pewag
lifting solutions

Wire rope fittings

Always the right fit

English EN

Product overview

Introduction

Our wire rope fittings program consists of master links, master link assemblies, various hooks, shackles and spare parts.

We provide you with a special transmission table in which you can easily find the required wire rope fitting for your wire rope hanger. We also provide a user manual in which general information, maintenance, testing, repair, storage and transport are described.

You will also find links to our pewag winner offshore and pewag winner inox programs, which also include products for rope slings.


innovative solutions
EU
lifting clamps
lifting points
chain slings in G10
extensive service
inox - stainless steel
levo
lashing chains in G12
pewag
lifting solutions
your one-stop
manufacturer

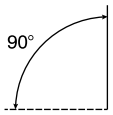
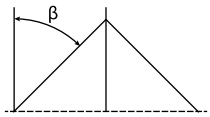
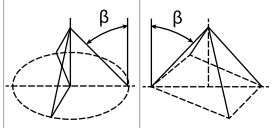
Products in comparison	SBR Snatch Block	AW Master link	MW Enlarged master link	VAW Special master link assembly	HSR Eye sling hook
Spare parts available	✓	-	-	-	✓
Anti-corrosion coating (powder coating)	✓	✓	✓	✓	✓
3D CAD drawing & trace parts	✓	✓	✓	✓	✓
Swivel safety hook	✓*	-	-	-	-
Quick fastener	-	-	-	-	✓
Rotatable under load	✓	-	-	-	-
Standards	✓	✓	✓	✓	✓
Temperature	-20°C to 60°C	-40°C to 200°C	-40°C to 200°C	-40°C to 200°C	-40°C to 200°C
Standard test certificates	✓	Upon request	Upon request	Upon request	Upon request
Individual test certificates	✓	✓	✓	✓	✓

*Applies only to SBRH and not to SBR(S)

FW Foundry hook	WLHW Swivel safety hook	WLHBW Swivel safety hook	LHW Safety hook	WSBW Swivel hook	HSW Eye sling hook	GSCHW Bow shackle
-	✓	✓	✓	✓	✓	-
✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓
-	✓	✓	✓	-	-	-
-	-	-	-	✓	✓	-
-	-	✓	-	✓	-	-
✓	✓	✓	✓	✓	✓	✓
-40°C to 200°C	-40°C to 200°C	-40°C to 120°C	-40°C to 200°C	-40°C to 120°C	-40°C to 200°C	-40°C to 200°C
Upon request	Upon request	Upon request	Upon request	Upon request	Upon request	Upon request
✓	✓	✓	✓	✓	✓	Upon request

Working load limits for steel wire rope slings using fibre cored rope acc. to EN 13414-1

of classes 6x19 and 6x36 in grade 1770 and having ferrule-secured eye terminations

	I-leg sling	II-leg sling		III + IV-leg slinging rope		Endless sling
Angle to the vertical	0°	0° to 45°	45° to 60°	0° to 45°	45° to 60°	0°
						
	direct	direct		direct		Choke hitch
Leg factor(K_L)	1	1.4	1	2.1	1.5	1.6
Nominal rope diameter mm	**Working load limits kg**					
8	700	950	700	1,500	1,050	1,100
9	850	1,200	850	1,800	1,300	1,400
10	1,050	1,500	1,050	2,250	1,600	1,700
11	1,300	1,800	1,300	2,700	1,950	2,120
12	1,550	2,120	1,550	3,300	2,300	2,500
13	1,800	2,500	1,800	3,850	2,700	2,900
14	2,120	3,000	2,120	4,350	3,150	3,300
16	2,700	3,850	2,700	5,650	4,200	4,350
18	3,400	4,800	3,400	7,200	5,200	5,650
20	4,350	6,000	4,350	9,000	6,500	6,900
22	5,200	7,200	5,200	11,000	7,800	8,400
24	6,300	8,800	6,300	13,500	9,400	10,000
26	7,200	10,000	7,200	15,000	11,000	11,800
28	8,400	11,800	8,400	18,000	12,500	13,500
32	11,000	15,000	11,000	23,500	16,500	18,000
36	14,000	19,000	14,000	29,000	21,000	22,500
40	17,000	23,500	17,000	36,000	26,000	28,000
44	21,000	29,000	21,000	44,000	31,500	33,500
48	25,000	35,000	25,000	52,000	37,000	40,000
52	29,000	40,000	29,000	62,000	44,000	47,000
56	33,500	47,000	33,500	71,000	50,000	54,000
60	39,000	54,000	39,000	81,000	58,000	63,000

The listed load capacities in the table according to EN 13414-1 are understood as the maximum values for the different slinging methods according to the standard method.

Note 1: The working load limits (WLLs) given in Table 4 are based on the assumption that soft eyes of single-leg slings are used over bearing points having diameters not less than twice the nominal diameter of the rope.

Note 2: The table shows working load limit values for ferrule-secured eye slings in various configurations.
The values are based on the equations contained in chapters 5.2.4, 5.3.4, and 5.4.4 of the EN 13414-1 standard.

For better understanding, the values given in the equation have been rounded.

The maximum load capacities stated in the table must be reduced if the ropes are exposed to difficult loads.

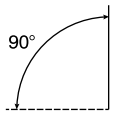
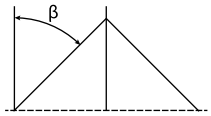
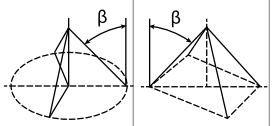
Loading difficulties arise from high temperatures, asymmetry, edge loads, impacts or similar. In these cases, pay attention to the load factors.

Should you still require technical information, please contact the manufacturers of wire rope slings or wire rope sling assemblies.

The company pewag only manufactures the components and does not produce wire rope slings or wire rope sling assemblies.

