

# pewag winner Chain system in G10

Lifting and Lashing



# pewag lifting solutions

From over half a millennium of company history, the drive for quality and the pursuit of excellence has become our pewag standard. The development and production of all our products is motivated by these characteristics to meet all our customers' expectations. This quality standard and our extensive service are the foundation of our success.



Developed and manufactured in Europe



Patented



Online training via pewag academy



Comes with an individual serial number



Optionally available with peTAG NFC Chip

# Contents

## The pewag product range – tailor-made with safety in mind

For pewag, the focus always lies on service, quality and tradition. For centuries, the company has been continuously expanding its expertise in the field of chain systems and today it is among the global leaders in the industry. Innovation, safety and sustainability are key features of all our products.

Our lifting technology and load-securing chain system in G10 is currently the most comprehensive range on the market and customers all over the world appreciate the fact that we go far beyond standard market requirements. Application-specific, customised solutions and a great eye for detail are part and parcel of the pewag philosophy – in the past, in the present, and in future.



**Full Member**

Technical changes and misprints excepted.

<b>pewag group</b>	
We are part of the pewag group	4-5
<b>Lifting accessories in G10</b>	
Benefits and information	6-17
<b>Chains in G10</b>	
pewag coropro	20-21
Lifting chains pewag winner 400	22
Lifting chains pewag winner 200	23
<b>Master links and sub-assemblies in G10</b>	
Master links and sub-assemblies in G10	24-45
<b>Accessories in G10</b>	
Accessories in G10	46-78
<b>Special accessories in G8</b>	
Special accessories in G8	80-91
<b>Lashing in G10</b>	
Benefits and information	92-99
<b>Chains and accessories in G10</b>	
Product overview lashing in G10	102
winner 200 lashing chain	103
Accessories	104-110
<b>Chains and accessories in G8</b>	
Chains and accessories in G8	112-116
<b>Spare parts</b>	
Spare parts for lifting and lashing	118-123
<b>User information</b>	
User information for Lifting accessories in G10	126-129
User information for Lashing in G10	130-132
peTAG solution	134-135

# We are part of the **pewag group**

pewag lifting solutions is part of an internationally operating group of companies. Our success story goes back to the year 1479.

## WHAT DRIVES US

Our entrepreneurial spirit at pewag group is shaped by the joy of innovation. We strive to manufacture the best solutions on the market – today and in the future.

The high quality of our brands, products and services, as well as the passionate performance of our employees are our biggest assets to reach excellence and to exceed customer expectations.

## LEADING TO EXCELLENCE



### striving for excellence in **QUALITY**

The values of the pewag group brands are demonstrated by our first-class quality and continuous innovation. You can rely on us.



### striving for excellence in **RESPONSIBILITY**

Our goal is CO<sub>2</sub> neutral production by 2030. We live sustainable and fair partnerships and an open way of working together. We take on social as well as environmental responsibility.



### striving for excellence in **ENTREPRENEURSHIP**

Through the specific expertise of each individual and decentralized responsibilities, we ensure healthy growth and a sustainably successful future.



### striving for excellence in **TECHNOLOGY**

We ensure our technological strength by striving for quality, continuous improvement and innovation of our products and production processes.

## FROM AUSTRIA....



1479

First documentary mention of the forge

1787

Foundation of the chain forge in Kapfenberg

1803

Foundation of the location in Graz

1836

Establishment of an iron casting plant in Brückl

1912

Production of the first pewag snow chain

2009

pewag develops into an international group of companies

2021

Extensive investment in renewable energies. Goal: CO<sub>2</sub>-neutral production by 2030

## ....ACROSS THE GLOBE

100+

Countries

50

Sales and other locations

45

Sales partners

16

Production sites

15+

Brands

5

Continents

## IN A SUSTAINABLE WAY

### Social Excellence

The corporate ethics of the pewag group are based on our clear commitment to universal human rights. As a globally active group of companies, we bear a social and corporate responsibility. This applies in particular to our employees. Their occupational safety and health protection are our top priority. We promote their personal and professional development and foster a culture of open, honest, non-discriminatory and team-oriented exchange based on transparent communication. We apply the same standards in our dealings with customers, suppliers and other business partners.



### Environmental Excellence

We are committed to a careful and sustainable approach to the environment. This applies to all areas and activities of our group of companies. For us, it is a matter of course to use resources as efficiently as possible and to ensure this also in the future through new environmentally friendly and efficient processes. We are continuously working to optimize the durability and recyclability of our products. In this context, one of our core concerns is to continuously improve our energy efficiency and thus reduce energy consumption in the long term. The energy we use comes from renewable energy sources and is already partly generated by ourselves.

## WHAT DEFINES US



**Snow and forestry chains**



**Hoist and conveyor chains**



**Do-it-yourself**



**Engineering**



**Lifting solutions**



**Tire protection chains**

#### Our Expertise.

Our international brands have an extensive and diverse range of products and services.

The portfolio ranges from traction chains for tires, tire protection chains for mining vehicles over a wide range of technical chains and innovative lifting solutions up to products for the do-it-yourself area as well as forming technology.

#### Our Network.

With over 50 locations on five continents, the pewag group forms a global platform of product specialists, partners and suppliers.

This community is strengthened by a large network of external experts from science, research and development and a wide range of brands and companies within the group.

#### Our Experience.

Based on centuries of experience, genuine craftsmanship and innovative technologies we process the highest quality materials with the claim to offer the best solutions on the market.

What unites us as people within the pewag group is the strong ambition for continuous development.

# Lifting accessories in G10

## Benefits and information

### Content

Lifting chains in G10 quality	8
pewag lifting chain	9
pewag winner core data	9
pewag winner chain marking	9
pewag winner identification	9
pewag winner marking - lifting identification tags	10
Load capacities	12-13
Exceptional conditions of use	14
Examples of order text	14-15
Standard sling types	16-17



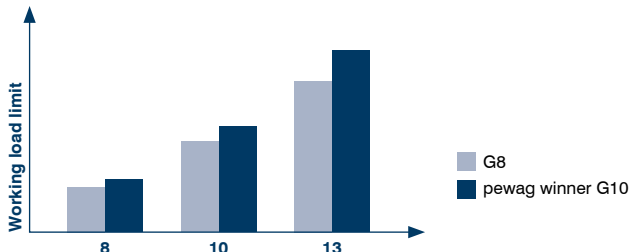


Our product experts will be happy to advise you and are also available for inquiries regarding special sling components and chain slings in special designs.  
[saleinfo@pewag.com](mailto:saleinfo@pewag.com)

Lifting chains in G10 quality – benefits that outweigh the rest.

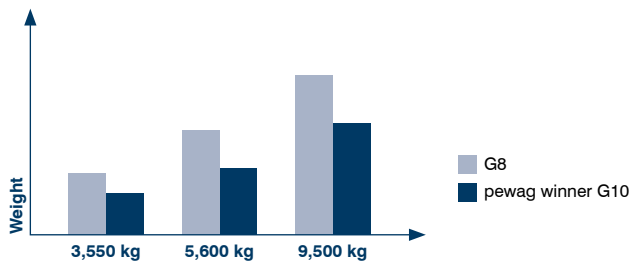
pewag is among the world's best manufacturers of lifting chains – for a good reason, as our products are the result of a responsible development process that focuses on user-friendliness and safety. These features are clearly measurable and form the basis of the pewag product development and manufacturing process, where only the best results count!

- 25 % more working load limit compared to G8.
- Simplified handling thanks to a 30 % weight reduction.



Working load limit	Previous chain Ø	pewag winner chain Ø
3,550	10	8
5,600	13	10
9,500	16	13

- Attractive price/performance ratio thanks to the small price



Working load limit	Previous chain weight	pewag winner chain weight	% weight reduction
3,550	16.20 kg	11.00 kg	32 %
5,600	27.60 kg	17.60 kg	36 %
9,500	42.20 kg	29.60 kg	30 %

differential compared to grade 8.

- One dimension smaller than grade 8 slings, for many load ranges – thus providing excellent value.
- Extended service life due to higher wear resistance.
- WIN 400 Easy identification – each link is marked with “W”. WIN 200 Easy identification – each link is marked with “10”.
- Code on chain and component ensures traceability of all manufacturing data.
- High-visibility orange powder-coating for simple visual

identification.

- Largest range of components in special grade 10 quality – for 11 chain dimensions.
- Fastest and simplest assembly of slings thanks to VMXKW set with unique shortening element.



- Additional safety feature compared to shortening claws, thus reducing risks resulting from improperly attached chains of our shortening hooks
- Easier and faster annual inspection as fewer components are used.
- Compatible with our grade 8 range – used slings are easy to repair. NOTE: Grade 10 components may be used to repair G8, but not at an increased working load limit!
- First company to offer parallel hooks with 100 % working load limit – shortening of the sling chain does not require a reduction in load caused by shear effect of the hook!
- 3 assembly systems of slings: welded, Connex and Clevis system.
- Pioneer: pewag were the first to sell G10 lifting chains and have a wealth of experience in this field.
- Quality-approved European production by an ISO 9001 certified company.
- Worldwide distribution network – smooth supply of spare and replacement parts.
- All components comply with EN 1677-1, -2, -3 or -4.
- A true-as-steel bonus: The pewag winner 400 chain meets the EN 818-2 with higher working load limit resp. PAS 1061 up to 16 mm and Machinery Directive 2006/42/EG.

## pewag lifting chains – environmentally friendly, resource-preserving, strong.

True-as-steel quality management principles best explain why pewag is now offering even more benefits for lifting chains. For instance, ISO 14001 certification is being rigorously implemented for the G10 lifting chains, resulting in significantly lowered energy and material consumption during manufacturing, thus preserving raw materials – an

environmentally friendly approach throughout! And the reduced amount of materials used also means that less material has to be recycled.

Core data of the pewag winner range – winner by name, winner by nature.

- **Top ranking:**

**pewag winner 200** – meets the requirements of ASTM A973/A973M-01 and of EN 818-2 but with higher working load limit (however admissible operating temperature of 200 °C max.) and 2006/42/EG Machinery Directive.

**Chain quality of pewag winner 400** meets the EN 818-2 with higher working load limit resp. PAS 1061 up to 16 mm and Machinery Directive 2006/42/EC.

- **Stress at working load limit:** 250 N/mm<sup>2</sup>.
- **Test stress:** 625 N/mm<sup>2</sup> – equals 2.5 times the working load limit.
- **Breaking stress:** 1,000 N/mm<sup>2</sup> – equals 4 times working load limit.
- **Breaking elongation:** min. 20 %.
- **Bending according to EN 818-2 and PAS 1061:** 0.8 x nominal diameter.
- **Admissible operating temperature:**  
pewag winner 200 – 200 °C max.  
pewag winner 400 – up to 380 °C.
- **Quality grade stamps**  
**pewag winner 200:** 10 at a spacing of approx. 300 mm till 16 mm chain (other 900mm) and 10 additionally on the back of each link.  
**pewag winner 400:** 10 at a spacing of approx. 300 mm up to 16 mm chain (other 900 mm) and W on the back of each link.  
**Components** – 10.
- **Manufacturer's name or symbol on the chain and components:** PW or pewag.
- **Surface:**  
**pewag winner 200:** shot-blasted and clear coated  
**pewag winner 400:** blue painted  
**Components:** orange powder-coated  
**Welded system:** blue painted

- **Compatibility:**

pewag winner chains and components may be combined by a competent person under consideration of the manufacturer specifications with all grade 8 components that meet the requirements of EN 818 and EN 1677. Furthermore, the pewag winner chains may be combined with all competitor chains and components that are compatible with EN 818 and EN 1677 qualified items. Please note that the products cannot be combined with items that do not comply with EN 818 or EN 1677! The maximum working load limit of the overall system is always defined by its weakest part.

Only original pewag spare parts (e. g. pins and bolts, safety catches, etc.) may be used for pewag products, subject to

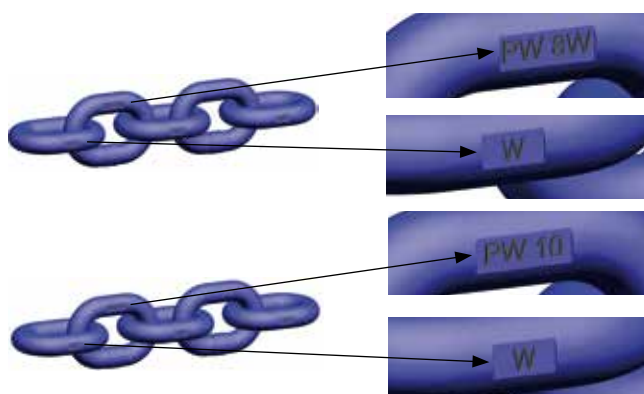
inspection and approval by the competent person.

- **Product characteristics** for stress crack corrosion are equal to those of grade 8.

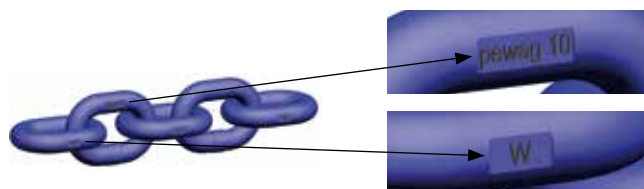
All dimensions given in this catalog are nominal dimensions. Depending on the manufacturing process they are subject to various manufacturing tolerances. Please contact our customer service if required.

## pewag winner chain markings

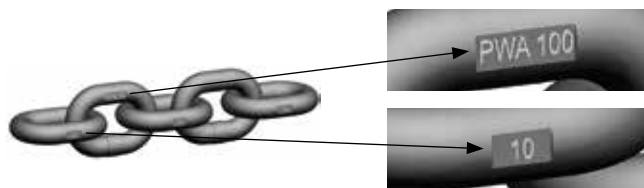
pewag winner 400 chain with old chain markings and the usual outstanding safety characteristics:



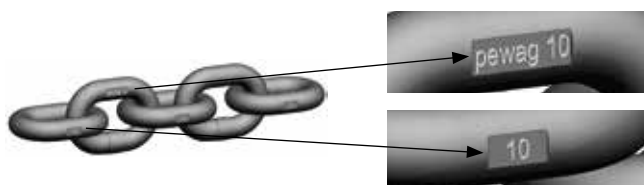
pewag winner 400 chain with new chain markings and the usual outstanding safety characteristics:



WIN 200 chain with old chainmarking:



WIN 200 chain with new chainmarking:



## Rectangular working load limit tag.

pewag is always striving to develop its products further. The shape of the working load limit tags was changed to a rectangular design that offers numerous benefits to the user, thus taking our idea of safety yet one step further.

The tags are made from stainless steel material and linked to the sling with stainless steel, quick-release fastener, thus considerably increasing user safety.

This will eliminate once and for all an error that happened fairly often in the past: As all standard documents for lifting chains describe ID tags where the number of corners correspond to the grade category of the lifting chain, users frequently made the mistake of estimating the working load limit of the chain based on this information, without paying attention to the actual markings on the tag. However, standards only ever describe the minimum requirements that a product must comply with and can always be exceeded.

The rectangular working load limit tags prevent this mistake from happening and offer the following benefits to the user:

- Prevention of incorrect assessment of the working load limit as looking at the tag prior to each lifting operation becomes unavoidable.
- When the marking is not observed, the lifting chain will be classed as a maximum grade 4.
- Corrosion-resistant: therefore resistant to solvents, acids, caustics and their vapours.
- Easily replaceable due to the stainless steel cable with quick-release fastener.
- All information is engraved, allowing for customer-specific markings.
- Pre-stamped years for the periodic inspections make it immediately apparent when the last inspection took place.
- For periodic inspections, only the month must be stamped.



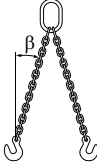
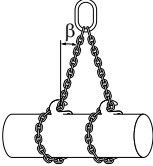



# **pewag winner G10 – in safety lies strength.**



## pewag winner working load limits.

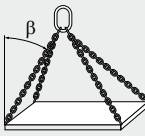




The working load limits listed are maximum values of the various sling types, stated according to the standard (Uniform Load) method of rating.

Safety factor 4	I-leg chains		II-leg chains				III- + IV-leg chains	
								
Angle of inclination $\beta$	-	-	0° – 45°	45° – 60°	0° – 45°	45° – 60°	0° – 45°	
Load factor	1	0.8	1.4	1	1.12	0.8	2.1	
Code	d	Working load limit [kg]						
WIN 5	5	1,000	800	1,400	1,000	1,120	800	2,000
Ni 5 G8	5	800	640	1,120	800	900	640	1,600
WIN 6	6	1,400	1,120	2,000	1,400	1,600	1,120	3,000
Ni 6 G8	6	1,120	900	1,600	1,120	1,250	900	2,360
WIN 7	7	1,900	1,500	2,650	1,900	2,120	1,500	4,000
Ni 7 G8	7	1,500	1,200	2,120	1,500	1,700	1,200	3,150
WIN 8	8	2,500	2,000	3,550	2,500	2,800	2,000	5,300
Ni 8 G8	8	2,000	1,600	2,800	2,000	2,240	1,600	4,250
WIN 10	10	4,000	3,150	5,600	4,000	4,250	3,150	8,000
Ni 10 G8	10	3,150	2,500	4,250	3,150	3,550	2,500	6,700
WIN 13	13	6,700	5,300	9,500	6,700	7,500	5,300	14,000
Ni 13 G8	13	5,300	4,250	7,500	5,300	5,900	4,250	11,200
WIN 16	16	10,000	8,000	14,000	10,000	11,200	8,000	21,200
Ni 16 G8	16	8,000	6,300	11,200	8,000	9,000	6,300	17,000
WIN 19	19	14,000	11,200	20,000	14,000	16,000	11,200	30,000
Ni 19 G8	19	11,200	8,950	16,000	11,200	12,500	8,950	23,600
WIN 22	22	19,000	15,000	26,500	19,000	21,200	15,000	40,000
Ni 22 G8	22	15,000	12,000	21,200	15,000	17,000	12,000	31,500
WIN 26	26	26,500	21,200	37,500	26,500	30,000	21,200	56,000
Ni 26 G8	26	21,200	16,950	30,000	21,200	23,700	16,950	45,000
WIN 32	32	40,000	31,500	56,000	40,000	45,000	31,500	85,000
Ni 32 G8	32	31,500	25,200	45,000	31,500	35,200	25,200	67,000

If the chain slings are used in severe conditions (e.g. high temperature, asymmetric load distribution, edge load, impact/shock loads), the maximum working load limit values in the table must be reduced by the load factors specified on page 20.

Please also note the user information on different conditions of use and their effects on the working load limit values!




The safety factor for all chain slings is 4. For higher safety factors, please reduce the working load limit or consult the technical department.

III- + IV- leg chains	IV- leg chains with load distributor		Endless chain sling	Single lifting sling		Double lifting sling	
							
45° – 60°	0° – 45°	45° – 60°	-	0° – 45°	45° – 60°	0° – 45°	45° – 60°
1.5	2.8	2	1.6	1.4	1	2.1	1.5
1,500	2,800	2,000	1,600	1,400	1,000	2,000	1,500
1,180	2,240	1,600	1,250	1,120	800	1,600	1,180
2,120	4,000	2,800	2,240	2,000	1,400	3,000	2,120
1,700	3,150	2,240	1,800	1,600	1,120	2,360	1,700
2,800	5,300	3,750	3,000	2,650	1,900	4,000	2,800
2,240	4,000	3,000	2,500	2,120	1,500	3,150	2,240
3,750	7,100	5,000	4,000	3,550	2,500	5,300	3,750
3,000	5,600	4,000	3,150	2,800	2,000	4,250	3,000
6,000	11,200	8,000	6,300	5,600	4,000	8,000	6,000
4,750	8,500	6,300	5,000	4,250	3,150	6,700	4,750
10,000	19,000	13,200	10,600	9,500	6,700	14,000	10,000
8,000	14,000	10,600	8,500	7,500	5,300	11,200	8,000
15,000	28,000	20,000	16,000	14,000	10,000	21,200	15,000
11,800	22,400	16,000	12,500	11,200	8,000	17,000	11,800
21,200	39.200	28.000	22,400	20,000	14,000	30,000	21,200
17,000	-	-	18,000	16,000	11,200	23,600	17,000
28,000	53.200	38.000	30,000	26,500	19,000	40,000	28,000
22,400	-	-	23,600	21,200	15,000	31,500	22,400
40,000	74.200	53.000	42,500	37,500	26,500	56,000	40,000
31,500	-	-	33,500	30,000	21,200	45,000	31,500
60,000	-	-	63,000	56,000	40,000	85,000	60,000
47,500	-	-	50,000	45,000	31,500	67,000	47,500

## Exceptional conditions of use.

Even the highest-quality products will lose some of their working load limit if used at high temperatures, as a consequence of asymmetric load distribution, edge loading, shock/impact loading or other exceptional conditions of use. Please consult the user information for details.

The following circumstances are considered exceptional conditions of use as outlined above:

<b>Temperature</b>	-40 °C – 200 °C	above 200 °C – 300 °C	above 300 °C – 380 °C
<b>Load factor pewag winner 200</b>	1	not permissible	not permissible
<b>Load factor pewag winner 400</b>	1	0.9	0.75
<b>Asymmetric load distribution</b>	The WLL has to be reduced by at least 1 leg. In case of doubt only consider 1 leg as load-bearing.		
<b>Edge load *</b>	R = larger than 2 x d*	R = larger than d*	R = smaller than d*
			
<b>Load factor</b>	1	0.7	0.5
<b>Shock</b>	slight shocks	medium shocks	strong shocks
<b>Load factor</b>	1	0.7	not permissible

\* d = dia. of chain

## Sample order text for pewag winner sling types.

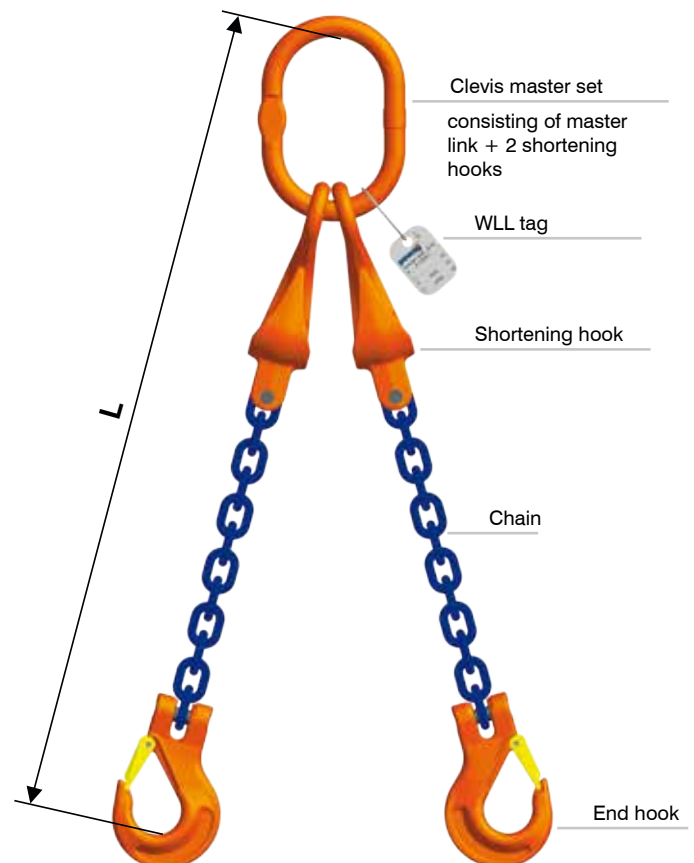
Here you will find some examples that show what an order of a fully assembled and commercially available pewag winner G10 chain slings could look like, clearly labelled and with all components and measurements.

What you see here is a pewag winner 400 II-leg chain sling, 13 mm, with shortening device and hook. Length: 3000 mm.

### Clevis system:

**WIN 13 400 II VMXKW – KHSW 3000**

Short designation of the chain | Number of legs | Clevis master set | Endhook | Length [mm]

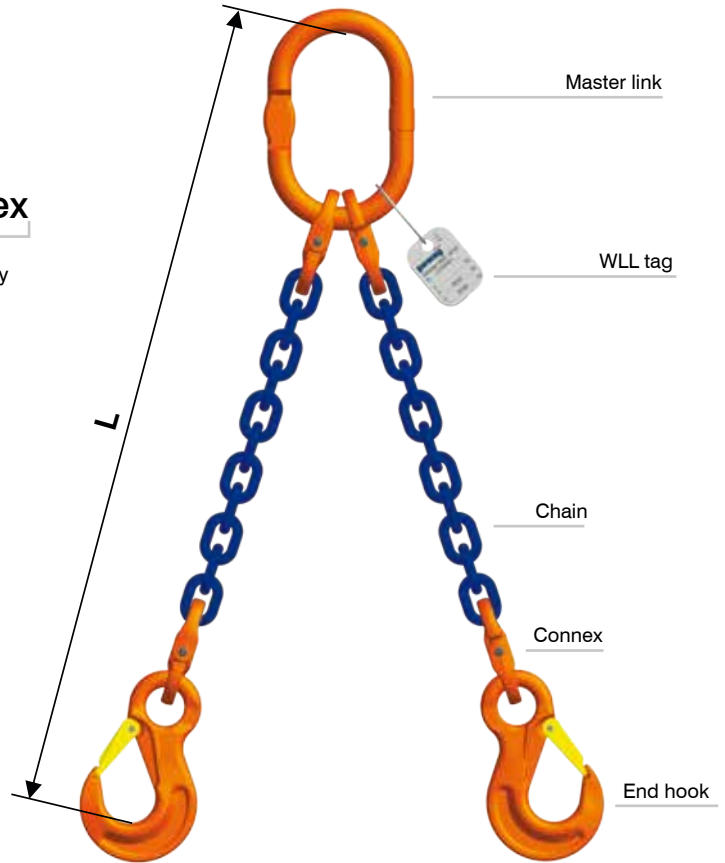


## Sample order text.

### Connex System:

**WIN 13 400 II AW – HSW 3000 Connex**

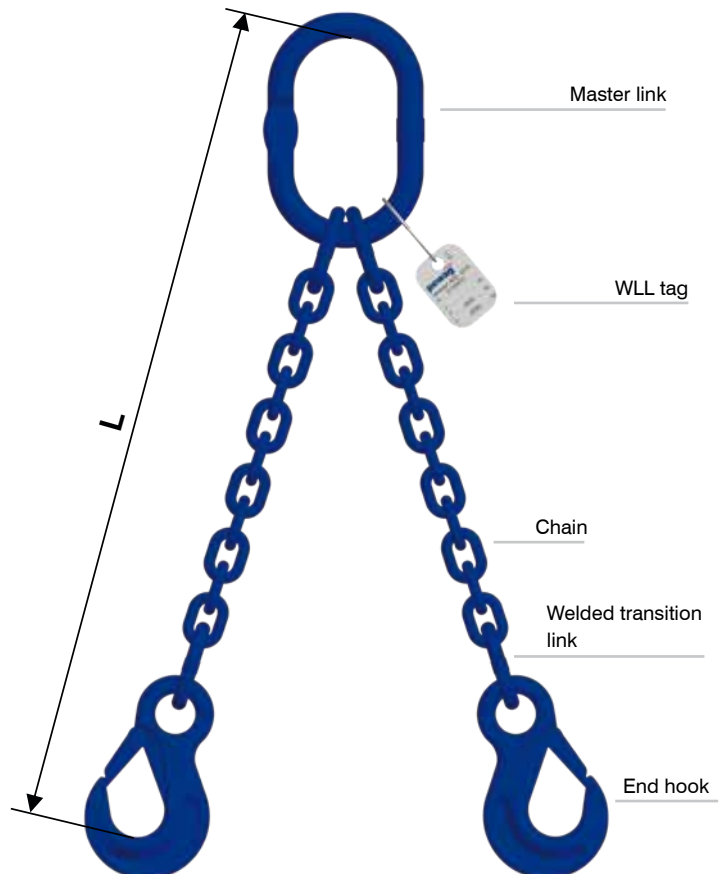
Short designation of the chain	Number of legs	Master link	End hook	Length [mm]	Assembly system
--------------------------------	----------------	-------------	----------	-------------	-----------------



### Welded system:

**WIN 13 400 II AW – HSW 3000**

Short designation of the chain	Number of legs	Master link	End hook	Length [mm]
--------------------------------	----------------	-------------	----------	-------------



### Information:

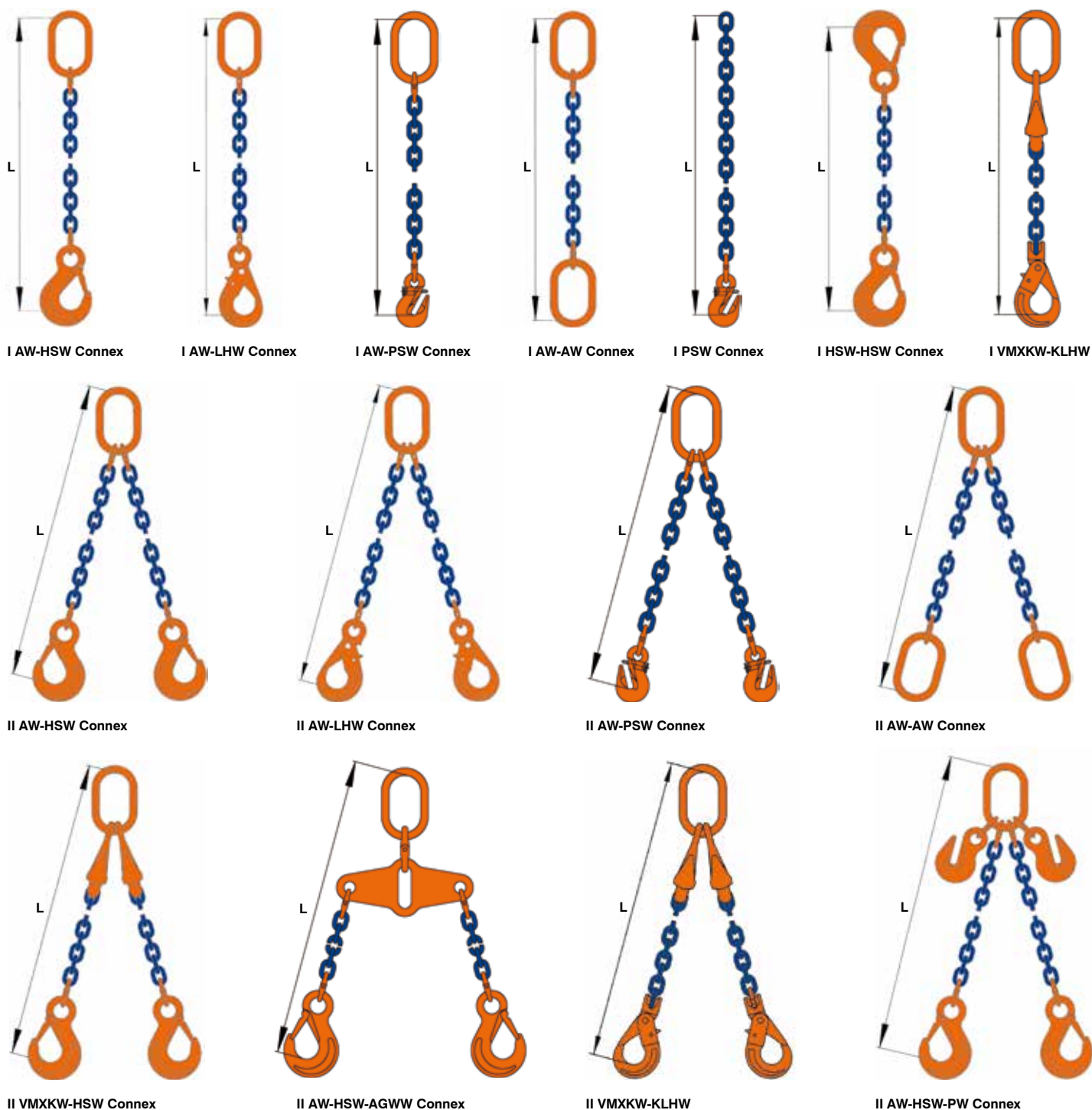
Information: Without the additional text „Connex“ at the end of the short chain sling designation, a sling chain in welded execution is automatically assumed.

