PFEIFER

07/2018

BS Anchor System

PFEIFER
SEIL- UND HEBETECHNIK
GMBH

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General Installation Instructions for the PFEIFER BS Anchor System

1. Description

The PFEIFER BS Anchor System comprises the actual BS Anchor, the formwork accessories and the corresponding lifting device, the BS Hook. The BS Hook is a cast steel hook with a hook mouth which is designed to match the rope's diameter (Figure 3). The BS Anchor consists of an oval curved high-tensile steel rope which is swaged with an aluminium ferrule (Figures 1 and 2).

The BS Anchors are suitable for compact solid units as well as, for example, slim pretensioned girder. The concrete units can be safely lifted in the precast factory, during transport and the final assembly. According to the Safety Regulations for Lifting Anchors and Lifting Anchor Systems for Precast Concrete Units they are not suitable for regularly recurring attachment procedures, for example crane counter weights.

The BS Anchor System corresponds to the employers' liability insurance association's Safety Regulations for Lifting Anchors and Lifting Anchor Systems for precast concrete units. All technical data concerning the BS Anchor cast in concrete has been tested by the Institute for Construction Materials at the University of Stuttgart and confirmed by Prof. Eligehausen's inspection.

The ropes used have a special design and the required quantity of individual wires according to DIN 3088, in order to ensure the necessary flexibility. There are 114 individual wires, 200 individual wires in a rope diameter of 14 mm and above. The nominal wire strength amounts to 1770 N/mm^2. The BS Anchors are dimensioned in such a way that from the load capacity to the minimum breaking force of the rope, there is a safety margin of 4. This has been proven under the supervision of a panel of experts on the subject of iron and metal at the employers' liability insurance association by means of tensile tests. The ferrules are in accordance with DIN 3093.

As a result of the evaluation of the series of experiments carried out by Prof. Eligehausen and the tensile tests carried out by the employers' liability insurance association's panel of experts on iron and metal, safe handling is confirmed for the entire PFEIFER BS Anchor System as well as for recessed (Figure 1) and for projecting installation (Figure 2).

2. Installation

The concrete cover at the side of the BS Anchors and on the additional reinforcement should be in accordance with the norm.

The BS anchors can be installed in two ways:

2.1 Recessed installation

With recessed installation into the precast unit, the BS Anchor is fixed to the formwork wire using a rubber Moulding Insert. The BS Anchor Hook (Figure 3) is to be used as a lifting device to attach the rope loop in the recess. Its geometry, which matches in the rope diameter of the BS Anchor and the recess in the concrete, allows secure attachment.

For recessed installation BS Anchors have 6 load capacity levels according to Tables 4 and 5 on the product data sheet.

2.2 Projecting installation

With this type of installation, the upper part of the oval BS Anchor projects out of the concrete so that every crane hook or every attachment hook with the corresponding radius can be attached (Figure 4). For this case, no special lifting device or formwork accessories are necessary; the BS Hook can be used but does not have to be. The projecting part of the BS Anchor can be cut off after the last time that the precast concrete element was lifted.

Figure 1 – BS Anchor System, recessed installation

Figure 2 – BS Anchor System, projecting installation

Figure 3

Figure 4

Attention:

The internal radius of the attached crane hook or sling hook must correspond to at least the wire rope diameter.
We recommend the 5-fold rope ∅, particularly with larger tonnages (larger than BS 10 t).

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Conditions of Use

The individual technical data relating to the products mentioned can be found in the product data sheets of the individual articles. Please pay attention to all the information contained in these sheets.

When installed on the head side in a thin concrete unit, BS Anchors can be installed perpendicular as well as parallel to the concrete unit level.

The BS Anchor may be placed under load from the anchor plane under a limited degree of parallel shear force, as long as the effect of the load is parallel to the concrete unit plane. The upper limit for parallel shear force with projecting and recessed installation is an angle of inclination $\beta = 30°$. The reason for this is firstly, the deviation forces of the projecting BS Anchor that effect the concrete and secondly, the BS Hook's freedom of movement in the recess in the case of recessed installation (Figure 5).

Projecting anchors of up to 30°, recessed installed ones of up to 15° (Figure 6) may be placed under load with parallel shear force. Larger angles of inclination are not admissible.

In the event of installation on the head side, the load must never project out from the concrete unit plane. Transversal sheat pull or parallel shear pull from out of the concrete unit plane are inadmissible (Figure 7).

The maximum working load of the BS Anchor does not depend on the angles of inclination (see 4.6 of the General Technical Introduction to PFEIFER Lifting Anchor Systems).

In the event of installation on the head side, an additional reinforcement must be installed in the concrete unit in the form of a U-shaped stirrup in the area of the BS anchor. Any bars that have been cut out must be replaced. There are more precise specifications concerning the additional reinforcements, the minimum unit thicknesses, edge distances and intermediate distances in the product data sheets.

Without any further specifications, the maximum working loads are valid for normal concrete with a compressive strength of $\beta_w = 15$ N/mm^2 at the time of first lifting.

In addition, maximum working loads for concrete with a compressive strength of $\beta_w = 30$ N/mm^2 are shown on the product data sheets because BS Anchors are often used with prestressed beams with greater concrete compressive strength.

The safety margin of the maximum working loads is 2.5 times against concrete breakout if the Installation Instructions are kept to.

A load capacity identification tag is attached to every BS Anchor legibly stating the anchor type described by the admissible load capacity and the manufacturer's name PFEIFER. When concrete is cast, this identification tag must be positioned in such a way that it is situated on the visible area of the BS Anchor after the stripping of the form (Figure 8). This fulfills the identifcation obligation according to the Safety Regulations of the employers' liability insurance association.

The BS Anchors must be dimensioned with all load-increasing factors – partial safety factors – as specified in the "General Technical Introduction for PFEIFER Lifting Anchors" in Register 1.

Only BS Anchor corresponding components may be used. It is not admissible to combine this system with other anchor systems.

