

Cargo lashing equipment

Lost cargo?	244	HIT lashing chain system	264
We solve your load lashing problem	245	Grade 80 lashing chain system	265
POLYTEX® lashing strap systems	246	Special lashings	268
POLYTEX® cargo lashing equipment sets	254	POLYTEX® disposable tensioning system	269
POLYTEX® lashing nets	255	Lashings for buckets	270
Valuable aids for lashing	256		
Anti-slip mats	258		
Interior lashing	260		
Lashing chain systems:			
General information	261		
HIT-PRO lashing chain system	263		



■ Quality has a name

POLYTEX® – put your trust in the original. Lashing belts and accessories for safe, ergonomic and cost-effective load securing. More than just the standard version. Our range includes lashing ratchets with additional features for optimum lashing.

■ Performance

HIT PRO lashing chains in grade 120 and HIT lashing chains in grade 100 with up to 100% higher tensile force than grade 80 reliably secure your heavy goods. The lashing process is faster and thus more economic due to low dead weight and ease of use.

■ Expertise

Securing the load should be a quick and cost-effective process. We provide a broad range of solutions for all applications.

Lost cargo?



Why?

Did the lashing strap not perform the way you were promised it would perform?

Manufacturing and outgoing checks ensure that the guaranteed characteristics are adhered to.



We have noticed:

The straps of many lashing systems have the following non-visible **defects**:

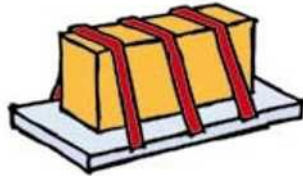
- **Unsafe power transmission:** The straps maximum admissible extension of 7% is greatly exceeded. We have recorded measurements of more than 10%
- **Reduced safety:** The straps breaking load of three times which is required by the standard is not even nearly reached; hooks are often too brittle.

You can rely on our quality: Polytex®!



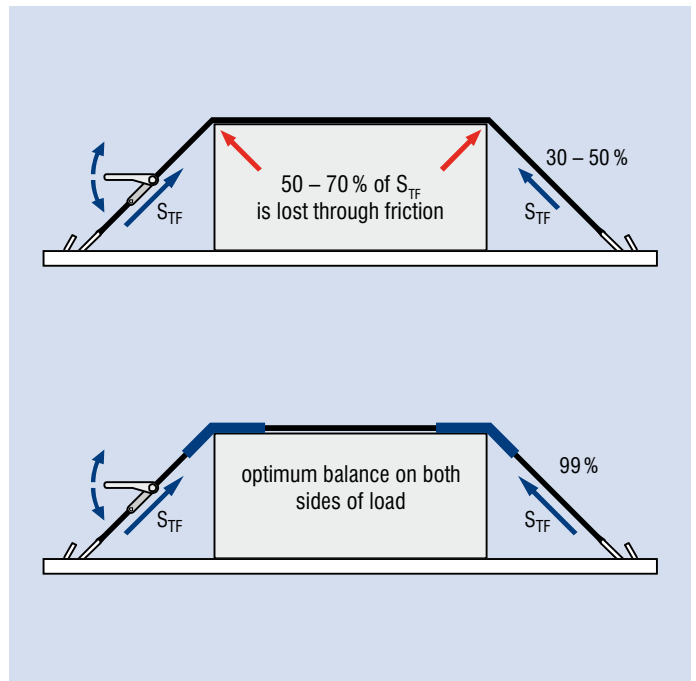
We solve your load lashing problem ...

When lashing down:

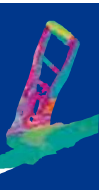


- by means of long lever ratchets with higher pretensioning force S_{TF} . Only this S_{TF} , which can be found on the lashing strap label, causes an increase of the frictional force (securing force) when lashing down.
- by means of anti-slip mats, only these make it possible to lash down larger load weights reasonably and economically.
- by means of edge protectors to protect against sharp edges (see also p. 256), but also to distribute the pretensioning force on both sides of the load.

When lashing diagonally:



- by the attainment of high permissible lashing forces (LC) using the lashing systems RS 40 000, RS 20 000 and lashing chains.
- by means of anti-slip mats.



... with our products



POLYTEX® lashing strap systems

for cargo lashing

VDI 2700ff and DIN EN 12195-2

- ▶ Simplest possible handling
- ▶ Enormous loadability, tensile forces up to 20,000 daN
- ▶ Stretch-resistant, robust, chafe-resistant, specially impregnated strap material (100 % polyester) with long service life
- ▶ No absorption of moisture into the strap fibres, therefore no frost rigidity and largely resistant to rotting
- ▶ Colour-coded to avoid mistakes in use
- ▶ Up to 50 mm strap width with woven-in tonnage stripes
- ▶ Fittings made of galvanised, non-aging steel
- ▶ With load label and short operating instructions
- ▶ Straps available in all desired lengths
- ▶ In the case of two-piece lashing straps, the standard length of the fixed end (ratchet part) is approx. 0.3 to 0.5 m, dependent on the end fitting.
- ▶ Heat-resistant to + 100 °C, frost-resistant to – 40 °C



POLYTEX® lashing strap system RS 40 000

Heavy duty lashing system for the most extreme assignments. Double strap guide produces the highest tensile forces.

Strap width 75 mm

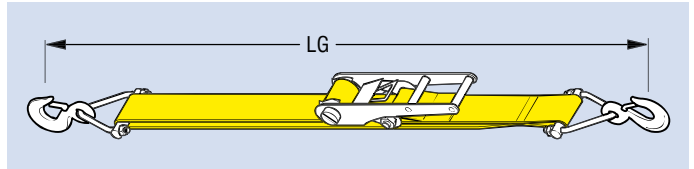
Pre-tensioning force S_{TF} 900 daN



Our strongest for diagonal lashing

Lashing method		
Permissible lashing force LC (daN)	20000	10000
Breaking force BF (daN)	40000	20000

two-piece with triangular hooks	Availability	
	4 m	8 m
Reference no. 135971	√	√



Please always specify the reference number and length LG when ordering!
Additional lengths on enquiry.

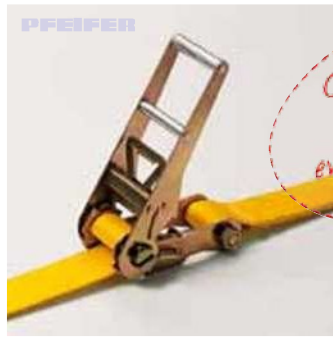
The dimensions of the end fittings can be found on page 257

... and for suitable protective systems:

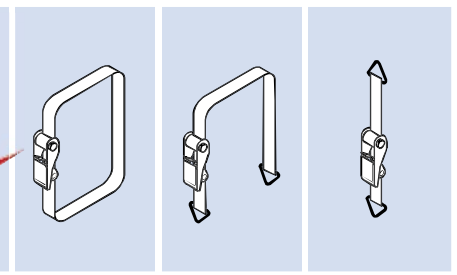
POLYTEX® Flexoclip S See page 135	POLYTEX® abrasion protection sleeve See page 135

POLYTEX® lashing strap system RS 20 000

Heavy duty lashing system for extreme demands on loadability and robustness.
Strap width 75 mm
Pre-tensioning force S_{TF} 450 daN



Our strongest for diagonal lashing. even for heaviest loads



Lashing method			
Permissible lashing force LC (daN)	10000	10000	5000
Breaking force BF (daN)	20000	20000	10000

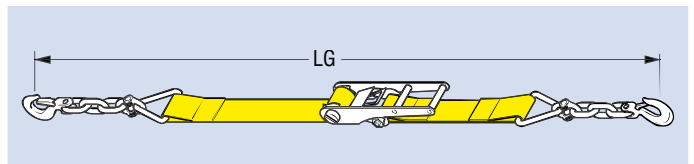
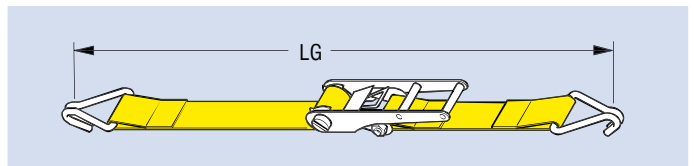
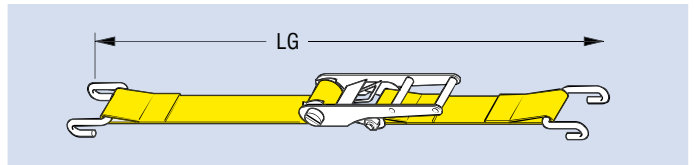
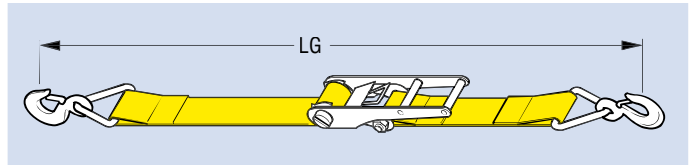
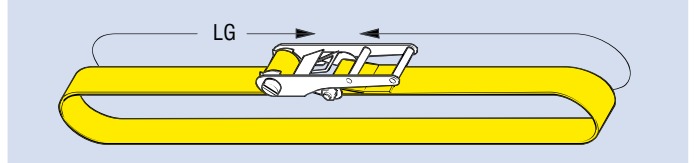
one-piece	Availability	
	8 m	10 m
Reference no. 123244	✓	✓

two-piece with triangular hooks	Availability	
	4 m	8 m
Reference no. 123257	✓	✓

two-piece with claw hooks	Availability	
	4 m	8 m
Reference no. 123254	✓	✓

two-piece with wire claw hooks	Availability	
	4 m	8 m
Reference no. 123261	✓	✓

two-piece	Availability	
	8 m	10 m
Reference no. 123250	✓	✓



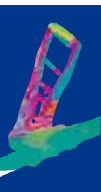
Please always specify the reference number and length LG when ordering!
Additional lengths on enquiry.

The dimensions of the end fittings can be found on page 257

... and for suitable protective systems:

POLYTEX® Flexoclip S See page 135	POLYTEX® abrasion protection sleeve See page 135

Cargo lashing equipment

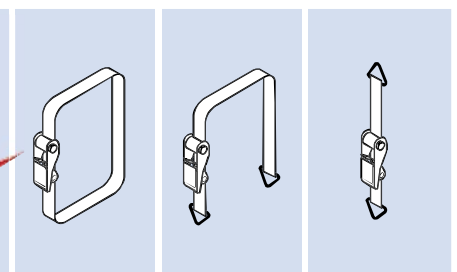


POLYTEX® lashing strap system ERGO LH 10 000 long lever

- ▶ Long lever:
replaces two lashing straps
with normal ratchet.
- ▶ ERGO:
Easy, back-protecting operation
due to ergonomic movement
sequence.



