



## Polyester Lifting and Lashing Products

- Web and Round Slings
- Ratchet Straps

## pewag Round slings RS



Working load limit table (kg) according to the type of sling:

Type	Colour coding	Endless sling	Choke hitch				Asymmetrie	Stock length / effective working length [m]	Weight per circumferential length approx. [kg/m]
		100%	80%	200%	140%	100%	100%		
RS 1	purple	1,000	800	2,000	1,400	1,000	1,000	0.50/1/1.50/2/2.50/3/4/5/6	0.14
RS 2	green	2,000	1,600	4,000	2,800	2,000	2,000	0.50/1/1.50/2/2.50/3/4/5/6	0.23
RS 3	yellow	3,000	2,400	6,000	4,200	3,000	3,000	1/1.50/2/2.50/3/4/5/6	0.31
RS 4	grey	4,000	3,200	8,000	5,600	4,000	4,000	1/1.50/2/2.50/3/4/5/6	0.41
RS 6	brown	6,000	4,800	12,000	8,400	6,000	6,000	1/1.50/2/2.50/3/4/5/6	0.60
RS 8	blue	8,000	6,400	16,000	11,200	8,000	8,000	1/1.50/2/2.50/3/4/5/6/8/10	0.75
RS 10	orange	10,000	8,000	20,000	14,000	10,000	10,000	2/3/4/5/6	0.95
RS 12	orange	12,000	9,600	24,000	16,800	12,000	12,000	available in all effective working lengths up to 15m	1.32
RS 15	orange	15,000	12,000	30,000	21,000	15,000	15,000	available in all effective working lengths up to 15m	1.50
RS 20	orange	20,000	16,000	40,000	28,000	20,000	20,000	available in all effective working lengths up to 15m	2.00
RS 25	orange	25,000	20,000	50,000	35,000	25,000	25,000	available in all effective working lengths up to 15m	2.68

**Order example:** Polyester round sling type RS 1 with an effective working length (L1) of 3,000 mm (circumferential length = 6,000 mm), according to EN 1492-2, working load limit in endless slings 1,000 kg.  
**Order text:** Round sling RS 1 x 3,000

Larger sizes are available on request

## pewag Round slings RS PRO

- With robust protective sleeve
- Significantly longer lifespan thanks to optimised wear and abrasion resistance
- Load capacity is woven into the material



Working load limit table (kg) according to the type of sling:

Type	Colour coding	Endless sling	Choke hitch				Asymmetrie	Weight per circumferential length approx. [kg/m]
		100%	80%	200%	140%	100%	100%	
RS PRO 1	purple	1,000	800	2,000	1,400	1,000	1,000	0.16
RS PRO 2	green	2,000	1,600	4,000	2,800	2,000	2,000	0.25
RS PRO 3	yellow	3,000	2,400	6,000	4,200	3,000	3,000	0.24
RS PRO 4	grey	4,000	3,200	8,000	5,600	4,000	4,000	0.45
RS PRO 6	brown	6,000	4,800	12,000	8,400	6,000	6,000	0.66
RS PRO 8	blue	8,000	6,400	16,000	11,200	8,000	8,000	0.88
RS PRO 10	orange	10,000	8,000	20,000	14,000	10,000	10,000	1.20
RS PRO 12	orange	12,000	9,600	24,000	16,800	12,000	12,000	1.40
RS PRO 15	orange	15,000	12,000	30,000	21,000	15,000	15,000	1.74

**Order example:** Polyester round sling type RS PRO 1 with an effective working length (L1) of 3,000 mm (circumferential length = 6,000 mm), according to EN 1492-2, working load limit in endless slings 1,000 kg.  
**Order text:** Round sling RS PRO 1 x 3,000

## pewag Webbing sling type B2 EN 1492-1

With reinforced eyes



Working load limit table (kg) according to the type of sling:

Webbing width	Colour coding					
					45°	60°
		100%	80%	200%	140%	100%
30	purple	1,000	800	2,000	1,400	1,000
60	green	2,000	1,600	4,000	2,800	2,000
90	yellow	3,000	2,400	6,000	4,200	3,000
120	grey	4,000	3,200	8,000	5,600	4,000
150	red	5,000	4,000	10,000	7,000	5,000
180	brown	6,000	4,800	12,000	8,400	6,000
240	blue	8,000	6,400	16,000	11,200	8,000

Larger sizes are available on request

## pewag Webbing sling type A2



Working load limit table (kg) according to the type of sling:

