



# PFEIFER Attachment Point

for personal protective  
equipment



**PFEIFER**

# For secure anchoring in concrete ...

The fastening of personal protective equipment to concrete elements during assembly, installation and service work must meet high safety requirements.

The PFEIFER system, consisting of DB Attachment Point and PFEIFER Eye Bolt PSA as well as supplementary installation accessories ensures a qualified and secure method of fixing your personal protective equipment.



## Safety

- TÜV-Süd-tested system of DB Attachment Point and PFEIFER Eye Bolt PSA conforming to EN 795 and CEN/TS 16415



## Flexibility

- The most diverse installation variants and load directions are permissible



## Quality

- European Technical Assessment ETA – 11/0288 for the PFEIFER DB Attachment Point PSA



## Cost-effectiveness

- Separation of cast-in-concrete anchor and reusable eye bolt



## High performance

- System usable by up to 2 persons

# PFEIFER Attachment Point for personal protective equipment



**PFEIFER**

Fixing Systems

PFEIFER DB  
Attachment Point PSA

The PFEIFER Attachment Point for personal protective equipment consists of an approved DB Anchor with internal thread, a clear marking and an eye bolt for the attachment of the personal protective equipment.

**Advantages:**

- Flexible use
- Safe system
- Cost-effective
- Eye bolt reusable with integrated hexagonal spanner
- Fixing bolt usable as closure
- TÜV-Süd-tested

**Materials:**

DB Attachment Point socket:  
Precision steel pipe in special quality,  
optionally galvanised/stainless steel

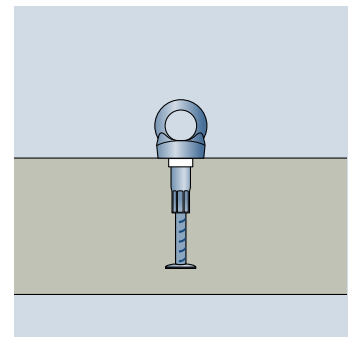
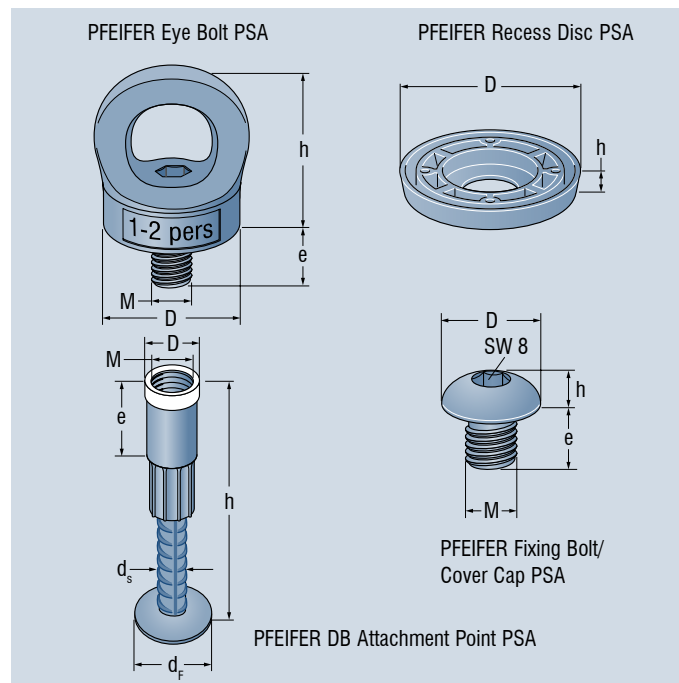
DB Attachment Point foot:  
B 500 B

PFEIFER Eye Bolt PSA:  
Steel in special quality,  
optionally galvanised/stainless steel

