

Lifting points

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■ Comprehensive product range from a large number of manufacturers

In the following you will find the correct lifting point for almost every application. The product range from a large number of manufacturers enables you to make the most cost effective selection.

■ TOP in special solutions

Can't find the right solution for your application? We are happy to develop a suitable solution for you, even for small quantities. We will find a solution, whether for special thread standards, thread lengths, thread pitches or completely different shapes.

■ Thinking ahead...

Many lifting points have an individual serial number for secure test documentation. We see ourselves as pioneers in this. Free 3D design data are available in many cases.

Lifting points: General information

3D

3D design data are available for many lifting points.
Download at:
www.pfeifer-anschlagpunkte.de
Look for this symbol!

Lifting points

Selecting the correct lifting point depends on the application.

The following parameters are important for the selection:

- Thread size – Is the thread size partly determined by the use of a thread which is already fixed?
- Working load limit – Adequate dimensioning taking the load direction into account.
- Number of lifting points – Dimensioning taking account of the number of attachment legs (1, 2, 3 or 4 legs) and the angle of inclination.
- Lifting point turnability – Does the lifting point need to be rotatable under load (e.g. for turning loads) or does the pulling direction only have to be adjusted in the unloaded state.
- Dimensions – Is the space for the lifting point limited?

Consider the following when making the selection:



Type of attachment

Pay attention to the pulling direction when making the selection. The correct choice can reduce the necessary thread size and thus lower the weight and cost.

Is the load on the lifting point to the side or straight up? The most suitable types for side attachment are the HIT lifting eye, AP 90 (neither rotatable under load) or the HIT SNS and SNB bolt-on swivels.

The HIT rotatable eyebolt and the AP 0 lifting point (neither rotatable under load) plus the bolt-on swivel G10 or AP 3+ are particularly suitable for a straight pull.

Rotatable under load, only rotatable when unloaded or fixed?

This question must be answered before deciding on the appropriate lifting point.

All bolt-on swivel attachments are rotatable under load. Their bearing ensures that the swivel automatically

aligns with the pulling direction. In addition, bolt-on swivel attachments remain rotatable under load which is important for e.g. turning procedures.

There are also lifting points which can be aligned in the direction of pull after assembly when not under load. These are the HIT rotatable eyebolt, HIT lifting eye, AP 90 lifting point, AP 0 lifting point. This functionality is of importance if more than one lifting point is used for the lift. Dangerous uneven loading is thus reliably avoided.

Fixed lifting points such as the high-tensile eyebolt should only be used when it is ensured that these are only loaded in the prescribed direction. This can generally only be guaranteed with 1-leg operation, i.e. when the direction of pull is straight upwards. In multi-leg operation a dangerous uneven loading is almost inevitable.

Multi-leg operation / Angle of inclination

The force acting on the lifting point increases when the load is applied at an angle. Example: Weight on the lifting point 1,000 kg. With an angle of 45° a force of approx. 1,400 kg will act on the lifting point.

Key data for the permitted load with differing types of attachment, angles and asymmetry are given on the following pages for each type of lifting point. We are happy to calculate exact values for your specific application on request. Just contact us!

Screws, welds, lock nuts

Lifting points are available as screw-type and weld-type. The screw-type version is considerably more popular and allows for simple assembly and disassembly.

The weldable products are cheaper in comparison with the screw-type. Screw-type lifting points can be locked using a washer and nut. The length of a standard nut according to DIN is sufficient for the total working load limit (minimum screw depth for tool steel is 1x thread diameter). The nut strength must be 10.9 – a washer must be used.

What if nothing fits?

We are specialists when it comes to special requirements! Whether it is different thread lengths, fine threads, different thread standards (WW, inch etc.), special load directions or particular carrying capacities.

Just contact us!

Please note that all parameters are always to be seen in connection with one another!

We will be only too pleased to assist you in selecting the optimum lifting point for your application! Just contact us!

Talk to your sales advisor or give us a call on:

+49 (0) 83 31-937-112 – We look forward to hearing from you.

Swivelling lifting points

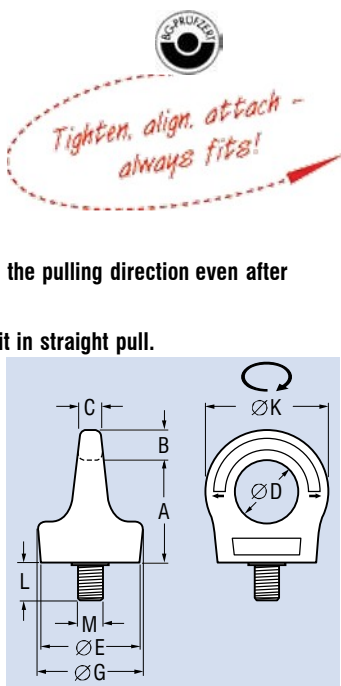
HIT rotatable eyebolt Grade 100

Working load limit up to 32 tonnes, threads up to M48

- ▶ 100% safety due to quadruple safety even in tight spots.
- ▶ Swivelling eye can be aligned to the pulling direction even after assembly.
- ▶ Extremely high working load limit in straight pull.
- ▶ Lateral lifting up to 90° possible.
- ▶ Approved for multi-leg operation (2, 3 and 4-legs).

The problem frequently arises in practice that, after assembly, the eye of the eyebolt is not positioned correctly. The result: The stress is not at the eye level during the lifting operation. This is not permitted for reasons of safety!

After tightening, the ring of the HIT rotatable eyebolt can be turned in the direction of pull. In this way, a possible hazard is avoided.



WLL kg	Thread	Weight approx. kg	Dimensions in mm								Reference no.
			A	B	C	D	E	G	K	L	
400	M 8	0.25	52.5	12	8.5	25	32	34	49	15	218897
400	M 10	0.25	52.5	12	8.5	25	32	34	49	15	218898
750	M 12	0.39	62.4	14	8.5	30	44	46	58	18	218899
1500	M 16	0.73	71.5	16	15.0	35	56	60	67	24	218900
2300	M 20	0.92	79.9	18	17.0	40	58	60	76	30	218901
3200	M 24	1.73	96.9	23	20.0	48	73	76	94	36	218902
4500	M 30	3.50	123.9	27	28.0	60	80	84	114	45	218903
7000	M 36	2.15	124.9	37	38.0	80	95	99	154	54	218904
9000	M 42	4.15	148.0	40	41.0	90	105	114	170	63	218905
12000	M 48	6.20	164.9	45	47.0	95	120	129	185	72	218906

Version with suitable fixed Allen key on enquiry!