BS Anchors in a plain version should not be exposed to the open air for an unlimited period of time. We recommend the galvanized version (especially for recessed installation)

4. Identification

The identification of the PFEIFER BS Anchors (Lifting Anchors) is guaranteed by an attached tag e.g.:

Manufacurer's name	**PFEIFER**
Anchor type	**BS 4,0**

The BS Hook lifting device is indicated by raised lettering e.g.:

Manufacurer's name	**PFEIFER**
Anchor type	**BS 4,0**
Year of construction	**2004**
Diameter of rope	**∅ 9**
Factory no.	**Is the wire rope diameter ∅ 9.**

Figure 5

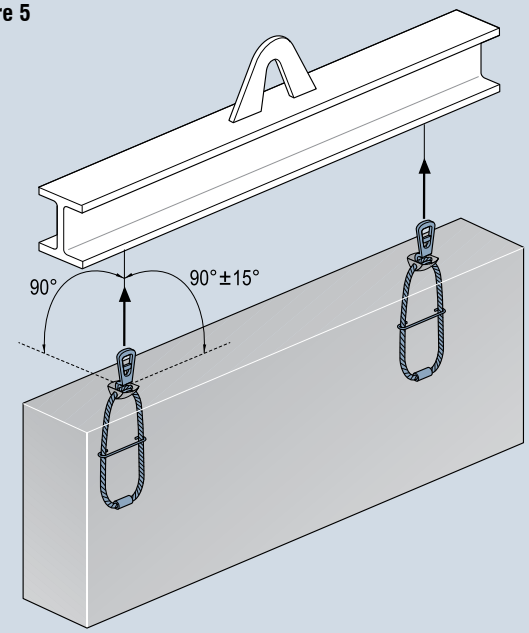

Figure 6

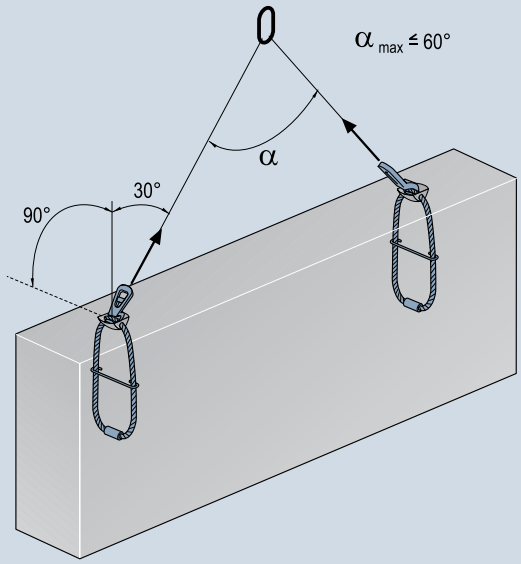

Figure 7

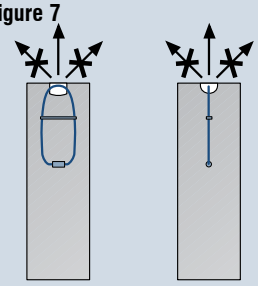

Figure 8

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PFEIFER BS Anchors

Item-No. 05.020

PFEIFER

BS System

Lifting Anchors

PFEIFER BS Anchors are lifting anchors for precast concrete units whose connection side will later no longer be visible (including prefabricated bases, joists and suporting walls).

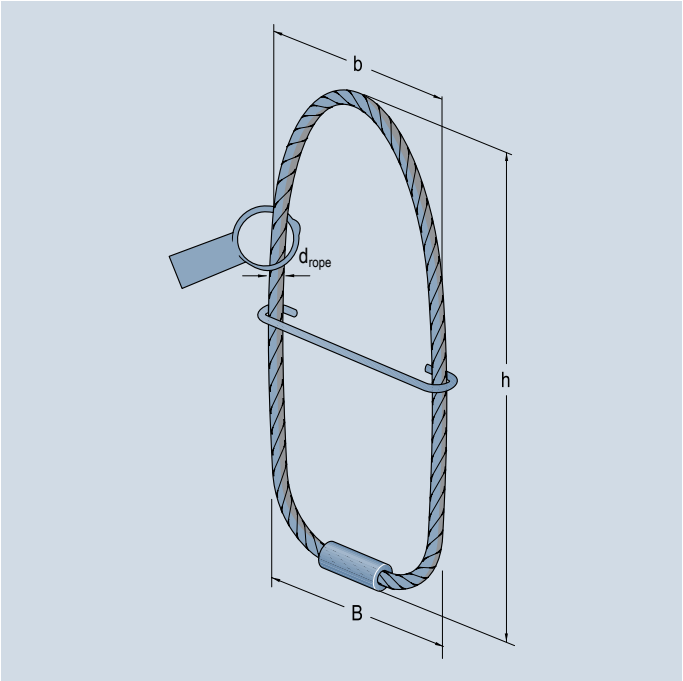
BS Anchors have a minimum safety factor of four against minimum breaking force of the wire rope.

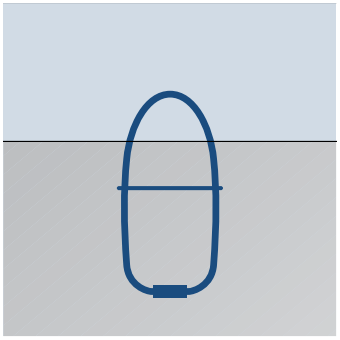
PFEIFER BS Anchors can be installed projecting or in a recess.

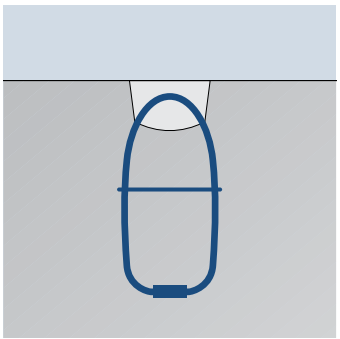
Safety and colour: All PFEIFER BS Anchors have colour-coded identification tags which match the colour of the right PFEIFER BS Hook.