Webbing width	Colour coding					
					45°	60°
		100%	80%	200%	140%	100%
30	purple	1,000	800	2,000	1,400	1,000
60	green	2,000	1,600	4,000	2,800	2,000
90	yellow	3,000	2,400	6,000	4,200	3,000
120	grey	4,000	3,200	8,000	5,600	4,000
150	red	5,000	4,000	10,000	7,000	5,000
180	brown	6,000	4,800	12,000	8,400	6,000
240	blue	8,000	6,400	16,000	11,200	8,000

## pewag Webbing sling type B2 4-layer



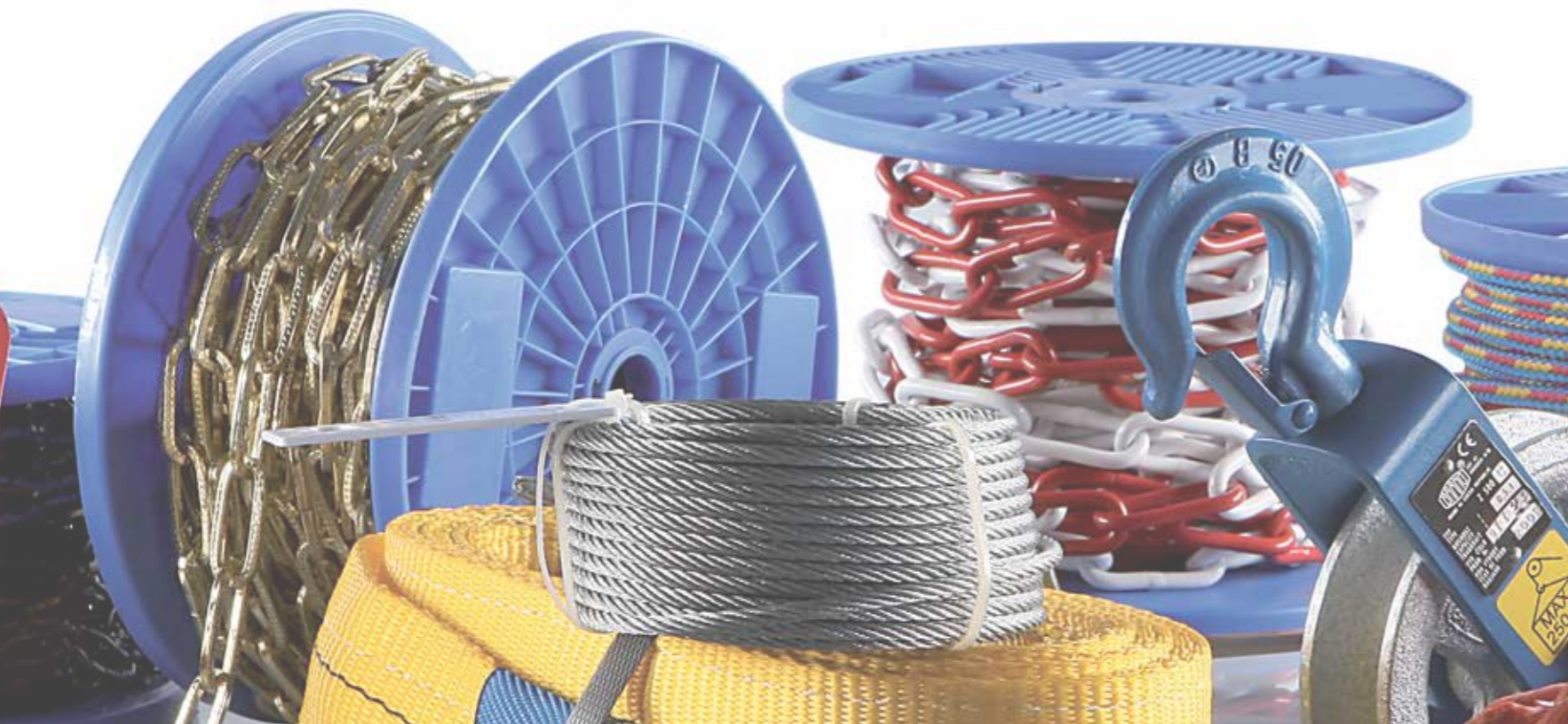
- Webbing slings for use with heavy loads
- Double the load capacity of 2-layer webbing slings of the same width

Working load limit table (kg) according to the type of sling:						
Webbing width	Colour coding				45°	60°
		100%	80%	200%	140%	100%
30	green	2,000	1,600	4,000	2,800	2,000
60	grey	4,000	3,200	8,000	5,600	4,000
90	brown	6,000	4,800	12,000	8,400	6,000
120	blue	8,000	6,400	16,000	11,200	8,000
150	orange	10,000	8,000	20,000	14,000	10,000
180	orange	12,000	9,600	24,000	16,800	12,000
240	orange	16,000	12,800	32,000	22,400	16,000
300	orange	20,000	16,000	40,000	28,000	20,000