PFEIFER Recess Disc PSA:  
yellow plastic

PFEIFER Fixing Bolt/Cover Cap PSA:  
stainless steel

Fastening base:  
concrete C30/37 or better



Ref. no.	Description	Material	Type/ Size	Permissible no. of persons as per EN 795 & CEN/TS 16415	Thread	d <sub>f</sub> [mm]	d <sub>s</sub> [mm]	e [mm]	D [mm]	h [mm]	Weight approx. [kg/pc.]
05.268.163.120	PFEIFER DB Attachment Point PSA	galvanized	M 16	1-2	M 16 x 2,00	36	12	27	21,0	120,0	0,20
05.268.164.120	PFEIFER DB Attachment Point PSA	stainless steel	M 16	1-2	M 16 x 2,00	36	12	27	21,0	120,0	0,21
05.269.163.935	PFEIFER Eye Bolt PSA	galvanized	M 16	1-2	M 16 x 2,00	-	-	24	56,0	72,5	0,90
05.269.164.935	PFEIFER Eye Bolt PSA	stainless steel	M 16	1-2	M 16 x 2,00	-	-	24	56,0	72,5	1,15
05.201.180.01	PFEIFER Recess Disc PSA	yellow plastic	-	-	-	-	-	13	62,5	10,0	0,01
05.209.184.01	PFEIFER Fixing Bolt/Cover Cap PSA	stainless steel	M 16	-	M 16 x 2,00	-	-	13	30,0	8,5	0,06



**Notice:**

If a DB Attachment Point is to be installed in a recessed position, it is compulsory to use the PFEIFER Recess Disc PSA provided for this. Otherwise the required screw-in depth of the eye bolt cannot be achieved and there is a danger to life and limb!

# Instructions for installation and use

## System description

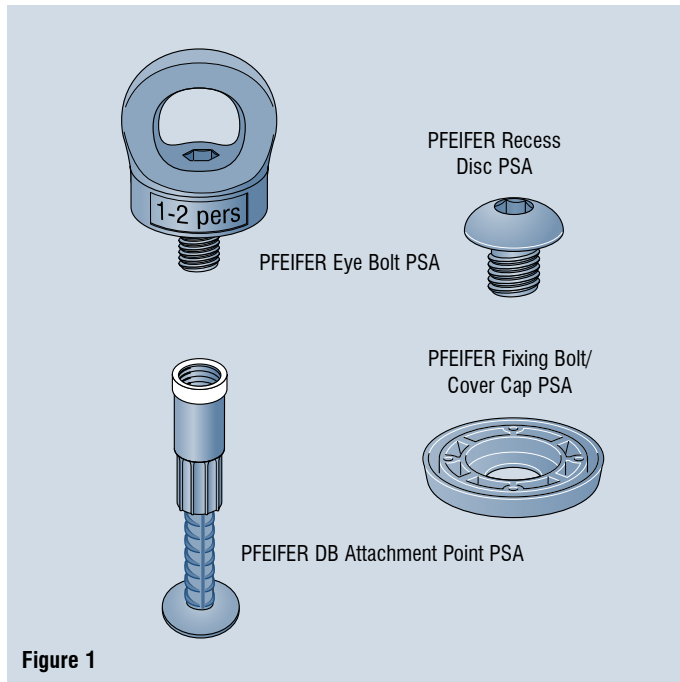


Figure 1

The PFEIFER Attachment Point for personal protective equipment conforming to EN 795 and CEN/TS 16415 consists of a PFEIFER DB Attachment Point PSA and the matching reusable PFEIFER Eye Bolt PSA.

Within the scope of the planning the DB Attachment Points must already have been defined and installed prior to concreting. Following the hardening of the concrete, the anchors can be used with the associated eye bolts, which are screwed fully into the anchor, as the anchorage for the personal protective equipment conforming to EN 795 and CEN/TS 16415 for up to two persons.

In addition, corresponding accessories are available for suitable fastening to the formwork in the form of the recess disc and the fixing bolt/cover cap. After use as a formwork fixing this bolt can also be used for the high-quality closure of the remaining thread aperture.

Table 1: Anchor version definition

Variants	Environmental conditions
Stainless steel (grade 1.4571)	Components in the open air <sup>*)</sup>
Galvanized	Dry interior

<sup>\*)</sup> including industrial atmospheres and closeness to the sea or damp rooms, if there are no particularly aggressive conditions (e.g. sea water splash zones).