*For economic
lashing down with
few lashing straps*



Lashing method			
Permissible lashing force LG (daN)	5000	5000	2500
Breaking force BF (daN)	10000	10000	5000

Approx. 50% **saving of time** when lashing down.
High attainable pre-tensioning force of 500 daN due to additional fine teething.
With ratchet lever transport lock.
Strap width 50 mm
Pre-tensioning force S_{TF} 500 daN

one-piece	Availability	
	8 m	10 m
Reference no. 146861	√	√

two-piece with lathed snap hook	Availability	
	8 m	10 m
Reference no. 199104	√	√

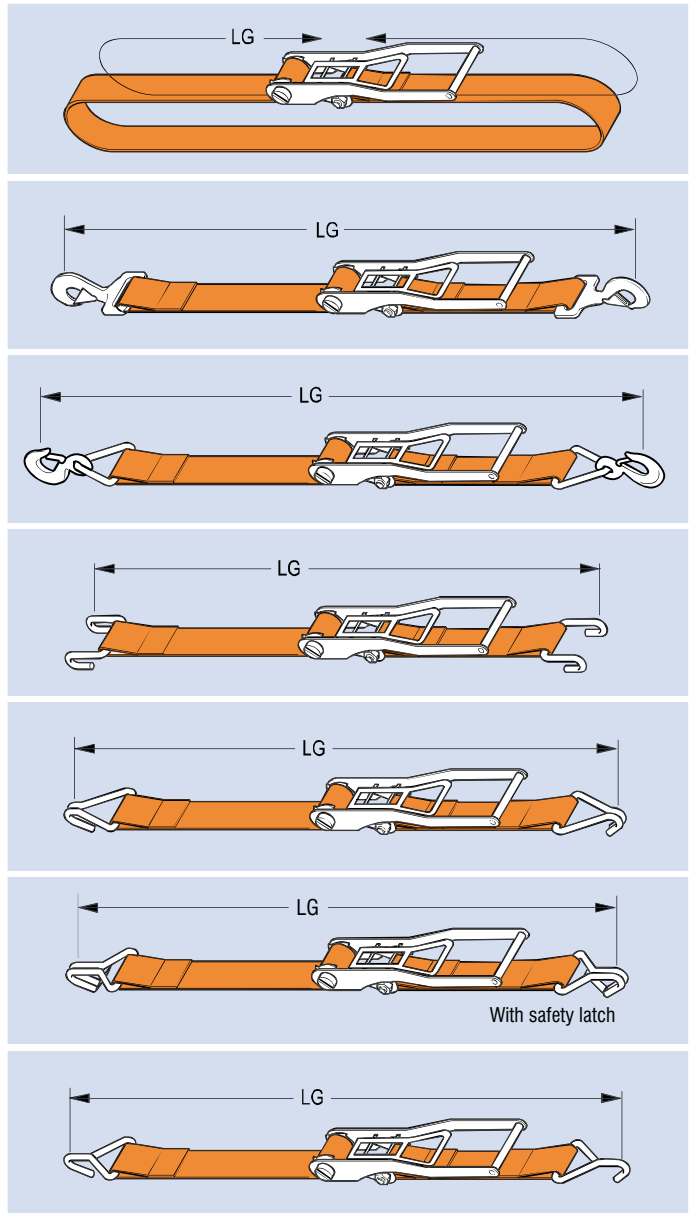
two-piece with triangular hooks	Availability	
	8 m	10 m
Reference no. 159674	√	√

two-piece with claw hooks	Availability	
	8 m	10 m
Reference no. 200963	√	√

two-piece with wire claw hooks	Availability	
	8 m	10 m
Reference no. 146862	√	√

two-piece with wire claw hooks with safety latch	Availability	
	8 m	10 m
Reference no. 185096	√	√

two-piece with J-hooks	Availability	
	8 m	10 m
Reference no. 198026	√	√



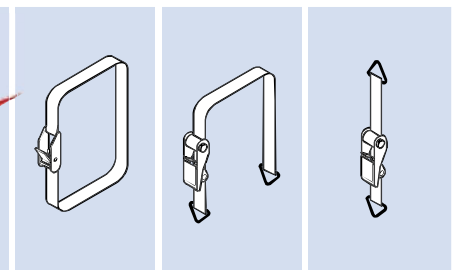
... and for suitable protective systems, see opposite.
Please always specify the reference number and length LG when ordering!
Additional lengths on enquiry.

POLYTEX® lashing strap system RS 10 000

Particularly stable lashing system for heavy load units of all kinds, with extra-strong strap.
With ratchet lever transport lock.
Strap width 50 mm
Pre-tensioning force S_{TF} 250 daN



*The standard -
universally usable*



Lashing method			
Permissible lashing force LC (daN)	5000	5000	2500
Breaking force BF (daN)	10000	10000	5000

one-piece	Availability	
	8 m	10 m
Reference no. 123276	✓	✓

two-piece with lathed snap hook	Availability	
	8 m	10 m
Reference no. 123286	✓	✓

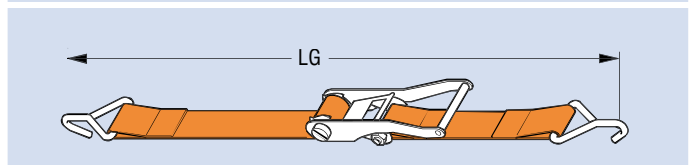
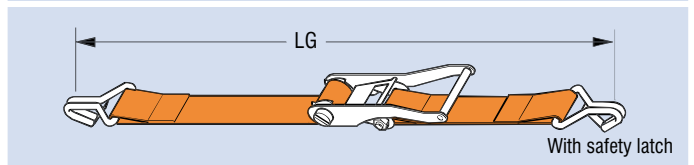
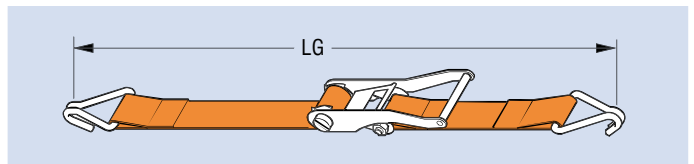
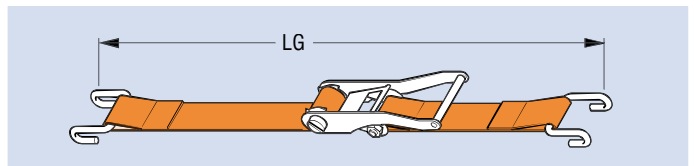
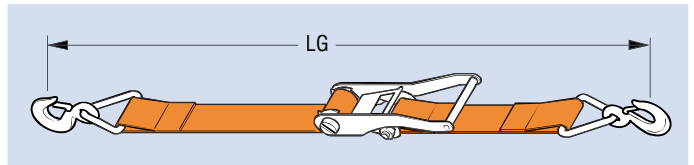
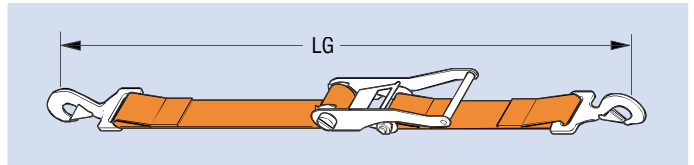
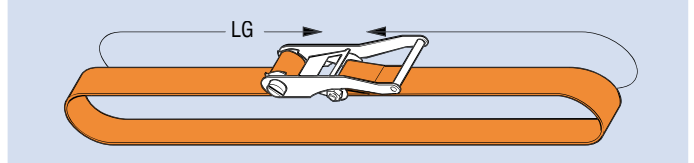
two-piece with triangular hooks	Availability	
	8 m	10 m
Reference no. 123320	✓	✓

two-piece with claw hooks	Availability	
	8 m	10 m
Reference no. 123304	✓	✓

two-piece with wire claw hooks	Availability	
	8 m	10 m
Reference no. 123327	✓	✓

two-piece with wire claw hooks with safety latch	Availability	
	8 m	10 m
Reference no. 123334	✓	✓

two-piece with J-hooks	Availability	
	8 m	10 m
Reference no. 123331	✓	✓

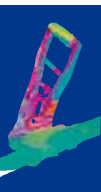


Please always specify the reference number and length LG when ordering!
Additional lengths on enquiry.

... and for suitable protective systems:

POLYTEX® Flexoclip S See page 135	POLYTEX® abrasion protection sleeve See page 136	POLYTEX® edge protection plate See page 256	POLYTEX® edge protection profile, plastic See page 256	POLYTEX® edge protection profile, steel See page 256

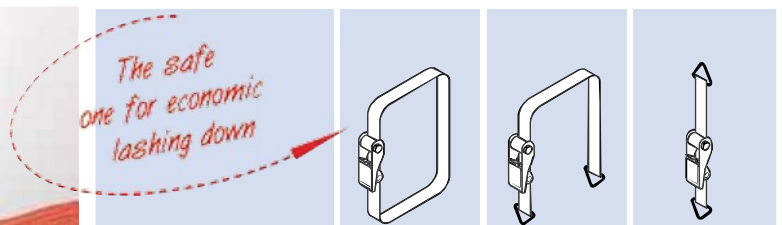
Cargo lashing equipment



POLYTEX® lashing strap system LK 10 000

- ▶ Lashing system with long-lever off-load ratchet

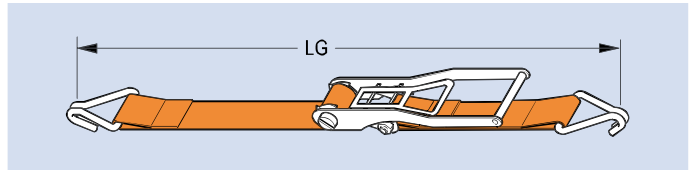
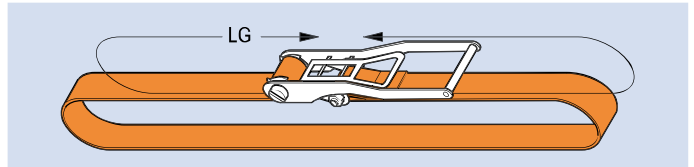
Additional **safety** when unloading, as it can be opened gradually.
Approx. 50 % **saving of time** when lashing down.
With ratchet lever transport lock.
Strap width 50 mm
Pre-tensioning force S_{TF} 500 daN



Lashing method			
Permissible lashing force LC (daN)	5000	5000	2500
Breaking force BF (daN)	10000	10000	5000

one-piece	Availability	
	8 m	10 m
Reference no. 194333	√	√

two-piece with wire claw hooks	Price in EUR per piece for length LG	
	8 m	10 m
Reference no. 184596	√	√

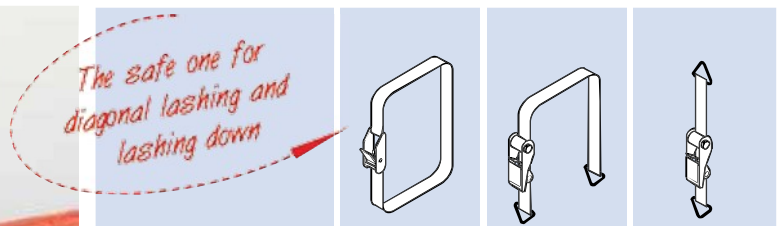


Please always specify the reference number and length LG when ordering!
Additional lengths on enquiry.