Maximum load weight G in tonnes for different types of attachment

Type of attachment										
Number of lifting points	1	1	2	2	2 symmetr.		3 & 4 symmetr.		2 asymm.	3 & 4 asymm.
Angle	0°	90°	0°	90°	0-45°	45-60°	0-45°	45-60°		
M8	1	0.4	2	0.8	0.56	0.4	0.84	0.6	0.4	0.4
M10	1	0.4	2	0.8	0.56	0.4	0.84	0.6	0.4	0.4
M12	2	0.75	4	1.5	1.0	0.75	1.6	1.12	0.75	0.75
M16	4	1.5	8	3.0	2.0	1.5	3.15	2.25	1.5	1.5
M20	6	2.3	12	4.6	3.22	2.3	4.83	3.45	2.3	2.3
M24	8	3.2	16	6.4	4.48	3.2	6.7	4.8	3.2	3.2
M30	12	4.5	24	9.0	6.3	4.5	9.4	6.7	4.5	4.5
M36	16	7.0	32	14.0	9.8	7.0	14.7	10.5	7.0	7.0
M42	24	9.0	48	18.0	12.6	9.0	18.9	13.5	9.0	9.0
M48	32	12.0	64	24.0	16.8	12	25.2	18.0	12.0	12.0



Lifting points

HIT lifting eye Grade 100

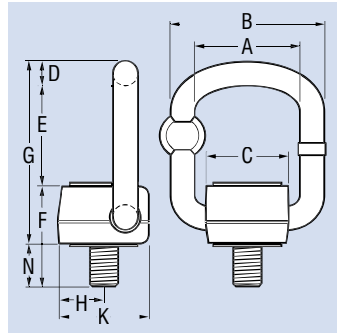
Working load limit up to 20 tonnes, threads up to M48

new!

No tools required

- ▶ With consecutive serial number – for simple documentation of the annual inspections!
- ▶ No clanging – a patented spring holds the lifting ring in every position!
- ▶ High working load limits when lifted laterally!
- ▶ Loadable all round
- ▶ Spring-loaded screw – can be screwed in without tools! Tool is only needed for tightening!

360° rotatable and 180° vertically tiltable (not under load)
Orange paint finish
Safety factor 4:1



WLL kg	Thread	Weight approx. kg	Dimensions in mm										Reference no.
			A	B	C	D	E	F	G	H	K	N	
300	M 8	0.48	45	67	40	11	44	70	91	23	55	33	237072
630	M 10	0.52	45	67	40	11	44	70	91	23	55	33	237073
1000	M 12	0.58	45	67	40	11	44	70	91	23	55	33	237074
1500	M 16	0.60	45	67	40	11	44	70	91	23	55	33	237075
2500	M 20	1.00	54	81	50	13	57	70	107	33	67	33	237076
4000	M 24	2.81	75	115	67	20	70	87	138	45	100	37	237077
6000	M 30	2.96	75	115	67	20	70	99	138	45	100	50	237078
8000	M 36	5.91	93	147	85	27	90	117	180	52	120	54	237079
10000	M 42	6.16	93	147	85	27	90	126	180	52	120	63	237080
20000	M 48	11.70	115	181	105	33	115	165	238	63	150	73	237081

Maximum load weight G in tonnes for different types of attachment

Type of attachment									
Number of lifting points	1	1	2	2	2 symmetrically		3 & 4 symmetrically		2, 3 & 4
Angle	0°	90°	0°	90°	0–45°	45–60°	0–45°	45–60°	asymm
M8	0.3	0.3	0.6	0.6	0.4	0.3	0.6	0.4	0.3
M10	0.6	0.6	1.3	1.3	0.9	0.6	1.3	0.9	0.6
M12	1.0	1.0	2.0	2.0	1.4	1.0	2.1	1.5	1.0
M16	1.5	1.5	3.0	3.0	2.1	1.5	3.1	2.2	1.5
M20	2.5	2.5	5.0	5.0	3.5	2.5	5.2	3.7	2.5
M24	4.0	4.0	8.0	8.0	5.6	4.0	8.4	6.0	4.0
M30	6.0	6.0	12.0	12.0	8.5	6.0	12.7	9.0	6.0
M36	8.0	8.0	16.0	16.0	11.2	8.0	16.8	12.0	8.0
M42	10.0	10.0	20.0	20.0	14.0	10.0	21.0	15.0	10.0
M48	20.0	20.0	40.0	40.0	28.0	20.0	42.0	30.0	20.0

AP90 lifting points Grade 100

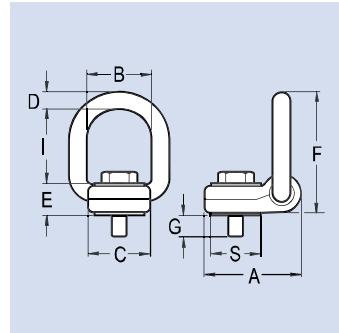
Working load limit up to
8 tonnes, threads up to M 36

- ▶ High working load limits when lifted laterally!
- ▶ Flat design
- ▶ Loadable all round
- ▶ Link lockable

Optimal in lateral attachment (90°)

360° rotatable and 180° vertically tiltable
(not under load)
Powder-coated version
Safety factor 4:1

Thread M24 s: more compact design
of the M24 AP90 with smaller ring
than the standard M24 lifting point!

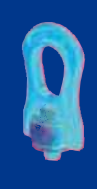


WLL kg	Tightening torque Nm	Bolt Size	Weight approx. kg	Dimensions in mm									Reference no.
				A	B	C	D	E	F	G	I	S	
500	40	M 10 × 40	0.70	69	50	48	13	28	100	12	52	34	181056
800	65	M 12 × 45	0.71	69	50	48	13	28	100	17	51	34	181057
1500	160	M 16 × 55	0.76	69	50	48	13	28	100	27	49	34	181058
2500	250	M 20 × 70	0.73	69	50	48	13	28	100	42	46	34	181059
4000	300	M 24 s	0.76	69	50	48	13	31	102	49	42	34	237099
4000	300	M 24 × 80	2.60	104	76	72	18	39	147	41	74	58	188971
5300	400	M 27 × 80	2.70	104	76	72	18	39	147	51	72	58	188972
6000	500	M 30 × 90	2.76	104	76	72	18	39	147	51	70	58	188973
8000	600	M 36 × 100	2.81	104	76	72	18	45	103	57	61	58	237100



Maximum transport weights G in tonnes with different types of attachment

Type of attachment Suspension arrangement											
Number of lifting points		1	1	2	2	2 symmetrically		3 & 4 symmetrically		2	3 & 4
Tilt angle		0°	90°	0°	90°	0–45°	45–60°	0–45°	45–60°	asymm.	asymm.
181056	M 10 × 40	0.5	0.70	1.0	1.4	0.70	0.5	1.00	0.70	0.5	0.5
181057	M 12 × 45	0.8	1.25	1.6	2.5	1.12	0.8	1.60	1.12	0.8	0.8
181058	M 16 × 55	1.5	2.12	3.0	4.0	2.00	1.5	3.15	2.24	1.5	1.5
181059	M 20 × 70	2.5	3.55	5.0	7.1	3.35	2.5	5.00	3.00	2.5	2.5
237099	M 24s	4.0	4.00	8.0	8.0	5.60	4.0	8.00	6.00	4.0	4.0
188971	M 24 × 80	4.0	5.60	8.0	11.2	5.60	4.0	8.00	6.00	4.0	4.0
188972	M 27 × 80	5.3	7.10	10.6	14.0	7.10	5.3	11.20	8.00	5.0	5.0
188973	M 30 × 90	6.0	8.00	12.0	16.0	8.00	6.0	12.50	9.00	6.0	6.0
237100	M 36 × 100	8.0	8.00	16.0	16.0	11.2	8.00	16.80	12.00	8.00	8.00