## Safety

- PFEIFER DB Attachment Point PSA: European Technical Assessment ETA-11/0288
- PFEIFER Eye Bolt PSA: conforming to EN 795 und CEN/TS 16415
- System: Test TÜV SÜD according to EN 795 and CEN/TS 16415

## Intended use

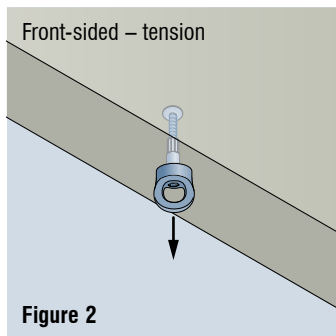


Figure 2

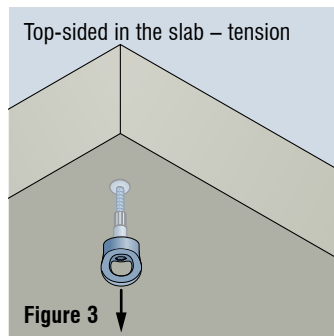


Figure 3

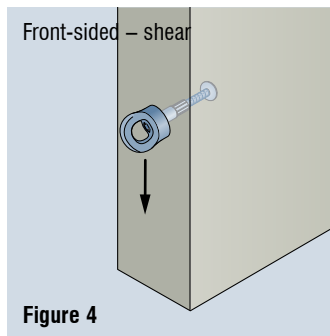


Figure 4

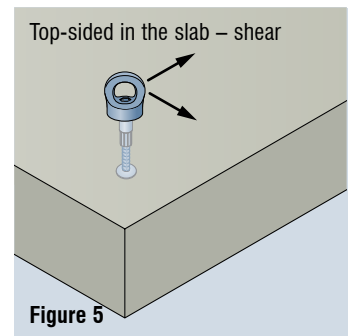


Figure 5

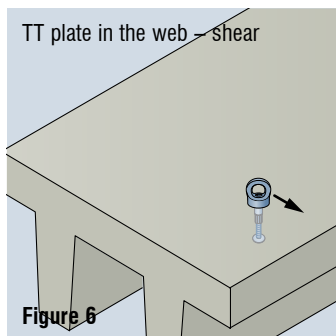


Figure 6

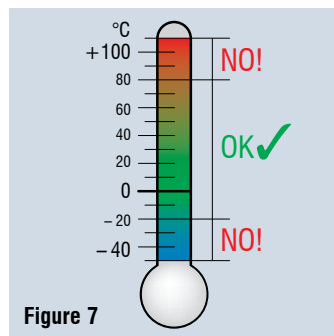


Figure 7

The attachment points can be used in accordance with figures 2–6. The DB Attachment Points are hereby fastened to the formwork as inserts prior to concreting, taking into account the relevant installation conditions. After concreting and attainment of a minimum concrete grade of C30/37, this anchor can be used for fastening the personal protective equipment of up to two persons by screwing in the associated eye bolt. The associated formwork accessories ensure that the front side of the eye bolt is contacting with its full surface after screwing in.

## Dimensioning

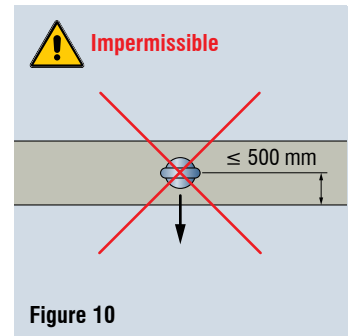
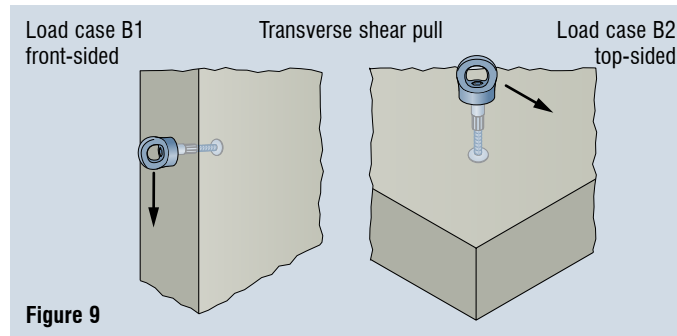
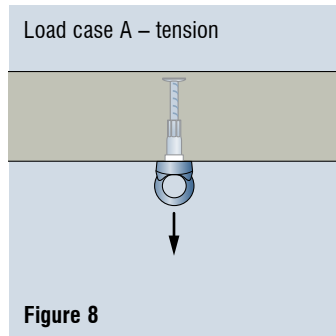