Working load limits for steel wire rope slings using steel cored rope acc. to EN 13414-1

of classes 6x19, 6x36 and 8x36 in grade 1770 and having ferrule-secured eye terminations

	I-leg sling	II-leg sling		III + IV-leg slinging rope		Endless sling
Angle to the vertical	0°	0° to 45°	45° to 60°	0° to 45°	45° to 60°	0°
						
	direct	direct		direct		Choke hitch
Leg factor (K_L)	1	1.4	1	2.1	1.5	1.6
Nominal rope diameter mm	**Working load limits kg**					
8	750	1,050	750	1,550	1,100	1,200
9	950	1,300	950	2,000	1,400	1,500
10	1,150	1,600	1,150	2,400	1,700	1,850
11	1,400	2,000	1,400	3,000	2,120	2,250
12	1,700	2,300	1,700	3,550	2,500	2,700
13	2,000	2,800	2,000	4,150	3,000	3,150
14	2,250	3,150	2,250	4,800	3,400	3,700
16	3,000	4,200	3,000	6,300	4,500	4,800
18	3,700	5,200	3,700	7,800	5,650	6,000
20	4,600	6,500	4,600	9,800	6,900	7,350
22	5,650	7,800	5,650	11,800	8,400	9,000
24	6,700	9,400	6,700	14,000	10,000	10,600
26	7,800	11,000	7,800	16,500	11,500	12,500
28	9,000	12,500	9,000	19,000	13,500	14,500
32	11,800	16,500	11,800	25,000	17,500	19,000
36	15,000	21,000	15,000	31,500	22,500	23,500
40	18,500	26,000	18,500	39,000	28,000	30,000
44	22,500	31,500	22,500	47,000	33,500	36,000
48	26,000	37,000	26,000	55,000	40,000	42,000
52	31,500	44,000	31,500	66,000	47,000	50,000
56	36,000	50,000	36,000	76,000	54,000	58,000
60	42,000	58,000	42,000	88,000	63,000	67,000

The listed load capacities in the table according to EN 13414-1 are understood as the maximum values for the different slinging methods according to the standard method.

Note 1: The working load limits (WLLs) given in Table 4 are based on the assumption that soft eyes of single-leg slings are used over bearing points having diameters not less than twice the nominal diameter of the rope.

Note 2: The table shows working load limit values for ferrule-secured eye slings in various configurations.

The values are based on the equations contained in chapters 5.2.4, 5.3.4 and 5.4.4 of the EN 13414-1 standard.
For better understanding, the values given in the equation have been rounded.

The maximum load capacities stated in the table must be reduced if the ropes are exposed to difficult loads.

Loading difficulties arise from high temperatures, asymmetry, edge loads, impacts or similar. In these cases, pay attention to the load factors.

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SBR Snatch Block

SBRH	SBR(S)
Code	Code
SBRH 04 13 115	SBR(S) 04 13 115
SBRH 08 22 150	SBR(S) 08 22 150
SBRH 12 22 150	SBR(S) 12 22 150

SBR Snatch Block

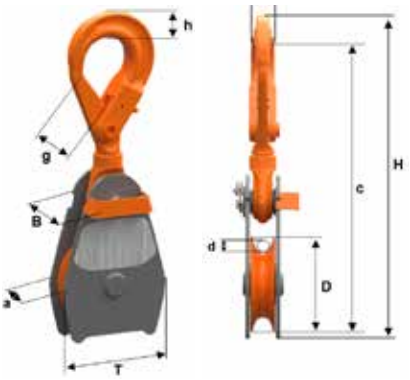
Features

- Snatch block with removable bolts for attaching ropes.
- For loads up to 4 / 8 / 12 tonnes.
- Pulley for multiple rope diameters.

Standards
EN 1677-1
EN 1677-3

Temperature
-20°C to 60°C

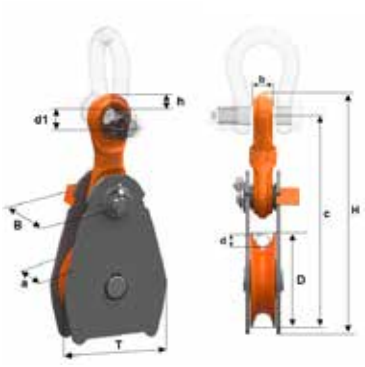
Technical details



Code	Working load limit [kg]	d [mm]	D [mm]	a [mm]	b [mm]	c [mm]	h [mm]	g [mm]	B [mm]	H [mm]	T [mm]	Weight kg/pc.
SBRH 04 13 115	4,000	10-13	115	42	29	351	24	45	76	390	130	4.80
SBRH 08 22 150	8,000	19- 22	150	50	41	500	48	60	90	560	160	11.70
SBRH 12 22 150	12,000	19- 22	150	61	50	545	62	70	100	620	160	25.50

The working load limit with safety factor 4.

Technical details



Code	Working load limit [kg]	d [mm]	D [mm]	a [mm]	b [mm]	c [mm]	d1 [mm]	h [mm]	B [mm]	H [mm]	T [mm]	Weight kg/pc.
SBR(S) 04 13 115	4,000	10-13	115	42	23	262	24	12	76	291	130	3.80
SBR(S) 08 22 150	8,000	19- 22	150	50	31	353	31	17	90	403	160	7.70
SBR(S) 12 22 150	12,000	19- 22	150	61	34	378	37	22	100	442	160	12.10

The working load limit with safety factor 4.

Master link and master link assembly

I-leg and II-leg		III-leg and IV-leg
		
Master link AW	**Enlarged master link MW**	**Special master link assembly VAW**
Code	Code	Code
AW 10	MW 10	VAW 6/7
AW 13	MW 13	VAW 8
AW 16	MW 16	VAW 10
AW 18	MW 18	VAW 13
AW 22	MW 22	VAW 16
AW 26	MW 26	VAW 19/20
AW 32	MW 32	VAW 22
AW 36	MW 36	VAW 26
AW 45	MW 56	VAW 32
AW 50		
AW 56		
AW 72		

AW Master link

Features

- Used in the production of 1- and 2- leg rope slings.
- Can also be used as end link.
- Universal connection possibilities through flattened section.

Standards
EN 1677-4

Temperature
-40°C to 200°C

Technical details

Code	Working load limit 0-45° kg (SF 5)	d [mm]	t [mm]	w [mm]	s [mm]	Weight kg/pc.
AW 10	1,400	10	80	50	10	0.14
AW 13	2,300	13	110	60	10	0.34
AW 16	3,500	16	110	60	14	0.53
AW 18	5,000	19	135	75	14	0.92
AW 22	7,600	23	160	90	17	1.60
AW 26	10,000	27	180	100	20	2.46
AW 32	14,000	33	200	110	26	4.14
AW 36	25,100	36	260	140	29	6.22
AW 45	30,800	45	340	180	-	12.82
AW 50	40,000	50	350	190	43	16.55
AW 56	64,000	56	400	200	-	22.00
AW 72	85,000	70	460	250	-	45.30

The working load limit with safety factor 5 applies when used for steel wire rope slings.