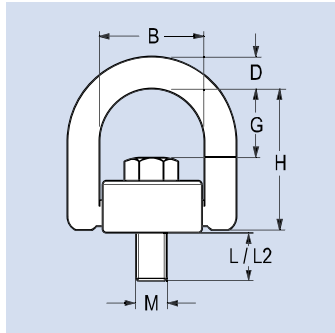
Lifting points

APO lifting points Grade 100

Working load limit up to 16 tonnes, threads up to M48

- ▶ Extremely high working load limit in straight pull.
- ▶ Extremely small design
- ▶ Loadable all round
- ▶ The lifting point turns automatically into the pulling direction
- ▶ Removable stirrup allows rings or other lifting devices to be fitted

360° rotatable and 180° vertically tiltable (not under load)
Painted version.
Safety factor 4:1



WLL kg	Tightening torque Nm	Bolt Size	Weight approx. kg	Dimensions in mm						Reference no.
				B	D	G	H	L	L ₂	
300	30	M 8	0.3	42	12	35.0	60	15.0	26	166194
500	50	M 10	0.3	42	12	34.0	60	20.0	31	166195
750	70	M 12	0.9	57	19	46.5	85	19.0	40	166196
1500	100	M 16	0.9	57	19	44.0	85	24.0	50	166197
2500	170	M 20	2.8	83	28	56.0	111	32.0	67	166198
3500	250	M 24	2.8	83	28	53.0	111	37.0	77	166199
6000	500	M 30	7.0	114	34	69.5	144	49.5	—	200053
8000	700	M 36	7.3	114	34	69.5	144	61.0	—	200054
14000	600	M 42	14.0	149	40	90.0	185	65.0	—	217120
16000	800	M 48	14.9	149	40	86.0	185	75.0	—	217121

Delivery with dimension L₂: price on enquiry

Maximum transport weights G in tonnes with different types of attachment

Type of attachment Suspension arrangement											
Number of lifting points		1	1	2	2	2 symmetrically		3 & 4 symmetrically		2	3 & 4
Angle of inclination/load direction		0°	90°	0°	90°	0–45°	45–60°	0–45°	45–60°	asymm.	asymm.
166194	M 8	0.60*	0.30	1.20*	0.60	0.42	0.30	0.63	0.45	0.30	0.30
166195	M10	1.00*	0.50	2.00*	1.00	0.70	0.50	1.05	0.75	0.50	0.50
166196	M12	1.50*	0.75	3.00*	1.50	1.00	0.75	1.60	1.13	0.75	0.75
166197	M16	3.00*	1.50	6.00*	3.00	2.10	1.50	3.15	2.25	1.50	1.50
166198	M20	5.00*	2.50	10.00*	5.00	3.50	2.50	5.25	3.75	2.50	2.50
166199	M24	7.00*	3.50	14.00*	7.00	4.90	3.50	7.35	5.25	3.50	3.50
200053	M30	12.00*	6.00	24.00*	12.00	8.40	6.00	12.60	9.00	6.00	6.00
200054	M36	16.00*	8.00	32.00*	16.00	11.20	8.00	16.80	12.00	8.00	8.00
217120	M42	16.00*	14.00	32.00*	28.00	19.60	14.00	29.40	21.00	14.00	14.00
217121	M48	20.00*	16.00	40.00*	32.00	22.40	16.00	33.60	24.00	16.00	16.00

* These working load limits are possible if the load direction is in a direct line with the thread as shown in the drawing. Axial loading or bending must be fundamentally ruled out here!

HIT lifting point – HAP Grade 100

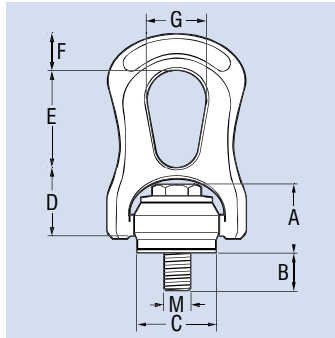
Working load limit up to 15 tonnes, threads up to M48

new!

With lockable ring

- ▶ With consecutive serial number – for simple documentation of the annual inspections!
- ▶ No clanging – a patented spring holds the lifting ring in every position!
- ▶ High working load limits when attached in-line or laterally!
- ▶ 360° rotatable and 180° vertically tiltable (not under load)

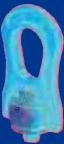
High-tensile bolt – strength class 10.9
Orange paint finish
Safety factor 4:1



WLL kg	Thread	Weight approx. kg	Dimensions in mm							Reference no.
			A	B	C	D	E	F	G	
300	M 8	0.30	27.8	14.2	30.0	30.2	38	17.5	27	237178
600	M 10	0.31	27.8	16.2	30.0	30.2	38	17.5	27	237179
1000	M 12	0.32	27.8	18.2	30.0	30.2	38	17.5	27	237180
1300	M 14	1.03	43.2	22.3	45.0	45.0	55	25.0	38	237182
1600	M 16	1.04	43.2	24.3	45.0	45.0	55	25.0	38	237183
2000	M 18	1.07	43.2	27.3	45.0	45.0	55	25.0	38	237184
2500	M 20	1.08	43.2	30.3	45.0	45.0	55	25.0	38	237185
3000	M 22	3.52	64.1	33.4	67.5	67.8	85	37.5	58	237186
4000	M 24	3.55	64.1	36.4	67.5	67.8	85	37.5	58	237187
5000	M 27	3.60	64.1	40.4	67.5	67.8	85	37.5	58	237188
6300	M 30	3.68	64.1	45.4	67.5	67.8	85	37.5	58	237189
8000	M 33	14.32	106.3	53.7	108.0	108.8	132	60.0	91	237190
10000	M 36	14.43	106.3	58.7	108.0	108.8	132	60.0	91	237191
12500	M 42	14.72	106.3	68.7	108.0	108.8	132	60.0	91	237192
15000	M 48	15.03	106.3	73.7	108.0	108.8	132	60.0	91	237193

