

S-Line[®]

MultiSAVE[®]
Ladungssicherung ohne verzurren.

Swep
Nutzfahrzeugtechnik

Competence since 1892



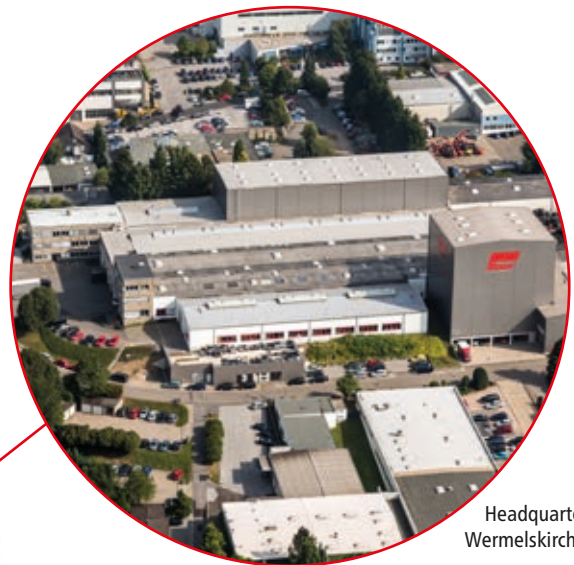
Cargo Control 2020

Mechanical and textile load securing · Lifting equipment · Load securing in the vehicle body

For over a century, the name Suer has been linked to progress and innovation in commercial vehicle construction. Founded in the tool stronghold of Remscheid, the company's headquarters are today located in Wermelskirchen.

Since the 1950's numerous representations have been added in Germany and across Europe. In addition to the headquarters in Wermelskirchen, we are currently positioned with branches in Dasing and Leipzig and two foreign branches in Kościan/Poland and Vilnius/Lithuania.

Establishing new products and product lines on the market has been our goal since the company's foundation. With the own products of our **S-Line**[®] we serve the complete range of mechanical and textile load securing systems.



Headquarters
Wermelskirchen





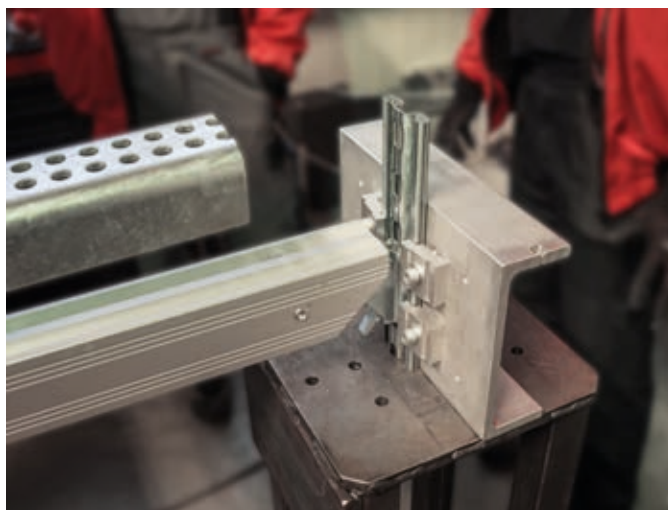
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THE QUALITY STANDARD

Load securing products must withstand extreme loads during their service life. All **S-Line**® products are regularly tested for their resilience and quality in the in-house test laboratory.

The test is carried out according to the DIN standards of the load securing system. All tested values are indicated by labels on the products.



All items in the catalogue can also be found in our webshop:
www.fahrzeugbau-shop.de



THE KNOW-HOW

It is not only done with the use of load securing - the most important is the correct use! Incorrectly used load securing products can endanger human life in an emergency.

We present the correct application in our cargo control seminars. In the theoretical part, our certified trainer and consultant provides the legal and technical principles of cargo securing. The correct use of mechanical and textile load securing equipment is demonstrated in practice.

Secure your personal appointment.

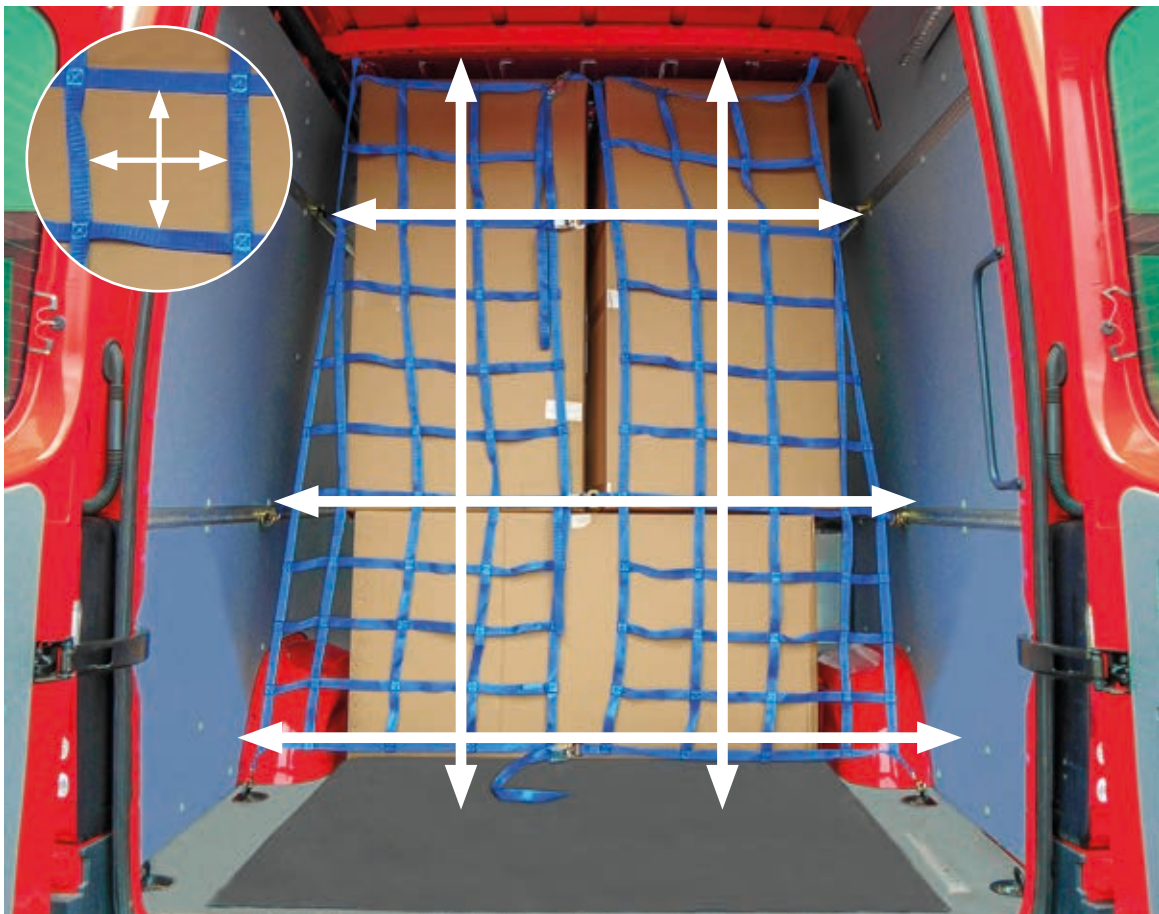


In addition to our seminars, you will find a series of instructional videos in our YouTube channel - for example, to shorten clipboards.

THE INDIVIDUALITY

The **S-Line**® standard products contained in this catalogue cover the areas of mechanical and textile load securing. If you can not find the right product on the following pages, please contact us. Our Cargo control team analyzes your needs together with you. We configure and develop your personal product.

No matter whether it is webbing colour, belt imprinting, logo positioning, special lengths of shoring bars, deviating end fittings, net sizes or mesh widths - much is possible and there is always the right solution.



Catalogue Cargo Control 2020

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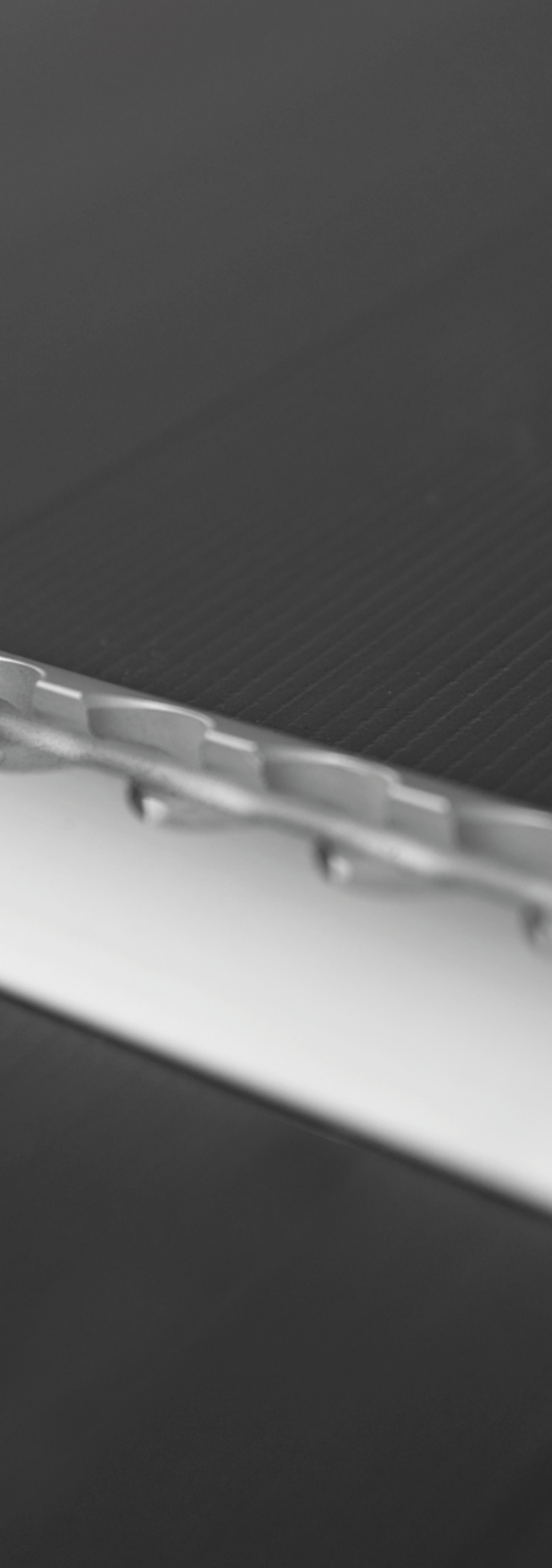
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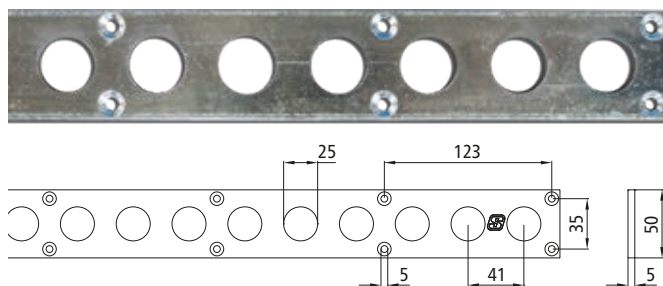
S-Line® Round hole anchor track 3004

Galvanized steel.

For floor mounting. Compatible to combi plugs Ø 19/24 mm.

LC values with end fitting 5008.

	Length [mm]	Mat. thickness [mm]	Weight [kg]	LC [daN] at ↘ 45°	LC [daN] at ↘ 90°	Ø Round hole [mm]
142138851	2990	5.0	4.4	500	500	25



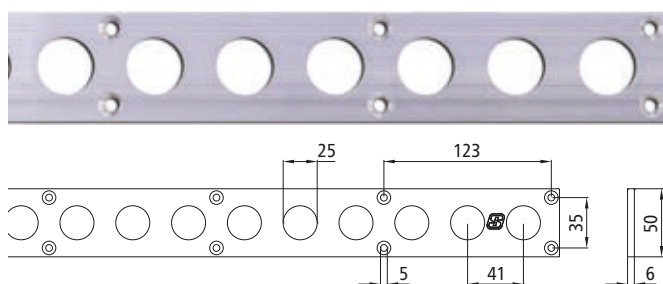
S-Line® Round hole anchor track 3004-AL

Anodised aluminium.

For floor mounting. Compatible with combi plugs Ø 19/24 mm.

LC values with end fitting 5008.

	Length [mm]	Mat. thickness [mm]	Weight [kg]	LC [daN] at ↘ 45°	LC [daN] at ↘ 90°	Ø Round hole [mm]
142138951	2990	6.0	1.6	500	500	25



S-Line® Round hole anchor track 1804

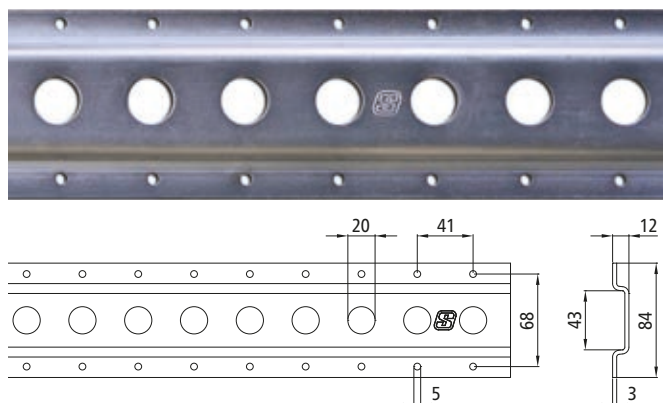
Galvanized steel.

For horizontal and vertical wall and roof mounting.

Compatible with combi plugs Ø 19/24 mm.

LC values with end fitting 5007.

	Length [mm]	Mat. thickness [mm]	Weight [kg]	LC [daN] at ↘ 45°	LC [daN] at ↘ 90°	Ø Round hole [mm]
142138598	3048	3.0	5.9	500	500	20



S-Line® Round hole anchor track 1805

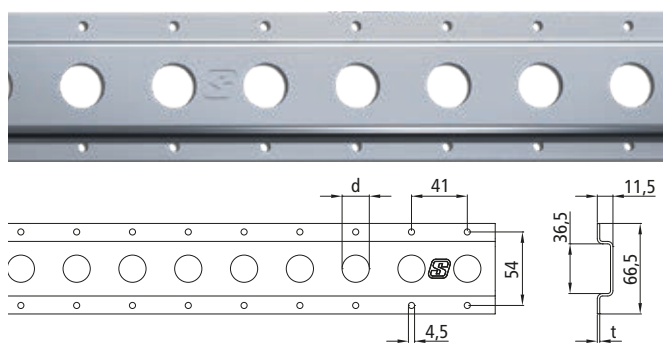
Galvanized steel.

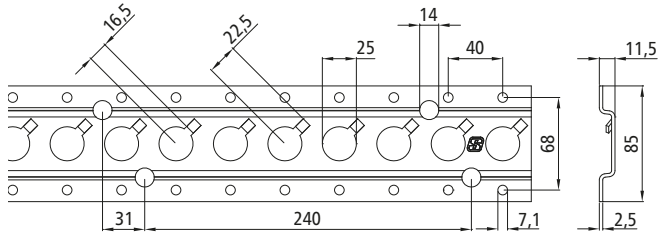
For horizontal and vertical wall, floor and roof mounting.

Compatible with combi plugs Ø 19/24 mm (142138004, 142138002) and with combi plugs Ø 21 mm (142138617).

LC values 142138004 with end fitting 5007, for 142138617/142138002 with end fitting 5008.

	Length [mm]	Mat. thickness t [mm]	Weight [kg]	LC [daN] at ↘ 45°	LC [daN] at ↘ 90°	Ø Round hole d [mm]
142138004	2993	2.0	3.0	500	500	20
142138617	2500	3.0	4.5	500	500	22
142138002	2993	2.0	3.0	500	500	25

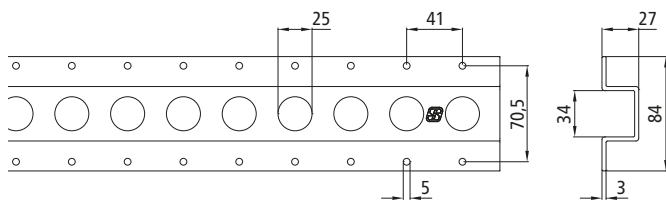




S-Line® Round hole anchor track 1806

Galvanized steel, with anti-twist protection. For horizontal and vertical wall and roof mounting. Compatible with combi plugs \varnothing 19/24 mm and garment rails. LC values with end fitting 5008.

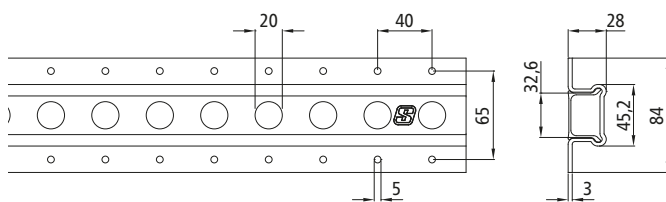
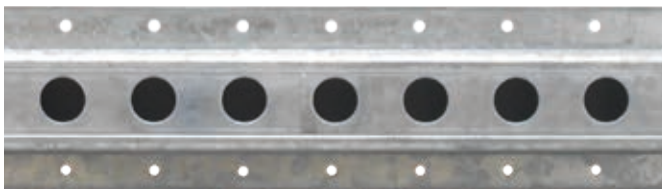
	Length [mm]	Mat. thickness [mm]	Weight [kg]	LC [daN] at \rightarrow 45°	LC [daN] at \rightarrow 90°	\varnothing Round hole [mm]
142138005	3000	2.5	4.9	500	500	25



S-Line® Round hole anchor track 3011

Galvanized steel. For floor and roof mounting. Compatible with combi plugs \varnothing 19/24 mm. LC values with end fitting 5008.

	Length [mm]	Mat. thickness [mm]	Weight [kg]	LC [daN] at \rightarrow 45°	LC [daN] at \rightarrow 90°	\varnothing Round hole [mm]
142138028	2993	3.0	7.7	500	500	25



S-Line® Round hole anchor track 3010-GS

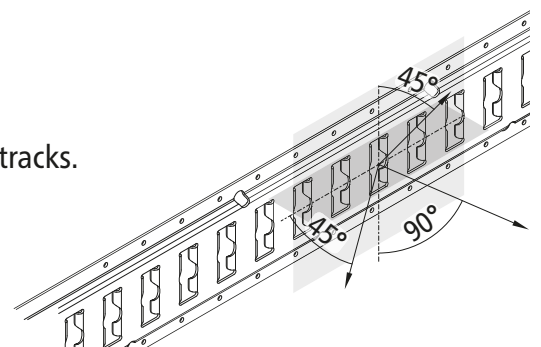
Galvanized steel, with plastic insert. For floor mounting. Compatible with combi plugs \varnothing 19/24 mm and beverage shoring beams. LC values with end fitting 5008.

	Length [mm]	Mat. thickness [mm]	Weight [kg]	LC [daN] at \rightarrow 45°	LC [daN] at \rightarrow 90°	\varnothing Round hole [mm]
142138611	7770	3.0	23.3	500	500	20

WHAT CAN ANCHOR TRACKS ACTUALLY BEAR?

We can state the BLC values for the majority of the S-Line® anchor tracks.

The values for the angles of 45° and 90° are specified, measured from the main axis of the track. The values are to be found in the respective product description.

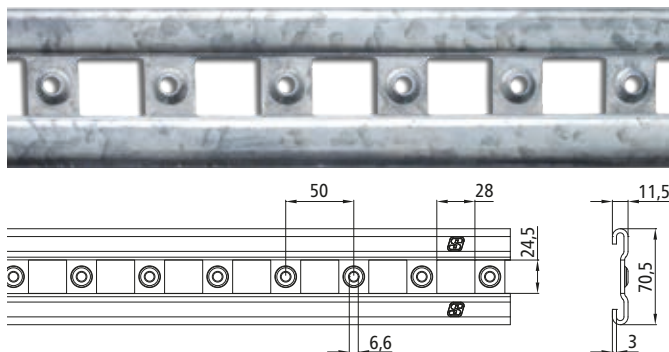


S-Line® Guide track 3010-GS

Galvanized steel.

For roof mounting. Compatible with beverage shoring beam steel slider.

	Length [mm]	Mat. thickness [mm]	Weight [kg]	LC [daN] at 45°	LC [daN] at 90°	Ø Round hole [mm]
142138610	7480	3.0	14.5	--	--	6.6

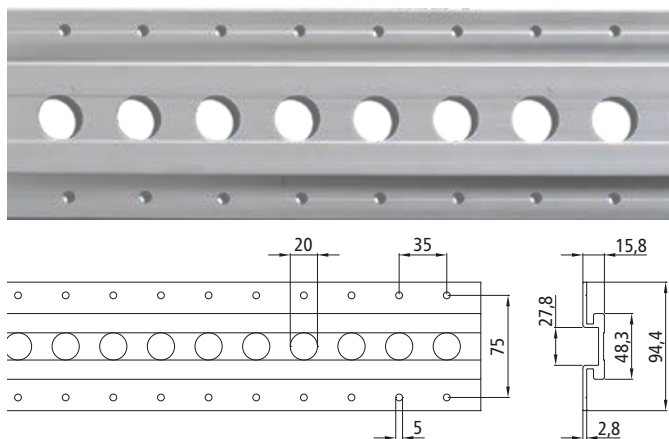


S-Line® Guide track 5000-AL

Anodised aluminium.

For horizontal wall mounting. Compatible with combi plugs Ø 19/24 mm. In combination with clamping slider for securing roll containers or similar. LC values with end fitting 5007.

	Length [mm]	Mat. thickness [mm]	Weight [kg]	LC [daN] at 45°	LC [daN] at 90°	Ø Round hole [mm]
142138720	6000	2.8	7.1	500	500	20

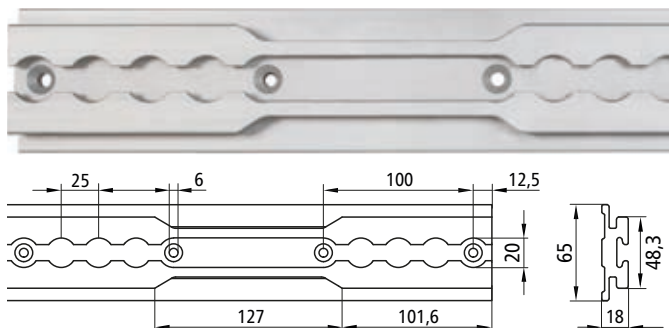


S-Line® Guide track 5001-AL

Anodised aluminium, with Airline channel, countersunk holes and adhesive channel.

For horizontal wall mounting. Compatible with combi plugs Ø 19/24 mm and all Airline fittings. In combination with clamping slider for securing roll containers or similar. LC values with end fitting 571.

	Length [mm]	Mat. thickness [mm]	Weight [kg]	LC [daN] at 45°	LC [daN] at 90°	Ø Round hole [mm]
142138863	6000	5.0	11.13	1000	1500	20

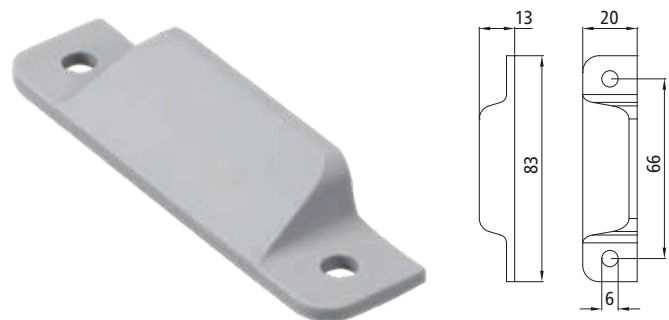


End cap for anchor tracks

Grey plastic, weight 0.05 kg.

For round hole anchor tracks type 1804, 1805 and 1806.

122138006





45 mm clamping range



S-Line® Roll container securing I

Steel, blocking force 800 kg, suitable for clamping ranges 25 mm, 35 mm and 45 mm.

Compatible to guide track 5000-AL (142138720).

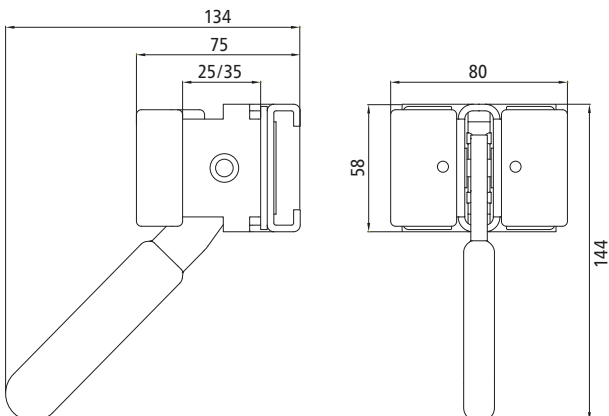
142138789



35 mm clamping range



25 mm clamping range





S-Line® Roll container securing II

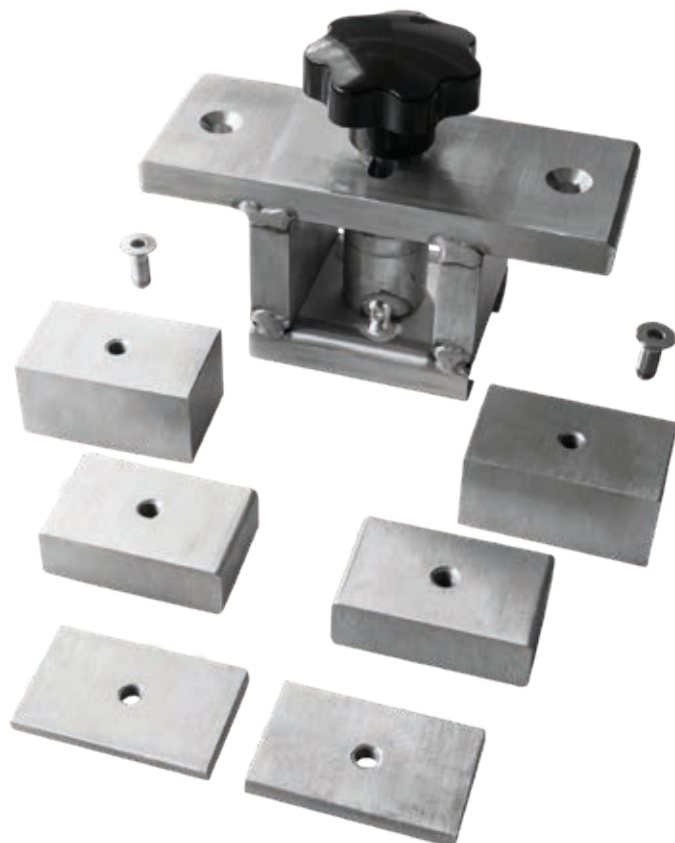
Aluminium, blocking force 1000 kg, suitable for clamping ranges 25 mm, 35 mm, 45 mm und 50 mm. Compatible with guide track 5000-AL (142138720) and 5001-AL (142138863). Suitable for refrigerated trailers.

142138880

Accessories for 25 mm clamping range

Accessories for 35 mm clamping range

Accessories for 45 mm clamping range



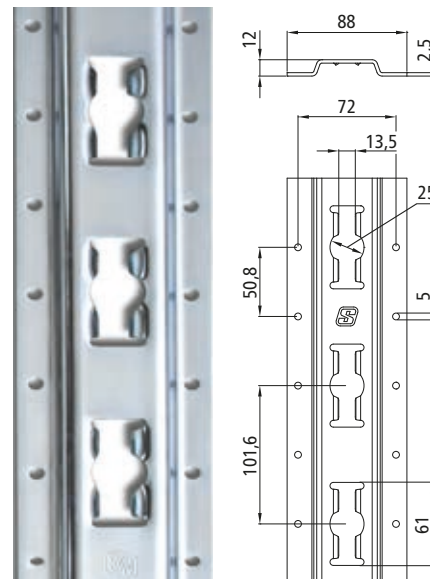
S-Line® Combi anchor track 2010

Galvanized steel.

For vertical wall mounting. Compatible with combi plugs Ø 19/24 mm and all established combi anchor track end fittings.

LC values with end fitting 585.

	Length [mm]	Mat. thickness [mm]	Weight [kg]	LC [daN] at ↘ 45°	LC [daN] at ↘ 90°
142138008	3048	2.5	5.0	1000	1000



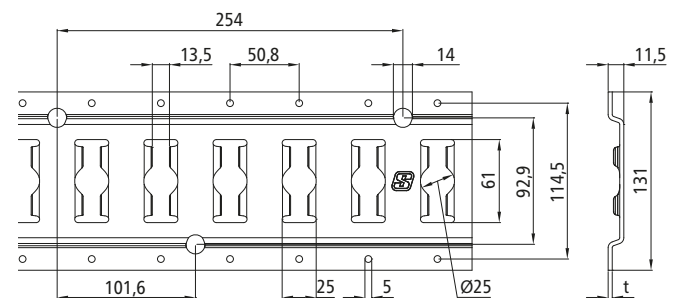
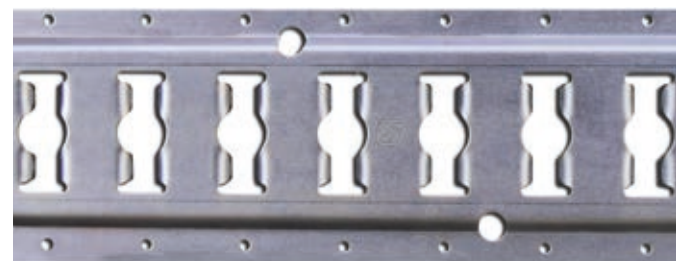
S-Line® Combi anchor track 3009

Galvanized steel/hot dip galvanized steel/pre-galvanized steel.

For horizontal wall mounting. Compatible with combi plugs Ø 19/24 mm and all established combi anchor track end fittings.

LC values with end fitting 585.