**Order example:** Webbing sling according to EN1492-1 type B2, four-layer webbing slings with reinforced eyes, webbing width 30 mm, effective working length L1 = 4,000 mm, made from polyester PES, working load limit for straight and direct lifting 2,000 kg

**Order text:** Webbing sling B2 4-layer 30 x 4,000 / 2,000

Larger sizes are available on request



## 5-fold Single-use lifting sling

- For lifting operations as part of the once-only transportation of goods
- a 5-fold safety factor according to DIN 60005 (orange label),
- a 7-fold safety factor based on EN 1492-1 (blue label)



Working load limit table (kg) according to the type of sling:						
Standard Design	Length [m]				45°	60°
		100%	80%	200%	140%	100%
according EN 1492-1 (Safety factor 7:1)						
Type A 48 x 2000 / 500	2.00	500	400	1,000	700	500
Type A 50 x 500 / 500	0.50	500	400	1,000	700	500
Type A 50 x 500 / 1000	0.50	1,000	800	2,000	1,400	1,000
Type A 50 x 800 / 1000	0.80	1,000	800	2,000	1,400	1,000
Type A 50 x 1000 / 1000	1.00	1,000	800	2,000	1,400	1,000

## 7-fold Single-use lifting sling

Working load limit table (kg) according to the type of sling:						
Standard Design	Length [m]				45°	60°
		100%	80%	200%	140%	100%
according DIN 60005 (Safety factor 5:1)						
Type A 48 x 500 / 750	0.50	750	600	1,500	1,050	750
Type A 48 x 700 / 750	0.70	750	600	1,500	1,050	750
Type A 50 x 800 / 2500	0.80	2,500	2,000	5,000	3,500	2,500
Type A 50 x 1000 / 2500	1.00	2,500	2,000	5,000	3,500	2,500
Type A 50 x 1300 / 2500	1.30	2,500	2,000	5,000	3,500	2,500

Ideal for one-way transport operations from manufacturer to final consumer. Single-use lifting slings must not be reused and should be destroyed at the end of the transport chain. In this respect, they differ from lifting slings that comply with EN 1492-1 and that may be reused for transport and lifting operations.

**Classic areas of application:**

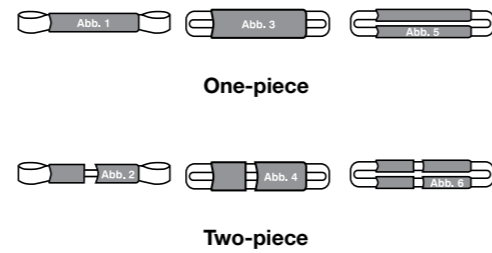
- Prefab-house industry and suppliers
- Timber construction
- Transport of overlong goods, e.g. tubes
- Steel distribution

## pewag AS Gummied protective sleeve

- Gummied, ideal for rough surfaces
- For sharp edges, we recommend to use an edge protector or a edge wear pad GS
- The standard design is not sewed on the sling, so the sleeve can be moved along the sling. On request also available sewed on the material of the sling



Protective sleeve	Webbing slings B2 / Cr2 mit EZD fig. 1 + 2	Webbing slings A2 fig. 5 + 6	Round slings fig. 3 + 4	Round slings Webbing slings A fig. 5 + 6
AS 38	30 mm	30 mm	1 t	1 t / 2 t
AS 52	60 mm	60 mm	2 t / 3 t	3 t / 4 t
AS 65	-	-	4 t / 6 t	6 t / 8 t
AS 75	90 mm	90 mm	8 t	-
AS 102	120 mm	120 mm	10 t / 12 t	10 t / 12 t
AS 110	150 mm	150 mm	15 t / 20 t	12 t / 20 t
AS 125	180 mm	180 mm	25 t	25 t



## pewag GS Edge wear pad

- Three-layer, therefore very effective
- Made of Polyester PES
- Length 500 mm, special lengths and special widths available on upon request



Type	Webbing slings	Round slings
GS 50	30 mm	-
GS 90	60 mm	1 t
GS 120	90 mm	2 t / 3 t
GS 150	120 mm	4 t / 6 t
GS 180	150 mm	8 t
GS 240	180 mm	10 t

### Protective sleeve for labels

Additional protective sleeve for the load capacity/lashing capacity label is available upon request. If required, the protective sleeve for the label may also be stitched onto the webbing. As lashing straps and webbing slings without labels must be decommissioned, protective sleeves for the label may significantly extend the lifespan of textile lashing and lifting equipment.