Assignment table

Code	Crane hook sizes for AW Master link		Rope sizes for AW Master link Assignment for steel wire rope slings according to EN 13414-1			
	Fits on single hook DIN 15401 Nr.	Fits on double hook DIN 15402 Nr.	Nominal rope diameter [mm] using fibre core		Nominal rope diameter [mm] using steel core	
			I-leg	II-leg	I-leg	II-leg
AW 10	1.6	2.5	8 to 11	8 to 9	8 to 11	8 to 9
AW 13	2.5	4	12 to 14	10 to 12	12 to 14	10 to 12
AW 16	2.5	4	16 to 18	13 to 14	16	13 to 14
AW 18	5	6	20	16 to 18	18 to 20	16
AW 22	6	8	22 to 26	20 to 22	22 to 24	18 to 20
AW 26	8	10	28	24 to 26	26 to 28	22 to 24
AW 32	10	12	32 to 36	28	32	26 to 28
AW 36	16	20	40 to 48	32 to 40	36 to 44	32 to 36
AW 45	25	32	52	44	48	40
AW 50	32	40	56 to 60	48 to 52	52 to 56	44 to 48
AW 56	32	40	60	56 to 60	60	52 to 60
AW 72	50	63	60	60	60	60

The assignment of wire rope slings includes the matching thimbles according to DIN EN 13411-1 and DIN 6899 (Form B). The assignment of components to the lifting slings is based on their respective working load limit. This ensures that all wire rope sizes according to EN 13414-1 are covered. For additional combination options, please contact the technical product management of pewag. For the assignment of chain slings, see the pewag winner chain system G10 catalogue.

MW Enlarged master link

Features

- Larger inner width for larger crane hooks or special hooks (compared to the AW Master link).
- Can also be used as end link.
- Universal connection possibilities through flattened section.

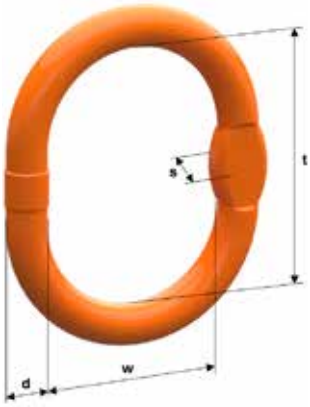
Standards

EN 1677-4

Temperature

-40°C to 200°C

Technical details



Code	Working load limit 0-45° kg (SF 5)	d [mm]	t [mm]	w [mm]	s [mm]	Weight kg/pc.
MW 10	1,400	11	90	65	10	0.22
MW 13	2,300	14	120	70	10	0.44
MW 16	3,200	16	140	80	13	0.71
MW 18	4,200	19	160	95	14	1.09
MW 22	6,700	23	170	105	17	1.74
MW 26	10,100	27	190	110	20	2.65
MW 32	16,000	33	230	130	26	4.78
MW 36	21,200	38	275	150	29	7.48
MW 56	40,000	56	350	250	46	21.98

The working load limit with safety factor 5 applies when used for steel wire rope slings.

Assignment table

Code	Crane hook sizes for MW Enlarged master link		Rope sizes for MW Enlarged master link Assignment for steel wire rope slings according to EN 13414-1			
	Fits on single hook DIN 15401 Nr.	Fits on double hook DIN 15402 Nr.	Nominal rope diameter [mm] using fibre core		Nominal rope diameter [mm] using steel core	
			I-leg	II-leg	I-leg	II-leg
MW 10	2.5	4	8 to 11	8 to 9	8 to 11	8 to 9
MW 13	4	5	12 to 14	10 to 12	12 to 14	10 to 12
MW 16	5	6	16	14	16	14
MW 18	6	8	18	16	18	16
MW 22	10	12	20 to 24	18 to 20	20 to 24	18 to 20
MW 26	10	12	26 to 28	22 to 26	26 to 28	22 to 24
MW 32	12	16	32 to 36	28 to 32	32 to 36	26 to 28
MW 36	20	25	40 to 44	36	40	32 to 36
MW 56	50	63	48 to 60	36 to 52	44 to 56	40 to 48

The assignment of wire rope slings includes the matching thimbles according to DIN EN 13411-1 and DIN 6899 (Form B). The assignment of components to the lifting slings is based on their respective working load limit. This ensures that all wire rope sizes according to EN 13414-1 are covered. For additional combination options, please contact the technical product management of pewag. For the assignment of chain slings, see the pewag winner chain system G10 catalogue.

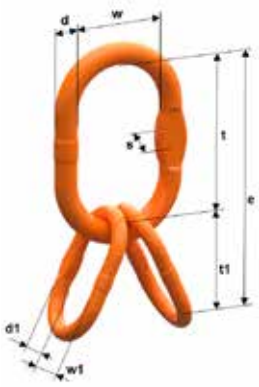
VAW Special IV-leg master link assembly

- Ideal for III- and IV-leg slings thanks to AW master links as transition links.

Standards
EN 1677-4

Temperature
-40°C to 200°C

Features



Code	Working load limit 0-45° kg (SF 5)	e [mm]	d [mm]	t [mm]	w [mm]	s [mm]	d1 [mm]	t1 [mm]	w1 [mm]	Weight kg/pc.
VAW 6/7	5,000	245	19	135	75	14	14	110	60	1.72
VAW 8	6,300	270	23	160	90	17	16	110	60	2.66
VAW 10	9,500	315	27	180	100	20	19	135	75	4.30
VAW 13	16,100	380	33	200	110	26	27	180	100	9.06
VAW 16	25,100	460	36	260	140	29	33	200	110	14.53
VAW 19/20	41,100	625	50	350	190	43	38	275	150	31.51
VAW 22	47,400	690	50	350	190	43	45	340	180	42.19
VAW 26	58,000	750	56	400	200	-	50	350	190	56.40
VAW 32	85,000	860	70	460	250	-	56	400	200	99.02

The working load limit with safety factor 5 applies when used for steel wire rope slings.

Technical details

Code	Crane hook sizes for VAW Special IV-leg master link assembly		Rope sizes for VAW Special IV-leg master link assembly Assignment for steel wire rope slings according to EN 13414-1	
	Fits on single hook DIN 15401 Nr.	Fits on double hook DIN 15402 Nr.	Nominal rope diameter [mm] using fibre core	Nominal rope diameter [mm] using steel core
			III- and IV- leg	III- and IV- leg
VAW 6/7	5	6	8 to 14	8 to 14
VAW 8	6	8	16	16
VAW 10	8	10	18 to 20	18
VAW 13	10	12	22 to 26	20 to 24
VAW 16	16	20	28 to 32	26 to 32
VAW 19/20	32	40	36	36 to 40
VAW 22	32	40	44	44
VAW 26	32	40	48	48
VAW 32	50	63	52 to 60	52 to 56

Assignment table

The assignment of wire rope slings includes the matching thimbles according to DIN EN 13411-1 and DIN 6899 (Form B). The assignment of components to the lifting slings is based on their respective working load limit. This ensures that all wire rope sizes according to EN 13414-1 are covered. For additional combination options, please contact the technical product management of pewag.