POLYTEX® lashing strap system SK 10 000

- ▶ Lashing system with off-load mechanism

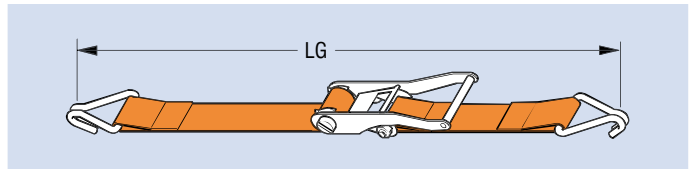
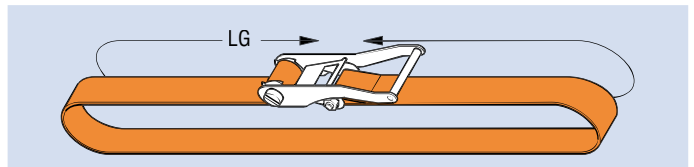
The lashing strap can be opened gradually. The danger of tipping over of unsafe loads can be recognised before the lashing strap releases the load completely!
Strap width 50 mm
Pre-tensioning force S_{TF} 350 daN



Lashing method			
Permissible lashing force LC (daN)	5000	5000	2500
Breaking force BF (daN)	10000	10000	5000

one-piece	Availability	
	8 m	10 m
Reference no. 181042	√	√

two-piece with wire claw hooks	Availability	
	8 m	10 m
Reference no. 179766	√	√



Please always specify the reference number and length LG when ordering!
Additional lengths on enquiry.

... and for suitable protective systems:

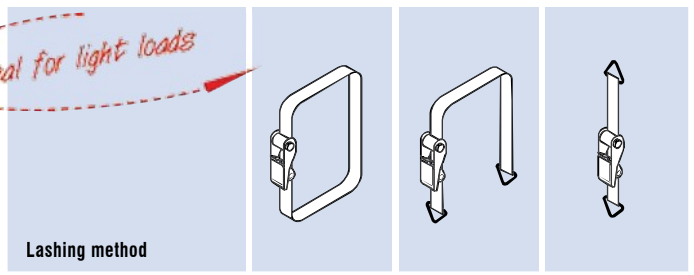
POLYTEX® Flexclip S See page 135	POLYTEX® abrasion protection sleeve See page 136	POLYTEX® edge protection plate See page 256	POLYTEX® edge protection profile, plastic See page 256	POLYTEX® edge protection profile, steel See page 256

POLYTEX® lashing strap system RS 4000

Stable lashing system for moderately heavy loads in industry and handicrafts. With ratchet lever transport lock. Strap width 35 mm
Pre-tensioning force S_{TF} 100 daN

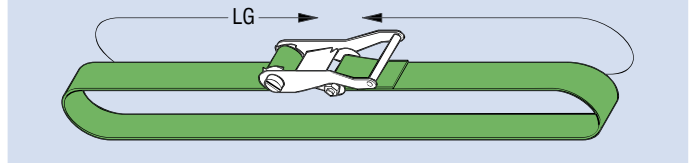


Ideal for light loads

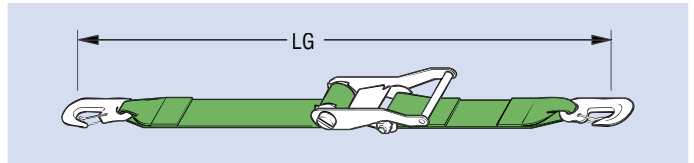


Lashing method			
Permissible lashing force LC (daN)	2000	2000	1000
Breaking force BF (daN)	4000	4000	2000

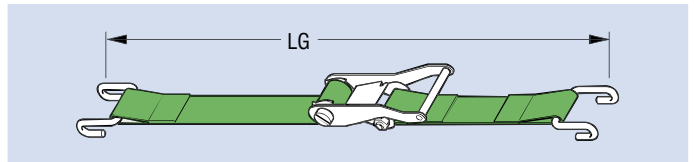
one-piece	Availability	
	4 m	6 m
Reference no. 123464	✓	✓



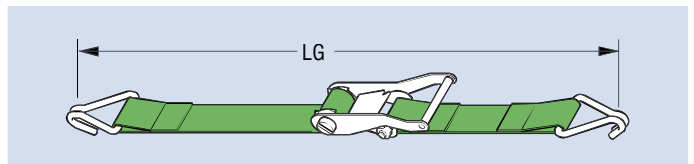
two-piece with eye hooks	Availability	
	4 m	6 m
Reference no. 123486	✓	✓



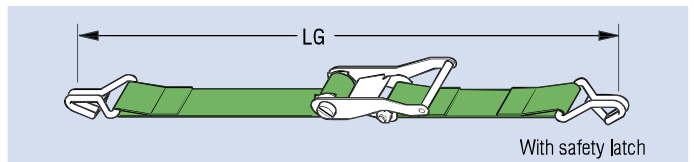
two-piece with claw hooks	Availability	
	4 m	6 m
Reference no. 123475	✓	✓



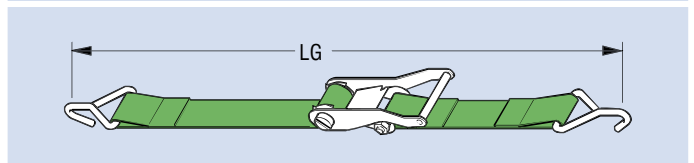
two-piece with wire claw hooks	Availability	
	4 m	6 m
Reference no. 123472	✓	✓



two-piece with wire claw hooks with safety latch	Availability	
	4 m	6 m
Reference no. 241817 new	✓	✓

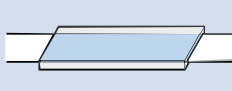
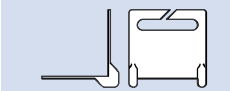
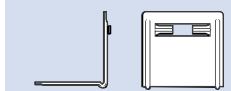


two-piece with J-hooks	Availability	
	4 m	6 m
Reference no. 123481	✓	✓

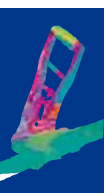


Please always specify the reference number and length LG when ordering!
Additional lengths on enquiry.

... and for suitable protective systems:

		
POLYTEX® abrasion protection sleeve See page 136	POLYTEX® edge protection profile, plastic See page 256	POLYTEX® edge protection profile, steel See page 256

Cargo lashing equipment



POLYTEX® lashing strap system RS 2000

Multi-purpose lashing system for lighter transport loads, securing of in-plant transport and pallet lashing.
Strap width 25 mm
Pre-tensioning force S_{TF} 50 daN



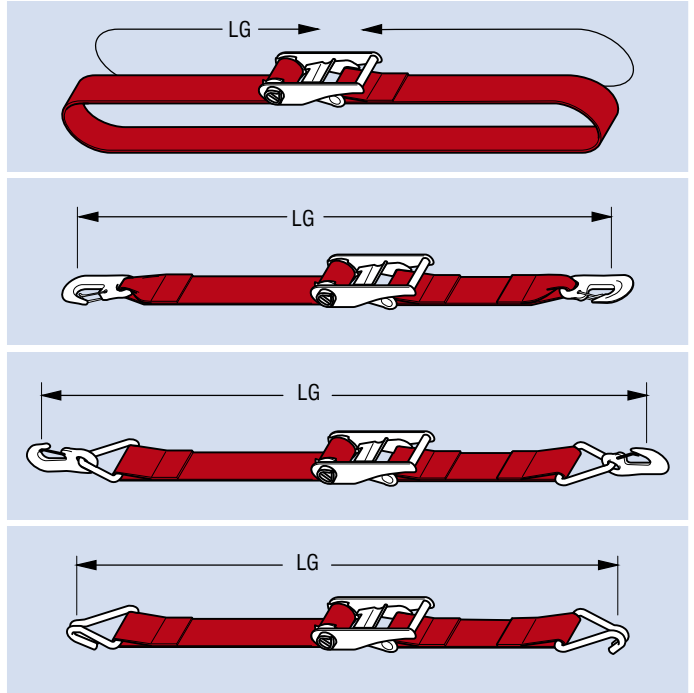
Lashing method			
	Permissible lashing force LC (daN)	1000	1000
Breaking force BF (daN)	2000	2000	1000

one-piece	Availability	
	4 m	6 m
Reference no. 123506	✓	✓

two-piece with eye hooks	Availability	
	4 m	6 m
Reference no. 147515	✓	✓

two-piece with stirrup hooks	Availability	
	4 m	6 m
Reference no. 123519	✓	✓

two-piece with wire claw hooks	Availability	
	4 m	6 m
Reference no. 123514	✓	✓



Please always specify the reference number and length LG when ordering!
Additional lengths on enquiry.

... and for suitable protective systems:

POLYTEX® abrasion protection sleeve See page 136	POLYTEX® edge protection profile, plastic See page 256	POLYTEX® edge protection profile, steel See page 256

POLYTEX® lashing strap system RS 1000

Light securing system for corresponding loads, for example for hobbies and leisure.

Strap width 25 mm



one-piece	Availability	
	4 m	6 m
Reference no. 123534	✓	✓

two-piece with stirrup hooks	Availability	
	4 m	6 m
Reference no. 123546	✓	✓

two-piece with wire claw hooks	Availability	
	4 m	6 m
Reference no. 123541	✓	✓

two-piece with PVC-coated S-hook	Availability	
	4 m	6 m
Reference no. 155229	✓	✓

Please always specify the reference number and length LG when ordering!
Additional lengths on enquiry.

POLYTEX® lashing strap system KS with clamping lock

Particularly low-priced securing strap,
suitable for light loads.

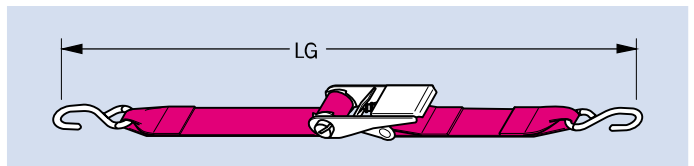
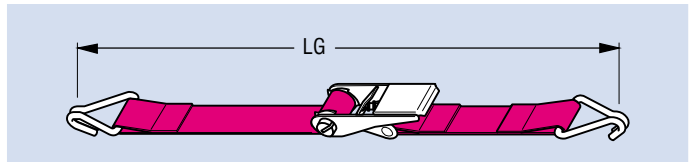
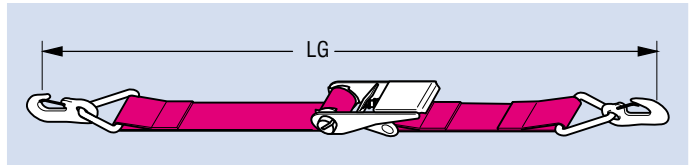
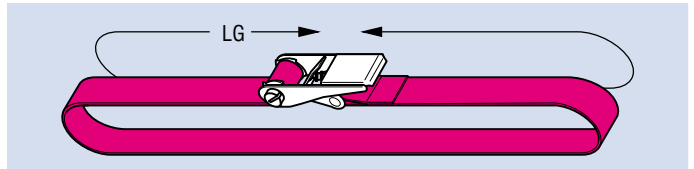


KS 500 one-piece Strap width 25 mm	Availability	
	4 m	6 m
Reference no. 123560	✓	✓

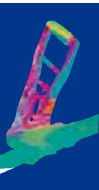
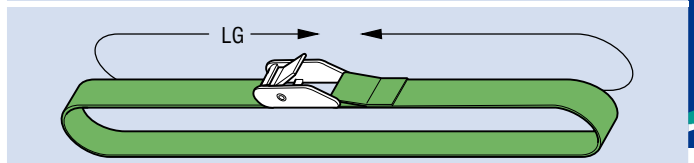
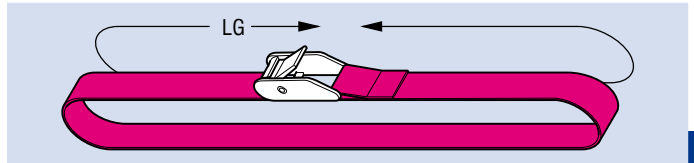
KS 1600 one-piece Strap width 35 mm	Availability	
	4 m	6 m
Reference no. 135980	✓	✓

Please always specify the reference number and length LG when ordering!
Additional lengths on enquiry.