Maximum load weight G in tonnes for different types of attachment

Type of attachment									
Number of lifting points	1	1	2	2	2 symmetrically		3 & 4 symmetrically		2, 3 & 4
Angle	0°	90°	0°	90°	0–45°	45–60°	0–45°	45–60°	asymm
M8	0.5	0.3	1.0	0.6	0.4	0.3	0.6	0.5	0.3
M10	1.0	0.6	2.0	1.2	0.8	0.6	1.3	0.9	0.6
M12	1.3	1.0	2.6	2.0	1.4	1.0	2.1	1.5	1.0
M14	2.0	1.3	4.0	2.6	1.8	1.3	2.7	2.0	1.3
M16	2.5	1.6	5.0	3.2	2.2	1.6	3.4	2.4	1.6
M18	3.0	2.0	6.0	4.0	2.8	2.0	4.2	3.0	2.0
M20	3.0	2.5	6.0	5.0	3.5	2.5	5.3	3.8	2.5
M22	4.5	3.0	9.0	6.0	4.2	3.0	6.3	4.0	3.0
M24	5.5	4.0	11.0	8.0	5.6	4.0	8.4	6.0	4.0
M27	6.0	5.0	12.0	10.0	7.0	5.0	10.5	7.5	5.0
M30	6.5	6.3	13.0	12.6	8.8	6.3	13.2	9.5	6.3
M33	9.0	8.0	18.0	16.0	11.0	8.0	16.5	12.0	8.0
M36	11.0	10.0	22.0	20.0	14.0	10.0	21.0	15.0	10.0
M42	13.5	12.5	27.0	25.0	17.5	12.5	26.3	18.8	12.5
M48	16.0	15.0	32.0	30.0	21.0	15.0	32.0	22.5	15.0



Lifting points

Lifting points rotatable under load

SNS bolt-on swivel, high-tensile

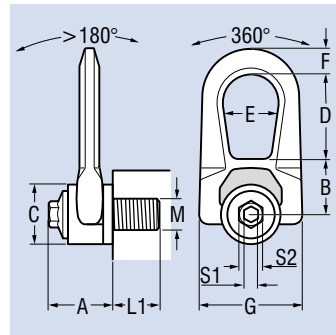
Working load limit up to 6.3 tonnes, threads up to M 30

- ▶ TOP traceability – each swivel has a serial number for documentation tests
- ▶ Flexible! – can be swivelled 360° under load – can be tilted by 180° – loadable all-round!
- ▶ Maximum safety – safety factor 5:1

Can be turned under load!



For higher working load limits see SNB, page 197



WLL kg	Thread	Pitch	Tightening torque Nm	Dimensions in mm										Weight approx. kg	Reference no.
				A	B	C	D	E	F	G	L ₁	S1	S2		
300	M 8	1.25	6	33	30	30	38	27	14	53	14	8	16	0.3	217043
600	M 10	1.50	10	33	30	30	38	27	14	53	17	8	16	0.3	217044
1000	M 12	1.75	15	33	30	30	38	27	14	53	21	8	16	0.3	217045
1300	M 14	2.00	30	45	42	45	54	38	17	76	23	8	20	0.9	217046
1600	M 16	2.00	50	45	42	45	54	38	17	76	27	8	20	0.9	217047
2000	M 18	2.50	70	45	42	45	54	38	17	76	27	8	20	0.9	217048
2500	M 20	2.50	100	45	42	45	54	38	17	76	30	8	20	0.9	217049
3000	M 22	2.50	120	63	55	60	83	55	25	107	33	14	24	2.6	217050
4000	M 24	3.00	160	62	55	60	83	55	25	107	36	14	24	2.6	217051
5000	M 27	3.00	200	62	55	60	83	55	25	107	40	14	24	2.7	217052
6300	M 30	3.50	250	62	55	60	83	55	25	107	45	14	24	2.7	217053

Stainless steel version and imperial thread available as standard. Please enquire!

Maximum load weight G in tonnes for different types of attachment

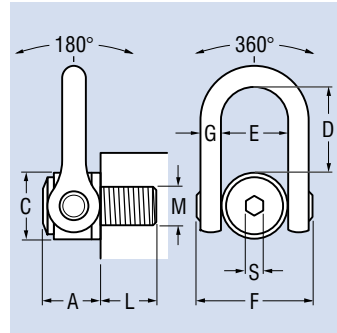
Type of attachment									
Number of lifting points	1	1	2	2	2 symmetrically		3 & 4 symmetrically		2, 3 & 4 asymm.
Angle	0°	90°	0°	90°	0–45°	45–60°	0–45°	45–60°	
M8	0.6	0.3	1.2	0.6	0.4	0.3	0.6	0.5	0.3
M10	1.0	0.6	2.0	1.2	0.8	0.6	1.3	0.9	0.6
M12	1.5	1.0	3.0	2.0	1.4	1.0	2.1	1.5	1.0
M14	2.5	1.3	5.0	2.6	1.8	1.3	2.7	2.0	1.3
M16	3.0	1.6	6.0	3.2	2.2	1.6	3.4	2.4	1.6
M18	3.0	2.0	6.0	4.0	2.8	2.0	4.2	3.0	2.0
M20	3.0	2.5	6.0	5.0	3.5	2.5	5.3	3.8	2.5
M22	3.2	3.0	6.4	6.0	4.2	3.0	6.3	4.5	3.0
M24	5.0	4.0	10.0	8.0	5.6	4.0	8.4	6.0	4.0
M27	5.0	5.0	10.0	10.0	7.0	5.0	10.5	7.5	5.0
M30	6.3	6.3	12.6	12.6	8.8	6.3	13.2	9.5	6.3

SNB bolt-on swivel, high-tensile

Working load limits up to 50 tonnes, threads up to M100

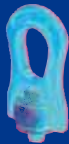
- ▶ TOP traceability – each swivel has a serial number for documentation tests
- ▶ Highest working load limits when attached laterally
- ▶ Flexible! – can be swivelled 360° under load – can be tilted by 180° – loadable all-round!
- ▶ Maximum safety – safety factor 5:1 up to M 42, safety factor 4:1 from M 45

*Heavy-duty professional!
Now up to 50 tonnes!*










WLL kg	Thread	Pitch	Tightening torque Nm	Dimensions in mm								Weight approx. kg	Reference no.
				A	B	C	D	E	F	G	L ₁		
8000	M 33	3.5	250	61	31	70	104	73	145	29	50	5.5	217065
10000	M 36	4.0	320	61	31	70	104	73	145	29	54	5.5	217066
10000	M 39	4.0	320	61	31	70	104	73	145	29	58	5.7	217067
12500	M 42	4.5	400	61	31	70	104	73	145	29	63	5.8	217068
15000	M 45	4.5	400	61	31	70	104	73	145	29	63	5.7	217069
20000	M 48	5.0	600	79	38	90	125	91	184	33	68	11.0	217070
20000	M 52	5.0	600	79	38	90	125	91	184	33	68	11.0	217071
25000	M 56	5.5	600	79	38	90	125	91	184	33	78	11.3	217072
32100	M 64	6.0	600	79	38	95	125	91	184	33	90	12.2	217073
32100	M 80	6.0	600	79	38	95	125	91	184	33	90	15.0	217074
32100	M 100	6.0	600	79	38	95	125	91	184	33	90	16.5	217075
35000	M 72	6.0	700	90	44	140	195	143	278	59	110	43.0	237605
40000	M 80	6.0	800	90	44	140	195	143	278	59	120	44.5	237606
45000	M 90	6.0	900	90	44	140	195	143	278	59	135	46.5	237607
50000	M 100	6.0	1000	90	44	140	195	143	278	59	150	49.0	237608

Other thread pitches and imperial threads available as standard. Please enquire!
All versions can be manufactured according to individual customer requirements, please enquire.