Sling hooks & shackle

Sling hooks

Eye sling hook HSR	Foundry hook FW	Swivel safety hook WLHW	Swivel safety hook WLHBW
Code	Code	Code	Code
HSR 5/6-8	FW 7/8	WLHW 5/6	WLHBW 5/6
HSR 7/8-8	FW 10	WLHW 7/8	WLHBW 7/8
HSR 10-8	FW 13	WLHW 10	WLHBW 10
HSR 13-8	FW 16	WLHW 13	WLHBW 13
	FW 19/20	WLHW 16	WLHBW 16
	FW 22	WLHW 19/20*	WLHBW 19/20
	FW 26	WLHW 22*	WLHBW 22
	FW 32		

*Upon request

Sling hooks

Shackle

Safety hook LHW	Swivel hook WSBW	Eye sling hook HSW	Bow shackle GSCHW
Code	**Code**	**Code**	**Code**
LHW 5/6	WSBW 7/8	HSW 5/6	GSCHW 7/8
LHW 7/8	WSBW 10	HSW 7/8	GSCHW 10
LHW 10	WSBW 13	HSW 10	GSCHW 13
LHW 13		HSW 13	GSCHW 16
LHW 16		HSW 16	
LHW 19/20		HSW 19/20	
LHW 22		HSW 22	
LHW 26		HSW 26	
LHW 32		HSW 32	

HSR Eye sling hook

NEW

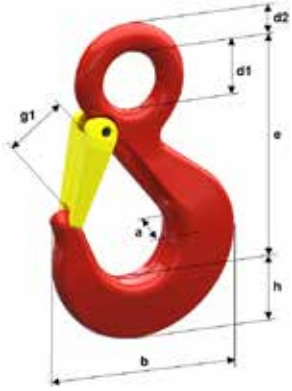
Features

- HSR eye sling hook offers universal options for usage and is manufactured with a forged safety catch.
- Increased protection through safety catch that locks into the tip of the hook.
- Safety catch set SFGW is also available as a spare parts set.

Standards
EN 1677-2

Temperature
-40°C to 200°C

Technical details



Code	Working load limit kg (SF 5)	e [mm]	h [mm]	a [mm]	d1 [mm]	d2 [mm]	g1 [mm]	b [mm]	Weight kg/pc.
HSR 5/6	1,400	85	21	17	20	10	20	73	0.36
HSR 7/8	2,600	105	28	23	27	13	26	87	0.77
HSR 10	3,400	129	32	24	32	16	28	106	1.22
HSR 13	5,650	158	40	32	38	19	36	131	2.3

The working load limit with safety factor 5 applies when used for steel wire rope slings.
This product is only for applications in steel wire rope slings.

Assignment table

Code	Rope sizes for HSR Eye sling hook Assignment for steel wire rope slings according to EN 13414-1 in l-leg	
	Nominal rope diameter [mm] using fibre core	Nominal rope diameter [mm] using steel core
HSR 5/6	8 to 11	8 to 11
HSR 7/8	12 to 14	12 to 14
HSR 10	16 to 18	16
HSR 13	20 to 22	18 to 22

The assignment of wire rope slings includes the matching thimbles according to DIN EN 13411-1 and DIN 6899 (Form B). The assignment of components to the lifting slings is based on their respective working load limit. This ensures that all wire rope sizes according to EN 13414-1 are covered. For additional combination options, please contact the technical product management of pewag.

FW Foundry hook

Features

- Extra-wide jaw.
- Frequently used in foundries and also does an excellent job when used with connex and welded systems.

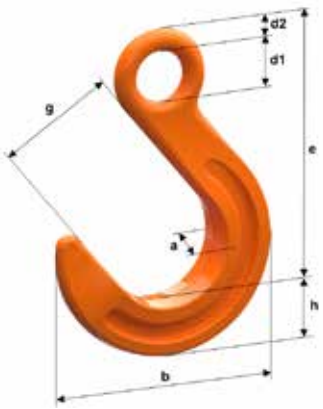
Standards

EN 1677-1

Temperature

-40°C to 200°C

Technical details



Code	Working load limit [kg] (SF 5)[1]	Working load limit [kg] (SF 4)[2]	e [mm]	h [mm]	a [mm]	d1 [mm]	d2 [mm]	g [mm]	b [mm]	Weight kg/pc.
FW 7/8	2,000	2,500	131	29	25	24	11	64	118	0.94
FW 10	3,150	4,000	158	35	32	31	14	76	143	1.62
FW 13	5,300	6,700	190	42	40	39	17	89	170	3.24
FW 16	8,000	10,000	224	50	46	47	22	102	200	5.65
FW 19/20	12,500	16,000	260	61	54	56	28	114	231	9.20
FW 22	15,000	19,000	287	75	63	47	31	140	284	13.40
FW 26	21,200	26,500	358	84	73	82	38	152	312	21.40
FW 32	31,500	40,000	370	101	90	66	44	170	359	35.00

1) The working load limit with safety factor 5 applies when used for steel wire rope slings.
2) The working load limit with safety factor 4 applies when used for chain slings.

Assignment table

Code	Rope sizes for FW Foundry hook Assignment for steel wire rope slings according to EN 13414-1 in l-leg	
	Nominal rope diameter [mm] using fibre core	Nominal rope diameter [mm] using steel core
FW 7/8	11 to 13	10 to 13
FW 10	14 to 16	14 to 16
FW 13	18 to 22	18 to 20
FW 16	24 to 26	22 to 26
FW 19/20	28 to 32	28 to 32
FW 22	36	36
FW 26	40 to 44	40
FW 32	48 to 52	44 to 52

The assignment of wire rope slings includes the matching thimbles according to DIN EN 13411-1 and DIN 6899 (Form B). The assignment of components to the lifting slings is based on their respective working load limit. This ensures that all wire rope sizes according to EN 13414-1 are covered. For additional combination options, please contact the technical product management of pewag. For the assignment of chain slings see the pewag winner chain system G10 catalogue.

WLHW Swivel safety hook

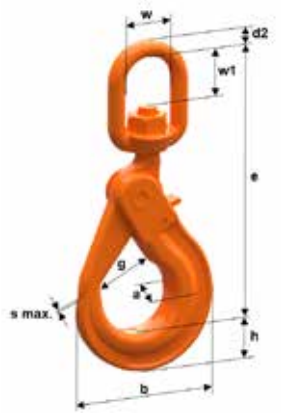
Features

- Locks automatically and cannot be opened while under load.
- Not rotatable and locked when under load.
- Safety catch set VLHW - available as a spare parts set.