Lashing method			
	Permissible lashing force LC (daN)	500	500
Breaking force BF (daN)	1000	1000	500



Lashing method		
	Permissible lashing force LC (daN)	250
Breaking force BF (daN)	500	1600



POLYTEX® cargo lashing equipment sets

*The quantity makes the difference!
Quality and low price*

- ▶ Inexpensive due to large manufacturing quantities
- ▶ POLYTEX® quality
- ▶ Purposefully assembled

POLYTEX® lashing set Standard

Set with 20 POLYTEX® RS 10 000 lashing strap systems with wire claw hooks
Length 8.0 m

Reference no.
201038



POLYTEX® lashing set ERGO Long lever

Set with 20 POLYTEX® LH 10 000 ERGO long lever lashing strap systems with wire claw hooks
Length 8.0 m

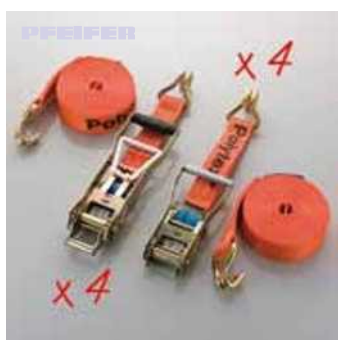
Reference no.
201039



POLYTEX® lashing set HGV

Set with 4 POLYTEX® RS 10 000 lashing strap systems and 4 POLYTEX® LH 10 000 ERGO long lever lashing strap system with wire claw hooks
Length 8.0 m

Reference no.
201040



POLYTEX® lashing set Transporter

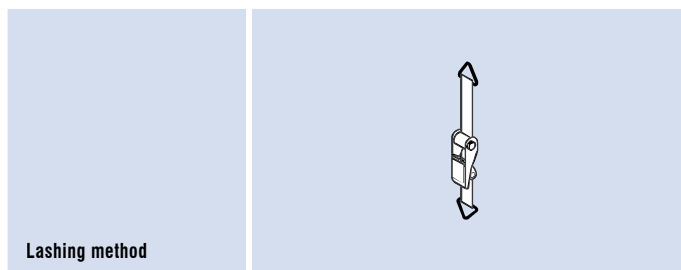
Ideal for vans with trailers
Set with 5 POLYTEX® RS 4000 one-piece lashing strap systems, length 6.0 m, and 5 POLYTEX® RS 4000 lashing strap systems with wire claw hooks, length 4.0 m

Reference no.
201041



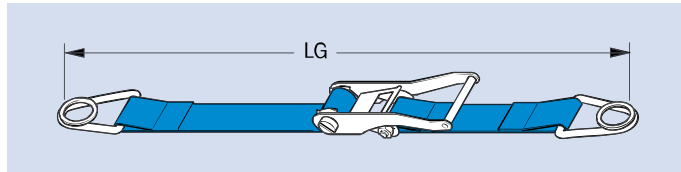
Loading ramp lashing on low-loaders

An alternative to ramp lashing poles. Simple, fast handling due to special end fitting and free-moving ratchet. Suitable for low-loaders with bolt (max. Ø 40 mm) and spring cotter. Strap width 50 mm



Lashing method	
Permissible lashing force LC (daN)	2000
Breaking force BF (daN)	4000

two-piece Anchor ring with washer	Availability	
	2 m	3 m
Reference no. 145618	√	√



Please always specify the reference number and length LG when ordering!
Additional lengths on enquiry.

POLYTEX® lashing nets

for vans, flat-bed trucks and lorries

- ▶ Flexible and simple use
- ▶ Optimum mesh size for the most diverse goods
- ▶ Simple and fast tensioning with the aid of the supplied fastening straps
- ▶ Form-fit adjustment to every load due to numerous fastening options
- ▶ Usable both for down lashing and for diagonal lashing
- ▶ Space-saving stowage

Extreme light and flexible



Cargo lashing net for vans

Vehicle interior width from 1.5 to 1.9m
Strap width 35 mm
Mesh size 175 x 175 mm



Article name	Dimensions (l x L) mm	Reference no.
Lashing net for vans with vario-telescopic bar for rod rail and 6 fastening straps, 2.0 m	2825 x 1625	218440
Extension net for vans	1025 x 1625	218441

Quick-release clamp

Strap width 35 mm
Permissible tensile force (LC) in direct pull = 650 daN



Article name	Length m	Reference no.
Quick-release clamp, 35 mm	2	218442
Quick-release clamp, 35 mm	3	218443
Quick-release clamp, 35 mm	4	218444

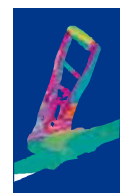
Cargo lashing net for lorries

Vehicle interior width from 2.5m
Strap width 35 mm
Mesh size 210 x 230 mm



Article name	Dimensions (l x L) mm	Reference no.
Lashing net for lorries with 2.0m eye bar sewn on triangles and 6 fastening straps, 2.0 m	3480 x 2485	218438
Extension net for lorries, with sewn-on triangles	3480 x 2486	218439

Cargo lashing equipment



Valuable aids for lashing

POLYTEX® edge protection plate and ratchet underlay

Robust PU plate, protects lashing strap and load.

For strap widths up to 50 mm
Packing unit 10 pieces

Reference no.
208391

Additional sizes on enquiry.

POLYTEX® edge protection profile, steel

This way you can protect lashing strap and transport goods at the same time.

For strap widths up to 50 mm
Packing unit 10 pieces

Reference no.
208389

POLYTEX® edge protection profile, plastic

Made of sturdy plastic, provides for even, protective pressure distribution due to wide contact area.

With slot for simple insertion of the strap (max. 50 mm).

For strap widths up to 100 mm
Packing unit 10 pieces

Reference no.
208390

POLYTEX® Flexoclip

The most stable protection against wear. Made of high-quality, extremely resistant polyurethane.
See page 135



LashControl Mobile version

Using this checking device you can monitor the pre-tensioning force in the respective 50-mm lashing straps, mobile for use on several straps. The pre-tensioning force is indicated on a scale.

LashControl	Reference no.
Mobile version	146935



POLYTEX® edge protection profile, black

For loads that are particularly sensitive to edge pressure, such as rolls of paper.

For strap widths up to 50 mm

Reference no.
187347



Double bridge edge protection rail

Protects the cargo; the edge pressure is distributed over a large area.

Several cargo items can be spanned simultaneously.

Leg length 190 mm
Thickness 19 mm

Length m	Reference no.
0.4	240219
0.8	240220
1.2	240221
2.0	240222
2.4	240223
5.8	240224



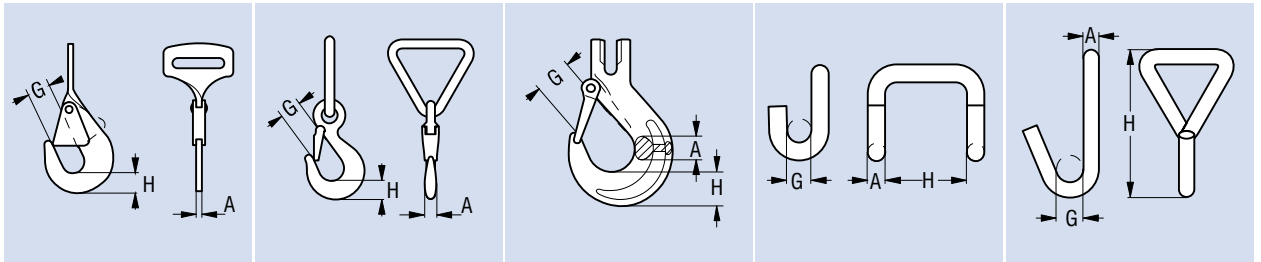
POLYTEX® abrasion protection sleeve

Extend the service life of your lashing straps, avoid abrasion.
See page 136



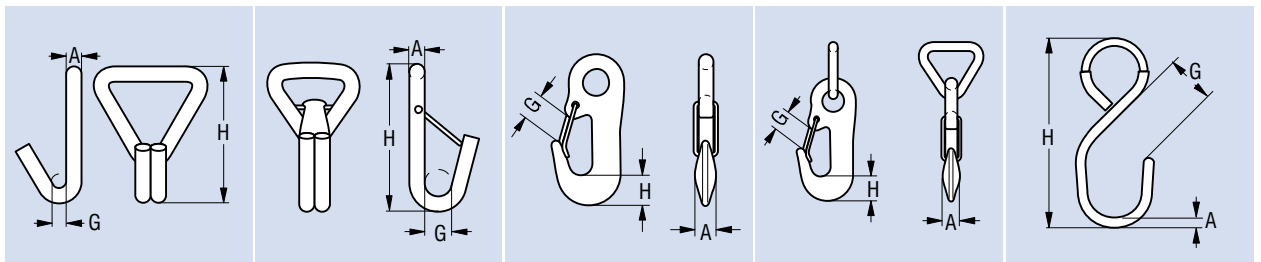
At one glance: dimensions of the terminations for POLYTEX® lashing strap systems

Dimensions in mm



lashing system	snap hook			triangle hook			clevis parallel hook			claw hook			single J-hook		
	A	G	H	A	G	H	A	G	H	A	G	H	A	G	H
RS 40000	—	—	—	30	43	40	—	—	—	—	—	—	—	—	—
RS 20000	—	—	—	19	30	28	19	27	28	16	20	75	—	—	—
RS 10000	6	21	23	15	20	21	—	—	—	13	13	52	15	17	130
RS 4000	—	—	—	—	—	—	—	—	—	10	16	30	11	16	100

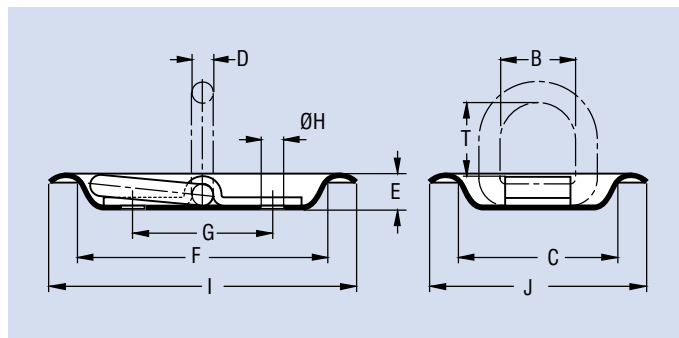
Dimensions in mm



lashing system	double J-hook			double J-hook with safety catch			eye hook			triangle eye hook			PVC coated S-hook		
	A	G	H	A	G	H	A	G	H	A	G	H	A	G	H
RS 20000	15	16	135	—	—	—	—	—	—	—	—	—	—	—	—
RS 10000	12	19	80	12	20	110	—	—	—	—	—	—	—	—	—
RS 4000	10	16	80	—	—	—	15	14	18	—	—	—	—	—	—
RS 2000	6	10	45	—	—	—	15	14	18	13	14	18	—	—	—
RS 1000	6	10	45	—	—	—	—	—	—	13	14	18	9	24	108

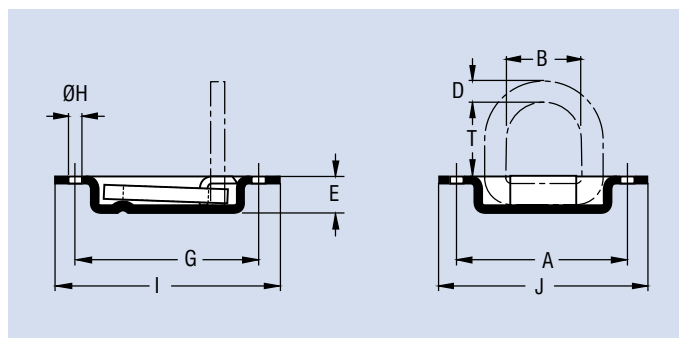
Recessed lashing ring, bolt-on

Galvanised version
Mounted recessed in the floor of the lorry and fastened with penetrating carriage bolts.
Bolts are not included in the scope of supply.