## pewag winner standard sling types – perfect in the original!

If you require a sling type that is not listed here, please submit a small sketch indicating the required type.

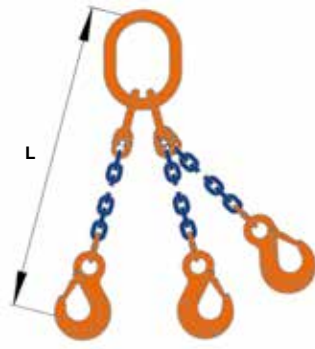
Important: Especially if you handle the assembly yourself, make sure that only pewag winner original parts are used! The usual tolerance of length “L” is +2 chain pitches.

The sling designation system is the same as that of G8. The additional “W” in the code of the individual parts points to the higher quality grade.

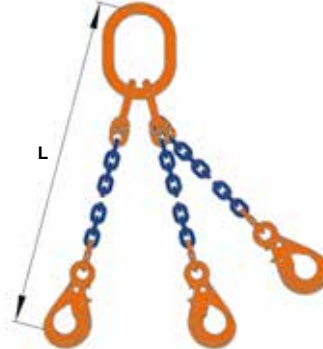




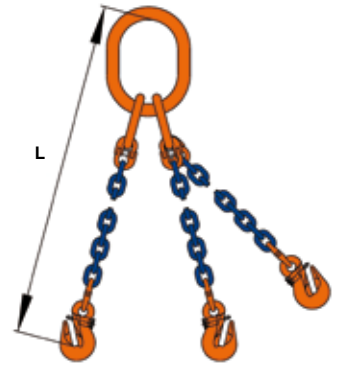
II AW-S-PW Connex



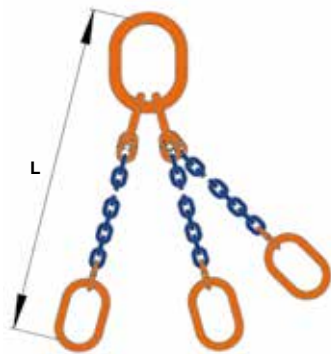
III VW-HSW Connex



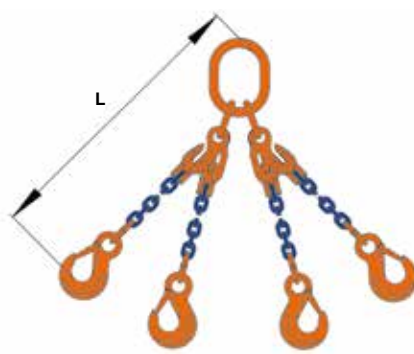
III VW-LHW Connex



III VW-PSW Connex



III VW-AW Connex



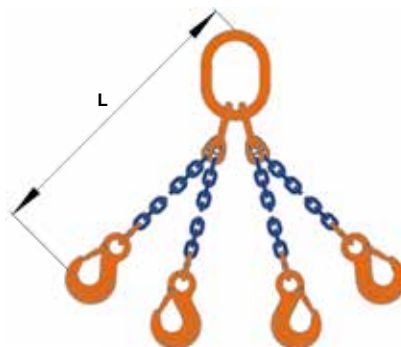
IV VMXKW-HSW Connex



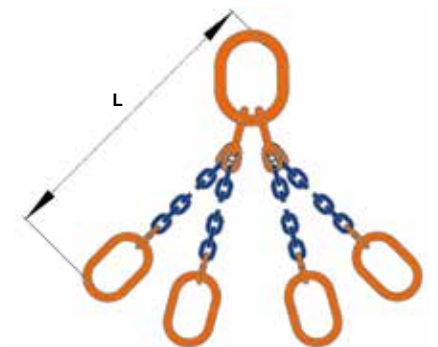
IV VW-HSW-AGWW Connex



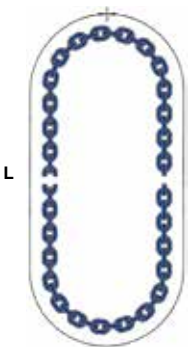
IV VMXKW-KLHW



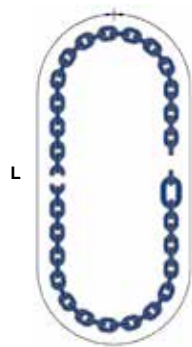
IV VW-HSW Connex



IV VW-AW Connex



S



SK (up from dimension 8!)



II AW-S Connex



IV VW-S Connex

# Chains in G10

## Product overview

### Content

pewag coropro	20-21
Lifting chains pewag winner 400	22
Lifting chains pewag winner 200	23





# Safe. Innovative. pewag.

## The innovative corrosion protection system from pewag.

**pewag coropro is an electrochemical deposited anticorrosion coating, which has a zinc bondering pretreatment. In a dipping bath, an epoxy based anticorrosion layer is electrochemically isolated on the surface of the work pieces by coagulating the binder. The so isolated micro layer is hardened in special ovens at a temperature of 150 °C – 180 °C.**

pewag coropro is not containing any heavy metals like lead, cadmium and hexavalent chromium (CrVI-free).

Technical properties of the products are not influenced negatively. The coating process is free of hydrogen to the work piece. This is very important on products with high material strengths over 1.000 N/mm<sup>2</sup>.

The colouring is black, similar to RAL 9005.

The size of the layer is 20±5 µm. Because of this very thin micro layer, the corrosion protection system is very suitable for complex structures, like threads or movable parts.

### **Crosscut adhesion test method acc. to: ISO 2409, DIN 53151, ASTM 3002, ASTM D3359**

The crosscut adhesion test provides information about the bond strength of PCP on the surface. With crosscut significant value 0 (null) – PCP shows optimal adhesion. A sub-surface migration and delamination of the PCP-layer by corrosion processes is avoided due to the optimal adhesion.

### **Outdoor weathering test**

The chain was over 12 months exposed to weathering of rain, sun and snow. Beside a slight matt look of the surface none erosion could be noticed.

### **Corrosion protection values in comparison**

Salt spray test according to ISO 9227 (duration without corrosion of the base material respectively red rust)\*

Corrosion protection values in comparison	
PCP – coropro	> 430 h
PC – powder coated	> 360 h
GZN – electro galvanized 10 µm, blue chromated	120 h
LAC – varnished	24 h

\*) At mechanical undamaged, not covered areas. Minimal covered areas may occur at the coating process.

### **Magnetic crack detection („Magnaflux process“)**

pewag coropro-coated chains and components are able to be tested by magnetic crack detection without problem.




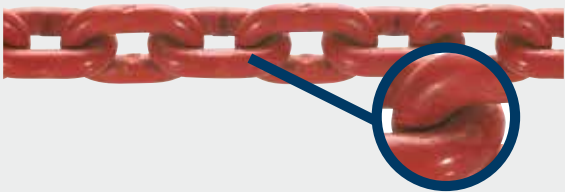



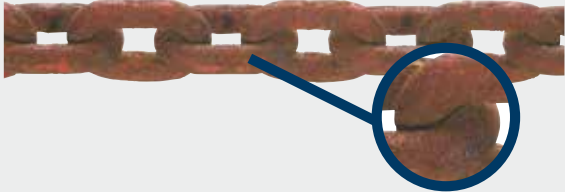
### **Indication of PCP**

For the pewag articles the coating with pewag coropro is indicated by the abbreviation PCP.

Example of order text: WINNER 400 PAS – 8 x 24 PCP

**pewag corropro**

**Salt spray test –  
to ISO 9227 (NSS-test).**

Starting situation	Final state
<p><b>PCP – corropro</b></p>  <p><b>before</b></p>	<p><b>after 528 h</b></p> 
<p><b>PC – powder coated</b></p>  <p><b>before</b></p>	<p><b>after 528 h</b></p> 
<p><b>GZN - electrogalvanized</b></p>  <p><b>before</b></p>	<p><b>after 288 h</b></p> 
<p><b>LAC – varnished</b></p>  <p><b>before</b></p>	<p><b>after 168 h</b></p> 

# pewag winner 400 Lifting chains

## Too strong to be broken.

These grade 10 high-duty chains are manufactured according to EN 818-2 with mechanical values for G10/PAS 1061. Further they are BG-approved and are ideal for the assembly of chain slings and lashing chains as well as for lifting and transporting loads. The permitted operating temperature ranges from -40 °C to + 380 °C

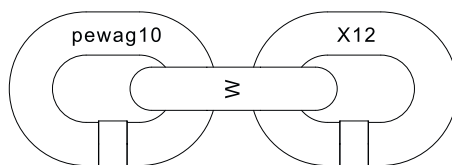
The standard surface is blue and the chains are available in dimensions from 5 to 32 mm. For more information, please refer to the full operating manual.



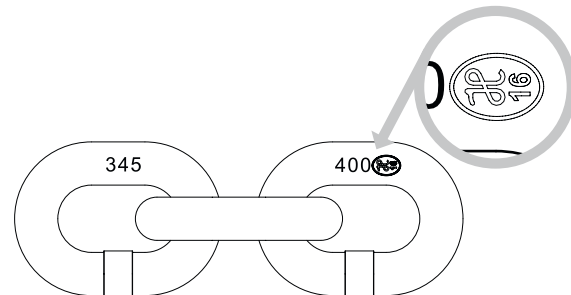
winner 400 Lifting chains	Code	Nominal diameter dn [mm]	Standard delivery length [m]	Pitch t [mm]	Inside width b1 min. [mm]	Outside width b2 max. [mm]	Working load limit [kg]	Breaking force [kN]	Weight [kg/m]
	WIN 5 400	5	50	16	7,50	18,50	1.000	39,30	0,61
	WIN 6 400	6	50	18	8,70	22,20	1.400	56,50	0,96
	WIN 7 400	7	50	21	9,50	25,20	1.900	77	1,20
	WIN 8 400	8	50	24	10,90	28,80	2.500	101	1,57
	WIN 10 400	10	50	30	13,50	36	4.000	157	2,46
	WIN 13 400	13	50	39	17,70	46,40	6.700	265	4,05
	WIN 16 400	16	25	48	21,50	57,60	10.000	402	6,28
	WIN 19 400	19	25	57	26,60	69,40	14.000	567	8,92
	WIN 22 400	22	25	66	29,50	79,20	19.000	760	11,88
	WIN 26 400	26	25	78	35	94	26.500	1.060	16,18
	WIN 32 400	32	15	96	43,20	115	40.000	1.610	24,10

The standard chain is painted blue, optionally also available with the tried-and -tested coropro coating PCP for maximum corrosion resistance.

**Stamping for:**  
Chain slings WIN 6 400 to WIN 16 400  
Manufacturer: pewag  
grade: 10  
Type: 400 "H16  
Traceability code: X12345

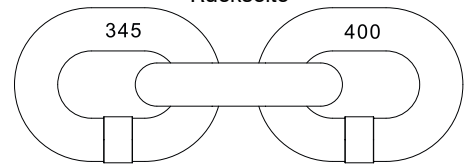
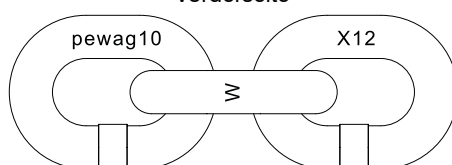


Vorderseite



Rückseite

**Stamping for:**  
Chain slings WIN 5 400 and WIN 19 400 to WIN 32 400  
Manufacturer: pewag  
Grade: 10  
Type: 400  
Traceability code: X12345



## pewag winner 200 Round steel chains

### Performance you can rely on.

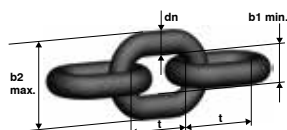
These grade 10 high-duty chains are manufactured according to EN 818-2 modified with mechanical values for G 10.

The winner 200 round-steel chains are particularly suitable in lifting and lashing chains and withstand operating temperatures between -40 °C and +200 °C. These chains are available in dimensions from 5 to 32 mm and the standard surface is blasted and clear painted.

Please notice that they are not allowed for lifting chains in Austria.



#### winner 200 Round steel chains



Code	Nominal diameter dn [mm]	Standard delivery length [m]	Pitch t [mm]	Inside width b1 min. [mm]	Outside width b2 max. [mm]	Working load limit [kg]	Breaking force [kN]	Weight [kg/m]
WIN 5 200	5	50 / 100	16	7,50	18,50	1,000	39.30	0.61
WIN 6 200	6	50 / 200	18	8,70	21,60	1,400	56.50	0.96
WIN 7 200	7	50 / 250 / 300	21	9,50	25,20	1,900	77	1.20
WIN 8 200	8	50 / 50 / 200 / 250	24	10,90	28,80	2,500	101	1.57
WIN 10 200	10	50 / 130 / 150	30	13,50	37	4,000	157	2.46
WIN 13 200	13	50 / 75 / 100	39	17,50	46,80	6,700	265	4.18
WIN 16 200	16	25 / 50 / 100	48	21,50	57,60	10,000	402	6.28
WIN 19 200	19	25 / 35 / 50	57	26,60	69,40	14,000	567	8.92
WIN 22 200	22	25 / 30	66	29,50	79,20	19,000	760	11.88
WIN 26 200	26	25	78	35	94	26,500	1,060	16.18
WIN 32 200	32	20	96	43,20	115	40,000	1,610	24.10

The chain is lack varnished, optionally also available with the tried-and-tested coropro coating PCP for maximum corrosion resistance.

# Master links and sub-assemblies in G10

## Product overview

### Contents

Master links	26-27
Transition links	28
Four-leg assemblies	29-31
Oversize master link assemblies	32-36
Clevis master sets	37-45





# pewag AW Master link

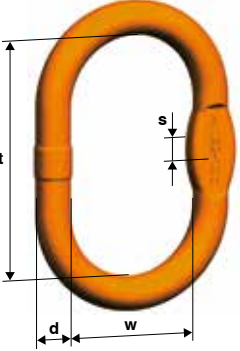
## Perfection from start to finish.

This master link is ideally suited for pewag Connex and as a component in the welded system. It may also be used as a master link for I-leg and II-leg slings.

For III- and IV-leg slings it can only be used in conjunction with BW transition links in VW IV-leg assemblies. Ideal for simple, speedy assembly of I- and II-leg chain slings using Connex connecting elements. May also be used as a master link in welded systems. Also suitable as an end link. See table for the maximum crane hook size as specified by DIN 15401 and DIN 15402.

The flattened section enables universal connecting options – an important benefit of this high-grade link. Links are manufactured according to EN 1677-4 with mechanical values for G10. BG-approval, CE-marking and full operating manual available.



AW Master link	Code	Working load limit 0°-45° [kg]	Fits on single hook acc. DIN 15401 no.	Fits on double hook acc. DIN 15402 no.	For 1-leg slings	For 2-leg slings	d	t	w	s	Weight [kg/pc.]
							[mm]	[mm]	[mm]	[mm]	
	AW 10	1.400	1,6	2,5	5	5	10	80	50	10	0,14
	AW 13	2.300	2,5	4	6+7	6	13	110	60	10	0,34
	AW 16	3.500	2,5	4	8	7	16	110	60	14	0,53
	AW 18	5.000	5	6	10	8	19	135	75	14	0,92
	AW 22	7.600	6	8	13	10	23	160	90	17	1,60
	AW 26	10.000	8	10	16	13	27	180	100	20	2,46
	AW 32	14.000	10	12	19	16	33	200	110	26	4,14
	AW 36	25.100	16	20	22	19	36	260	140	29	6,22
	AW 45	30.800	25	32	26	22	45	340	180	-	12,82
	AW 50	40.000	32	40	32	26	50	350	190	43	16,55
	AW 56	64.000	32	40	-	32	56	400	200	-	22
	AW 72	85.000	50	63	-	-	70	460	250	-	45,30

For chain sling working load limits, please refer to the table "pewag winner working load limits".

## pewag MW Enlarged master link

### Universally connected.

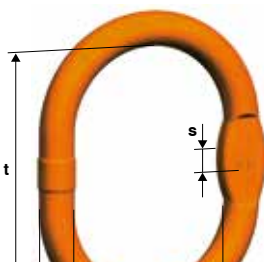
A flattened section on the master link opens up additional, universal connection possibilities. It is ideal for the simple, speedy assembly of I- and II-leg chains using Connex connecting elements, as a master link in welded systems and as an end link. Its inner dimensions are larger than those of the AW master link, making it suitable for larger crane hooks or special hooks.

The MW enlarged master link must not be used for IV-leg chains, except when combined with BW transition links in VMW IV-leg assemblies.

Manufactured according to EN 1677-4 with mechanical values according to G10. With CE-marking and full operating manual.

See table below for the maximum crane hook size as specified by DIN 15401 and DIN 15402.



MW Enlarged master link	Code	Working load limit 0°-45° [kg]	Fits on single hook acc. DIN 15401 no.	Fits on double hook acc. DIN 15402 no.	For 1-leg slings	For 2-leg slings
	MW 10	1.400	2,5	4	5	5
	MW 13	2.300	4	5	6+7	6
	MW 16	3.200	5	6	8	7
	MW 18	4.200	6	8	10	8
	MW 22	6.700	10	12	13	10
	MW 26	10.100	10	12	16	13
	MW 32	16.000	12	16	19	16
	MW 36	21.200	20	25	22	19
	MW 56	40.000	50	63	32	26

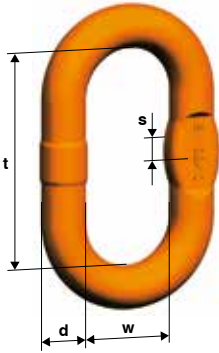
Code	d [mm]	t [mm]	w [mm]	s [mm]	Weight [kg/pc.]
MW 10	11	90	65	10	0,22
MW 13	14	120	70	10	0,44
MW 16	16	140	80	13	0,71
MW 18	19	160	95	14	1,09
MW 22	23	170	105	17	1,74
MW 26	27	190	110	20	2,65
MW 32	33	230	130	26	4,78
MW 36	38	275	150	29	7,48
MW 56	56	350	250	46	21,98

# pewag BW Transition link

## Versatile by default.

This link is versatile. It can be used as a transition and as an end link in welded systems. The flattened section opens up universal connection possibilities. The CE-marking and BG-approval ensure flawless quality. This transition link is manufactured according to EN 1677-4 with mechanical values according to G10 and is supplied with a full operating manual, offering users outstanding versatility at the highest level.



BW Transition link	Code	Working load limit 0°-45° [kg]	d [mm]	t [mm]	w [mm]	s [mm]	Weight [kg/pc.]	Transition link for chain Ø I- + II-leg BW I/II
	BW 7	1.000	7	36	16	-	0,03	5
	BW 8 <sup>1)</sup>	1.400	8	36	16	-	0,05	6
	BW 9	1.900	9	44	20	-	0,07	7
	BW 10	2.500	10	44	20	-	0,09	8
	BW 13	4.000	13	54	25	10	0,17	10
	BW 16	6.700	17	70	34	14	0,39	13
	BW 20	10.000	20	85	40	14	0,69	16
	BW 22	12.500	23	115	50	17	1,16	-
	BW 23 <sup>1)</sup>	14.000	23	115	45	17	1,16	19
	BW 26	16.200	27	140	65	20	1,92	-
	BW 27 <sup>1)</sup>	19.000	27	140	55	20	1,92	22
	BW 32	26.500	33	150	70	26	3,16	26
	BW 36	31.000	36	170	75	-	4,35	-
	BW 40	40.400	40	170	80	-	4,12	32
	BW 45 <sup>1)</sup>	42.400	45	170	80	-	7,15	-
	BW 50	64.000	50	200	100	-	10,58	-

<sup>1)</sup> Only in welded systems.

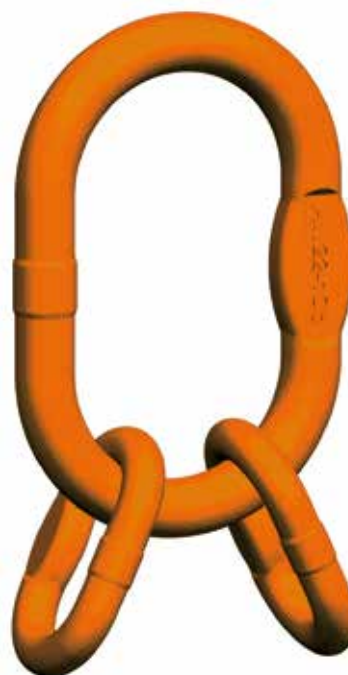
# pewag VW IV-leg Master link assembly

## Universal connection possibilities.

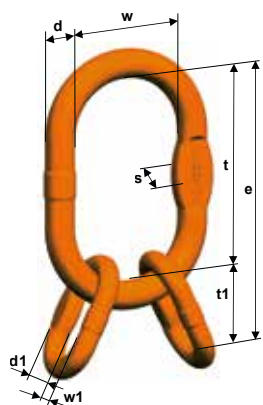
This standard master link assembly is ideal for preparing III- and IV-leg chain slings in assembled or welded systems. It is manufactured according to EN 1677-4 with mechanical values for G10.

A flattened section on the transition links open up additional, universal connection possibilities (measurements can be obtained from the product "BW"). Includes CE-marking, BG-approval and full operating manual.

See table for the maximum crane hook size as specified by DIN 15401 and DIN 15402.



VW IV-leg Master link assembly



Code	Consisting of	Working load limit 0°-45° [kg]	Fits on single hook acc. DIN 15401 no.	Fits on double hook acc. DIN 15402 no.
VW 5	AW 13 + 2 BW 10	2.300	2,5	4
VW 6	AW 18 + 2 BW 13	4.200	5	6
VW 7/8	AW 22 + 2 BW 16	7.600	6	8
VW 10	AW 26 + 2 BW 20	9.600	8	10
VW 13	AW 32 + 2 BW 22	14.000	10	12
VW 16	AW 36 + 2 BW 26	21.200	16	20
VW 19/20	AW 50 + 2 BW 32	34.100	32	40
VW 22	AW 50 + 2 BW 36	40.000	32	40
VW 26	AW 56 + 2 BW 45	56.000	32	40
VW 32	AW 72 + 2 BW 50	85.000	50	63

Code	e [mm]	d [mm]	t [mm]	w [mm]	s [mm]	d1 [mm]	t1 [mm]	w1 [mm]	Weight [kg/pc.]
VW 5	154	13	110	60	10	10	44	20	0,52
VW 6	189	19	135	75	14	13	54	25	1,30
VW 7/8	230	23	160	90	17	17	70	34	2,32
VW 10	265	27	180	100	20	20	85	40	3,82
VW 13	315	33	200	110	26	23	115	50	6,46
VW 16	400	36	260	140	29	27	140	65	10,06
VW 19/20	500	50	350	190	43	33	150	70	22,62
VW 22	520	50	350	190	43	36	170	75	24,54
VW 26	570	56	400	200	-	45	170	80	37,60
VW 32	660	70	460	250	-	50	200	100	66,60

Please note that the allocation does not apply to suspension systems with a load distributor.

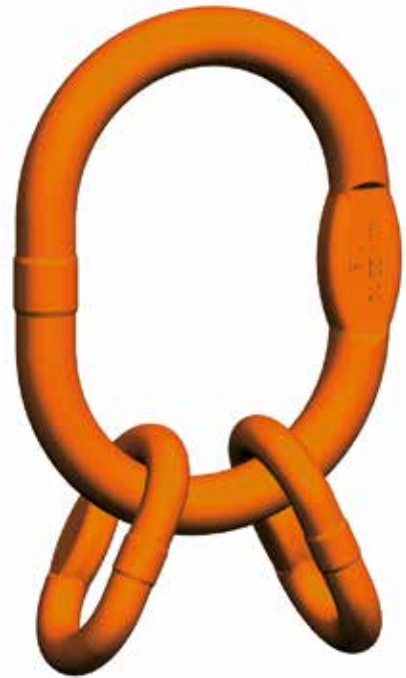
# pewag VMW Enlarged IV-leg master link assembly

## The link to strength.

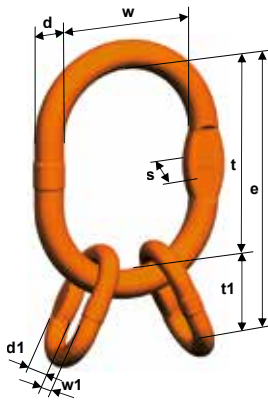
This master link assembly for III- and IV-leg chain slings in assembled or welded systems complies with EN 1677-4 and the mechanical values for G10.

A flattened section on the transition links opens up additional, universal connection possibilities (measurements can be obtained from the product "BW"). Thanks to the use of MW links, this master link assembly has larger inside dimensions than the VW IV-leg master link assembly and can thus also be used for the next size up crane hooks.

See table below for the maximum crane hook size as specified by DIN 15401 and DIN 15402. This powerful package comes with CE-marking and a full operating manual.



VMW Enlarged IV-leg master link assembly



Code	Consisting of	Working load limit 0°-45° [kg]	Fits on single hook acc. DIN 15401 no.	Fits on double hook acc. DIN 15402 no.
VMW 6	MW 18 + 2 BW 13	4.200	6	8
VMW 7/8	MW 22 + 2 BW 16	6.600	10	12
VMW 10	MW 26 + 2 BW 20	10.100	10	12
VMW 13	MW 32 + 2 BW 22	15.700	12	16
VMW 16	MW 36 + 2 BW 26	21.200	20	25
VMW 19/20	MW 56 + 2 BW 32	34.100	50	63
VMW 22	MW 56 + 2 BW 36	40.000	50	63

Code	e [mm]	d [mm]	t [mm]	w [mm]	s [mm]	d1 [mm]	t1 [mm]	w1 [mm]	Weight [kg/pc.]
VMW 6	214	19	160	95	14	13	54	25	1,43
VMW 7/8	240	23	170	105	17	17	70	34	2,46
VMW 10	275	27	190	110	20	20	85	40	4,01
VMW 13	345	33	230	130	26	23	115	50	7,10
VMW 16	415	38	275	150	29	27	140	65	11,30
VMW 19/20	500	56	350	250	46	33	150	70	28,30
VMW 22	520	56	350	250	46	36	170	75	30,22

Please note that the allocation does not apply to suspension systems with a load distributor.

## pewag VAW Special IV-leg master link assembly

### An XL range of applications.

This IV-leg master link assembly can be used for III- and IV-leg chain slings in the assembled or welded system and is even more versatile due to universal connection possibilities.

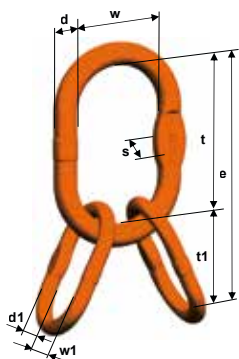
If safety is your strongest argument, you can't do better than choose this IV-leg master link assembly with extra-large transition links for assembling your chain slings. For use in rope slings, please consider that working load limit is indicated with safety factor 4!

See table below for the maximum crane hook size as specified by DIN 15401 and DIN 15402. For the detailed measurements of the single components please refer to the product "AW".

The chain sling complies with EN 1677-4 and the mechanical values for G10. Includes CE-marking, BG-approval and full operating manual.



VAW Special IV-leg master link assembly



Code	Consisting of	Working load limit 0°-45° [kg]	Fits on single hook acc. DIN 15401 no.	Fits on double hook acc. DIN 15402 no.
VAW 6/7	AW 18 + 2 AW 14	5.000	5	6
VAW 8	AW 22 + 2 AW 16	6.300	6	8
VAW 10	AW 26 + 2 AW 18	9.500	8	10
VAW 13	AW 32 + 2 AW 26	16.100	10	12
VAW 16	AW 36 + 2 AW 32	25.100	16	20
VAW 19/20	AW 50 + 2 MW 36	41.100	32	40
VAW 22	AW 50 + 2 AW 45	47.400	32	40
VAW 26	AW 56 + 2 AW 50	58.000	32	40
VAW 32	AW 72 + 2 AW 56	85.000	50	63

Code	e [mm]	d [mm]	t [mm]	w [mm]	s [mm]	d1 [mm]	t1 [mm]	w1 [mm]	Weight [kg/pc.]
VAW 6/7	245	19	135	75	14	14	110	60	1,72
VAW 8	270	23	160	90	17	16	110	60	2,66
VAW 10	315	27	180	100	20	19	135	75	4,30
VAW 13	380	33	200	110	26	27	180	100	9,06
VAW 16	460	36	260	140	29	33	200	110	14,53
VAW 19/20	625	50	350	190	43	38	275	150	31,51
VAW 22	690	50	350	190	43	45	340	180	42,19
VAW 26	750	56	400	200	-	50	350	190	56,40
VAW 32	860	70	460	250	-	56	400	200	99,02

Please note that the allocation does not apply to suspension systems with a load distributor.

# pewag VLW 1 Master link assembly

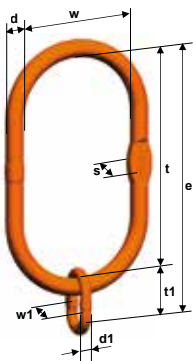
## Convincing simplicity.

This master link assembly for I-leg chain slings in assembled or welded systems complies with EN 1677-4 and the mechanical values for G10. Extra-large rings make this master link assembly the perfect partner for crane hooks according to DIN 15401 up to no. 25 and according to DIN 15402 up to no. 32. A flattened section on the transition links open up additional, universal connection possibilities (measurements can be obtained from the product "BW").

This true all-rounder comes with a full operating manual. CE-marking and BG-approval ensure quality of the highest order.



VLW 1 Master link assembly



Code	Consisting of	Working load limit [kg]	Fits on single hook acc. DIN 15401 no.	Fits on double hook acc. DIN 15402 no.
VLW 1-6/7/8	LW 22 + BW 13	2.500	25	32
VLW 1-10	LW 27 + BW 16	4.000	25	32
VLW 1-13	LW 27	6.700	25	32
VLW 1-16	LW 32	10.000	25	32
VLW 1-19/22	LW 40	19.000	25	32

Code	e [mm]	d [mm]	t [mm]	w [mm]	s [mm]	d1 [mm]	t1 [mm]	w1 [mm]	Weight [kg/pc.]
VLW 1-6/7/8	394	23	340	180	17	13	54	25	3,37
VLW 1-10	410	27	340	180	20	17	70	34	4,76
VLW 1-13	340	27	340	180	20	-	-	-	4,40
VLW 1-16	340	33	340	180	27	-	-	-	6,70
VLW 1-19/22	340	40	340	180	29	-	-	-	10,00

**Example:** VLW 1-6/7/8 can be used for I-leg slings with 6 mm, 7 mm and 8 mm chains.

## pewag VLW 2/4 Master link assembly

### Effortless adaptability.

This master link assembly is designed for the effortless creation of II- and IV-leg chain slings in the assembled or welded system. The flattened section on the transition links opens up additional, universal connection possibilities (measurements can be obtained from the product "BW").

