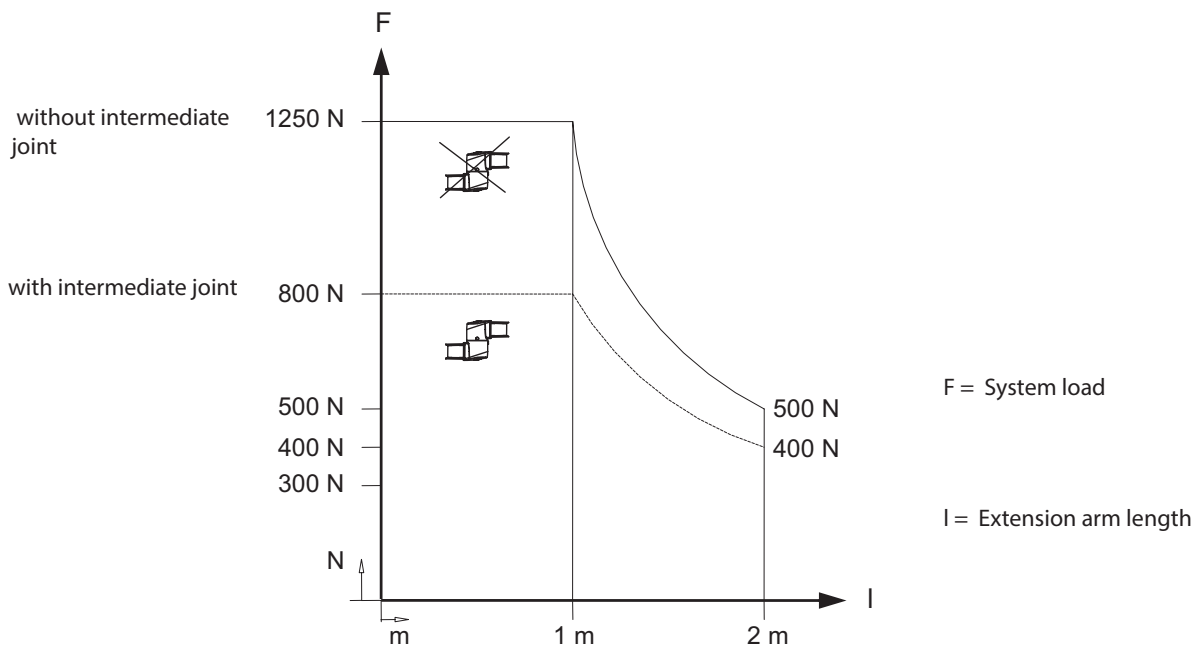


## 12 Mechanical Data

### Material

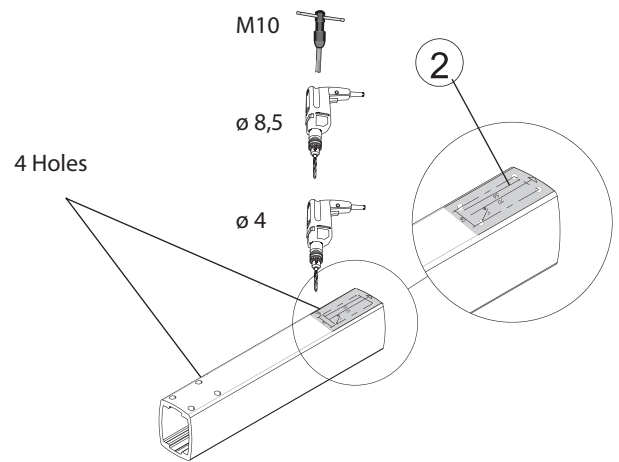
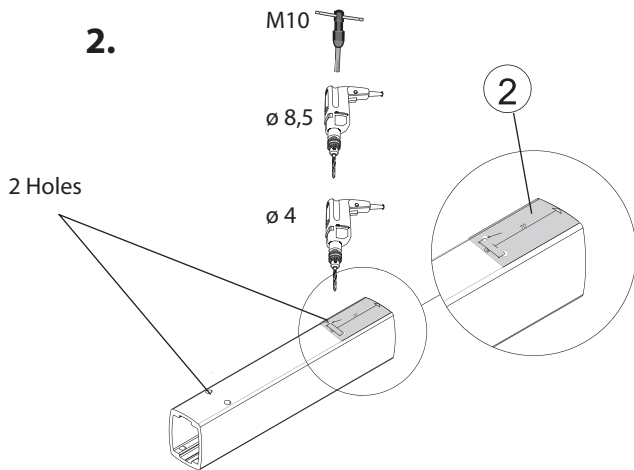
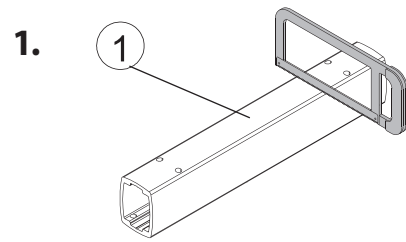
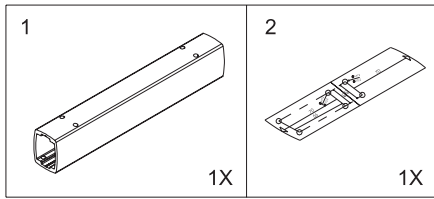
Komponenten	GD-AI
Large base	GD-AI
Small base	Steel
Gasket	Neoprene
Plastics	PA / POM
Protection class	IP65 ( except bases )

## 13 Load diagram SYSPEND 281-MAX





## 14 Tube Cutoff



The original operating and installation instructions are the German language version.  
Other languages are a translation of the original operating and installation instructions.