

PFEIFER Socket Dowel with crimped end and nail plate

Item-No. 05.252

We recommend Socket Dowels only for fixings, for which a general technical approval is not necessary.



PFEIFER

Fixing System
Socket Dowels

PFEIFER Socket Dowels can be attached to wooden formwork simply and efficiently using the nail plate.

The crimped end of the PFEIFER Socket Dowel transfers the forces safely into the concrete by form closure. The values are valid for concrete with compressive strength of 25 N/mm².

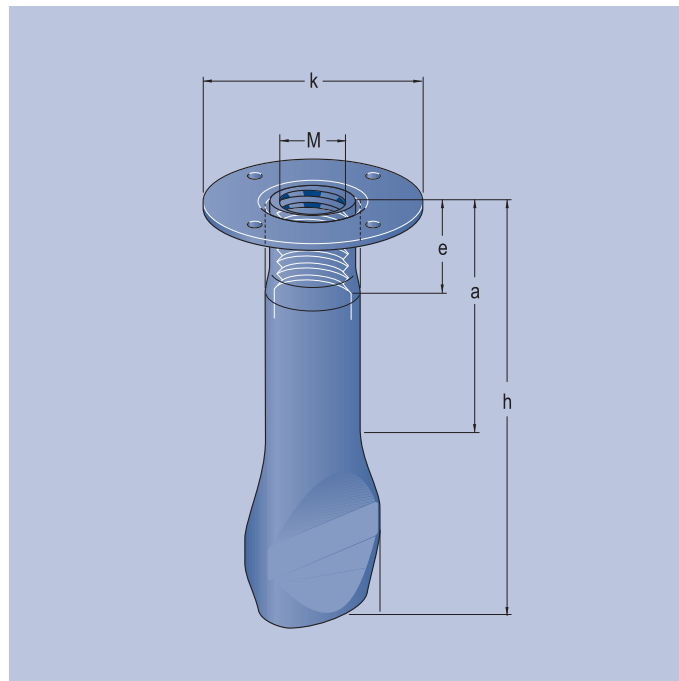
Material:

M 10 – M 12

DIN 2394, St 34-2

M 16 – M 24

DIN 1626, St 33/37-2



Minimal tolerances from the dimension specifications are possible and do not affect the load capacity.

Ref. No. black/plain	Ref No. zinc-plated	Load capacity t	adm. F kN	Size M x h	Dimensions mm			Packing unit piece	Weight approx kg/packing unit
					a	e	k		
–	05.252.103.060	0,40	4,0	10 x 60	40	10	34	200	6,4
–	05.252.123.070	0,60	6,0	12 x 70	40	12	40	200	12,8
05.252.162.100	05.252.163.100	1,00	10,0	16 x 100	50	16	44	100	12,9
05.252.202.100	05.252.203.100	1,25	12,5	20 x 100	50	20	48	100	16,6
05.252.242.100	05.252.243.100	1,60	16,0	24 x 100	40	24	57	50	14,3

Sample order:

200 PFEIFER Socket Dowels with crimped end and nail plate, zinc-plated M 12 x 70 mm:

200 PFEIFER Socket Dowels ref. no. 05.252.123.070

Installation instructions for PFEIFER Socket Dowel with crimped end and nail plate

1. Installation

The Socket Dowel with crimped end and nail plate can be nailed directly to the formwork. Alternatively, it can be screwed onto the formwork with a hexagonal screw. No further reinforcement is necessary.

2. Straight pull

In order to avoid premature failure of the Socket Dowel caused by blow-out of the concrete under straight pull, a certain minimum edge distance has to be considered. Table 1 and Figure 1 show the minimum values for concrete with a compressive strength of 25 N/mm².

Table 1 – Edge distance under straight pull

Size mm x mm	adm. F _Z kN	min a _r (Z) mm
M 10 x 60	4,0	90
M 12 x 70	6,0	105
M 16 x 100	10,0	150
M 20 x 100	12,5	150
M 24 x 100	16,0	150

3. Transversal pull load

If there is exposure to transversal pull (vertically to the longitudinal axis of the Socket Dowel) in the direction of the free edge, there is danger of concrete blow-out. To make sure the forces are transferred properly, certain minimum edge distances (a_r) and minimum thickness of panel d should be considered. See Table 2 and Figure 2. Greater concrete cover may result in thicker precast concrete panels.

Table 2 – Edge distance, thickness of panel under transversal pull

Size mm x mm	adm. F _Q kN	min a _r (Q) mm	min d mm
M 10 x 60	4,0	120	85
M 12 x 70	6,0	140	95
M 16 x 100	10,0	200	125
M 20 x 100	12,5	200	125
M 24 x 100	16,0	200	125

4. Parallel shear force (interaction)

We speak of parallel shear pull if there is straight pull and transversal pull simultaneously working on the Socket Dowel. The force components should fulfil the following formula:

$$\sqrt{F_Z^2 + F_Q^2} \leq \text{adm } F$$

This means for an angle of inclination from 0° to 90° the same admissible force is valid.

5. Example of application

In Figure 3 a typical example for the proper use of PFEIFER Fixing Sockets is shown: Attachment of machines to foundations.

Figure 1

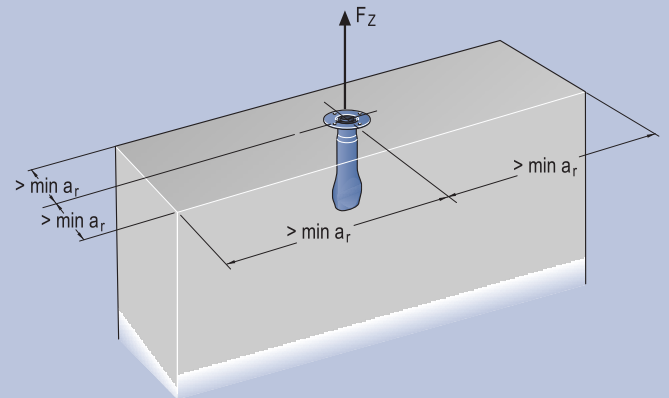


Figure 2

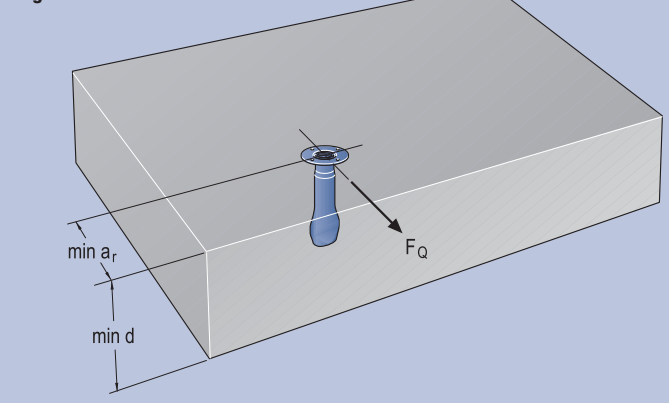


Figure 3