Standards
EN 1677-3

Temperature
-40°C to 200°C

Technical details



Code	Working load limit [kg] (SF 5)[1]	Working load limit [kg] (SF 4)[2]	e [mm]	h [mm]	a [mm]	w [mm]	w1 [mm]	d2 [mm]	g1 [mm]	s max. [mm]	Weight kg/pc.
WLHW 5/6	1,120	1,400	161	20	17	35	36	12	28	1	1.20
WLHW 7/8	2,000	2,500	182	26	20	35	36	12	34	1	1.54
WLHW 10	3,150	4,000	218	30	29	42	41	16	45	1	2.14
WLHW 13	5,300	6,700	269	40	35	49	47	20	52	1.50	4.42
WLHW 16	8,000	10,000	319	50	41	60	60	24	60	2	7.34
WLHW 19/20*	12,500	16,000	394	62	50	80	86	35	70	2	14.30
WLHW 22*	15,000	19,000	430	65	58	80	80	35	81	2	17.00

1) The working load limit with safety factor 5 applies when used for steel wire rope slings.
2) The working load limit with safety factor 4 applies when used for chain slings.
***WLHW 19/20 and 22 upon request**

Assignment table

Code	Rope sizes for WLHW Swivel safety hook Assignment for steel wire rope slings according to EN 13414-1 in I-leg	
	Nominal rope diameter [mm] using fibre core	Nominal rope diameter [mm] using steel core
WLHW 5/6	8 to 10	8 to 9
WLHW 7/8	11 to 13	10 to 13
WLHW 10	14 to 16	14 to 16
WLHW 13	18 to 22	18 to 20
WLHW 16	24 to 26	22 to 26
WLHW 19/20*	28 to 32	28 to 32
WLHW 22*	36	36

The assignment of wire rope slings includes the matching thimbles according to DIN EN 13411-1 and DIN 6899 (Form B). The assignment of components to the lifting slings is based on their respective working load limit. This ensures that all wire rope sizes according to EN 13414-1 are covered. For additional combination options, please contact the technical product management of pewag. For the assignment of chain slings see the pewag winner chain system G10 catalogue.
***WLHW 19/20 and 22 upon request**

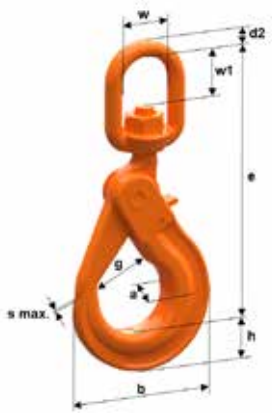
WLHBW Swivel safety hook

- Locks automatically and cannot be opened while under load.
- Rotatable under load.
- Wider jaw opening than HSW offers more flexibility.

Standards
EN 1677-3

Temperature
-40°C to 120°C

Features



Technical details

Code	Working load limit [kg] (SF 5)[1]	Working load limit [kg] (SF 4)[2]	e [mm]	h [mm]	a [mm]	w [mm]	w1 [mm]	d2 [mm]	g [mm]	s max. [mm]	Weight kg/pc.
WLHBW 5/6	1,120	1,400	161	20	17	35	36	12	28	1	1.20
WLHBW 7/8	2,000	2,500	182	26	20	35	36	12	34	1	1.54
WLHBW 10	3,150	4,000	218	30	29	42	41	16	45	1	2.14
WLHBW 13	5,300	6,700	269	40	35	49	47	20	52	1.50	4.42
WLHBW 16	8,000	10,000	319	50	41	60	60	24	60	2	7.34
WLHBW 19/20	12,500	16,000	394	62	50	80	86	35	70	2	14.30
WLHBW 22	15,000	19,000	430	65	58	80	80	35	81	2	17.00

1) The working load limit with safety factor 5 applies when used for steel wire rope slings.
2) The working load limit with safety factor 4 applies when used for chain slings.

Assignment table

Code	Rope sizes for WLHBW Swivel safety hook Assignment for steel wire rope slings according to EN 13414-1 in I-leg	
	Nominal rope diameter [mm] using fibre core	Nominal rope diameter [mm] using steel core
WLHBW 5/6	8 to 10	8 to 9
WLHBW 7/8	11 to 13	10 to 13
WLHBW 10	14 to 16	14 to 16
WLHBW 13	18 to 22	18 to 20
WLHBW 16	24 to 26	22 to 26
WLHBW 19/20	28 to 32	28 to 32
WLHBW 22	36	36

The assignment of wire rope slings includes the matching thimbles according to DIN EN 13411-1 and DIN 6899 (Form B). The assignment of components to the lifting slings is based on their respective working load limit. This ensures that all wire rope sizes according to EN 13414-1 are covered. For additional combination options, please contact the technical product management of pewag. For the assignment of chain slings see the pewag winner chain system G10 catalogue.

LHW Safety hook

Features

- Locked under load.
- Wider jaw opening than HSW offers more flexibility.
- Safety catch set VLHW on the back of the hook - available as a spare parts set

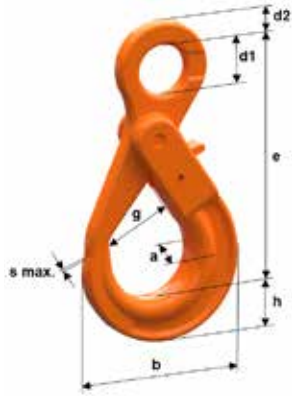
Standards

EN 1677-3

Temperature

-40°C to 200°C

Technical details



Code	Working load limit [kg] (SF 5)[1]	Working load limit [kg] (SF 4)[2]	e [mm]	h [mm]	a [mm]	b [mm]	d1 [mm]	d2 [mm]	g1 [mm]	s max. [mm]	Weight kg/pc.
LHW 5/6	1,120	1,400	110	20	17	71	21	11	28	1	0.53
LHW 7/8	2,000	2,500	135	26	20	88	25	12	34	1	0.92
LHW 10	3,150	4,000	168	30	29	107	33	16	45	1	1.57
LHW 13	5,300	6,700	205	40	35	138	40	20	52	1.50	3.19
LHW 16	8,000	10,000	251	50	41	168	50	25	60	2	6.24
LHW 19/20	12,500	16,000	290	62	50	194	60	30	70	2	9.75
LHW 22	15,000	19,000	322	65	52	211	70	32	81	2	12.45
LHW 26	21,200	26,500	383	79	61	253	82	42	100	2	20.00
LHW 32	31,500	40,000	425	102	80	311	82	45	120	3	32.40

1) The working load limit with safety factor 5 applies when used for steel wire rope slings.
2) The working load limit with safety factor 4 applies when used for chain slings.

Assignment table

Code	Rope sizes for LHW Safety hook Assignment for steel wire rope slings according to EN 13414-1 in I-leg	
	Nominal rope diameter [mm] using fibre core	Nominal rope diameter [mm] using steel core
LHW 5/6	8 to 10	8 to 9
LHW 7/8	11 to 13	10 to 13
LHW 10	14 to 16	14 to 16
LHW 13	18 to 22	18 to 20
LHW 16	24 to 26	22 to 26
LHW 19/20	28 to 32	28 to 32
LHW 22	36	36
LHW 26	40 to 44	40
LHW 32	48 to 52	44 to 52

The assignment of wire rope slings includes the matching thimbles according to DIN EN 13411-1 and DIN 6899 (Form B). The assignment of components to the lifting slings is based on their respective working load limit. This ensures that all wire rope sizes according to EN 13414-1 are covered. For additional combination options, please contact the technical product management of pewag. For the assignment of chain slings see the pewag winner chain system G10 catalogue.