Lifting points

Maximum load weight G in tonnes for different types of attachment

Type of attachment									
Number of lifting points	1	1	2	2	2 symmetrically		3 & 4 symmetrically		2, 3 & 4 asymm.
Angle	0°	90°	0°	90°	0–45°	45–60°	0–45°	45–60°	
M33	8.0	8.0	16.0	16.0	11.2	8.0	16.8	12.0	8.0
M36	10.0	10.0	20.0	20.0	14.0	10.0	21.0	15.0	10.0
M39	10.0	10.0	20.0	20.0	14.0	10.0	21.0	15.0	10.0
M42	12.5	12.5	25.0	25.0	17.5	12.5	26.3	18.8	12.5
M45	15.0	15.0	30.0	30.0	21.0	15.0	31.5	22.5	15.0
M48	20.0	20.0	40.0	40.0	28.0	20.0	42.0	30.0	20.0
M52	20.0	20.0	40.0	40.0	28.0	20.0	42.0	30.0	20.0
M56	25.0	25.0	50.0	50.0	35.0	25.0	52.5	37.5	25.0
M64	32.1	32.1	64.2	64.2	44.9	32.1	67.4	48.2	32.1
M80	32.1	32.1	64.2	64.2	44.9	32.1	67.4	48.2	32.1
M100	32.1	32.1	64.2	64.2	44.9	32.1	67.4	48.2	32.1
M72 35to	35.0	35.0	70.0	70.0	49.0	35.0	73.5	52.5	35.0
M80 40to	40.0	40.0	80.0	80.0	56.0	40.0	84.0	60.0	40.0
M90 45to	45.0	45.0	90.0	90.0	63.0	45.0	94.5	67.5	45.0
M100 50to	50.0	50.0	100.0	100.0	70.0	50.0	105.0	75.0	50.0

Bolt-on swivel, type G10 Grade 100

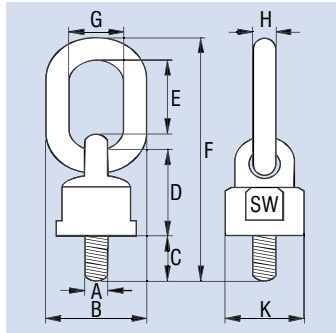
new!

Working load limit up to 32 tonnes, threads up to M64

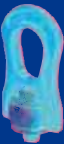
The new standard

- ▶ With consecutive serial number
– for simple documentation of the annual inspections!
- ▶ Significantly higher working load limit (up to 25% more) than similar grade 80 bolt-on swivels!
- ▶ Flexible! – can be swivelled 360° under load – can be tilted by 180°
– loadable all-round!
- ▶ Quality made in Germany!

Safety factor 4:1
Painted version.
For special designs, please consult PFEIFER – we are happy to supply e.g. special threads (Inch, Whitworth, etc.) Other thread pitches and lengths










WLL kg	Bolt Size	Weight approx. kg	Dimensions in mm										Reference no.
			Oval link	B	C	D	E	F	G	H	K	SW	
300	M 8	0.3	55×30	56	16	43	44	127	30	13	36	30	237102
500	M 10	0.3	55×30	56	18	43	44	129	30	13	36	30	237103
700	M 12	0.3	55×30	56	18	43	44	129	30	13	36	30	237104
1400	M 16	1.2	55×30	56	20	43	44	129	30	13	36	30	237105
1400	M 18	1.5	70×34	66	30	62	50	178	34	16	57	45	237106
2500	M 20	1.5	70×34	66	30	62	50	178	34	16	57	45	237108
3500	M 24	2.2	85×40	76	30	64	67	197	40	18	57	46	237109
3500	M 27	2.9	85×40	76	35	64	67	197	40	18	57	46	237110
6700	M 30	2.9	85×40	80	35	82	57	222	40	20	80	65	237112
9500	M 30	3.3	115×50	94	35	90	89	262	50	22	80	65	237113
12500	M 36	3.5	115×50	94	50	91	89	313	50	22	80	65	237114
12500	M 42	6.5	140×65	117	60	109	104	335	65	26	104	80	237115
16000	M 42	6.5	140×65	117	60	109	104	335	65	26	104	80	241968
17000	M 45	6.5	140×65	117	60	109	104	335	65	26	104	80	237116
17000	M 48	8.6	140×65	117	60	109	104	335	65	26	104	80	237117
20000	M 56	12.0	140×65	117	60	130	104	335	65	26	104	80	237118
22000	M 56	12.0	150×70	122	110	135	110	364	65	28	104	80	237119
24000	M 64	16.3	150×70	122	110	135	110	364	65	28	104	80	237759
30000	M 64	16.3	150×70	122	150	135	110	364	65	28	104	80	237120



Lifting points

Maximum load weight G in tonnes with different types of attachment

	Type of attachment									
Reference no.	Number of lifting points	1	1	2	2	2 symmetrically		3 & 4 symmetrically		2, 3 & 4
	Angle	0°	90°	0°	90°	0°-45°	45°-60°	0°-45°	45°-60°	asymm.
237102	M8	0.6	0.3	1.2	0.6	0.4	0.3	0.6	0.4	0.3
237103	M 10	1.0	0.5	2.0	1.0	0.7	0.5	1.1	0.7	0.5
237104	M 12	1.4	0.7	2.8	1.4	1.0	0.7	1.5	1.1	0.7
237105	M 16	2.8	1.4	5.6	2.8	2.0	1.4	2.9	2.1	1.4
237106	M 18	2.8	1.4	5.6	2.8	2.0	1.4	2.9	2.1	1.4
237108	M 20	5.0	2.5	10.0	5.0	3.5	2.5	5.3	3.8	2.5
237109	M 24	7.0	3.5	14.0	7.0	4.9	3.5	7.4	5.3	3.5
237110	M 27	7.0	3.5	14.0	7.0	4.9	3.5	7.4	5.3	3.5
237112	M 30	12.0	6.7	24.0	13.4	9.4	6.7	14.1	10.1	6.7
237113	M 30	16.0	9.5	32.0	19.0	13.3	9.5	20.0	14.3	9.5
237114	M 36	17.5	12.5	35.0	25.0	17.5	12.5	26.3	18.8	12.5
237115	M 42	17.5	12.5	35.0	25.0	17.5	12.5	26.3	18.8	12.5
241968	M 42	20.0	16.0	40.0	32.0	22.4	16.0	33.6	24.0	16.0
237116	M 45	22.0	17.0	44.0	34.0	23.8	17.0	35.7	25.5	17.0
237117	M 48	22.0	17.0	44.0	34.0	23.8	17.0	35.7	25.5	17.0
237118	M 56	24.0	20.0	48.0	40.0	28.0	20.0	42.0	30.0	20.0
237119	M 56	26.0	22.0	52.0	44.0	30.8	22.0	46.2	33.0	22.0
237759	M 64	28.0	24.0	56.0	48.0	33.6	24.0	50.4	36.0	24.0
237120	M 64	32.0	30.0	64.0	60.0	42.0	30.0	63.0	45.0	30.0

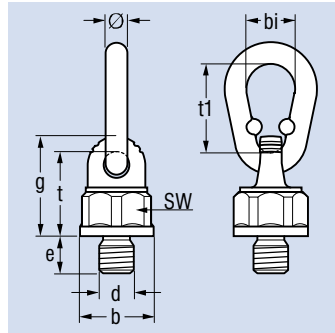
Bolt-on swivel AP3+ Grade 100

Working load limit up to 20 tonnes, threads up to M64

- ▶ Secure holding due to optimised support surface.
- ▶ Safe lifting due to readable angle of inclination.
- ▶ Replacement can be decided by looking at the easily recognisable wear indicator
- ▶ Guaranteed correctly positioned ring – the squeezing mark reliably prevents kinking of the ring.