Permissible lashing force LC daN	Breaking force BF daN	Dimensions in mm										Reference no.
		B	C	D	E	F	G	H	I	J	T	
350	700	30	52	6	12	86	45	8.5	104	70	27	135981
800	1600	38	75	10	16	120	60	11.0	145	100	35	135982

Recessed lashing ring, bolt-on according to DIN EN 12640



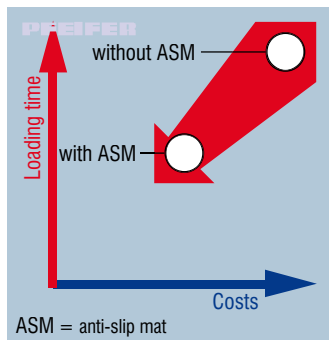
Permissible lashing force LC daN	Breaking force BF daN	Dimensions in mm									Reference no.
		A	B	D	E	G	H	I	J	T	
1000	2000	71	28	10	17	82	6	104	92	35	135983



Anti-slip mats

- ▶ Fast, economical lashing with fewer lashing devices.

Optimal for fast lashing down



Anti-slip mat

($\mu = 0.6$)

Smooth loading surfaces require elaborate lashing of the loads. Lashing work can be reduced enormously by the employment of the anti-slip mat with a guaranteed coefficient of sliding friction of at least 0.6.

Make-up	Thickness mm	Width mm	Length mm	Reference no.
Roll	8	250	5000	123650
Box of 120 pcs.	8	100	200	200942
Box of 100 pcs.	10	100	200	200943

Other dimensions and thicknesses available on enquiry.



Anti-slip mat, Black-Cat-Panther ($\mu > 0,9+$)

new!

for use on lorries, cars, rail- sea- and airfreight, in industry and handcrafts

- ▶ Ultra-high tear strength due to additional textile insert with a special coating
- ▶ Only 4.5 mm thick, thus highly flexible, dimensionally stable and trimmable
- ▶ Coefficient of sliding friction $> 0.9+$; you can always count on a value of $\mu = 0.6$ (statutory value).
- ▶ Also suitable for heavy loads
- ▶ Easy to clean with standard cleaning agents. The closed surface means that liquids are not absorbed.
- ▶ Very good resistance to acids, alkalis, petrol/gasoline, diesel and uncontaminated oils.
- ▶ Already complies with the planned labelling requirements (district labelling)
- ▶ Is eco-friendly and easily disposable (no hazardous waste).
- ▶ Temperature resistant from -40 to 120°C
- ▶ Max. contact pressure 82.5 tonnes/m^2

Make-up	Thickness mm	Width mm	Length mm	Reference no.
4 rolls	4.5	120	4000	234487
4 rolls	4.5	200	4000	234488
Roll	4.5	600	4000	234489
Roll	4.5	800	4000	234490
8-edge pad 100 pcs.	4.5	150	150	234491
Roll	4.5	800	1200	234492

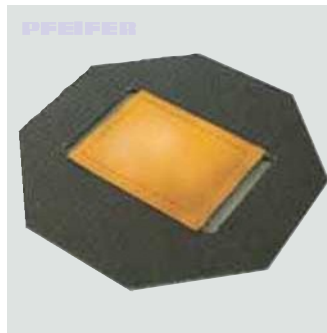
Also available in self-adhesive versions. Please consult Pfeifer.

Edge-protection pad, Black-Cat-Panther non-slip

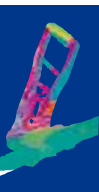
new!

Compensation of the preload force S_{TF} of the lashing strap is ensured by the sewn-on sliding plastic. The anti-slip effect means that an additional locking effect is achieved, even with a slightly loosened strap.

Make-up	Thickness mm	Width mm	Length mm	Reference no.
8-edge pad 24 pcs.	4.5	150	150	238768



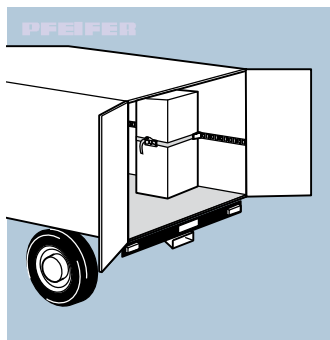
Cargo lashing equipment



Interior lashing

Lashing systems for box trucks

- ▶ Easy-to-install lashing system consisting of lashing rails and lashing straps with special fittings.
- ▶ For the securing of load units in closed vehicles.



Lashing rail

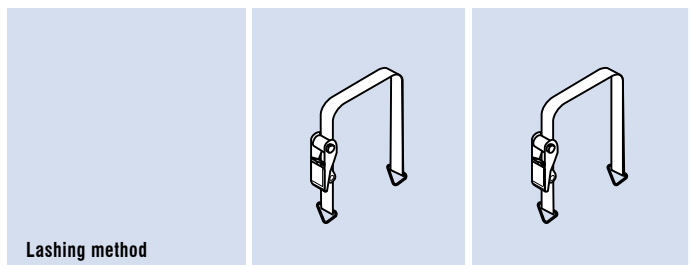
Universal lashing rail for horizontal installation.



Material thickness mm	Width mm	Length mm	Reference no.
2.5	132	3050	146790

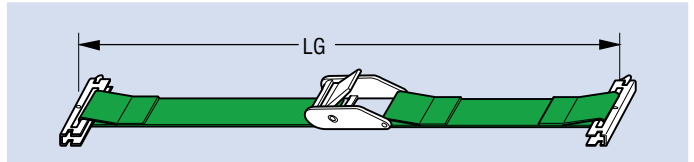
POLYTEX® lashing strap system for interior lashing

Stable lashing system with special fitting for lashing rails.
Strap width 35 mm

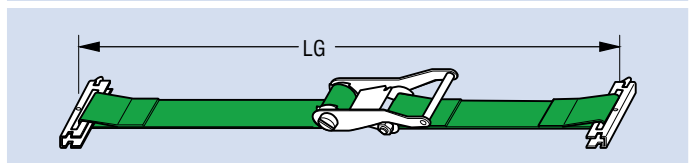


Lashing method	Permissible lashing force LC (daN)	Breaking force BF (daN)
Method 1	800	1600
Method 2	1600	3200

KS 1600 two-piece with clamping lock	Availability	
	2 m	4 m
Reference no. 146863	✓	✓



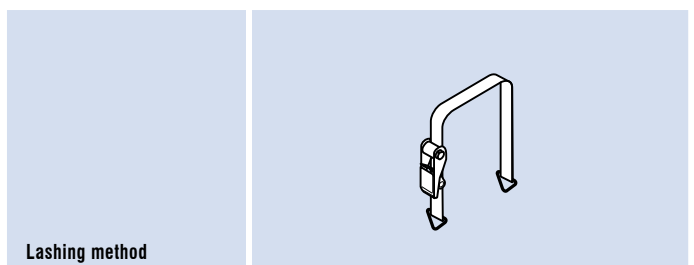
RS 3000 two-piece with ratchet	Availability	
	2 m	4 m
Reference no. 146864	✓	✓



Please always specify the reference number and length LG when ordering!
Additional lengths on enquiry.

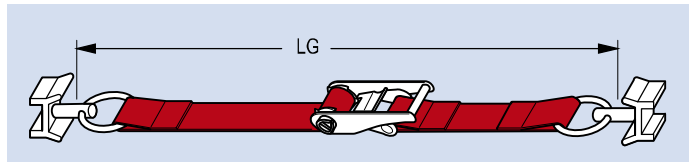
POLYTEX® lashing strap system with airline fitting

Special fitting for airline lashing rail systems.
Strap width 25 mm



Lashing method	Permissible lashing force LC (daN)	Breaking force BF (daN)
Method 1	1000	2000

RS 2000 two-piece	Availability	
	2 m	4 m
Reference no. 162625	✓	✓



Lashing chain systems: General information

Grade 120, 100, 80

The benefits of the new innovative chain system HIT PRO grade 120



■ **Intelligent profile** – by the intelligent use of material, essential characteristics of the chain (e.g. fatigue load and flexural rigidity) are substantially improved compared to a normal round steel chain with the same cross section. In order to achieve the optimum technical effect, the use of the material was optimised (blue surfaces) at effective points, but reduced (**red surfaces**) in less relevant areas.

■ **Patented material** with optimised strength and endurance characteristics at both high and at low temperatures.

■ **Optimised flexural rigidity** – the section modulus, which is important to prevent undesirable deflection, is up to 16% higher in the profile chain than in a round link chain with the same cross section and hence reduces the maximum tension in the chain (**no red areas**).

■ **Longer service life** due to higher strength and lower wear and tear.

■ **Complete traceability** – chains and components are provided with identity stamps; these allow the entire manufacturing process to be verified.

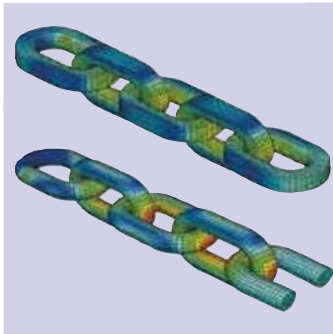
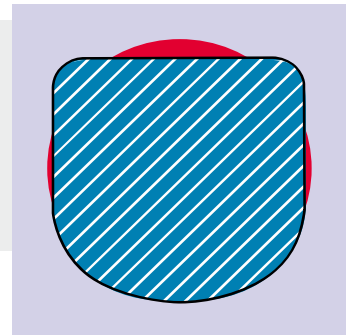
■ **The professional in demanding use** – thanks to the combination of **intelligent profile**, patented **high performance chain steel** and an **optimised tempering process**, HIT PRO attains **maximum strength, hardness and flexural rigidity**. Particularly in tough use on edges, the revolutionary HIT PRO technology proves its capabilities with a ruggedness that has never been known before!

■ **The low temperature professional** – due to the extremely high temperature stability from **-60° to +300°C**, HIT PRO is suitable even for the harshest environmental conditions in the world.