Table 2: Minimum reinforcement and possible number of persons to be secured

Load case	Number of personnel	Edge distances/ installation dimensions	Minimum reinforcement [mm <sup>2</sup> /m]
A	1–2 persons	Figs. 11–13	188
B1	1–2 persons	Figs. 11–13	188 + additional reinforcement
B2	1–2 persons	Figs. 14	188

### Hinweis:

The additional reinforcement pos. 1 only needs to be provided for the transverse shear loading of front-sided installed attachment points (load case B1, fig. 9 left).

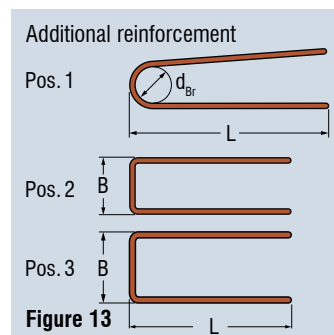
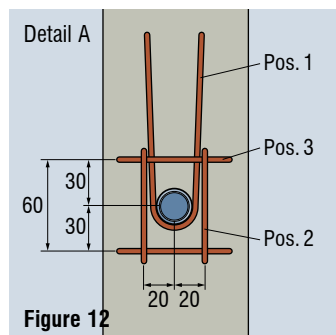
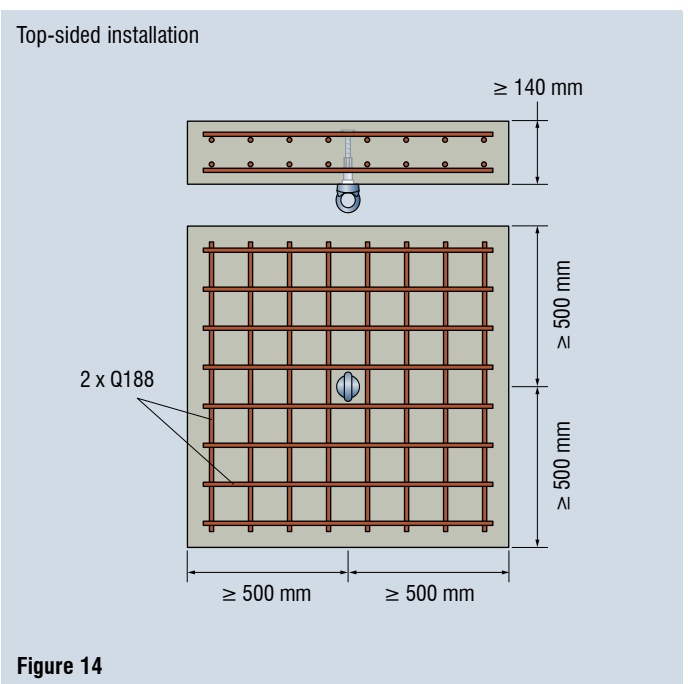
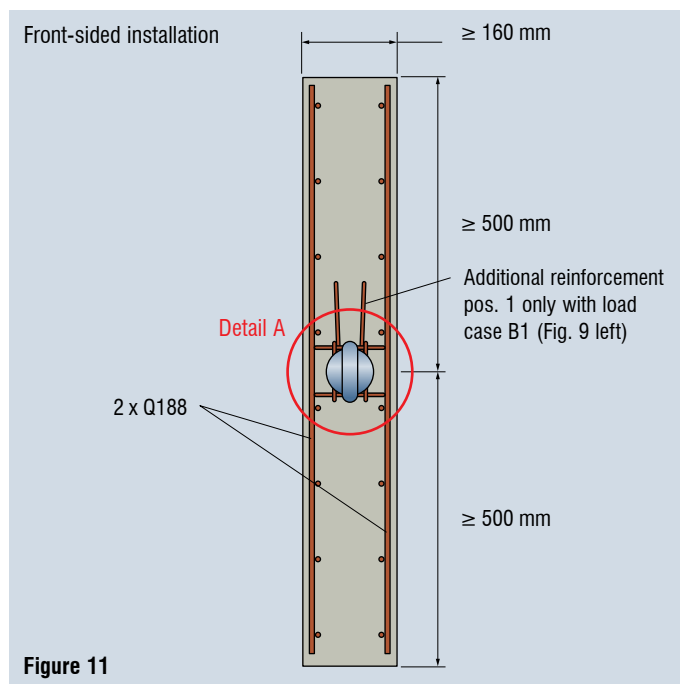