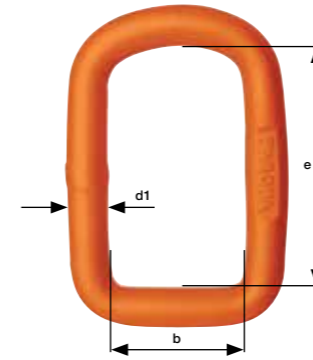
### Edge corners made from polyurethane (PU)

- For webbing slings and round slings
- Available with or without magnet
- Different designs and delivery time upon request

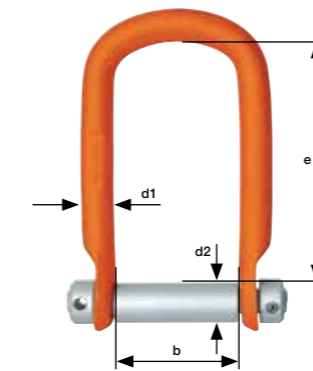


## pewag ED and EZD High strength fittings

- Made from age-resistant, high-strength material; may be sent back for inspections and reuse to pewag
- Easy assembly and disassembly of the demountable fitting EZD, low wear of end fittings thanks to rotatable steel bolt
- Powder coating for protection against corrosion
- Can also be used in a choke hitch



Type	Suitable for sling width	e [mm]	b [mm]	d <sub>1</sub> [mm]	WLL [kg]	Weight [kg/pc.]
ED 40	30	80	40	13	1,000	0.30
ED 75	60	125	75	16	2,500	0.70
ED 105	90	165	105	20	3,000	1.50
ED 135	120	210	135	23	4,000	2.50
ED 165	150	245	165	26	5,000	3.80
ED 195	180	300	195	30	6,000	6.10
ED 265	240	395	265	36	8,000	11.70



Type	Suitable for sling width	e [mm]	b [mm]	d <sub>1</sub> [mm]	d <sub>2</sub> [mm]	WLL [kg]	Weight [kg/pc.]
EZD 60	60	110	60	16	20	2,000	0.70
EZD 100	90	165	100	23	25	3,000	2.00
EZD 120	120	185	120	23	25	4,000	2.50
EZD 150	150	235	150	23	35	5,000	3.20

## pewag CARW Round sling connecting link

- For easy assembly of multi-leg webbing slings/round slings
- Thanks to wide surface suitable for round slings/webbing slings, no need of reducing the working load limit
- Supplied with Connex halves, bolt and safety bush



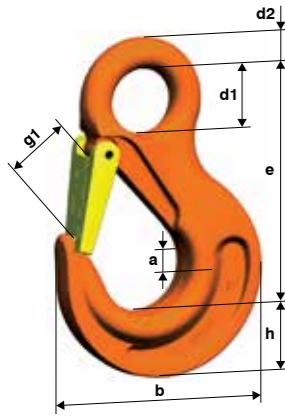
Code	for Webbing sling / Round sling	Working load limit [kg]	a [mm]	e [mm]	c [mm]	d [mm]	b [mm]	s [mm]	g [mm]	Weight [kg/pc.]
CARW 8	30/60 // 1 / 2	2,500	29	66	12	10	65	18	18	0.40
CARW 10	90/120 // 3 / 4	4,000	40	81	15	13	82	21	24	0.55
CARW 13	150 // 6	6,700	50	104	20	17	100	28	28	1.20
CARW 16	180 // 8	10,000	47	113	21	21	110	40	33	2.00
CARW 22	240 // 10 / 12 / 15	19,000	109	178	29	27	215	59	48	6.50

## pewag<sup>®</sup> HSW Eye sling hook

For pewag connex system.

To be connected by means of webbing-/ roundsling connector CARW.

- All hooks with forged safety catch

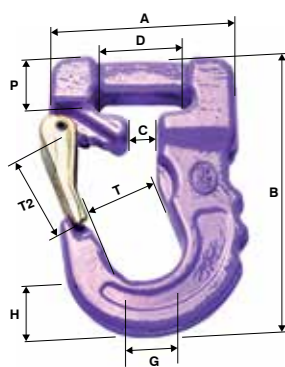


Code	WLL [kg]	e [mm]	h [mm]	a [mm]	d1 [mm]	d2 [mm]	g1 [mm]	b [mm]	Weight [kg/pc.]
HSW 5/6	1,400	85	21	17	20	10	19	68	0.30
HSW 7/8	2,500	106	27	19	25	11	26	88	0.50
HSW 10	4,000	131	33	26	34	16	31	109	1.10
HSW 13	6,700	164	44	33	43	19	39	134	2.20
HSW 16	10,000	183	50	40	50	25	45	155	3.50
HSW 19/20	16,000	205	55	48	55	27	53	178	5.80
HSW 22	19,000	225	62	50	60	29	62	196	8.00