Extra-large rings make this master link assembly the perfect partner for crane hooks according to DIN 15401 up to no. 25 and according to DIN 15402 up to no. 32. This master link assembly also comes with CE-marking and BG-approval and was manufactured according to EN 1677-4, with the mechanical values of the G10 programme.

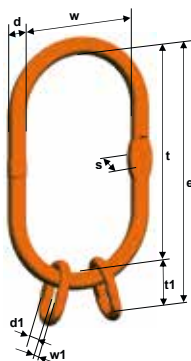
A full operating manual provides detailed information on all potential areas of use.



VLW 2/4 Master link assembly	Code	Consisting of	Working load limit 0°-45° [kg]	Fits on single hook acc. DIN 15401 no.	Fits on double hook acc. DIN 15402 no.	For 2-leg slings	For 3- and 4-leg slings
	VLW 2-6/7/8/4-6	LW 22 + 2 BW 13	3.550	25	32	6/7/8	6
	VLW 2-10/4-7/8	LW 27 + 2 BW 16	5.600	25	32	10	7/8
	VLW 2-13/4-10	LW 32 + 2 BW 20	9.500	25	32	13	10
	VLW 2-16/4-13	LW 40 + 2 BW 22	14.000	25	32	16	13
	VLW 2-19/4-16	LW 40 + 2 BW 26	21.200	25	32	19	16

Code	e [mm]	d [mm]	t [mm]	w [mm]	s [mm]	d1 [mm]	t1 [mm]	w1 [mm]	Weight [kg/pc.]
VLW 2-6/7/8/4-6	394	23	340	180	17	13	54	25	3,54
VLW 2-10/4-7/8	410	27	340	180	20	17	70	34	5,12
VLW 2-13/4-10	425	33	340	180	27	20	85	40	7,81
VLW 2-16/4-13	455	40	340	180	29	23	115	50	12,32
VLW 2-19/4-16	480	40	340	180	29	27	140	65	13,84



**Example of multi-leg chain sling:** VLW 2-10/4-7/8 can be used for 10 mm II-leg slings and for 7+8 mm IV-leg slings.

# pewag VSW 2/4 Oversize master link assembly

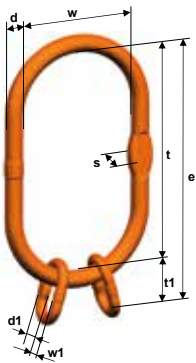
## Smart. strong. secure.

This master link assembly is designed for the effortless creation of II- and IV-leg chain slings in the assembled or welded system. The flattened section on the transition links opens up additional, universal connection possibilities. Extra-large rings make this master link assembly the perfect partner for crane hooks according to DIN 15401 up to no. 40 and according to DIN 15402 up to no. 50. This master link assembly also comes with CE marking and was manufactured according to EN 1677-4, with the mechanical values of the G10 programme.

A full operating manual provides detailed information on all potential areas of use.



VSW 2/4 Oversize master link assembly



Code	Consisting of	Working load limit 0°-45° [kg]	Fits on single hook acc. DIN 15401 no.	Fits on double hook acc. DIN 15402 no.	For 2-leg slings	For 3- and 4-leg slings
VSW 2-10 / 4-8	SW 30 + 2 BW 20	5.600	40	50	10	8
VSW 2-13 / 4-10	SW 33 + 2 BW 20	9.500	40	50	13	10
VSW 2-16 / 4-13	SW 36 + 2 BW 22	14.000	40	50	16	13
VSW 2-19/20 / 4-16	SW 45 + 2 BW 26	21.200	40	50	19/20	16

Code	e [mm]	d [mm]	t [mm]	w [mm]	s [mm]	d1 [mm]	t1 [mm]	w1 [mm]	Weight [kg/pc.]
VSW 2-10 / 4-8	515	30	430	220	24	20	85	40	8,16
VSW 2-13 / 4-10	515	33	430	220	26	20	85	40	9,66
VSW 2-16 / 4-13	545	36	430	220	29	23	115	50	12,32
VSW 2-19/20 / 4-16	570	45	430	220	-	27	140	65	19,54

**Example of multi-leg chain sling:** VSW 2-10/4-8 can be used for 10 mm II-leg slings and for 8 mm IV-leg slings.

## pewag VSAW 1 Master link assembly

### Does the heavy job for you.

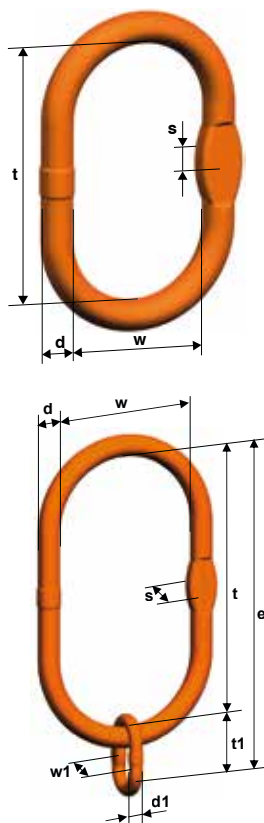
Ideal for the quick and safe mounting of transition assemblies. These master links make it possible to create extremely short assemblies, facilitating the switch from a large to a small crane hook - useful in many lifting and transport processes!

This standard master link assembly is ideal for preparing I-leg chain slings in assembled or welded systems and have a working load limit of up to 40,000 kg. Extra-large internal ring dimensions that are suitable for single hooks according to DIN 15401 no. 50/100 or for double hooks according to DIN 15402 no. 63/125 are yet another outstanding feature of these products.

A flattened ring section opens up universal adaptation possibilities that are also outlined in the full operating manual. The assemblies are manufactured according to EN 1677-4 with the mechanical values of G10 and come with a CE marking for certified quality.



VSAW 1 Master link assembly	Code	Consisting of	Working load limit [kg]	Fits on single hook acc. DIN 15401 no.	Fits on double hook acc. DIN 15402 no.
	VSAW 1-10/13	SAW 32+BW 20	10.000	50	63
	VSAW 1-16	SAW 32	10.000	50	63
	VSAW 1-19	SAW 40	16.000	50	63
	VSAW 1-22	SAW 45	22.400	50	63
	VSAW 1-26	SAW 50	33.600	50	63
	VSAW 1-32	SAW 56	40.000	50	63
	VSAW 1-32 / 320	SAW 60	40.000	100	125



Code	e [mm]	d [mm]	t [mm]	w [mm]	s [mm]	d1 [mm]	t1 [mm]	w1 [mm]	Weight [kg/pc.]
VSAW 1-10/13	585	33	500	250	26	20	85	40	10,00
VSAW 1-16	500	33	500	250	26	-	-	-	9,32
VSAW 1-19	460	40	460	250	32	-	-	-	13,12
VSAW 1-22	500	45	500	250	-	-	-	-	17,80
VSAW 1-26	460	50	460	250	43	-	-	-	20,98
VSAW 1-32	460	56	460	250	-	-	-	-	26,68
VSAW 1-32 / 320	800	60	800	320	54	-	-	-	48,00

**Example:** VSAW 1-10/13 may be used for I-leg chain slings with a 10 mm or 13 mm chain.

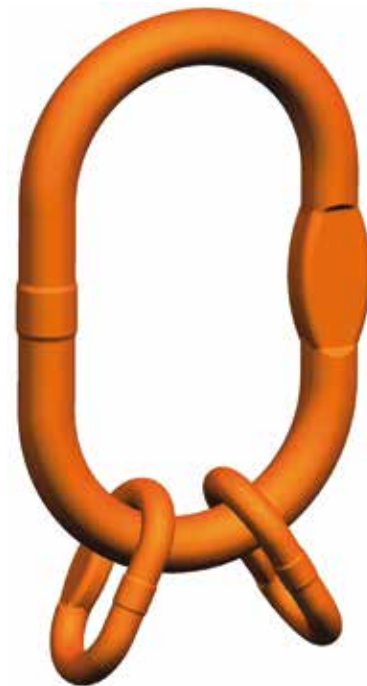
# pewag VSAW 2 Master link assembly

## Simplified lifting.

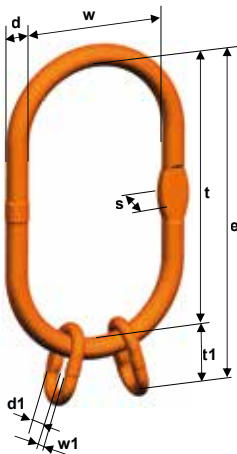
The VSAW 2 assembly comes with the same benefits as the VSAW 1 assembly and can also be used to create transition assemblies. This system is ideal for simplifying lifting and transport processes as it enables the creation of very short transition assemblies, thereby facilitating the switch from a large to a small crane hook.

With a working load limit of up to 40,000 kg, these master links may be used to create II-, III- and IV-leg chain slings in the assembled or welded system. The flattened section on the rings make them universally adaptable and the extra-large interior dimensions of the rings make them easy to use with single hooks according to DIN 15401 no. 50/100 or double hooks according to DIN 15402 no. 63/125.

The assemblies are manufactured according to EN 1677-4 with the mechanical values of G10 and come with a CE-marking for certified quality. A full operating manual is provided.



VSAW 2 Master link assembly	Code	Consisting of	Working load limit 0°-45° [kg]	Fits on single hook acc. DIN 15401 no.	Fits on double hook acc. DIN 15402 no.	For 2-leg slings	For 3- and 4-leg slings
	VSAW 2-10/13 / 4-10	SAW 32 + 2 BW 20	9.500	50	63	10/13	10
	VSAW 2-16 / 4-13	SAW 40 + 2 BW 22	14.000	50	63	16	13
	VSAW 2-19/20 / 4-16	SAW 45 + 2 BW 26	21.200	50	63	19/20	16
	VSAW 2-22 / 4-19/20	SAW 50 + 2 BW 32	30.000	50	63	22	19/20
	VSAW 2-26 / 4-22	SAW 56 + 2 BW 32	40.000	50	63	26	22
	VSAW 2-26 / 4-22 / 320	SAW 60 + 2 BW 32	40.000	100	125	26	22



Code	e [mm]	d [mm]	t [mm]	w [mm]	s [mm]	d1 [mm]	t1 [mm]	w1 [mm]	Weight [kg/pc.]
VSAW 2-10/13 / 4-10	585	33	500	250	26	20	85	40	10,68
VSAW 2-16 / 4-13	575	40	460	250	32	23	115	50	15,44
VSAW 2-19/20 / 4-16	640	45	500	250	-	27	140	65	21,64
VSAW 2-22 / 4-19/20	610	50	460	250	43	33	150	70	27,30
VSAW 2-26 / 4-22	610	56	460	250	-	33	150	70	34,92
VSAW 2-26 / 4-22 / 320	950	60	800	320	54	33	150	70	56,24

**Example:** VSAW 2-10/13 / 4-10 may be used for II-leg chains with a 10 mm or 13 mm chain.

## pewag KMGW 1 Enlarged clevis master set

### Your load in good hands.

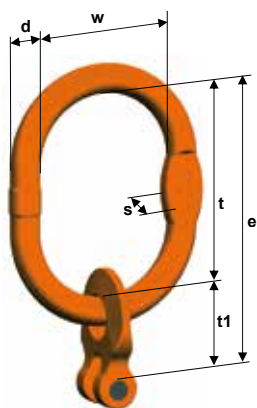
The MW master ring and the welded-in KRW captive coupling are the perfect pair for creating I-leg chain slings in the assembled system. The chain is mounted directly in the coupling, thereby eliminating the need for an additional connecting link.

Disassembly is also simple and can be completed without special tools. However, make sure that it is performed by a competent person. An extra plus result from the enlarged internal dimensions of the master ring, which make it suitable for the next size up crane hook.

The set is manufactured according to EN 818-4 with mechanical values for G10 and comes with CE-marking and a full operating manual. The coupling pin and the lock pin are available as a KBSW spare parts set.



KMGW 1 Enlarged clevis master set



Code	Working load limit [kg]	For chain-Ø	Fits on single hook acc. DIN 15401 no.	Fits on double hook acc. DIN 15402 no.
KMGW 1-6 <sup>1)</sup>	1.400	6	4	5
KMGW 1-7	1.900	7	4	5
KMGW 1-8	2.500	8	5	6
KMGW 1-10	4.000	10	6	8
KMGW 1-13	6.700	13	10	12
KMGW 1-16	10.000	16	10	12
KMGW 1-19/20	16.000	19	12	16
KMGW 1-22	19.000	22	20	25

Code	e [mm]	d [mm]	t [mm]	w [mm]	s [mm]	t1 [mm]	Weight [kg/pc.]
KMGW 1-6 <sup>1)</sup>	151	14	120	70	10	31	0,63
KMGW 1-7	163	14	120	70	10	43	-
KMGW 1-8	183	16	140	80	13	43	0,91
KMGW 1-10	212	19	160	95	14	52	1,53
KMGW 1-13	234	23	170	105	17	64	2,58
KMGW 1-16	265	27	190	110	20	75	4,14
KMGW 1-19/20	324	33	230	130	26	94	-
KMGW 1-22	377	38	275	150	29	102	-

<sup>1)</sup> May also be used with a 5 mm chain if working load limit is adjusted accordingly.

**Example:** KMGW 1-10 may be used for I-leg chains with a 10 mm chain.

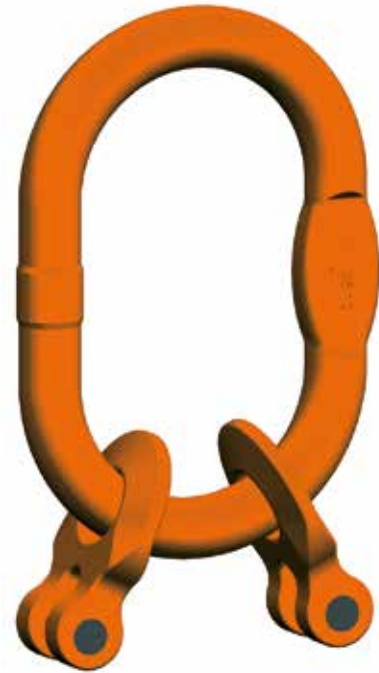
# pewag KMGW 2 Enlarged clevis master set

## Surely safe.

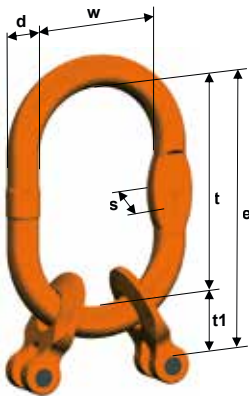
The chain is mounted directly into the captive coupling, eliminating the need for an additional connecting link. This makes the master set with a MW master ring and two welded-in KRW captive couplings even better suited for creating II-leg chain slings in the assembled system. Product features include easy assembly and disassembly by a competent person without the need for special tools – benefits that speak for themselves! Extra-large internal dimensions of the master ring also make this system suitable for the next size up crane hook.

The set comes with a full operating manual. A CE-marking is standard. The extra-large clevis master set is manufactured according to EN 818-4 with mechanical values for G10.

Coupling bolt and lock pin are available as a KBSW spare parts set – yet another weighty benefit of this set!



KMGW 2 Enlarged clevis master set



Code	Working load limit 0°-45° [kg]	Working load limit 45°-60° [kg]	For chain-Ø	Fits on single hook acc. DIN 15401 no.	Fits on double hook acc. DIN 15402 no.
KMGW 2-6 <sup>1)</sup>	2.000	1.400	6	4	5
KMGW 2-7	2.650	1.900	7	5	6
KMGW 2-8	3.550	2.500	8	6	8
KMGW 2-10	5.600	4.000	10	10	12
KMGW 2-13	9.500	6.700	13	10	12
KMGW 2-16	14.000	10.000	16	12	16
KMGW 2-19/20	20.000	14.000	19	20	25
KAGW 2-22	26.500	19.000	22	25	32

Code	e [mm]	d [mm]	t [mm]	w [mm]	s [mm]	t1 [mm]	Weight [kg/pc.]
KMGW 2-6 <sup>1)</sup>	151	14	120	70	10	31	0,69
KMGW 2-7	183	16	140	80	13	43	-
KMGW 2-8	203	19	160	95	14	43	1,58
KMGW 2-10	222	23	170	105	17	52	2,54
KMGW 2-13	254	27	190	110	20	64	4,32
KMGW 2-16	305	33	230	130	26	75	8,47
KMGW 2-19/20	369	38	275	150	29	94	-
KAGW 2-22	442	45	340	180	-	102	21,51

<sup>1)</sup> May also be used with a 5 mm chain if working load limit is adjusted accordingly.

**Beispiel:** KMGW 2-10 may be used for II-leg chains with a 10 mm chain.

# pewag KMGW 4 Enlarged clevis master set

## Strength in any situation.

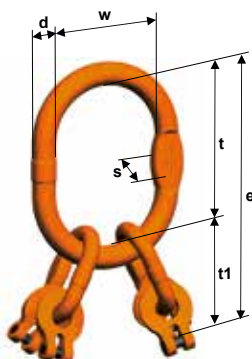
This clevis master set is manufactured according to EN 818-4 with mechanical values of G10 and consists of the VMW enlarged IV-leg master link assembly and four welded-in KRW captive couplings. This master set is ideal for the creation of IV-leg chain slings in the assembled system. The chain may simply be mounted directly into the captive coupling by a competent person, without the need for special tools. Disassembly is also easy and fast.

Enlarged internal dimensions of the master ring make this product suitable for the next size up crane hook – one of the outstanding pewag features! The coupling pin and the lock pin are available as KBSW spare parts sets.

This four-fold package comes with CE-marking and a full operating manual.



KMGW 4 Enlarged clevis master set



Code	Working load limit 0°-45° [kg]	Working load limit 45°-60° [kg]	For chain-Ø	Fits on single hook acc. DIN 15401 no.	Fits on double hook acc. DIN 15402 no.
KMGW 4-6 <sup>1)</sup>	3.000	2.120	6	6	8
KMGW 4-7	4.000	2.800	7	10	12
KMGW 4-8	5.300	3.750	8	10	12
KMGW 4-10	8.000	6.000	10	10	12
KMGW 4-13	14.000	10.000	13	12	16
KMGW 4-16	21.200	15.000	16	20	25
KMGW 4-19/20	30.000	21.200	19	50	63
KMGW 4-22	40.000	28.000	22	50	63

Code	e [mm]	d [mm]	t [mm]	w [mm]	s [mm]	t1 [mm]	Weight [kg/pc.]
KMGW 4-6 <sup>1)</sup>	245	19	160	95	14	85	1,94
KMGW 4-7	283	23	170	105	17	113	3,30
KMGW 4-8	283	23	170	105	17	113	3,36
KMGW 4-10	327	27	190	110	20	137	5,55
KMGW 4-13	409	33	230	130	26	179	11,15
KMGW 4-16	490	38	275	150	29	215	17,67
KMGW 4-19/20	594	56	350	250	46	244	37,62
KMGW 4-22	622	56	350	250	46	272	46,02

<sup>1)</sup> May also be used with a 5 mm chain if working load limit is adjusted accordingly.

**Beispiel:** Example: KMGW 4-10 may be used for IV-leg chain slings with a 10 mm chain.

# pewag VMXKW 1 Clevis master set

## Always reliable.

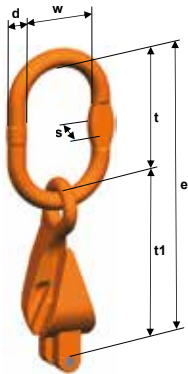
With this assembly, there is no compromise when it comes to security. This safety product complies with EN 818-4 and has the mechanical values of G10. The chain is mounted directly into the coupling unit of the shortening element, thereby eliminating the need for an additional connecting link. The hook functions both as a connecting link and a shortening element, making for simple assembly and disassembly by a competent person, without the need for special tools.

This master set consists of a MW master ring and a welded-in XKW shortening hook for the creation of I-leg chain slings in the assembled system.

CE-marking is guaranteed and a full operating manual is included. The coupling pin and the lock pin are available as a KBSW spare parts set.



VMXKW 1 Clevis master set



Code	Working load limit [kg]	For chain-Ø	Fits on single hook acc. DIN 15401 no.	Fits on double hook acc. DIN 15402 no.
VMXKW 1-5/6	1.400	6	4	5
VMXKW 1-7	1.900	7	4	5
VMXKW 1-8	2.500	8	5	6
VMXKW 1-10	4.000	10	6	8
VMXKW 1-13	6.700	13	10	12
VMXKW 1-16	10.000	16	10	12

Code	e [mm]	d [mm]	t [mm]	w [mm]	s [mm]	t1 [mm]	Weight [kg/pc.]
VMXKW 1-5/6	204	14	120	70	10	84	0,74
VMXKW 1-7	242	14	120	70	10	122	1,06
VMXKW 1-8	262	16	140	80	13	122	1,30
VMXKW 1-10	321	19	160	95	14	161	2,34
VMXKW 1-13	373	23	170	105	17	203	4,39
VMXKW 1-16	425	27	190	110	20	235	7,45

**Example:** VMXKW 1-10 may be used for I-leg chain slings with a 10 mm chain.

## pewag VMXKW 2 Clevis master set

### Two to trust.

The fact that the hook functions both as a connecting and a shortening element, there is no additional connecting element needed. The chain may be attached directly to the captive coupling of the shortening element.

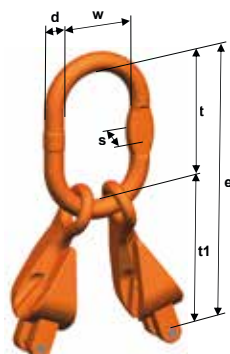
The set consists of a MW master ring and two welded-in XKW shortening hooks, facilitating the speedy assembly and disassembly of II-leg chain slings by a competent person, without the need for special tools.

The clevis master set is manufactured according to EN 818-4 with mechanical values for G10. This all-round package comes with CE-marking and a full operating manual.

The coupling pin and the lock pin are available as a KBSW spare parts set.



VMXKW 2  
Clevis master set



Code	Working load limit 0°-45° [kg]	Working load limit 45°-60° [kg]	For chain-Ø	Fits on single hook acc. DIN 15401 no.	Fits on double hook acc. DIN 15402 no.
VMXKW 2-5/6	2.000	1.400	6	4	5
VMXKW 2-7	2.650	1.900	7	5	6
VMXKW 2-8	3.550	2.500	8	6	8
VMXKW 2-10	5.600	4.000	10	10	12
VMXKW 2-13	9.500	6.700	13	10	12
VMXKW 2-16	14.000	10.000	16	12	16

Code	e [mm]	d [mm]	t [mm]	w [mm]	s [mm]	t1 [mm]	Weight [kg/pc.]
VMXKW 2-5/6	204	14	120	70	10	84	1,04
VMXKW 2-7	262	16	140	80	13	122	1,91
VMXKW 2-8	282	19	160	95	14	122	2,35
VMXKW 2-10	331	23	170	105	17	161	4,19
VMXKW 2-13	393	27	190	110	20	203	8,05
VMXKW 2-16	465	33	230	130	26	235	14,38

**Beispiel:** VMXKW 2-10 may be used for II-leg chain slings with a 10 mm chain.

# pewag VMXKW 4 Clevis master set

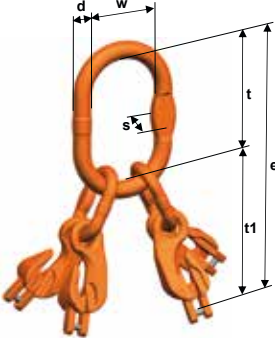
## More to trust.

The chain is directly attached to the captive coupling of the shortening element. This has the advantage, that there is no additional connecting element needed, because the hook functions both as a connecting and a shortening element. The assembly and disassembly is done easily, quickly and without special tool by a competent person. Once mounted, this IV-leg master set with four welded-in XKW shortening hooks for the assembly of IV-leg chain slings in the assembled system will not be budged!

The set is manufactured according to EN 818-4 with the mechanical values of G10 and come with a CE-marking for certified quality.

A full operating manual and the KBSW spare parts set consisting of coupling pin and lock pin are also included in the delivery.



VMXKW 4 Clevis master set	Code	Working load limit 0°-45° [kg]	Working load limit 45°-60° [kg]	For chain-Ø	Fits on single hook acc. DIN 15401 no.	Fits on double hook acc. DIN 15402 no.
	VMXKW 4-5/6	3.000	2.120	6	6	8
	VMXKW 4-7	4.000	2.800	7	10	12
	VMXKW 4-8	5.300	3.750	8	10	12
	VMXKW 4-10	8.000	6.000	10	10	12
	VMXKW 4-13	14.000	10.000	13	12	16
	VMXKW 4-16	21.200	15.000	16	20	25

Code	e [mm]	d [mm]	t [mm]	w [mm]	s [mm]	t1 [mm]	Weight [kg/pc.]
VMXKW 4-5/6	298	19	160	95	14	138	2,63
VMXKW 4-7	362	23	170	105	17	192	4,84
VMXKW 4-8	362	23	170	105	17	192	4,93
VMXKW 4-10	436	27	190	110	20	246	9,01
VMXKW 4-13	548	33	230	130	26	318	17,90
VMXKW 4-16	650	38	275	150	29	375	30,52

**Beispiel:** VMXKW 4-10 may be used for IV-leg chain slings with a 10 mm chain.

## pewag L XKW 1 Clevis master set

### Well connected.

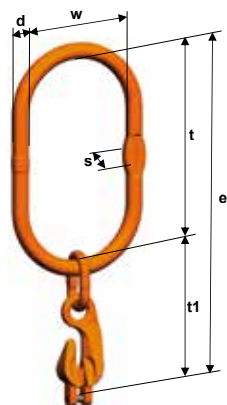
This oversize clevis master set is frequently used on mobile cranes. It consists of an LW master ring and a welded-in XKW shortening hook for the creation of I-leg chain slings in the assembled system. The chain is mounted directly into the captive coupling of the shortening element, thereby eliminating the need for an additional connecting link. Assembly and disassembly of the system by a competent person is easy and quick, without the need for special tools. The hook functions both as a connecting link and a shortening element and the master link is suitable for crane hooks up to no. 25 according to DIN 15401 and up to no. 32 according to DIN 15402.

The set is manufactured according to EN 818-4 with the mechanical values of G10, comes with CE-marking and BG-approval as well as a full operating manual.

The coupling pin and the lock pin are available as a KBSW spare parts set.



LXKW 1 Clevis master set



Code	Working load limit [kg]	Fits on single hook acc. DIN 15401 no.	Fits on double hook acc. DIN 15402 no.
LXKW 1-6 <sup>1)</sup>	1.400	25	32
LXKW 1-8	2.500	25	32
LXKW 1-10	4.000	25	32
LXKW 1-13	6.700	25	32
LXKW 1-16	10.000	25	32

Code	e [mm]	d [mm]	t [mm]	w [mm]	s [mm]	t1 [mm]	Weight [kg/pc.]
LXKW 1-6 <sup>1)</sup>	478	23	340	180	17	138	3,72
LXKW 1-8	516	23	340	180	17	176	4,03
LXKW 1-10	571	27	340	180	20	231	6,05
LXKW 1-13	628	27	340	180	20	288	8,82
LXKW 1-16	690	33	340	180	27	350	13,54

<sup>1)</sup> May also be used with a 5 mm chain if working load limit is adjusted accordingly.

**Example:** LXKW 1-10 may be used for I-leg chain slings with a 10 mm chain.

# pewag L XKW 2 Clevis master set

## Two-way strength.

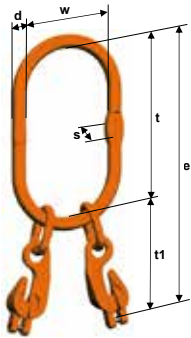
II-leg chain slings in the assembled system are created easily and quickly using this oversize clevis master set, as the chain may be attached directly to the captive coupling of the shortening element, which eliminates the need for an additional connecting element. Assembly and disassembly of the system by a competent person is easy and quick, without the need for special tools.

The hook functions both as a connecting link and a shortening element and the master link is suitable for crane hooks up to no. 25 according to DIN 15401 and up to no. 32 according to DIN 15402. The set itself complies with EN 818-4 and has the mechanical values of G10. Due to its large master ring, it is frequently used on mobile cranes.

Other quality features in true pewag style include CE-marking, BG-approval and a full operating manual. The coupling pin and the lock pin are available as a KBSW spare parts set.



L XKW 2 Clevis master set



Code	Working load limit 0°-45° [kg]	Working load limit 45°-60° [kg]	Fits on single hook acc. DIN 15401 no.	Fits on double hook acc. DIN 15402 no.
LXKW 2-6 <sup>1)</sup>	2.000	1.400	25	32
LXKW 2-8	3.550	2.500	25	32
LXKW 2-10	5.600	4.000	25	32
LXKW 2-13	9.500	6.700	25	32
LXKW 2-16	14.000	10.000	25	32

Code	e [mm]	d [mm]	t [mm]	w [mm]	s [mm]	t1 [mm]	Weight [kg/pc.]
LXKW 2-6 <sup>1)</sup>	478	23	340	180	17	138	3,97
LXKW 2-8	516	23	340	180	17	176	4,84
LXKW 2-10	571	27	340	180	20	231	7,69
LXKW 2-13	628	33	340	180	27	288	14,28
LXKW 2-16	690	40	340	180	29	350	23,17

<sup>1)</sup> May also be used with a 5 mm chain if working load limit is adjusted accordingly.

**Example:** LXKW 2-10 may be used for II-leg chain slings with a 10 mm chain.

## pewag L XKW 4 Clevis master set

### Right and tight – times four.

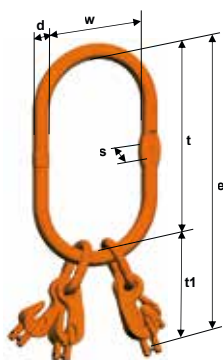
This high-grade clevis master set was designed for the creation of IV-leg chain slings in the assembled system. The benefits of this system are obvious: the chain can simply be mounted directly in the captive coupling of the shortening element, thereby eliminating the need for an additional connecting link. The hook functions both as a connecting link and a shortening element and the master link is suitable for crane hooks up to no. 25 according to DIN 15401 and up to no. 32 according to DIN 15402.

A full operating manual instructs competent person in the assembly of the set, without any need for special tools. The set is manufactured according to EN 818-4 with the mechanical values of G10 and, because of its large master ring, it is frequently used on mobile cranes that must withstand multiple loads.

The coupling pin and the lock pin are available as a KBSW spare parts set. CE-marking and BG-approval are part of our standard programme.