	Length [mm]	Mat. thickness [mm]	Weight [kg]	LC [daN] at ↘ 45°	LC [daN] at ↘ 90°	Material
142138016	3048	2.5	7.0	1000	1000	g
142138015	3048	3.0	8.4	1200	1200	g
142138017	3048	2.5	7.2	1000	1000	hdg
142138289	6096	2.5	13.9	1000	1000	pg



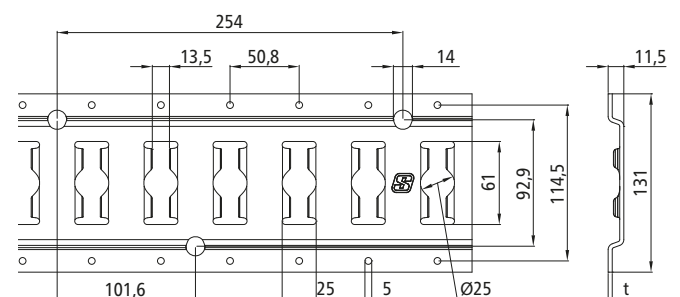
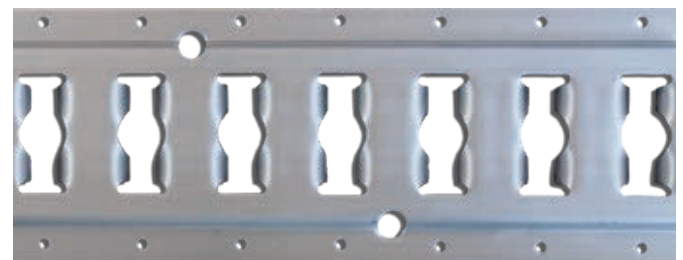
S-Line® Combi anchor track 3009-AL

Anodised aluminium.

For horizontal wall mounting. Compatible with combi plugs Ø 19/24 mm and all established combi anchor track end fittings.

LC values with end fitting 585.

	Length [mm]	Mat. thickness [mm]	Weight [kg]	LC [daN] at ↘ 45°	LC [daN] at ↘ 90°
142138019	3048	3.0	2.9	500	500

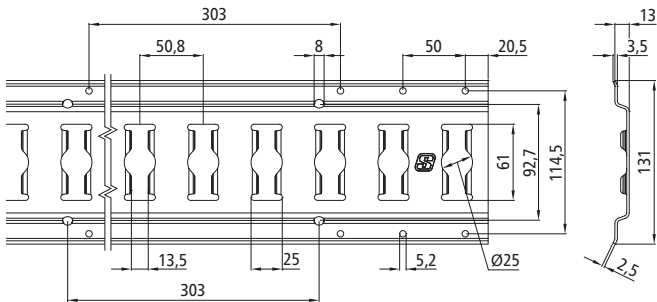




S-Line® Combi anchor track 3009-VK

Pre-galvanized steel, with adhesive bonding flange.
For horizontal wall mounting. Compatible with combi plugs \varnothing 19/24 mm and all established combi anchor track end fittings.
LC values with end fitting 585.

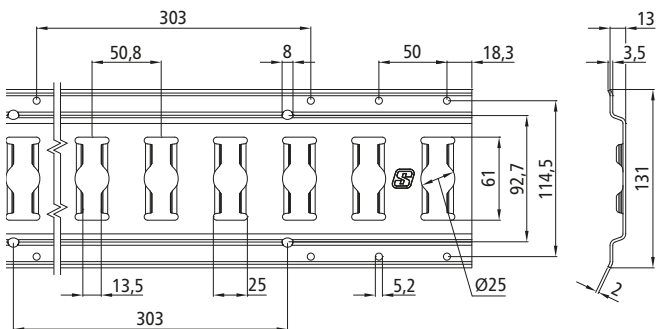
	Length [mm]	Mat. thickness [mm]	Weight [kg]	LC [daN] at \angle 45°	LC [daN] at \angle 90°
142138754	6000	2.5	13.8	1000	1000



S-Line® Combi anchor track 3009-VK

Polished stainless steel, with adhesive bonding flange.
For horizontal wall mounting. Compatible with combi plugs \varnothing 19/24 mm and all established combi anchor track end fittings.
LC values with end fitting 585.

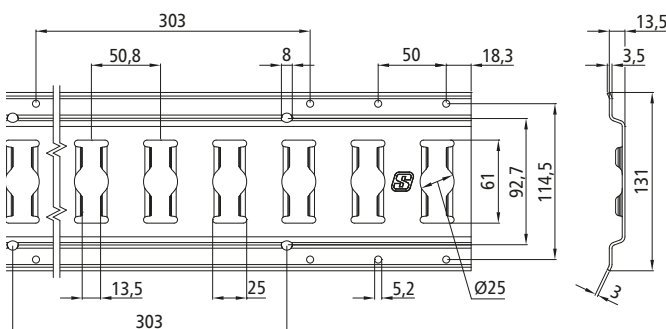
	Length [mm]	Mat. thickness [mm]	Weight [kg]	LC [daN] at \angle 45°	LC [daN] at \angle 90°
142138612	5994	2.0	11.0	800	800



S-Line® Combi anchor track 3009-VK

Aluminium, with adhesive bonding flange.
For horizontal wall mounting. Compatible with combi plugs \varnothing 19/24 mm and all established combi anchor track end fittings.
LC values with end fitting 585.

	Length [mm]	Mat. thickness [mm]	Weight [kg]	LC [daN] at \angle 45°	LC [daN] at \angle 90°
142138841	6096	3.0	5.7	500	500



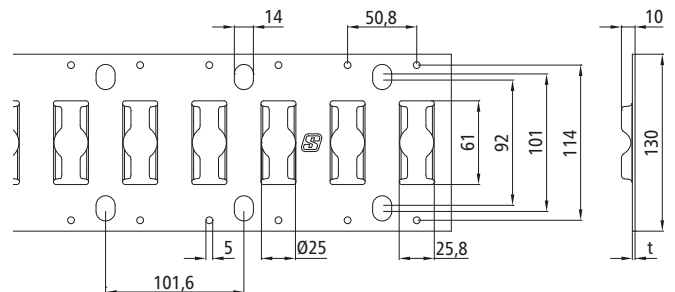
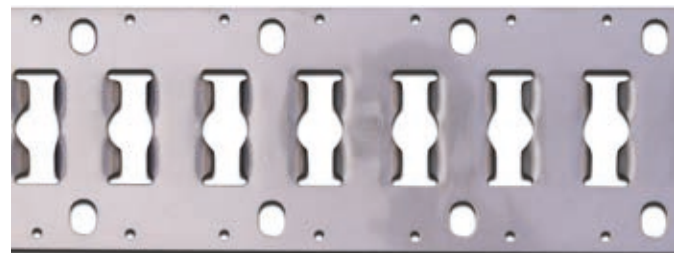
For adhesive fixing of all combi anchor tracks 3009-VK we recommend, for example, Körapop 235. You will find this and other chemical articles in our bodywork catalogue section or our webshop www.fahrzeugbau-shop.de in the section "Superstructure and kits".

S-Line® Flat combi anchor track 3009-FL

Stainless steel/Galvanized steel.

For horizontal wall mounting. Compatible with combi plugs \varnothing 19/24 mm and all established combi anchor track end fittings. LC values with end fitting 585.

	Length [mm]	Mat. thickness [mm]	Weight [kg]	LC [daN] at \rightarrow 45°	LC [daN] at \rightarrow 90°	Material
142138701	3048	2.0	4.6	800	800	st
142138852	3048	2.5	5.1	1000	1000	g

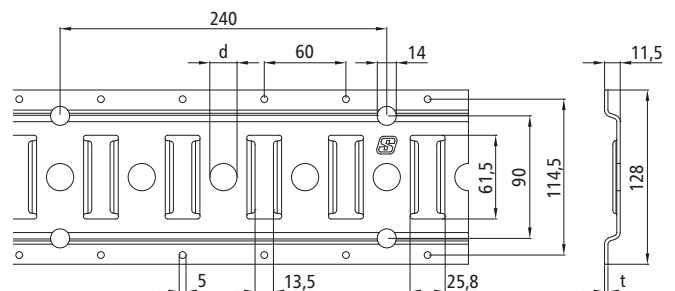


S-Line® Slot-hole anchor track 3008

Galvanized steel.

For horizontal wall mounting. Compatible with combi plugs \varnothing 19/24 mm and all established combi anchor track end fittings. LC values with with fitting 585.

	Length [mm]	Mat. thickness [mm]	Weight [kg]	LC [daN] at \rightarrow 45°	LC [daN] at \rightarrow 90°	\varnothing Round hole d [mm]
142138021	3000	2.5	6.7	1000	1000	20
142138023	3000	3.0	8.2	1200	1200	25

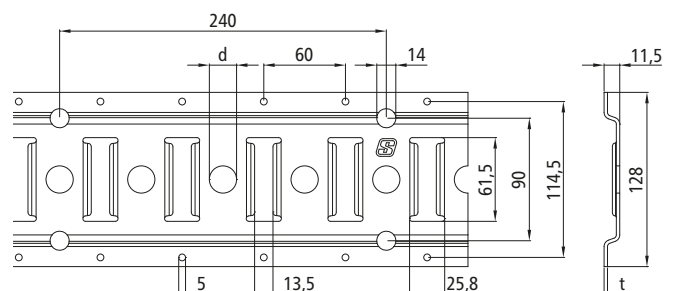


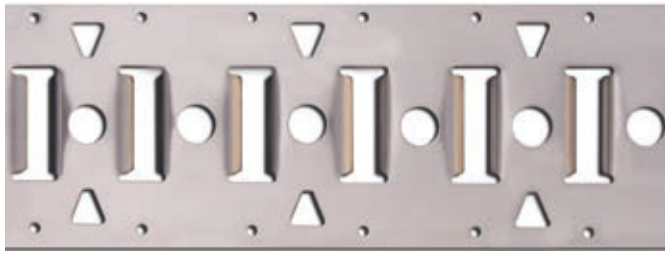
S-Line® Slot-hole anchor track 3008-AL

Anodized aluminium.

For horizontal wall mounting. Compatible with combi plugs \varnothing 19/24 mm and all established combi anchor track end fittings. LC values with end fitting 585.

	Length [mm]	Mat. thickness [mm]	Weight [kg]	LC [daN] at \rightarrow 45°	LC [daN] at \rightarrow 90°	\varnothing Round hole d [mm]
142138826	3048	3.0	2.8	500	500	20



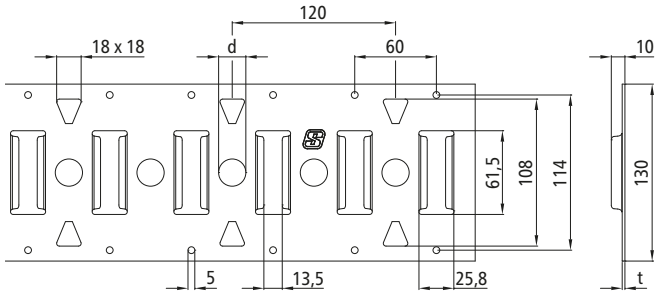


S-Line® Flat slot-hole anchor track 3008-FL

Stainless steel.

For horizontal wall mounting. Compatible with combi plugs \varnothing 19/24 mm and all established combi anchor track end fittings. LC values with end fitting 585.

	Length [mm]	Mat. thickness [mm]	Weight [kg]	LC [daN] at \angle 45°	LC [daN] at \angle 90°	\varnothing Round hole d [mm]
142138700	3000	2.0	4.9	800	800	20

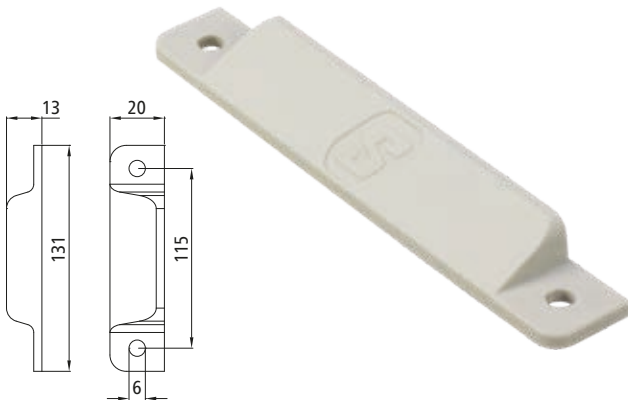


S-Line® End cap for anchor tracks

Plastic, weight 0.09 kg.

For all surface mounted anchor tracks type 3009 and 3008.

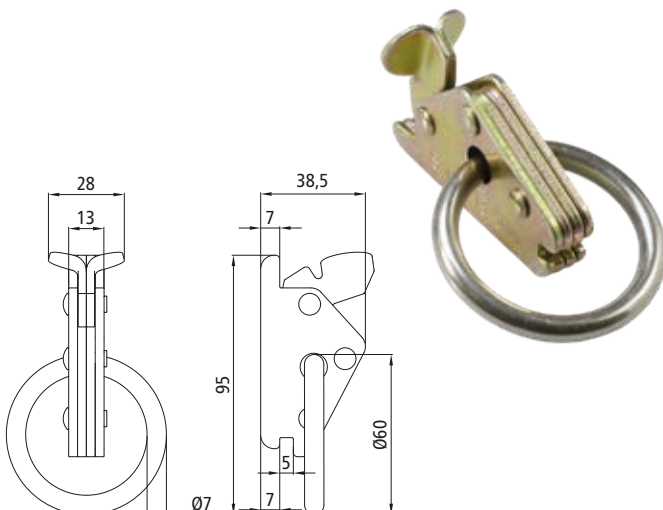
142138018



S-Line® End fitting 585 for combi anchor tracks

Steel, inner ring- \varnothing 60 mm, breaking load 2700 daN, weight 0.22 kg.

142138585

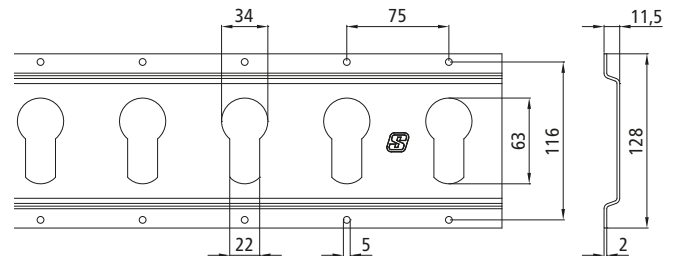


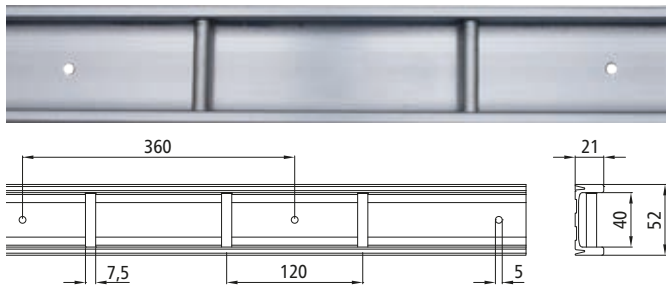
S-Line® Keyhole anchor track 1803-H

Galvanized steel.

For horizontal wall mounting. Compatible with plugs Ø 33 mm, garment rails with steel end plug and all established combi anchor track end fittings. LC values with end fitting 585.

	Length [mm]	Mat. thickness [mm]	Weight [kg]	LC [daN] at ↘ 45°	LC [daN] at ↘ 90°
142138001	3000	2.0	6.4	800	800

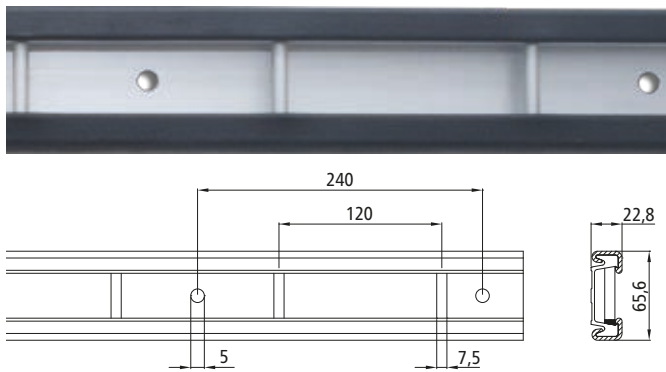




S-Line® Pin anchor tracks 3114-AL

Anodised Aluminium, without rubber coating, with adhesive channel. For horizontal wall mounting. Compatible with combi plugs Ø 19/24 mm with slot 9 mm, all webbing straps up to 35 mm and lashing strap end fitting for pin anchor tracks. LC values with end fitting 2504. Suitable for refrigerated bodies.

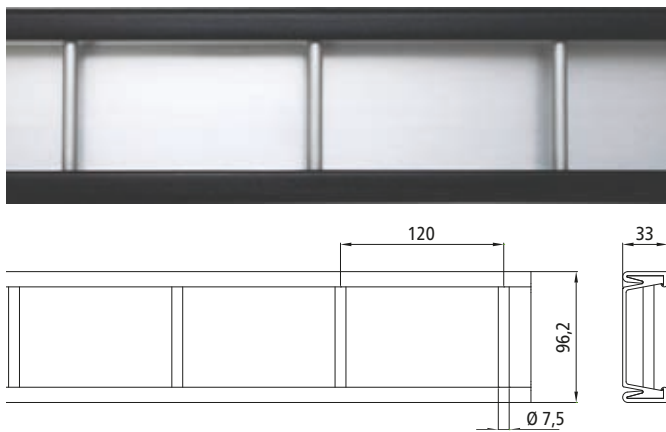
	Length [mm]	Mat. thickness [mm]	Weight [kg]	LC [daN] at $\angle 45^\circ$	LC [daN] at $\angle 90^\circ$
142138755	6000	--	5.3	800	700



S-Line® Pin anchor tracks 3115-AL

Anodised aluminium, with rubber coating and adhesive channel. For horizontal wall mounting. Compatible with combi plugs Ø 19/24 mm with slot 9 mm, all webbing straps up to 35 mm and lashing strap end fitting for pin anchor tracks. LC values with end fitting 2504.

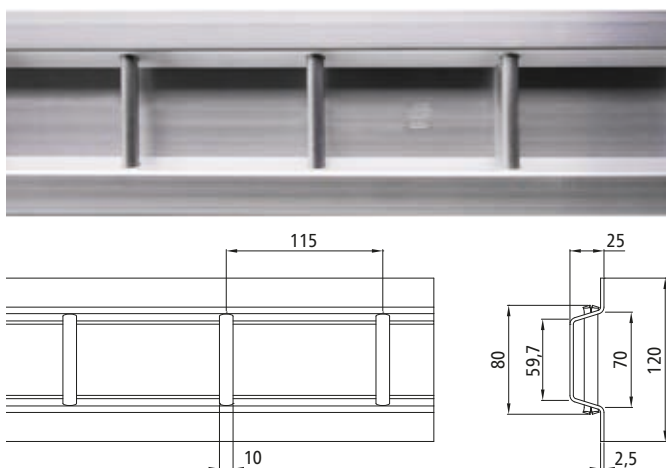
	Length [mm]	Mat. thickness [mm]	Weight [kg]	LC [daN] at $\angle 45^\circ$	LC [daN] at $\angle 90^\circ$
142138254	3000	--	4.3	850	750
142138269	6000	--	8.6	850	750



S-Line® Pin anchor tracks 3117-AL

Anodised aluminium, with rubber coating and adhesive channel. For horizontal wall mounting. Compatible with combi plugs Ø 19/24 mm with slot 9 mm, all webbing straps up to 50 mm and lashing strap end fitting for pin anchor tracks. LC values with end fitting 2504.

	Length [mm]	Mat. thickness [mm]	Weight [kg]	LC [daN] at $\angle 45^\circ$	LC [daN] at $\angle 90^\circ$
142138636	6000	--	8.9	350	350



S-Line® Pin anchor tracks 3116-AL

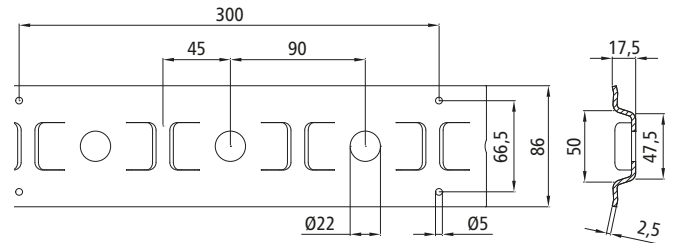
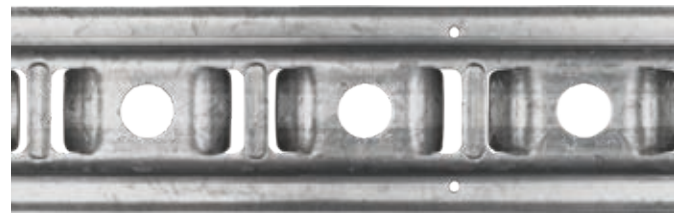
Anodised aluminium. For horizontal wall mounting. Compatible with all strap types up to 50 mm. LC values with polyester webbing 50 mm.

	Length [mm]	Mat. thickness [mm]	Weight [kg]	LC [daN] at $\angle 45^\circ$	LC [daN] at $\angle 90^\circ$
142138743	6400	2.5	7.4	550	550

S-Line® Round hole combi track 3100-VK

Pre-zinc steel, with adhesive edge.
 For horizontal wall mounting. Compatible with combi plugs
 Ø 19/24 mm and all strap types up to 35 mm.
 LC values with polyester webbing 35 mm.

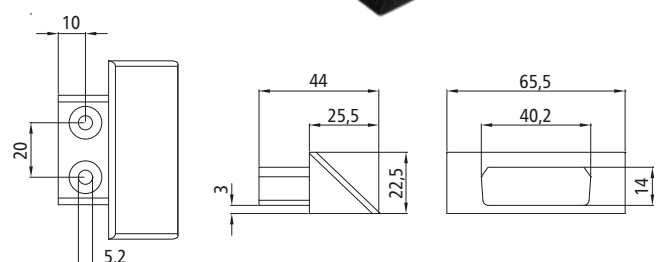
	Length [mm]	Mat. thickness [mm]	Weight [kg]	LC [daN] at $\leq 45^\circ$	LC [daN] at $\leq 90^\circ$	Ø Round hole [mm]
142138835	5920	2.5	7.4	1000	1000	22



S-Line® End cap for pin anchor tracks

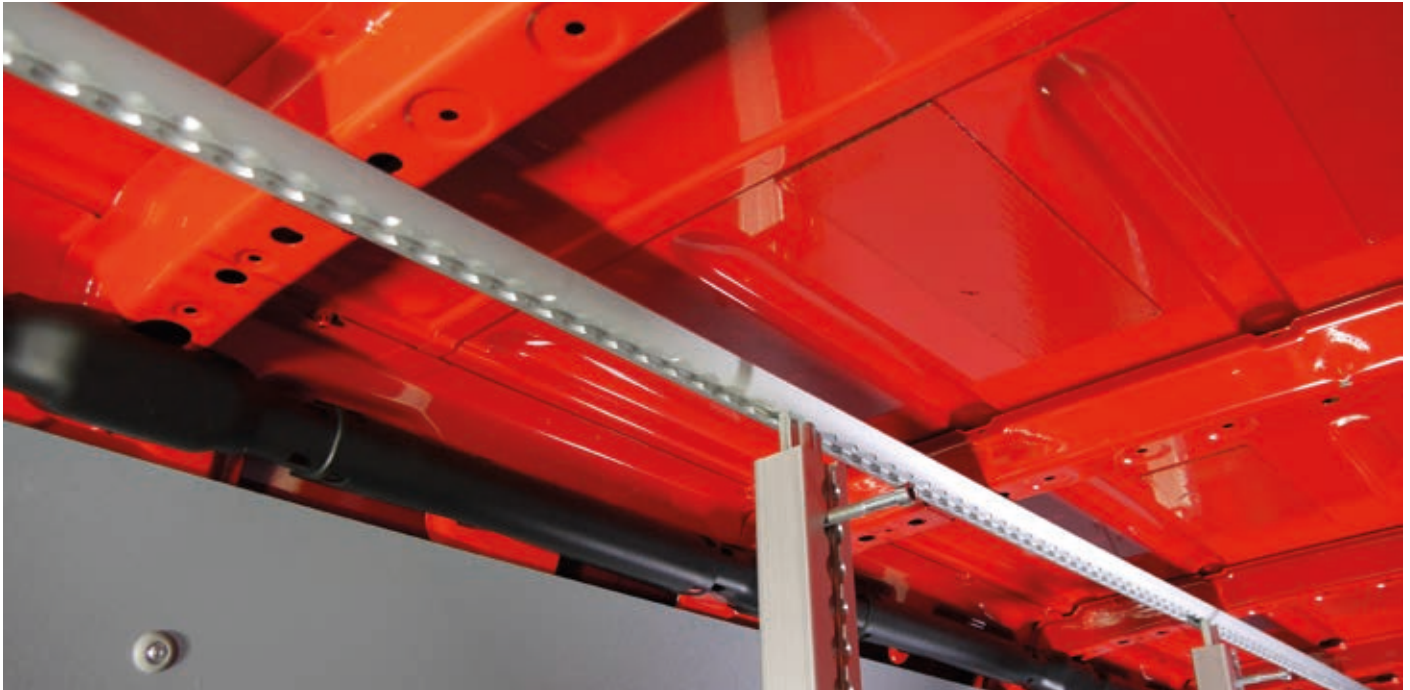
Black plastic, weight 0,013 kg.
 For pin anchor tracks 3115-AL.

142138722



-Line® Airline-System

Easy...quick...flexible



LOAD CAPACITY CONDITIONS FOR AIRLINE TRACKS

S-Line® Airline tracks may be used by the installer in conjunction with the specified **S**-Line® Airline end fittings as lashing point according to ISO 27955 (cars), ISO 27956 (panel van), DIN 75410-1 (flatbed up to 3.5 t) or DIN EN 12640 (flatbed from 3.5 t permissible total mass).

The load values specified in the article descriptions are achieved under the following conditions:

- Sufficient force transmission into the substructure
- Mounting distance 100/101.6 mm or sufficient bonding
- Screw grade 8.8 for specified size

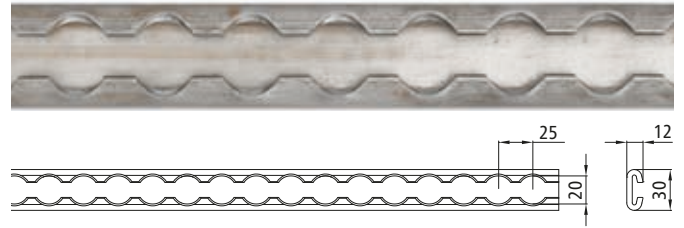


S-Line® Airline anchor track 4000

Steel, self colour.

For floor and roof mounting. Compatible with combi plugs \varnothing 19/24 mm and all Airline end fittings. LC values with end fitting 571.

	Length [mm]	Weight [kg]	LC [daN] at \sphericalangle 45°	LC [daN] at \sphericalangle 90°
142138791	2400	3.0	2500	2500



S-Line® Airline anchor track 4002-AL

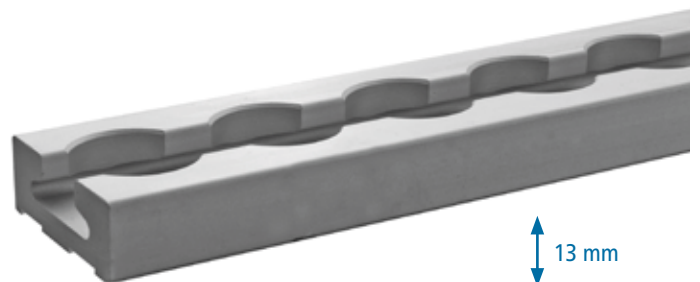
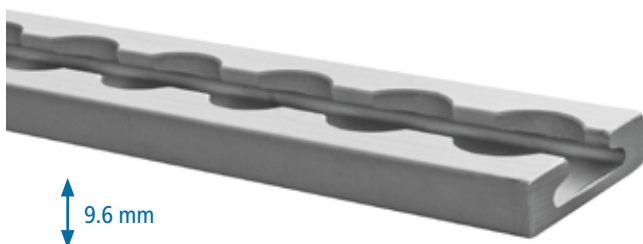
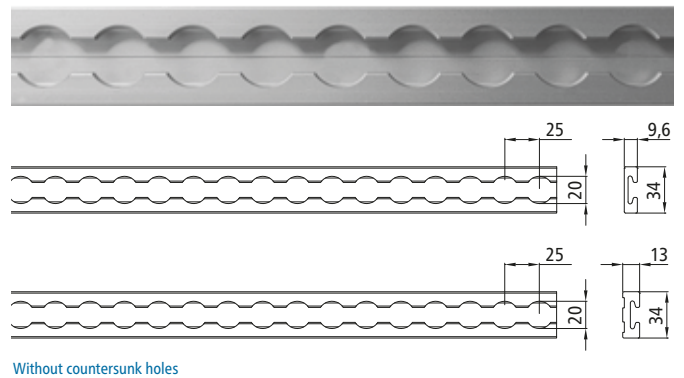
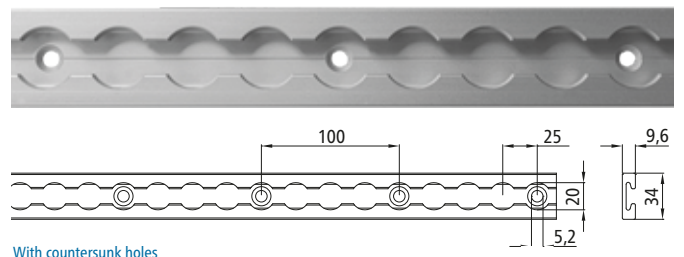
Anodised aluminium.

For horizontal and vertical wall and floor mounting.

With/without countersunk holes M5 for fixing. Compatible with combi plugs \varnothing 19/24 mm, all Airline end fittings and sliding decking beam 142138510. LC values with end fitting 571.