## pewag<sup>®</sup> HBH webbing sling hook

- For direct and easy attachment to round slings and webbing slings. Without the need for additional components, this hook allows users to create 1-4-leg assemblies or to attach textile lifting equipment directly to the load
- All hooks include safety catch

- Suitable for the direct installation in round slings or webbing slings, as a connecting link or end hook
- No risk of confusion of load capacities thanks to colour scheme that reflects the colour code for textile lifting equipment



Code	WLL [kg]	A [mm]	B [mm]	C [mm]	G [mm]	H [mm]	P [mm]	T [mm]	D [mm]	D2 [mm]	Weight [kg/pc.]
HBH 1	1,000	78	123	12	17	20	16	31	41	26	0.70
HBH 2	2,000	91	148	19	21	26	17	40	55	31	1.20
HBH 3	3,000	113	175	21	25	32	25	50	55	37	2.20
HBH 4	4,000	130	223	40	36	40	36	59	70	43	4.50
HBH 5	5,000	133	233	40	36	40	36	59	70	43	4.50
HBH 6	6,000	133	223	40	36	40	36	59	70	43	4.50



## pewag textile lashing straps

pewag textile lashing strap systems for securing loads are produced according to EN 12195-2. Lashing straps are normally applied as a one-piece lashing strap for strapping or as a two-piece lashing strap composed of a fixed end with tensioning element and end fitting and a loose end with end fitting.

Our extensive range of products ranging from a strap width of 25 to 75 mm and a lashing capacity from 250 to 10,000 daN can be further extended to suit customer's individual needs. Each lashing strap is provided with essential technical data and user information, such like "Do not use for lifting purposes".

### Lashing strap labels:



Two-piece fixed ends



Two-piece loose ends



One-piece

### User information:

**User info**  
**Lashing belts (PES)**

- Improper usage of lashing belts is a danger for life of human beings, animals and goods in area of the load.
- Use lashing belts only for lashing, not for lifting loads!
- To be used only by trained and instructed personnel.
- Follow the instruction rules:  
EN12195-2 Annex B  
09/2004 / 2702  
VDI 2700 Pt. 2h 1/413
- Before each usage of lashing belts it must be checked on damage i.e.:
  - cuts
  - fractures/tears of fibre and sews
  - deformation/damage by heat or overheat
  - abrasion or corrosion of metal fittings
  - missing or illegible label
- withdrawn lashing belts must not be used anymore!
- lashing belts to be checked yearly by a competent person.
- lashing belts must not be loaded more than their allowed lashing force.
  - Tensioning device to be loaded with max. 500kg (max force) Do not use devices (i.e. tubes) for tensioning.
- use additional protection equipment for handling loads with sharp edges or rough surfaces!
  - do not knot the lashing belts!
- use only recommended lashing belts for lashing, please pay attention on LC and STP of lashing belt, friction, weight, size, appearance and surface of load.
- Range of use:
  - temperature: -40°C up to +120°C
- Usage in chemical solutions can destroy the lashing belt. It's forbidden to use lashing belts in alkaline solutions!
- Please get in contact with us for cleaning instructions.

### Load securing

In the last years, load securing has become an important issue within transportation in Europe. Since public institutions have tightened up controls, the enforcement of a correct load securing will become a statutory duty in future.

pewag has been for years a competent reference person to suit customer requirements. For detailed information, we offer clients a full consultancy service.

### Overview:

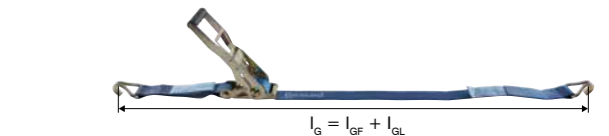
Types, length, order text



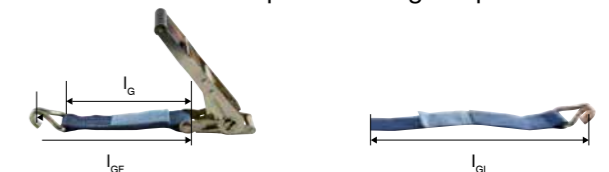
Two-piece lashing strap

One-piece lashing strap

### Lengths according to the corresponding standard for one- and two-piece lashing straps

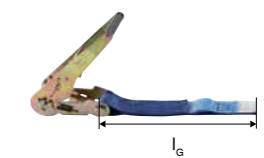


Two-piece lashing strap



Fixed end to lashing strap  
Two-piece

Loose end to lashing strap  
Two-piece



One piece lashing strap (in strapping)