WSBW Swivel hook

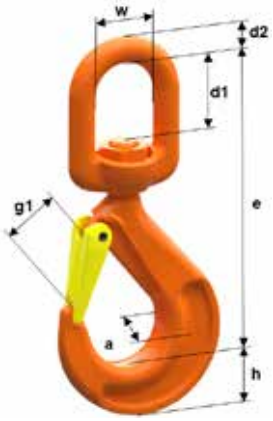
Features

- WSBW Swivel Hook - comes with a die-forged safety catch that locks into the tip of the hook.
- Rotatable under load.
- Safety catch set SFGW - available as a spare parts set

Standards
EN 1677-2

Temperature
-40°C to 120°C

Technical details



Code	Working load limit [kg] (SF 5)[1]	Working load limit [kg] (SF 4)[2]	e [mm]	h [mm]	a [mm]	d1 [mm]	d2 [mm]	g1 [mm]	Weight kg/pc.
WSBW 7/8	2,000	2,500	154	28	19	37	12	26	1.24
WSBW 10	3,150	4,000	183	33	25	41	16	30	1.84
WSBW 13	5,300	6,700	221	40	30	47	20	38	3.45

1) The working load limit with safety factor 5 applies when used for steel wire rope slings.
2) The working load limit with safety factor 4 applies when used for chain slings.

Assignment table

Code	Rope sizes for WSBW Swivel hook Assignment for steel wire rope slings according to EN 13414-1 in l-leg	
	Nominal rope diameter [mm] using fibre core	Nominal rope diameter [mm] using steel core
WSBW 7/8	11 to 13	10 to 13
WSBW 10	14 to 16	14 to 16
WSBW 13	18 to 22	18 to 20

The assignment of wire rope slings includes the matching thimbles according to DIN EN 13411-1 and DIN 6899 (Form B). The assignment of components to the lifting slings is based on their respective working load limit. This ensures that all wire rope sizes according to EN 13414-1 are covered. For additional combination options, please contact the technical product management of pewag. For the assignment of chain slings see the pewag winner chain system G10 catalogue.

HSW Eye sling hook

Features

- HSW eye sling hook offers universal options for usage and is manufactured with a forged safety catch.
- Increased protection through safety catch that locks into the tip of the hook.
- Safety catch set SFGW is also available as a spare parts set.

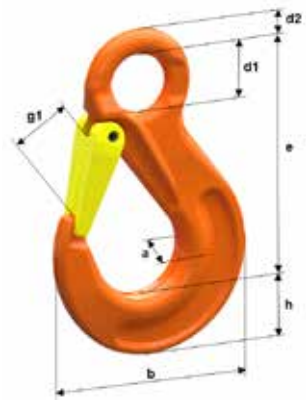
Standards

EN 1677-2

Temperature

-40°C to 200°C

Technical details



Code	1) Working load limit [kg] (SF 5)	2) Working load limit [kg] (SF 4)	e [mm]	h [mm]	a [mm]	d1 [mm]	d2 [mm]	g1 [mm]	b [mm]	Weight kg/pc.
HSW 5/6	1,120	1,400	85	21	17	20	10	19	68	0.34
HSW 7/8	2,000	2,500	106	27	19	25	11	26	88	0.57
HSW 10	3,150	4,000	131	33	26	34	16	31	109	1.25
HSW 13	5,300	6,700	164	44	33	43	19	39	134	1.86
HSW 16	8,000	10,000	183	50	40	50	25	45	155	3.86
HSW 19/20	12,500	16,000	205	55	48	55	27	53	178	6.01
HSW 22	15,000	19,000	225	62	50	60	29	62	196	8.19
HSW 26	21,200	26,500	260	80	70	70	37	73	240	12.76
HSW 32	31,500	40,000	299	97	82	66	45	87	291	27.86

1) The working load limit with safety factor 5 applies when used for steel wire rope slings.
2) The working load limit with safety factor 4 applies when used for chain slings.

Assignment table

	Rope sizes for HSW Eye sling hook Assignment for steel wire rope slings according to EN 13414-1 in l-leg	
Code	Nominal rope diameter [mm] using fibre core	Nominal rope diameter [mm] using steel core
HSW 5/6	8 to 10	8 to 9
HSW 7/8	11 to 13	10 to 13
HSW 10	14 to 16	14 to 16
HSW 13	18 to 22	18 to 20
HSW 16	24 to 26	22 to 26
HSW 19/20	28 to 32	28 to 32
HSW 22	36	36
HSW 26	40 to 44	40
HSW 32	48 to 52	44 to 52

The assignment of wire rope slings includes the matching thimbles according to DIN EN 13411-1 and DIN 6899 (Form B). The assignment of components to the lifting slings is based on their respective working load limit. This ensures that all wire rope sizes according to EN 13414-1 are covered. For additional combination options, please contact the technical product management of pewag. For the assignment of chain slings see the pewag winner chain system G10 catalogue.

GSCHW Bow shackle

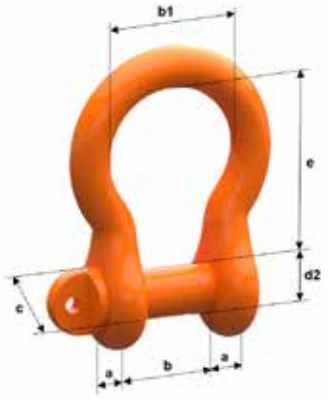
Features

- UKCA-Marking available on request.
- Both sides of the smooth bolt rest in the eyes and the thread does not protrude into the opening of the shackle.

Standards
EN 1677-1

Temperature
-40°C to 200°C

Technical details



Code	Working load limit [kg] (SF 5)[1]	Working load limit [kg] (SF 4)[2]	e [mm]	b [mm]	b1 [mm]	a [mm]	c [mm]	d2 [mm]	Weight kg/pc.
GSCHW 7/8	2,000	2,500	51	22	32	13	34	16	0.46
GSCHW 10	3,150	4,000	64	27	43	16	40	19	0.85
GSCHW 13	5,300	6,700	76	31	51	19	46	22	1.27
GSCHW 16	8,000	10,000	95	43	68	25	59	28	2.90

1) The working load limit with safety factor 5 applies when used for steel wire rope slings.
2) The working load limit with safety factor 4 applies when used for chain slings.