■ **Simple visual identification** due to profiled chain and GK12 stamp on each chain link

■ **Super PFEIFER XLL corrosion protection** (eXtremely Long Life)

■ **Quality-assured European production** by an ISO 9001-certified company



Cargo lashing equipment

Advantages in cargo lashing with grade 120

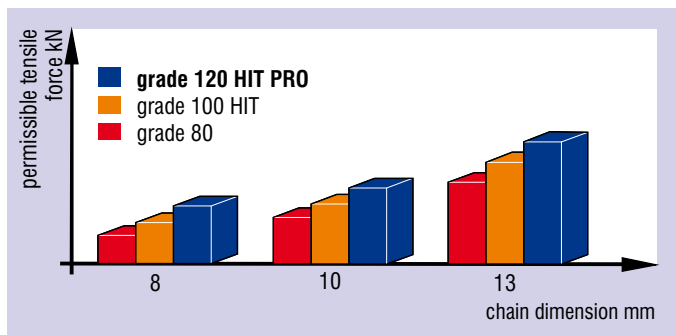


Higher tensile forces

50 % higher tensile force compared to grade 80
20 % higher tensile force compared to grade 100

Nominal chain thickness mm	HIT PRO grade 120 kN	HIT grade 100 kN	grade 80 kN
7	47	28 (6 mm)	22.4 (6 mm)
8	60	50	40
10	100	80	63
13	160	134	100

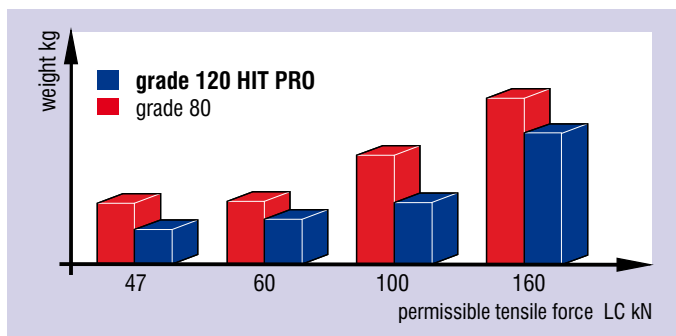
More loads or a heavier loads can be secured **with the same chain dimension**. Plus 50% compared to grade 80 and 25% compared to grade 100 (direct lashing)



Weight saving

Significantly less weight by lashing with HIT PRO, hence more comfortable handling

permissible tensile force LC kN	Previous chain weight grade 80 kg	HIT PRO chain weight kg	Reduction %
60	14.5	10.3	29
100	26.1	15.6	40
160	37.7	30.7	18



Reduction of the chain dimension

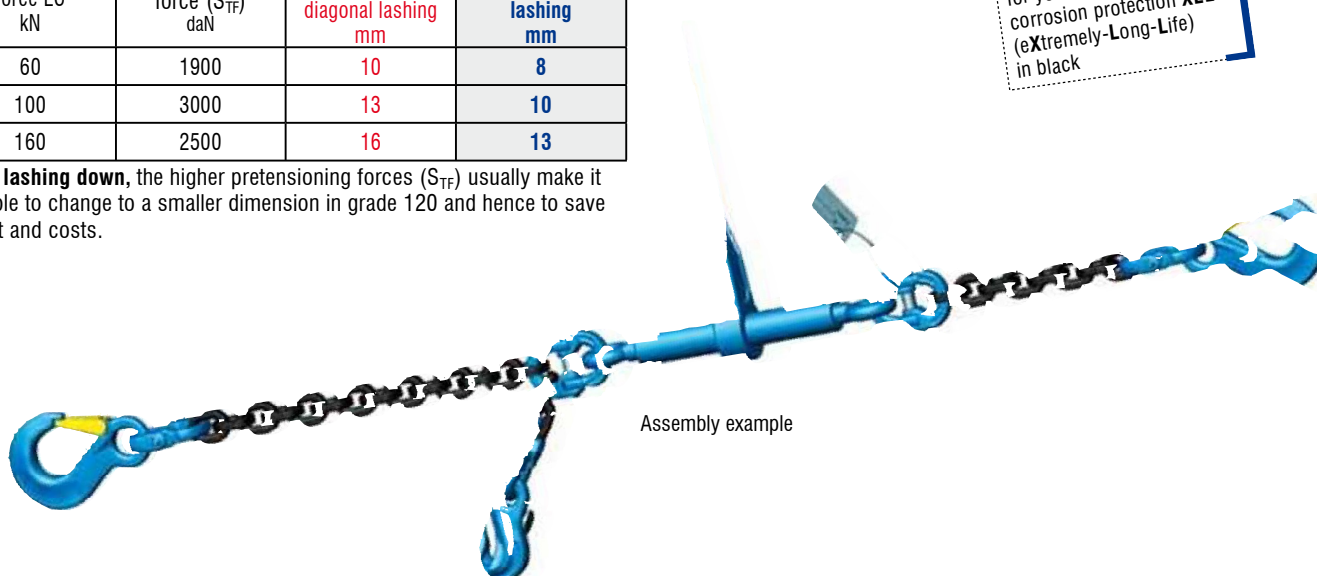
When lashing diagonally, it is often possible to reduce to a smaller chain dimension, hence saving considerably on weight and costs.

Example: 8 mm (LC = 60 kN) replaces 10 mm grade 80 (LC = 63 kN)

permissible tensile force LC kN	Pretensioning force (S_{TF}) daN	Previous chain \varnothing grade 80 for diagonal lashing mm	HIT PRO chain \varnothing for diagonal lashing mm
60	1900	10	8
100	3000	13	10
160	2500	16	13

When lashing down, the higher pretensioning forces (S_{TF}) usually make it possible to change to a smaller dimension in grade 120 and hence to save weight and costs.

HIT PRO
for you with proven super corrosion protection **XLL** (eXtremely-Long-Life) in black



Assembly example

HIT PRO saves costs and weight in cargo lashing due to higher tensile forces.

HIT-PRO lashing chain system

Grade 120

ergonomic, fast, economical



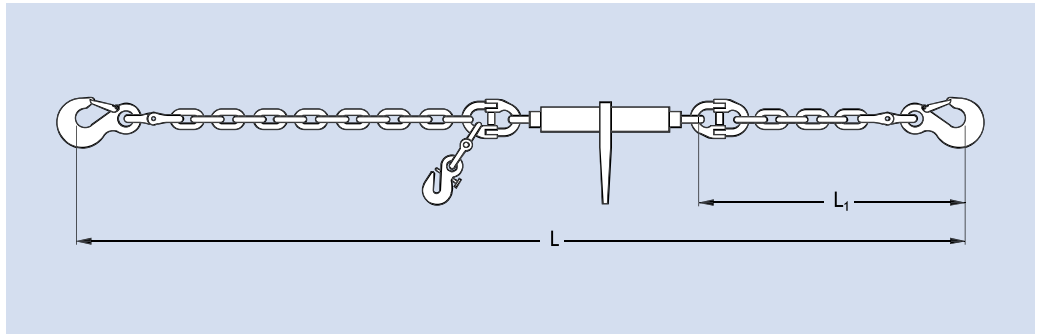
- ▶ Light, durable, ergonomic and economical
- ▶ Protects the health of users – up to 50% less weight of chain!
- ▶ Maximum service life from intelligent D-chain profile
- ▶ Optimum corrosion protection from the XLL coating
- ▶ Ultra-high tension range of the ratchet load tensioner in the important 13 mm version

HIT-PRO-RSP lashing chain system

new!

with ratchet load tensioner, PSWP chain shortener and HSWP chain hook

Grade 120
50% higher lashing force compared with the grade 80
With diagonal lashing, and in comparison with grade 80, a chain one size smaller in nominal thickness can be used.



System	Max. permissible lashing force in direct pull daN	Standard pre-tensioning force S_{TF} daN	Standard length with closed tensioner approx.		Tensioning stroke mm	Aperture width mm	Reference no.
			L_1 mm	L mm			
RSP 7	4700	1900	1000	3000	155	26	229527
RSP 7	4700	1900	310	3000	155	26	229528
RSP 8	6000	1900	1000	3000	155	26	229529
RSP 8	6000	1900	330	3000	155	26	229530
RSP 10	10000	3000	1000	3000	155	31	229531
RSP 10	10000	3000	410	3000	155	31	229532
RSP 13	16000	2500	1000	3000	297	39	229533
RSP 13	16000	2500	520	3000	297	39	229534

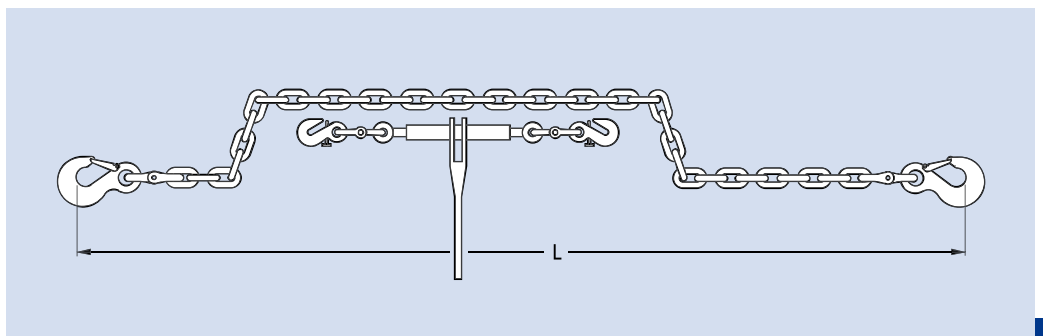
Please always specify the reference number and effective length L when ordering!
Apart from the standard lengths we supply the lashing chains in any desired length.

HIT-PRO-ARP lashing chain system

new!

two-piece

Very flexible lashing system with a ratchet that can be positioned at any place on the chain.
Grade 120
50% higher lashing force compared with the grade 80
With diagonal lashing, and in comparison with grade 80, a chain one size smaller in nominal thickness can be used.



System	Max. permissible lashing force in direct pull daN	Standard pre-tensioning force S_{TF} daN	Standard length with closed tensioner approx. L mm	Tensioning stroke mm	Aperture width mm	Reference no.
ARP 7	4700	1900	3000	155	26	229535
ARP 8	6000	1900	3000	155	26	229536
ARP 10	10000	3000	3000	155	31	229537
ARP 13	16000	2500	3000	297	39	229538

Please always specify the reference number and effective length L when ordering!
Apart from the standard lengths we supply the lashing chains in any desired length.

Cargo lashing equipment



HIT lashing chain system

Grade 100

- ▶ 25% higher permissible lashing force in comparison with grade 80
- ▶ Optimum corrosion protection from the XLL coating
- ▶ Ultra-high tension range of the ratchet load tensioner in the important 13 mm version

Our standard with top price-performance ratio

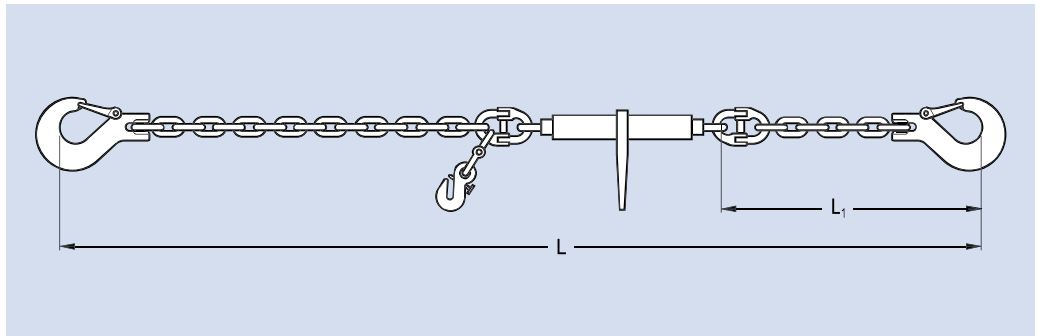


HIT-RSH lashing chain system

with ratchet load tensioner, PSW chain shortener and chain hook

Practical and fast lashing system; the pretensioning forces are transferred quickly and finely dosed into the chain using a ratchet.