PFEIFER BS Anchors with higher maximum working loads or with a galvanised cable can be obtained on request.

Material:
Flexible steel wire rope
Swaged ferrule to DIN 3093







Ref. No.	Type/Size	$N_{R, zul}$ kN	Colour coding MWL tag	Dimensions mm h	B	b	d_{rope} [1]	Packing unit pieces	Weight about kg/100 pieces
05.020.008.3	BS 0,8	8	Pure white	205	95	85	6	100	8,0
05.020.012.3	BS 1,2	12	Fire red	230	100	90	7	100	12,0
05.020.016.3	BS 1,6	16	Pale pink	250	130	125	8	50	8,5
05.020.020.3	BS 2	20	White green	300	135	125	9	50	13,5
05.020.025.3	BS 2,5	25	Anthracite grey	325	140	125	10	20	6,0
05.020.040.3	BS 4	40	Emerald green	370	165	145	12	10	5,0
05.020.052.3	BS 5,2	52	Pale yellow	380	180	145	14	1	0,85
05.020.063.3	BS 6,3	63	Light blue	425	235	200	16	1	1,1
05.020.080.3	BS 8	80	Silver grey	480	235	235	18	1	1,6
05.020.100.3	BS 10	100	Burgundy violet	535	260	235	20	1	2,1
05.020.125.3	BS 12,5	125	Dark yellow	590	280	245	22	1	3,0
05.020.160.3	BS 16	160	Blue lilac	670	325	300	26	1	4,7
05.020.200.3	BS 20	200	Yellow green	750	380	345	28	1	5,9
05.020.250.3	BS 25	250	Light brown	850	400	380	32	1	8,4

[1] The given wire rope diameter is only an indication and may vary depending on wire rope construction.

Sample order for
100 PFEIFER BS Anchors in steel wire rope BS 25:
100 PFEIFER BS Anchors ref. no. 05.020.250.2

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Installation Instructions for PFEIFER BS Anchors

Please note:

Here you will find only item-specific information. In addition you should consult the "General Technical Introduction to the PFEIFER Lifting Anchor Systems"

The PFEIFER BS Anchor is a component of the PFEIFER BS Anchor system and complies with the „Safety regulations for transport anchors and systems for prefabricated concrete parts".

1. General Requirements

The maximum forces exerted on the individual BS Anchors, when all the factors which might increase the load are taken into account – resulting from acceleration and angled pulling etc. – must be determined in accordance with the "General Technical Introduction to PFEIFER Transport Anchor Systems" in Index 1 of this catalogue and then compared with the safe working loads (= admissible forces).

When BS Anchors are being used, the thickness of precast concrete elements, edge and axis distances and the depth of a recess must be observed, as given below. The beam thicknesses when installation is of the projecting perpendicular type are at a concrete strength of 15 and 30 N/mm² partially the same, as the geometric width of the BS Hook is the ruling factor.

In order to achieve the maximum working load on the minimum beam thicknesses with the 2.5 times safety factor, mesh or some other form of reinforcement must be bent into a U shape with at least the same crosssection, in accordance with Table 1 and Figure 1. Bars which have been cut out must be replaced. In order not to penetrate the recesses where installation is of the recessed type, the bars must then be arranged in an offset manner.

The reinforcement mentioned must be placed in an area at a depth T from the loaded surface and a width symmetric to the BS Anchor axis, in order to guarantee local introduction of force. For global passing on of the internal and external force, e. g. bending moments or over turning etc., the user must take his own precautionary measures.

Care must be taken that, where installation is of the recessed and projecting type, angled pulling is only possible within certain limits, because of the BS Hook, as can be seen from Figures 3, 4, 5 and 6.

Figure 1

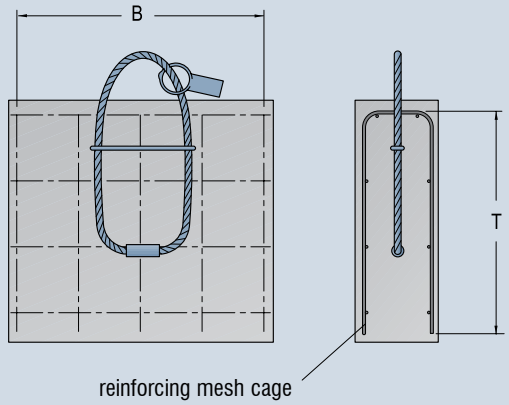

Figure 2

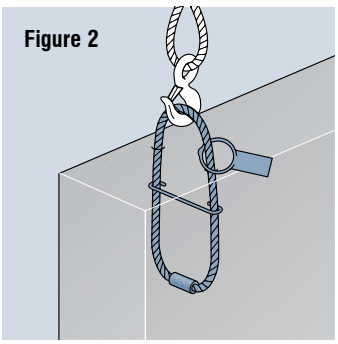

Table 1 – Minimum Reinforcement

Type/ Size	Minimum reinforcing mesh mm²/m	Projecting installation B cm	Projecting installation T cm	Recessed installation B cm	Recessed installation T cm
BS 0,8	Q188	45	30	–	–
BS 1,2	Q188	50	35	–	–
BS 1,6	Q188	55	35	–	–
BS 2	Q188	65	45	90	60
BS 2,5	Q188	70	50	–	–
BS 4	Q188	80	55	110	75
BS 5,2	Q188	85	55	–	–
BS 6,3	Q188	95	60	130	85
BS 8	Q257	105	70	–	–
BS 10	Q257	120	80	160	105
BS 12,5	Q257	130	90	–	–
BS 16	Q257	150	100	200	135
BS 20	Q424	170	115	–	–
BS 25	Q424	195	130	255	170

2. Projecting installation

BS Anchors are to be installed in such a way that the depth of installation, determined from the dimensions e and f given in Tables 2 and 3 and as illustrated in Figures 2 and 3, are respected. The edge and intermediate distances a and b are minimum values. BS Anchors can be arranged in parallel (Figure 3) or perpendicularly (Figure 4) to the plaine of the concrete elements of the components. Different concrete element thicknesses apply in this case and these can be found in Tables 2 and 3.