	Length [mm]	Weight [kg]	LC [daN] at \sphericalangle 45°	LC [daN] at \sphericalangle 90°	Dim. h [mm]	Holes
142138589	2000	1.1	1000	1000	9.6	with
142138032	3000	1.6	1000	1000	9.6	with
142138718	6000	3.3	1000	1000	9.6	w/o
142138874*	6000	5.3	1000	1500	13.0	w/o

* with adhesive channels 7 mm



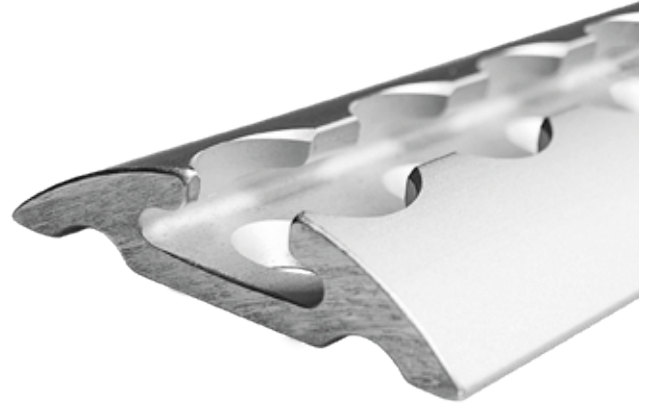
S-Line® Airline anchor track 4001-AL

Anodised aluminium, with adhesive channel.

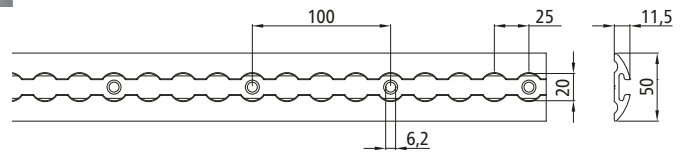
For horizontal and vertical wall and floor mounting.

With/without countersunk holes M6 for fixing. Compatible with combi plugs Ø 19/24 mm, all Airline end fittings and sliding decking beam [142138522](#). LC values with end fitting 571.

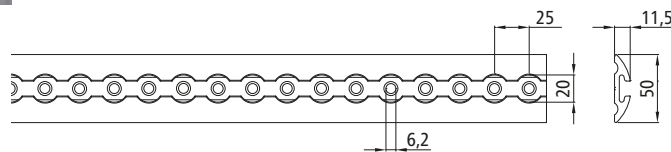
	Length [mm]	Weight [kg]	LC [daN] at $\nabla 45^\circ$	LC [daN] at $\nabla 90^\circ$	Holes	Position
142138590	2000	1.4	1000	1500	with	1
142138031	3000	2.1	1000	1500	with	1
142138953	6000	4.1	1000	1500	with	2
142138719	6000	4.1	1000	1500	w/o	3



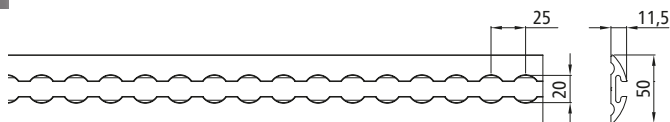
①



②



③

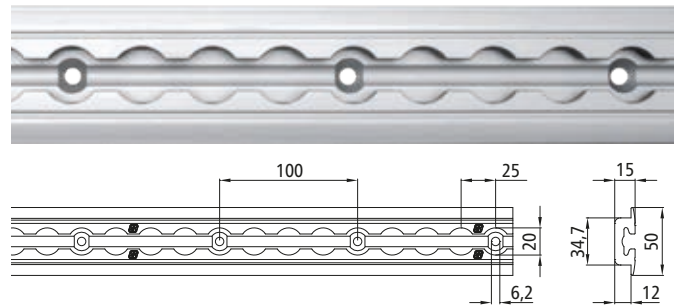
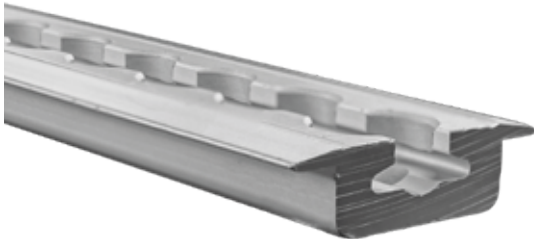


S-Line® Airline anchor track 4004-AL

Anodised aluminium.

For ground mounting. With countersunk M6 holes for fixing. Compatible with combi plugs Ø 19/24 mm and all Airline end fittings. LC values with end fitting 571.

	Length [mm]	Weight [kg]	LC [daN] at ↘ 45°	LC [daN] at ↘ 90°
142138034	3000	2.6	1000	1000

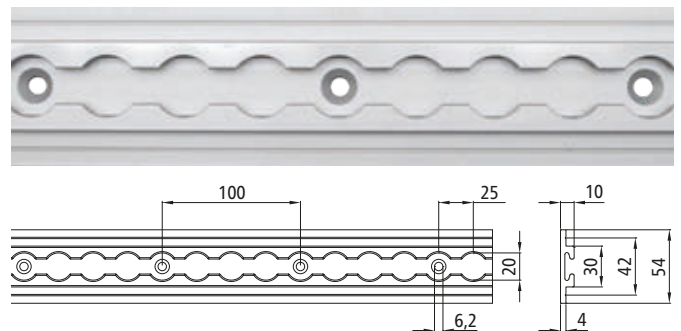
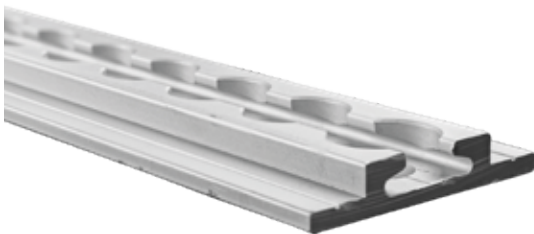


S-Line® Airline anchor track 4008-AL

Anodised aluminium.

For horizontal and vertical wall, ground and roof mounting. With countersunk holes M6 for fixing. Compatible with combi plugs Ø 19/24 mm, all Airline end fittings and sliding decking beam 142138510. LC values with end fitting 571.

	Length [mm]	Weight [kg]	LC [daN] at ↘ 45°	LC [daN] at ↘ 90°
142138712	3000	2.2	1000	1000

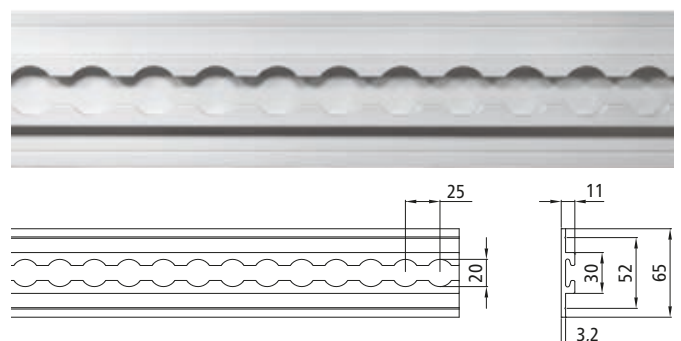
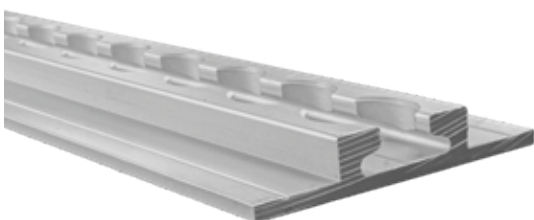


S-Line® Airline anchor track 4009-AL

Anodised aluminium, without countersunk holes.

For horizontal and vertical wall, ground and roof mounting. Compatible with combi plugs Ø 19/24 mm, all Airline end fittings and sliding decking beam 142138510. LC values with end fitting 571.

	Length [mm]	Weight [kg]	LC [daN] at ↘ 45°	LC [daN] at ↘ 90°
142138788	3000	2.7	1000	1000

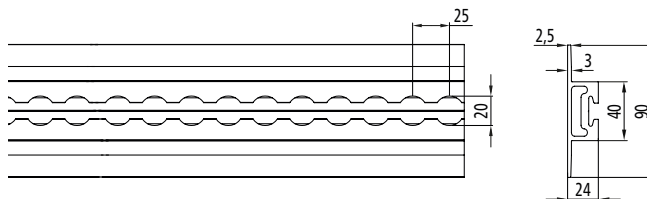
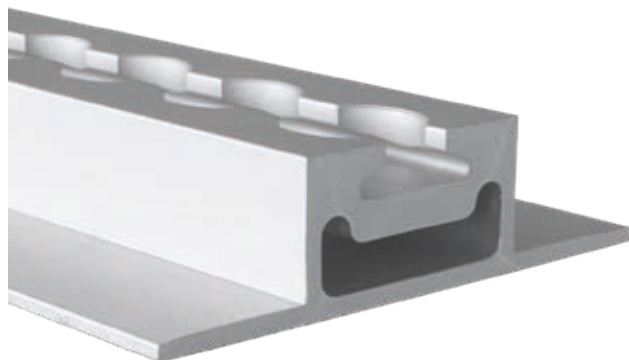


S-Line® Airline anchor track 4010

Anodised aluminium.

For floor mounting. Wings downside. Compatible with all Airline end fittings and combi plugs Ø 19/24 mm. LC values with end fitting 571.

	Length [mm]	Weight [kg]	LC [daN] at ↘ 45°	LC [daN] at ↘ 90°
142139026	3000	5.6	1000	1000
142138898	4170	7.7	1000	1000

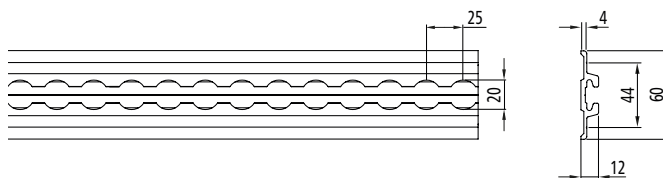
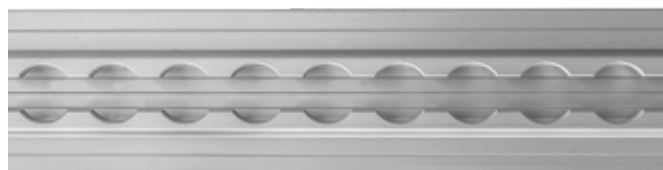


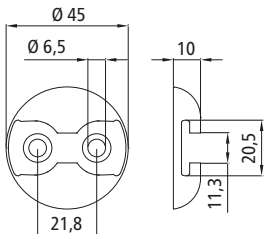
S-Line® Airline anchor track 4009-VK

Anodised aluminium, with adhesive channel.

For horizontal and vertical wall and roof mounting. Wings downside. Compatible with all Airline end fittings, combi plugs Ø 19/24 mm and sliding decking beam 142138510. LC values with end fitting 571.

	Length [mm]	Weight [kg]	LC [daN] at ↘ 45°	LC [daN] at ↘ 90°
142138893	6000	4.2	1000	1000

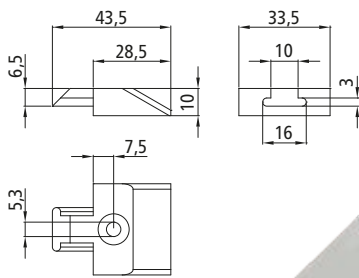




S-Line® Airline lashing point

Aluminium, with 2 countersunk holes M5 for fixing.
Compatible with single Airline fitting 570 and 600.
LC values with end fitting 570.

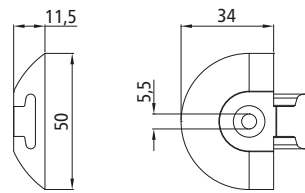
	Length [mm]	Mat. thickness [mm]	Weight [kg]	LC [daN] at α -45°	LC [daN] at α -90°	Ø overall [mm]
142138703	--	--	0.02	500	500	45



S-Line® End cap for Airline anchor tracks

Grey plastic, weight 0.02 kg.
For Airline anchor track 4002-AL.

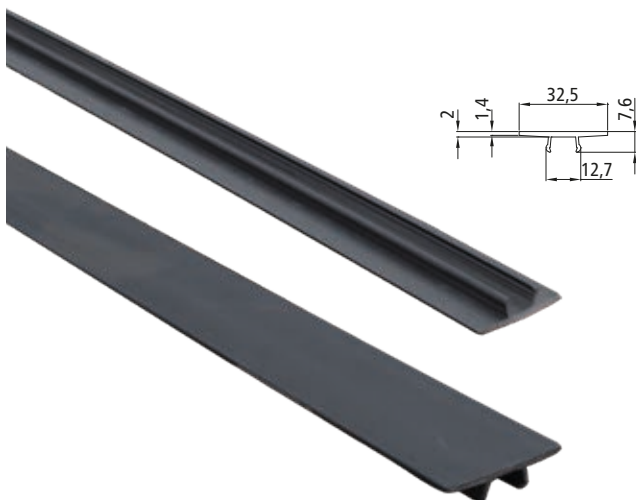
142138721



S-Line® End cap for Airline anchor tracks

Grey plastic, weight 0.02 kg.
For Airline anchor track 4001-AL.

142138599



S-Line® Cover strip for Airline anchor tracks

Black plastic, length 3 m, weight 0.33 kg.

142138750



S-Line® Single Airline fitting 570

Aluminium, inner ring Ø 30 mm, BL 1800 daN, weight 0.05 kg.

142138570



S-Line® Single Airline fitting 600

Plastic, triangle ring 29 mm, BL 1800 daN, weight 0.04 kg.

142138600



S-Line® Double Airline fitting 571

Steel, inner ring Ø 42 mm, BL 2700 daN, weight 0.16 kg.

142138571



S-Line® Wire hook

Steel, black powdered, BL 50 daN. Compatible with Single Airline fitting 600.

142138899



S-Line® Quattro Airline fitting 702

Steel, folding, inner ring Ø 24 x 62 mm, BL 5000 daN, weight 0.397 kg.

142138702



S-Line® Quattro Airline fitting 579

Steel, rigid, inner slot Ø 15 x 57 mm, BL 5000 daN, weight 0.25 kg.

142138579





S-Line® Screw fitting for Airline track

Galvanized steel, with screw M8, washer and self-locking nut, BL 1000 daN.

	Thread length [mm]	Weight [kg]
142138832	20	0.04
142138745	45	0.05
142138875	60	0.06

S-Line® Star grip for screw fitting

Plastic, Ø 40 mm, thread M8 with trough hole. Suitable for screw fittings 142138745, 142138875 or 142138832. Weight 0.017 kg.

142138802



S-Line® Sliding block for Airline tracks

Galvanized steel, 2 bores M8. For attaching various vehicle parts. Without screws. Weight 0.03 kg.

142138849



S-Line® GSP handle

Aluminium, black coated, 118 x 78 mm. Consisting of:

- 1 GSP handle
- 2 Sliding blocks 142138849
- 2 Counter sunk screws M 8 x 16 DIN 7991 8.8 zn

142139011



Table: Lashing strap end fittings compatibility to anchor tracks



























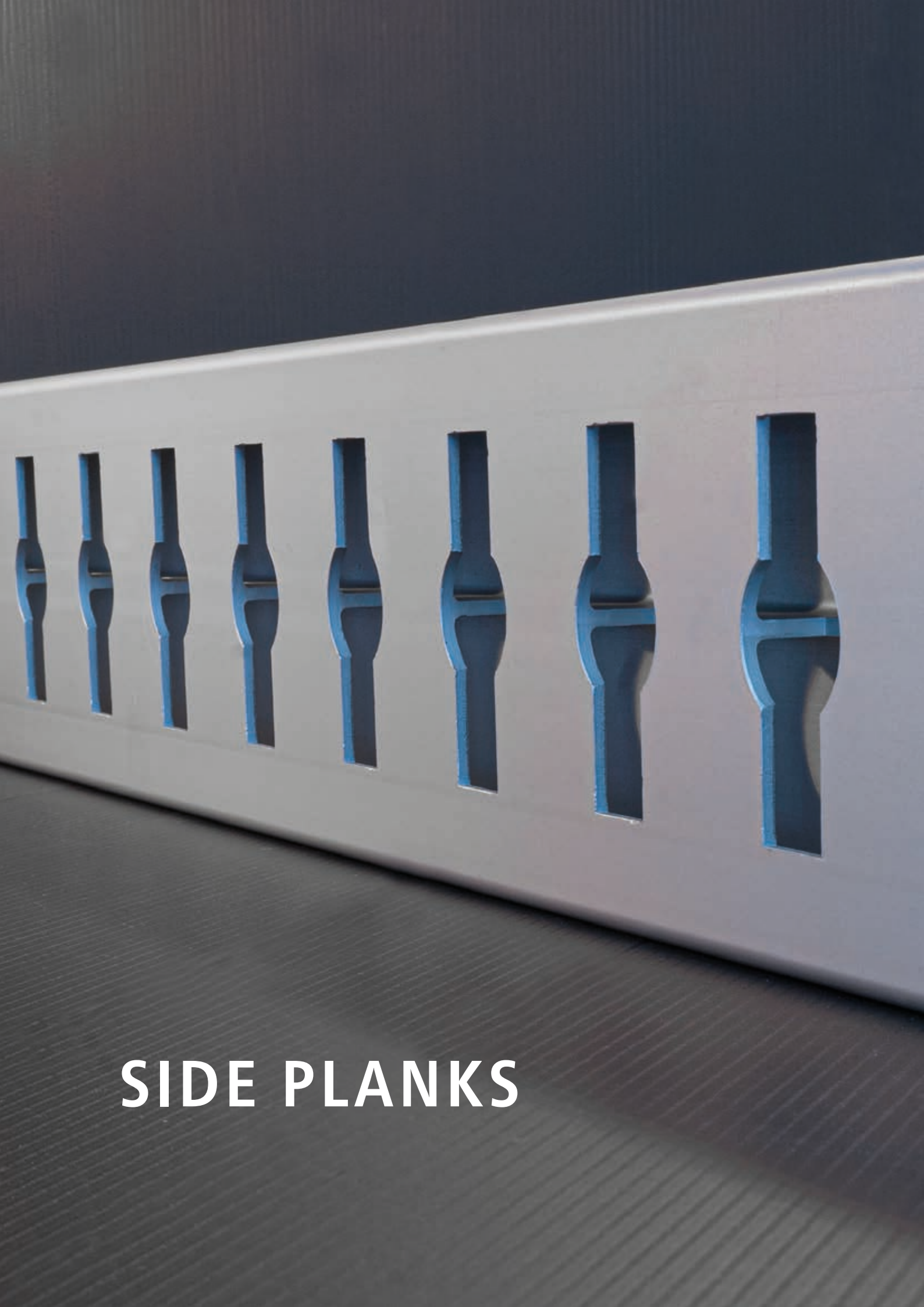
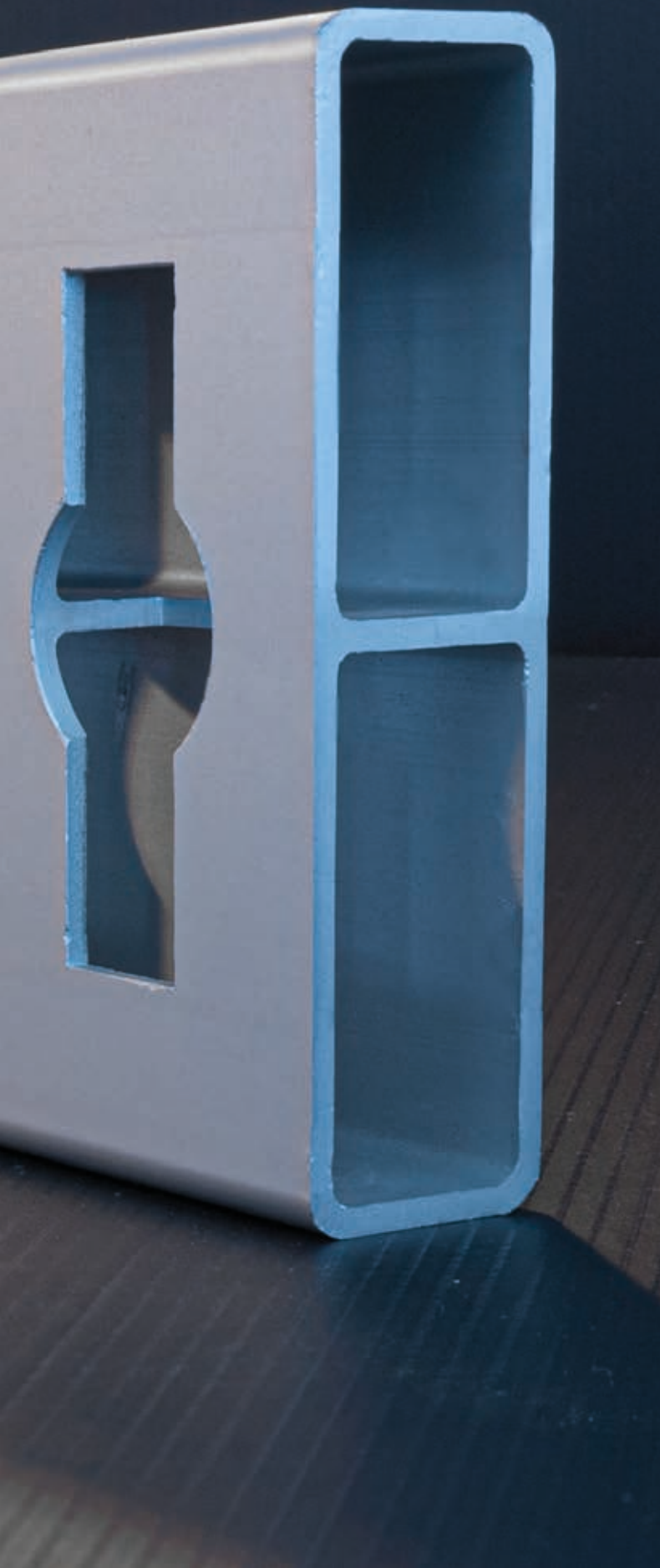
																		
 Airline profile anchor tracks/ Airline lashing point*	142138031	✓	✓	✓	✓	✓	✓	✓	✓	✓								
	142138032	✓	✓	✓	✓	✓	✓	✓	✓	✓								
	142138034	✓	✓	✓	✓	✓	✓	✓	✓	✓								
	142138589	✓	✓	✓	✓	✓	✓	✓	✓	✓								
	142138590	✓	✓	✓	✓	✓	✓	✓	✓	✓								
	142138712	✓	✓	✓	✓	✓	✓	✓	✓	✓								
	142138718	✓	✓	✓	✓	✓	✓	✓	✓	✓								
	142138719	✓	✓	✓	✓	✓	✓	✓	✓	✓								
	142138788	✓	✓	✓	✓	✓	✓	✓	✓	✓								
	142138791	✓	✓	✓	✓	✓	✓	✓	✓	✓								
	142138863	✓	✓	✓	✓	✓	✓	✓	✓	✓								
	142138874	✓	✓	✓	✓	✓	✓	✓	✓	✓								
	142138893	✓	✓	✓	✓	✓	✓	✓	✓	✓								
	142138898	✓	✓	✓	✓	✓	✓	✓	✓	✓								
	142138953	✓	✓	✓	✓	✓	✓	✓	✓	✓								
	142139026	✓	✓	✓	✓	✓	✓	✓	✓	✓								
142138703*	✓	✓	✓	✓	✓													
Slot-hole anchor tracks	142138021											✓	✓					
	142138023											✓	✓					
	142138700											✓	✓					
	142138826											✓	✓					
Combi anchor tracks	142138008											✓	✓					
	142138015											✓	✓					
	142138016											✓	✓					
	142138017											✓	✓					
	142138019											✓	✓					
	142138289											✓	✓					
	142138612											✓	✓					
	142138701											✓	✓					
	142138754											✓	✓					
142138841											✓	✓						
142138852											✓	✓						
Keyhole anchor track	142138001											✓	✓					
Pin anchor tracks	142138254										✓			✓	✓	✓		
	142138269										✓			✓	✓	✓		
	142138636										✓			✓	✓	✓	✓	
	142138743													✓	✓	✓	✓	
	142138755										✓			✓	✓	✓		
	142138835														✓	✓		

Table: LC values (maximum permissible strap force) for the anchor tracks under lashing strap loading

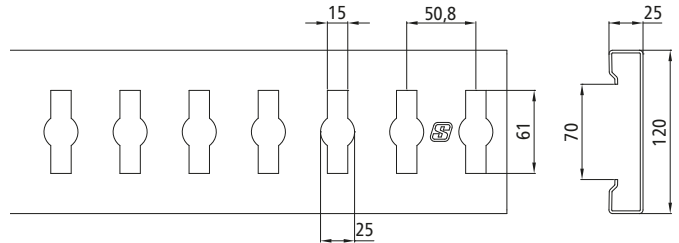
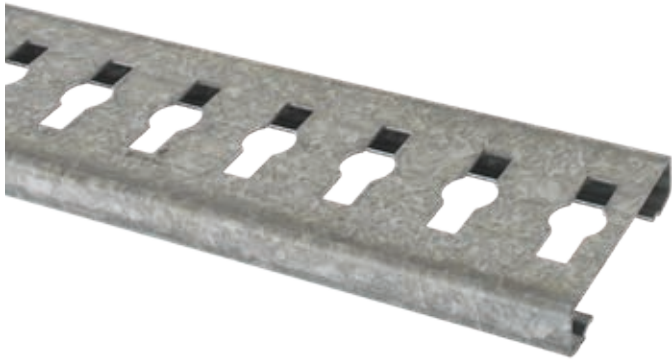
			 Lashing strap with double Airline fitting 570		 Polyester webbing 50 mm/35 mm		 Lashing strap with flat hook 2504 with safety catch		 Lashing strap with combi anchor track end fitting 585	
			LC [daN] at ↘90°	LC [daN] at ↘45°	LC [daN] at ↘90°	LC [daN] at ↘45°	LC [daN] at ↘90°	LC [daN] at ↘45°	LC [daN] at ↘90°	LC [daN] at ↘45°
Airline profile tracks		142138031	1500	1000						
		142138032	1000	1000						
		142138034	1000	1000						
		142138589	1000	1000						
		142138590	1500	1000						
		142138712	1000	1000						
		142138718	1000	1000						
		142138719	1500	1000						
		142138788	1000	1000						
		142138791	2500	2500						
		142138863	1500	1000						
		142138874	1500	1000						
		142138893	1000	1000						
		142138898	1000	1000						
		142138953	1500	1000						
142139026	1000	1000								
Slot-hole anchor tracks		142138021							1000	1000
		142138023							1200	1200
		142138700							800	800
		142138826							500	500
Combi anchor tracks		142138008 *							1000	1000
		142138015							1200	1200
		142138016							1000	1000
		142138017							1000	1000
		142138019							500	500
		142138289							1000	1000
		142138612							800	800
		142138701							800	800
		142138754							1000	1000
		142138841							500	500
142138852							1000	1000		
Keyhole anchor track		142138001							800	800
Pin anchor tracks		142138254					750	850		
		142138269					750	850		
		142138636					350	350		
		142138743			550	550				
		142138755					700	800		
		142138835			1000	1000				



SIDE PLANKS



COMBI ANCHOR SIDE PLANK	32
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SIDE PLANKS	34
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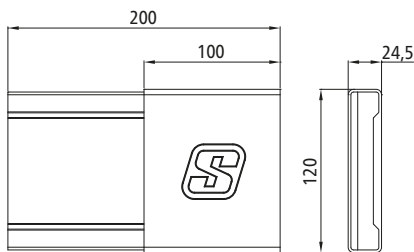


S-Line® Combi anchor side plank 6000

Galvanized steel.

Compatible with combi plugs Ø 19/24 mm and all combi anchor track end fittings. LC values with end fitting 585.

	Length [mm]	Weight [kg]	LC [daN] at ↘45°	LC [daN] at ↘90°
142131851	3500	11.6	1000	1000

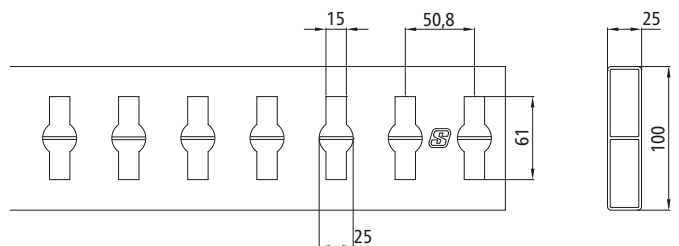
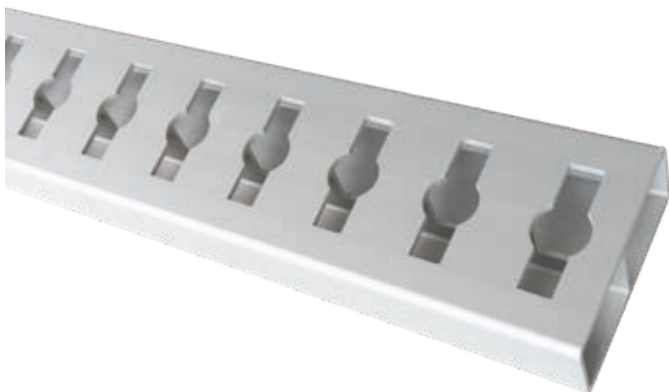


S-Line® End cap for combi anchor side plank 6000

Red plastic, weight 0.52 kg.

End piece to extend the combi anchor side plank 6000 by 100 mm per side.

142138783

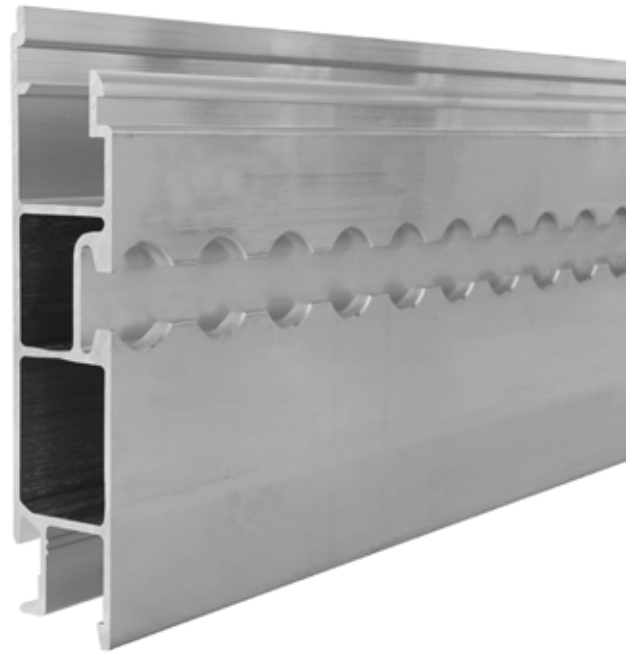
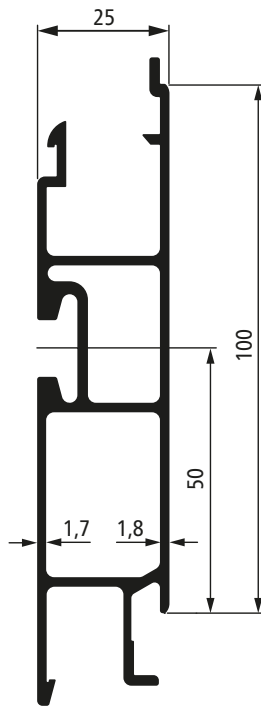


S-Line® Combi anchor side plank 6003

Anodised aluminium.