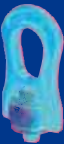
Flexible! – can be swivelled 360° under load – can be tilted by 180° – loadable all-round!

Higher performance – 25% higher working load limit than Grade 80 with the same thread
Safety factor 4:1










WLL kg	Thread		Weight approx. kg	Dimensions in mm				Ring dimension Ø×t1×bi	Reference no.
	d	e		b	g	SW	t		
500	M 10	18	0.43	36.5	48.0	34	41	13×55×32	222669
700	M 12	18	0.43	36.5	48.0	34	41	13×55×32	217109
1000	M 14	20	0.43	36.5	48.0	34	41	13×55×32	237260
1400	M 16	20	0.44	36.5	48.0	34	41	13×55×32	217110
2500	M 20	30	0.98	52.0	67.0	46	57	16×70×34	217111
4000	M 24	30	1.35	57.0	75.0	50	63	18×85×45	217112
6700	M 30	35	2.51	70.0	94.5	65	78	20×85×45	217114
8000	M 30	35	3.59	81.0	106.0	75	86	23×115×60	237261
10000	M 36	50	3.72	81.0	106.0	75	86	23×115×60	237262
12500	M 42	60	3.91	81.0	106.0	75	86	23×115×60	230259
12500	M 45	60	4.03	81.0	106.0	75	86	23×115×60	237263
12500	M 48	72	4.23	81.0	106.0	75	86	23×115×60	237264
13000	M 42	60	7.34	104.0	127.0	95	106	30×140×70	237265
17000	M 45	60	7.50	104.0	127.0	95	106	30×140×70	237266
17000	M 48	60	7.57	104.0	127.0	95	106	30×140×70	233867
18000	M 56	78	8.00	104.0	127.0	95	106	30×140×70	237267
20000	M 64	96	8.85	104.0	127.0	95	106	30×140×70	237268

Additional sizes on enquiry.



Lifting points

Maximum load weight G in tonnes for different types of attachment

Item No.	Type of attachment									
	Number of lifting points	1	1	2	2	2 symmetrically		3 & 4 symmetrically		2, 3 & 4
	Angle	0°	90°	0°	90°	0-45°	45-60°	0-45°	45-60°	asymm.
222669	M 10	1.0	0.5	2.0	1.0	0.7	0.5	1.0	0.8	0.5
217109	M 12	1.4	0.7	2.8	1.4	1.0	0.7	1.4	1.0	0.7
237260	M 14	2.0	1.0	4.0	2.0	1.4	1.0	2.1	1.5	1.0
217110	M 16	2.8	1.4	5.6	2.8	2.0	1.4	3.0	2.1	1.4
217111	M 20	5.0	2.5	10.0	5.0	3.6	2.5	5.3	3.8	2.5
217112	M 24	8.0	4.0	16.0	8.0	5.6	4.0	8.5	6.0	4.0
217114	M 30	12.0	6.7	24.0	13.4	9.5	6.7	14.0	10.0	6.7
237261	M 30	12.0	8.0	24.0	16.0	11.2	8.0	16.0	12.0	8.0
237262	M 36	15.0	10.0	30.0	20.0	14.0	10.0	21.2	15.0	10.0
230259	M 42	15.0	12.5	30.0	25.0	17.0	12.5	25.0	18.0	12.5
237263	M 45	15.0	12.5	30.0	25.0	17.0	12.5	25.0	18.0	12.5
237264	M 48	15.0	12.5	30.0	25.0	17.0	12.5	25.0	18.0	12.5
237265	M 42	20.0	13.0	40.0	26.0	18.0	13.0	27.0	19.0	13.0
237266	M 45	25.0	17.0	50.0	34.0	23.5	17.0	35.0	25.0	17.0
233867	M 48	25.0	17.0	50.0	34.0	23.5	17.0	35.0	25.0	17.0
237267	M 56	25.0	18.0	50.0	36.0	25.0	18.0	37.5	26.5	18.0
237268	M 64	25.0	20.0	50.0	40.0	28.0	20.0	40.0	30.0	20.0

Further versions available as standard



Bolt-on swivel, rustproof!
Stainless steel version for use in harsh environments!



Bolt-on eye with individual hole pattern!
Working load limit 32.25 tonnes
Have it individually adapted or adapt it yourself.

Just enquire – we look forward to submitting an individual quotation!

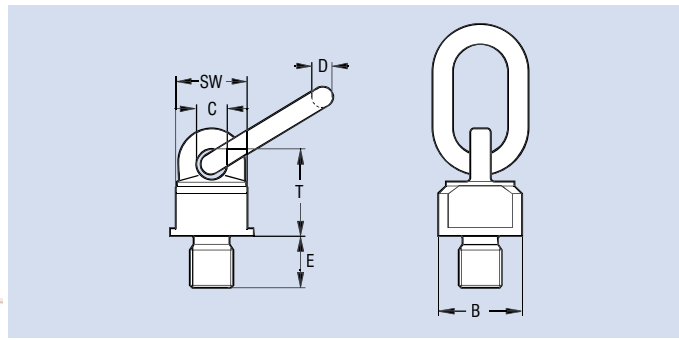
Bolt-on swivel, type G8 Grade 80

Working load limit up to
31.5 tonnes, threads up to
M90



- ▶ Attractive price/performance ratio
- ▶ Flexible! – can be swivelled 360° under load – can be tilted by 180° – loadable all-round!
- ▶ Quality made in Germany!