L XKW 4 Clevis master set



Code	Working load limit 0°-45° [kg]	Working load limit 45°-60° [kg]	Fits on single hook acc. DIN 15401 no.	Fits on double hook acc. DIN 15402 no.
LXKW 4-6 <sup>1)</sup>	3.000	2.120	25	32
LXKW 4-8	5.300	3.750	25	32
LXKW 4-10	8.000	6.000	25	32
LXKW 4-13	14.000	10.000	25	32
LXKW 4-16	21.200	15.000	25	32

Code	e [mm]	d [mm]	t [mm]	w [mm]	s [mm]	t1 [mm]	Weight [kg/pc.]
LXKW 4-6 <sup>1)</sup>	478	23	340	180	17	138	4,38
LXKW 4-8	532	27	340	180	20	192	7,71
LXKW 4-10	586	33	340	180	27	246	12,88
LXKW 4-13	658	40	340	180	29	318	24,37
LXKW 4-16	715	40	340	180	29	375	34,53

<sup>1)</sup> May also be used with a 5 mm chain if working load limit is adjusted accordingly.

**Example:** LXKW 4-10 may be used for IV-leg chain slings with a 10 mm chain.

# Accessories in G10

## Product overview

### Content

Connecting links	48-49
Round sling connecting link, Load distributor	50-51
Eye sling hook, Safety hook	52-53
Swivel safety hook	54-55
Swivel hooks, Foundry hook	56-57
Grab hook, Grab hook with safety catch	58-59
Clevis shortening hook, Sheet metal plate hook	60-61
Fork hooks, Shackles	62-64
Toggle, Coupling ring, Clevis reeving link	65-67
Clevis sling hooks	68-69
Clevis C hook, Clevis safety hook	70-71
Clevis foundry hook, Clevis grab hook	72-73
Clevis grab hook with safety catch, Clevis shackle	74-75
Weld-on hook, pewag academy	76
Transition assembly	77-78





# pewag CW Connex connecting link

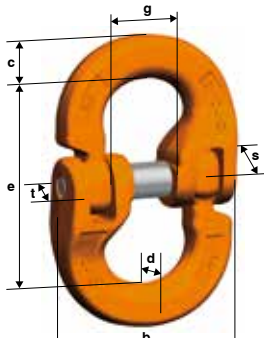
## For a flawless connection.

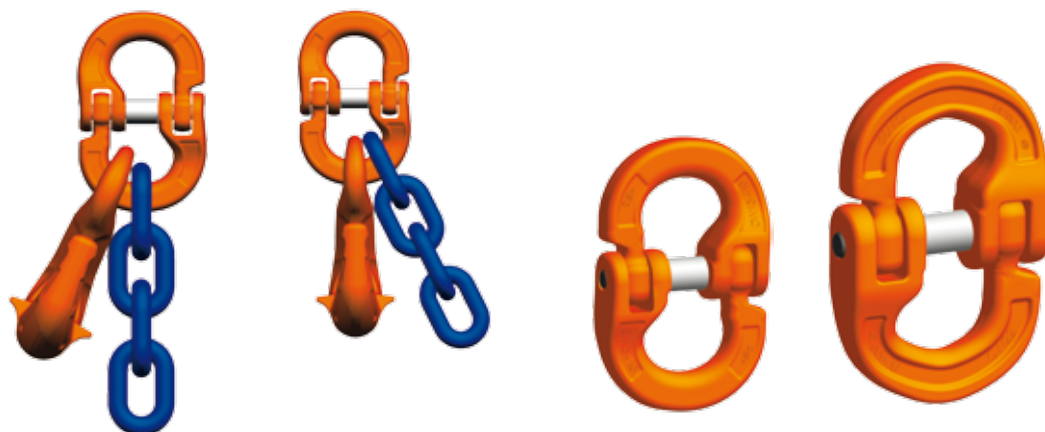
This universal connecting link consists of two symmetrical, die-forged halves, one bolt and one safety sleeve. For the expert connection of master ring and chain, chain and chain, chain and hook, master ring and hook and much more! Please note that the product is suitable for straight pull only and must be assembled by a competent person. Thanks to the sophisticated design, no special tool is required.

To maintain the high quality of this product, we recommend replacing the pin and tension sleeve after three assemblies/disassemblies. CBHW spare parts sets with pins and tension sleeves are particularly recommended. The product is manufactured according to EN 1677-1 with mechanical values for G10.

BG-approval and CE-marking are included. A full operating manual is also supplied.



CW Connex connecting link	Code	Working load limit [kg]	e [mm]	c [mm]	s [mm]	t [mm]	d [mm]	b [mm]	g [mm]	Weight [kg/pc.]
	CW 5	1.000	38	7	9	12	7	34	13	0,06
	CW 6	1.400	44	8	11	13	8	39	14	0,08
	CW 7	1.900	53	10	13	16	9	46	17	0,14
	CW 8	2.500	62	12	14	20	10	55	19	0,24
	CW 10	4.000	72	15	18	22	13	64	24	0,42
	CW 13	6.700	88	20	22	26	17	79	28	0,85
	CW 16	10.000	112	24	29	35	20	105	34	1,90
	CW 19/20	16.000	126	32	35	45	25	126	44	3,10
	CW 22	19.000	157	36	39	46	26	148	52	4,60
	CW 26	26.500	179	40	46	57	30	175	62	6,80
	CW 32	40.000	206	47	56	63	35	216	80	11,36



CW 5 – CW 16

CW 19/20 – CW 32

The connecting link is wide enough to accommodate shorteners and chains. The part (chain or hook) can position itself centrally and the symmetrical load on the connecting link is given.

# pewag CLW Connex connecting link

## Form and function.

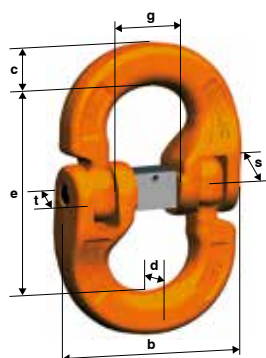
This universal connection link is manufactured from high-grade material. This product owes its outstanding quality and expediency to a sophisticated manufacturing process. Two symmetrical, die-forged halves and a special safety set ensure universal combination options of master ring/chain, chain/chain, chain/hook, master ring/hook and other elements.

The CLW Connex connecting link is suitable for straight pull only and cannot be dismantled after assembly. The link may be assembled by a competent person easily and quickly, without the need for special tools. Manufactured according to EN 1677-1 with the mechanical values of G10. Recommended for applications where the pin must not be removed once assembled, for instance when using lifting magnets or concrete buckets.

The special safety kit is available as a CLBHW spare parts set. Product includes CE-marking, BG-approval and a full operating manual.



CLW Connex connecting link	Code	Working load limit [kg]	e [mm]	c [mm]	s [mm]	t [mm]	d [mm]	b [mm]	g [mm]	Weight [kg/pc.]
	CLW 7	1.900	53	10	13	16	9	46	17	0,14
	CLW 10	4.000	72	15	18	22	13	64	24	0,43
	CLW 13	6.700	88	20	22	26	17	79	28	0,85
	CLW 16	10.000	112	24	29	35	20	105	34	1,90



**Info:** Connecting links type CLRW - demountable, in sizes 19/20, 22, 26 and 32 available on request!

# pewag CARW Round sling connecting link

## Safely connected.

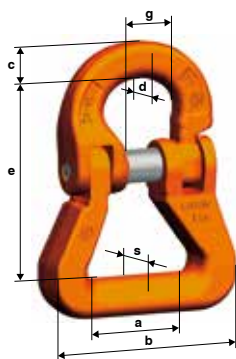
Extra-safe round sling connecting links are required for the assembly of round slings or webbing slings, with a wide, protecting layer for round slings and webbing slings. The CARW round sling connecting link is manufactured according to EN 1677-1 with the mechanical values of G10 and fulfils these requirements down to the smallest detail. It is easily assembled and disassembled by a competent person, without the need for special tools.

It is recommended to use a new pin and tension sleeve after three assemblies/disassemblies. Also note that this product is suitable for straight pull only. Pin and tension sleeve are also available as CBHW spare parts set.

Includes CE-marking, BG-approval and full operating manual.



CARW Round sling connecting link	Code	Working load limit [kg]	e [mm]	a [mm]	c [mm]	d [mm]	b [mm]	s [mm]	g [mm]	Weight [kg/pc.]
	CARW 8	2.500	66	29	12	10	68	18	19	0,33
	CARW 10	4.000	81	40	15	13	82	21	24	0,71
	CARW 13	6.700	104	44	20	17	101	28	28	1,34
	CARW 16	10.000	113	47	24	20	110	40	34	1,83
	CARW 22	19.000	188	110	36	25	215	58	52	8,97



# pewag AGWW Load distributor

## Your load just got lighter.

A bonus for all specialist users! As this system offers a higher working load limit compared to standard IV-leg slings, it is all about the working load limit of the master link assembly. The load distributor may be turned by 180° once the elimination criteria have been reached, thereby doubling its lifespan!

The system is used for assembling IV-leg chain slings with Connex connecting links. Where required, all four legs may be considered load-carrying:

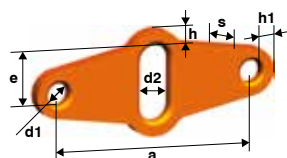
If two II-leg slings are used at the same time and one of them is provided with a load distributor, this system can be treated as a IV-leg sling with four load-carrying legs.

Special users beware! Due to the higher load-bearing capacity compared to standard IV strand hangers, special attention should be paid to the choice of the appropriate assembly - standard assemblies may have a too low working load limit.

Please consult the operating manual for more detailed information.



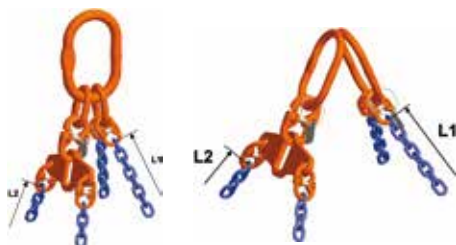
AGWW Load distributor



Code	Connecting link	Working load limit 0°-45° [kg]	Working load limit 45°-60° [kg]	Difference L1 / L2 [chain links]
AGWW 5/6	CW 8	2.000	1.400	6 for 5 mm chains 5 for 6 mm chains
AGWW 7/8	CW 10	3.550	2.500	6 for 7 mm chains 5 for 8 mm chains
AGWW 10	CW 13	5.600	4.000	4
AGWW 13	CW 16	9.500	6.700	4
AGWW 16	CW 19/20	14.000	10.000	4
AGWW 19/20	CW 32	20.000	14.000	5
AGWW 22	CW 32	26.500	19.000	5
AGWW 26	GSCHW VB G-4163 WLL 55 t	37.500	26.500	5

Code	e [mm]	a [mm]	d1 [mm]	d2 [mm]	h [mm]	h1 [mm]	s [mm]	Weight [kg/pc.]	Suspension heads to use
AGWW 5/6	35	148	16	22	11	9	10	0,54	VW 6 / VMW 6 / VAW 6/7
AGWW 7/8	51	210	22	25	15,50	14	15	1,75	VW 7/8 / VMW 10 / VAW 10
AGWW 10	32	180	25	32	23	15,50	15	1,56	VW 13 / VMW 13 / VAW 13
AGWW 13	53	240	32	40	27	20	20	3,60	VW 16 / VMW 16 / VAW 16
AGWW 16	77	300	40	50	32	25	25	7,00	VW 19/20 / VMW 19/20 / VAW 19/20
AGWW 19/20	79	390	50	70	45	30	30	13,20	VW 22 / VMW 22 / VAW 19/20
AGWW 22	124	350	60	70	50	35	30	14,70	VW 26 / VAW 26
AGWW 26	130	400	70	75	60	40	40	25,80	VAW 32

Please use the displayed item in column "Connecting link" to assemble the load distributor in the four-leg sling. Static test coefficient = 2.5 x working load limit of the respective chain section; safety factor = 4



Video AGWP

## pewag HSW Eye sling hook

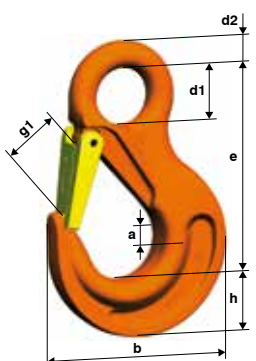
### Resilience has a name.

This eye sling hook offers universal options for usage and is manufactured with a forged safety catch that locks into the tip of the hook, thereby offering increased protection against lateral shifts. The hook is suitable for Connex and the welded system and is manufactured according to EN 1677-2 with the mechanical values of G10.

Like all pewag components, this eye sling hook is a high-grade manufacturing product. It comes with a safety catch set with a stainless steel spring and safety sleeve and may be assembled quickly, without the need for special tools. The safety catch ensures that all important safety bonus. However, please note that the product is suitable for straight pull only. Loads must not be placed on the tip of the hook or the safety catch! Includes CE-marking, BG-approval and full operating manual.

The safety catch set SFGW is also available as a spare parts set.



HSW Eye sling hook	Code	Working load limit [kg]	e [mm]	h [mm]	a [mm]	d1 [mm]	d2 [mm]	g1 [mm]	b [mm]	Weight [kg/pc.]
	HSW 5/6	1.400	85	21	17	20	10	19	68	0,34
	HSW 7/8	2.500	106	27	19	25	11	26	88	0,57
	HSW 10	4.000	131	33	26	34	16	31	109	1,25
	HSW 13	6.700	164	44	33	43	19	39	134	1,86
	HSW 16	10.000	183	50	40	50	25	45	155	3,86
	HSW 19/20	16.000	205	55	48	55	27	53	178	6,01
	HSW 22	19.000	225	62	50	60	29	62	196	8,19
	HSW 26	26.500	260	80	70	70	37	73	240	12,76
	HSW 32	40.000	299	97	82	66	45	87	291	27,86

# pewag LHW Safety hook

## Automatic safety.

Safe by name, safe by nature – this hook closes and locks automatically, which means that it cannot open when under load. It is perfect in combination with the Connex system and also offers additional, universal connection options thanks to the flattened section on the eye. As it comes with a wider jaw opening than HSW, it may be used much more flexibly.

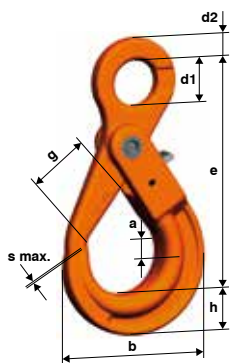
Please note that this hook is suitable for straight pull only. The tip of the hook and the safety catch must not be placed under load and the hook should not be used in the welded system.

If used correctly, assembly of this safety hook is simple and does not require any special tools. The hook corresponds to EN 1677-3, with the mechanical values of G10, and comes with a full operating manual, CE-marking and BG-approval.

The safety catch set VLHW on the back of the hook is also available as a spare parts set.



LHW Safety hook



Code	Working load limit [kg]	e [mm]	h [mm]	a [mm]	b [mm]	d1 [mm]	d2 [mm]	g [mm]	s max. [mm]	Weight [kg/pc.]
LHW 5/6	1.400	110	20	17	71	21	11	28	1	0,53
LHW 7/8	2.500	135	26	20	88	25	12	34	1	0,92
LHW 10	4.000	168	30	29	107	33	16	45	1	1,57
LHW 13	6.700	205	40	35	138	40	20	52	1,50	3,19
LHW 16	10.000	251	50	41	168	50	25	60	2	6,24
LHW 19/20	16.000	290	62	50	194	60	30	70	2	9,75
LHW 22	19.000	322	65	52	211	70	32	81	2	12,45
LHW 26	26.500	383	79	61	253	82	42	100	2	20,00
LHW 32	40.000	425	102	80	311	82	45	120	3	32,40

LHW 5/6 bis 22	LHW 26	LHW 32
	<p><b>ADVANTAGE:</b> The trigger is covered by a safety rib, therefore no unintentional activation of the trigger is possible</p>	<p><b>ADVANTAGES:</b> New improved trigger system (patented): better operability, withstands stronger impacts</p> <p>Rejection marks on the tip of the hook:</p>

# pewag WLHW Swivel safety hook

## Stable and versatile.

This hook is at its best when used with the Connex system. It closes and locks automatically and cannot be opened while under load. The large swivel casing opens up an even wider range of application options and the larger jaw opening compared to HSW means that it may be used more flexibly. When it comes to quality, this hook is in a league of its own: It comes with CE-marking and BG-approval, complies with EN 1677-3 and has the mechanical values of G10.

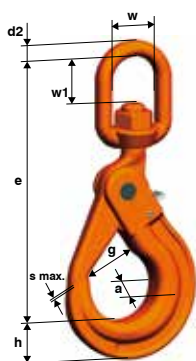
A detailed operating manual provides information on the wide range of possible applications. But be careful – the hook is only suitable for straight pull and cannot be rotated when under load. Also note that the tip of the hook and the safety catch must not be placed under load and the hook should not be used in the welded system.

Assembly of the safety catch is easy and quick, without the need for special tools.

The safety catch set VLHW which forms the locking mechanism on the back of the hook is also available as a spare parts set.



WLHW Swivel safety hook	Code	Working load limit [kg]	e [mm]	h [mm]	a [mm]	w [mm]	w1 [mm]	d2 [mm]	g [mm]	s max. [mm]	Weight [kg/pc.]
	WLHW 5/6	1.400	161	20	17	35	36	12	28	1	1,20
	WLHW 7/8	2.500	182	26	20	35	36	12	34	1	1,54
	WLHW 10	4.000	218	30	29	42	41	16	45	1	2,14
	WLHW 13	6.700	269	40	35	49	47	20	52	1,50	4,42
	WLHW 16	10.000	319	50	41	60	60	24	60	2	7,34



## pewag WLHBW Swivel safety hook

### Rotates even under load.

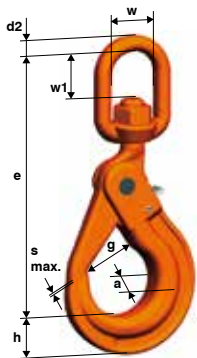
This showpiece can withstand operating temperatures of up to 120°C. The swivel safety hook closes and locks automatically and comes with an axial bearing, ensuring that it may be rotated when under load, but not opened. It is suitable for Connex systems and also offers additional connecting options thanks to its large swivel casing. Its jaw opening is larger than the HSW eye hook, making it more flexible in terms of potential use.

Please note that the product is suitable for straight pull only. Also note that the tip of the hook and the safety catch must not be placed under load and the hook should not be used in the welded system. Quality features include CE-marking and BG-approval, compliance with EN 1677-3 and the mechanical values of G10.

Assembly of the locking set is easy and quick and does not require any special tools. A replacement bearing unit and full operating manual are available. The safety catch set VLHW which forms the locking mechanism on the back of the hook is also available as a spare parts set.



WLHBW Swivel safety hook



Code	Working load limit [kg]	e [mm]	h [mm]	a [mm]	w [mm]	w1 [mm]	d2 [mm]	g [mm]	s max. [mm]	Weight [kg/pc.]
WLHBW 5/6	1.400	161	20	17	35	36	12	28	1	1,20
WLHBW 7/8	2.500	182	26	20	35	36	12	34	1	1,55
WLHBW 10	4.000	218	30	29	42	41	16	45	1	2,14
WLHBW 13	6.700	269	40	35	49	47	20	52	1,50	4,43
WLHBW 16	10.000	319	50	41	60	60	24	60	2	7,35

# pewag WSBW Swivel hook

## Hooked on safety.

CE-marking and BG-approval are essential features of this pewag safety component. The swivel hook may be used universally and comes with a die-forged safety catch that locks into the tip of the hook, thereby providing excellent protection against lateral shifts.

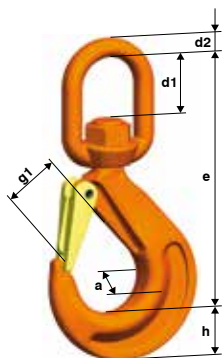
The WSBW swivel hook is suitable for the Connex systems, but also offers numerous other universal connection options thanks to its large swivel casing. Rotatability under load is ensured by an axial bearing design and comes as a special plus. The maximum operating temperature for this product is 120 °C. The product is manufactured according to EN 1677-2 with the mechanical values for G10.

This product is suitable for straight pull only. Also note that the tip of the hook and the safety catch must not be placed under load. The swivel hook should not be used in the welded system. Assembly of the safety catch set is simple and quick and does not require any special tools. It consists of a die-forged safety catch, a stainless steel spring and a safety sleeve – after all, all good things come in threes!

A full operating manual contains everything you need to know about the versatile application options of this swivel hook. The safety catch set SFGW is also available as a spare parts set.



WSBW Swivel hookxx



Code	Working load limit [kg]	e [mm]	h [mm]	a [mm]	d1 [mm]	d2 [mm]	g1 [mm]	Weight [kg/pc.]
WSBW 7/8	2.500	154	28	19	37	12	26	1,24
WSBW 10	4.000	183	33	25	41	16	30	1,84
WSBW 13	6.700	221	40	30	47	20	38	3,45

# pewag FW Foundry hook

## Size matters.

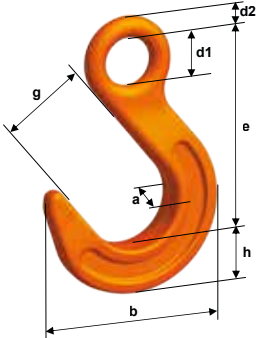
This hook comes with an extra-wide jaw and is used in applications where other hooks simply aren't up to the job. The model is frequently used in foundries and also does an excellent job when used with Connex and welded systems.

The product is manufactured according to EN 1677-1 with the mechanical values of G10 and comes with a full operating manual. CE-marking and BG-approval ensure quality of the highest order.

This extra-wide hook has a lot to offer – but please avoid tip loading and ensure that it is used in straight pull only. Please check whether use without the safety catch is admissible prior to each use.

The assembly with Unilock connecting elements should be generally avoided.



FW Foundry hook	Code	Working load limit [kg]	e [mm]	h [mm]	a [mm]	d1 [mm]	d2 [mm]	g [mm]	b [mm]	Weight [kg/pc.]
	FW 7/8	2.500	131	29	25	24	11	64	118	0,94
	FW 10	4.000	158	35	32	31	14	76	143	1,62
	FW 13	6.700	190	42	40	39	17	89	170	3,24
	FW 16	10.000	224	50	46	47	22	102	200	5,65
	FW 19/20	16.000	260	61	54	56	28	114	231	9,20
	FW 22	19.000	287	75	63	47	31	140	284	13,40
	FW 26	26.500	358	84	73	82	38	152	312	21,40
	FW 32	40.000	370	101	90	66	44	170	359	35,00

FW 22, 26 and 32: With largest jaw opening "g" on the market!

# pewag PW Grab hook

## Heavy-duty with a twist.

Thanks to the special design of the chain contact area, this standard shortening hook ensures optimal interaction between chain and hook. Even when shortened, the working load limit must not get reduced.

The product comes with a full operating manual and is suitable for use with Connex and the welded system and can also be retrofitted. It complies with EN 1677-1 with the mechanical values for G10 and comes with CE-marking. Please note that it is not suitable for tip loading and cannot be used with Unilock connecting links.

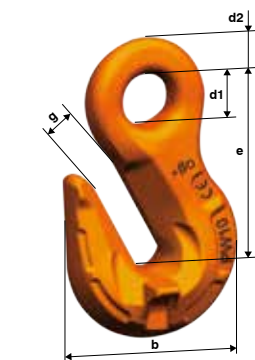


PW 5 – PW 16

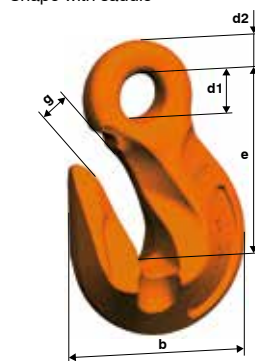
PW 19/20 – PW 32

PW Grab hook	Code	Working load limit [kg]	e [mm]	b [mm]	d1 [mm]	d2 [mm]	g [mm]	Weight [kg/pc.]
	PW 5	1.000	47	40	11	9	7	0,16
	PW 6	1.400	50	44	12	9	7	0,16
	PW 7/8	2.500	65	57	16	12	9	0,38
	PW 10	4.000	77	77	20	14	12	0,72
	PW 13	6.700	101	92	26	19	15	1,56
	PW 16	10.000	121	113	32	23	19	2,67
	PW 19/20 <sup>1)</sup>	16.000	151	150	36	27	25	6,16
	PW 22 <sup>1)</sup>	19.000	170	165	42	31	27	8,30
	PW 26 <sup>1)</sup>	26.500	201	195	50	37	32	13,65
	PW 32 <sup>1)</sup>	40.000	243	242	60	43	38	25,00

<sup>1)</sup> Shape with support surface



Shape with saddle



Shape with support surface

### pewag – passionate about user-friendliness

pewag sets great store by the user-friendliness of its products and stays abreast of market requirements in this respect. True to this principle, the design of parallel hooks in the pewag range is being adapted. The new design for dimensions 5 to 16 includes supporting saddles, offering perfect support for pewag winner chains and ensuring optimised positioning of the chain on the bearing surface.

**Exception:** Chain dimensions from 19/20 have not yet been adjusted. For technical reasons, chains with these dimensions must not touch the bearing surface of the hook.



## pewag PSW Grab hook with safety catch

### Safety allrounder.

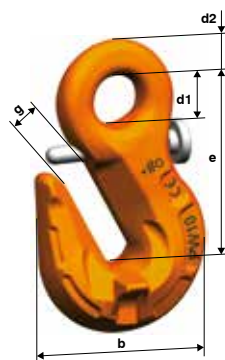
This standard shortening hook ensures optimal interaction between chain and hook thanks to the special design of the chain contact area. Moreover, the integrated safety catch protects the chain from an accidental release. Tip loading is not allowed as well as the assembling with Unilock connecting links. Further, the usage in the welded system has to be prevented.

Even when shortened, the working load limit is not reduced. The product comes with a full operating manual and is compatible with the Connex system and can also be retrofitted. It complies with EN 1677-1 with the mechanical values for G10 and comes with CE-marking.

The safety catch is also available as a spare part. The PSGW spare parts set consists of pin, spring and nut.



PSW Grab hook with safety catch



Code	Working load limit [kg]	e [mm]	b [mm]	d1 [mm]	d2 [mm]	g [mm]	Weight [kg/pc.]
PSW 7/8	2.500	65	57	16	12	9	0,40
PSW 10	4.000	77	71	20	14	12	0,75
PSW 13	6.700	101	92	26	19	15	1,61
PSW 16	10.000	121	113	32	23	19	2,73

# pewag XKW Clevis shortening hook


## Ready for any challenge.

This shortening hook is ideally suited for the Connex and welded system. Thanks to its clevis part, the shortening hook may be mounted directly into the chain. The eye of the hook makes it suitable for universal connections and applications as a hook in VMXKW and LXKW chain slings. For details, please refer to the full operating manual that comes with the product.

The clevis shortening hook is manufactured according to EN 1677-1 with the mechanical values of G10 and comes with a CE-marking for certified quality and BG-approval. Please note that tip loading is not permitted. If handled by a competent person, assembly is quick and easy and does not require any special tools.

The coupling pin and the lock pin are available as a KBSW spare parts set.



XKW Clevis shortening hook	Code	Working load limit [kg]	e [mm]	b [mm]	a [mm]	d1 [mm]	d2 [mm]	g [mm]	Weight [kg/pc.]
	XKW 5/6	1.400	84	37	29	18	9	8	0,22
	XKW 7	1.900	122	54	39	24	12	11	0,66
	XKW 8	2.500	122	54	39	24	12	11	0,67
	XKW 10	4.000	161	70	50	31	14	13	1,31
	XKW 13	6.700	203	92	64	37	18	15	2,83
	XKW 16	10.000	235	102	80	48	24	20	5,06

# pewag BWW Sheet metal plate hook

## The perfect lift.

The lifting of sheet metal stacks, boards etc. requires perfect tools - and the BWW sheet metal plate hook is one of them. It can also be supplied in customised dimensions upon request. As a standard, it may be used with Connex and the welded system and corresponds with EN 1677-1 with the mechanical value of G10.

Please note that the product is not suitable for tip loading and that the hooks must be fully pushed onto the load. The lifting process must be carried out by means of min. a III-leg chain sling. The classification of the WLL must be done carefully:

- If a III-leg chain sling is used, the WLL is that of the corresponding II-leg chain sling
- If a IV-leg chain sling is used, the WLL is that of the corresponding III-leg chain sling

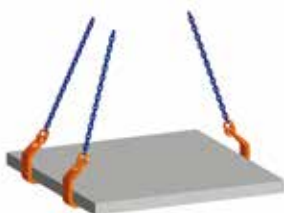
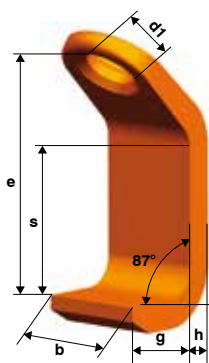
The angle of inclination of the lifting system must be adjusted between 15° and 30°.

The sheet metal plate hook comes with CE-marking and a full operating manual.



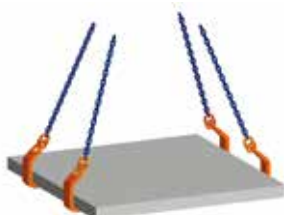
BWW Sheet metal plate hook	Code	Working load limit [kg]	e [mm]	s [mm]	b [mm]	h [mm]	d1 [mm]	g [mm]	Weight [kg/pc.]
	BWW 7/8	2.500	131	80	50	15	28	55	1,50
	BWW 10	4.000	170	100	70	20	36	65	2,80
	BWW 13	6.700	209	130	80	25	40	90	5,30
	BWW 16	10.000	263	160	100	30	50	110	10,50
	BWW 19/20	16.000	306	185	120	40	60	130	17,50
	BWW 22	19.000	368	220	140	50	75	150	30,50

Custom designs available upon request



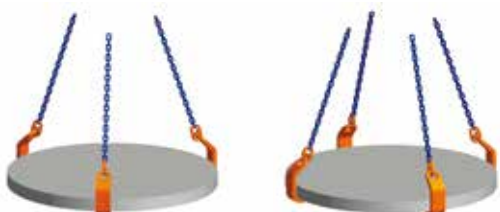
### Lifting of rectangular / square loads using III-leg chains:

Working load limit: Is to be reduced to that of the corresponding II-leg-chain. The specified angle of inclination of 15°-30° applies to all strands and must be observed! The spread angle of the chain legs on one side must be set to approx. 10°.



### Lifting of rectangular / square loads using IV-leg chains

Working load limit: Is not to be reduced, the values on the sling tag apply. The specified angle of inclination of 15°-30° applies to all chains and must be observed! The spread angle of the chain legs on one side must be set to approx. 10°.



### Lifting of round loads by means of III and IV-leg chains:

Working load limit: Is not to be reduced, the values on the sling tag apply. The specified angle of inclination of 15°-30° applies to all legs and must be observed!