Compatible with combi plugs Ø 19/24 mm and all combi anchor track end fittings. LC values with end fitting 5001.

	Length [mm]	Weight [kg]	LC [daN] at ↘45°	LC [daN] at ↘90°
142131864	3600	7,2	500	500
142131865	4200	8,4	500	500

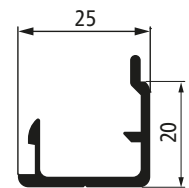
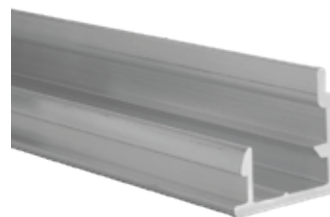
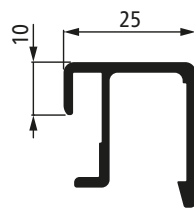


25 mm middle profile

AlMgSi 0,5 F25.

With integrated Airline system.

	Width [mm]	Weight [kg/m]
621317	100	1.77



25 mm upper end piece

AlMgSi 0,5 F25.

Suitable for the 25 mm middle profile **621317**.

	Width [mm]	Weight [kg/m]
621088	8	0.509

25 mm lower end piece

AlMgSi 0,5 F25.

Suitable for the 25 mm middle profile **621317**.

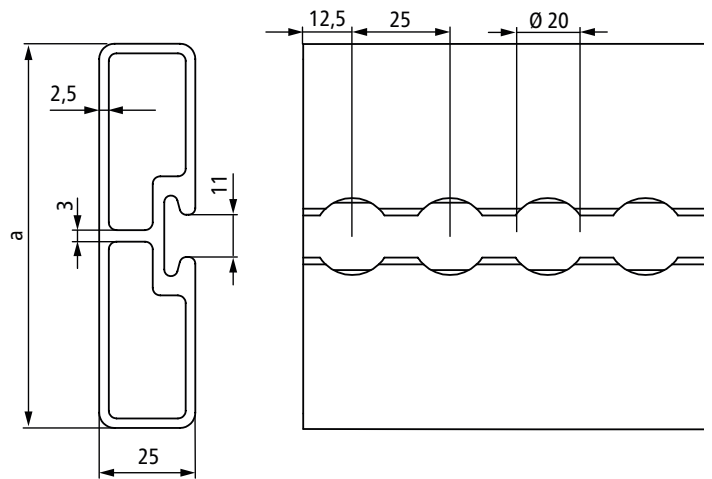
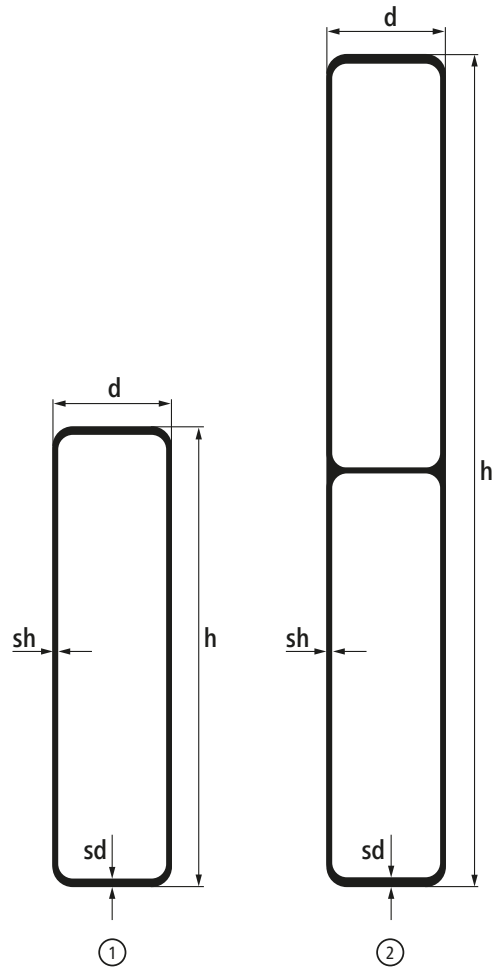
	Width [mm]	Weight [kg/m]
621087	8	0.329



25 mm/30mm side planks

AlMgSi 0,5 F25.

	Width h [mm]	Depth d [mm]	Thicknes sh [mm]	Thickness sd [mm]	Weight [kg/m]	Drawing
621315	100	25	1,5	2,0	0,871	①
621045	100	25	1,8	2,2	1,309	①
622922	200	25	1,8	2,5	2,480	②
611041	100	30	2,5	2,5	1,739	①
611026	120	30	2,0	4,0	1,951	①

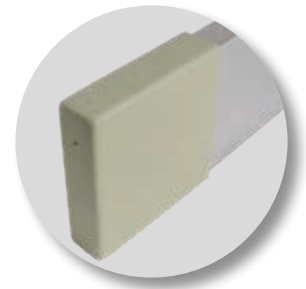
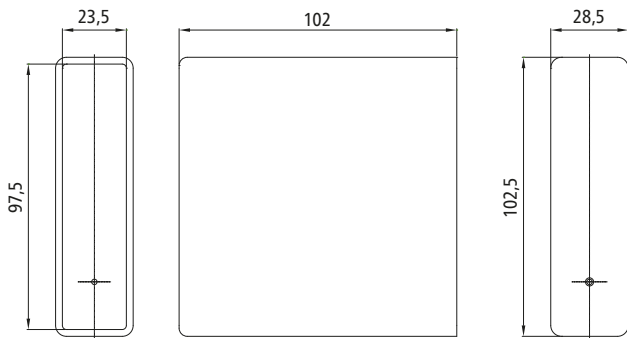


S-Line® Airline side plank 6001/6002

Anodised aluminium.

Use with pillar sockets. Compatible with combi plugs Ø 19/24 mm and all Airline end fittings. LC values with end fitting 571.

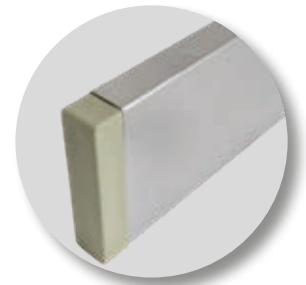
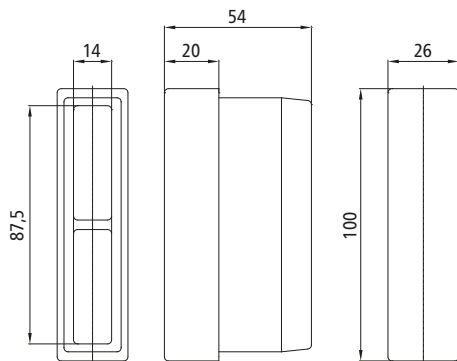
	Model	Length [mm]	Hight (a) [mm]	Weight [kg]	LC [daN] at $\pm 45^\circ$	LC [daN] at $\pm 90^\circ$
142138864	6001	3600	100	7,2	1000	1500
142138865	6002	3600	120	8,2	1000	1500



Plastic end stopper

To plug in, weight 0.05 kg.
Compatible with profiles **621315** and **621045**.

320131382

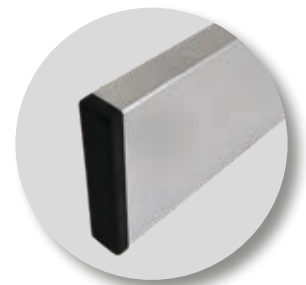
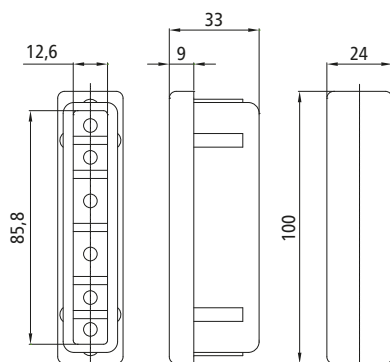


PUR end stopper

To plug in, weight 0.03 kg.
Compatible with profiles **621315** and **621045**.

215131536

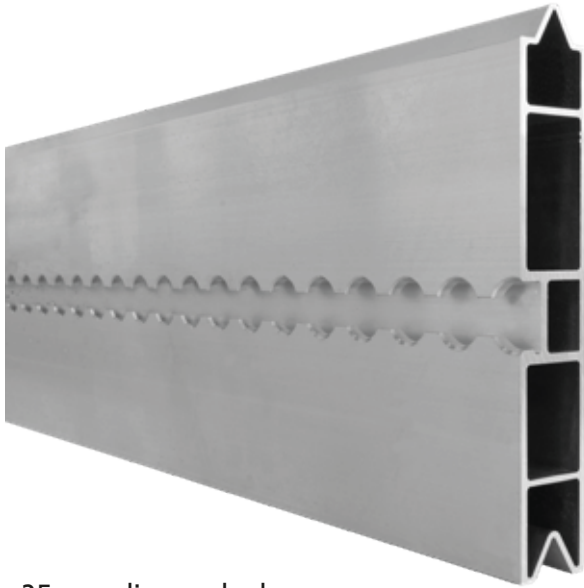
The side plank profiles **621315** and **621045** takes the end stops **215131536** and **320131382** and the pull-on end caps **320131383**.



Plastic end cap

To pull on, weight 0.06 kg.
Compatible with profiles **621315** and **621045**.

320131383



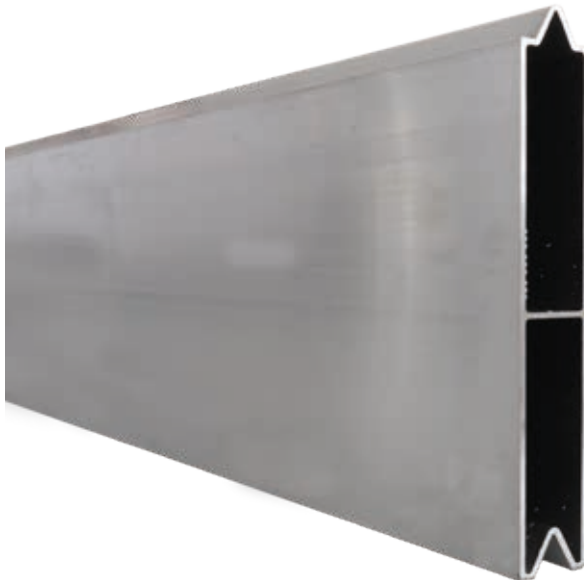
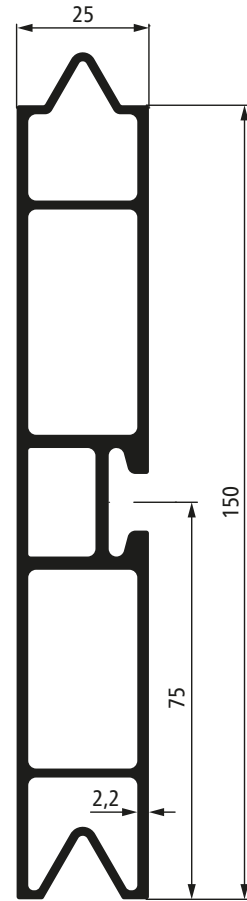
25 mm slip-on planks

AlMgSi 0,7 F27.

Airline system for shoring beams with plugs \varnothing 19 mm or lashing straps with Airline end fitting using in banding securing method.

	Width [mm]	Weight [kg/m]	Description
644009	150	2.400	with Airline system

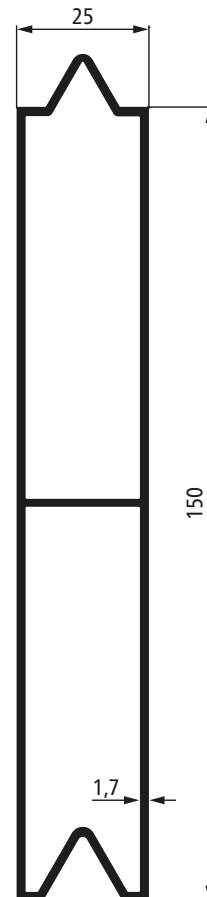
On request with channel without airline system.

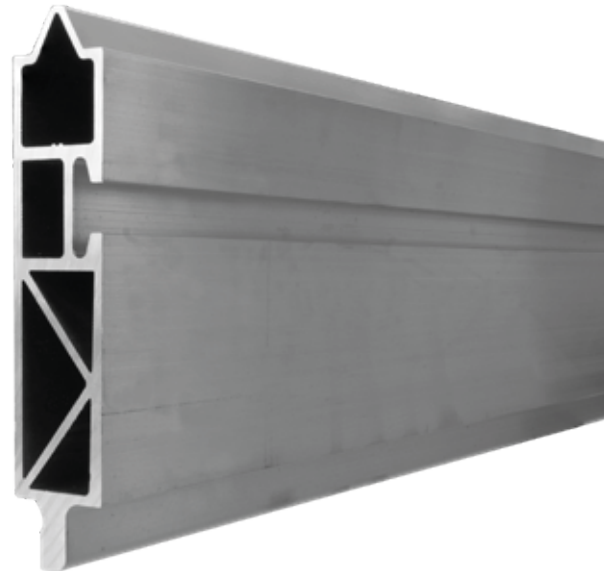
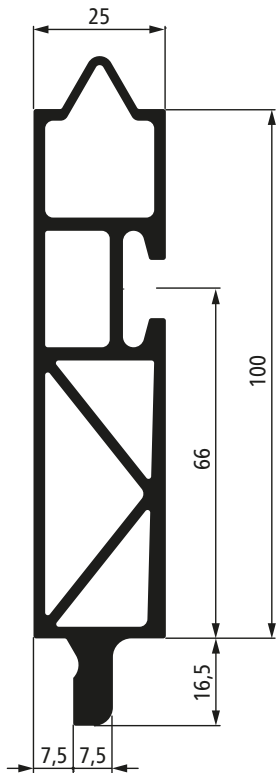


25 mm slip-on planks

AlMgSi 0,5 F25.

	Width [mm]	Weight [kg/m]
621223	150	1.889





25 mm pallet stop rail

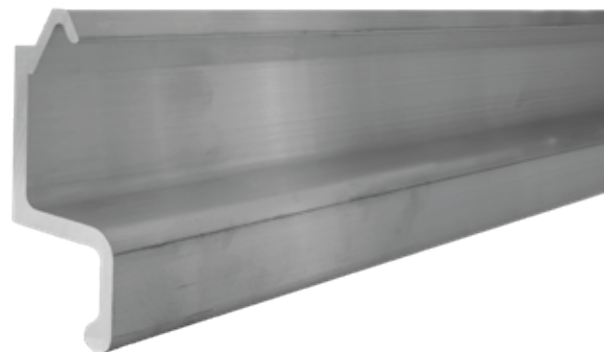
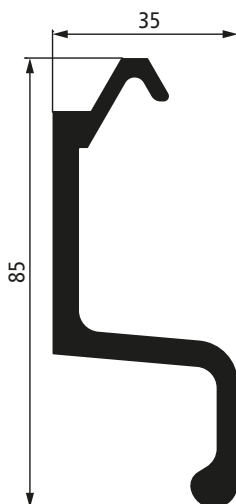
AlMgSi 0,7 F27.

Airline system for shoring beams with plugs \varnothing 19 mm or lashing straps with Airline end fitting in banding securing method.

	Weight [kg/m]	Description
644010	2.734	without Airline system
644011	2.640	with Airline system

The pallet stop rails 644010/644011 in conjunction with the combi ram guard 644001 are the only stop rails on the market recognised as a load securing which can be fitted without tools.

Certified in accordance with DIN EN 12195 and DIN EN 12642 Code XL.

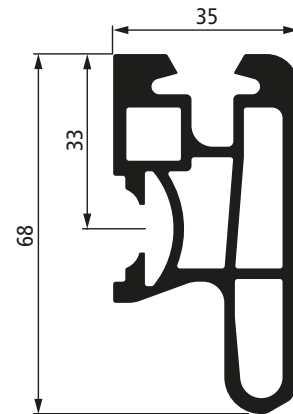


Combi ram guard

AlMgSi 0,5 F25.

With nose for slip-on planks 621282 und 621223, weight 1,7 kg/m.

644003



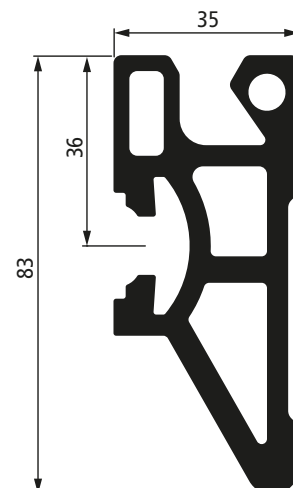
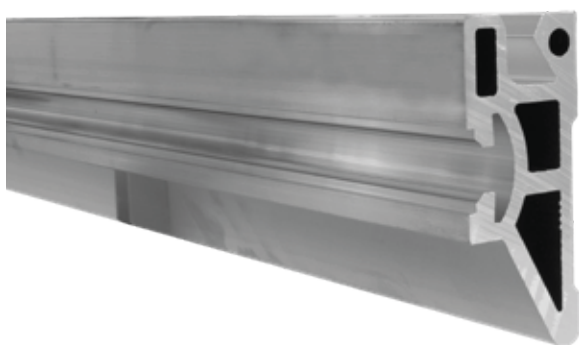
Combi ram guard

AlMgSi 0,5 F25.

Suitable for virtually all body types:

- For bodies with side boards where the side board hinge radius is at least 38 mm.
- For bodies with floor side planks/V- planks/pallet stop rail.
- The combi ram guard with Airline system **644007** can accept lashing straps/load securing components with Airline end fittings 570, 571 and 579.

	Weight [kg/m]	Description
644006	2.458	without Airline system
644007	2.156	with Airline system







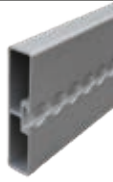
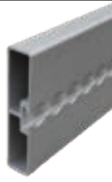







Combi ram guard

AlMgSi 0,5 F25.

With cavity for carriage bolts M 10, to DIN 603 and groove for slip-on planks **621282** and **621223**, pallet stop rails **644010/644011** or CS centre pillars for combi ram guards.

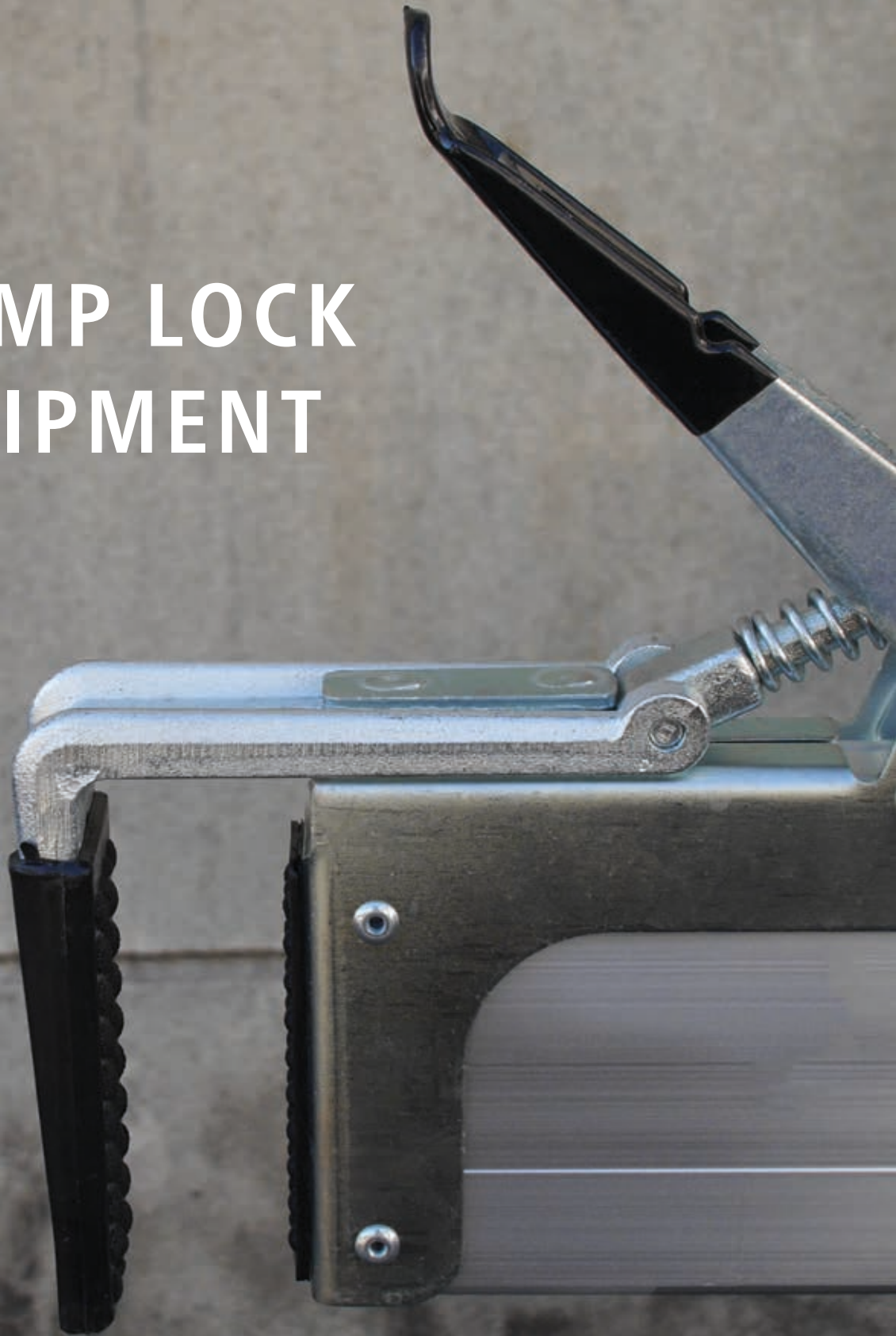
644011

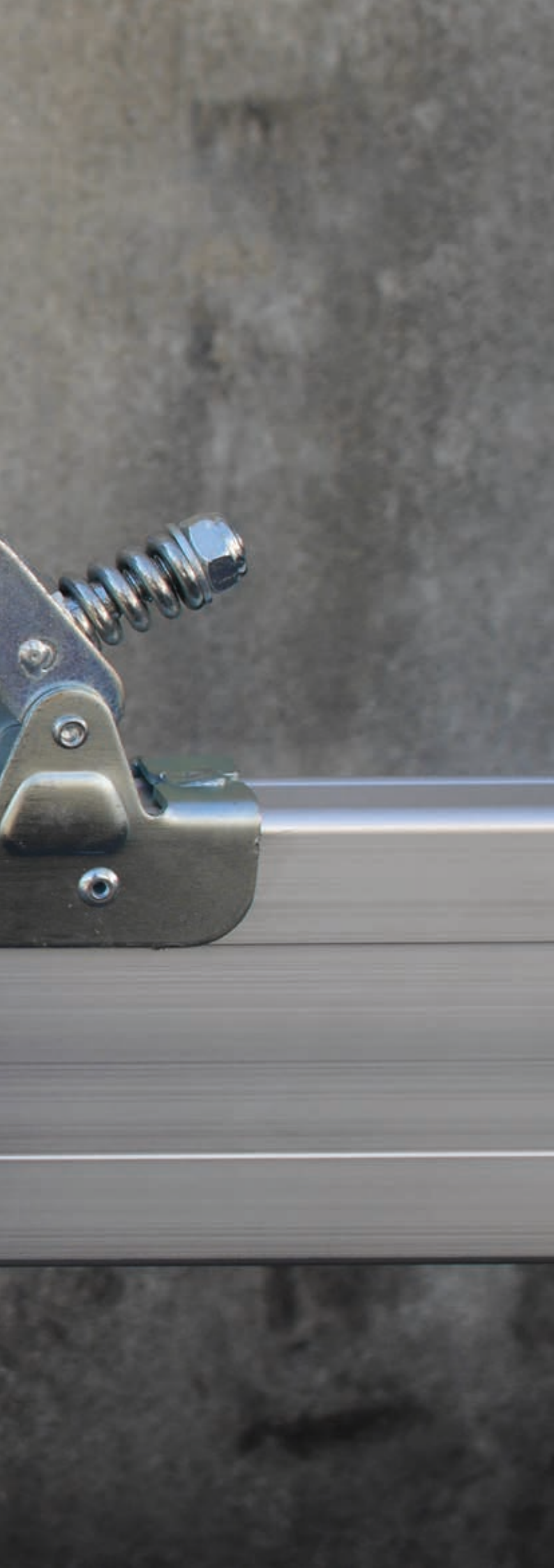
Table: Aluminium profiles with Airline system compatibility with shoring bars and cargo beams as well as lashing strap end fittings

							
		644007	621317	644011	644009	142138864	142138865
Shoring bars 	142137063	✓	✓	✓	✓	✓	✓
	142138500	✓	✓	✓	✓	✓	✓
	142138501	✓	✓	✓	✓	✓	✓
	142138502	✓	✓	✓	✓	✓	✓
	142138503	✓	✓	✓	✓	✓	✓
	142138504	✓	✓	✓	✓	✓	✓
	142138505	✓	✓	✓	✓	✓	✓
	142138506	✓	✓	✓	✓	✓	✓
	142138507	✓	✓	✓	✓	✓	✓
	142138508	✓	✓	✓	✓	✓	✓
	142138597	✓	✓	✓	✓	✓	✓
	142138812	✓	✓	✓	✓	✓	✓
	142138813	✓	✓	✓	✓	✓	✓
	142138814	✓	✓	✓	✓	✓	✓
	142138881	✓	✓	✓	✓	✓	✓
	142138908	✓	✓	✓	✓	✓	✓
	142138909	✓	✓	✓	✓	✓	✓
	142138910	✓	✓	✓	✓	✓	✓
142138985	✓	✓	✓	✓	✓	✓	
Sliding decking beam with Airline system 	142138510		✓	✓	✓	✓	✓
Airline fittings     	142138570	✓	✓	✓	✓	✓	✓
	142138600	✓	✓	✓	✓	✓	✓
	142138571	✓	✓	✓	✓	✓	✓
	142138579	✓	✓	✓	✓	✓	✓
	142138702	✓	✓	✓	✓	✓	✓

The profiles 621317, 644009, 644011, 142138864 and 142138865 in combination with lashing straps may only be deployed using the banding restraint method.

CLAMP LOCK EQUIPMENT





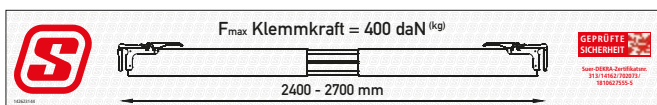
PARTING WALL LOCKS	42
PARTING WALL LOCK ACCESSORIES	43
INFINITELY VARIABLE ROUND SHORING BARS	44
ALUMINIUM CARGO BARS	46
STEEL CARGO BARS	47
CARGO BAR ACCESSORIES	47



S-Line® Parting wall lock with steel end plugs

Aluminium, with anti-slip protective caps in the inner and outer clamping area. DEKRA certified.

Can be shortened to 1400 mm overall length.



Label 142623144

	Max. load capacity [daN]	Clamping range [mm]	Weight [kg]	Application range [mm]
142623144	400	21 - 36	7.8	2400 - 2700



S-Line® Parting wall lock

Galvanized steel, with anti-slip protective caps in the inner and outer clamping area.

Can be shortened to 1000 mm overall length.

	Tube \square [mm]	Clamping range [mm]	Weight [kg]	Application range [mm]
142138583	40 x 40	21-36	6.9	1920 - 2720



S-Line® End plug for parting wall lock

Galvanized steel.

Compatible with profile 120 x 30 mm.

	Max. load capacity [daN]	Clamping range [mm]	Weight [kg]
142102144	400	21 - 36	2.7



S-Line® Anti-slip protector

For parting wall lock end plug 142102144. Weight 0.02 kg.

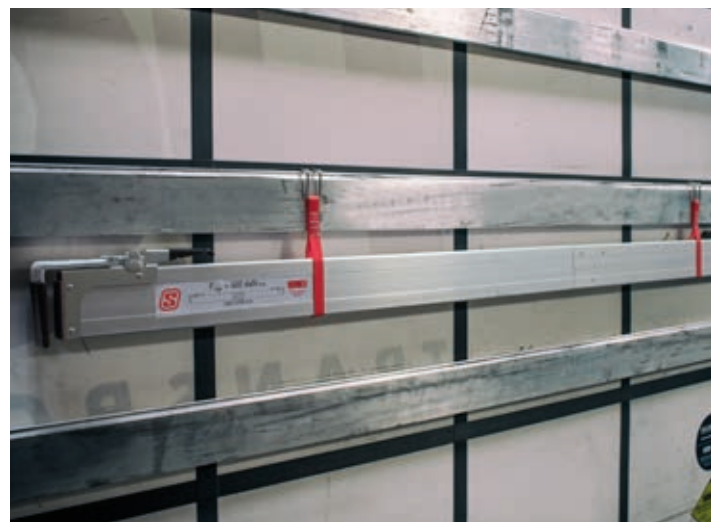
105102682



S-Line® Hanging strap with hook

For holding/stowing parting wall locks on side boards or side planks.

	Webbing width [mm]	Length [mm]	Weight [kg]
142138723	25	ca. 300	0.09



S-Line® Infinitely variable round shoring bars

Aluminium, pressing spring, tube Ø 42 mm, with combi plugs Ø 19/24 mm with slot 9 mm.