### Order text two-piece lashing strap: ZG ERGO DZ 50 x 8000 / 2500 Z DHS

- Lashing strap system with ratchet indication
- Width of lashing strap
- Total length
- Admissible lashing capacity LC
- Two-part
- End fitting DHS

### Order text one-part lashing strap: ZG ERGO DZ 50 x 8000 / 2500 E

- Lashing strap system with ratchet indication
- Width of lashing strap
- Total length
- Admissible lashing capacity LC
- Single-part

## pewag® Lashing strap ZG 25

with ratchet RA 10

Our space-saving lashing strap system is ideal for direct lashing of very light loads in cars and on roof racks providing also for private purposes safe transportation according to regulations. Available with double J hook and a length of 4m or as one-piece lashing strap with a length of 5m.

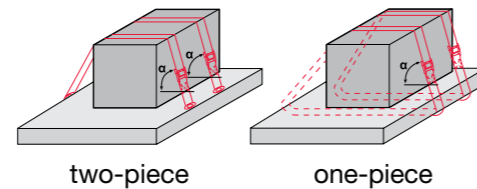


Strap width	25 mm
<b>STF</b> Standard tension force of the ratchet, important to determine the needed lashing straps for frictional lashing	-
<b>LC – two-piece</b> Allowed lashing capacity of the lashing strap, important to determine the needed lashing straps for direct lashing processes	250 daN 
<b>LC – one-piece strap</b> Allowed lashing capacity of the lashing strap in strapping	500 daN 

### Road transport applications:

#### Frictional lashing

This lashing strap is not designed for frictional lashing according to EN 12195. For special applications, please contact our technical service department.



Direct lashing The load can be secured with 4 lashing straps	Angle		Dynamic friction factor						
	α [°]	β [°]	0.01	0.1	0.2	0.3	0.4	0.5	0.6
			The load can be secured with 4 Lashing straps [daN ~ kg]						
	15-35	21-30	-	-	-	850	1,150	1,600	2,450
	15-35	31-40	400	450	600	750	1,050	1,400	2,200
	15-35	41-50	300	400	500	650	900	1,250	1,900
	15-35	51-60	250	300	400	550	700	1,000	1,550
	36-50	21-30	-	-	550	750	1,050	1,550	2,500
	36-50	31-40	300	400	500	700	950	1,450	2,350
	36-50	41-50	250	300	450	600	850	1,300	2,150
	36-50	51-60	-	250	350	550	750	1,150	1,850

### Accessories:



## pewag® Lashing strap ZG 35

with ratchet RA 40

The handy system for lashing down and direct lashing of light loads for commercial purposes and light trailers is characterized by a smaller strap width. Normally used with double J hooks and a length of 6m.



Strap width	35 mm
<b>STF</b> Standard tension force of the ratchet, important to determine the needed lashing straps for frictional lashing	280 daN
<b>LC – two-piece</b> Allowed lashing capacity of the lashing strap, important to determine the needed lashing straps for direct lashing processes	1,000 daN 
<b>LC – one-piece strap</b> Allowed lashing capacity of the lashing strap in strapping	2,000 daN 

### Road transport applications:

Frictional lashing The load can be secured with 1 lashing strap	Angle	Dynamic friction factor					
	α [°]	0.1	0.2	0.3	0.4	0.5	0.6
		The load can be secured with 1 Lashing strap [daN ~ kg]					
	90	60	140	250	420	700	1,260
	85	50	130	250	410	690	1,250
	80	50	130	240	410	680	1,240
	70	50	130	230	390	650	1,180
	60	50	120	210	360	600	1,090
	50	40	100	190	320	530	960
	40	30	80	160	260	440	800
	30	30	70	120	210	350	630

Direct lashing The load can be secured with 4 lashing straps	Angle		Dynamic friction factor						
	α [°]	β [°]	0.01	0.1	0.2	0.3	0.4	0.5	0.6
			The load can be secured with 4 Lashing straps [daN ~ kg]						
	15-35	21-30	-	-	-	3,500	4,650	6,400	9,900
	15-35	31-40	1,600	1,950	2,450	3,150	4,200	5,750	8,950
	15-35	41-50	1,300	1,650	2,100	2,750	3,600	5,000	7,750
	15-35	51-60	1,050	1,300	1,700	2,200	2,900	4,050	6,350
	36-50	21-30	-	-	2,350	3,100	4,300	6,250	10,150
	36-50	31-40	1,250	1,600	2,150	2,850	3,950	5,800	9,500
	36-50	41-50	1,050	1,350	1,850	2,550	3,550	5,300	8,700
	36-50	51-60	-	1,100	1,550	2,200	3,100	4,650	7,550

### Accessories:



## pewag® Lashing strap ZG 50...2000

with ratchet RA 100

The classic system for the lashing down of medium-heavy loads. The standard system is the "4-ton-strap" with a round hook in 8m and 10m length, available promptly ex warehouse.