Assignment table

	Rope sizes for GSCHW Bow shackle Assignment for steel wire rope slings according to EN 13414-1 in l-leg	
Code	Nominal rope diameter [mm] using fibre core	Nominal rope diameter [mm] using steel core
GSCHW 7/8	11 to 13	10 to 13
GSCHW 10	14 to 16	14 to 16
GSCHW 13	18 to 22	18 to 20
GSCHW 16	24 to 26	22 to 26

The assignment of wire rope slings includes the matching thimbles according to DIN EN 13411-1 and DIN 6899 (Form B). The assignment of components to the lifting slings is based on their respective working load limit. This ensures that all wire rope sizes according to EN 13414-1 are covered. For additional combination options, please contact the technical product management of pewag. For the assignment of chain slings see the pewag winner chain system G10 catalogue.

Spare parts

Spare parts may only be replaced by trained personnel with the necessary skills and knowledge.
Only original pewag spare parts may be used and fitted.

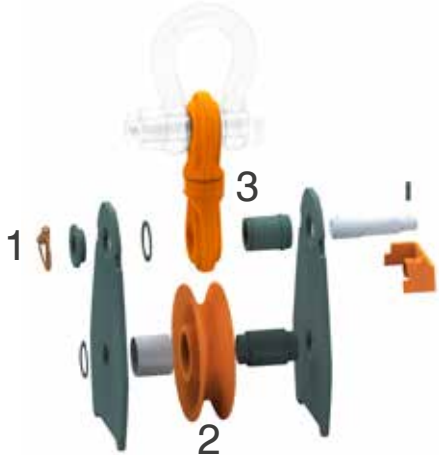
VLHW Trigger set

Code	For accessory part
VLHW 5/6	LHW 5/6, WLH(B)W 5/6
VLHW 7/8	LHW 7/8, WLH(B)W 7/8
VLHW 10	LHW 10, WLH(B)W 10
VLHW 13	LHW 13, WLH(B)W 13
VLHW 16	LHW 16, WLH(B)W 16
VLHW 19/20/22/26	LHW 19/20, LHW 22, LHW 26, WLH(B)W 19/20, WLH(B)W 22
VLHW 32	LHW 32

SFGW Safety catch set

Code	For accessory part
SFGW 5/6	HSW 5/6, HSR 5/6
SFGW 7/8	HSW 7/8, HSR 7/8, WSBW 7/8
SFGW 10	HSW 10, HSR 10, WSBW 10
SFGW 13	HSW 13, HSR 13, WSBW 13
SFGW 16	HSW 16
SFGW 19/20	HSW 19/20
SFGW 22	HSW 22
SFGW 26	HSW 26, HSW 32

SBR Snatch Block



Number	Spare Parts Sets
1	Safety linchpin
2	Pulley
3	SBRH PC/O
3	SBR(S) PC/O
/	Badge for SBRH
/	Badge for SBR(S)

Restrictions of use for wire rope fittings

Temperature	-40 °C – 200 °C	over 200 °C – 300 °C	over 300 °C – 380 °C
Load factor	1	0.9	0.75
Shock	slight shocks	medium shocks	strong shocks
	arises e.g. when the lifting or lowering movement is accelerated.	occurs e.g. when the chain slips during adjustment to the shape of the load.	arises e.g. when the load falls into the unloaded chain.
Load factor	1	0.7	not permissible
Edge load	not permissible		

Note: The table refers exclusively to pewag lifting components.
Different usage limitations apply to lifting ropes and thimbles. If any questions arise in this regard, please contact the manufacturer of steel ropes or thimbles.

Use at temperatures below -40°C and above 380°C is prohibited!

User information

General description

pewag components can be used for general lifting purposes for single- and multi leg wire rope slings acc. EN 13414-1 and are suitable for the lifting and transporting of loads, provided that the instructions of the operating manual and all national regulations are complied with. The comply with Machinery Directive 2006/42/EC and may only be used in accordance with the Declaration of Incorporation.

It should only be used by trained personnel, who have read and understood the instructions for use.
This is available for download at **www.pewag.com.**

Hooks should not bear weight on the tips. Loops, suspension links and thimbles must be able to move freely in the hook.
pewag lifting accessories may only be used within the specified temperature range, taking into account the corresponding reduction factors for wire rope slings – otherwise, they must be taken out of service.

The maximum load capacities specified in the table must be reduced if the wire rope slings are subjected to adverse loading conditions.

These include, for example, high temperatures, asymmetry, edge loads, impacts or similar. In these cases, the load factors must be taken into account.

Should you still require technical information, please contact the manufacturers of wire rope slings or wire rope sling assemblies.
The company pewag only manufactures the components and does not produce wire rope slings or wire rope sling assemblies.
If you require technical information about pewag lifting components, please contact our technical service.

Responsibility is key

If the pewag lifting accessories are used correctly and by competent people, they have a long lifespan and provide the highest possible safety standards. Material and personal damage can be avoided by reading this user information carefully and handling all lifting processes in a responsible, provident manner.

Intended use from components for wire rope slings

- **Intended application:**
  The assembly of wire rope fittings components, master links and four leg assemblies for rope hangers for attaching, lifting and transporting of loads.
- **Load:**
  All links and components must also be able to move freely and align in the load direction.
- **Normal operating temperature:**
  -40 °C bis 200 °C.
  Any deviations from the normal operating temperatures can be found in the table Restrictions on use.
- **Shocks**:
  Components must not be subjected to shock-loading! In case of impacts, see table Restrictions on use.
- **Users**:
  The components may only be used by properly trained personnel.
  Prior to each use, components must be inspected by the user for visible defects.

Changes to the condition as delivered

We urgently recommend using only the original parts that are included in the scope of delivery with pewag lifting components (bolts, safety pins, screws etc.).
Modifying the original condition of the lifting accessories by bending, grinding, removal of parts, welding, drilling, stamping etc. means exposing yourself and others to unnecessary danger.

In such a case, safety can no longer be guaranteed and usage becomes dangerous. Risk factors and conditions include heating the chains to a temperature of more than 380 °C (pewag winner 400) and removing safety parts such as safety pins, safety catches etc.

Do not apply any surface coatings to pewag chain slings, i.e. do not subject them to hot galvanizing or electro galvanizing.

If any surface treatments are required, please make sure to double-check with the pewag service department first.

Dipping or removing a coating with chemicals are potentially dangerous processes that may give rise to hazards.

We urgently recommend customers to check with the pewag technical team first.

Restrictions of use

For hazardous or dangerous conditions, please refer to the table.

- **Temperature effects**
  The table lists the load reduction values in case of extreme temperatures. These apply until the pewag lifting components have reached room temperature.

  pewag lifting components must on no account be used outside the indicated temperature range. If this has been the case, the chains must be removed from service.

- **Effects of acids, caustics and chemicals**
  Do not use pewag lifting components in acids, alkalines or chemicals or expose them to their fumes.

Important
Certain production procedures release acids and or fumes.