	Blocking force [daN]	Shoring force [daN]	Weight [kg]	Application range [mm]
142137063	130	400	3,3	1250 - 1850
142138812	130	400	3.4	1500 - 2100
142138813	130	400	4.4	2000 - 2600
142138814	130	400	5.4	2500 - 3100





Allrounders in logistics




Horizontal and vertical load securing - ideal for small vans.



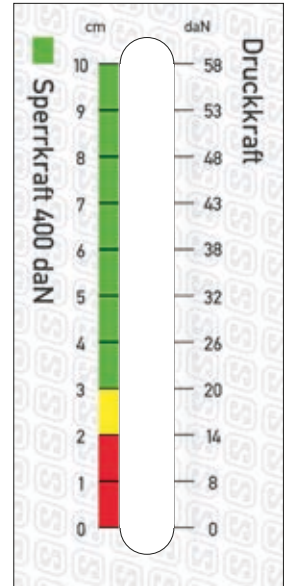

Sperrkraft $F_{max} = 400 \text{ daN}^{(kg)}$ / Klemmkraft $F_{max} = 130 \text{ daN}^{(kg)}$





Suer-DEKRA-Zertifikatsnr. 313/32100/702073/1820849823

Label - Example 142138812



Locking and clamping force control by patented force display using color and daN scale.



DEKRA-Zertifikat
 313/32100/702073/
 1820849823



Infinitely variable adjustment over 600 mm within the range by use the integrated tensioning ratchet with webbing strap.

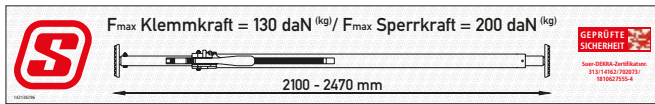
DEKRA tested blocking force 400 daN.

Effortless changeover from cargo bar to shoring bar by replacing the combi plug into rubber feet.



S-Line® Aluminium cargo bars

With spring, both ends with large anti-slip end piece. DEKRA certified.
Can be shortened to 1100 mm overall length.



Label - example 142138296

	Tube Ø [mm]	Clamping force [daN]	Shoring force [daN]	Weight [kg]	Application range [mm]
142138088	38	100	150	4.0	2275 - 2665
142138596	42	130	200	4.1	1630 - 2000
142138296	42	130	200	5.0	2100 - 2470
142138089	42	130	200	5.3	2350 - 2720
142138509	42	130	200	5.3	2650 - 3020

CUSTOMIZED PRODUCTS

We retrofit the clamping bars with combi plugs Ø 19/24 mm with slot, plugs 19 mm, plugs 24 mm or plugs 24/33 mm on telescopic tube side, supporting tube side or on both sides.

Prices, minimum purchase quantities and delivery times on request.

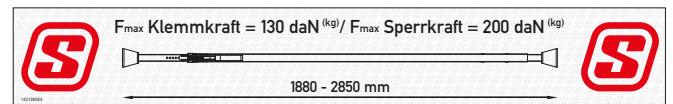




S-Line® Steel cargo bar

Galvanized, with spring, both ends with anti-slip rubber foot.

	Tube [mm]	Clamping force [daN]	Shoring force [daN]	Weight [kg]	Application range [mm]
142138584	35 x 35	130	200	6.75	1880 - 2850



Label - 142138584



S-Line® Housing with rack

Suitable for aluminium cargo bars.

	Rohr-Ø [mm]	Gewicht [kg]
142138869	38	1,15
142138870	42	1,15



S-Line® Rubber foot

Black, suitable for cargo and shoring bars with Ø 42 mm.

142138091



S-Line® Rubber foot

Black, suitable for steel cargo bar

142138584.

142138821

SHORING BARS





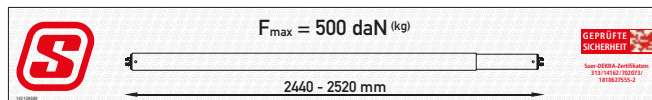
ROUND SHORING BARS STEEL	50
ROUND SHORING BARS ALUMINIUM	51
ROUND SHORING BARS INFINITELY VARIABLE	52
SQUARE SHORING BAR	53
END PLUGS	54
GSP LIGHT SYSTEM	56
COMPATIBILITY TABLE	57



S-Line® Round shoring bars

Galvanized steel, rigid, tube Ø 42 mm, pressing spring, with combi plugs Ø 19/24 mm with slot 9 mm. DEKRA certified.

Can be shortened to 800 mm overall length.



Label - Example 142138500

	Blocking force [daN]	Weight [kg]	Application range [mm]	Variant
142138500	500	7.8	2440 - 2520	w/o rubber coating
142138774	500	7.9	2440 - 2520	with rubber coating

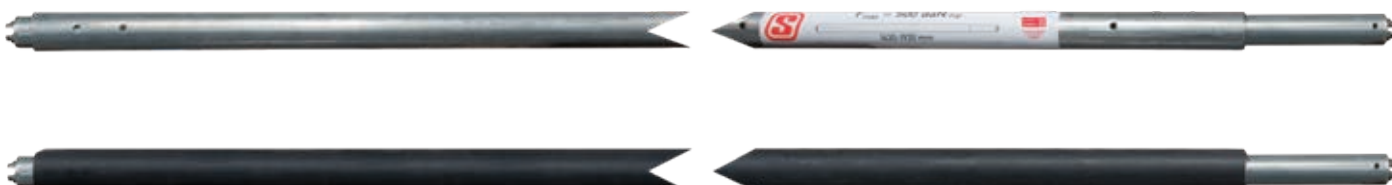
S-Line® Round shoring bars

Galvanized steel, rigid, tube Ø 42 mm, pressing spring, with combi plugs Ø 19/24 mm with slot 9 mm (supporting tube side loose).

Can be shortened to 800 mm overall length.



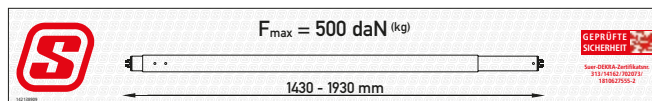
	Blocking force [daN]	Weight [kg]	Application range [mm]	Variant
142138502	500	10.1	≤ 3100	w/o rubber coating
142138775	500	10.2	≤ 3100	with rubber coating



S-Line® Round shoring bars

Galvanized steel, adjustable, tube Ø 42 mm, pressing spring, with combi plugs Ø 19/24 mm with slot 9 mm. DEKRA certified.

Can be shortened to 800 mm overall length.



Label - Example 142138909

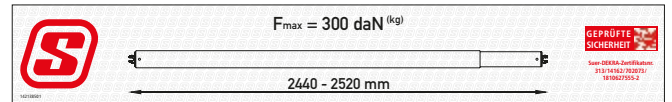
	Blocking force [daN]	Weight [kg]	Adjustment range [mm]	Variant
142138909	500	9.2	1430 - 1930	w/o rubber coating
142138925	500	9.3	1430 - 1930	with rubber coating
142138908	500	9.2	1750 - 2130	w/o rubber coating
142138504	500	8.1	2000 - 2400	w/o rubber coating
142138776	500	8.2	2000 - 2400	with rubber coating
142138506	500	9.2	2360 - 2760	w/o rubber coating
142138777	500	9.3	2360 - 2760	with rubber coating





S-Line® Round shoring bars

Aluminium, rigid, tube Ø 42 mm, pressing spring, with combi plugs Ø 19/24 mm with slot 9 mm. DEKRA certified.
 Can be shortened to 800 mm overall length.



Label - Example 142138501

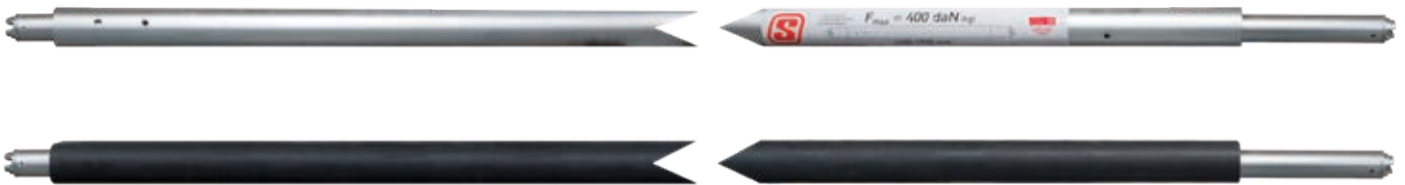
	Blocking force [daN]	Weight [kg]	Application range [mm]	Variant
142138501	300	4.4	2440 - 2520	w/o rubber coating
142138779	300	4.5	2440 - 2520	with rubber coating

S-Line® Round shoring bars

Aluminium, rigid, tube Ø 42 mm, pressing spring, with combi plugs Ø 19/24 mm with slot 9 mm (Tragrohrseite lose). DEKRA certified.
 Can be shortened to 800 mm overall length.

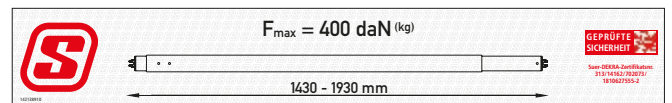


	Blocking force [daN]	Weight [kg]	Application range [mm]	Variant
142138503	300	5.4	≤ 3100	w/o rubber coating
142138780	300	5.5	≤ 3100	with rubber coating



S-Line® Round shoring bars

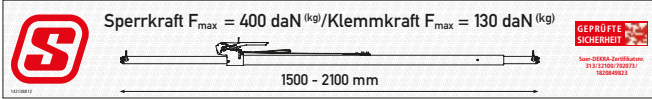
Aluminium, adjustable, tube Ø 42 mm, pressing spring, with combi plugs Ø 19/24 mm with slot 9 mm. DEKRA certified.
 Can be shortened to 800 mm overall length.



Label - Example 142138910

	Blocking force [daN]	Weight [kg]	Adjustment range [mm]	Variant
142138910	400	3.3	1430 - 1930	w/o rubber coating
142138926	400	3.4	1430 - 1930	with rubber coating
142138597	400	3.6	1600 - 2000	w/o rubber coating
142138778	400	3.7	1600 - 2000	with rubber coating
142138505	400	4.3	2000 - 2400	w/o rubber coating
142138781	400	4.4	2000 - 2400	with rubber coating
142138507	400	4.5	2360 - 2760	w/o rubber coating
142138782	400	4.6	2360 - 2760	with rubber coating





Label - Example 142138812

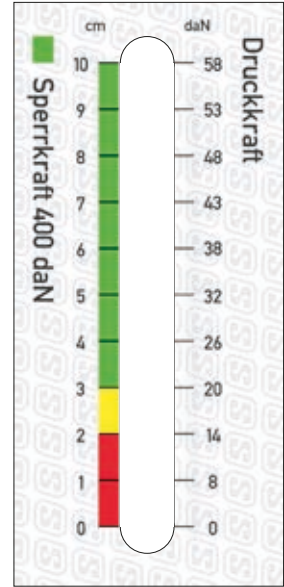


S-Line® Round shoring bars infinitely variable

Aluminium, pressing spring, tube Ø 42 mm, with combi plugs Ø 19/24 mm with slot 9 mm.

	Blocking force [daN]	Shoring force [daN]	Weight [kg]	Application range [mm]
142137063	130	400	3.3	1250 - 1850
142138812	130	400	3.4	1500 - 2100
142138813	130	400	4.4	2000 - 2600
142138814	130	400	5.4	2500 - 3100

Locking and clamping force control by patented force display using color and daN scale.



Convertible with:

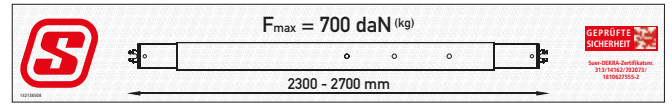
S-Line® Rubber foot
 Black, suitable for cargo and shoring bars with Ø 42 mm.
 142138091



S-Line® Square shoring bar

Galvanized steel, adjustable, pressing spring, with combi plugs Ø 19/24 mm with slot 9 mm. DEKRA certified.

Can be shortened to 800 mm overall length.



Label 142138508

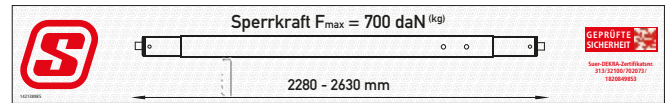
	Blocking force [daN]	Weight [kg]	Tube \square [mm]	Adjustment range [mm]
142138508	700	11.1	50 x 50	2300 - 2700



S-Line® Square shoring bar with handle

Aluminium, adjustable, pressing spring, with end plugs Ø 19 mm, DEKRA certified.

	Blocking force [daN]	Weight [kg]	Tube \square [mm]	Adjustment range [mm]
142138985	700	7.8	50 x 50	2280 - 2630



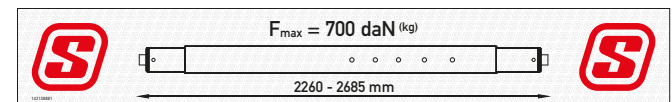
Label 142138985



S-Line® Round shoring bar

Aluminium, adjustable, pressing spring, with end plugs Ø 19 mm. Can be shortened to 800 mm overall length.

	Blocking force [daN]	Weight [kg]	Tube-Ø [mm]	Adjustment range [mm]
142138881	700	5.8	50	2260 - 2685

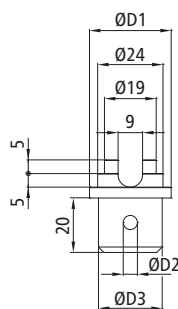


Label 142138881



S-Line® Combi plugs

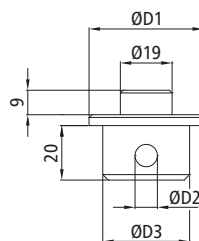
Galvanized steel, Ø 19/24 mm with slot 9 mm.



	Ø D1 [mm]	Ø D2 [mm]	Ø D3 [mm]	Weight [kg]	Telescopic tube/Adjusting tube													Supporting tube				Cargo bar									
					142138500	142138501	142138502	142138503	142138504	142138505	142138506	142138507	142138508	142138597	142138812	142138813	142138814	142138881	142138908	142138909	142138910	142138500	142138501	142138502	142138503	142138088	142138596	142138296	142138089	142138509	
142138730	30	5.2	23.4	0.10		✓		✓		✓		✓		✓	✓	✓	✓					✓									
142138731	42	8.2	31.9	0.17															✓			✓									
142138732	34	6.2	27.8	0.13	✓		✓		✓		✓															✓	✓	✓	✓		
142138733	42	8.2	35.8	0.20															✓			✓									
142138734	44	8.2	39.0	0.23																											

S-Line® Plugs

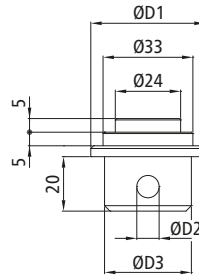
Galvanized steel, Ø 19 mm, cylindrical.








	Ø D1 [mm]	Ø D2 [mm]	Ø D3 [mm]	Weight [kg]	Telescopic tube/Adjusting tube													Supporting tube				Cargo bar										
					142138500	142138501	142138502	142138503	142138504	142138505	142138506	142138507	142138508	142138597	142138812	142138813	142138814	142138881	142138908	142138909	142138910	142138500	142138501	142138502	142138503	142138088	142138596	142138296	142138089	142138509		
142138761	42	8.2	31.9	0.18															✓			✓										
142138762	30	5.2	23.4	0.10		✓		✓		✓		✓		✓	✓	✓	✓										✓					
142138763	42	8.2	35.8	0.21															✓			✓										
142138764	34	6.2	27.8	0.14	✓		✓		✓		✓																✓	✓	✓	✓		

S-Line® Combi plugs

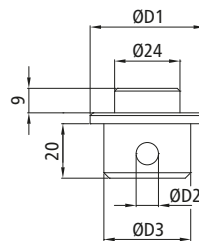
Galvanized steel, Ø 24/33 mm, cylindrical.
142138850 with Ø 19/24/32 mm.







					Telescopic tube/Adjusting tube										Supporting tube				Cargo bar													
	Ø D1 [mm]	Ø D2 [mm]	Ø D3 [mm]	Weight [kg]	142138500	142138501	142138502	142138503	142138504	142138505	142138506	142138507	142138508	142138597	142138812	142138813	142138814	142138881	142138908	142138909	142138910	142138500	142138501	142138502	142138503	142138088	142138596	142138296	142138089	142138509		
 142138769	43	8.2	31.9	0.10																			✓		✓							
 142138770	40	5.2	23.4	0.17		✓		✓		✓		✓		✓	✓	✓	✓									✓						
 142138771	42	8.2	35.8	0.13																		✓		✓								
 142138772	40	6.2	27.8	0.20	✓		✓		✓		✓							✓	✓	✓						✓	✓	✓	✓			
 142138850	40	6.3	27.8	0.23	✓		✓		✓		✓							✓	✓	✓						✓	✓	✓	✓			

S-Line® Plugs

Galvanized steel, Ø 24 mm, cylindrical.

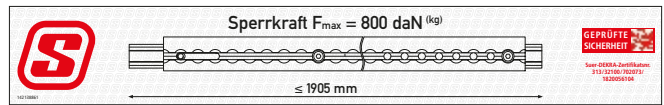


					Telescopic tube/Adjusting tube										Supporting tube				Cargo bar														
	Ø D1 [mm]	Ø D2 [mm]	Ø D3 [mm]	Weight [kg]	142138500	142138501	142138502	142138503	142138504	142138505	142138506	142138507	142138508	142138597	142138812	142138813	142138814	142138881	142138908	142138909	142138910	142138500	142138501	142138502	142138503	142138088	142138596	142138296	142138089	142138509			
 142138765	42	8.2	31.9	0.19																			✓		✓								
 142138766	30	5.2	23.4	0.11		✓		✓		✓		✓		✓	✓	✓	✓				✓					✓							
 142138767	42	8.2	35.8	0.22																		✓		✓									
 142138768	34	6.2	27.8	0.15	✓		✓		✓		✓							✓	✓	✓						✓	✓	✓	✓				

S-Line® GSP light

Aluminium, pressing spring, with end plug Ø 19 mm incl. anti-rotation lock. Compatible to all Airline tracks. Labeled.

Can be shortened to 400 mm overall length.



Label - Example 142138861

	Blocking force [daN]	Weight [kg]	For clear internal dimension [mm]
142138861	800	4.4	1905
142138862	800	4.9	2105
142138868	800	6,0	2615



S-Line® Bracket set for GSP light

Consisting of:

- 4 pcs Aluminium brackets, Ø 25 mm
- 8 pcs Clamp, galvanized steel
- 16 pcs Screw
- 16 pcs Self-locking nut

142139100

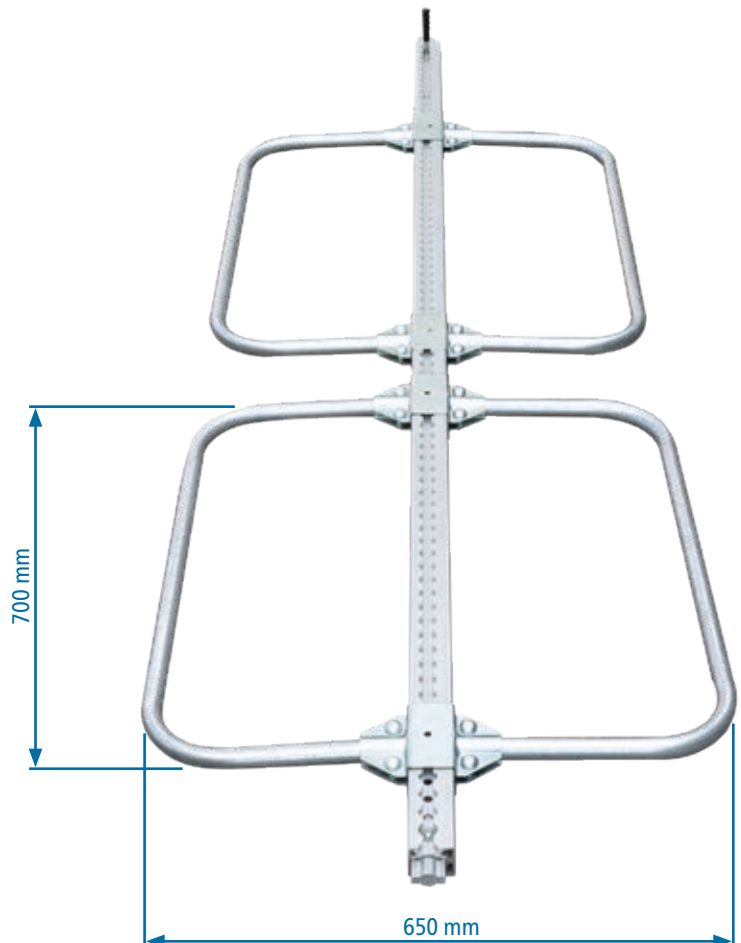












Table: Shoring bars compatibility with anchor tracks

						
			Round shoring bars	Square shoring bars	Infinitely variable round shoring bars	GSP light
Roundhole anchor tracks		142138002	✓	✓	✓	
		142138004	✓	✓	✓	
		142138005	✓	✓	✓	
		142138028	✓	✓	✓	
		142138598	✓	✓	✓	
		142138611	✓	✓	✓	
		142138617	✓	✓	✓	
		142138720	✓	✓	✓	
		142138851	✓	✓	✓	
		142138951	✓	✓	✓	
Airline profile anchor tracks		142138031	✓	✓	✓	✓
		142138032	✓	✓	✓	✓
		142138034	✓	✓	✓	✓
		142138589	✓	✓	✓	✓
		142138590	✓	✓	✓	✓
		142138712	✓	✓	✓	✓
		142138718	✓	✓	✓	✓
		142138719	✓	✓	✓	✓
		142138788	✓	✓	✓	✓
		142138791	✓	✓	✓	✓
		142138863	✓	✓	✓	✓
		142138874	✓	✓	✓	✓
		142138893	✓	✓	✓	✓
		142138898	✓	✓	✓	✓
		142138953	✓	✓	✓	✓
		142139026	✓	✓	✓	✓
Slot-hole anchor tracks		142138021	✓	✓	✓	
		142138023	✓	✓	✓	
		142138700	✓	✓	✓	
		142138826	✓	✓	✓	
Combi anchor tracks		142138008	✓		✓	
		142138015	✓		✓	
		142138016	✓		✓	
		142138017	✓		✓	
		142138019	✓		✓	
		142138289	✓		✓	
		142138612	✓		✓	
		142138701	✓		✓	
		142138754	✓		✓	
		142138841	✓		✓	
142138852	✓		✓			
Keyhole anchor track		142138001 In conjunction with 33 plugs	✓	✓	✓	
Pin anchor tracks		142138254	✓		✓	
		142138269	✓		✓	
		142138636	✓		✓	
		142138755	✓		✓	
		142138835	✓		✓	



GSP RESTRAINT SYSTEM



GSP SETS	61
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GSP ACCESSORIES	63
TRACKS FOR GSP	64
GSP LIGHT SYSTEM	65



DEKRA certified.
Testing in practical driving test.

The beverages restraint system is checked for loads of up to 27000 kg backwards and 16900 kg in the direction of travel for rigid load units.

For small vans also available as GSP light.

S-Line® GSP Set 1

Beverages restraint system consisting of 4 pieces of **S-Line® GSP 142138816** and the set items listed below.
Application range under 2200 mm - clear height by customer specification.

142138844

S-Line® GSP Set 2

Beverages restraint system consisting of 4 pieces of **S-Line® GSP 142138816** and the set items listed below.
Application 2200 - 2300 mm, can be shortened individual.

142138845

S-Line® GSP Set 3

Beverages restraint system consisting of 4 pieces of **S-Line® GSP 142138829** and the set items listed below.
Application range under 2560 mm - clear height by customer specification.

142138846

S-Line® GSP Set 4

Beverages restraint system consisting of 4 pieces of **S-Line® GSP 142138829** and the set items listed below.
Application range 2560 - 2660 mm, can be shortened individual.

142138847



All GSP sets contain the following items in addition to the respective beverages shoring beam:

- | | | |
|----------|-----------|--|
| 6 pieces | 142138828 | S-Line® GSP cross bar, 735 - 935 mm |
| 3 pieces | 142138746 | S-Line® Cam buckle strap 300 |
| 2 sets | 142138834 | S-Line® GSP triple depot bracket |
| 4 sets | 142139005 | S-Line® GSP parking holder 2 |
| 4 pieces | 142139011 | S-Line® GSP handle |

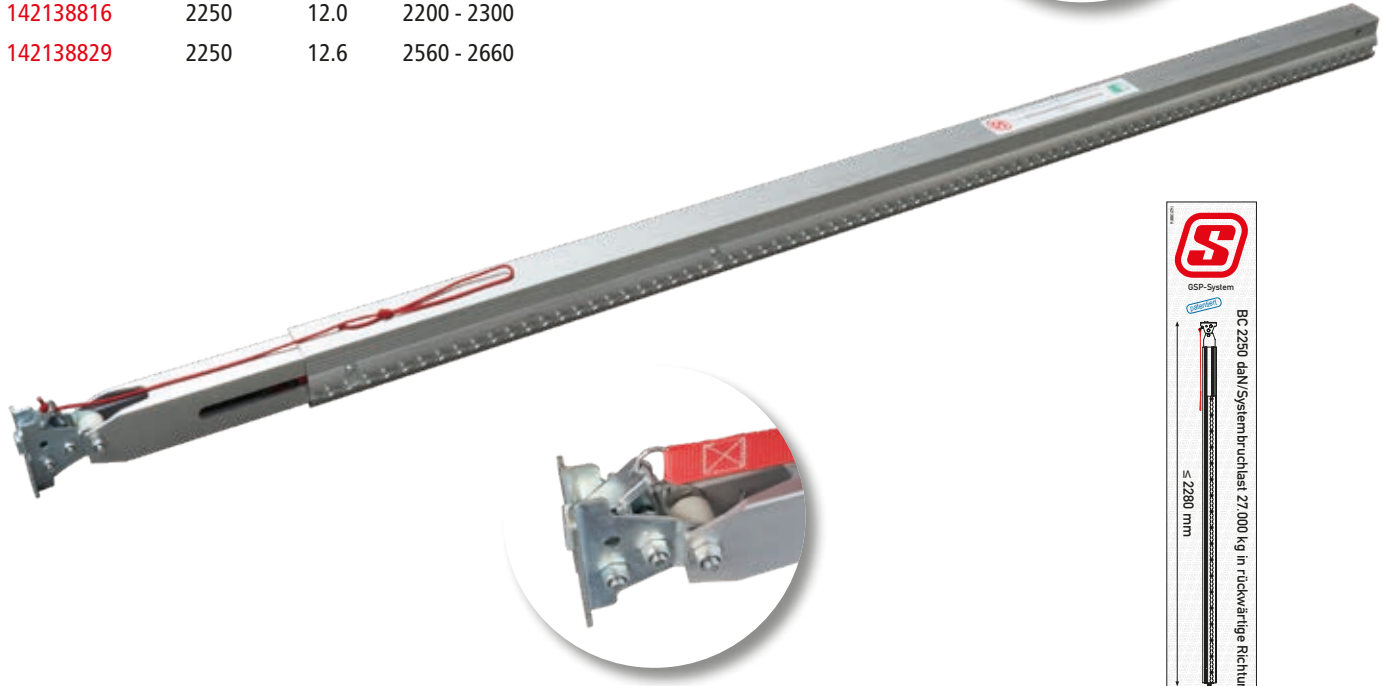
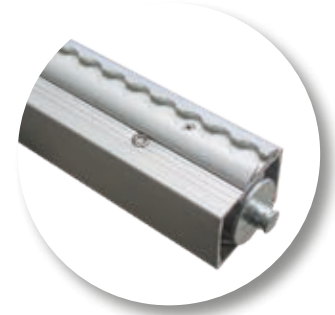


S-Line® Beverages shoring beam

Aluminium, pressing spring, with end plugs Ø 19 mm and steel slider, labeled.

Can be shortened individual.

	Blocking force [daN]	Weight [kg]	Application range [mm]
142138816	2250	12.0	2200 - 2300
142138829	2250	12.6	2560 - 2660

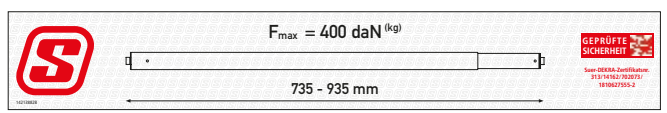


S-Line® Beverages shoring cross bar

Aluminium, adjustable, pressing spring, end plugs Ø 19 mm on both sides, labeled. DEKRA certified

Can be shortened individual.

	Blocking force [daN]	Weight [kg]	tube Ø [mm]	Adjustment range [mm]
142138828	400	1.7	42	735-935





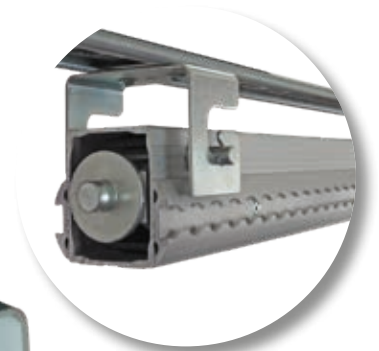
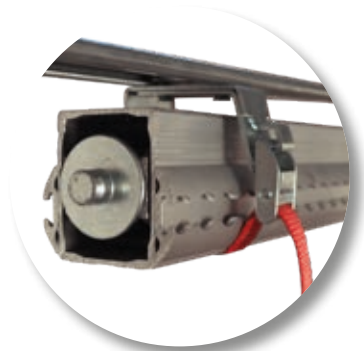
S-Line® GSP Threefold depot holder

Galvanized steel, Ø hole 20 mm.

Consisting of:
2 retaining plates
2 screw fittings

142138834

For parking the cross bars on the lateral Airline tracks of the beverages shoring cross bars during non-use or during the loading and unloading process. Free position in the grid of the Airline track.



S-Line® GSP parking holder 1

Consisting of:
1 retaining plate set
1 strap with cam buckle, 600 mm, incl. 100 mm handstrap
1 strap, 1500 mm, incl. 100 mm handstrap
1 screw fitting

142138833

For parking the beverages shoring beam under the roof during non-use or during the loading and unloading process.