2.1 Installing into formwork

As a rule, projecting BS Anchors are arranged on the formwork facing side of the precast concrete units and must be fixed there accordingly. If a BS Anchor is positioned through a recess in the formwork surface, then the gaps remaining in the formwork near to the fixed BS Anchor must be carefully plugged, or grout will escape during casting and this will cause a build-up of aggregate close to the BS Anchor, which will reduce the safe working load.

2.2 Lifting Device

Suspension gear, tie bars or crane hooks can be attached direct to projecting BS Anchors, without the use of the BS Hook (Figure 2).

The radii of the curves of the lifting devices which are attached to the projecting BS Anchors must correspond at least to the diameter of the cable on the BS Anchor.

The use of the BS Hook as a lifting device in between the connecting device and the BS Anchor relieves the user of all such considerations, because the hook mouth of the BS Hook is ideal for any cable diameter.

2.3 Storage of prefabricated concrete elements

Precast concrete units with projecting BS Anchors are to be stored in such a way that the cable loops do not get bent. The steel wire rope on the BS Anchors have only a limited resistance to corrosion and should not therefore be stored in the open air for an unlimited period of time.

3. Recessed Installation

BS Anchors in maximum working loads 2, 4, 6.3, 10, 16 and 25 t can be installed in a recessed manner and be connected to the correspondingly coloured BS Hooks.

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BS Anchors which are installed recessed are fixed to the formwork using the BS Moulding Inserts. The way to do this is explained in the Installation

Instructions for the BS Moulding Inserts (05.207). The depth of the recess is defined if the BS Moulding Insert is used. The lateral minimum edge and intermediate distances and the minimum component thickness can be found in Tables 4 and 5.

Different edge conditions apply (Tables 4 and 5) for parallel (Figure 5) and perpendicular installation (Figure 6).

4. Wear and Tear and Usability

BS Anchors with damage such as broken strands, pinching, buckling, coning and strong evidence of corrosion, which would require them to be discarded according to DIN 3088, must not be used.

Attention: If shackles are to be used, care must be taken to ensure that they are of a minimum diameter equal to two x the rope diameter. For higher tonnages (over 10 t) in particular we recommend a diameter of about 5 x the rope diameter.

Table 2 – Projecting parallel installation

Type/ Size	h	e	f	βw = 15 N/mm²			βw = 30 N/mm²		
				d	b	a	d	b	a
	mm	mm	mm	cm	cm	cm	cm	cm	cm
BS 0,8	205	145	60	7	54	27	5	54	27
BS 1,2	230	165	65	9	62	31	6	62	31
BS 1,6	250	180	70	12	69	35	8	69	35
BS 2,0	300	220	80	14	83	42	10	83	42
BS 2,5	325	240	85	16	89	45	11	89	45
BS 4,0	370	270	100	22	100	50	15	100	50
BS 5,2	380	280	100	29	103	52	20	103	52
BS 6,3	425	310	115	32	115	58	22	115	58
BS 8,0	480	350	130	40	129	65	28	129	65
BS 10,0	535	395	140	44	146	73	31	146	73
BS 12,5	590	440	150	56	162	81	39	162	81
BS 16,0	670	500	170	62	186	93	43	186	93
BS 20,0	750	570	180	68	212	106	48	212	106
BS 25,0	850	650	200	75	241	121	53	241	121

Figure 3

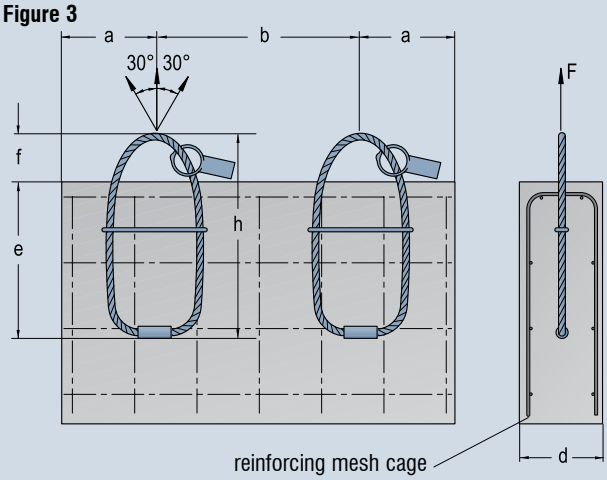

Table 3 – Projecting perpendicular installation

Type/ Size-	h	e	f	βw = 15 N/mm²			βw = 30 N/mm²		
				d	b	a	d	b	a
	mm	mm	mm	cm	cm	cm	cm	cm	cm
BS 0,8	205	145	60	13,5	54	27	13,5	54	27
BS 1,2	230	165	65	14	62	31	14	62	31
BS 1,6	250	180	70	17	69	35	17	69	35
BS 2	300	220	80	17,5	83	42	17,5	83	42
BS 2,5	325	240	85	18	89	45	18	89	45
BS 4	370	270	100	22	100	50	22	100	50
BS 5,2	380	280	100	29	103	52	22	103	52
BS 6,3	425	310	115	32	115	58	27,5	115	58
BS 8	480	350	130	40	129	65	28	129	65
BS 10	535	395	140	44	146	73	31	146	73
BS 12,5	590	440	150	56	162	81	39	162	81
BS 16	670	500	170	62	186	93	43	186	93
BS 20	750	570	180	68	212	106	48	212	106
BS 25	850	650	200	75	241	121	53	241	121