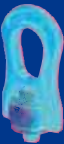
Safety factor 4:1
Red paint finish
For special designs, please consult
PFEIFER – we are happy to supply e.g.
special threads (Inch, Whitworth, etc.)
Other thread pitches and lengths



WLL kg	Bolt Size	Weight approx. kg	Dimensions in mm							Reference no.
			Oval link	B	C	D	E	SW	T	
200	M 8	0.42	55×30	36	14	13	18	30	43	154408
300	M 10	0.43	55×30	36	14	13	18	30	43	153843
500	M 12	0.44	55×30	36	14	13	18	30	43	120648
1120	M 16	0.45	55×30	36	14	13	20	30	43	120649
2000	M 20	1.05	70×34	57	18	16	30	45	62	120650
3150	M 24	1.40	85×40	57	20	18	30	46	64	120651
5300	M 30	2.20	85×40	70	24	20	35	65	82	120652
8000	M 30	3.50	115×50	80	27	22	35	65	90	120653
10000	M 36	3.70	115×50	80	27	22	50	65	91	120654
10000	M 42	4.00	115×50	80	27	22	60	65	94	186955
10000	M 48	4.30	115×50	80	27	22	75	65	94	179066
15000	M 45	7.30	140×65	104	32	26	60	80	109	120655
15000	M 48	7.50	140×65	104	32	28	60	80	114	225905
15000	M 56	9.80	140×65	104	32	28	60	80	114	218422
15000	M 64	8.31	140×65	104	32	26	96	80	109	171961
20000	M 64	17.70	170×75	129	45	36	110	105	150	161328
20000	M 72	22.50	170×75	104	39	36	110	80	120	237218
31500	M 90	22.50	170×80	148	50	40	150	115	172	161329

Maximum load weights G in tonnes with different types of attachment

Reference no.	Type of attachment									
	Number of lifting points	1	1	2	2	2 symmetrically		3; 4 symmetrically		2, 3 & 4
	Angle	0°	90°	0°	90°	0°–45°	45°–60°	0°–45°	45°–60°	asymm.
154408	M 8	0.4	0.2	0.8	0.4	0.3	0.2	0.4	0.3	0.2
153843	M10	0.6	0.3	1.2	0.6	0.4	0.3	0.6	0.5	0.3
120648	M12	1.0	0.5	2.0	1.0	0.7	0.5	1.1	0.8	0.5
120649	M16	2.0	1.1	4.0	2.2	1.6	1.1	2.4	1.7	1.1
120650	M20	4.0	2.0	8.0	4.0	2.8	2.0	4.2	3.0	2.0
120651	M24	6.3	3.1	12.6	6.2	4.4	3.1	6.6	4.7	3.1
120652	M30	10.6	5.3	21.2	10.6	7.4	5.3	11.1	8.0	5.3
120653	M30	12.0	8.0	24.0	16.0	11.2	8.0	16.8	12.0	8.0
120654	M36	15.0	10.0	30.0	20.0	14.0	10.0	21.0	15.0	10.0
186955	M42	15.0	10.0	30.0	20.0	14.0	10.0	21.0	15.0	10.0
179066	M48	15.0	10.0	30.0	20.0	14.0	10.0	21.0	15.0	10.0
120655	M45	22.4	15.0	44.8	30.0	21.0	15.0	31.5	22.5	15.0
225905	M48	22.4	15.0	44.8	30.0	21.0	15.0	31.5	22.5	15.0
218422	M56	22.4	15.0	44.8	30.0	21.0	15.0	31.5	22.5	15.0
171961	M64	22.4	15.0	44.8	30.0	21.0	15.0	31.5	22.5	15.0
161328	M64	25.0	20.0	50.0	40.0	28.0	20.0	42.0	30.0	20.0
237218	M72	25.0	20.0	50.0	40.0	28.0	20.0	42.0	30.0	20.0
161329	M90	40.0	31.5	80.0	63.0	44.1	31.5	66.2	47.3	31.5



Lifting points

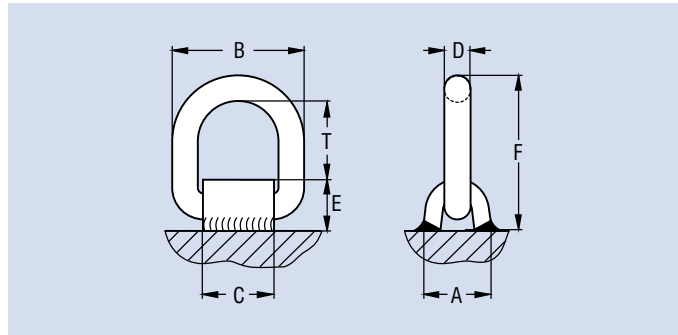
Welding points

Welding eye

With quadruple protection against breakage in all load directions.
Ring painted red.

Grade 80

Material of the welding eye holder ST 52-3.



WLL kg	Weight approx. kg	Dimensions in mm							Reference no.
		A	B	C	D	E	F	T	
1120	0.4	35	56	36	13	39	89	37	146454
2000	0.4	37	70	38	14	40	92	38	146455
3150	0.8	49	79	42	17	43	106	46	120637
5300	1.6	60	99	50	22	60	135	53	120638
8000	2.6	75	122	65	26	71	164	67	120639
15000	5.4	90	165	90	34	90	216	92	120640

Maximum load weights G in tonnes with different types of attachment

Type of attachment Suspension arrangement										
Number of lifting points	1	1	2	2	2 symmetrically		3 & 4 symmetrically		2	3 & 4
Inclination angle	0°	90°	0°	90°	0-45°	45-60°	0-45°	45-60°	asymm.	asymm.
146 454	1.60	1.12	3.2	2.24	1.50	1.12	2.36	1.60	1.12	1.12
146 455	3.00	2.00	6.0	4.00	2.80	2.00	4.00	3.00	2.00	2.00
120 637	4.75	3.15	9.5	6.30	4.25	3.15	6.30	4.75	3.15	3.15
120 638	8.00	5.30	16.0	10.60	7.10	5.30	11.20	8.00	5.30	5.30
120 639	12.00	8.00	24.0	16.00	11.20	8.00	16.00	12.00	8.00	8.00
120 640	22.40	15.00	45.0	30.00	21.20	15.00	31.50	22.40	15.00	15.00

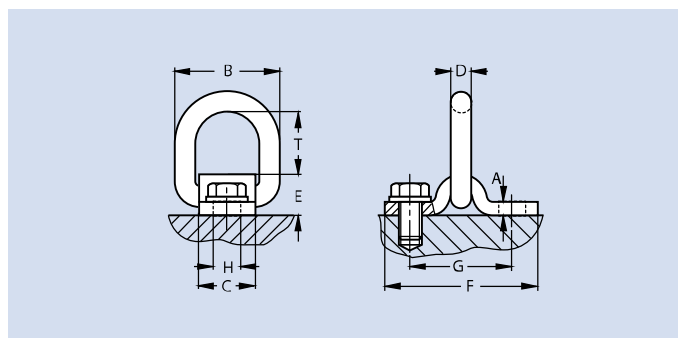
Bolt-on eye

With quadruple protection against breakage in all load directions.
Ring painted red.

Grade 80

Bolts are not included in the scope of supply.

CAUTION: The minimum quality of the hexagonal-head bolts to be used according to DIN EN 4017 (DIN 933) is 8.8 crack-tested (at 3150/5000/8000 kg) and 10.9 crack-tested (at 15000/20000/25000 kg).