S-Line® GSP parking holder 2

Consisting of:
1 retaining plate
1 counter plate
2 lens head screw hexagon socket M6 x 12
2 lock washers

142139005

For parking the beverages shoring beam under the roof during non-use or during the loading and unloading process.



S-Line® GSP handle

Aluminium, black coated, 118 x 78 mm. Consisting of:

- 1 GSP handle
- 2 Sliding blocks [142138849](#)
- 2 Counter sunk screws M 8 x 16 DIN 7991 8.8 zn [142139011](#)



S-Line® Cam buckle strap 300

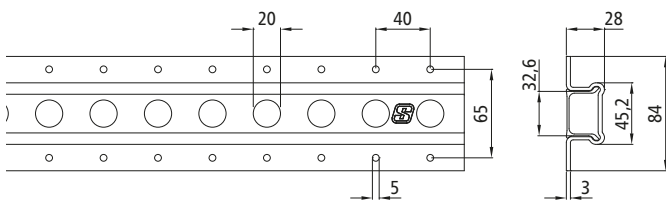
Two-piece, cam buckle K255, simple Airline fitting 600, strap width 25 mm, webbing colour blue, elongation < 5 %, manufactured and tested according to DIN EN 12195-2.

	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
142138746	1.1	0.1	1.0	--	--	150	300



S-Line® Round hole anchor track 3010-GS

Galvanized steel, with plastic insert. For ground mounting. Compatible with combi plugs Ø 19/24 mm and beverages shoring beams. LC values with end fitting 5008.

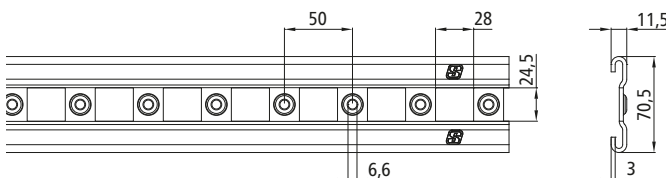


	Length [mm]	Mat. thickness [mm]	Weight [kg]	LC [daN] bei α 45°	LC [daN] bei α 90°	Ø Round hole [mm]
142138611	7770	3.0	23.3	500	500	20

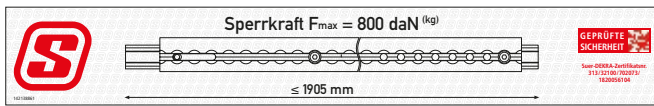


S-Line® Guide track 3010-GS

Galvanized steel. For roof mounting. Compatible with steel slider beverages shoring beam.



	Length [mm]	Mat. thickness [mm]	Weight [kg]	LC [daN] bei α 45°	LC [daN] bei α 90°	Ø Round hole [mm]
142138610	7480	3.0	14.5	--	--	6.6



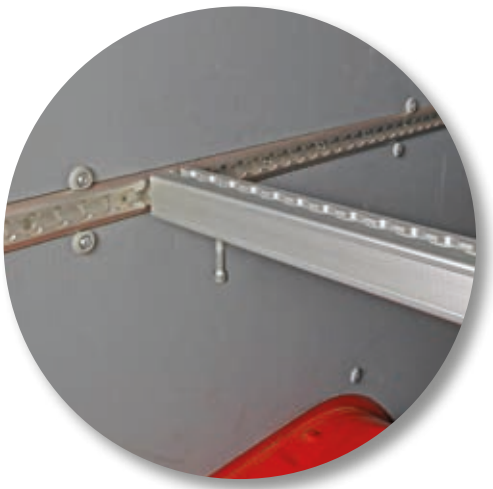
Label - Beispiel 142138861



S-Line® GSP light

Aluminium, pressing spring, with end plug Ø 19 mm incl. anti-rotation lock. Compatible to all Airline tracks. Labeled.
 Can be shortened to 400 mm overall length.

	Blocking force [daN]	Weight [kg]	For clear internal dimension [mm]
142138861	800	4,4	1905
142138862	800	4,9	2105
142138868	800	6,0	2615



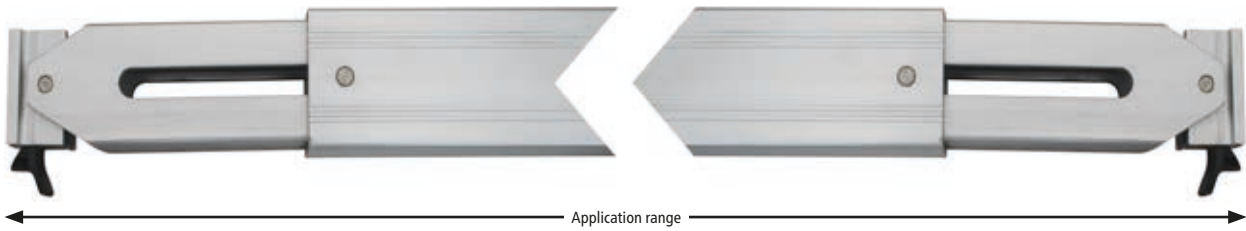


DECKING BEAM LOADING





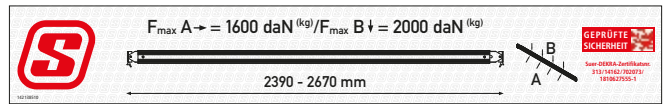
SLIDING DECKING BEAMS	68
SLIDING DECKING BEAMS ACCESSORIES	69
BEAM SHOE	69
DECKING BEAMS · ACCESSORIES	70
COMPATIBILITY TABLE	71



S-Line® Sliding decking beam for flat Airline track

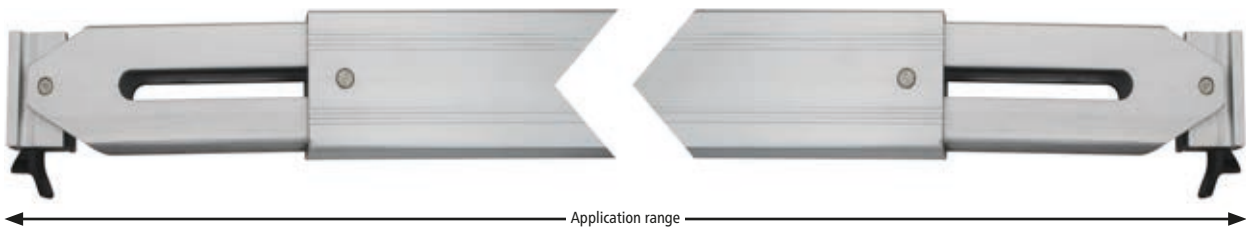
Aluminium, both ends with extendable aluminium end plug, DEKRA certified.

Can be shortened to 600 mm overall length.



Label - 142138510

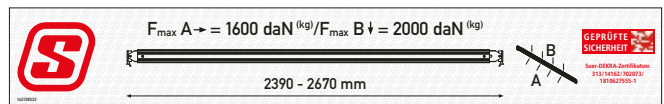
	BC A→ [daN]	LC B↓ [daN]	Weight [kg]	Tube $\varnothing w \times h$ [mm]	Application range [mm]
142138510	1600	2000	7.7	66 x 84	2390 - 2670



S-Line® Sliding decking beam for convex Airline track

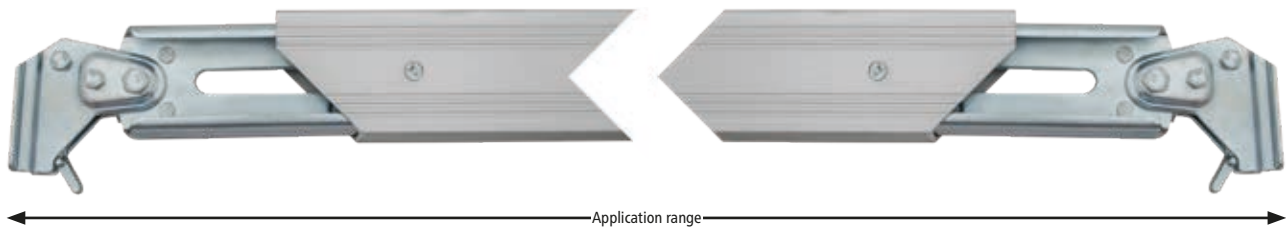
Aluminium, both ends with extendable aluminium end plug, DEKRA certified.

Can be shortened to 600 mm overall length.



Label - 142138522

	BC A→ [daN]	LC B↓ [daN]	Weight [kg]	Tube $\varnothing w \times h$ [mm]	Application range [mm]
142138522	1350	1350	8.0	66 x 84	2390 - 2670

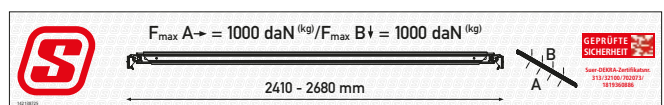


S-Line® Sliding decking beam for steel guide track

Aluminium, both ends with extendable steel end plug.

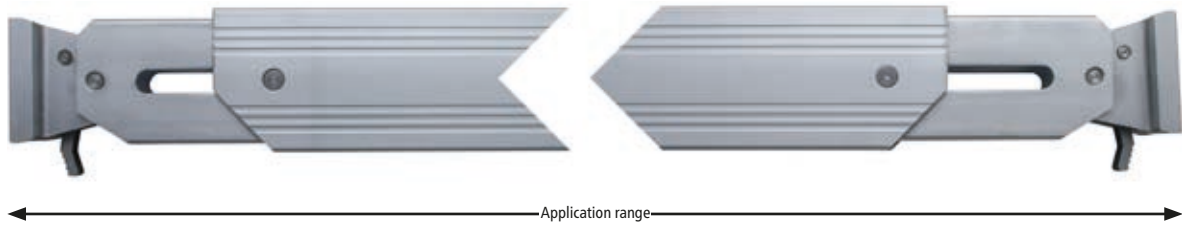
Can be shortened to 800 mm overall length.

Suitable for Krone swap bridge trailer systems 5044.



Label - 142138725

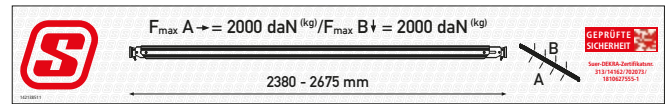
	BC A→ [daN]	LC B↓ [daN]	Weight [kg]	Tube $\varnothing w \times h$ [mm]	Application range [mm]
142138725	1000	1000	10.0	66 x 84	2410 - 2680



S-Line® Sliding decking beam for Schmitz track

Aluminium, both ends with extendable aluminium end plug, DEKRA certified.

Can be shortened to 500 mm overall length.



Label - 142138511

	BC A→ [daN]	LC B↓ [daN]	Weight [kg]	Tube \varnothing w x h [mm]	Application range [mm]
142138511	2000	2000	7.7	66 x 84	2380 - 2675



S-Line® Unlocking bar for sliding decking beam

Aluminium, with black PVC coating on the handle. Dimensions 20 x 10 x 1090 mm.

142138854

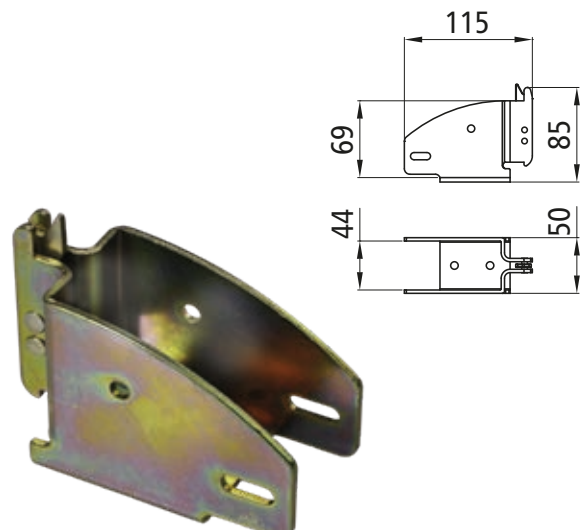


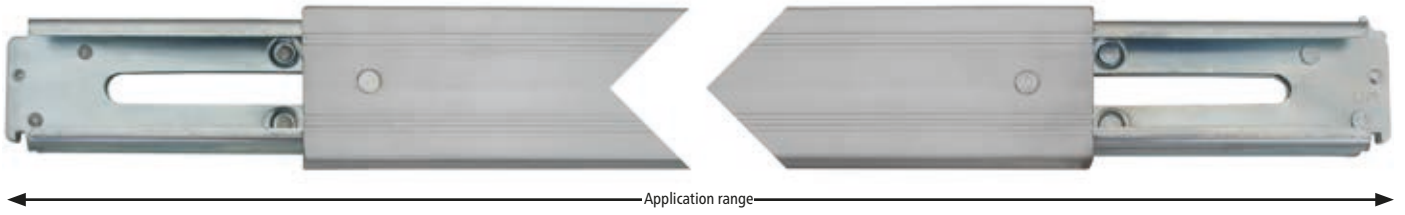
S-Line® Beam shoe 1845

Galvanized steel, weight 0.4 kg.

142138085

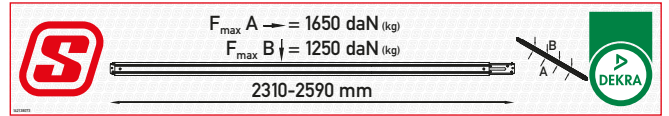
The beam shoe can be used for producing extra demountable loading levels or for combining with 70 x 40 mm beams.





S-Line® Decking beam for combi anchor tracks

Aluminium, both ends with extendable steel end plug, DEKRA certified.
Can be shortened to 650 mm overall length.



Label - Example 142138073

	BC A→ [daN]	LC B↓ [daN]	Weight [kg]	Tube \varnothing w x h [mm]	Application range [mm]
142138073	1650	1250	9.4	66 x 84	2310 - 2590
142138074	1650	1700	10.6	66 x 84	2310 - 2590



For decking beams 142138073
and 142138074







S-Line® End piece for decking beams

Steel, compatible to anchor combi track (2010, 3008, 3009),
weight 0.95 kg.

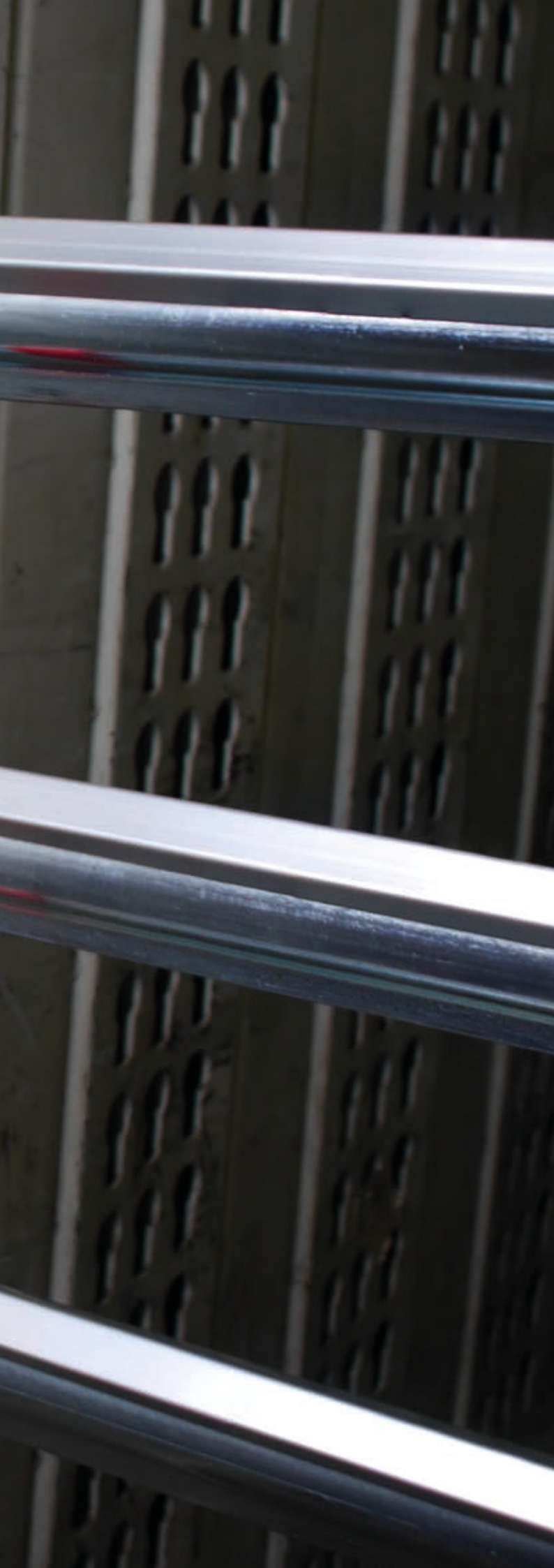
142138751

Table: Decking beams compatibility with anchor tracks

		Sliding decking beams/Decking beams				Beam shoe	
		142138073	142138074	142138510	142138522	142138085	
Airline profile anchor tracks		142138031				✓	
		142138032			✓		
		142138034			✓		
		142138589			✓		
		142138590				✓	
		142138712			✓		
		142138718			✓		
		142138719				✓	
		142138788			✓		
		142138791					
		142138863			✓		
		142138874			✓		
		142138893			✓		
		142138898			✓		
		142138953				✓	
	142139026			✓			
Slot-hole anchor tracks		142138021	✓	✓			✓
		142138023	✓	✓			✓
		142138700	✓	✓			✓
		142138826	✓	✓			✓
Combi anchor tracks		142138008	✓	✓			✓
		142138015	✓	✓			✓
		142138016	✓	✓			✓
		142138017	✓	✓			✓
		142138019	✓	✓			✓
		142138289	✓	✓			✓
		142138612	✓	✓			✓
		142138701	✓	✓			✓
		142138754	✓	✓			✓
		142138841	✓	✓			✓
	142138852	✓	✓			✓	
Keyhole anchor tracks		142138001	✓	✓			✓

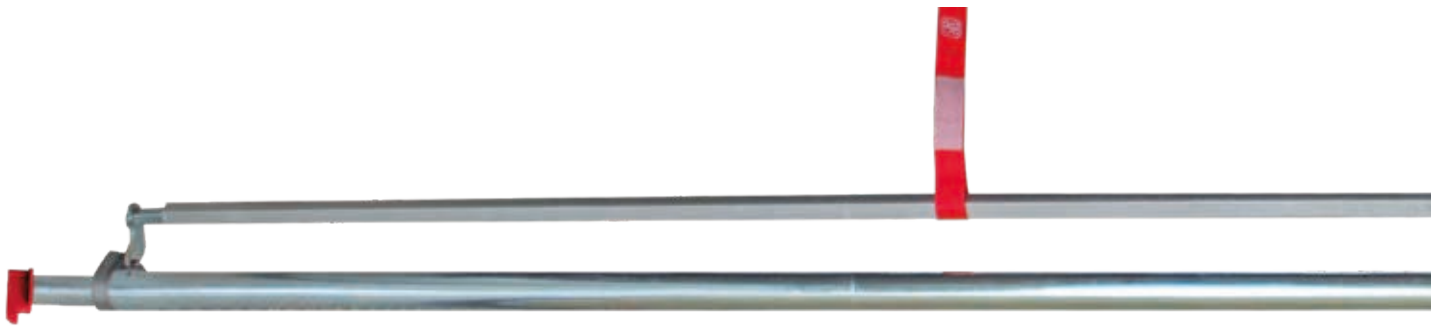
GARMENT RAILS





GARMENT RAILS 74

GARMENT RAILS ACCESSORIES 75



S-Line® Garment rail with plastic end plug

Chrome tube with plastic end plug, pulling spring function, Throw bracket with double Velcro tape backup.

For full beaded keyhole system.

	Load capacity [daN]	Weight [kg]	Application range [mm]	Spring function
142138742	350	7.43	2420 - 2510	with



S-Line® Garment rail with steel end plug

Chrome tube with steel end plug, pulling spring function, Throw bracket with double Velcro tape backup.

For keyhole system half and full beaded and without beading (1803).

	Load capacity [daN]	Weight [kg]	Application range [mm]	Spring function
142137045	350	7.43	2420 - 2510	without



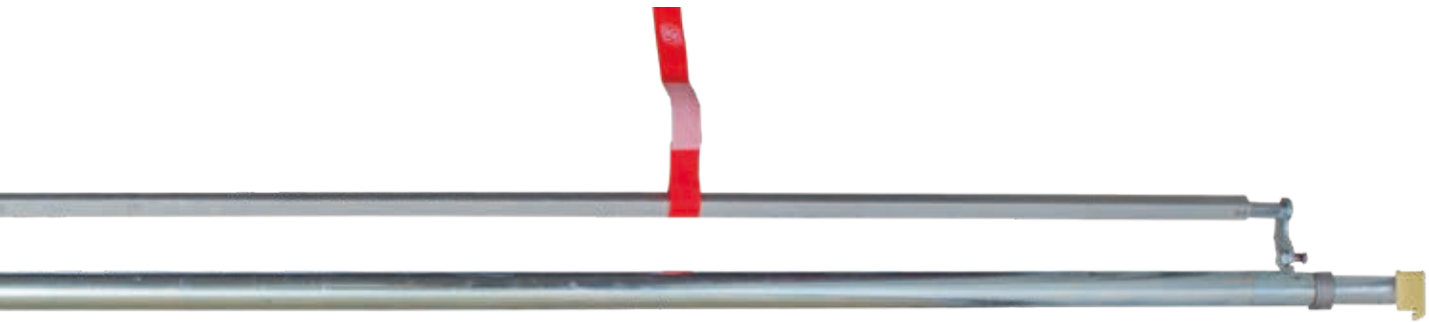
S-Line® Garment rail with combi anchor end fitting

Chrome tube with combi anchor end fitting, without spring, Throw bracket with double Velcro tape backup.

For combi anchor tracks and slit-hole tracks.

	Load capacity [daN]	Weight [kg]	Application range [mm]	Spring function
142138836	350	7.70	2420 - 2510	with





S-Line® Plastic end plug
suitable for garment rail

Red plastic, left, weight 0.036 kg.
Suitable for keyhole systems half- and full-beaded.

142138837



S-Line® Plastic end plug
suitable for garment rail

White plastic, right, weight 0.036 kg.
Suitable for keyhole systems half- and full-beaded.

142138838



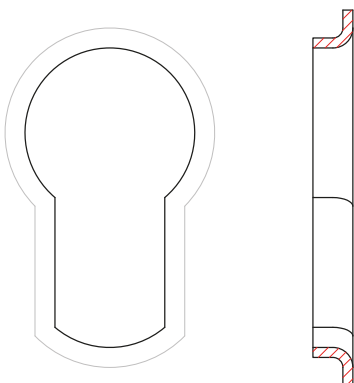
S-Line® End plug
suitable for garment rail

Galvanized steel, weight 0.13 kg.
Suitable for keyhole systems without beading (1803).

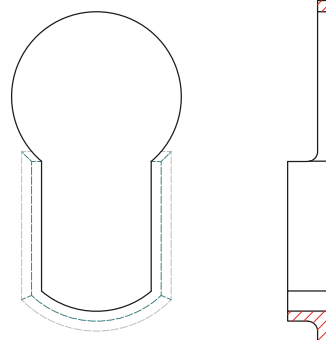
142138800

WHAT ARE BEADED KEYHOLE SYSTEMS?

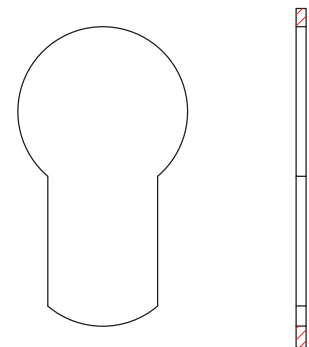
The term "beading" comes from forming technology. This involves the bending of a sheet metal edge with a machine or by hand.



Keyhole system full beaded



Keyhole system half beaded



Keyhole system without beading



S 16 25 KN



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Load securing

Driving off, taking bends, braking, driving on bumpy stretches - it isn't always when the brakes are slammed on that the load starts slipping.

With road transport, even when driving off, 0.5 times the weight of the load acts in a longitudinal direction towards the rear and the same value acts laterally towards the outside on bends. When the brakes are applied, it can be 0.8 times the load weight.

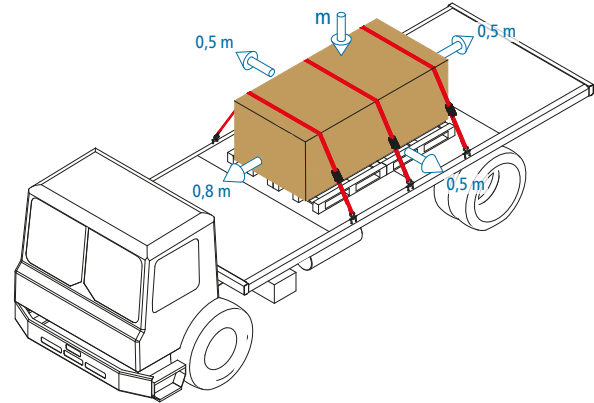
The force (F_M) a load develops when braking is quite a simple physical calculation:

$$F_M = m \times c_x \times g$$

$$F_M = 1,99t \times 0,8 \times 9,81 \frac{m}{s^2}$$

$$F_M = 15,64kN$$

The transportation of a pack of Finnish birch phenolic plyboards (60 pieces 15 x 1250 x 2500 mm, weight 1.99 tons) serves as an example. The load is freely exposed with no positive fit against the side boards or another load on the loading area.



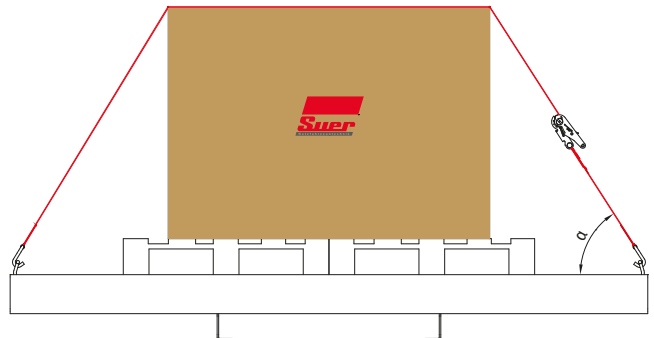
Minus the friction forces (F_R) between the loading floor and the load:

$$F_R = m \times \mu_D \times g$$

$$F_R = 1,99t \times 0,25 \times 9,81 \frac{m}{s^2}$$

$$F_R = 4,89kN$$

Once again the example using the pack of phenolic plyboards, the truck loading floor is fitted with phenolic plywood boards.



Produces an excess force of:

$$F_X = F_M - F_R$$

$$F_X = 15,64kN - 4,89kN$$

$$F_X = 10,75kN$$

There remains a force equal to almost 1.1 tons, which shifts in the direction of the cab. A good load restraint is required for example, through lashing the load down with tie-down straps.

EN 12195-1 "Load restraint assemblies on road vehicles" contains, among other things, an equation for calculating the number of tie-down straps necessary:

$$n \geq \frac{(c_x - \mu_D \times c_z) m \times g}{k \times \mu_D \times \sin \alpha \times F_T}$$

$$n \geq \frac{(0,8 - 0,25 \times 1) 1,99t \times 9,81 \frac{m}{s^2}}{1,5 \times 0,25 \times \sin 57^\circ \times 5kN}$$

$$n \geq 8,14 \rightarrow 9 \text{ lashing straps}$$

Staying with our phenolic plyboard pack example.

By comparison: A table obtainable through the trade in which the number of tie-down straps necessary can be read off by a simple method using the factors of load weight, friction value μ , standard tension force (STF) and strap angle, recommends the deployment of 8 tie-down straps.

To deploy 9 tie-down straps is less practical. How important a factor the friction between the load and the truck floor plays is demonstrated by the deployment of anti-slip mats or anti-slip strips, article nos.:

142131386 und 142131387. With anti-slip mats or strips, a friction value

μ of up to 0.8 can be achieved. With it, the required number of tie-down straps in our worked example sinks to 3:

$$n \geq \frac{(c_x - \mu_A \times c_z) m \times g}{k \times \mu_A \times \sin \alpha \times F_T}$$

$$n \geq \frac{(0,8 - 0,50 \times 1) 1,99t \times 9,81 \frac{m}{s^2}}{1,5 \times 0,50 \times \sin 57^\circ \times 5kN}$$

$$n \geq 2,22 \rightarrow 3 \text{ lashing straps}$$

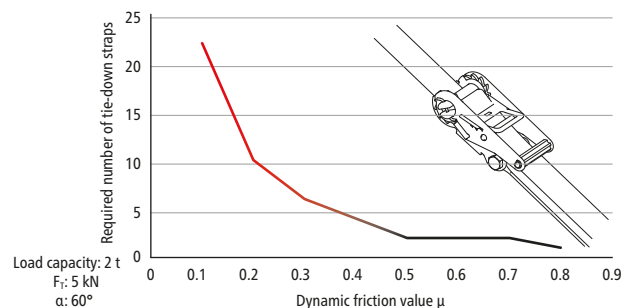
And to conclude, staying with our phenolic plyboard pack example, the friction value μ_A has been determined at 0.50.

Symbols, units and descriptions of the itemised formulae:

Symbol	Unit	Description
F_L	kN	Longitudinal load force on braking.
F_R	kN	Friction force between load and loading floor.
F_e	kN	Effective longitudinal force of the load.
m	t	Load weight including pallets.
g	m/s ²	Gravitational acceleration/gravitational force.
μ_D		Dynamic friction value of timber Europallet to loading floor, floor faced with phenolic plyboards. Value selected in accordance with EN 12195-1.
μ_A		Dynamic friction value of timber Europallet to anti-slip mat to loading floor, floor faced with phenolic plyboards.
c_x		Acceleration coefficient in the X- or Z direction. Value selected in accordance with EN 12195-1.
k		Transfer coefficient. Value selected in accordance with EN 12195-1.
α	Angle	Vertical angle of tie-down strap to loading floor. Value measured from drawing above.
F_T	kN	Standard tension force STF for the tie-down strap.
n		Required number of tie-down straps.