Hook and shortener with safety device. Chain with PFEIFER XLL coating. Grade 100



25% higher permissible tensile force

6 to 22 mm
HIT
HIGH WORKING
LOAD LIMIT

System	Max. permissible lashing force in direct pull daN	Standard pre-tensioning force S_{TF} daN	Standard length with closed tensioner approx.		Tensioning stroke mm	Aperture width mm	Reference no.
			L_1 mm	L mm			
RSH 8	5000	1900	1000	3000	155	27	200955
RSH 8	5000	1900	280	3000	155	27	200956
RSH 10	8000	3000	1000	3000	155	30	200957
RSH 10	8000	3000	330	3000	155	30	200958
RSH 13	13400	2500	1000	3000	297	38	200959
RSH 13	13400	2500	420	3000	297	38	200960
RSH 16	20000	3000	1000	3000	280	46	217122
RSH 16	20000	3000	500	3000	280	46	217123

Please always specify the reference number and effective length L when ordering!
Apart from the standard lengths we supply the lashing chains in any desired length.

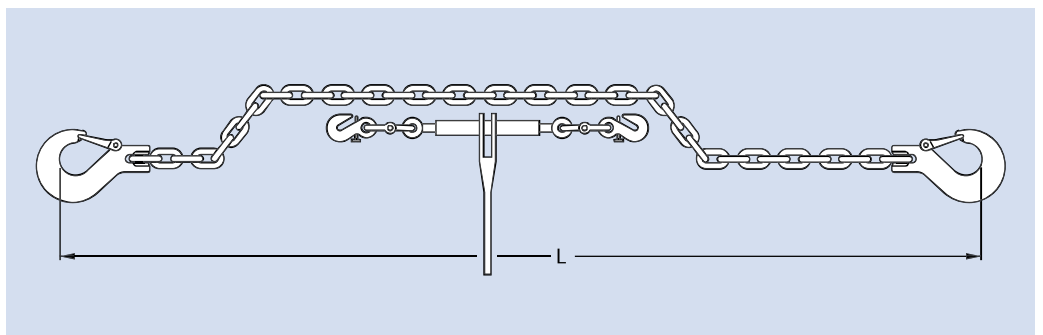
HIT-RKH lashing chain system two-piece

Very flexible lashing system with a ratchet that can be positioned at any place on the chain.

Hook and shortener with safety device. Chain with PFEIFER XLL coating. Grade 100

25% higher permissible tensile force

6 to 22 mm
HIT
HIGH WORKING
LOAD LIMIT



System	Max. permissible lashing force in direct pull daN	Standard pre-tensioning force S_{TF} daN	Standard length with closed tensioner approx. L mm	Tensioning stroke mm	Aperture width mm	Reference no.
RKH 8	5000	1900	3000	155	27	207836
RKH 10	8000	3000	3000	155	30	207837
RKH 13	13400	2500	3000	297	38	207838

Please always specify the reference number and effective length L when ordering!
Apart from the standard lengths we supply the lashing chains in any desired length.

Grade 80 lashing chain system

Grade 80

Value for money

- ▶ High-tensile chains and fittings of grade 8 for rough conditions.
- ▶ The built-in chain shorteners enable highly variable lashing lengths.
- ▶ The chain shorteners are equipped with a safety device to prevent unintentional loosening of the chain, as required by DIN EN 12195-3.
- ▶ DIN EN 818, part 1/2/4 and DIN EN 1677, DIN EN 12195-3, VDI 2700ff



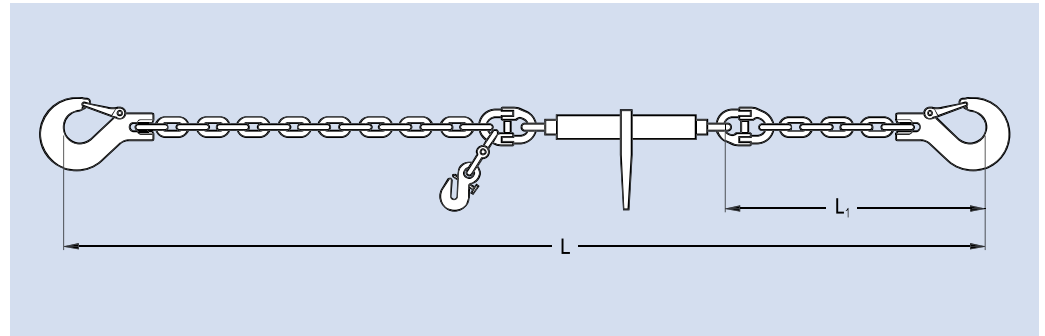
ARS lashing chain system

with RS ratchet load tensioner, KVS chain shortener and chain hook

Practical and fast lashing system; the pretensioning forces are transferred quickly and finely dosed into the chain using a ratchet.

Hook and shortener with safety device.

Grade 80



System	Max. permissible lashing force in direct pull daN	Standard pre-tensioning force S_{TF} daN	Standard length with closed tensioner approx.		Tensioning stroke mm	Aperture width mm	Reference no.
			L_1 mm	L mm			
ARS 8	4000	1000	1000	3000	170	27	120673
ARS 8	4000	1000	280	3000	170	27	135975
ARS 10	6300	1575	1000	3000	170	30	120674
ARS 10	6300	1575	330	3000	170	30	135976
ARS 13	10000	1500	1000	3000	170	38	120675
ARS 13	10000	1500	420	3000	170	38	135977
ARS 16	16000	2400	1000	3000	160	46	188726
ARS 16	16000	2400	500	3000	160	46	188727

Please always specify the reference number and length L when ordering!

Apart from the standard lengths we supply the lashing chains in any desired length.

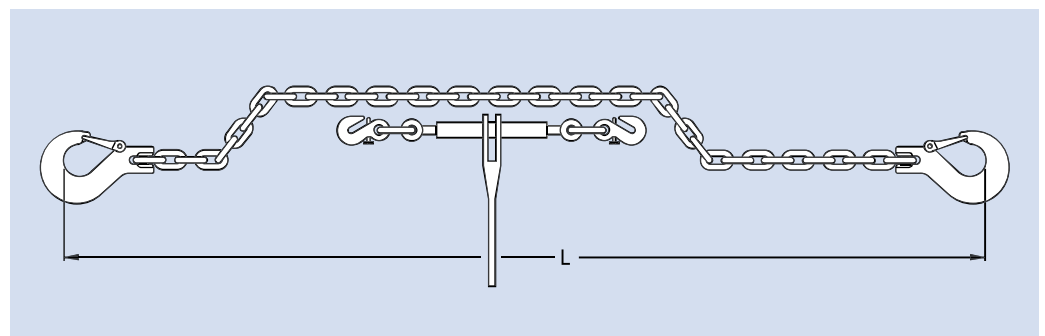
ARK lashing chain system

two-piece

Very flexible lashing system with a ratchet that can be positioned at any place on the chain.

Hook and shortener with safety device.

Grade 80



System	Max. permissible lashing force in direct pull daN	Standard pre-tensioning force S_{TF} daN	Standard length with closed tensioner approx. L mm	Tensioning stroke mm	Aperture width mm	Reference no.
ARK 8	4000	1000	3000	170	27	181034
ARK 10	6300	1575	3000	170	30	181035
ARK 13	10000	1500	3000	170	38	181036
ARK 16	16000	2400	3000	160	46	188728

Please always specify the reference number and length L when ordering!

Apart from the standard lengths we supply the lashing chains in any desired length.

Cargo lashing equipment

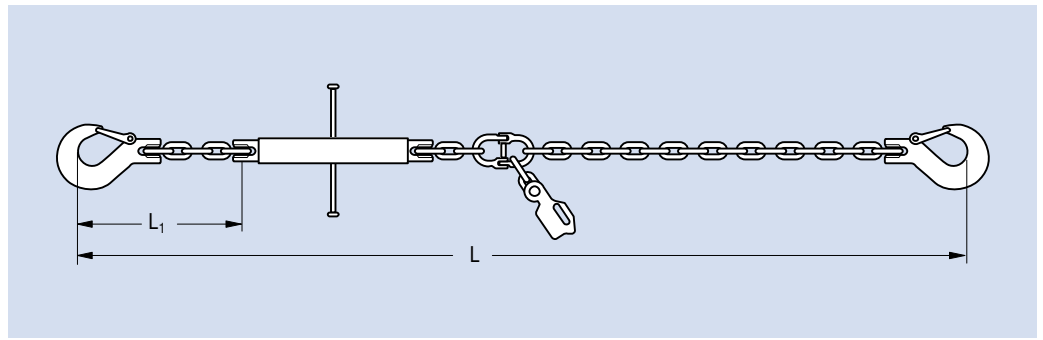
ASS lashing chain system

With KSS coupling turnbuckle, KVS chain shortener and chain hook

Simple system with large tensioning range, the tensioning stroke can be finely dosed via the spindle in the turnbuckle.

Hook and shortener with safety device.

Grade 80



System	Max. permissible lashing force in direct pull daN	Standard pre-tensioning force S_{TF} daN	Standard length with closed tensioner approx.		Tensioning stroke mm	Aperture width mm	Reference no.
			L_1 mm	L mm			
ASS 8	4000	1700	1000	3000	200	27	120669
ASS 8	4000	1700	215	3000	200	27	135972
ASS 10	6300	2000	1000	3000	240	30	120670
ASS 10	6300	2000	260	3000	240	30	135973
ASS 13	10000	1700	1000	3000	230	38	120672
ASS 13	10000	1700	330	3000	230	38	135974
ASS 16	16000	2400	1000	3000	280	46	166224
ASS 16	16000	2400	395	3000	280	46	166225

Please always specify the reference number and length L when ordering!

Apart from the standard lengths we supply the lashing chains in any desired length.

Safety labelling for lashing chains in accordance with EN 12195-3

Lashing chains must be provided with a metal safety tag showing the following information:

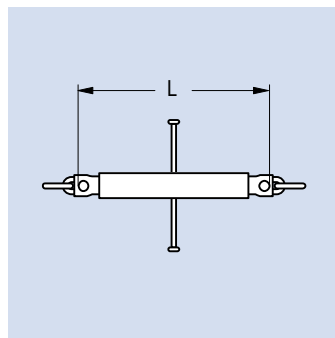
- Lashing force (LC) in kN
- Tension force S_{TF} in daN
- Type of lashing
- Warning notices
- Manufacturer
- Traceability code
- EN 12195-3



KSS chain coupling turnbuckle

For the simple tensioning of the chain lashing, infinitely adjustable, with built-in overwinding protector.