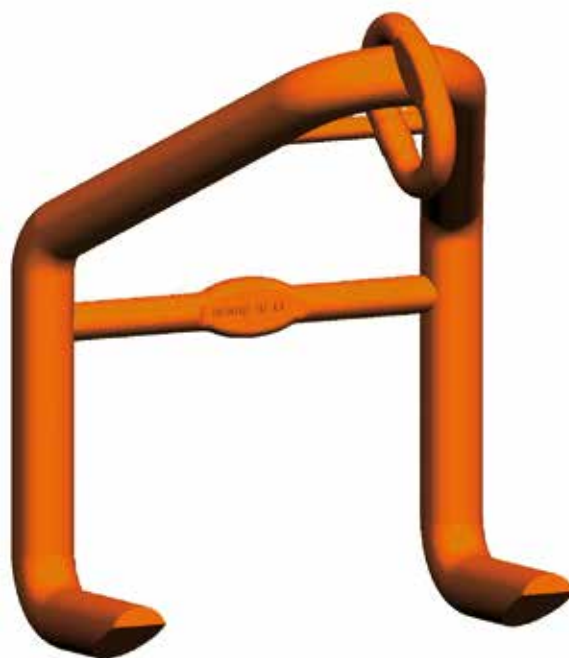
# pewag GHW Fork hook

## A reliable partner.

Safety is key when it comes to lifting sheet metal stacks, plates etc. The GHW fork hook ticks all the boxes: It makes a great partner for Connex and welded systems and is available in customised dimensions upon request. In addition, it comes with CE-marking, complies with EN 1677-1 and has the mechanical values of G10.

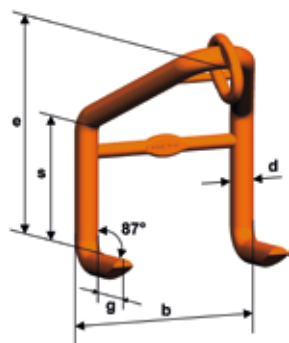
Tip loading must be avoided and care must be taken to ensure that the hooks are fully pushed onto the load. The hooks must always be used in pairs, with a sling inclination angle of 30° to 45°.

For details, please refer to the full operating manual.



GHW Fork hook	Code	Working load limit [kg]	e [mm]	s [mm]	b [mm]	g [mm]	d [mm]	BW-link	Weight [kg/pc.]
	GHW 5/6	1.400	203	100	190	65	23	BW 13	2,84
	GHW 7/8	2.500	300	150	254	100	30	BW 16	7,25
	GHW 10	4.000	402	200	380	130	40	BW 22	16

Custom designs are available upon request!



### Application:

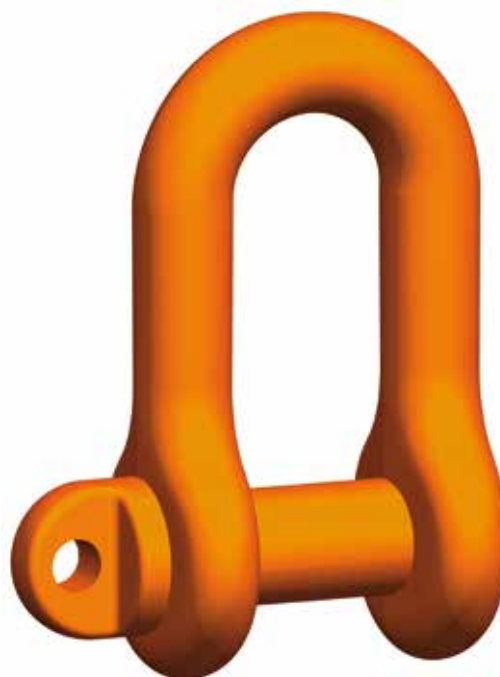
Only in II-leg chains, observing the angle of inclination of 30°-45°.


# pewag SCHW Shackle

## Test passed.

This high-strength shackle with a stud bolt in grade 10 and marked accordingly prevents mix-ups and is suitable for general lifting purposes. Both sides of the smooth bolt rest in the eyes and the thread does not protrude into the opening of the shackle. Please check that the bolt is sitting tightly prior to each lifting operation. If this precaution is observed, the shackle can cope with even the most demanding lifting operations. However, please note that the shackle cannot be mounted directly into the chain.

Every single one of these safety products comes with CE-marking and a full operating manual.



SCHW Shackle	Code	Working load limit [kg]	e [mm]	b [mm]	a [mm]	d1 [mm]	c [mm]	d2 [mm]	Weight [kg/pc.]
	SCHW 5	1.000	24	11	7	8	16	8	0,11
	SCHW 6	1.400	30	14	8	10	20	10	0,20
	SCHW 7/8	2.500	36	17	10	12	24	12	0,41
	SCHW 10	4.000	49	21	13	15	32	16	0,61
	SCHW 13	6.700	61	27	17	19	40	20	1,42
	SCHW 16	10.000	73	33	21	23	48	24	2,62

# pewag GSCHW Bow shackle

## Uncompromising quality.

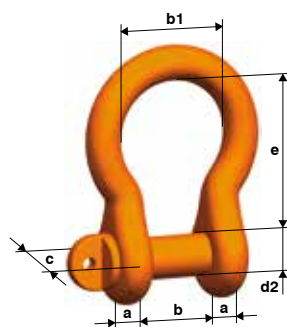
This high-strength, bow shackle with a grade 10 special thread bolt and corresponding markings is ideally suited for all kinds of general lifting processes, without the risk of mix-ups.

Both sides of the smooth bolt rest in the eyes and the thread does not protrude into the opening of the shackle. Please check that the bolt is sitting tightly prior to each lifting operation. The shackle cannot be mounted directly into the chain.

This pewag product comes with CE-marking and a full operating manual.



GSCHW Bow shackle	Code	Working load limit [kg]	e [mm]	b [mm]	b1 [mm]	a [mm]	c [mm]	d2 [mm]	Weight [kg/pc.]
	GSCHW 7/8	2.500	51	22	32	13	34	16	0,46
	GSCHW 10	4.000	64	27	43	16	40	19	0,85
	GSCHW 13	6.700	76	31	51	19	46	22	1,27
	GSCHW 16	10.000	95	43	68	25	59	28	2,90



# pewag KNEW Toggle

## Small but convincing.

Thanks to its special low design, this toggle is frequently used for general transportation purposes in the construction industry, for instance of sheet piles. As the toggle is welded into the sling with the next size up chain link, it takes up little space and is also suitable for small bores. Please refer to the table for the minimum and maximum bore diameter (d).

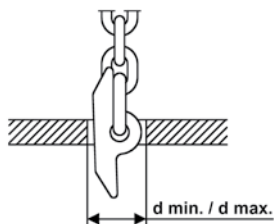
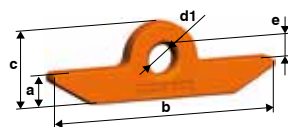
Also available in other designs upon request.

The toggle is manufactured according to EN 1677-1 with mechanical values according to G10 and full operating manual.

We recommend using a 10 mm chain for the transportation of standing sheet piles.



KNEW Toggle	Code	For chain	Working load limit [kg]	e [mm]	a [mm]	b [mm]	c [mm]	d1 [mm]	d min. [mm]	d max. [mm]	Connecting link
	KNEW 8	8	2.500	10	17	120	38	15	40	60	WIN 10



# pewag KRW Coupling ring

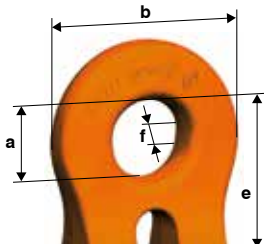
## A ring for all seasons.

This coupling ring is also flexible when it comes to customized applications and is a component of the clevis master sets KMGW. It is manufactured according to EN 1677-1 with mechanical values for G10.

The ring may be assembled easily and quickly by a competent person, without the need for special tools. A full operating manual is available.

The coupling pin and the retaining pin are available as a KBSW spare parts set.



KRW Coupling ring	Code	Working load limit [kg]	e [mm]	s [mm]	a [mm]	b [mm]	f [mm]	d [mm]	Weight [kg/pc.]
	KRW 5/6	1.400	31	7	18	38	8	7,40	0,12
	KRW 7	1.900	43	10	24	54	11	9	0,21
	KRW 8	2.500	43	10	24	54	11	10	0,21
	KRW 10	4.000	52	12	28	63	14	12,50	0,37
	KRW 13	6.700	64	15	33	76	17	16	0,77
	KRW 16	10.000	75	18	40	88	20	20	1,36
	KRW 19/20	16.000	94	23	50	114	24	24	2,33
	KRW 22	19.000	102	25	50	122	31	27	3,95

## pewag KOW Clevis reeving link

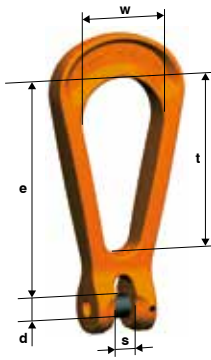
### All's well that couples well.

When it comes to quality, we offer no compromises – the middle ground is not where we operate. We specialise in practical, serviceable products – and the KOW clevis reeving link is one of them.

The high-strength, die-forged coupling eye serves to establish a direct connection with the chain. The link may also be used as an end link. No connecting link is required. This powerful package comes with BG-approval, CE-marking and a full operating manual and is manufactured according to EN 1677-1 with the mechanical values for G10.

The link may be assembled by a competent person easily and quickly, without the need for special tools. If individual components need to be exchanged, the system offers yet another bonus: The coupling pin and the retaining pin are available as a KBSW spare parts set!



KOW Clevis reeving link	Code	Working load limit [kg]	e [mm]	t [mm]	w [mm]	d [mm]	s [mm]	Weight [kg/pc.]
	KOW 7	1.900	92	70	34	9	9	0,33
	KOW 8	2.500	91	70	34	10	9	0,33
	KOW 10	4.000	128	102	50	12,50	12	0,75
	KOW 13	6.700	169	136	66	16	15	1,08
	KOW 16	10.000	214	172	83	20	18	2,93

# pewag KHSW Clevis sling hook

## Hooked on quality.

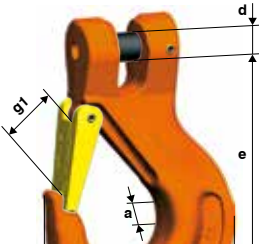
If you are looking for an easy, simple chain connection using a clevis system and without any connecting links, this universal sling hook with a forged safety catch is your best bet. The safety catch locks into the tip of the hook, thereby providing excellent protection against lateral shifts.

The clevis sling hook is manufactured in accordance with EN 1677-2 with the mechanical values for G10, comes with BG-approval and CE-marking and guarantees top performance under straight pull only.

A competent person will require no special tools for the quick and easy assembly of the chain. A full operating manual is provided. The safety catch set consists of a die-forged safety catch, a stainless steel spring and a safety sleeve, all of which are easy to assemble, without the need for special tools.

Spare parts are also easy to come by: The coupling pin and the retaining pin are available as a KBSW spare parts set. The SFGW safety catch set may also be used as a spare part.



KHSW Clevis sling hook	Code	Working load limit [kg]	e [mm]	h [mm]	a [mm]	d [mm]	g1 [mm]	b [mm]	Weight [kg/pc.]
	KHSW 5/6	1.400	69	20	15	7,40	19	66	0,29
	KHSW 7	1.900	95	28	19	9	26	90	0,61
	KHSW 8	2.500	95	28	19	10	26	90	0,62
	KHSW 10	4.000	109	35	25	12,50	31	108	1,19
	KHSW 13	6.700	136	41	34	16	39	131	2,12
	KHSW 16	10.000	155	49	37	20	45	153	3,49
	KHSW 19/20	16.000	184	53	51	24	53	177	5,64
	KHSW 22	19.000	214	62	52	27	62	196	9,05

## pewag BKHSW Oversize clevis sling hook

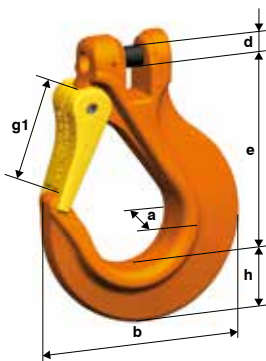
### The bigger, the better.

The safety latch of the BKHSW oversize clevis sling hook locks into the tip of the hook, thereby providing excellent protection against lateral shifts. The jaw opening is significantly larger than that of the standard KHSW, making this product extra-flexible. Forged control markings make it easy to determine discard criteria. The product may be linked to the chain quickly and easily, without the need for an additional connecting element. The product is designed for straight pull only. Care must be taken to protect the tip of the hook and the safety catch against loading. The BKHSW oversize clevis sling hook is easily and quickly assembled by a competent person – no special tools required! The coupling pin and the lock pin are available as a spare parts set. The safety catch set consists of a die-forged safety catch, a stainless steel spring and a safety sleeve.

The product comes with a full operating manual that will answer any other questions you may have. Outstanding quality features include manufacturing according to EN 1677-2 with the mechanical values for G10, BG-approval and CE-marking. The KHSW spare parts set consists of a coupling pin and retaining pin. The SFGW-B spare parts set consists of a safety catch, spring and safety sleeve.



BKHSW Oversize clevis sling hook



Code	Working load limit [kg]	e [mm]	h [mm]	a [mm]	d [mm]	g1 [mm]	b [mm]	Weight [kg/pc.]
BKHSW 8	2.500	93	27	25	10	32	98	1,01
BKHSW 10	4.000	111	33	30	12,50	38	119	1,57

## pewag<sup>®</sup> KCHW Clevis C-hook

### „C“ for Clever.

Simple and fast hooking and removal where no safety catch is required – this is where the KCHW clevis C-hook comes into its own! Its hook tip is shaped in such a way as to prevent accidental unhooking when not under load. The chain may be linked to the clevis system easily and speedily, without the need for additional connecting links.

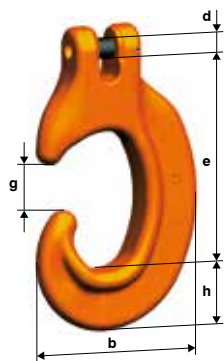
The hook is manufactured in accordance with EN 1677-1 with the mechanical values for G10, comes with BG-approval, CE-marking and a full operating manual. The KBSW spare parts set consists of a coupling pin and a retaining pin. A competent person will find both the hook and its spare parts set with coupling pin and retaining pin easy and quick to assemble, without the need for special tools.

Provided that it is used under straight pull only and without the tip being loaded, the clevis C-hook is a charming solution indeed.

**Attention: Discontinued item!**



KCHW Clevis C-hook



Code	Working load limit [kg]	e [mm]	h [mm]	d [mm]	b [mm]	g [mm]	Weight [kg/pc.]
KCHW 7	1.900	91	28	9	74	20	0,52
KCHW 8	2.500	90	28	10	74	20	0,51
KCHW 10	4.000	129	39	12,50	107	28	1,51
KCHW 13	6.700	166	51	16	137	41	3,13
KCHW 16	10.000	205	60	20	166	45	5,56

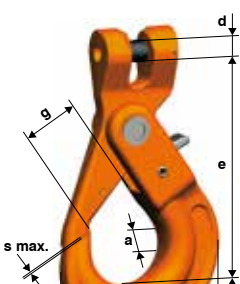
## pewag KLHW Clevis safety hook

### Guaranteed stress-resistant.

This clevis safety hook closes and locks automatically and has a significantly larger jaw opening than the KHSW clevis hook, which makes it much more versatile. The hook corresponds to EN 1677-3 with the mechanical values for G10. For safety reasons, it cannot be opened while under load. Please note that the hook is suitable for straight pull only and that the load must not be placed on the tip of the hook or the safety catch. If these safety requirements are adhered to, the hook is bound to live up to its name!

Assembly is quick and easy and does not require any special tools – however, it must be performed by a competent person. The full operating manual tells you all you need to know about using this product correctly. The hook comes with BG-approval, CE-marking and exchangeable spare parts. The coupling pin and retaining pin are available as a KBSW spare parts set, as is the VLHW locking set on the back of the hook.



KLHW Clevis safety hook	Code	Working load limit [kg]	e [mm]	h [mm]	a [mm]	b [mm]	d [mm]	g [mm]	s max. [mm]	Weight [kg/pc.]
	KLHW 5/6	1.400	94	20	17	71	7,40	28	1	0,56
	KLHW 7	1.900	123	26	20	88	9	34	1	0,87
	KLHW 8	2.500	123	26	20	88	10	34	1	1,00
	KLHW 10	4.000	144	30	29	107	12,50	45	1	1,61
	KLHW 13	6.700	180	40	35	138	16	52	1,50	3,25
	KLHW 16	10.000	218	50	41	168	20	60	2	5,95
	KLHW 19/20	16.000	259	62	50	194	24	70	2	12,89
	KLHW 22	19.000	286	65	52	211	27	81	2	15,91
	KLHW 26	26.500	338	79	61	253	33	100	2	21,33

# pewag KFW Clevis foundry hook

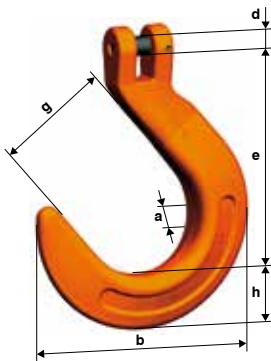
## Into the great wide open.

If you've got it, flaunt it - the oversize jaw size of the KFW clevis foundry hook plays all the tricks. This hook is frequently used in foundries and is manufactured according to EN 1677-1 with the mechanical values of G10. Other classic pewag quality features include BG-approval and CE-marking. Yet another typical pewag feature – the clevis system means that linking the hook to the chain is quick and easy, without the need for a connecting element. A full operating manual outlines everything you need to know for efficient and safe handling.

Please note that the hook is suitable for straight pull only and that the load must not be placed on the hook tip. Please check whether use without the safety catch is admissible prior to each use. For a competent person, assembly of the clevis foundry hook is quick and easy and does not require any special tools. Spare parts for the coupling pin and retaining pin are easily procured, thanks to the designated spare parts set.



KFW Clevis foundry hook	Code	Working load limit [kg]	e [mm]	h [mm]	a [mm]	g [mm]	d [mm]	b [mm]	Weight [kg/pc.]
	KFW 7	1.900	121	29	25	64	9	118	1,02
	KFW 8	2.500	120	29	25	64	10	118	1,04
	KFW 10	4.000	140	35	32	76	12,50	143	1,74
	KFW 13	6.700	170	42	40	89	16	170	3,38



# pewag KPW Clevis grab hook

## Perfect interplay.

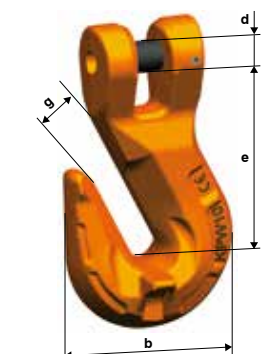
This standard shortening hook ensures optimal interaction between chain and hook thanks to the special design of the chain contact. Even when shortened, the working load limit is not reduced and the product is suitable for retrofitting. The clevis system makes it possible to link the chain to the hook quickly and easily, without the need for an additional connecting element. The coupling pin and the retaining pin are available as a KBSW spare parts set.

The clevis grab hook is manufactured according to EN 1677-1 with the mechanical values for G10 and comes with CE-marking. As specified in the full operating manual, it is not suitable for tip loading and assembly must always be performed by a competent person to ensure safe usage. No special tools are required for assembling this product.

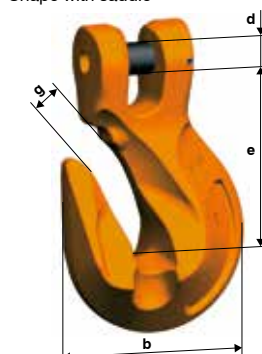


Code	Working load limit [kg]	e [mm]	b [mm]	d [mm]	g [mm]	Weight [kg/pc.]
KPW 6	1.400	47	44	7,40	7	0,19
KPW 7	1.900	63	57	9	9	0,46
KPW 8	2.500	63	57	10	9	0,46
KPW 10	4.000	78	71	12,50	12	0,90
KPW 13	6.700	93	92	16	15	1,85
KPW 16	10.000	115	113	20	19	3,49
KPW 19/20 <sup>1)</sup>	16.000	141	150	24	25	6,88
KPW 22 <sup>1)</sup>	19.000	158	165	27	27	9,68

KPW Clevis grab hook



Shape with saddle



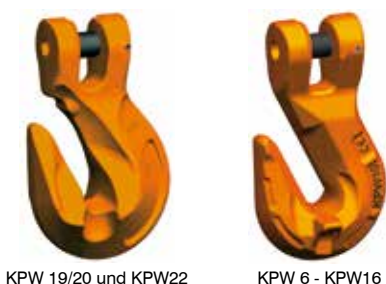
Shape with support surface

<sup>1)</sup> Shape with support surface

### pewag – passionate about user-friendliness

pewag sets great store by the user-friendliness of its products and stays abreast of market requirements in this respect. True to this principle, the design of parallel hooks in the pewag range is being adapted. The new design for dimensions 6 to 16 includes supporting saddles, offering perfect support for pewag winner chains and ensuring optimised positioning of the chain on the bearing surface.

**Exception:** Chain dimensions from 19/20 have not yet been adjusted. For technical reasons, chains with these dimensions must not touch the bearing surface of the hook.



KPW 19/20 und KPW22

KPW 6 - KPW16

# pewag KPSW Clevis grab hook with safety catch

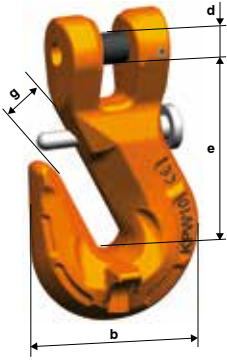
## Safe shortening.

This standard shortening hook ensures optimal interaction between chain and hook thanks to the special design of the chain contact, providing extra protection from accidental chain release. Even when shortened, the working load limit is not reduced and the product is suitable for retrofitting. The clevis system makes it possible to link the chain to the hook quickly and easily, without the need for an additional connecting element. The coupling pin and the retaining pin are available as a KPSW spare parts set.

Thanks to its safety mechanism which prevents the accidental unhooking of the chain, this hook is also ideal for securing loads.

The safety set PSGW consists of bolt, spring and nut and is also available as a spare parts set. The clevis grab hook is manufactured according to EN 1677-1 with the mechanical values for G10 and comes with CE-marking. As specified in the full operating manual, tip loading must be avoided and assembly must always be performed by a competent person to ensure safe usage. No special tools are required for assembling this product.



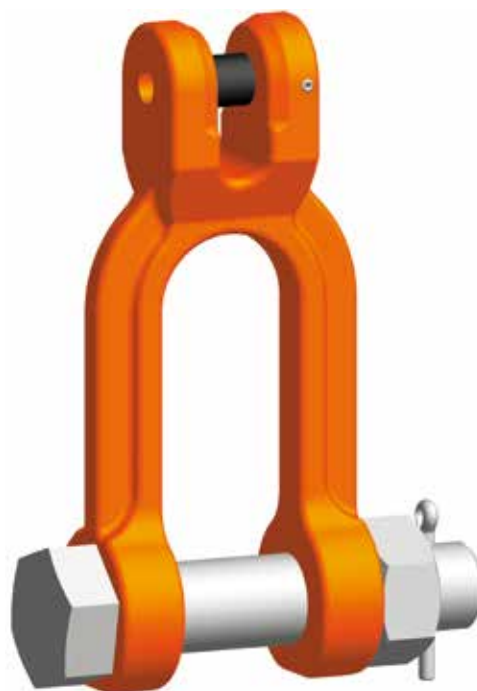
KPSW Clevis grab hook with safety catch	Code	Working load limit [kg]	e [mm]	b [mm]	d [mm]	g [mm]	Weight [kg/pc.]
	KPSW 7	1.900	63	57	9	9	0,48
	KPSW 8	2.500	63	57	10	9	0,48
	KPSW 10	4.000	78	71	12,50	12	0,93
	KPSW 13	6.700	93	92	16	15	1,90
	KPSW 16	10.000	115	113	20	19	3,55

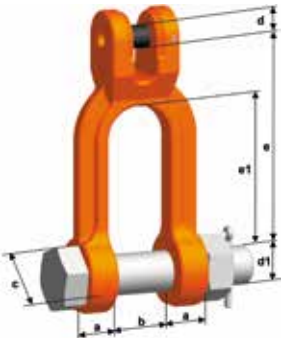
## pewag KSCHW Clevis shackle

### The missing link.

This high-performance shackle consists of a special screw, nut and split pin, which makes losing the screw practically impossible. The wide opening makes this shackle extremely versatile – for instance, it may be used on spreader beams. The clevis system makes linking the shackle to the chain quick and simple, without the need for an additional connecting element. The clevis shackle is manufactured according to EN 1677-1 with mechanical values for G10, and comes with a full operating manual, BG-approval and CE-marking.

Prior to each lifting operation, it must be checked that the safety split pin is in place and that the system is subjected to straight pull only. Lateral forces must not be applied. Assembly must be handled by a competent person. No special tools are required. The KBSW spare parts set consists of coupling pin and retaining pin. The KBMSW spare parts set consists of special screw, nut and split pin.



KSCHW Clevis shackle	Code	Working load limit [kg]	e [mm]	e1 [mm]	b min. [mm]	a [mm]	d [mm]	c [mm]	d1 [mm]	Weight [kg/pc.]
	KSCHW 7	1.900	76	54	26	12	9	31	16	0,64
	KSCHW 8	2.500	76	54	26	12	10	31	16	0,66
	KSCHW 10	4.000	105	76	32	16	12,50	39	20	1,22
	KSCHW 13	6.700	113	77	42	21	16	50	24	2,64


# pewag AWHW Weld-on hook

## Welding for winners.

This high-strength hook is particularly well suited for welding onto excavator bucket, spreader beams etc. Its outstanding features include a die-forged, tempered safety catch, making it extrarobust. As the safety catch locks into the tip of the hook, it provides excellent protection against lateral shifting.

The product is manufactured according to EN 1677-1 with a higher working load limit. Attention should be paid to the delivered operating manual and to the welding instructions. A CE-marking further emphasises the superior quality of this product. Replacing the SFGW-A safety catch set is easy and quick, without the need for special tools.



AWHW Weld-on hook	Code	Working load limit [kg]	L [mm]	H [mm]	G [mm]	B [mm]	C [mm]	Weight [kg/pc.]
	AWHW 1,3	1.300	95	74	20	25	34	0,67
	AWHW 3,8	3.800	132	106	26	35	40	1,40
	AWHW 6,3	6.300	167	133	29	45	49	2,95
	AWHW 10	10.000	175	136	29	50	49	4,02

# pewag ÜW Transition assembly

## For simple hooks according to DIN 15401 – smooth transition guaranteed!

Large master rings, combined with CW Connex and HSW eye hooks, make it possible to use smaller hooks, thereby opening up a wide range of possible combinations and working load limits, thanks to the modular assembly system. For details, please refer to the full operating manual.

The ÜW transition link assembly is manufactured according to EN 818-4 with the mechanical values for G10 and ensures smooth transitions throughout the pewag product range.



ÜW Transition assembly	Code	Single hook DIN 15401	Working load limit [kg]	Consisting of	Weight [kg/pc.]
	ÜW 32/16 I AW-HSW Connex	32	16.000	AW 50/CW 26/HSW 19/20	28,86
	ÜW 32/19 I AW-HSW Connex	32	19.000	AW 50/CW 26/HSW 22	30,54
	ÜW 32/26,5 I AW-HSW Connex	32	26.500	AW 50/CW 26/HSW 26	36,89
	ÜW 50/4 I VSAW-HSW Connex	50	4.000	VSAW 1-16/CW 16/HSW 10	12,54
	ÜW 50/6,7 I VSAW-HSW Connex	50	6.700	VSAW 1-16/CW 16/HSW 13	13,73
	ÜW 50/10 I VSAW-HSW Connex	50	10.000	VSAW 1-16/CW 16/HSW 16	15,05
	ÜW 50/16 I VSAW-HSW Connex	50	16.000	VSAW 1-22/CW 22/HSW 19/20	28,22
	ÜW 50/19 I VSAW-HSW Connex	50	19.000	VSAW 1-22/CW 22/HSW 22	29,90
	ÜW 50/26,5 I VSAW-HSW Connex	50	26.500	VSAW 1-26/CW 26/HSW 26	41,89
	ÜW 50/40 I AW-HSW Connex	50	40.000	AW 72/CW 32/HSW 32	80,76
	ÜW 100/26,5 I VSAW-HSW Connex	100	26.500	VSAW 1-32/320/CW 26/HSW 26	68,89
	ÜW 100/40 I VSAW-HSW Connex	100	40.000	VSAW 1-32/320/CW 32/HSW 32	87,26

# pewag ÜW Transition assembly

## For double hooks according to DIN 15402 – flawless finish.

Large master rings, combined with CW Connex and HSW eye hooks, make it possible to use smaller hooks, thereby opening up a wide range of possible combinations and working load limits, thanks to the modular assembly system. For details, please refer to the full operating manual.

The ÜW transition link assembly is manufactured according to EN 818-4 with the mechanical values for G10 and is regarded as a high-quality product that lives up to its name throughout the pewag product range.



ÜW Transition assembly	Code	Double hook DIN 15402	Working load limit [kg]	Consisting of	Weight [kg/pc.]
	ÜW 50/4 II VSAW-HSW Connex	50	4.000	2xVSAW 1-16/AW36/ CW16/HSW10	28,09
	ÜW 50/6,7 II VSAW-HSW Connex	50	6.700	2xVSAW 1-16/AW36/ CW16/HSW13	29,28
	ÜW 50/10 II VSAW- HSW Connex	50	10.000	2xVSAW 1-16/AW36/ CW16/HSW16	30,60
	ÜW 50/16 II VSAW-HSW Connex	50	16.000	2xVSAW 1-16/AW36/ CW19/20/ HSW19/20	33,10
	ÜW 50/19 II VSAW-HSW Connex	50	19.000	2xVSAW 1-22/AW50/ CW26/HSW22	67,09
	ÜW 50/26,5 II VSAW-HSW Connex	50	26.500	2xVSAW 1-22/AW50/ CW26/HSW26	73,44
	ÜW 50/36 II VSAW-HSW Connex	50	36.000	2xVSAW 1-22/AW50/ CW32/HSW32	91,81
	ÜW 100/26,5 II VSAW-HSW Connex	100	26.500	2xVSAW 1-32/320/AW50/ CW26/ HSW26	133,44
	ÜW 100/40 II VSAW-HSW Connex	100	40.000	2xVSAW 1-32/320/AW50/ CW32/ HSW32	151,81

VSAW angle of inclination: max. 35°.

# pewag academy



## Intermedial courses

Sustainable learning through intermediality of teaching material and didactic methods



## Anytime, anywhere

Maximum flexibility in learning with access to all information on the online learning platform



## ISO certified

High quality through ISO certification for learning services in non-formal education and training

## Knowledge for you

### Product and technology training, e-learning, blended learning

Learn about optimum use of pewag products from the first commissioning to ongoing use and maintenance, as well as about the technology applied and how it influences the product performance, quality and durability.



[academy.pewag.com](https://academy.pewag.com)



**pewag group**

LEADING TO EXCELLENCE



# Special accessories in G8

## Product overview

### Content

Unilock connecting link	82
Swivel	83
Clevis connector	84
Concrete pipe lifting sling	85-86
SM S-hook	87
SSM S-hook	88
Bale hook	89
Barrel hook	90
High-tensile lifting tong	91





# pewag U Unilock connecting link


## Heat-resistant up to 100 °C.

This universal connecting link in Grade 8 is suitable for a wide range of applications.