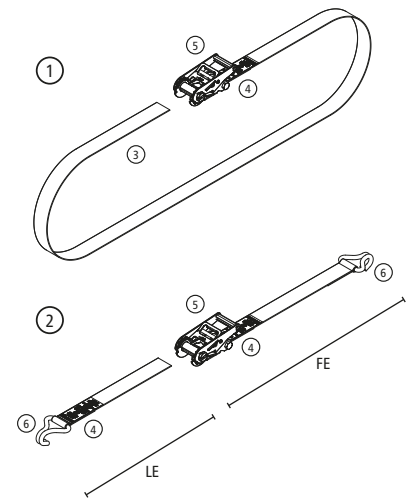
Frictional influence

The curve below shows clearly how greatly the friction between the load and the truck floor influences the number of tie-down straps necessary.



Lashing strap part names

- 1 One-piece lashing strap
- 2 Two-piece lashing strap - consisting of the fixed end (FE) and loose end (LE) units
- 3 Webbing
- 4 Label
- 5 Tensioning element variable: Cam buckle, ratchet (illustration) or lashing winch
- 6 End fitting variable: Double Airline fitting, simple Airline fitting, flat hook, carabine hook, combi anchor track end fitting, chain combination parts, Krone hook, round hole end fitting, S-hook, double J-hook (illustration), single J-hook, triangle, fourfold Airline fitting or lashing hook with safety catch (flat, swivel or twisted design).





Information on the label

Each tie-down strap and each unit in the case of two-part straps (fixed end/loose end) must, to comply with DIN EN 12195-2, be provided with a label in accordance with EN 292-2:1991.

The following statutory information is stated on the label:

- 1 LC (Lashing Capacity - permitted strap force)
Maximum permitted force in straight tension for which the tie-down strap is designed to be used.
- 2 SHF (Standard Hand Force - normal hand force)
Specified force at the cam buckle/ratchet handle which the tensioning force generates in the lashing strap.
- 3 STF (Standard Tension Force - normal tensioning force)
Residual force/tensioning force after the handle of the cam buckle/ratchet (SHF) is let go.
- 4 Webbing material
S-Line® strap webbing is manufactured from multiple layers of interwoven synthetic fibres. The material used can be identified by the designation and/or the colour of the label:
PES (polyester), label colour blue, suitable for the temperature range -40° C to +120° C.
PA (polyamide), label colour green, suitable for the temperature range -40° C to +100° C.
PP (polypropylene), label colour brown, suitable for the temperature range -40° C to +80° C.
- 5 Elongation of strap
In accordance with the DIN Standard the strap, when tensioned to the maximum permissible force BLC, may not stretch by more than 7%. The majority of **S-Line**® straps have a maximum elongation of not more than 5%.
- 6 Length of lashing strap/length of lashing strap unit
With one-piece tie-down straps, the dimension is approx. the length of the open, laid out strap.
With two-part tie-down straps, the dimension is similarly measured but the length is given separately for each unit (fixed end/loose end).
- 7 Warning
- 8 Manufacturer's name or symbol
The **S-Line**® symbol identifies proprietary products of Suer Nutzfahrzeugtechnik GmbH & Co. KG.
- 9 Manufacturer's traceability code
In the case of **S-Line**® lashing straps, an 8-digit code no. is given with the Suer item number beneath this.
- 10 Year of manufacture
- 11 Standard number
The Standard to which the tie-down strap has been manufactured and tested.
- 12 Item Number

In addition, the labels on the **S-Line**® lashing straps contain the following information:

- 13 Permissible tension force depending on lashing method.
 Permissible tension force when banded - only one-piece lashing straps.
 Permissible tension force pulled straight - only two-piece lashing straps.
- 14 Other seals of approval – many **S-Line**® lashing straps carry the TÜV and the GS seals.
- 15 Test table
Lashing straps must be tested at least once every year by a qualified specialist. The test year can be marked in the test table.

① LC 2500 daN

② SHF 50 daN/STF 350 daN ③

⑬ 2500 daN

④ Werkstoff: PES PU-beschichtet


⑤ Dehnung < 5%

⑥ Länge 0,5 m

⑦ Darf nicht zum Heben verwendet werden!

⑭ TÜV
SÜD

GS
geprüfte
Sicherheit

⑧ 

⑨ Code-Nr. XXXXXXXX

⑫ 14213XXX

⑩ Herstellungsjahr 20XX

⑪ DIN EN 12195-2

Geprüft:

20XX	20XX	20XX	20XX
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⑮

Operation instructions for **S**-Line® Lashing straps

Terms on the lashing strap

Loose end

Fixed end

Webbing

End fitting, variable:
 Double J-hook (illustration)
 Simple Airline fitting
 Flat hook
 Claw hook
 Combination part to a chain
 Simple J-hook
 Triangle
 Fourfold Airline fitting
 Lashing hook with safety catch

Clamping element, variable:
 Cam bucket
 Ratchet (illustration)
 Lashing winch

End fitting:
 Also variable
 (see left side)

Slotted bolt
 Tension slide
 Handle

How to open/release a lashing strap

1

2

Release the lashing strap and unlock the hand lever by pulling the tension slider and fully open the hand lever by 180°.

After releasing the ratchet the strap can be pulled out.

How to tension a lashing strap

1

2

3

4

Insert the webbing of the loose end into the slotted bolt.

Tighten the webbing manually.

Tensioning the lashing strap by moving the handgrip up and down by hand, until the required or maximum permissible hand force SHF (value on the label) is reached.

After tensioning, close the ratchet completely by pulling the tensioning slide.

Instructions for use and care of lashing straps

1. When selecting and using lashing straps the required lashing capacity and the type of use and the type of load to be lashed must be considered. The size, shape and weight of the load determine the correct choice, but also the intended usage, the transport environment and the type of cargo. For reasons of stability, at least two lashing straps must be used for tie-down lashing and two pairs of lashing straps must be used for diagonal lashing.
2. The selected lashing strap must be strong and long enough for the intended purpose and be of the correct length with regard to the type of lashing. Always good lashing practices must be considered: Attaching and removing the lashings straps should be planned before the start of the ride. During longer rides partial discharges are considered. The number of lashing straps must be calculated according to DIN EN 12195-2. Only those lashing systems which are designed for tie-down lashing with STF on the label may be used for lashing.
3. Due to different behavior and because of the change in length under load, different lashing devices (eg lashing chains and lashing straps made of chemical fibers) must not be used for lashing the same load. When using additional fittings and lashing devices during the tying, care must be taken that they fit into the lashing strap.
4. During use flat hooks must rest with the entire width of the hook.
5. Opening of the lashing: Before opening you should make sure, that the cargo is still safe without security and does not endanger the unloading person by falling down. If necessary, the measures provided for further transport means are previously to be attached to the cargo to prevent it falling and/or tilting of the load. This is also the case when using clamping elements that allow safe removal.
6. Before beginning the unloading, the lashings must be loosened so that the load is free.
7. During loading and unloading, attention must be paid to the proximity of any overhead contact lines.
8. The materials from which lashing straps are manufactured have a different resistance to chemical agents. The instructions of the manufacturer or supplier must be observed if the lashing straps are likely to be exposed to chemicals. It should be taken into account that the effects of the chemical influence increase with increasing temperatures. The resistance of synthetic fibers to chemical agents is summarized below:
 - Polyamides are resistant to the action of alkalies but are attacked by mineral acids.
 - Polyester is resistant to mineral acids, but is attacked by alkaline solutions.
 - Polypropylene is little attacked by acids and alkalis and is suitable for applications where high resistance to chemicals (other than organic solvents) is required.
 - Harmless acid or alkali solutions can be concentrated by evaporation to cause damage. Contaminated lashing straps must immediately be taken out of service, rinsed in cold water and dried in air.
9. Lashing straps in accordance with this part of the European Standard DINEN12195 are suitable for use in the following temperature ranges:
 - -40°C to +80°C for Polypropylen (PP)
 - -40°C to +100°C for Polyamid (PA)
 - -40°C to +120°C for Polyester (PES)

These temperature ranges may vary depending on the chemical environment. In this case, the manufacturer or supplier's recommendations should be obtained. Changing the ambient temperature during transport may affect the force in the webbing. The lashing force must be checked after entry into warm regions.
10. Lashing straps must be taken out of service or returned to the manufacturer for repair if they show signs of damage. The following points are to be considered as signs of damage:
 - For straps (which must be taken out of service): cracks, cuts, indentations and breaks in load-carrying fibers and seams, deformations due to heat.
 - For end fittings and clamping elements: deformations, cracks, strong signs of wear and corrosion.



Only lashing straps with labels for their identification may be repaired. If there is an accidental contact with chemicals, the lashing must be taken out of service, and the manufacturers or suppliers are questioned.
11. It is important to ensure, that the lashing strap is not damaged by the edges of the load to which it is attached. Regular visual inspection before and after each use is recommended.
12. It should be used only legible marked and labeled lashing straps.
13. Lashing straps must not be overloaded: The maximum hand force of 500 N (50 daN on label, 1 daN \approx 1 kg) may only be applied with one hand. No mechanical aids such as rods or levers, etc., may be used, unless they are part of the clamping element.
14. Knotted lashing straps must not be used.
15. Damage to labels should be prevented by keeping them away from the edges of the load and, if possible, from the load.
16. Straps must be protected against friction and abrasion as well as damage caused by loads with sharp edges through the use of protective covers and/or edge protectors.

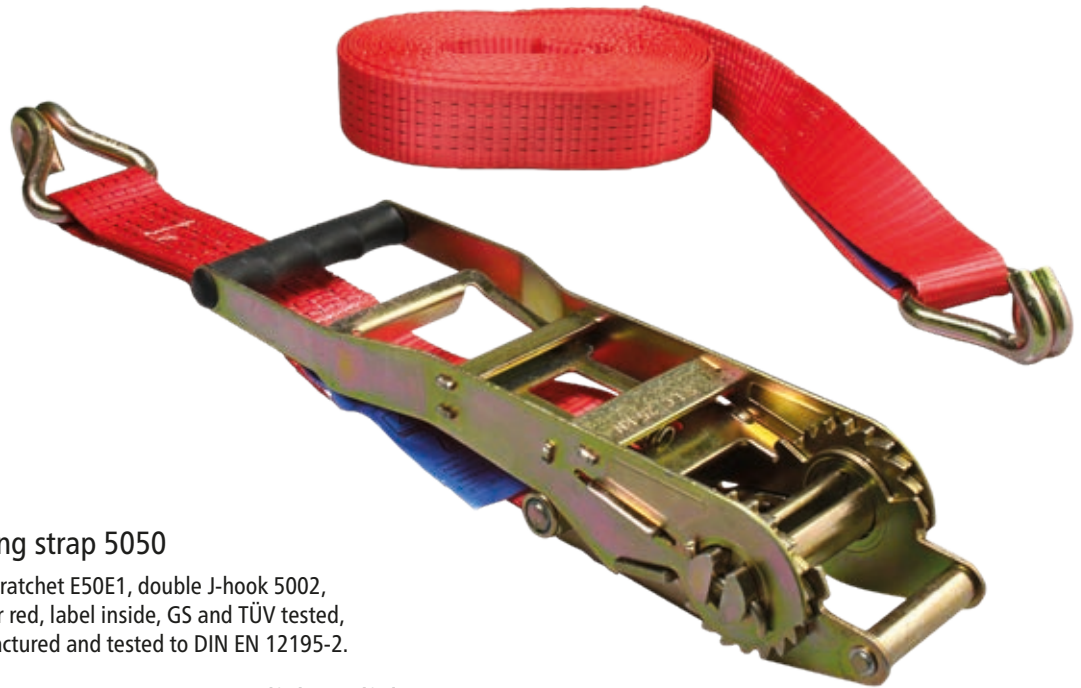
S-Line® Lashing straps may only be used for lashing loads. Please observe the following applicable regulations and technical regulations for load securing on road vehicles:
§§ 22 and 23 StVO, VDI 2700 and DIN EN 12195.



S-Line® Lashing strap 10050

Two-piece, ratchet R75E1, double J-hook 5016, strap width 75 mm, colour red, label inside, GS and TÜV tested, elongation < 7 %, manufactured and tested to DIN EN 12195-2.

	Length [m]	FE [m]	LE [mm]	SHF [daN]	STF [daN]	LC [daN] 	LC [daN] 
142137071	8.0	0.5	7.5	50	500	5000	10000



S-Line® Ergo lashing strap 5050

Two-piece, Ergo pull-type ratchet E50E1, double J-hook 5002, strap width 50 mm, colour red, label inside, GS and TÜV tested, elongation < 5 %, manufactured and tested to DIN EN 12195-2.

	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
142138792	3.0	0.5	2.5	50	500	2500	5000
142131852	8.0	0.5	7.5	50	500	2500	5000
142138625	9.0	0.5	8.5	50	500	2500	5000
142131854	10.0	0.5	9.5	50	500	2500	5000
142131855	12.0	0.5	11.5	50	500	2500	5000



S-Line® Ergo lashing strap 5050 - fixed end

Ergo pull-type ratchet E50E1, double J-hook 5002, strap width 50 mm, colour red, Label inside, GS and TÜV tested, elongation < 5 %, manufactured and tested to DIN EN 12195-2.

	Length [m]	FE [m]	LE [mm]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
142131858	0.5	0.5	--	50	500	2500	5000
142138807	1.0	1.0	--	50	500	2500	5000

S-Line® Lashing strap 5000 - loose end



Double J-hook 5002, strap width 50 mm, colour red, label inside, elongation < 5 %, manufactured and tested to DIN EN 12195-2.

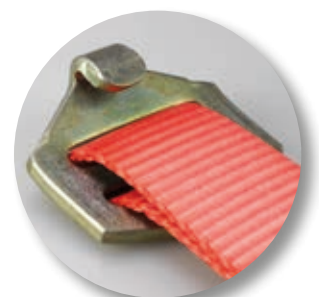
	Length [m]	FE [mm]	LE [mm]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
142138568	7.5	--	7.5	--	--	2500	5000
142131859	9.5	--	9.5	--	--	2500	5000



S-Line® Ergo lashing strap 5050

Two-piece, Ergo pull-type ratchet E50E1, double J-hook with safety catch 5005, strap width 50 mm, colour red, label inside, GS and TÜV tested, elongation < 5 %, manufactured and tested to DIN EN 12195-2.


	Length [m]	FE [m]	LE [mm]	SHF [daN]	STF [daN]	LC [daN] 	LC [daN] 
142138588	8.0	0.5	7.5	50	500	2500	5000



S-Line® Ergo lashing strap 5050

Two-piece, Ergo pull-type ratchet E50E1, simple flat hook 5006, strap width 50 mm, colour red, label inside, GS and TÜV tested, elongation < 5 %, manufactured and tested to DIN EN 12195-2.



For Krone trailers with side board.

	Length [m]	FE [m]	LE [mm]	SHF [daN]	STF [daN]	LC [daN] 	LC [daN] 
142138794	10.0	1.0	9.0	50	500	2500	5000



S-Line® Lashing strap 5035



Two-piece, ratchet R50E1, double J-hook 5002, strap width 50 mm, colour rot, label inside, GS and TÜV tested, elongation < 5 %.

	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN] 	LC [daN] 
142138793	6.0	0.5	5.5	50	350	2500	5000
142138239	8.0	0.5	7.5	50	350	2500	5000
142138623	9.0	0.5	8.5	50	350	2500	5000
142138240	10.0	0.5	9.5	50	350	2500	5000
142138247	12.0	0.5	11.5	50	350	2500	5000
142138580	15.0	0.5	14.5	50	350	2500	5000



S-Line® Lashing strap 5035 - fixed end



Ratchet R50E1, double J-hook 5002, strap width 50 mm, colour red, label inside, GS and TÜV tested, Elongation < 5 %, manufactured and tested to DIN EN 12195-2.

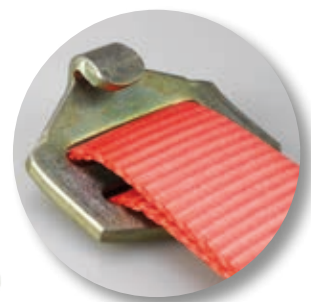
	Length [m]	FE [m]	LE [mm]	SHF [daN]	STF [daN]	LC [daN] 	LC [daN] 
142138803	0.5	0.5	--	50	350	2500	5000
142138804	1.0	1.0	--	50	350	2500	5000



S-Line® Lashing strap 5000 - loose end

Double J-hook 5002, strap width 50 mm, colour red, label inside, elongation < 5 %, manufactured and tested to DIN EN 12195-2.

	Length [m]	FE [mm]	LE [mm]	SHF [daN]	STF [daN]	LC [daN] 	LC [daN] 
142138568	7.5	--	7.5	--	--	2500	5000
142131859	9.5	--	9.5	--	--	2500	5000



S-Line® Lashing strap 5035

Two-piece, ratchet R50E1, simple flat hook 5006, strap width 50 mm, colour red, label inside, GS and TÜV tested, elongation < 5 %, manufactured and tested to DIN EN 12195-2.

For Krone trailers with side board.

	Length [m]	FE [m]	LE [mm]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
142131860	8.0	1.0	7.0	50	350	2500	5000
142131861	10.0	1.0	9.0	50	350	2500	5000



S-Line® Lashing strap 5035

Two-piece, ratchet R50E1, cranked double J-hook 5013, strap width 50 mm, colour red, label inside, GS and TÜV tested, elongation < 5 %, manufactured and tested to DIN EN 12195-2.



For Krone trailers without side board.

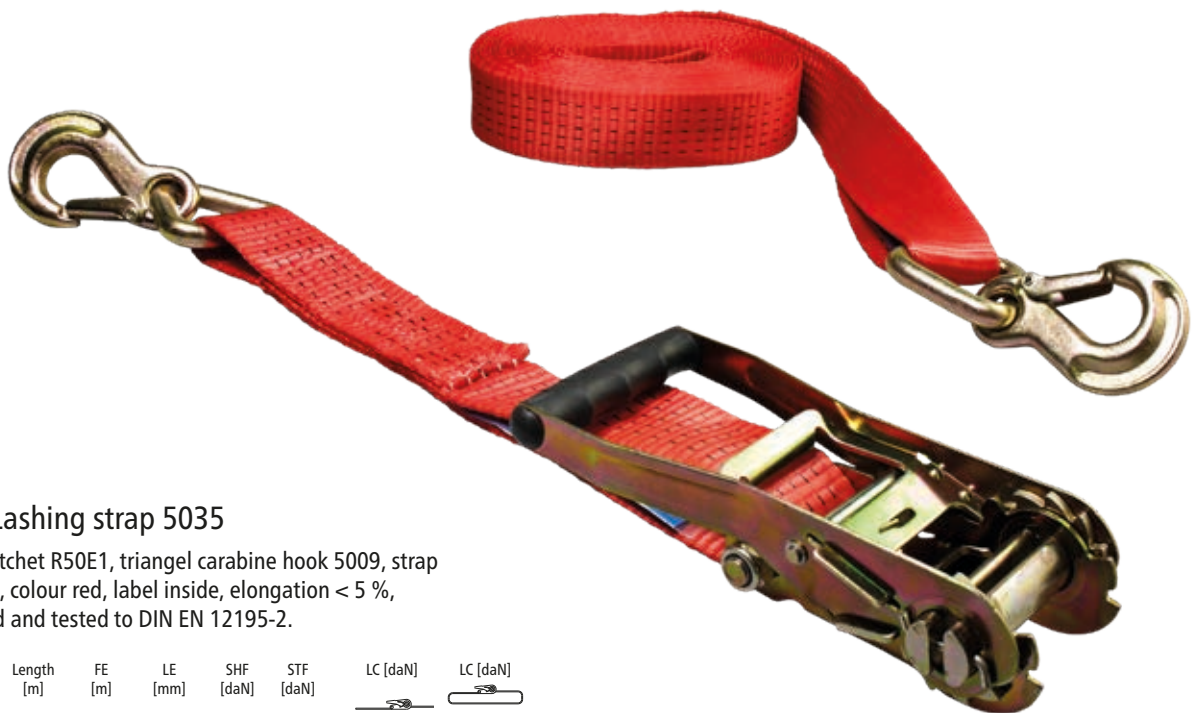
	Length [m]	FE [m]	LE [mm]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
142138805	8.0	1.0	7.0	50	350	2500	5000
142138806	10.0	1.0	9.0	50	350	2500	5000



S-Line® Lashing strap 5035



Two-piece, ratchet R50E1, double J-hook with safety catch 5005, strap width 50 mm, colour red, label inside, GS and TÜV tested, elongation < 5 %, manufactured and tested to DIN EN 12195-2.

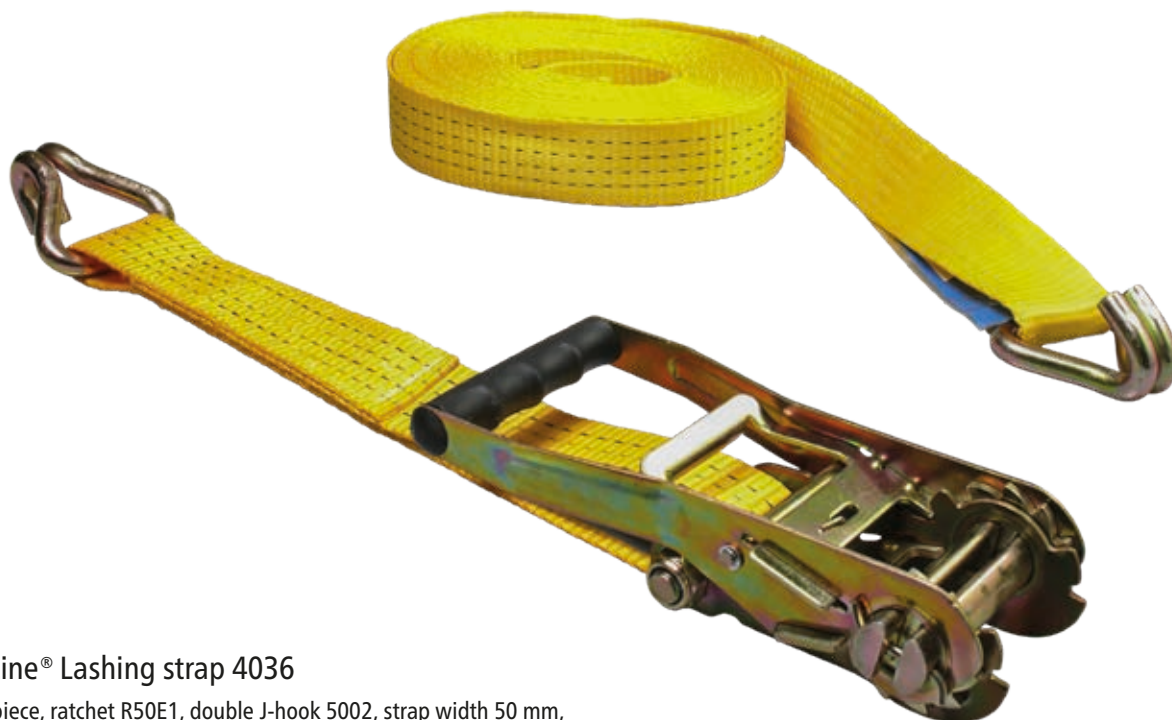
	Length [m]	FE [m]	LE [mm]	SHF [daN]	STF [daN]	LC [daN] 	LC [daN] 
142138699	8.0	0.5	7.5	50	350	2500	5000



S-Line® Lashing strap 5035



Two-piece, ratchet R50E1, triangle carabine hook 5009, strap width 50 mm, colour red, label inside, elongation < 5 %, manufactured and tested to DIN EN 12195-2.

	Length [m]	FE [m]	LE [mm]	SHF [daN]	STF [daN]	LC [daN] 	LC [daN] 
142138713	8.0	0.5	7.5	50	350	2500	5000
142138715	12.0	0.5	11.5	50	350	2500	5000



S-Line® Lashing strap 4036



Two-piece, ratchet R50E1, double J-hook 5002, strap width 50 mm, colour yellow, label inside, GS and TÜV tested, elongation < 5 %, manufactured and tested to DIN EN 12195-2.

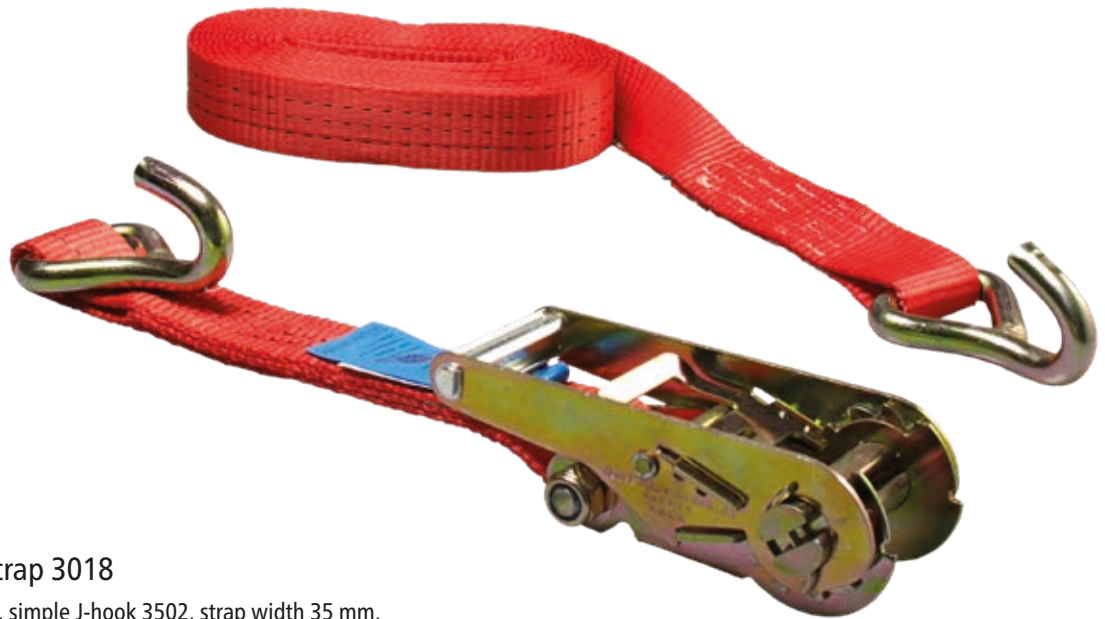
	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN] 	LC [daN] 
142138569	8.0	0.5	7.5	50	360	2000	4000
142138753	9.0	0.5	8.5	50	360	2000	4000
142138248	10.0	0.5	9.5	50	360	2000	4000



S-Line® Lashing strap 4000 - loose end



Double J-hook 5002, strap width 50 mm, colour orange, label inside, elongation < 5 %, manufactured and tested to DIN EN 12195-2.

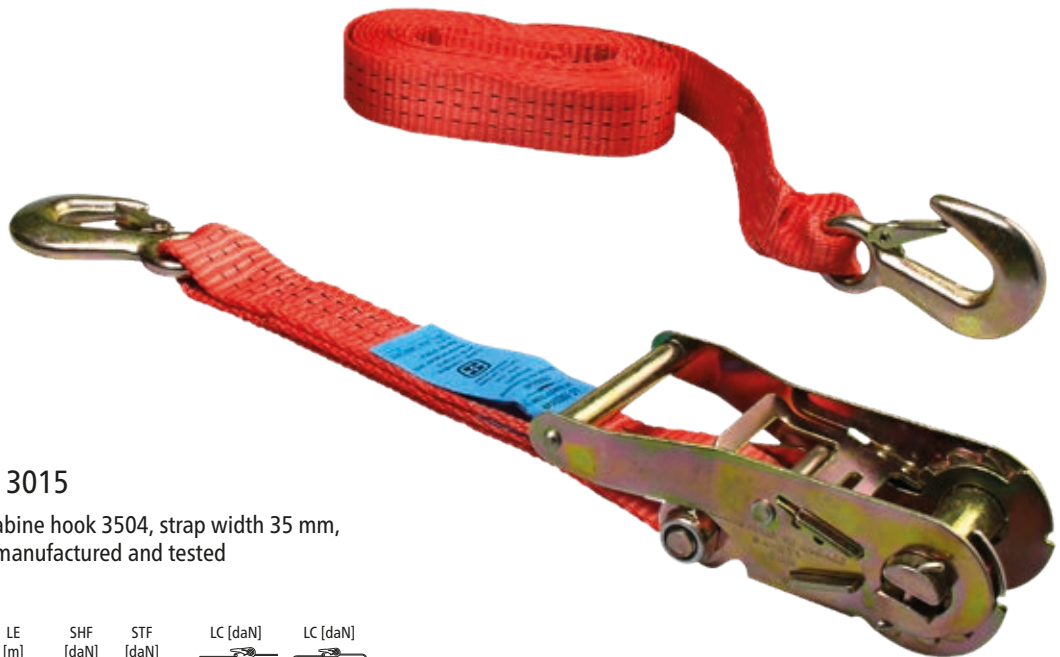
	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN] 	LC [daN] 
142138709	2.5	--	2.5	--	--	2000	4000
142138710	9.5	--	9.5	--	--	2000	4000



S-Line® Lashing strap 3018



Two-piece, ratchet R35S1, simple J-hook 3502, strap width 35 mm, colour red, elongation < 5 %, manufactured and tested to DIN EN 12195-2.