Figure 4

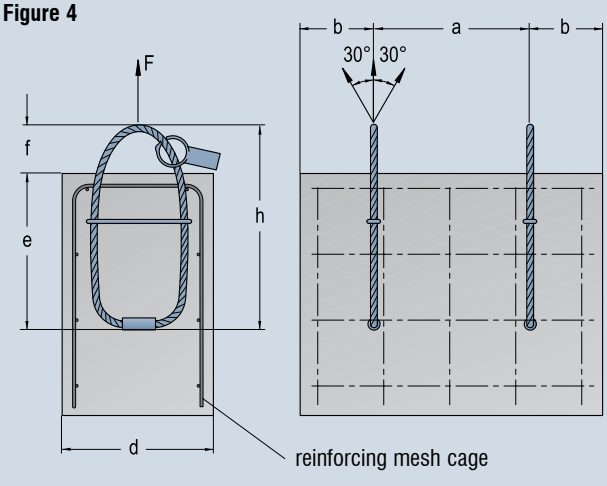

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Table 4 – Recessed parallel installation

Type/ Size	h	c	βw = 15 N/mm²			βw = 30 N/mm²		
			d	b	a	d	b	a
	mm	mm	cm	cm	cm	cm	cm	cm
BS 2	300	14	9	119	60	6	119	60
BS 4	370	14	16	148	74	11	148	74
BS 6,3	425	18	24	170	85	17	170	85
BS 10	535	13	36	215	108	25	215	108
BS 16	670	13	48	269	135	34	269	135
BS 25	850	13	62	340	170	43	340	170

Figure 5

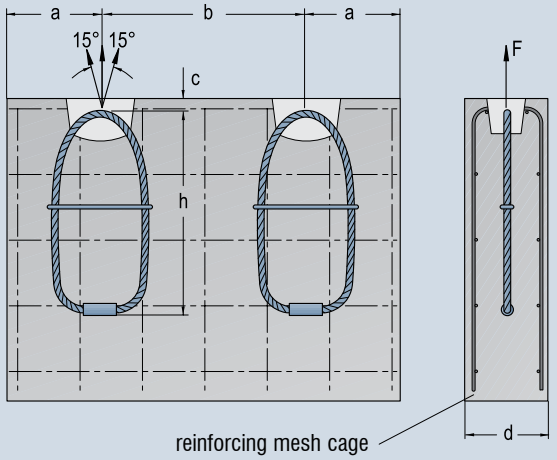
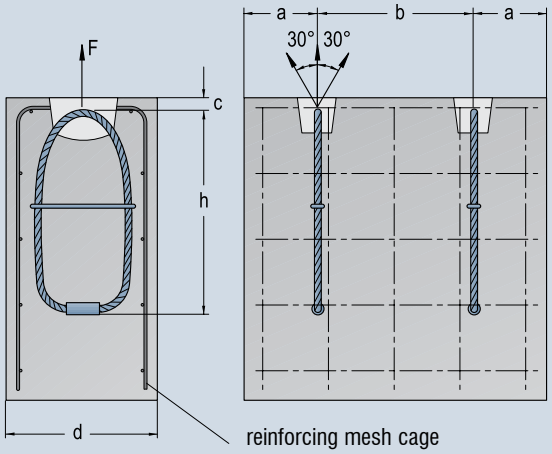


Table 5 – Recessed, vertical installation

Type/ Size	h	c	βw = 15 N/mm²			βw = 30 N/mm²		
			d	b	a	d	b	a
	mm	mm	cm	cm	cm	cm	cm	cm
BS 2	300	14	17,5	119	60	17,5	119	60
BS 4	370	14	20,5	148	74	20,5	148	74
BS 6,3	425	18	27,5	170	85	27,5	170	85
BS 10	535	13	36	215	108	30	215	108
BS 16	670	13	48	269	135	36,5	269	135
BS 25	850	13	62	340	170	44	340	170

Figure 6



5. Corrosion

To avoid corrosion and in consequence local lateral blow out at concrete panels we cannot recommend to use BS Anchor with a ferrule near to the surface of the panels, especially if the concrete is permanent or temporarly moist. Near to the surface means up to a depth of 2 times the concrete cover on the reinforcement. Especially if chlorides are in the concrete BS Anchors should not be positioned near to the surface. The content of chloride in the concrete should not exceed the limits mentioned in ENV 206.

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Notes

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PFEIFER BS Anchors

Item-No. 05.020

PFEIFER

BS System

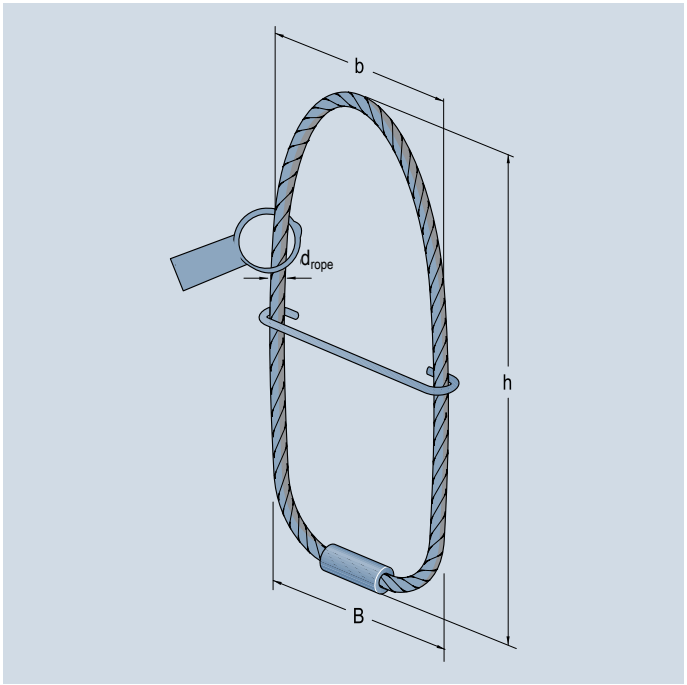
Lifting Anchors

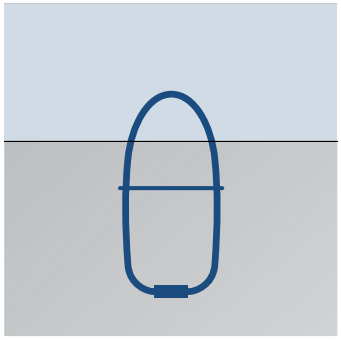
This articles are not on stock. They will be produced after ordering.