The connecting link is easy and quick to assemble by a competent person thanks to the hexagon screw and nut. A full operating manual provides detailed information on the assembly process. The connecting link is manufactured according to EN 1677-1, comes with CE-marking and is heat-resistant up to 100 °C. Always ensure that the nut is not overtightened and that the screw is able to rotate.

The special screw, the hexagonal nut and washers are available as a spare parts set. As the screw is a special screw, it must always be replaced by an original part.



U Unilock connecting link	Code	Working load limit [kg]	e [mm]	b [mm]	d [mm]	s [mm]	a [mm]	M [mm]	Weight [kg/pc.]
	U 5/6	1,120	33	21	9	11	17	7	0.077
	U 7	1,500	49	28	13	16	24	9	0.22
	U 8	2,000	48	28	13	16	24	10	0.22
	U 10	3,150	60	35	16	20	28	12	0.41
	U 13	5,300	72	39	18	24	34	16	0.65
	U 16	8,000	80	47	23	32	44	20	1.34
	U 19/20	12,500	96	56	26	36	52	24	2.03
	U 26	21,200	121	77	36	49	74	33	4.70

## pewag DF Swivel

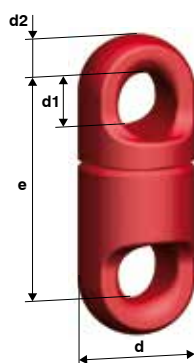
### 130 °C operating temperature.

This swivel is an excellent choice if you are looking for a special accessory in grade 8 that may be rotated under load and withstands an operating temperature of up to 130 °C.

The product is manufactured according to the pewag factory standard and comes with CE-marking, BG-approval and a full operating manual.



DF Swivel



Code	Working load limit [kg]	e [mm]	d [mm]	d1 [mm]	d2 [mm]	Weight [kg/pc.]
DF 5/6 <sup>1)</sup>	1,120	44	22	12	7	0.10
DF 7/8 <sup>1)</sup>	2,000	60	27	16	8	0.20
DF 10 <sup>1)</sup>	3,150	74	32	20	10	0.30
DF 13 <sup>1)</sup>	5,300	92	40	25	13	0.60

<sup>1)</sup> Upon request!

# pewag KVS Clevis connector

## A perfect fit.

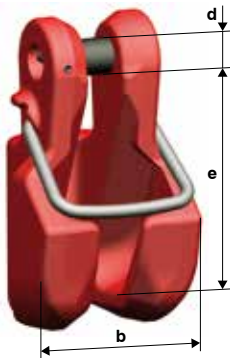
This clevis connector for grade 8 is designed for the shortening of chain slings and forming of slings that must not tighten and can be mounted without the need for special tools.

The shortening claw has a safety mechanism to prevent the accidental unhooking of the load, comes with CE-marking and BG-approval and is manufactured according to EN 1677-1. A full operating manual outlines all areas of possible use and also gives information on what to watch out for: for instance, the correct load direction of the chain and the correct assessment of the working load limit if combined with grade 10 chains. The clevis system makes this product easy and quick to assemble.

The coupling pin and the retaining pin are available as a KBSW spare parts set.



KVS Clevis connector	Code	Working load limit [kg]	e [mm]	b [mm]	d [mm]	Weight [kg/pc.]
	KVS 6	1,120	45	36	7,4	0.27
	KVS 7	1,500	58	44	9	0.50
	KVS 8	2,000	58	44	10	0.50
	KVS 10	3,150	70	55	12,5	0.80
	KVS 13	5,300	90	70	16	1.53



### Safety warnings:

- Only load the inside chain.
- Only use with a safety device.
- Ensure that the chain fits neatly and securely.

# pewag BRG Concrete pipe lifting sling

## Perfection you can touch.

This three-leg chain sling with self-tightening grips is perfect for lifting and transporting concrete pipes with a diameter between 1,300 and 2,300 mm.

The pipes may have a wall thickness from 60 to 150 mm, with a maximum weight of 2,500 kg.

The concrete pipe lifting sling corresponds to the pewag factory standard and may be used in a three-leg chain sling with an angle of inclination of up to 30°. For safety reasons, the grippers must not be used for diagonal pull. The maximum operating temperature is 100 °C.

A full operating manual provides information on all features and areas of application.



BRG Concrete pipe lifting sling	Code	Leg length	Working load limit up to 30°	Up to tube diameter	Weight	Greifbereich
		[mm]	[kg]	[mm]	[kg/pc.]	[mm]
	WIN 6 400 III VMXKW-BRG 2000	2.000	2.500	1.800	35,30	60-150
	WIN 6 400 III VMXKW-BRG 2500	2.500	2.500	2.300	36,60	60-150
	WIN 6 400 III VW-BRG 1500	1.500	2.500	1.300	32,00	60-150
	WIN 6 400 III VW-BRG 1500 Unilock	1.500	2.500	1.300	34,40	60-150
	WIN 6 400 III VW-BRG 2000	2.000	2.500	1.800	35,10	60-150
	WIN 6 400 III VW-BRG 2000 Unilock	2.000	2.500	1.800	35,30	60-150
	WIN 6 400 III VW-BRG 2500 Unilock	2.500	2.500	2.300	36,60	60-150

Customs lengths are available upon request!

Assembly options for BRG chain slings	VW	VMXKW	VW-Unilock

# pewag BCW Concrete pipe lifting sling

## Perfection you can touch.

Gripper slings for concrete pipes- and concrete shaft rings.

BCW clamps are preferably used for vertical lifting and moving of concrete pipes and wells. BCW/BCW-A clamps must always be used in pairs or per three clamps in combination with a chain sling. The movable side is fitted with a special high pressure plastic cover to protect load surface. High tensile two- or three leg chain slings available upon request. Type BCW-A: The jaw opening width is adjustable by steps of 25 mm.



BCW Concrete pipe lifting sling



Code	Leg length [mm]	Working load limit up to 30° [kg]	Up to tube diameter [mm]	Weight [kg/pc.]	Greifbereich [mm]
WIN 6 400 III KMGW-BCW 1500 KRW	1.500	2.500	1.300	36,70	60-120
WIN 6 400 III KMGW-BCW 2000 KRW	2.000	2.500	1.800	38,20	60-120
WIN 6 400 III KMGW-BCW 2500 KRW	2.500	2.500	2.300	39,60	60-120
WIN 6 400 III VMXKW-BCW 2000 KRW	2.000	2.500	1.800	38,90	60-120
WIN 6 400 III VMXKW-BCW 2500 KRW	2.500	2.500	2.300	40,20	60-120

Sonderlängen auf Anfrage möglich!

Assembly options for BCW chain slings

KMGW



VMXKW



## pewag SM S-Hook

### Bent on success.

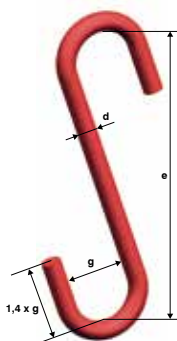
This SM S-hook withstands temperatures of up to 300 °C. It is manufactured according to EN 1677-1 and classified as a grade 8 special accessory. The hook may also be used as an intermediate hook if the „g“ jaw size of the HSW hook is insufficient, or as an intermediate hook with wire rope loops.

Prior to each use, please determine whether the hook may be used without a safety catch. Always observe the working load limits – they do not correspond to grade 10! A full operating manual provides details on usage and application.

This SM S-hook comes with CE-marking. It is suitable for straight pull only and the tip must not be placed under load. An added benefit: Customised designs (also with a safety catch) are available upon request!



SM S-Hook



Code	Working load limit [kg]	e [mm]	g [mm]	d [mm]	Weight [kg/pc.]
SM 5	800	180	42	16	0,60
SM 7/8	2.000	220	53	23	1,50
SM 10	3.150	280	58	31	3,40
SM 13	5.300	400	90	40	8,40
SM 16	8.000	500	120	50	16,00
SM 19	11.200	550	130	60	26,00

Custom designs are available upon request!

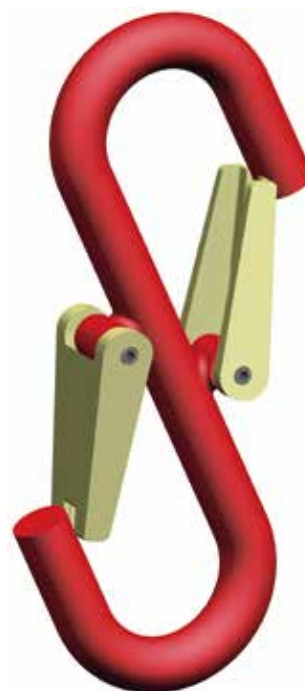
# pewag SSM S-Hook

## Better safe than sorry.

SSM S-hook with safety catch. This SSM S-hook withstands temperatures of up to 300°C. It is manufactured according to EN 1677-1 and classified as a grade 8 special accessory. The hook may also be used as an intermediate hook if the „g1“ jaw size of the HSW hook is insufficient, or as an intermediate hook with wire rope loops.

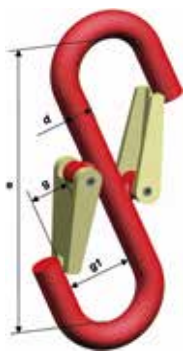
Always observe the working load limits – they do not correspond to grade 10! A full operating manual provides details on usage and application.

This SSM S-hook comes with CE-marking. It is suitable for straight pull only and the tip must not be placed under load.



SSM S-Hook	Code	Working load limit [kg]	e [mm]	g [mm]	g1 [mm]	d [mm]	Weight [kg/pc.]
	SSM 5	800	180	31	42	16	0,88
	SSM 7/8	2.000	220	43	53	23	1,6
	SSM 10	3.150	280	51	58	31	4,1
	SSM 13	5.300	400	76	90	40	8,5

Custom designs are available upon request!



## pewag BA Bale hook

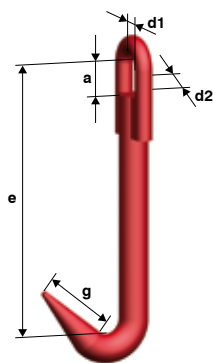
### Concentrated power.

The bale hook is a special accessory in grade 8, suitable for welded or Connex systems. It is ideal for lifting and transporting bales and structural steel wire meshes, is manufactured according to the pewag factory standard and comes with CE-marking. A full operating manual provides details on usage and application.

Prior to each use, please verify whether the hook may be used without a safety catch. Also note that this hook is suitable for straight pull only and that the load must not be placed on the tip of the hook. An added bonus – customised designs are available upon request!



BA Bale hook



Code	Working load limit [kg]	e [mm]	d1 [mm]	g [mm]	a [mm]	d2 [mm]	Weight [kg/pc.]
BA 5/6	1,120	160	16	40	24	7	0.36
BA 7/8	2,000	200	19	50	30	10	0.72
BA 10	3,150	260	27	65	39	13	1.78

## pewag FA Barrel hook

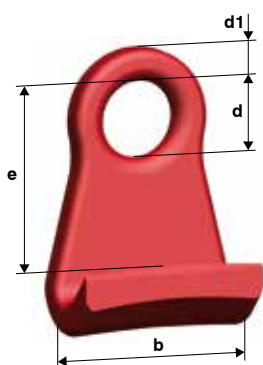
### Truly uplifting.

Please note that an inclination angle of 30° is the maximum value for this special accessory in grade 8. The hook is perfect for lifting and transporting barrels.

To do this, two hooks are attached to chain, which contracts under load. Moreover, the barrel hook complies with the pewag factory standard and comes with a full operating manual.



FA Barrel hook	Code	Working load limit [kg]	e [mm]	d [mm]	d1 [mm]	b [mm]	Weight [kg/pc.]
	FA 5/6	500	90	40	17	70	0.80



#### Order example for a complete chain sling:

- WIN 6 II AW-S-FA 2500
- WIN 6 II AW-S-FA 100

# pewag HZ High-tensile lifting tong

## Benefits that go further.

The tips of these high-tensile lifting tongs in grade 8 are reinforced, making the lifting of short steel bars easier than ever. Naturally the tongs comply with the pewag works standard and come with a full operating manual.

Always observe the working load limits - they do not correspond to grade 8 and grade 10! Customised designs are available upon request, making these tongs a truly superior choice.



HZ High-tensile lifting tong	Code	Working load limit [kg]	Range [mm]	e [mm]	d [mm]	Weight [kg/pc.]	Required chain sling
	HZ 0,125	125	100 - 200	310	15	2,43	WIN 5 II AW-CW 310
	HZ 0,25	250	130 - 300	466	20	4,77	WIN 6 II AW-CW 410
	HZ 0,5	500	160 - 400	629	28	12,00	WIN 7 II AW-CW 570
	HZ 1	1.000	215 - 500	808	30	24,00	WIN 8 II AW-CW 730
	HZ 2	2.000	250 - 600	959	30	41,00	WIN 8 II AW-CW 830



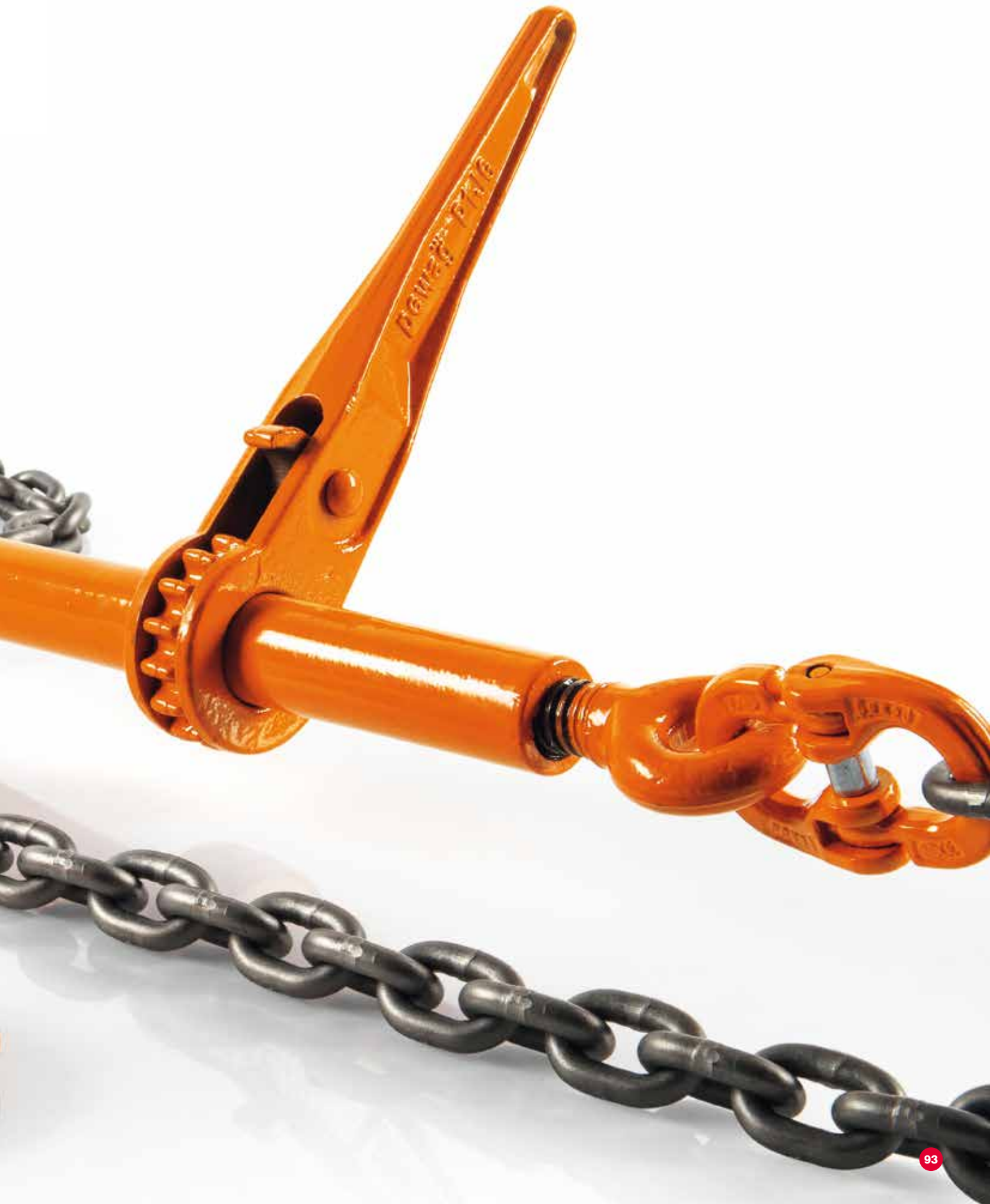
# Lashing in G10

## Benefits and information

### Content

Lashing chains in G10 quality, pewag winner key data, Order example, pewag winner identification	94-95
Direct lashing	96
Lashing down	97
Dynamic friction values	98
Comparison between G8, G10 and G12 lashing chains	99

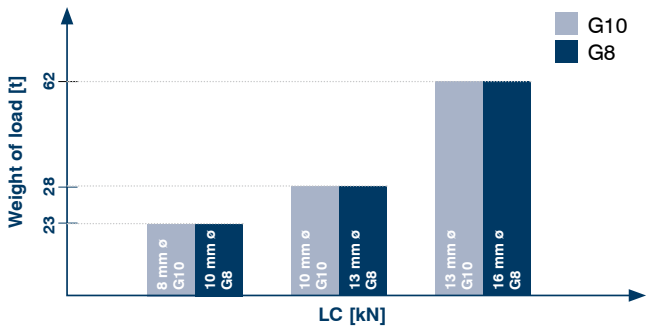
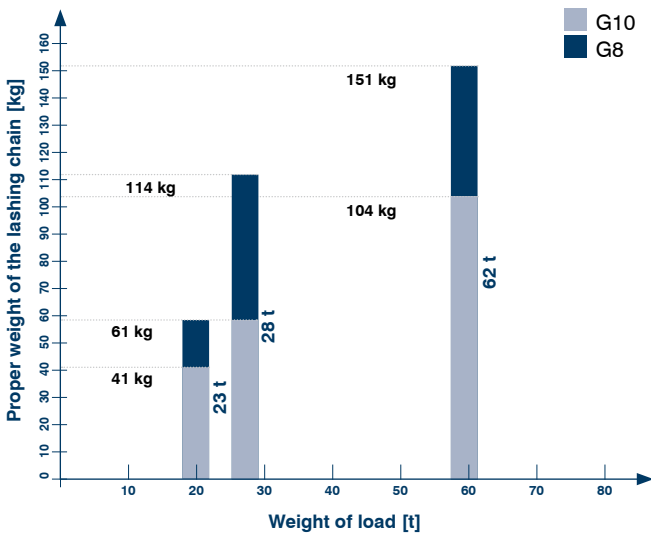




# pewag lashing chains in G10 quality – benefits that speak for themselves.

On a global scale, pewag is a true pioneer when it comes to the production of lashing chains. User-friendliness and compliance with all legal stipulations for securing loads are part for the course and constitute a solid foundation for all our products. These characteristics are clearly measurable and are influential factors during product development and manufacturing. Quite simply, only the best products get made!

- 25 % increase in lashing capacity and therefore also in load-securing capacity compared to G8.



- The same chain dimension secures a heavier and/or bulkier load - a performance increase of no less than 25 % compared to direct lashing in G8!

Admissible lashing LC	Previous weight of	pewag winner chains-ø	% Reduction
50	13.4	10.1	25 %
80	21.9	15.1	31 %

- Large product range for 5 chain dimensions.
- Significant improvements for direct lashing: chain dimension is reduced, resulting in significantly lower weight and costs!

Admissible lashing LC	Chains up to ø	pewag winner chains-ø
50	10	8
80	13	10
134	16	13

- For lashing-down operations with the same securing capacity (STF), you can always downsize to a smaller chain dimension, thereby reducing weight and costs.
- Lashing operations using pewag winner result in considerably reduced weight and easier handling.
- Highest level of thanks to clear identification tag according to EN12195-3 with G10 values.

## pewag winner key data – facts that speak for themselves.

### Top of the range:

- **Chain quality:** pewag winner meets the EN818-2 standard with modifications (higher mechanical values, reduced operating temperature)
- **Lashing force:** 500 N/mm<sup>2</sup>.
- **Test stress:** 625 N/mm<sup>2</sup>.
- **Breaking stress:** 1,000 N/mm<sup>2</sup>.
- **Breaking elongation:** min. 20 %.
- **Bending:** 0.8 x d.
- **Stress crack corrosion:** Same stress crack corrosion characteristics as in G8.
- **Operating temperature:** -40 °C to +200 °C.
- **Quality grade stamping:** pewag winner chain 200 Lashing chain - 10 at a distance of 300 mm and 10 on the back of each link
- **pewag winner components – 10.**
- **Manufacturer's name or symbol** on the chain and the components: **PW or pewag.**
- **Surface:**  
**Chain** – clear-coated.  
**Components** – orange powder-coated – RAL 2004.
- **Lashing tag** contains all the user-relevant data.
- **Compatibility:** pewag winner chains and components may be combined by a competent person under consideration of the manufacturer specifications with all components of G8 meeting the requirements of EN 818 and EN 1677. Furthermore, pewag winner chains may be combined with all competitor chains and components that are also compatible with EN 818 and EN 1677. Please note that pewag winner chains and components are not compatible with products that do not comply with EN 818 and/or EN 1677!

The maximum lashing capacity of pewag lashing chains is always defined by their weakest part. Only original pewag spare parts (esp. pins and bolts, safety catches, etc.) may be used for pewag products, following the inspection and approval by a competent person.

The product dimensions given in this catalogue are nominal dimensions. Depending on the production process, they are subject to various manufacturing tolerances. If necessary, please contact our customer service team for more information.

## Sample order text for pewag winner lashing system.

Below you will find a detailed example of a finished and commercially available pewag lashing chain (pewag winner 8 mm – single lashing chain with shortening components and clevis hook, mounted with Connex connecting links, length: 3,500 mm)

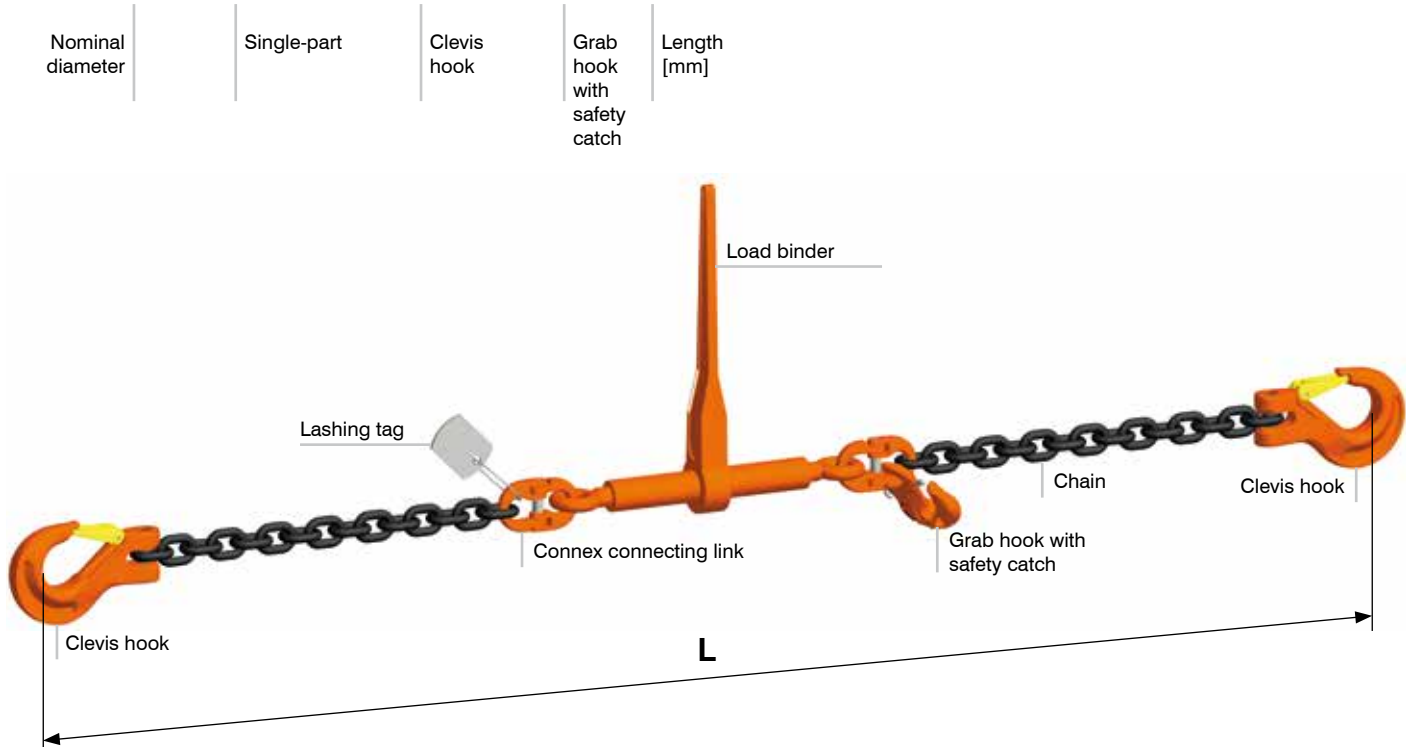
## Labelling and documentation, taken seriously.

The lashing chains are supplied with the following labels and documents in accordance with EN 12195-3:

- Lashing chain tag.
- Manufacturer's certificate.
- User information.
- Test certificate/lashing chain file.



### ZRSW 8 200 I - KHSW - KHSW - PSW 3500



## Direct lashing

Lashing system: WIN 7 chain with dimension 7 load binder (LC 38 kN; for 4 lashing chains)

Angle $\alpha$	Angle $\beta$	Max. load [kg] at dynamic friction factor						
		0.01	0.1	0.2	0.3	0.4	0.5	0.6
20 - 35°	21 - 30°	-	-	8.200	11.050	13.350	16.500	21.000
20 - 35°	31 - 40°	6.050	7.000	8.300	9.950	12.150	15.050	18.950
20 - 35°	41 - 50°	5.050	5.950	7.150	8.650	10.600	13.050	16.450
20 - 35°	51 - 60°	3.950	4.700	5.750	7.100	8.700	10.650	13.500
36 - 50°	21 - 30°	-	-	7.450	9.600	11.950	15.050	19.550
36 - 50°	31 - 40°	-	5.750	7.100	8.750	10.950	13.900	18.150
36 - 50°	41 - 50°	4.000	4.900	6.150	7.700	9.750	12.500	16.450
36 - 50°	51 - 60°	-	3.950	5.100	6.500	8.350	10.850	14.450

Lashing system: WIN 8 chain with dimension 8 load binder (LC 50 kN; for 4 lashing chains)

Angle $\alpha$	Angle $\beta$	Max. load [kg] at dynamic friction factor						
		0.01	0.1	0.2	0.3	0.4	0.5	0.6
20 - 35°	21 - 30°	-	-	10.800	14.550	17.600	21.750	27.600
20 - 35°	31 - 40°	7.950	9.200	10.950	13.150	15.950	19.800	24.950
20 - 35°	41 - 50°	6.650	7.850	9.400	11.400	13.950	17.200	21.650
20 - 35°	51 - 60°	5.200	6.200	7.600	9.350	11.400	14.050	17.800
36 - 50°	21 - 30°	-	-	9.850	12.650	15.700	19.850	25.750
36 - 50°	31 - 40°	-	7.550	9.300	11.550	14.400	18.300	23.900
36 - 50°	41 - 50°	5.250	6.450	8.100	10.150	12.850	16.450	21.650
36 - 50°	51 - 60°	-	5.200	6.700	8.550	11.000	14.300	19.000

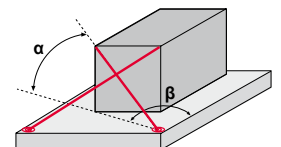
Lashing system: WIN 10 chain with dimension 10 loadbinder (LC 80 kN; for 4 lashing chains)

Angle $\alpha$	Angle $\beta$	Max. load [kg] at dynamic friction factor						
		0,01	0,1	0,2	0,3	0,4	0,5	0,6
20 - 35°	21 - 30°	-	-	17.350	23.300	28.200	34.800	44.200
20 - 35°	31 - 40°	12.750	14.750	17.550	21.050	25.550	31.700	39.900
20 - 35°	41 - 50°	10.700	12.550	15.050	18.200	22.350	27.550	34.600
20 - 35°	51 - 60°	8.350	9.950	12.150	14.950	18.300	22.500	28.500
36 - 50°	21 - 30°	-	-	15.750	20.250	25.150	31.750	41.200
36 - 50°	31 - 40°	-	12.100	14.900	18.450	23.100	29.350	38.250
36 - 50°	41 - 50°	8.450	10.350	12.950	16.250	20.550	26.350	34.600
36 - 50°	51 - 60°	-	8.350	10.700	13.700	17.600	22.900	30.450

Lashing system: WIN 13 chain with dimension 13 load binder (LC 134 kN; for 4 lashing chains)

Angle $\alpha$	Angle $\beta$	Max. load [kg] at dynamic friction factor						
		0,01	0,1	0,2	0,3	0,4	0,5	0,6
20 - 35°	21 - 30°	-	-	29.050	39.050	47.200	58.250	74.050
20 - 35°	31 - 40°	21.350	24.750	29.400	35.250	42.850	53.100	66.900
20 - 35°	41 - 50°	17.950	21.050	25.250	30.550	37.400	46.150	58.000
20 - 35°	51 - 60°	13.950	16.700	20.400	25.100	30.650	37.700	47.750
36 - 50°	21 - 30°	-	-	26.400	33.950	42.150	53.200	69.000
36 - 50°	31 - 40°	-	20.300	25.000	30.950	38.700	49.150	64.050
36 - 50°	41 - 50°	14.150	17.350	21.750	27.250	34.450	44.150	58.000
36 - 50°	51 - 60°	-	14.000	17.950	23.000	29.500	38.350	51.000

This table provides information on how to get the best use from the pewag lashing systems. The loads specified are maximum loads that may be secured using four equal lashing chains and given the specified angles and dynamic friction factors. Additional securing methods (i.e. wedges or similar) that may be used to secure even heavier weights have not been taken into account. Please contact our customer service, for more information. Every lashing dimension has its own table. The maximum forces resulting from acceleration, braking and avoidance manoeuvres in road traffic acc. to EN 12195-1 were taken into account. Different tables apply for transport by rail and sea. Our customer service team will be pleased to provide additional information.