Table 3: Additional reinforcements

Item	Quantity	Bar-Ø [mm]	$d_{Br}$ [mm]	Length L [mm]	Width B [mm]
Pos. 1	1	8	32	360	–
Pos. 2	2	8	–	290	84
Pos. 3	2	8	–	290	Wall thickness – $2 \times c_{nom}$

### Notice:

The additional reinforcement pos. 1 only needs to be provided for the transverse shear loading of front-sided installed attachment points (load case B1, fig. 9 left).

# Instructions for installation and use

## Installation

The correct installation of the DB Attachment Points and the proper screwing in of the eye bolt are crucial for the functionality of the system. All essential details are illustrated in figures 15–22. In addition, stainless steel closure options are available for applications over lengthy periods. Stainless steel DB Attachment Points are also to be used here.

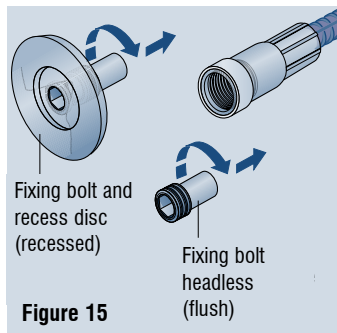


Figure 15

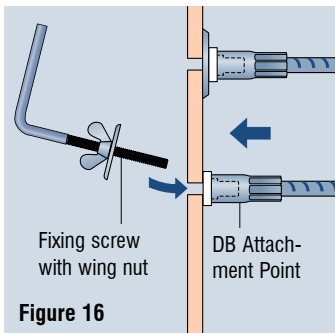


Figure 16

1. Connection of fixing bolt/cover cap and recess disc.
2. Screwing into the DB Attachment Point.
3. Attachment of the anchor with the fixing screw or by nailing on the disc.



**Caution:**

It is compulsory to use the PFEIFER Recess Disc PSA (yellow). The diameter is larger than in the standard system (thread system)!

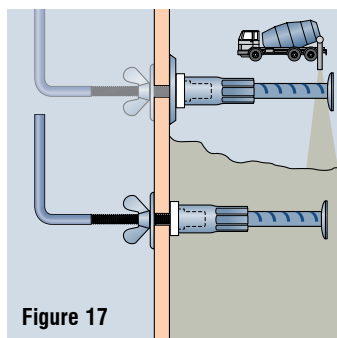


Figure 17

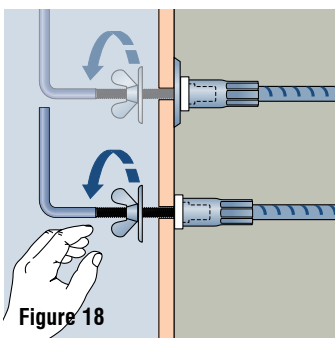


Figure 18

4. Concreting of the component and careful compaction.
5. Avoid direct contact between the built-in component and the vibrator. Remove the fixing screw.

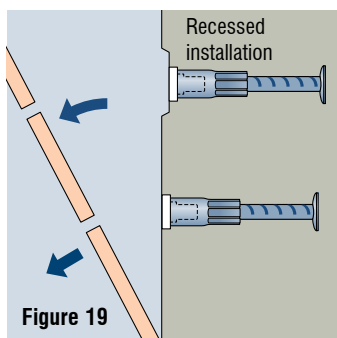


Figure 19

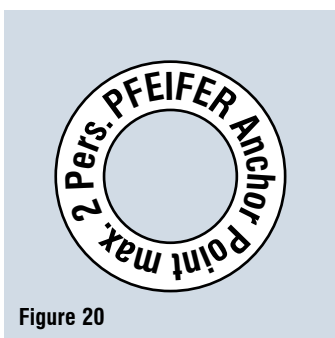


Figure 20

6. Remove the formwork.
7. Check the marking.



**Caution:**

Correct installation is very important for the functionality of the system. The installation tolerances (figs. 23–26) must therefore be observed at all costs.