These anchors are available up to 99 t. They are designed especially for lifting big concrete members such like bridge decks. With these anchors it is possible to lift such heavy elements.

Please contact us if you need assistence in planning these BS Anchors.

Material:
Flexible steel wire rope
Swaged ferrule





Ref. No.	Type/ Size	$N_{R, perm}$ kN	Dimensions mm h	B	b	d_{rope} [1]	Weight approx. kg/piece
05.020.280.3	BS 28	280	680	360	262	32	9,64
05.020.320.3	BS 32	320	770	400	332	36	10,04
05.020.370.3	BS 37	370	950	440	380	36	15,14
05.020.420.3	BS 42	420	1000	480	418	40	19,23
05.020.470.3	BS 47	470	1100	520	438	44	20,87
05.020.520.3	BS 52	520	1200	550	456	44	27,00
05.020.570.3	BS 57	570	1350	600	500	48	30,75
05.020.650.3	BS 65	650	1430	690	600	46	36,01
05.020.750.3	BS 75	750	1530	760	700	50	46,02
05.020.850.3	BS 85	850	1680	850	760	52	55,06

[1] The given wire rope diameter is only an indication and may vary depending on wire rope construction.

Sample order
16 PFEIFER BS Anchors BS 65:
16 PFEIFER BS Anchors, ref. no. 05.020.650.3

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Notes

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PFEIFER BS Hooks

Item-No. 05.055

PFEIFER

BS System

Lifting devices

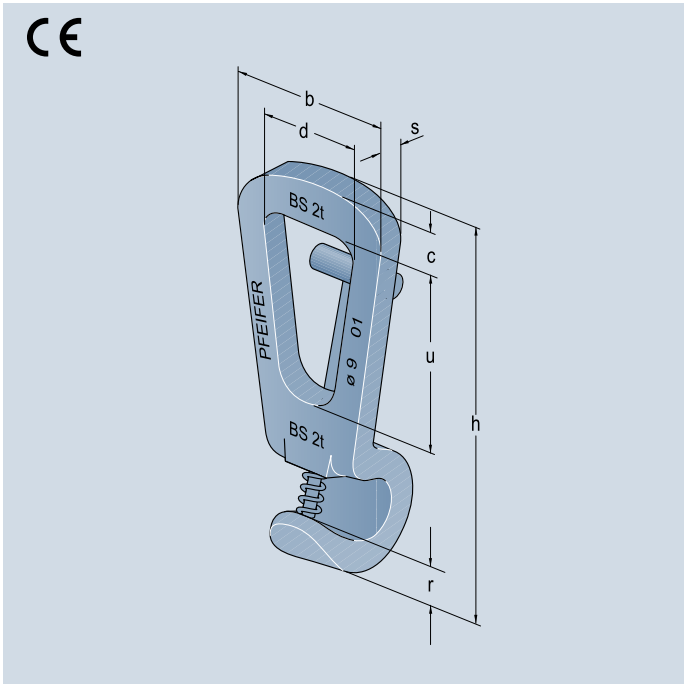
The PFEIFER BS hook represents the load lifting device in the BS anchor system.

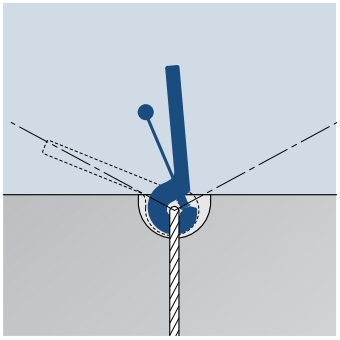
It is only by using the PFEIFER BS hook that deeply recessed BS anchors can be attached. The favourable shape of the mouth of the hook as it relates to the wire rope means that force is transfered safely to the wire rope of the BS anchor. Which means that it is wise to use the BS hook when the BS anchor has been cast in recessed and projecting as well. A spring loaded locking pin prevents the BS hook accidentally releasing the BS anchor.

Safety from colour coding:
In order to make it easy to differentiate between the different BS hooks, the individual maximum working loads are painted in different colours. The BS anchors have identification tags with the same colour coding to make allocating them easier.

Material:

Hardened and tempered cast steel, colour coded paint





Ref. No.	Type/ Size	Colour coding	Dimensions mm b	c	d	h	r	s	u	Weight approx. kg/piece
05.055.020	BS 2	White green	74	22	42	155	15	12	65	0,90
05.055.040	BS 4	Emerald green	90	30	50	200	20	15	80	1,80
05.055.063	BS 6,3	Light blue	120	37	65	260	25	20	110	3,20
05.055.100	BS 10	Burgundy violet	140	45	80	320	32	25	145	6,40
05.055.160	BS 16	Blue lilac	190	60	100	370	37	30	160	11,00
05.055.250	BS 25	Light brown	240	82	140	470	53	35	193	23,00

Sample order for 20 PFEIFER BS hooks BS 10:
20 PFEIFER BS hooks ref. no. 05.055.100

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Instructions for using PFEIFER BS Hooks

Please note:

Here you will find only item-specific information. In addition you should consult the "General Technical Introduction to the PFEIFER Lifting Anchor Systems"

The PFEIFER BS hook is a component of the PFEIFER BS anchor system, is GS tested and complies with the "Safety regulations for transport anchors and systems for prefabricated concrete parts".

1. Lifting devices in the PFEIFER BS Anchor system

The lifting device for the BS anchor system/recessed installation is exclusively the BS Hook, specially designed for this purpose.

Because of the special shape of the hook mouth, with large curve radii, which carefully match of the wire rope, all damage to the wire rope can be avoided. For this reason, the BS hook is also recommended for use with BS anchors where they are installed projecting.