## Lashing down

### Tensioner with an STF value of: 1900daN

Angle to surface $\alpha$	Max. load [kg] at dynamic friction factor					
	0,1	0,2	0,3	0,4	0,5	0,6
90°	430	1.010	1.820	3.040	5.060	9.120
85°	430	1.000	1.810	3.020	5.040	9.080
80°	420	990	1.790	2.990	4.980	8.980
70°	400	950	1.710	2.850	4.760	8.560
60°	370	870	1.570	2.630	4.380	7.890
50°	330	770	1.390	2.320	3.880	6.980
40°	270	650	1.170	1.950	3.250	5.860
30°	210	500	910	1.520	2.530	4.560

### Tensioner with an STF value of: 2500daN

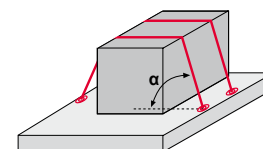
Angle to surface $\alpha$	Max. load [kg] at dynamic friction factor					
	0,1	0,2	0,3	0,4	0,5	0,6
90°	570	1.330	2.400	4.000	6.660	12.000
85°	560	1.320	2.390	3.980	6.640	11.950
80°	560	1.310	2.360	3.930	6.560	11.810
70°	530	1.250	2.250	3.750	6.260	11.270
60°	490	1.150	2.070	3.460	5.770	10.390
50°	430	1.020	1.830	3.060	5.100	9.190
40°	360	850	1.540	2.570	4.280	7.710
30°	280	660	1.200	2.000	3.330	6.000

### Tensioner with an STF value of: 3000daN

Angle to surface $\alpha$	Max. load [kg] at dynamic friction factor					
	0,1	0,2	0,3	0,4	0,5	0,6
90°	680	1.600	2.880	4.800	8.000	14.400
85°	680	1.590	2.860	4.780	7.960	14.340
80°	670	1.570	2.830	4.720	7.870	14.180
70°	640	1.500	2.700	4.510	7.510	13.530
60°	590	1.380	2.490	4.150	6.920	12.470
50°	520	1.220	2.200	3.670	6.120	11.030
40°	440	1.020	1.850	3.080	5.140	9.250
30°	340	800	1.440	2.400	4.000	7.200

This table provides information on how to get the best use from the pewag lashing systems. The loads specified are maximum loads that may be secured using four equal lashing chains and given the specified angles and dynamic friction factors.

**Please note:** Use at least two lashing devices for lashing-down operations! Additional securing methods (i.e. wedges, using the side panel as a blocker etc.) that may be used to secure even heavier weights have not been taken into account in the table. Please contact our customer service, for more information. The values specified in the table only apply to situations where the lashing system on both sides of the load is not subject to the same tension force (STF) due to the deflection and edges. If this can be determined (e.g. using a pretensioning gauge), the values in the table may be increased by a factor of 1.3. The maximum loading weight depends on the STF value of the tensioning system, which is shown on the lashing system's tag. Every lashing system has its own table. The maximum forces resulting from acceleration, braking and avoidance manoeuvres in road traffic acc. to EN 12195-1 were taken into account. Different tables apply for transport by rail and sea. Our customer service team will be pleased to provide additional information.



## Dynamic friction values of frequently transported goods

Combination of materials on the contact surface	Dynamic friction value
<b>Sawn wood</b>	
Sawn wood - fabric base laminate/plywood	0,45
Sawn wood - grooved aluminium	0,40
Sawn wood - shrink film	0,30
Sawn wood - stainless steel sheet	0,30
<b>Plane wood</b>	
Plane wood - fabric base laminate/plywood	0,30
Plane wood - grooved aluminium	0,25
Plane wood - stainless steel sheets	0,20
<b>Plastic pallet</b>	
Plastic pallet - fabric base laminate/plywood	0,20
Plastic pallet - grooved aluminium	0,15
Plastic pallet - stainless steel sheet	0,15
<b>Steel and metal</b>	
Steel crate - fabric base laminate/plywood	0,45
Steel crate - grooved aluminium	0,30
Steel crate - stainless steel sheet	0,20
<b>Concrete</b>	
Concrete rough - sawn wood battens	0,70
Concrete smooth - sawn wood battens	0,55
<b>Anti-slip mat<sup>1)</sup></b>	
Rubber - other material	0,60 <sup>2)</sup>

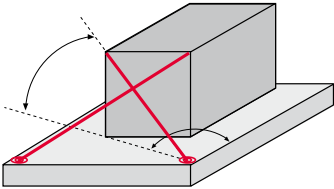
- The friction coefficients are based on EN12195-1 and apply to clean surfaces under ideal conditions.
- Please note: Dirty, wet or icy surfaces will reduce friction factors. Be aware that changes in the friction coefficients may occur even during transportation, depending on the time of year!
- Always be on the safe side – if in doubt, choose the lower value!

<sup>1)</sup> Surface clean, free from oil, ice, grease

<sup>2)</sup> Unless anti-slip mat certificate shows different values for both surface contact combinations.

## Comparison between G8, G10 and G12 lashing chains.

**Direct lashing of loads on trucks**



When using 4 lashing chains of type	Admissible load [kg] when using 4 lashing chains $\alpha = 35^\circ$ , $\beta = 30^\circ$ , friction coefficient $\mu = 0.3$		
	ZRS G8	ZRSW G10	ZRSWP G12
Lashing chain 8 mm	14,100	17,600	21,150
Lashing chain 10 mm	22,200	28,200	35,250
Lashing chain 13 mm	35,250	47,200	56,400



# Chains and accessories in G10

## Product overview

### Content

Product overview lashing G10	102
pewag winner 200 Lashing chain	103
pewag winner RSW Load binder G10	104
pewag winner RSPSW Load binder G10	105
pewag winner ZRSW Lashing chain G10	106-107
pewag winner ZKSW Lashing chain G10	108-109
pewag winner ZKW Lashing chain G10	110
pewag lifting solutions	111

















## Product overview lashing G10

### Which accessories from the lifting program are suitable for lashing applications?

The table gives you an overview of our accessories from the lifting program, which we recommend for lashing applications. Please note that due to different standard regulations, the permissible load during lashing differs from the maximum working load limit during lifting.

The permissible lashing force according to the following table must be taken into account for lashing applications.

Dimension	7	8	10	13	16
Lashing capacity LC [kN]	38	50	80	134	200
<b>Lashing accessories</b>					
winner 200 Lashing chain 	WIN 7 200	WIN 8 200	WIN 10 200	WIN 13 200	WIN 16 200
AW 	AW 13	AW 16	AW 18	AW 22	AW 26
MW 	MW 13	MW 16	MW 18	MW 22	MW 26
KMGW 1-... 	-	KMGW 1-8	KMGW 1-10	KMGW 1-13	KMGW 1-16
CW 	CW 7	CW 8	CW 10	CW 13	CW 16
HSW 	HSW 7/8	HSW 7/8	HSW 10	HSW 13	HSW 16
PSW 	PSW 7/8	PSW 7/8	PSW 10	PSW 13	PSW 16
KHSW 	KHSW 7	KHSW 8	KHSW 10	KHSW 13	KHSW 16
BKHSW 	-	BKHSW 8	BKHSW 10	-	-
KLHW 	KLHW 7	KLHW 8	KLHW 10	KLHW 13	KLHW 16
KPSW 	KPSW 7	KPSW 8	KPSW 10	KPSW 13	KPSW 16
KSCHW 	KSCHW 7	KSCHW 8	KSCHW 10	KSCHW 13	-

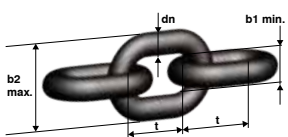
# pewag<sup>\*\*\*</sup> winner 200 Lashing chain

## Tested by fire and resistant to cold temperatures.

This lashing chain complies with EN 818-2 with the mechanical values of G10 and has a 25 % higher lashing capacity than grade 8. It is used to assemble lashing chains in the one- or two-part system in accordance with EN 12195-3 and is suitable for operating temperatures from -40 °C to +200 °C.

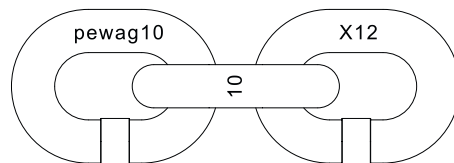
The chain is easy to assemble using the Connex or clevis system. A full operating manual is provided.



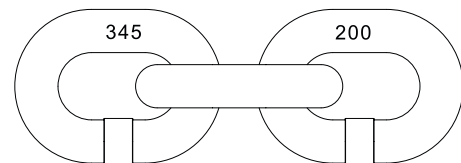
winner 200 Lashing chain	Code	Nominal diameter dn [mm]	Standard length [m]	Pitch t [mm]	Inside width b1 min. [mm]	Outside width b2 max. [mm]	LC lashing capacity [kN]	Breaking force [kN]	Weight [kg/m]
	WIN 7 200	7	-	21	9,50	25,20	38	77	1,20
	WIN 8 200	8	-	24	10,90	28,80	50	101	1,57
	WIN 10 200	10	-	30	13,50	37	80	157	2,46
	WIN 13 200	13	-	39	17,70	46,40	134	265	4,05
	WIN 16 200	16	-	48	21,50	57,60	200	402	6,28

The chain is lack varnished, optionally also available with the tried-and-tested coropro coating PCP for maximum corrosion resistance.

**Stampings:**  
 Manufacturer: pewag  
 Grade: 10  
 Type: 200  
 Traceability code: X12345



Front



Back

# pewag RSW Load binder G10

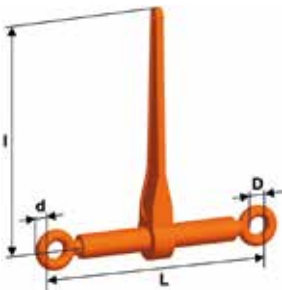
## Powerful and popular.

This load binder for one-part lashing chains in accordance with EN 12195-3 is also suitable for frictional lashing, depending on the selected lever length (always take the STF value into account!). It has a 25 % higher lashing capacity than grade 8 and is manufactured according to EN 12195-3.

Please note that the product must not be used for the lifting or attaching of loads. A full operating manual describes areas of application as well as the assembly process. Assembly into a lashing chain is simple and quick thanks to Connex connecting links.



RSW Load binder G10	Code	Marking / stamping	LC lashing capacity	STF Standard tension force	Length closed L	Length open L	Tension distance	Lever length l	D	d	Weight
			[kN]	[daN]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
	RSW 7/8	Typ A	50	1,900	355	500	145	237	20	16	3.20
	RSW 10	Typ B	80	3,000	365	505	140	355	26	18	3.80
	RSW 13	Typ C	134	2,500	576	866	290	359	31	22	9.90



# pewag RSPSW Load binder G10

## Flexible tension.

This load binder for two-part lashing chain systems in accordance with EN 12195-3 is intended for the ZKW lashing chain – the two are always used in conjunction.

The PSW shortening hook with safety catch is already assembled. Depending on the selected lever length (always take the STF value into account!), all sizes are also suitable for frictional lashing.

The lashing capacity is 25 % higher than for grade 8. As specified in the full operating manual, this load binder is not suitable for lifting or attaching loads. Thanks to the pre-mounted shortening hook, the RSPSW load binder may be positioned anywhere in the ZKW lashing chain.



RSPSW Load binder G10	Code	Marking / stamping	LC lashing capacity [kN]	STF Standard tension force [daN]	Length closed L [mm]	Length open L [mm]	Tension distance [mm]	Lever length l [mm]	g [mm]	Weight [kg/pc.]
	RSPSW 8 <sup>1)</sup>	Type A	50	1,900	609	754	145	237	9	4.40
	RSPSW 10	Type B	80	3,000	663	808	145	355	12	6.30
	RSPSW 13	Type C	134	2,500	954	1,244	290	359	15	15.00



<sup>1)</sup> Also useable with a 7 mm chain. LC with 7 mm chain = 38 kN!

# pewag ZRSW | KHSW-KHSW-PSW Lashing chain G10

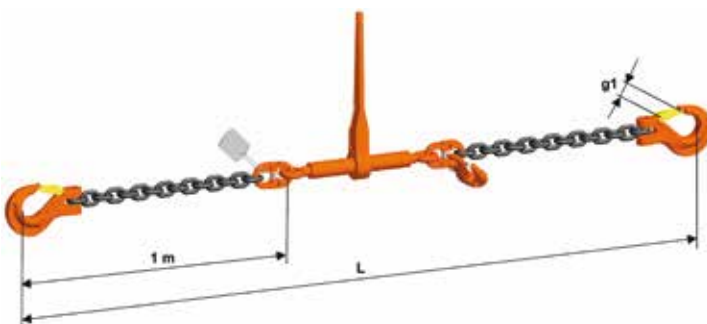
## Build your own.

This lashing chain surpasses the requirements of EN 12195-3 as it has a 25 % higher lashing capacity than standard G8 lashing chains. The lashing chain comes in a modular design with a standard length of 3,500 mm and is also suitable for frictional lashing, provided that the STF value is taken into account. Other end fittings and/or combinations and delivery lengths are available upon request and with short delivery times.

Please note that the product must not be used for lifting or attaching loads. A full operating manual tells you all you need to know about how to use the chain to its best advantage. Make sure you also refer to the tables for a useful overview.



Code	LC lashing capacity [kN]	STF Standard tension force [daN]	Length RSW closed L [mm]	Length RSW open L [mm]	Tension distance [mm]	Jaw size g1 [mm]	Weight [kg/pc.]
ZRSW 7 200   KHSW-KHSW-PSW 3500	38	1.900	355	500	145	26	8,40
ZRSW 8 200   KHSW-KHSW-PSW 3500	50	1.900	355	500	145	26	10,10
ZRSW 10 200   KHSW-KHSW-PSW 3500	80	3.000	365	505	140	31	15,30
ZRSW 13 200   KHSW-KHSW-PSW 3500	134	2.500	576	866	290	39	26,10



# pewag ZRSW I KHSW-KHSW-KPSW Lashing chain G10

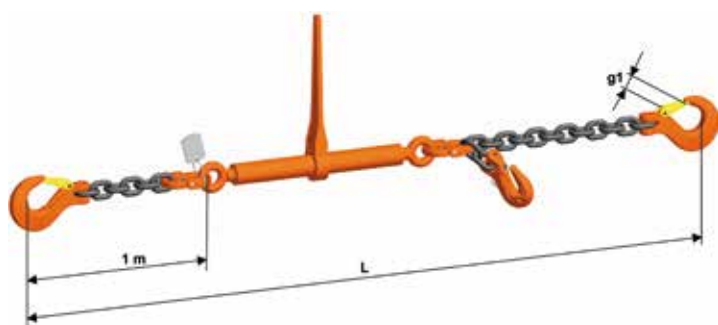
## Build your own.

This lashing chain surpasses the requirements of EN 12195-3 as it has a 25 % higher lashing capacity than standard G8 lashing chains. The lashing chain comes in a modular design with a standard length of 3,500 mm and is also suitable for frictional lashing, provided that the STF value is taken into account. Other end fittings and/or combinations and delivery lengths are available upon request and with short delivery times.

Please note that the product must not be used for lifting or attaching loads. A full operating manual tells you all you need to know about how to use the chain to its best advantage. Make sure you also refer to the tables for a useful overview.



Code	LC lashing capacity [kN]	Length RSW closed L [mm]	Length RSW open L [mm]	Tension distance [mm]	STF Standard tension force [daN]	Jaw size g1 [mm]	Weight [kg/pc.]
ZRSW 7 200 I KHSW-KHSW-KPSW 3500	38	355	500	145	1.900	26	8,40
ZRSW 8 200 I KHSW-KHSW-KPSW 3500	50	355	500	145	1.900	26	10,10
ZRSW 10 200 I KHSW-KHSW-KPSW 3500	80	365	505	140	3.000	31	15,30
ZRSW 13 200 I KHSW-KHSW-KPSW 3500	134	576	866	290	2.500	39	26,10



# pewag<sup>®</sup> ZKSW I KHSW-KHSW-PSW Lashing chain G10

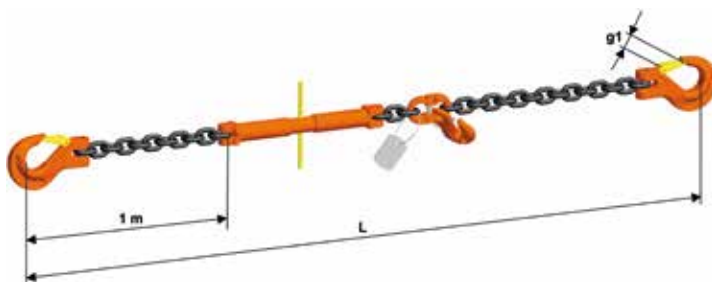
## Short-term delivery time for long-term benefits.

This lashing chain surpasses the requirements of EN 12195-3 as it has a 25% higher lashing capacity than standard G8 lashing chains. The lashing chain comes in a modular design with a standard length of 3,500 mm. Other end fittings/combinations and delivery lengths are available upon request and with short delivery times.

Please note that the product must not be used for lifting or attaching loads. A full operating manual tells you all you need to know on how to use the chain to its best advantage.



Code	LC lashing capacity [kN]	Length KSSW closed L [mm]	Length KSSW open L [mm]	Tension distance [mm]	STF Standard tension force [daN]	Jaw size g1 [mm]	Weight [kg/pc.]
ZKSW 16 200 I KHSW-KHSW-PSW 3500	200	530	780	250	-	45	37,70

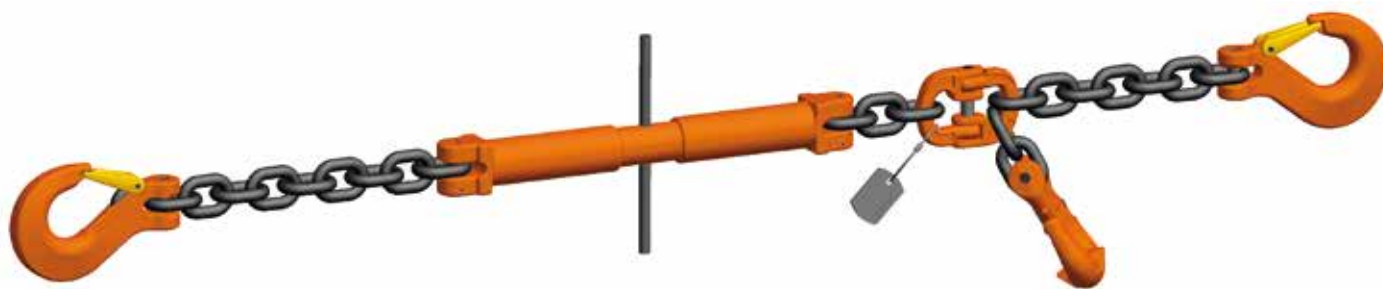


## pewag ZKSW I KHSW-KHSW-KPSW Lashing chain G10

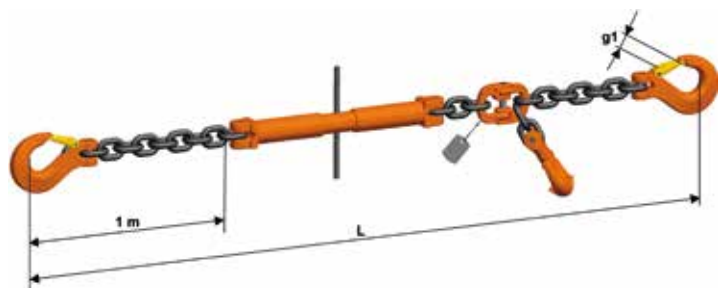
### Outstanding quality for lasting benefits.

This lashing chain for securing loads has a 25 % higher lashing capacity than standard G8 lashing chains and thus surpasses EN 12195-3. The lashing chain has a standard length of 3,500 mm and comes in a modular design. Other end fittings/combinations and delivery lengths are available upon request and with short delivery times.

Please note that the product must not be used for lifting or attaching loads. For details, please refer to the full operating manual.



Code	LC lashing capacity [kN]	Length KSSW closed L [mm]	Length KSSW open L [mm]	Tension distance [mm]	STF Standard tension force [daN]	Jaw size g1 [mm]	Weight [kg/pc.]
ZKSW 16 200 I KHSW-KHSW-KPSW 3500	200	530	780	250	-	45	37,70



## pewag ZKW Lashing chain G10 as two-part system

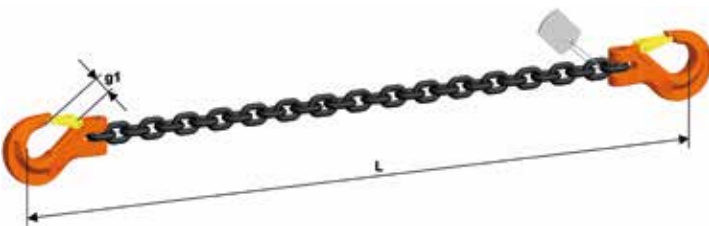
### Short-term delivery times for long-term benefits.

This lashing chain surpasses the requirements of EN 12195-3 as it has a 25 % higher lashing capacity than standard G8 lashing chains. It comes in a modular design and a standard length of 3,500 mm and is also suitable for frictional lashing, provided that the STF value of the tensioner is taken into account. Other end fittings/combinations and delivery lengths are available upon request and with short delivery times.

Please note that the product must not be used for lifting or attaching loads. A full operating manual tells you all you need to know about how to use the chain to its best advantage.



Code	LC lashing capacity [kN]	L [mm]	g1 [mm]	Weight [kg/pc.]
ZKW 7 200   KHSW-KHSW 3500	38	3,500	26	5.17
ZKW 8 200   KHSW-KHSW 3500	50	3,500	26	6.40
ZKW 10 200   KHSW-KHSW 3500	80	3,500	31	10.27
ZKW 13 200   KHSW-KHSW 3500	134	3,500	39	17.49



**The original. proven in quality.**



Higher working load limit compared to G8.



Weight reduction.



Cost savings.



Developed and manufactured in Europe.



Anti-corrosion coating.



**Top solutions for your lifting challenges:**



levo



lifting points



lifting magnets



lifting clamps

# Chains and accessories in G8

## Product overview

### Content

pewag RSPS Load binder G8	114
pewag KSS Clevis turnbuckle G8	115
pewag KVS Clevis connector G8	116





# pewag RSPS Load binder G8

## The element for tension.

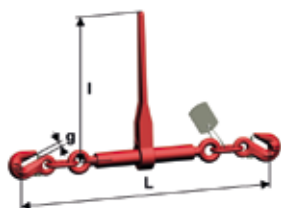
This load binder for two-part lashing chain systems in accordance with EN 12195-3 is intended for the ZKW lashing chain. It includes a pre-mounted shortening hook including safety catch and, depending on the selected lever length, all sizes are also suitable for frictional lashing (always take the STF value into account!).

As specified in the full operating manual, this load binder is not suitable for lifting or attaching loads. Please also note that, if used with grade 10 lashing chains, the lashing capacity must be assessed in accordance with G8!

Thanks to the pre-mounted shortening hook, the load binder may be positioned anywhere in the ZKW lashing chain. In short, this element is bound to create some tension!



RSPS Load binder G8	Code	LC lashing capacity [kN]	STF Standard tension force [daN]	Length closed L [mm]	Length open L [mm]	Tension distance [mm]	Lever length l [mm]	g [mm]	Weight [kg/pc.]
	RSPS 8	40	1,900	586	731	145	237	12	4.60
	RSPS 10	63	1,900	626	771	145	237	15	5.40
	RSPS 13	100	3,000	708	853	145	355	19,5	8.00



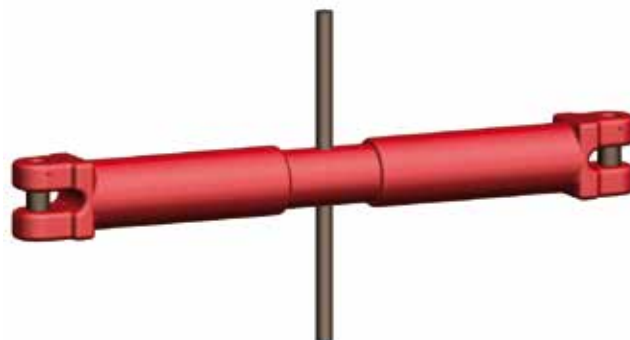
## pewag KSS Clevis turnbuckle

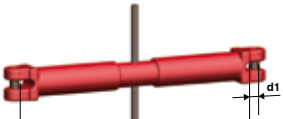
### Takes robustness to a higher level.

Some jobs need a no-nonsense approach for top results. The KSS clevis turnbuckle has a particularly robust design, with grade 8 clevis couplings that are die-forged and tempered.

The turnbuckle is manufactured according to EN 1677-1 and comes with a full operating manual. It is suitable for straight pull only and may be assembled easily and quickly thanks to its clevis structure, without the need for special tools. For lifting operations, an additional safety chain must be used to prevent accidental opening. One of the great advantages of this product lies in the fact that the coupling pin and the retaining pin are available as a KBS-KSS spare parts set.

**Note:** The KSS and KSSW turnbuckles can also be used for lifting. For more information, please contact customer service.



KSS Kuppelspannschloss	Code	Lashing capacity [kN]	Tension range [mm]	L min. [mm]	L max. [mm]	d1 [mm]	Weight [kg/pc.]	Gewicht [kg/Stk.]
	KSS 8	2.000	40	120	330	450	10	2,01
	KSS 10	3.150	63	225	460	685	12	4,24
	KSS 13	5.300	100	265	520	785	16	6,55
	KSSW 16*	10.000	200	250	530	780	20	10,00

\* No standard stock item

# pewag KVS Clevis connector G8

## Smooth operator.

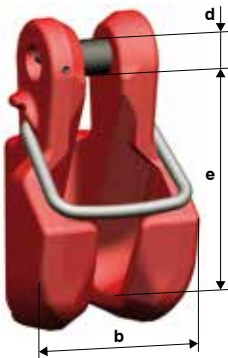
For grade 8 lashing chains, we recommend using a shortening claw with a safety catch to prevent the accidental release of the load and the coarse shortening of lashing chains. Watch out for the correct load direction of the chain as outlined in the full operating manual.

The clevis connector is manufactured according to EN 1677-1 and comes with CE-marking and BG-approval. Please ensure that the lashing capacity of the connector is assessed in accordance with grade 8 if the product is used in combination with grade 10 chains!

The clevis system makes this product easy and quick to assemble. The coupling pin and the retaining pin are available as a KBSW spare parts set.



KVS Clevis connector G8	Code	LC lashing capacity [kN]	e [mm]	b [mm]	d [mm]	Weight [kg/pc.]
	KVS 7	30	58	44	9	0.50
	KVS 8	40	58	44	10	0.50
	KVS 10	63	70	55	12,5	0.80
	KVS 13	100	90	70	16	1.53



### Safety warnings:

- Only load the inside chain
- Only use with a safety device
- Ensure that the chain fits neatly and securely



# Spare parts

## Product overview

### Inhalt

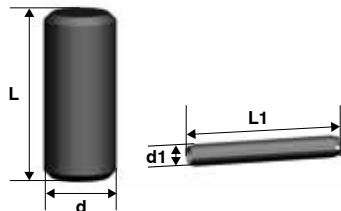
KBSW Clevis load pin	120
KBS-KSS Special clevis load pin	120
SFGW Safety catch set	120-121
CBHW Bolt + safety bush	121
CLBHW Bolt + safety bush	121
PSGW Safety catch	122
UBMS Bolt + washer + nut	122
KBMSW Bolt + nut + cotter pin	122
VLHW Trigger set	123
IDW Tag set for lifting	123
IDW Tag set for lashing	123





## pewag KBSW Clevis load pin

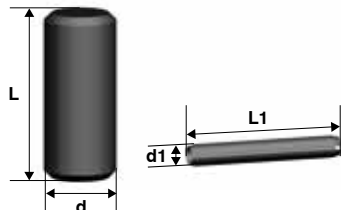
KBSW Clevis load pin



Code	L [mm]	d [mm]	L1 [mm]	d1 [mm]	Weight [kg/pc.]	For accessory part
KBSW 5/6	16,50	7,40	16	2,50	0,01	XKW 5/6, KRW 5/6, KHSW 5/6, KLHW 5/6, KPW 6, KVS 6
KBSW 7	23	9	22	3	0,02	XKW 7, KRW 7, KOW 7, KHSW 7, KCHW 7, KLHW 7, KFW 7, KPW 7, KPSW 7, KSCHW 7, KVS 7
KBSW 8	23	10	22	3	0,02	XKW 8, KRW 8, KOW 8, KHSW 8, BKHSW 8, KCHW 8, KLHW 8, KFW 8, KPW 8, KPSW 8, KSCHW 8, KVS 8
KBSW 10	29,50	12,50	28	3,50	0,03	XKW 10, KRW 10, KOW 10, KHSW 10, BKHSW 10, KCHW 10, KLHW 10, KFW 10, KPW 10, KPSW 10, KSCHW 10, KVS 10
KBSW 13	37	16	36	4	0,06	XKW 13, KRW 13, KOW 13, KHSW 13, KCHW 13, KLHW 13, KFW 13, KPW 13, KPSW 13, KSCHW 13, KVS 13
KBSW 16	52	20	40	4,50	0,12	XKW 16, KRW 16, KOW 16, KHSW 16, KCHW 16, KLHW 16, KPW 16, KPSW 16
KBSW 19/20	73	24	50	5	0,27	KRW 19/20, KHSW 19/20, KLHW 19/20, KPW 19/20
KBSW 22	71	27	55	5	0,29	KRW 22, KHSW 22, KLHW 22, KPW 22
KBSW 26	86	33	70	5	0,59	KLHW 26

## pewag KBS-KSS Special clevis load pin

KBS-KSS Special clevis load pin



Code	d x L [mm]	d1 x L1 [mm]	For accessory part
KBS-KSS 6/7	8 x 22.5	3 x 22	KSS 6/7
KBS-KSS 8	10 x 27.2	3 x 26	KSS 8
KBS-KSS 10	12 x 32.2	4 x 32	KSS 10
KBS-KSS 13	16 x 45.7	4 x 40	KSS 13

## pewag SFGW Safety catch set

SFGW Safety catch set



Code	For accessory part
SFGW 5/6	HSW 5/6, KHSW 5/6
SFGW 7/8	HSW 7/8, KHSW 7, KHSW 8, WS 7/8, EHS 7/8, WSBW 7/8
SFGW 10	HSW 10, KHSW 10, WS 10, EHS 10, WSBW 10
SFGW 13	HSW 13, KHSW 13, WS 13, EHS 13, WSBW 13, SSM 5
SFGW 16	HSW 16, KHSW 16
SFGW 19/20	HSW 19/20, KHSW 19/20, SSM 7/8
SFGW 22	HSW 22, KHSW 22, SSM 10
SFGW 26/32	HSW 26, HSW 32, HS 32, SSM 13

## pewag SFGW-A & SFGW-B Safety catch set

### SFGW-A Forged safety catch set for AWHW



Code	For accessory part
SFGW-A1	AWHW 1.3
SFGW-A3	AWHW 3.8
SFGW-A6	AWHW 6.3, AWHW 10,

### SFGW-B Forged safety catch set for BKHSW



Code	For accessory part
SFGW-B 8	BKHSW 8
SFGW-B 10	BKHSW 10

## pewag CBHW Bolt + safety bush

### CBHW Bolt + safety bush



Code	For accessory part
CBHW 5 G10	CW 5
CBHW 6 G10	CW 6
CBHW 7 G10	CW 7
CBHW 8 G10	CW 8, CARW 8
CBHW 10 G10	CW 10, CARW 10
CBHW 13 G10	CW 13, CARW 13
CBHW 16 G10	CW 16, CARW 16
CBHW 19/20 G10	CW 19/20
CBHW 22 G10	CW 22, CARW 22
CBHW 26 G10	CW 26
CBHW 32 G10	CW 32