Grade 80



for nominal size of chain mm	Dimensions in mm		Weight kg	Reference no.
	L min.	L max.		
8	330	450	3.2	119698
10	455	670	3.9	119699
13	515	795	6.5	119700
16	530	780	10.0	165339

KSS safety chain for chain coupling turnbuckle

The coupling turnbuckle is also approved in connection with the safety chain as an attachment device. It can be used in chain slings of grade 80 for exact length adjustment.

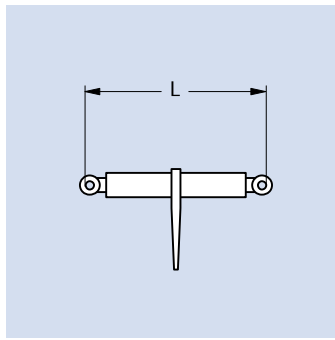


Reference no.
157802

Ratchet load tensioner grade 80

The ratchet enables the lashing to be tensioned with no considerable expenditure of energy. Particularly advantageous in cramped spaces.

Grade 80

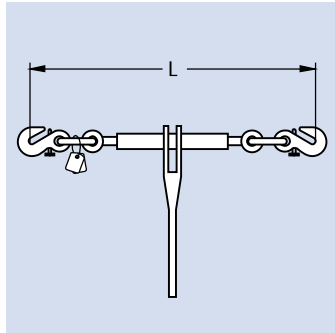


for nominal size of chain mm	Dimensions in mm		Weight kg	Reference no.
	L min.	L max.		
8	360	530	3.6	180535
10	360	530	3.6	180536
13	380	550	3.8	180537
16	360	520	4.6	188718

Ratchet load tensioner grade 80 with P-hook

With lashing badge and quality inspection tag. The shorteners are provided with a safety device as required by BS EN 12195-3.

Grade 80



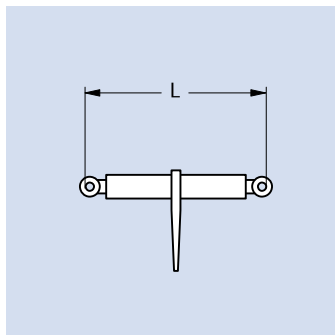
for nominal size of chain mm	Dimensions in mm		Weight kg	Reference no.
	L min.	L max.		
8	560	730	4.5	217124
10	620	790	5.4	217125
13	730	900	8.4	217126
16	740	900	10.2	217127

Ratchet load tensioner Grade 100

The ratchet enables the lashing to be tensioned with no considerable expenditure of energy. Particularly advantageous in cramped spaces.

Grade 100

Note: 16mm version with coupling connections!

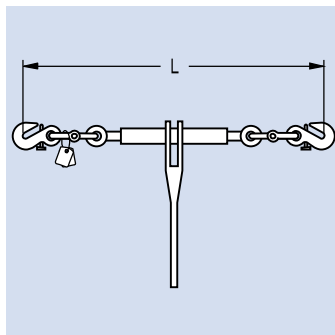


for nominal size of chain mm	Dimensions in mm		Weight kg	Reference no.
	L min.	L max.		
8	346	501	3.2	236328
10	358	513	3.8	236329
13	571	868	9.9	236330
16	554	834	13.5	215633

Ratchet load tensioner Grade 100 with P-hook

With lashing badge and quality inspection tag. The shorteners are provided with a safety device as required by BS EN 12195-3.

Grade 100

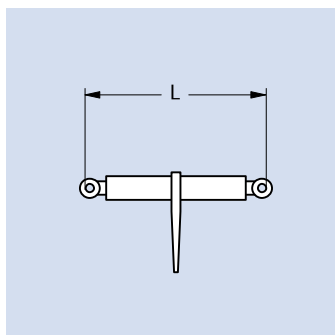


for nominal size of chain mm	Dimensions in mm		Weight kg	Reference no.
	L min.	L max.		
8	610	765	4.578	241887
10	678	833	6.478	241888
13	973	1270	15.158	241889

Ratchet load tensioner Grade 120

The ratchet enables the lashing to be tensioned with no considerable expenditure of energy. Particularly advantageous in cramped spaces.

Grade 120

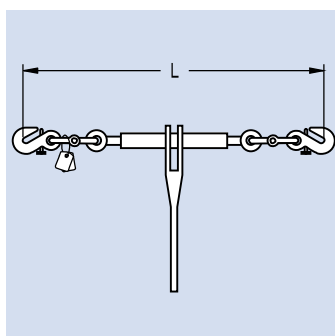


for nominal size of chain mm	Dimensions in mm		Weight kg	Reference no.
	L min.	L max.		
8	346	501	3.2	229084
10	358	513	3.8	229085
13	571	868	9.9	229086

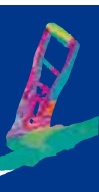
Ratchet load tensioner Grade 120 with P-hook

With lashing badge and quality inspection tag. The shorteners are provided with a safety device as required by BS EN 12195-3.

Grade 120



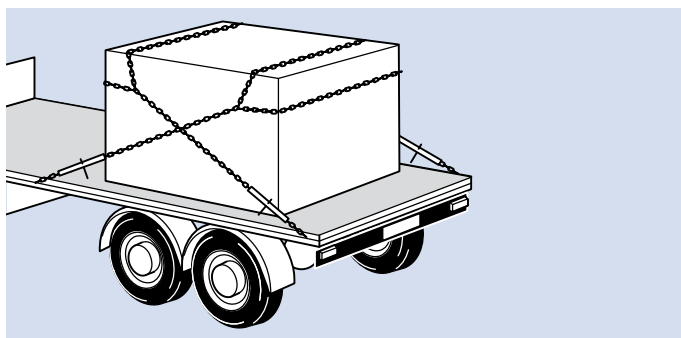
for nominal size of chain mm	Dimensions in mm		Weight kg	Reference no.
	L min.	L max.		
8	540	696	4.858	234034
10	674	829	6.698	234035
13	981	1278	15.678	234036



Special lashings

Lashing with head loops

For all cargos which can only be secured by lashing them down as there are not enough attachment points. The lashing is hooked to a round sling or an endless chain which is wrapped round the cargo and tightened vertically.



Single barrel fastening device for Euro-pallets

Single barrels are firmly secured to Euro-pallets in a simple manner when they are transported internally and externally.



Heavy duty lashing with hand chain hoists

Our hand chain hoists can be found on page 32 – 34.



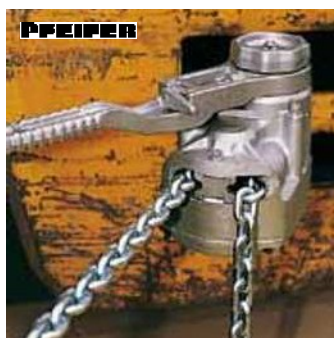
Lashings for paper rolls

Special lashings for transporting paper rolls. A specially designed lashing belt is firmly wrapped round the external roll and prevents the load from slipping or tipping.



POLYTEX Velcro straps

For bundling, forming packing units and wrapping round small, lightweight parts. Can be used repeatedly due to Velcro fastening.



Heavy machinery and devices can be lashed quickly, simply and safely using chain hoists.

In the case of diagonal lashing or down-lashing, they can be used as a tensioning element combined with lashings or as an independent complete lashing.

When using lever hoists as tensioning elements, the WLL specified is equal to the permissible Lashing Capacity LC in direct pull and the maximum obtainable tensile force.

POLYTEX® disposable tensioning system

For inexpensive bundling of loads

- ▶ For fast, simple bundling and looping around pallets, wood piles, crates or bulky transport goods.
- ▶ The tensioning ratchet is only required for tensioning the strap and is removed from the strap afterwards.
- ▶ High tensioning forces attainable.
- ▶ Protects the load.



Cargo lashing strap

Strap material woven from high-strength fibres

Also available as bagged goods on enquiry.



Strap width mm	permissible tensile force in the strapping daN	Colour	Make-up	Reference no.
30	1200	white	100m roll	218267
48	1600	black	250m roll	122758
50	1150	white	100m roll	218268
50	2500	white	100m roll	218269

Disposable lock

Punched or forged version.



For strap width mm	permissible tensile force in the strapping daN	Version	Reference no.
30	1500	forged	218246
50	1600	punched	123640
50	2500	forged	187019

Wire claw hook

With direct strap connection. No stitching necessary.



For strap width mm	Permissible tensile force in direct pull daN	Version	Reference no.
50	2500	forged	218247

Tensioning ratchet

With strengthened clamping mechanism. Long lever ERGO version.

For strap width mm	Reference no.
30/50	218266



Tensioning ratchet

With standard-version clamping mechanism.

For strap width mm	Reference no.
30/50	123642



Cargo lashing equipment

Lashings for buckets

- ▶ **Secure and reliable fastening for buckets, in a textile version or with chains.**
- ▶ **The presented lashings are designed for standard buckets with fixing points at height 0.9 m and spaced 1.1 m apart.**
- ▶ **Lashing systems for other dimensions on enquiry.**

POLYTEX® textile lashing system

Consisting of round sling with protective sleeve, lashing strap and J-hook. Small spreading angle of the round sling due to extremely short tensioning element. The forces acting on the round sling are decreased as a result.

Permissible lashing force LC daN	Reference no.
2500	146798

In combined use with anti-slip mats (μ min. 0.6), suitable for securing containers up to 2.5 tonnes. 2 lashing systems are necessary for professional lashing.

Lashing chain system

Consisting of 2 suspension rings, coupling turnbuckle, chain shortener and shackle.

Permissible lashing force LC daN	Nominal size of chain mm	Reference no.
4000	10	146801

In combined use with anti-slip mats (μ min. 0.6), suitable for securing containers up to 11.0 tonnes. 2 lashing systems are necessary for professional lashing.

Container cover nets

In standard dimensions, made from high-tensile polypropylene, nominal \varnothing 3.0 mm, mesh size 45 mm, colour green.

Dimensions m x m	Reference no.
3.5 x 5	136460
3.5 x 6	136461
3.5 x 7	136462
3.5 x 8	136463



Caution: With the publication of the VDI Guideline 2700 page 17, Y and V lashings may only be calculated as down-lashing.

Additional assumption by the VDI of $\mu=0.1$ due to the possibility of soiling. Practical use of these lashings only in combination with anti-slip mats.

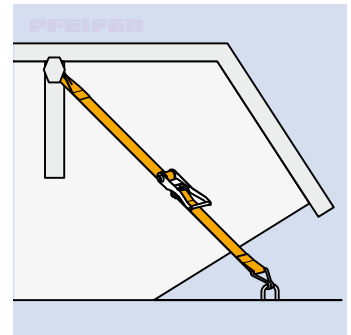
When using anti-slip mats it must be ensured that these are effective.

POLYTEX® lashing strap system

Consisting of 1 lashing strap with strengthened, tapered end loop and wire claw hook.

Permissible lashing force LC daN	Length m	Reference no.
2500	2	146799

For securing containers up to 2.5 tonnes. 4 lashing strap systems are necessary for professional lashing.



Lashing chain system, 2-piece

Consisting of a chain with suspension ring plus hook and a ratchet load tensioner with P-hook. Standard length 3 m

Permissible lashing force LC daN	Nominal size of chain mm	Reference no.
4000	8	200949
6300	10	200950

Containers up to 4.0 tonnes can be lashed with 8 mm chains, containers up to 6.0 tonnes with 10 mm chains. 4 lashing chain systems are necessary for professional lashing.