In especially dangerous conditions (e.g. offshore applications, lifting of persons or potentially dangerous loads i.e. molten metals, corrosive materials, nuclear substances) the working load limit must be adjusted according to the risk level by trained personnel. Hazardous conditions must always be avoided.

Spare parts

Spare parts may only be replaced by trained personnel with the necessary skills and knowledge.
Only original pewag spare parts may be used.

Maintenance, Evaluation, Repair, Transportation

Prevention is better than cure!
The safety of the pewag components can be influenced during its natural work life; it is therefore vital that to maintain it in a good state of use through periodic maintenance, evaluation and repair.

Maintenance: Components must be cleaned regularly. After use in a wet environment, components must be dried and protected against corrosion, e.g. lightly oiled.

Inspection before initial use: Before using a component for the first time, the following points should be checked:

- The components correspond to what was ordered.
- The test certification and/or the declaration of compliance and conformity are present.
- The marking and load capacity on the components correspond to the details on the certification and declarations.
- Recording individual details of the product into a card index.
- This manual is included with the pewag components and that every employee reads and fully understands what has been written.

Inspection before every use: The lifting components should be checked to make sure it is in a good state before each and every use by the operator.

He should pay attention to obvious damages or signs of wear; if in doubt, or if the lifting component fits into one of the below-mentioned “discard” categories, the lifting component should be taken out of operation immediately and given to trained personnel for evaluation.

Evaluation: Evaluation of the lifting component should take place after it has been cleaned - it must be free from oil, dirt and rust.

Painting is only admissible as far as an evaluation of the lifting component condition is possible.

Methods of cleaning that cause embrittlement of the material (pickling), overheating (burning), abrasion of material (sand blasting) are not permitted; cracks or other defects should not be hidden.

Sufficient lighting during evaluation needs to be provided; the whole of the lifting chain should be inspected; if in doubt, the component should be sent back to the manufacturer for evaluation.

Inspection after an unforeseen incident: The lifting components need to be taken out of operation immediately and given to trained personnel for evaluation in the event of an unforeseen incident - e.g. accidents, overheating, overloading, collisions, acid and chemical influences. After such cases, the pewag components must be taken out of operation immediately and checked by trained personnel.

Inspection carried out by trained personnel: Trained personnel should carry out periodic inspections based on the national legal requirements; if not otherwise specified a minimum of every twelve months. This time frame should be shortened for lifting chains in frequent use at maximum load capacity or under implementation-related limitations, in the case of increased wear or corrosion. The inspection includes both visual and functional testing.

After long periods in storage, the components should be checked thoroughly by trained personnel before initial use especially if the date for inspection has been exceeded or the product was stored incorrectly - see below.

Load Test: A load, visual and function test needs to be carried out by trained personnel at least every two years.

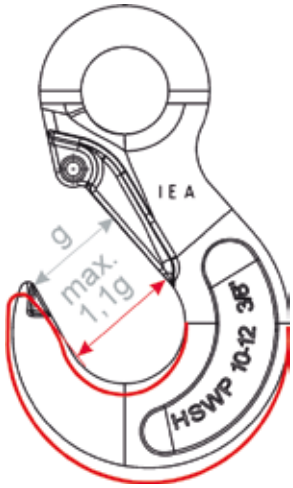
This time frame should be shortened for lifting chains in frequent use at maximum load capacity or under implementation-related limitations. The load test should be carried out with 2 times the working load limit. It can also be replaced by a crack detection test - e.g. by a magnetic crack test or a dye penetration method.

Note: The interval of the load test may vary due to national regulations.

Visual inspection criteria

If at least once of the criteria listed below manifests itself during the visual inspection, all parts must be removed from service:

- Breakage of a component
- Missing or illegible marking
- Unrecognizable identification marking of components
- Distortion of suspension components, accessories
- Cuts, notches, grooves, cracks: these defects, especially across the tensile direction can lead to sudden breaks!
- Excessive corrosion (e.g. pitting corrosion), material discolouration from heat, burning of the outer surface coating, evidence of subsequent welding
- Missing and/or defective safety measures as well as evidence of the hook being over-extended. The opening of the hook should not exceed 10 % of the nominal dimension.
- A swing-out safety catch is proof that the hook has been overloaded



Maximum permissible dimensional changes with regards to the nominal dimension

Designation	Dimensions	Admissible deviation
Links AW, MW, VAW	d	-10 %
	t	+10 %
Hooks HSW, HSR, LHW, WLH(B)W, WSBW, FW	e	+5 %
	d2 and h	-10 %
	g	+10 %
Hooks LHW, WLH(B)W	opening hook	2 x s max.
Shackle GSCHW	Movable bolt	No changes permitted
	e	+5%
	d2	-10%

Repairs

Repairs may only be performed by competent people who have the necessary skills and knowledge. Small cuts, notches and grooves may be removed by careful grinding or filing.

After the repair, the treated area must merge smoothly with the surrounding material, without abrupt changes of the cross-section.

Repair works must not reduce the dimension of the area by more than 10 % - discard criteria must not apply after the repair.
Welding, heat treatments and straightening of bent components, is not permissible. Always keep records of inspections and repair works and ensure that these are stored throughout the service life of the components.

Storing, Transportation

Lifting components that are not being used should be stored on designated frames and not in a heap on the floor as that would be the fastest way to damage them.

If unloaded wire rope sling remain on the crane hook, then the end hook must be attached into the master link or, if this is the case, the end links into the crane hook in order to reduce the risk sling legs swinging freely or accidentally unhooking.

If the lifting components will not be used for long periods of time, then they should be cleaned, dried and protected against corrosion (e.g. lightly oiled) before being stored.

When the components has been stored for a long period and the regular inspections have not been made, or it has been stored incorrectly (see also inspections), an inspection must be carried out before the first use.

Detailed original operating instructions for the high-quality pewag products are available as downloads at **www.pewag.com.** Ongoing improvement processes ensure that our products are always up to date. For this reason always refer to the latest edition!

The pewag winner offshore and winner inox portfolio includes additional wire rope fittings with safety factor 5, which you will find in the following catalogue:

pewag winner offshore for wire rope fittings
AOS - Master link for I- und II-legs wire rope sling
AOS-FZN - galvanized master link for I- and II-leg wire rope slings
VOS - master link assembly for III- and IV-leg wire rope slings
VOS-FZN - galvanized master link assembly for III- and IV-leg wire rope slings

pewag winner inox G6 plus for wire rope fittings

AWI - Master link for I- und II-legs wire rope slings
VAWI - master link assembly for 3- and 4-leg wire rope slings

Product description and technical information see folder pewag winner offshore or catalogue pewag winner inox G6 plus, simply scan the QR code.

pewag winner inox - stainless steel chain system G6 plus

pewag winner offshore - for extreme lifting applications

Notes

Notes

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