## pewag CLBHW Bolts + safety bush

### CLBHW Bolts + safety bush



Code	For accessory part
CLBHW 7 G10	CLW 7
CLBHW 10 G10	CLW 10
CLBHW 13 G10	CLW 13
CLBHW 16 G10	CLW 16

## pewag<sup>®</sup> PSGW Safety catch

### PSGW Safety catch



### Code

PSGW 7/8 G10  
 PSGW 10 G10  
 PSGW 13 G10  
 PSGW 16 G10

### For accessory part

PSW 7/8, KPSW 7, KPSW 8  
 PSW 10, KPSW 10  
 PSW 13, KPSW 13  
 PSW 16, KPSW 16

## pewag<sup>®</sup> UBMS Bolt + washer + nut

### UBMS Bolt + washer + nut



### Code

UBMS 5/6  
 UBMS 7  
 UBMS 8  
 UBMS 10  
 UBMS 13  
 UBMS 16  
 UBMS 19/20  
 UBMS 26

### For accessory part

U 5/6  
 U 7  
 U 8  
 U 10  
 U 13  
 U 16  
 U 19/20  
 U 26

## pewag<sup>®</sup> KBMSW Bolt + nut + split pin

### KBMSW Bolt + nut + split pin



### Code

KBMSW 7/8 G10  
 KBMSW 10 G10  
 KBMSW 13 G10

### For accessory part

KSCHW 7, KSCHW 8  
 KSCHW 10  
 KSCHW 13

## pewag VLHW Trigger set

### VLHW Trigger set



Code	For accessory part
VLHW 5/6 G10	LHW 5/6, KLHW 5/6, WLH(B)W 6
VLHW 7/8 G10	LHW 7/8, KLHW 7, KLHW 8, WLH(B)W 7/8
VLHW 10 G10	LHW 10, KLHW 10, WLH (B)W 10
VLHW 13 G10	LHW 13, KLHW 13, WLH(B)W 13
VLHW 16 G10	LHW 16, KLHW 16, WLH(B)W 16
VLHW 19/20/22/26 G10	LHW 19/20/22, LHW 26, KLHW 19/20, KLHW 22, KLHW 26
VLHW 32 G10	LHW 32

## pewag IDW Tag set for lifting

### IDW Tag set for lifting



Code	For lifting chains	Consisting of
ID-Set neutral	I- and multi-leg slings	Tag neutral + rope with quick-release fastener + safety information

## pewag IDW Tag set for lashing

### IDW Tag set for lashing



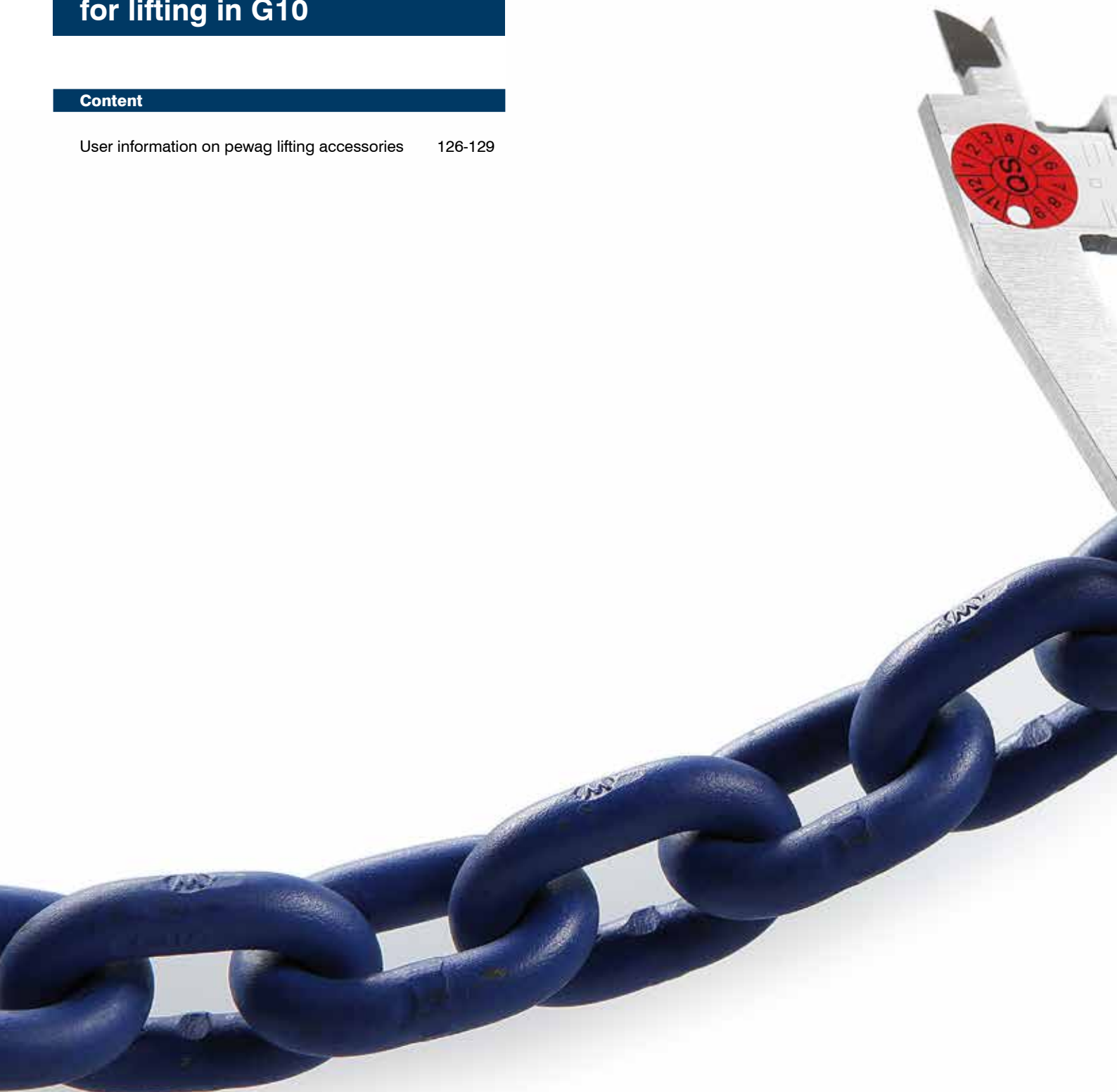
Code	Consisting of
IDW set lashing	Tag neutral + rope with quick release

# User information

## for lifting in G10

### Content

User information on pewag lifting accessories 126-129





# User information

**General information and safety-specific information on usage, storage, inspection and maintenance of pewag lifting accessories.**

## General information

pewag prides itself on its versatile and multi-faceted quality products that suit a wide range of applications. Different construction, loading and lashing methods for general lifting applications do not pose a particular challenge for our universally applicable lifting accessories as they were manufactured with precisely these different demands in mind. All information on design and working load limits in the catalogues (Uniform Load Method) take this range into account. There is also an alternative method in existence for rating the product working load limit, for which the specific application scenario of the chain and all operating conditions must be known. In such a case, please contact the pewag Technical Service team, as the information contained in the catalogues does not apply to such processes.

### Responsibility is key

If the pewag lifting accessories are used correctly and by competent persons, 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.

## 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 chains (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 electrogalvanizing.

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 on page 20.**

### Temperature effects

The table on page 20 lists the load reduction values in case of extreme temperatures. These apply until the chain and/or the lifting accessories have reached room temperature. pewag lifting accessories 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

pewag lifting accessories must not be used in acids or caustic solutions or be exposed to their vapours. Please be aware of this requirement at all times as certain production processes release acids and/or vapours! If the use of pewag lifting accessories with highly concentrated chemicals in combination with high temperatures cannot be avoided, please make sure to obtain the express approval of such usage by a pewag expert.

### Hazardous conditions

The working load limits in this catalogue have been determined on the basis that the product is not being used in hazardous conditions. Hazardous conditions are present when lifting accessories are used offshore or for the lifting of persons or potentially dangerous goods such as liquid metal, corrosive or caustic substances or nuclear material. If the chain sling is to be used for such purposes, the extent of the risk is to be assessed by an expert, the working load limit must be adjusted accordingly and incorrect usage in hazardous conditions must be avoided at all cost. As a rule, usage in hazardous conditions should be avoided.

### Prevention is better than cure!

Before using any lifting accessory, several inspections must be performed:

- Does the lifting chain correspond to the order?
- Has the inspection certificate or certificate of conformity been supplied?
- Do the markings and working load limits stated on the chain sling correspond to the information given on the inspection certificate or certificate of conformity?
- Have all the particularities of the chain sling been entered into a register of lifting equipment, if required?
- Has the operating manual outlining the correct use of the chain sling been supplied and read and understood by all personnel?

Please check the lifting accessories for visible signs of damage or wear prior to each use. In case of any doubt or damage, do not use the chain slings and have them inspected by a competent person.

Inspections by a competent person must be performed in accordance with national legislation, but at least once every 12 months. If the chain sling is frequently used at its full working load limit, more frequent inspections are required!

Please note that the chain sling must also be inspected after unusual events, for instance uncontrolled exposure to heat.

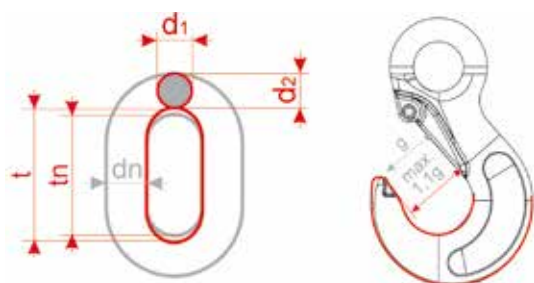
We recommend subjecting the chain sling to a working load limit test with 2 times the working load limit every two years, followed by a visual inspection, or another type of crack test.

### 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.
- Illegible or missing marking of the chain sling (i.e. information on identification data and/or working load limit).
- Deformation of suspension or sling parts or the chain itself.
- Elongation of the chain resulting in  $t > 1.05 \text{ tn}$ .
- Wear as determined by the mean value of two measurements of diameters  $d_1$  and  $d_2$  carried out at a right angle as shown. The chain must be removed from service life if:

$$d_m = \frac{d_1 + d_2}{2} \leq 0,9$$



- Visible damage such as cuts, notches, grooves, surface cracks, discolouration due to excessive heat exposure, signs of subsequent welding, bent or twisted links or other flaws.
- Obvious wear or chemical removal of material if the admissible dimensional changes as outlined in the table supplied has been exceeded, e.g. pitting corrosion.
- Cracks and cross-cracks that are visible to the naked eye.
- Missing or non-functional safety device as well as signs of widening or twisting of hooks, i.e. noticeable enlargement of the opening or other forms of deformation. The critical point is reached when the enlargement of the opening exceeds 10 % of the nominal value or if the safety catch is open, as this indicates that the hook is overloaded.

### Correct maintenance

Please note that all maintenance activities of pewag lifting accessories must be handled by competent persons to minimise the risk of improper use.

### Precise documentation

All inspections and their results must be recorded and these records be kept throughout the service life of the chain slings. Precise records of this sort constitute the best basis for effective maintenance.

### Clean storage

pewag lifting chains must always be stored in a clean and dried condition and protected against corrosion, i.e. slightly lubricated.

### Maximal approved dimensional change:

Designation	Dimensions	Admissible deviation
Chain	dm	-10 %
	t	+5 %
Links	d	-10 %
	t	+10 %
Hooks *	e	+5 %
	$d_2$ and h	-10 %
	g, $g_1$	+10 %
	a	-10 %
CW, CARW, CLW	halves loose	no changing admissible
	e	+5 %
	c	-10 %
BWW, GHW	e	+5 %
	d	-15 %
	$d_1$	+5 %
	angle change	$\leq 3^\circ$
SCHW, GSCHW, U	bolt loose	no changing admissible
	e	+5 %
	d, $d_1$ , $d_2$ and M	-10 %
SM	e	+5 %
	g	+10 %
	d	-10 %
BA	$d_2$	-10 %
FA	$d_1$	-5 %
Clevis bolts Connex bolts	d	-10 %
LHW, KLHW,	$d_2$	-10 %
WLH(B)W	h	-10 %
	opening of hook	2x s max.

\* HSW, FW, PW, KHSW, GKHSW, BKHSW, PSW, KPSW, LHW, WLHW, WLHBW, KLHW, KSCHW, KCHW, KFW, KPW, KVS, XKW, KOW, KRW, WSBW

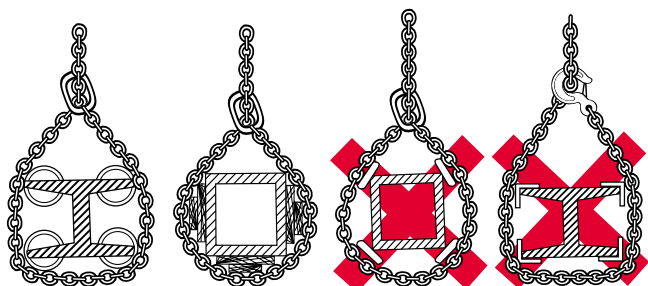
## Correct use of chain slings

### The right angle of inclination

To ensure safe handling, the slinging points and chain sling types must be selected in such a way that the angles of inclination of all chain strands (legs) lie within the data given on the working load limit tag. Preferably, all angles of inclination should be the same. Avoid angles of inclination of less than 15° because of the high risk of load instability. Never use chain slings with the angle of inclination exceeding 60°!

### Edge-loading – know your limits

The maximum working load limit of pewag chain slings assumes that the individual chain legs are pulled straight under load, i.e. that they do not run over edges. However, if edge-loading is unavoidable, load protection (packing) should be used to avoid damage (see illustration):



If chains are guided over edges without proper protection, their working load limit is significantly reduced and safe usage can no longer be guaranteed. See the table on page 14 for the corresponding load factors. Where chain have to be looped around beams or other round-shaped loads, the diameter should be minimum 3 times the chain pitch. For smaller diameters, the working load limit of the chains must be reduced by 50 %.

### Impact-/shock-loading

For the working load limits of pewag lifting chains to apply, it is assumed that the individual chain strands are not subjected to impact- or shock-loading. In cases of possible impact/shock, the load factors on page 20 apply.

### Classification of impacts

- Slight impact may result from accelerated lifting or lowering operations.
- Medium impact may result from the chain slipping while adjusting itself to the shape of the load.
- Strong impact results for instance from the load falling into the unloaded chain.

### Vibrations

If they are used correctly, pewag lifting chains and accessories withstand high load cycles, with a standard rating of 20,000 load cycles. In case of high dynamic loads, there is a risk of the chain or components getting damaged. The employer's liability insurance association Metall Nord Süd recommends reducing stress at WLL by using a larger nominal thickness/size in such a case.

### Symmetrical loading

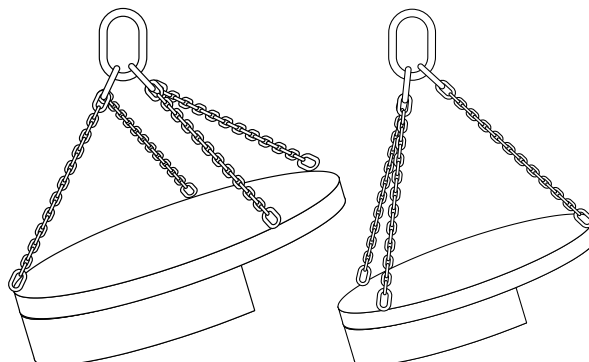
For the working load limits of pewag lifting chains to apply, it is assumed that the individual chain strands are placed under load symmetrically. When the load is lifted, this results in equal angles of inclination and the individual strands are symmetrical to each other.

If there is both lack of symmetry in plan and unequal angles of inclination, the load can still be considered as symmetrical when all of the following conditions apply:

- The load is less than 80 % of the indicated working load limit
- The angles of inclination of all chain strands are not lower than 15° and are very similar (i.e. only differ by a maximum of 15°).
- For three- and four-stranded lifting chains, it must be ensured that the corresponding plan angles are within 15° of each other.

### Be careful!

If not all of these parameters are complied with, the load cannot be considered symmetrical and the classification of the lifting operation must be left to an expert. In case of doubt, only one chain strand (leg) should be considered as load-bearing. For the corresponding working load limit values, please refer to the working load limit table on page 18 and 19 to determine the precise working load limit.



The main part of the load is carried by just one leg.

The main part of the load is carried by two legs.

### Wrongful use defeats the purpose

pewag lifting chains offer perfect quality standards if they are used according to their intended purpose.

In cases where not all individual legs are used simultaneously or where several lifting chains are used at the same time, different working load limits apply as outlined in the tables on pages 18 and 19. In case of doubt regarding the intended purpose, the working load limit as indicated on the tag must be amended in accordance with the following table:

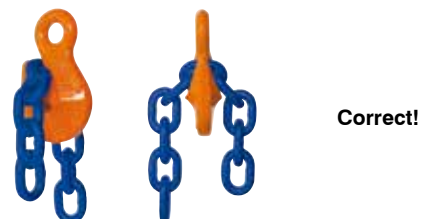
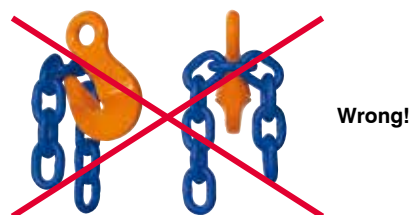
Type of sling chain	Number of individual strands used	Use factor in relation to the working load limit given on the tag
two-stranded (II-leg)	1	1/2
three- and four-stranded (III/IV-leg)	2	2/3
three- and four-stranded (III/IV-leg)	1	1/3
2 x single-stranded (single leg)	2	1.4 up to 45°
2 x two-stranded (II-leg)	3 or 4	1.5 from 0° – 45° and 45° – 60°

#### Precautions

- Hang any individual strands (leg) that you do not use back into the master link to prevent hazards caused by freely swinging chains or unintended hooking.
- Before using several chain slings at the same time, make sure that the crane hook is big enough for all the master rings. Make sure that the master rings cannot fall out of the hook during lifting.
- Angles of inclination of more than 45° must be avoided.
- Use only chain slings of the same nominal thickness and grade at the same time.

## Additional detailed information

Never tip-load the hook!



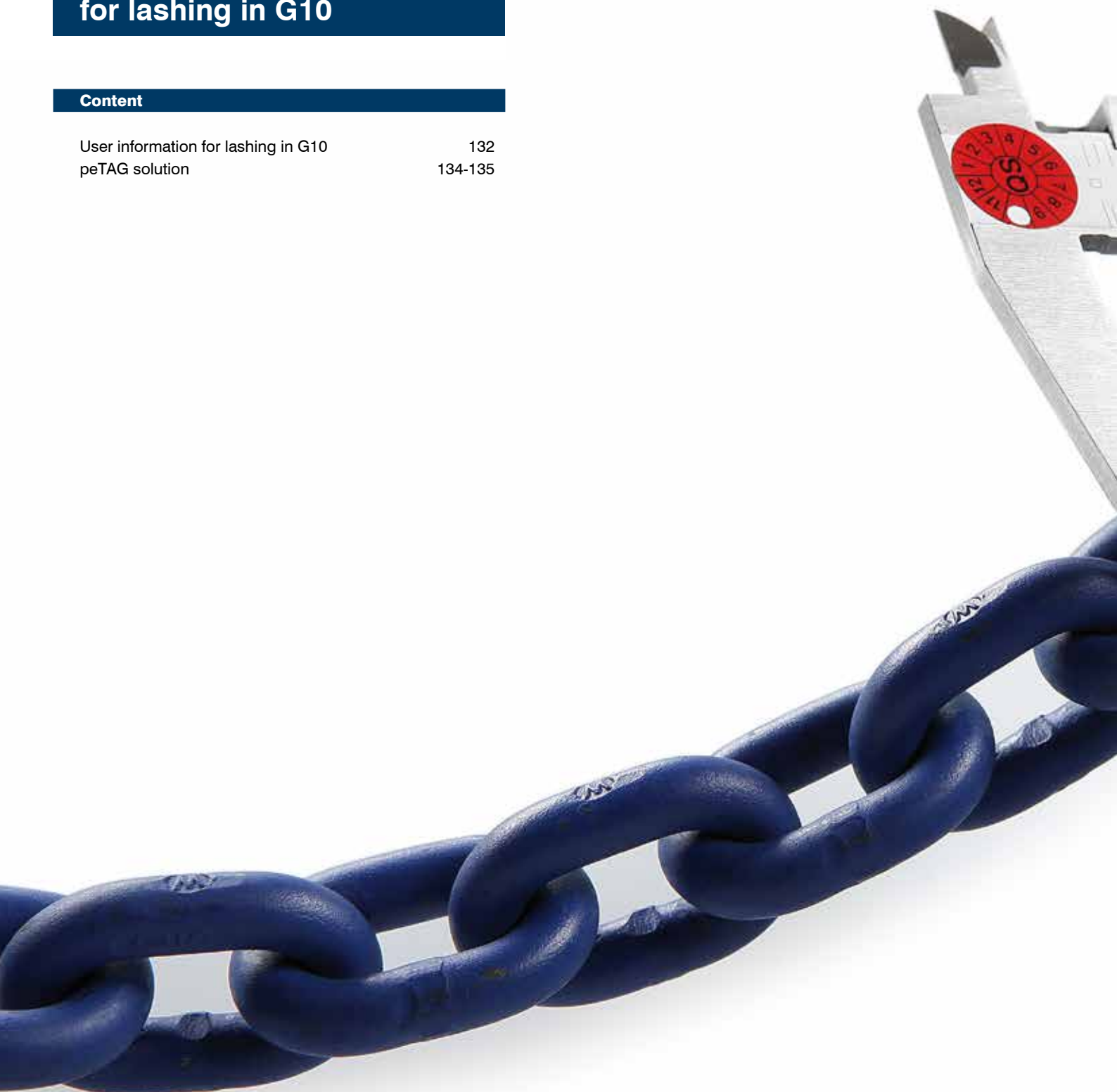
Detailed original operating manuals for individual products are available for download at [www.pewag.com](http://www.pewag.com). Our manuals are subject to a continuous improvement process to ensure that they are always up to date. For this reason, always refer to the latest version of a manual.

# User information

## for lashing in G10

### Content

User information for lashing in G10	132
peTAG solution	134-135





# User information

## User information on pewag winner lashing equipment

### General information

Overall, the same information applies to the pewag lashing chains as to the pewag winner lifting chain system. However, the following additional information must be taken into account:

- pewag winner lashing chains were developed to secure loads during transport. If used correctly, the lashing chains have a long lifespan and provide the highest possible safety standards. Personal and material damage are best prevented by ensuring correct use. Please note that pewag winner lashing chains may only be used once the user information has been read and understood in full. A responsible, provident approach towards load-securing is crucial at all times.
- We offer tools to assist with selection and proper usage of the lashing chain assemblies. Nevertheless, adequate experience of load securing and use of lashing equipment is indispensable.
- Only authorised and competent persons as defined by EN 12195-1 and 3 are allowed to assemble and use pewag winner lashing chain systems.
- Please note: lashing chains have safety factor = 2, lifting chains have safety factor = 4. This means that, for safety reasons, lashing chains must not be used as lifting chains! Therefore, lashing chains must always have the correct identification tag with the appropriate warning "Not for lifting".
- When the number of the lashing assemblies is calculated according to EN 12195-1, some impact loads may arise that are not reflected in the calculation but which will be balanced by the vehicle and by the flexibility of the lashing system.

### Information on use

#### Lashing points

Choose lashing points in such a way that the angles of the lashing chain assemblies are within the range given in our lashing table and the lashing chain assemblies are symmetrical to the driving direction. Use only lashing points with adequate strength. Any deviations are subject to prior consultation with the pewag technical service department.

#### Safe selection

When selecting the appropriate lashing chain system, consider the lashing method required and the load that needs to be secured. Size, shape and weight of the load as well as the intended usage category (friction lashing, direct lashing,...) and the transport environment (additional utilities, lashing points,...) must be taken into account for selecting the appropriate system.

For **lashing down**, we recommend using lashing straps because of their low weight and higher elongation.

Only select lashing equipment where the label or tag specifies an STF value.

For **direct lashing**, we recommend using lashing chains because of the high lashing capacity and low elongation.

To ensure that the minimum number of lashing systems is used, we recommend direct lashing to secure loads, especially for heavy loads.

The number of lashing systems may be calculated according to EN 12195-1.

In accordance with this standard, pewag has integrated the commonly used lashing methods in easy-to-use lashing tables. For more detailed information, please refer to pages 94 and 95.

For optimal stability, always use at least two lashing chains for lashing down and two pairs of lashing chains for diagonal lashing. Always ensure that the lashing chains are both long and strong enough for the application you have in mind! When in doubt, always opt for a **higher level of safety** to prevent overloading the chains.

All connecting parts of the lashing chains such as hooks and rings must be **free to move** within the lashing point and **adjustable in the tensile direction**. Bending stress on the accessories and tip loading of the hooks are not permissible. Hooks may only be loaded at the bearing area.

**Lashing chains should never be used in conjunction with lashing straps** as different lashing devices display different behaviours and elongation properties under load (for instance lashing chains and lashing straps made from synthetic fibres). If you have any further questions or require information on possible exceptions, please contact the pewag technical customer service.

#### Proper use

**Proper and correct lashing practice** is at the centre of any safe application. Before lashing, plan the lashing process and the release/opening of the lashing system.

During a longer trip, consider possible partial unloading. Watch out for overhead lines during loading and unloading and remove all lifting devices before starting the lashing process.

Also check the **tension of the lashing chain** regularly during transport. Before opening the lashing chain system, always check that the load is safe and that there is no risk of goods falling off or toppling down. Where required, attach any lifting equipment for further transport to the load immediately.

**Prior to unloading**, the lashing chains must be released far enough to ensure that the load is free-standing. Always ensure that there is no risk of the lashing chain getting tangled up during unloading.



## pewag always a safe spot

The peTAG solution enables cross-company, flexible servicing and administration of a wide range of different objects.

### peTAG solution

The intelligent solution for unambiguous object identification, data transfer without media breaks, easy servicing of objects, safe document archiving, efficient interaction with partner businesses and much more.

### peTAG info

Smart, free-of-charge access to product-specific information via mobile web.

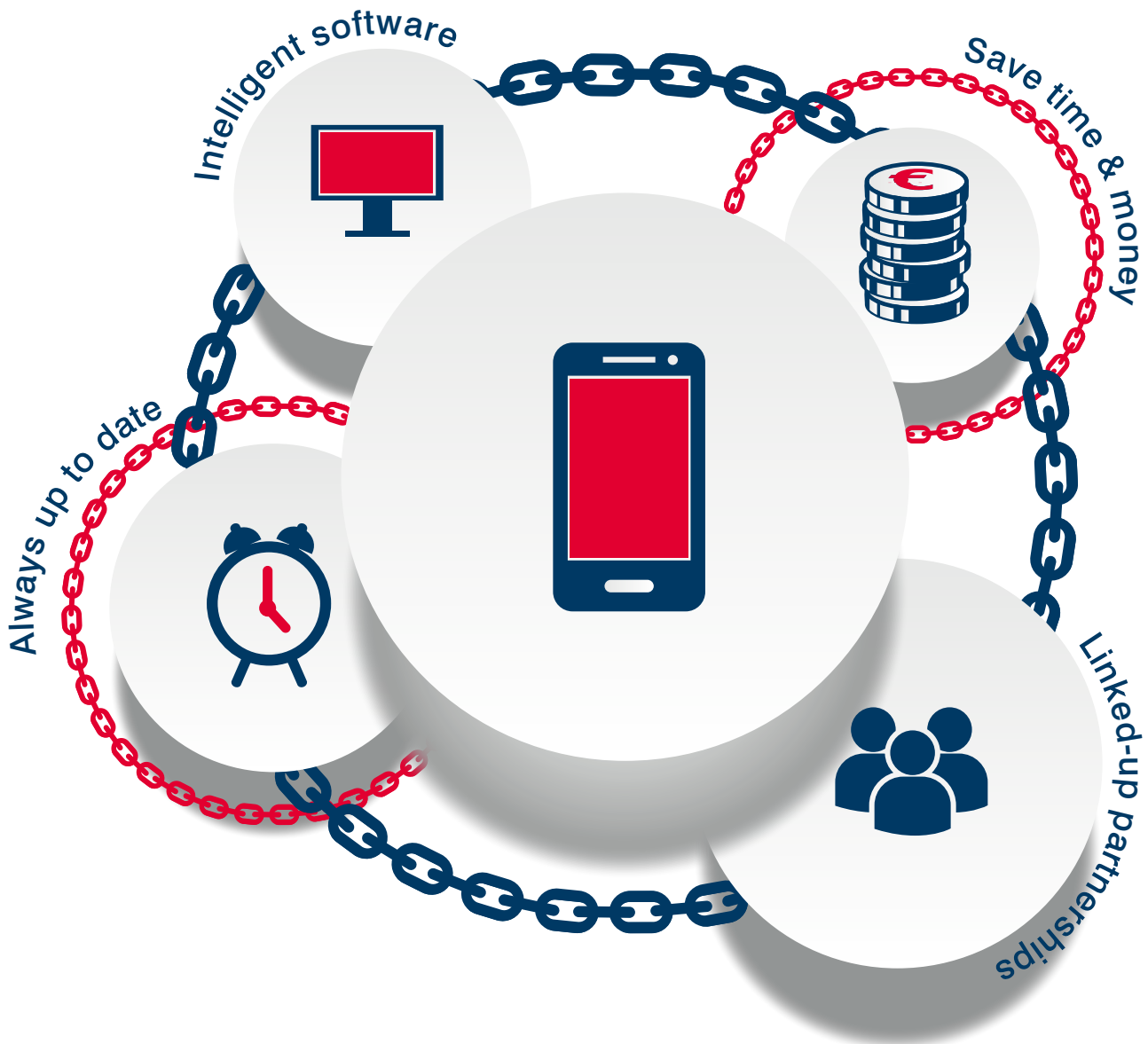


### peTAG manager

Watch your PC and mobile devices work hand in hand with this adaptable, high-performance platform – in any work environment and while increasing data quality at the same time. Expensive add-on reading devices and manual data transfer are things of the past!



# peTAG solution



## peTAG solution Keyfacts



### Intelligent software

User-specific adaptation of object data, testing processes and steps. Automates the creation, sending and archiving of test reports. Sophisticated authorisation concept.



### Save time & money

Efficient documentation of work processes, thus simplified daily workflows. Data exchange without media breaks, fault-free data communication.



### Mobile solution

Direct, location-independent data access (e.g. working load limit, safety information, latest test reports etc.) Smart servicing of objects via mobile app. Offline availability.



### Linked-up partnerships

Straightforward exchange and efficient interaction between service providers, merchants and customers. Improved service and data quality. Increased satisfaction and loyalty.



### Always up to date

Access to the latest product data and information, overview of all test data, documentation of test procedures. Traceability of object history.



# VAN SOEST

Morsestraat 17  
4004 JP Tiel

0344-610607  
info@vansoest-bv.nl

[www.vansoest-bv.nl](http://www.vansoest-bv.nl)