Strap width	50 mm
<b>STF</b> Standard tension force of the ratchet, important to determine the needed lashing straps for frictional lashing	360 daN
<b>LC – two-piece</b> Allowed lashing capacity of the lashing strap, important to determine the needed lashing straps for direct lashing processes	2,000 daN 
<b>LC – one-piece strap</b> Allowed lashing capacity of the lashing strap in strapping	4,000 daN 

### Road transport applications:

Frictional lashing The load can be secured with 1 lashing strap	Angle		Dynamic friction factor					
			0.1	0.2	0.3	0.4	0.5	0.6
	α [°]		The load can be secured with 1 Lashing strap [daN ~ kg]					
 two-piece      one-piece	90		70	180	320	540	900	1,620
	85		70	170	320	530	890	1,610
	80		70	170	310	530	880	1,590
	70		70	160	300	500	840	1,520
	60		60	150	280	460	770	1,400
	50		50	130	240	410	680	1,240
	40		40	110	200	340	570	1,040
	30		30	90	160	270	450	800

Direct lashing The load can be secured with 4 lashing straps	Angle		Dynamic friction factor						
			0.01	0.1	0.2	0.3	0.4	0.5	0.6
	α [°]	β [°]	The load can be secured with 4 Lashing straps [daN ~ kg]						
 two-piece	15-35	21-30	-	-	-	7,050	9,350	12,850	19,800
	15-35	31-40	3,200	3,900	4,900	6,350	8,400	11,550	17,900
	15-35	41-50	2,650	3,300	4,250	5,550	7,200	10,000	15,500
	15-35	51-60	2,100	2,650	3,450	4,450	5,850	8,150	12,750
	36-50	21-30	-	-	4,700	6,250	8,600	12,500	20,300
	36-50	31-40	2,500	3,250	4,300	5,750	7,950	11,650	19,000
	36-50	41-50	2,100	2,750	3,750	5,100	7,150	10,600	17,450
	36-50	51-60	-	2,250	3,150	4,400	6,250	9,300	15,100

### Accessories:



## pewag® Lashing strap ZG ERGO DZ 50

other applications with ratchet RA ERGO-DZ 100

The user friendliest system for the lashing down of heavy loads now allows to be tensioned under pull thanks to the long lever ERGO ratchet. The use of the maximal tensioning force (STF) reduces the required number of lashing straps and saves time when loading. Labels are very durable due to their transparent protective covers.



Strap width	50 mm
<b>STF</b> Standard tension force of the ratchet, important to determine the needed lashing straps for frictional lashing	500 daN
<b>LC – two-piece</b> Allowed lashing capacity of the lashing strap, important to determine the needed lashing straps for direct lashing processes	2,500 daN 
<b>LC – one-piece strap</b> Allowed lashing capacity of the lashing strap in strapping	5,000 daN 

### Road transport applications:

Frictional lashing The load can be secured with 1 lashing strap	Angle		Dynamic friction factor					
			0.1	0.2	0.3	0.4	0.5	0.6
	α [°]		The load can be secured with 1 Lashing strap [daN ~ kg]					
 two-piece      one-piece	90		100	250	450	750	1,250	2,250
	85		100	240	440	740	1,240	2,240
	80		100	240	440	730	1,230	2,210
	70		100	230	420	700	1,170	2,110
	60		90	210	380	640	1,080	1,940
	50		80	190	340	570	950	1,720
	40		60	160	280	480	800	1,440
	30		50	120	220	370	620	1,120

Direct lashing The load can be secured with 4 lashing straps	Angle		Dynamic friction factor						
			0.01	0.1	0.2	0.3	0.4	0.5	0.6
	α [°]	β [°]	The load can be secured with 4 Lashing straps [daN ~ kg]						
 two-piece	15-35	21-30	-	-	-	8,800	11,700	16,050	24,750
	15-35	31-40	4,000	4,850	6,150	7,950	11,500	10,500	22,350
	15-35	41-50	3,350	4,150	5,300	6,950	9,050	12,500	19,400
	15-35	51-60	2,600	3,300	4,350	5,600	7,300	10,200	15,950
	36-50	21-30	-	-	5,900	7,850	10,750	15,650	25,400
	36-50	31-40	3,150	4,050	5,350	7,200	9,950	14,550	23,800
	36-50	41-50	2,650	3,450	4,700	6,400	8,950	13,250	21,800
	36-50	51-60	-	2,800	3,950	5,500	7,800	11,600	18,900

### Accessories:



## pewag Lashing strap ZG 50

with ratchet RA 100

The most versatile system for friction lashing and economical direct lashing of heavy loads offers a high standard tension force (STF) and is the ideal 5-tonnes-strap for professional applications due to the special lengths and the extensive range of accessories.