PFEIFER BS Anchors and PFEIFER BS hooks are designed in terms of both materials and dimension tolerances in such a way that the safety can only be guaranteed if original parts are used. We advise expressly against the use of the inauthorised combination of our items with those made by other manufacturers.

2. Wear and Tear

The complete BS hook is made from special quality steel which is resistant to abrasion. The extremely wide bearing surface of the hook mouth means that abrasion is kept to a minimum in this area, even when it is subject to frequent use.

Wear and tear to the hook mouth must not amount to more than 5% of the dimension r (Figure 1 and Table 1). If this is exceeded, the hook must be replaced.

BS hooks are to be checked for deformations, cracks and wear and tear as necessary, or at least once a year. Measuring can be effected by making use of the accuracy of callipers.

No authorisation can be given for welding anything on to hooks, e. g. to repair wear and tear.

Table 1 – Wear and tear on heavy duty hooks

Type/Size	r mm	r min mm
BS 2	14,7	14,00
BS 4	20,0	19,00
BS 6,3	25,0	23,75
BS 10	32,0	30,50
BS 16	37,0	35,50
BS 25	53,0	51,00

3. Operating Information

When the hook is used with BS anchors installed recessed, then an shear pull of up to an angle of inclination of 30° perpendicular to the plain of the BS anchor (Figure 2) and up to 15° parallel to the plain of the anchors (Figure 3) is possible. These values must not be exceeded.

The restrictions must be observed when using the BS anchors in a shear pull. Sharp edges at the end of the area where the BS anchor wire rope bears on the BS hook can be smoothed off by fine filing. Where this is undertaken, there must be no noticeable loss of profile.

The locking pin must be kept running smoothly. Operation of the BS hook without the locking pin or with a locking pin with sticks because it is dirty is not allowed.

The BS hook must never be used in such a way that it bends as a result of tilting or lying the hook over one edge or an overhang.

4. Identification

The BS hook load lifting device is identified by a raised inscription:

Manufacturer	**PFEIFER**
Type	**BS 4,0**
Wire rope diameter	**e.g. ∅ 9**
Year of manufacture	**e.g. 1992**
Fabrication number	**The rope diameter is valid as fabrication number, e.g. ∅ 9.0**

Figure 1

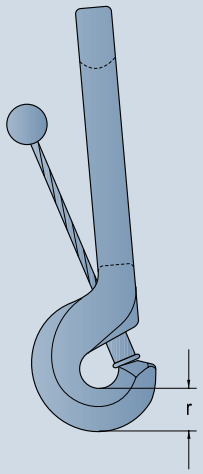


Figure 2

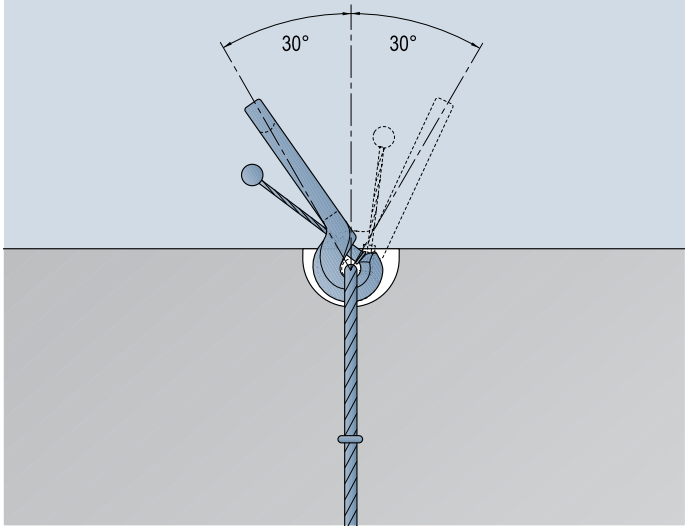
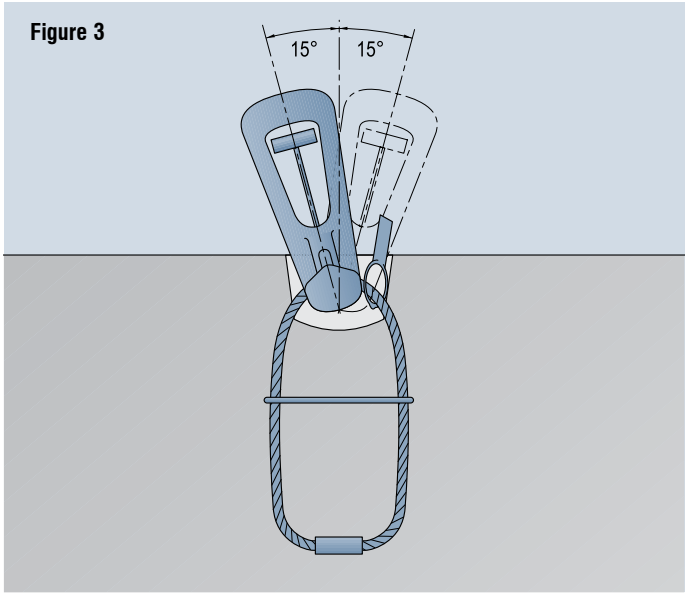


Figure 3



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Notes

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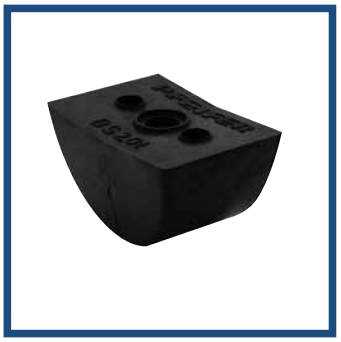
PFEIFER BS Moulding Insert