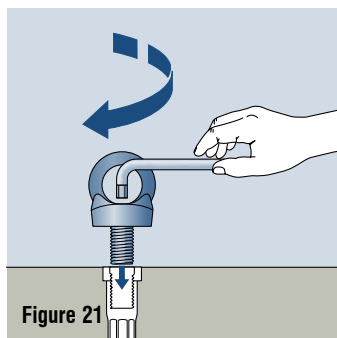


Figure 21

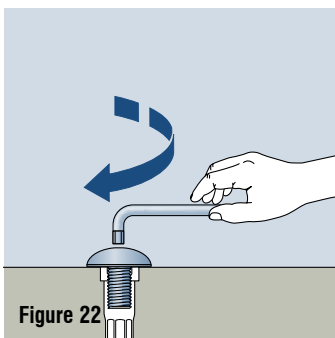


Figure 22

8. Screw in the PFEIFER Eye Bolt PSA until there is full contact between the pressure plate and the concrete surface (maximum tightening torque 30 Nm).
9. The fixing bolt is provided in parallel with the temporary closure of the DB Attachment Points. A high-quality look is ensured by the form and material grade (stainless steel).

## Installation tolerances

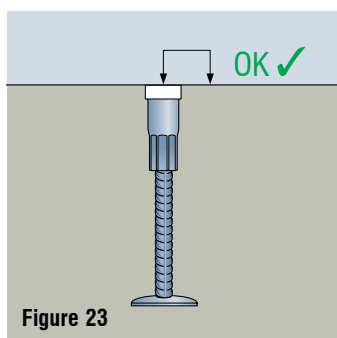


Figure 23

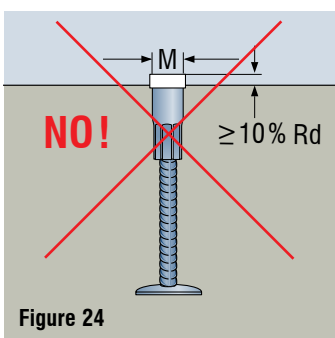


Figure 24

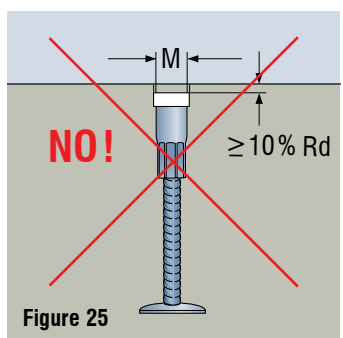


Figure 25

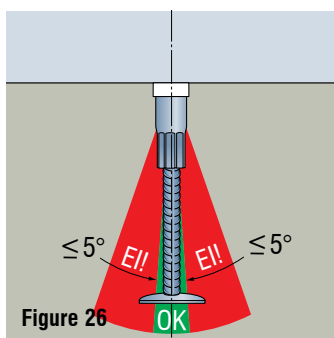
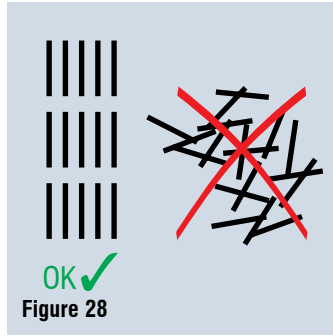
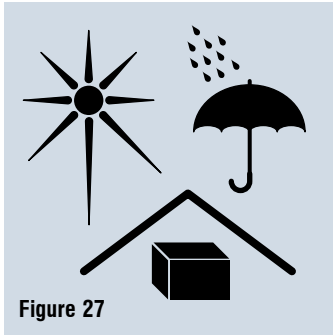


Figure 26

## Storage



All structural elements must be stored in a dry and protected place. There is an increased risk of corrosion with widely fluctuating temperatures, moisture in combination with de-icing salt or in areas near the sea! Structural elements with damage caused by corrosion must not be fitted!



# **PFEIFER**

## International

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