WLL kg	Weight approx. kg	Dimensions in mm									Refer- ence no.
		A	B	C	D	E	F	G	H	T	
3150	1.15	12	92	50	18	34	130	90	21	53	120641
5300	2.00	15	111	60	22	42	160	110	25	63	120642
8000	3.80	20	132	70	26	55	190	130	28	68	120643
15000	7.40	40	139	72	32	90	255	175	39	110	201655
20000	15.10	50	180	90	40	116	295	200	45	140	201656
25000	15.10	50	180	90	40	116	295	200	45	140	201657

Maximum transport weights G in tonnes with different types of attachment

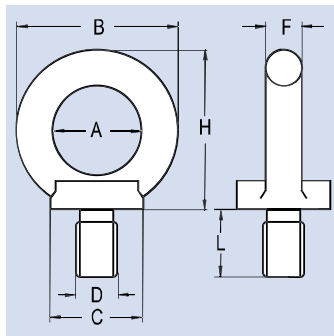
Type of attachment Suspension arrangement											
Number of lifting points		1	1	2	2	2 symmetrically		3 & 4 symmetrically		2	3 & 4
Inclination angle		0°	90°	0°	90°	0-45°	45-60°	0-45°	45-60°	asymm.	asymm.
120641	M20	4.75	3.15	9.5	6.3	4.25	3.15	6.3	4.75	3.15	3.15
120642	M24	8.00	5.30	16.0	10.6	7.10	5.30	11.2	8.00	5.30	5.30
120643	M27	12.00	8.00	24.0	16.0	11.20	8.00	16.0	12.00	8.00	8.00
201655	M36	15.00	15.00	30.0	30.0	21.00	15.00	31.5	22.50	15.00	15.00
201656	M42	20.00	20.00	40.0	40.0	28.00	20.00	42.0	30.00	20.00	20.00
201657	M45	25.00	25.00	50.0	50.0	35.00	25.00	52.5	37.50	25.00	25.00

Eyebolts



Eyebolts, high-tensile 8.8

Painted red.



WLL kg		Bolt D × L	Weight approx. kg	Dimensions in mm					Reference no.
at 0°	at 90°			A	B	C	F	H	
400	100	M 6 × 13	0.09	25	45	25	10	45	201658
800	200	M 8 × 13	0.09	25	45	25	10	45	201659
1000	250	M 10 × 17	0.11	25	45	25	10	45	201660
1600	400	M 12 × 21	0.27	35	63	35	14	62	201661
3000	750	M 14 × 21	0.29	35	63	35	14	62	201662
4000	1000	M 16 × 27	0.31	35	63	35	14	62	201663
5000	1250	M 18 × 27	0.84	50	90	50	20	90	201664
6000	1500	M 20 × 30	0.86	50	90	50	20	90	201665
8000	2000	M 24 × 36	0.90	50	90	50	20	90	201666
10000	2500	M 27 × 45	1.66	60	108	65	24	109	201667
12000	3000	M 30 × 45	1.70	60	108	65	24	109	201668

The specified working load limits only apply if:

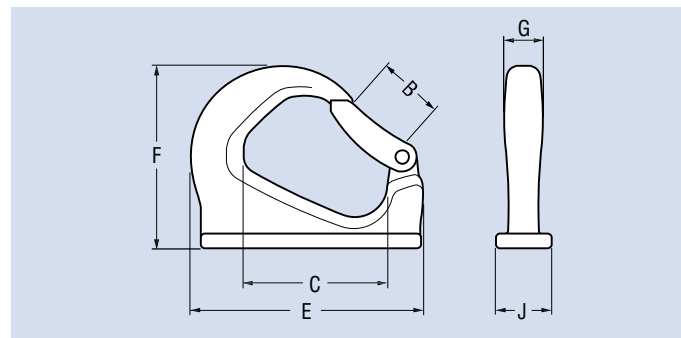
- 1) the ring of the bolt is in line with the load direction.
- 2) the bolt is firmly screwed in to the end of the thread (to the stop of the bolt)



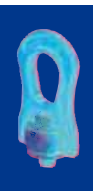
Welding hooks

Painted version.

Excavators equipped with weld-on hooks provide practical assistance for the fast relocation of loads on any building site.



WLL kg	Weight approx. kg	Dimensions in mm						Reference no.
		B	C	E	F	G	J	
1120	0.48	25.0	59.5	97	76.0	20	25	215923
2000	0.85	26.5	67.0	114	92.0	22	34	215924
3000	1.12	30.5	75.0	129	106.0	24	36	215925
5000	2.50	34.5	94.0	171	136.0	30	45	215926
8000	3.20	34.5	94.0	177	140.0	39	51	215927
10000	5.20	51.0	134.5	223	171.5	39	53	215928

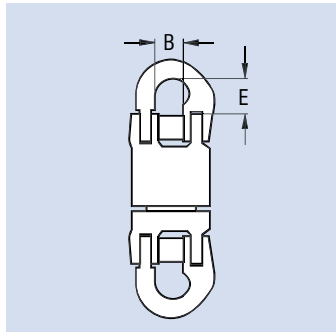


Lifting points

Insulating swivels

- ▶ Simple connection with chains or ropes
- ▶ With axial roller bearing, dust-protected and waterproof – usable without restriction in all areas (also underground and underwater)
- ▶ Particularly for fields of use in which current could be conducted unintentionally, for example when welding parts are suspended on the crane hook
- ▶ Effective insulation 1000 V
- ▶ **Grade 80**

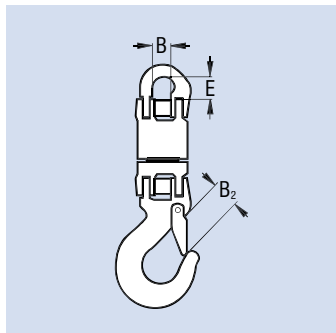
Perfect rotation even under load with 180° swivels



Insulating swivel with 2 coupling links

CE

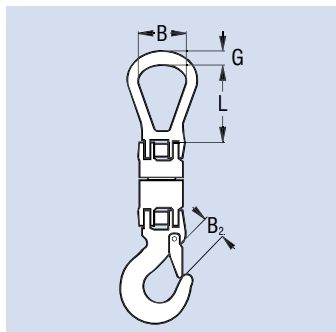
For nominal size of chain mm	WLL kg	Overall length mm	Weight approx. kg	Dimensions in mm		Reference no.
				■	■	
■	2000	129	0,8	18	22	119644
10	3150	161	1,6	25	26	119645
13	5300	205	3,7	29	33	119646
16	8000	236	6,1	36	40	119647
19	11200	278	9,0	43	48	119648



Insulating swivel with coupling link and load hook

CE

For nominal size of chain mm	WLL kg	Overall length mm	Weight approx. kg	Dimensions in mm			Reference no.
				B	B2	E	
■	2000	149	1,2	18	27	22	119649
10	3150	241	2,3	25	34	26	119650
13	5300	302	5,2	29	42	33	119651
16	8000	350	8,7	36	49	40	119652
19	11200	449	13,0	43	59	48	119653



Insulating swivel with suspension link and load hook

CE

For nominal size of chain mm	WLL kg	Overall length mm	Weight approx. kg	Dimensions in mm				Reference no.
				B	B2	G	L	
■	2000	219	1,4	50	27	14	99	119654
10	3150	326	2,6	66	34	18	127	119655
13	5300	403	5,3	72	42	22	145	119656
16	8000	470	9,2	82	49	25	175	119657
19	11200	589	13,9	105	59	30	204	119658