Item-No. 05.207



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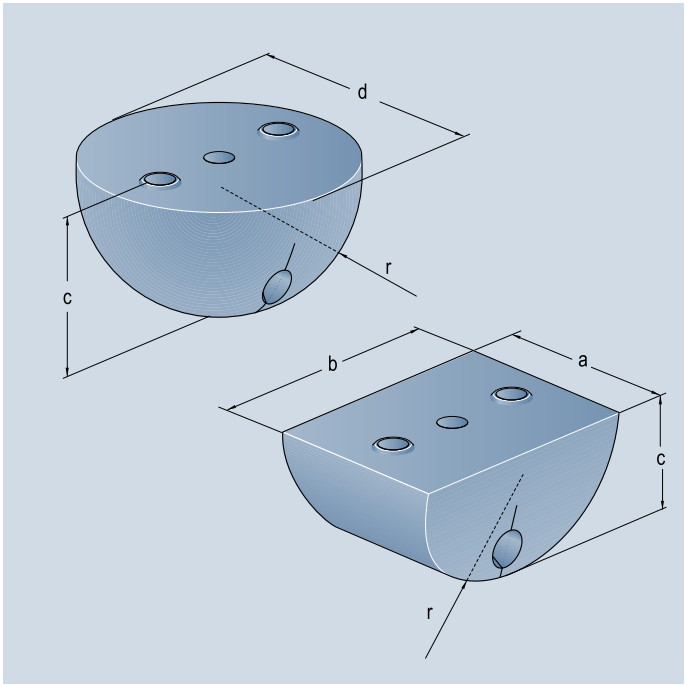
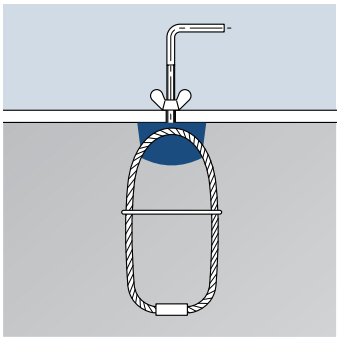
BS System

Accessories

A recess is created in the concrete by the BS Moulding Insert; this recess is necessary to hang the BS Hook into the loop.

Material:
Rubber/neoprene mixture





Ref. No.	Type	for BS Anchors Type/Size	Thread	Dimensions mm a	b	c	d	r	Weight approx. kg/piece
05.207.020	rectangular	BS 2	M 10	58	85	50	–	40,0	0,20
05.207.040	rectangular	BS 4	M 10	70	105	60	–	50,0	0,30
05.207.063	rectangular	BS 6,3	M 10	86	126	70	–	60,0	0,50
05.207.100	round	BS 10	M 10	–	–	75	149,0	72,5	0,80
05.207.160	round	BS 16	M 10	–	–	85	169,0	82,5	1,20
05.207.250	round	BS 25	M 10	–	–	108	214,0	105,0	2,50

Sample order:
100 PFEIFER BS Moulding Inserts for BS Anchors BS 10:
100 PFEIFER BS Moulding Inserts ref. no. 05.207.100

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Instruction for using BS Moulding Inserts

Please note:

Here you will find only item-specific information. In addition you should consult the "General Technical Introduction to the PFEIFER Lifting Anchor Systems"

The PFEIFER BS Moulding Insert is a component of the PFEIFER BS Anchor System and complies with the "Safety regulations for transport anchors and systems for prefabricated concrete parts".

1. Design

The Moulding Insert is designed for fixing the BS Anchor at the formwork to create a deep recess. In this special recess is the wire rope of the BS Anchor free (see Figure 1). Only the BS Hook can than grap the steel wire rope of the BS Anchor.

2. Moulding Insert installation into formwork

At the position of the BS Anchor you have to drill a small hole, diameter 11 mm, into the formwork (see Figure 2).

The rubber Moulding Insert has to be spreaded and placed over the wire rope. The swaged ferrule lies opposite the Moulding Insert (see Figure 1). With the PFEIFER Fixing Screw, Ref. No. 05.206. . ., the Moulding Insert is to be fixed at the formwork as follows:

a) you screw the Fixing Screw into the Moulding Insert through the drilled hole in the formwork.

b) during tighten the wing nut the Moulding Insert is to be pressed against the mould. The rubber lips are closed and no cement grout can get into the recess.

Figure 1

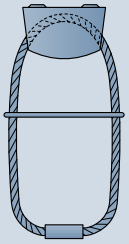
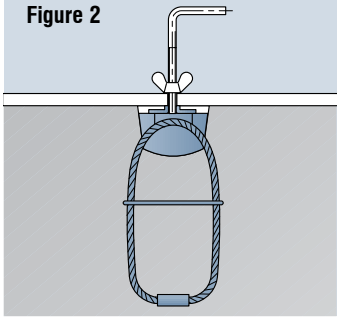


Figure 2

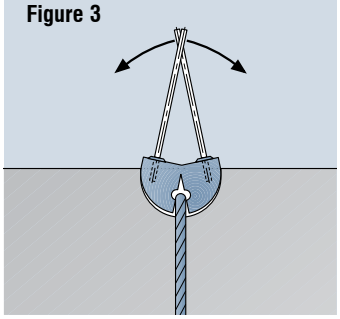


If the Moulding Insert is lubricated it is easier to demould afterwards.

3. Removal of Moulding Insert

After hardening of concrete the fixing screw and then the formwork is removed. Now the Moulding Insert will be pulled out by using two reinforcements bar or similar (see Figure 3). Remaining conrete has to be removed out of the recess. The BS Hook now can be used at the BS Anchor in the recess.

Figure 3



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THESE ARE OUR PRODUCT LINES


Lifting Anchor Systems
Thread System


Lifting Anchor Systems
BS Anchor System


Lifting Anchor Systems
WK Anchor System


Fixing Systems
DB Anchor 682
for Permanent Fixing


Fixing Systems
Socket Dowels
Polyamide Sockets


Fixing Systems
HK Assembly Anchor System


Connection Systems
Column Shoe System
Wall Shoe System


Connection Systems
Stell Bearing
Staircase Bearing VarioSonic


Connection Systems
Sandwich Anchor System
Delta Anchor System


Connection Systems
Concrete Earthing System BEB


Reinforcement Systems
VS®-Wire Rope Loop System


Reinforcement Systems
PH Reinforcement Continuity System


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Tension Rod System


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