<b>Strap width</b>	<b>50 mm</b>
<b>STF</b> Standard tension force of the ratchet, important to determine the needed lashing straps for frictional lashing	350 daN
<b>LC – two-piece</b> Allowed lashing capacity of the lashing strap, important to determine the needed lashing straps for direct lashing processes	2,500 daN 
<b>LC – one-piece strap</b> Allowed lashing capacity of the lashing strap in strapping	5,000 daN 

### Road transport applications:

Frictional lashing The load can be secured with 1 lashing strap	Angle		Dynamic friction factor						
			0.1	0.2	0.3	0.4	0.5	0.6	
	$\alpha$ [°]		The load can be secured with 1 Lashing strap [daN ~ kg]						
<p>two-piece      one-piece</p>	90		70	170	310	520	870	1,570	
	85		70	170	310	520	870	1,560	
	80		70	170	310	510	860	3,610	
	70		70	160	290	490	820	1,480	
	60		60	150	270	450	750	1,360	
	50		50	130	240	400	670	1,200	
	40		40	110	200	330	560	1,010	
	30		30	80	150	260	430	780	
Direct lashing The load can be secured with 4 lashing straps	Angle		Dynamic friction factor						
			0.01	0.1	0.2	0.3	0.4	0.5	0.6
	$\alpha$ [°]	$\beta$ [°]	The load can be secured with 4 Lashing straps [daN ~ kg]						
<p>two-piece</p>	15-35	21-30	-	-	-	8,800	11,700	16,050	24,750
	15-35	31-40	4,000	4,850	6,150	7,950	11,500	10,500	22,350
	15-35	41-50	3,350	4,150	5,300	6,950	9,050	12,500	19,400
	15-35	51-60	2,600	3,300	4,350	5,600	7,300	10,200	15,950
	36-50	21-30	-	-	5,900	7,850	10,750	15,650	25,400
	36-50	31-40	3,150	4,050	5,350	7,200	9,950	14,550	23,800
	36-50	41-50	2,650	3,450	4,700	6,400	8,950	13,250	21,800
	36-50	51-60	-	2,800	3,950	5,500	7,800	11,600	18,900

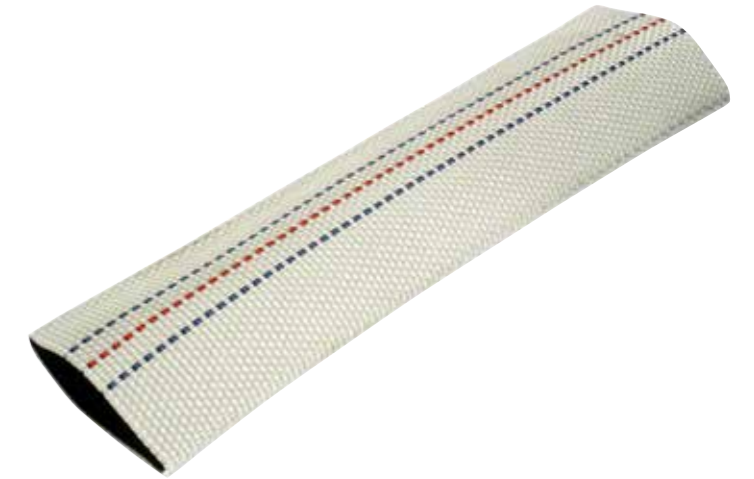
### Accessories:



## pewag AS Gummied protective sleeve

- Gummied, ideal for rough surfaces
- For sharp edges, we recommend to use an edge protector or a edge wear pad GS
- The standard design is not sewed on the sling, so the sleeve can be moved along the sling. On request also available sewed on the material of the sling

Type	Lashing strap system [mm]
AS 38	25 / 35
AS 52	48 / 50
AS 65	75



## pewag GS Edge wear pad

- Three-layer, therefore very effective
- made of Polyester PES
- Length 500 mm, special lengths and special widths available on upon request

Type	Lashing strap system [mm]
GS 50	25 / 35
GS 75	48 / 50
GS 90	75



## pewag Protective sleeve for labels

Additional protective sleeve for the load capacity/lashing capacity label is available upon request. If required, the protective sleeve for the label may also be stitched onto the webbing. As lashing straps and webbing slings without labels must be decommissioned, protective sleeves for the label may significantly extend the lifespan of textile lashing and lifting equipment.