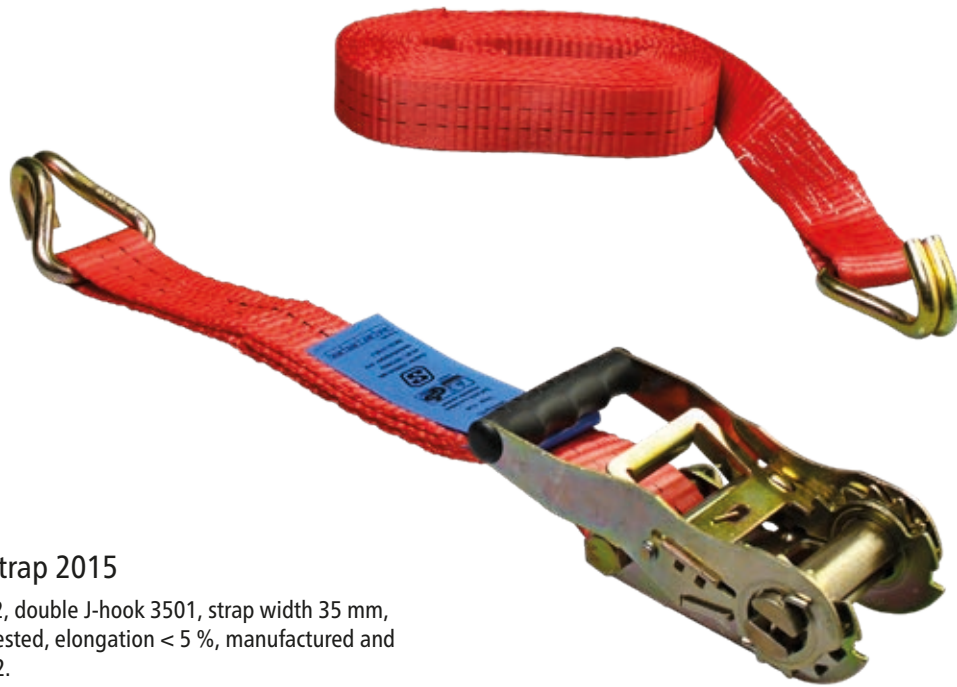
	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
							
142138535	4.0	0.3	3.7	50	180	1500	3000
142138536	6.0	0.3	5.7	50	180	1500	3000



S-Line® Lashing strap 3015

Two-piece, ratchet R35B1, carabine hook 3504, strap width 35 mm, colour red, elongation < 5 %, manufactured and tested to DIN EN 12195-2.

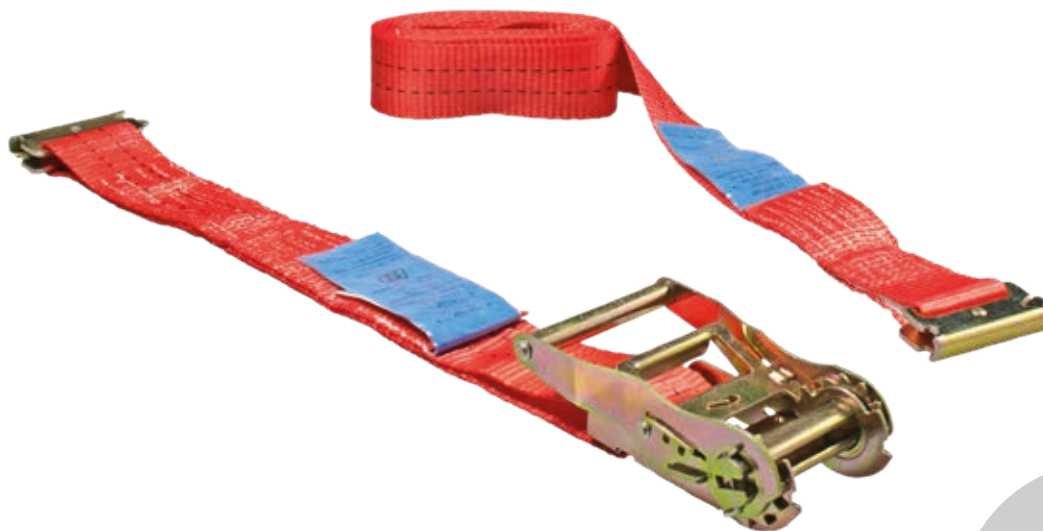
	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
							
142138716	4.0	0.3	3.7	50	150	1500	3000
142138717	6,0	0,3	5,7	50	150	1500	3000



S-Line® Lashing strap 2015

Two-piece, ratchet R35B2, double J-hook 3501, strap width 35 mm, colour red, GS and TÜV tested, elongation < 5 %, manufactured and tested to DIN EN 12195-2.

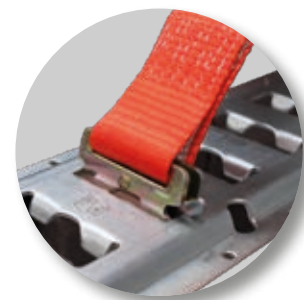
	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN] 	LC [daN]
142138534	6.0	0.3	5.7	50	150	1000	2000

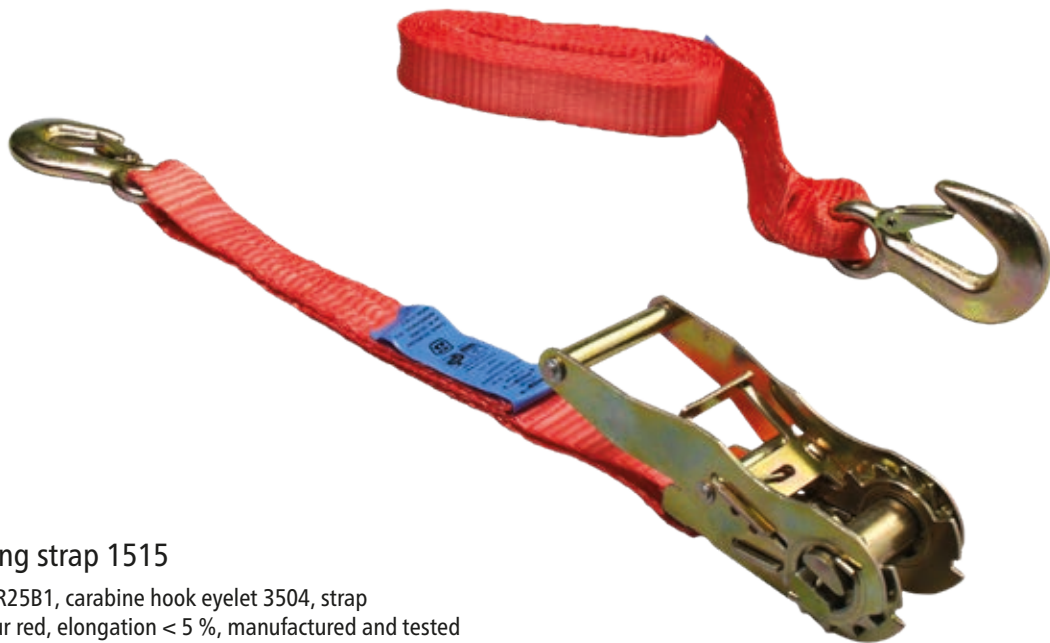


S-Line® Lashing strap 2015

Two-piece, ratchet R50B1, combi anchor track end fitting 5001, strap width 50 mm, colour red, elongation < 5 %, manufactured and tested to DIN EN 12195-2.



	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN] 	LC [daN]
142138539	3.0	0.5	2.5	50	150	1000	2000
142138540	4.0	0.5	3.5	50	150	1000	2000
142138808	4.5	1.5	3.0	50	150	1000	2000
142138541	5.0	0.5	4.5	50	150	1000	2000
142138572	10.0	0.5	9.5	50	150	1000	2000





S-Line® Lashing strap 1515



Two-piece, ratchet R25B1, carabine hook eyelet 3504, strap width 25 mm, colour red, elongation < 5 %, manufactured and tested to DIN EN 12195-2.

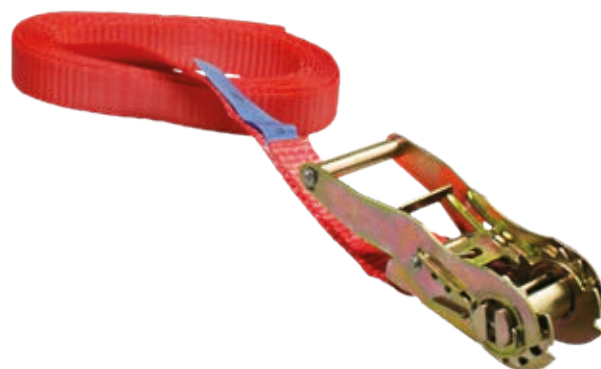
	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN] 	LC [daN] 
142138818	4.0	0.3	3.7	50	150	750	1500



S-Line® Lashing strap 1515

Two-piece, ratchet R25B1, double J-hook 2503, strap width 25 mm, colour blue, elongation < 5 %, manufactured and tested to DIN EN 12195-2.

	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN] 	LC [daN] 
142138749	6.0	0.3	5.7	50	150	750	1500



S-Line® Lashing strap 1515

Two-piece, ratchet R25B1, double J-hook 2503, strap width 25 mm, colour red, GS and TÜV tested, elongation < 5 %, manufactured and tested to DIN EN 12195-2.

	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
142138530	4.0	0.3	3.7	50	150	750	1500
142138531	6.0	0.3	5.7	50	150	750	1500

S-Line® Lashing strap 1515

One-piece, ratchet R25B1, strap width 25 mm, colour red, elongation < 5 %, manufactured and tested to DIN EN 12195-2.

	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
142138526	4.0	--	--	50	150	--	1500
142138527	6.0	--	--	50	150	--	1500



S-Line® Lashing strap 1015

Two-piece, ratchet R25B1, flat hook 2504 with safety catch for pin anchor track Ø 8 mm, strap width 25 mm, colour red, elongation < 7 %, manufactured and tested to DIN EN 12195-2.



	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
142138532	4.0	0.3	3.7	50	150	500	1000
142138533	6.0	0.3	5.7	50	150	500	1000





S-Line® Lashing strap 615



Two-piece, ratchet R25B1, S-hook 2501 with PVC coating, strap width 25 mm, colour red, elongation < 5 %, manufactured and tested to DIN EN 12195-2.

	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
							
142138528	2.0	0.3	1.7	50	150	300	600
142138529	4.0	0.3	3.7	50	150	300	600



S-Line® Lashing strap 510



One-piece, ratchet R25L1, strap width 25 mm, colour red, elongation < 5 %, manufactured and tested to DIN EN 12195-2.

	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
							
142138525	6.0	--	--	50	100	--	500



S-Line® Cam buckle strap 400

One-piece, cam buckle K25S, strap width 25 mm, colour red, GS and TÜV tested, elongation < 5 %.

	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
							
142138524	3.0	--	--	--	--	--	400



S-Line® Cam buckle strap 350

One-piece, cam buckle K25S, strap width 25 mm, colour red, elongation < 7%, manufactured and tested to DIN EN 12195-2.

	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
142139002	2,0	--	--	--	--	--	350



S-Line® Cam buckle strap 300

Two-piece, cam buckle K25S, double J-hook 2503, strap width 25 mm, colour blue, elongation < 5%.

	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
142138747	6.0	0.3	5.7	--	--	150	300

S-Line® Cam buckle strap 250

One-piece, cam buckle K25L, strap width 25 mm, colour red, GS and TÜV tested, elongation < 5%.

	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
142138523	5.0	--	--	--	--	--	250



S-Line® Lashing strap 2015

Two-piece, ratchet R50B1, double Airline fitting 571 threaded with sewn-in safety seam, strap width 50 mm, colour red, elongation < 5 %, manufactured and tested to DIN EN 12195-2.

	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
142138577	3.0	0.3	2.7	50	150	1000	2000
142138578	5.0	0.5	4.5	50	150	1000	2000



S-Line® Lashing strap 1515

Two-piece, ratchet R25B1, double Airline fitting 571 threaded with sewn-in safety seam, strap width 25 mm, colour rot, elongation < 5 %, manufactured and tested to DIN EN 12195-2.

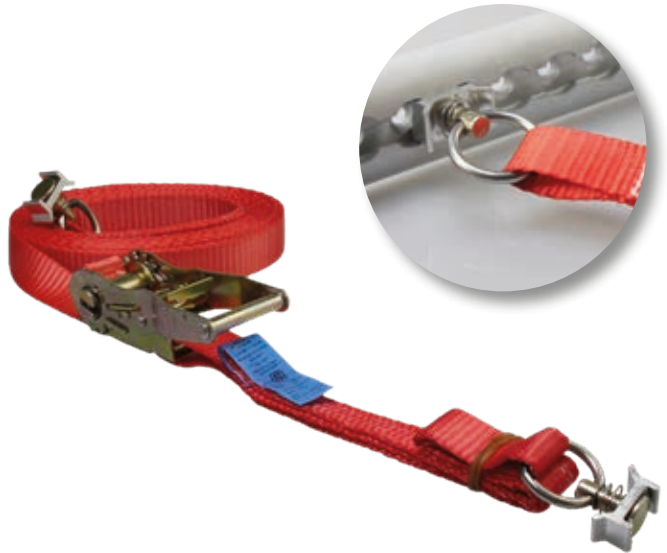
	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
142138576	6.0	0.5	5.5	50	150	750	1500



S-Line® Cam buckle strap 300

Two-piece, cam buckle K25S, simple Airline-Fitting 570 threaded with sewn-in safety seam, strap width 25 mm, colour red, elongation < 5 %, manufactured and tested to DIN EN 12195-2.

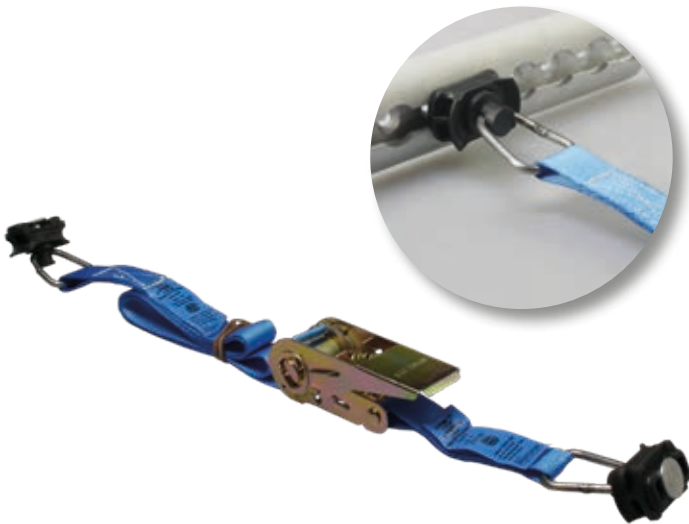
	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
142138574	5.0	0.5	4.5	--	--	150	300



S-Line® Lashing strap 1515

Two-piece, ratchet R25B1, simple Airline fitting 570, threaded with sewn-in safety seam, strap width 25 mm, colour red, elongation < 5 %, manufactured and tested to DIN EN 12195-2.

	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
142138575	3.4	0.2	3.2	50	150	750	1500
142138573	5.0	0.5	4.5	50	150	750	1500



S-Line® Lashing strap 510

Two-piece, ratchet R25L1, simple Airline fitting 600, strap width 25 mm, colour blue, elongation < 5 %, manufactured and tested to DIN EN 12195-2.

	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
142138748	1.1	0.1	1.0	50	100	250	500



S-Line® Cam buckle strap 300

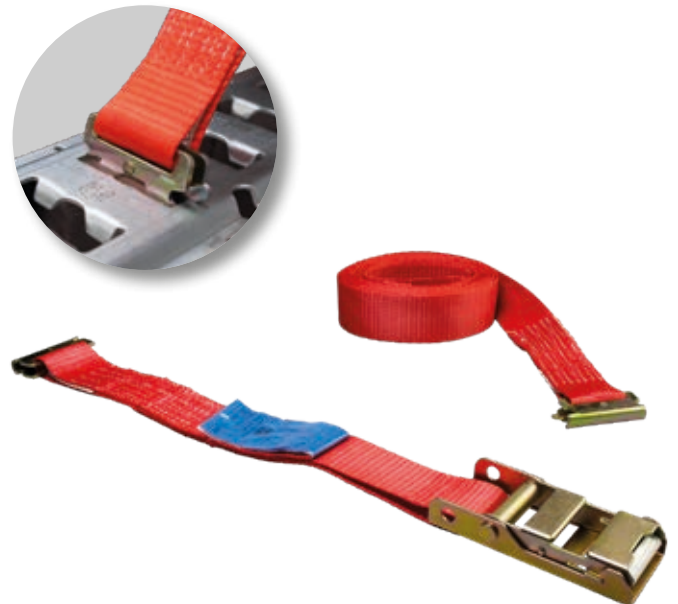
Two-piece, cam buckle K25S, simple Airline fitting 600, strap width 25 mm, colour blue, elongation < 5 %, manufactured and tested to DIN EN 12195-2.

	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
142138746	1.1	0.1	1.0	--	--	150	300



S-Line® products are the perfect equipment for load securing in caravan vehicles.





S-Line® Over center lock strap 1800

Two-piece, over center lock O50S2, combi anchor track end fitting 5001, strap width 50 mm, colour gray, label inside, elongation < 5 %, manufactured and tested to DIN EN 12195-2.






















	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
142138860	3,5	1,0	2,5	--	--	900	1800

S-Line® Over center lock strap 1500

Two-piece, over center lock O50S1, combi anchor track end fitting 5001, strap width 50 mm, colour red, label inside, elongation < 5 %, manufactured and tested to DIN EN 12195-2.

	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
142138810	5,0	0,5	4,5	--	--	750	1500

Table: Lashing strap end fittings compatibility with anchor tracks

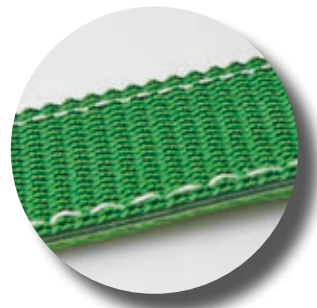
																	
	142138031	✓	✓	✓	✓	✓	✓	✓	✓	✓							
	142138032	✓	✓	✓	✓	✓	✓	✓	✓	✓							
	142138034	✓	✓	✓	✓	✓	✓	✓	✓	✓							
	142138589	✓	✓	✓	✓	✓	✓	✓	✓	✓							
	142138590	✓	✓	✓	✓	✓	✓	✓	✓	✓							
	142138712	✓	✓	✓	✓	✓	✓	✓	✓	✓							
	142138718	✓	✓	✓	✓	✓	✓	✓	✓	✓							
	142138719	✓	✓	✓	✓	✓	✓	✓	✓	✓							
	142138788	✓	✓	✓	✓	✓	✓	✓	✓	✓							
	142138791	✓	✓	✓	✓	✓	✓	✓	✓	✓							
	142138863	✓	✓	✓	✓	✓	✓	✓	✓	✓							
	142138874	✓	✓	✓	✓	✓	✓	✓	✓	✓							
	142138893	✓	✓	✓	✓	✓	✓	✓	✓	✓							
	142138898	✓	✓	✓	✓	✓	✓	✓	✓	✓							
	142138953	✓	✓	✓	✓	✓	✓	✓	✓	✓							
142139026	✓	✓	✓	✓	✓	✓	✓	✓	✓								
142138703 *	✓	✓	✓	✓	✓												
	142138021											✓	✓				
	142138023											✓	✓				
	142138700											✓	✓				
	142138826											✓	✓				
	142138008											✓	✓				
	142138015											✓	✓				
	142138016											✓	✓				
	142138017											✓	✓				
	142138019											✓	✓				
	142138289											✓	✓				
	142138612											✓	✓				
	142138701											✓	✓				
	142138754											✓	✓				
	142138841											✓	✓				
142138852											✓	✓					
	142138001											✓	✓				
	142138254										✓			✓	✓	✓	
	142138269										✓			✓	✓	✓	
	142138636										✓			✓	✓	✓	✓
	142138743													✓	✓	✓	✓
	142138755										✓			✓	✓	✓	
	142138835													✓	✓	✓	



S-Line® Three point car transport lashing strap 5025

Two-piece, ratchet R50S1 with rotatable simple J-hook 5010 (mounted). Loose end with rotatable simple J-hook 5019 and loose rotatable simple J-hook 5019. Including green abrasion protection (controller) in 750 mm length. Loose end threaded with sewn-in safety seam. Strap width 50 mm, colour orange, elongation < 4 %, manufactured and tested to DIN EN 12195-2.

	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
142138587	2.8	--	2.8	50	250	2500	5000





We recommend the car transport securing in conjunction with wheel chocks (see page 103).

S-Line® Three point car transport lashing strap 4025

Two-piece, ratchet R50S1 with rotatable simple J-hook 5010 (mounted). Loose end with double J-hook 5002 and loose double J-hook 5002, including blue abrasion protection in 1000 mm length. Loose end threaded with sewn-in safety seam. Strap width 50 mm, colour orange, elongation < 4 %, manufactured and tested to DIN EN 12195-2.



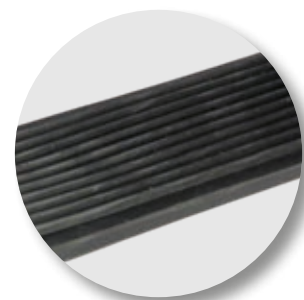
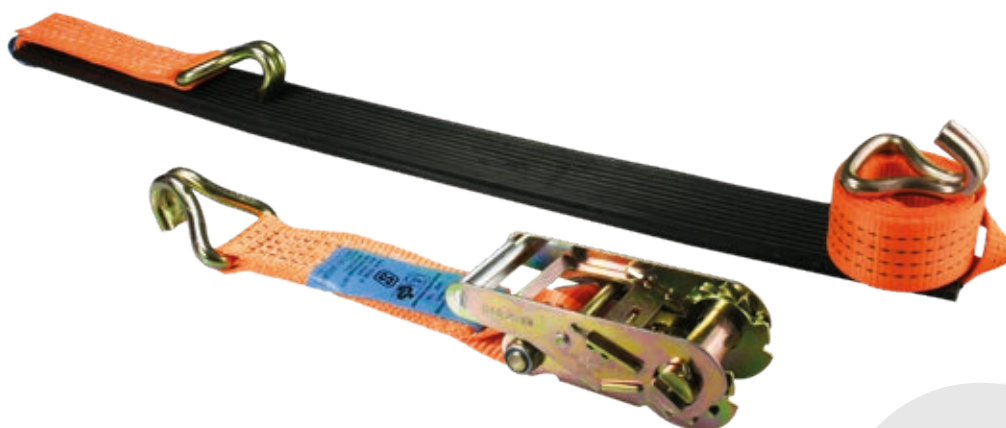
	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
142138591	2.8	--	2.8	50	250	2000	4000



S-Line® Three-point car transport lashing strap 4025

Two-piece, ratchet R50S1 with double J-hook and loose double J-hook 5002 on loose end, including 3 abrasion protection pads. Loose end threaded and with safety seam. Strap width 50 mm, colour orange, elongation < 4 %, manufactured and tested to DIN EN 12195-2.

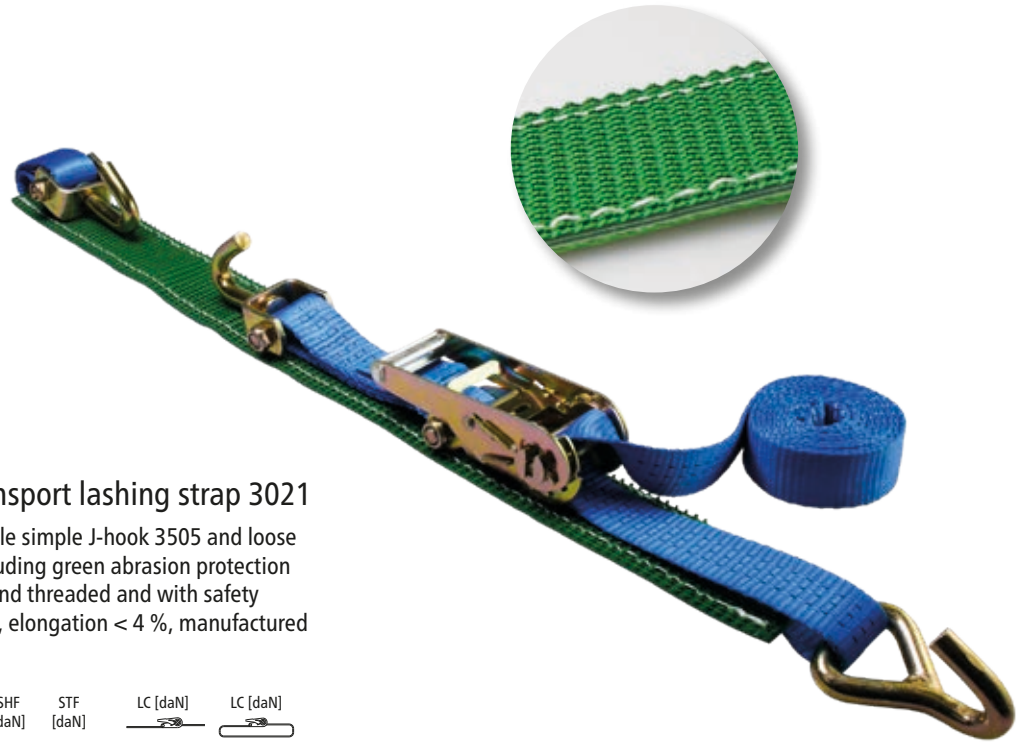
	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
142138707	2.7	0.2	2.5	50	250	2000	4000



S-Line® Three point car transport lashing strap 4025

Two-piece, ratchet R50S1 with double J-hook 5002 and loose double J-hook 5002 at loose end, including abrasion protection (rubber controller) black in 700 mm length. Loose end threaded and with safety seam. Strap width 50 mm, colour orange, elongation < 4 %, manufactured and tested to DIN EN 12195-2.

	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
142138706	2.5	0.2	2.3	50	250	2000	4000



S-Line® Three point car transport lashing strap 3021

Two-piece, ratchet R35S3 with rotatable simple J-hook 3505 and loose simple J-hook 3502 on loose end, including green abrasion protection (controller) in 750 mm length. Loose end threaded and with safety seam. Strap width 35 mm, colour blue, elongation < 4 %, manufactured and tested to DIN EN 12195-2.

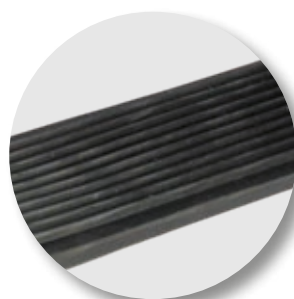
	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
142138819	3.2	0.2	3.0	50	210	1500	3000





S-Line® Three point car transport lashing strap 3018

Two-piece, ratchet R35S1 with double J-hook and loose double J-hook 3501, including abrasion protection (rubber controller) black in 700 mm length. Loose end threaded and with safety seam. Strap width 35 mm, colour orange, elongation < 4 %, manufactured and tested to DIN EN 12195-2.



	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
142138705	2.5	0.2	2.3	50	180	1500	3000



S-Line® Three point car transport lashing strap 3018 for lateral wheel lashing

Three-piece, ratchet R35B1, simple J-hook 3502, cross-strap 0,4 m. Loose end threaded and with safety seam. Strap width 35 mm, orange, elongation < 4 %, manufactured and tested to DIN EN 12195-2.

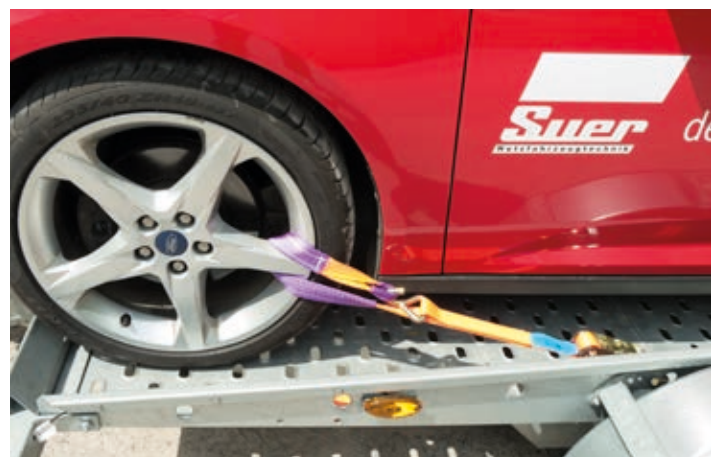
	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
142138586	3.3	0.3	3.0	50	180	1500	3000



S-Line® Three point car transport lashing strap 3018 for lateral wheel lashing

Two-piece, ratchet R35S1 with rotatable simple J-hook 3505 and simple J-hook 3502 stitched at 600 mm from the loop end, 150 mm loop with violet abrasion protection between the loop and the stitched J-hook. Loose end threaded and with safety seam. Strap width 35 mm, colour orange, elongation < 4 %, manufactured and tested to DIN EN 12195-2.

	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
142138801	1.5	--	1.5	50	180	1500	3000



S-Line® Y car transport lashing strap 2025
for lateral wheel lashing

Two-piece with double J-hook, D-ring, buckle and small ratchet R50S1. Loose end threaded and with safety seam. Strap width 50 mm, colour blue, elongation < 4 %, manufactured and tested to DIN EN 12195-2. In the Y divider a belt part with buckle 0.2 m and a belt part 1.8 m.

	Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
142138853	2,8	2,0	0,8	50	250	1000	2000





S-Line® Abrasion protection

For car transport straps with webbing width 50 mm, black rubber, length 700 mm.

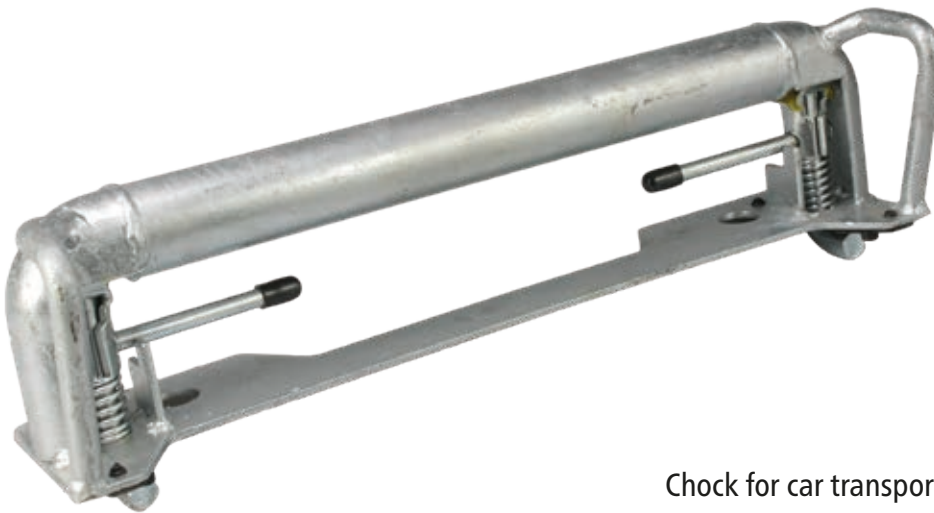
142138708



S-Line® Abrasion protection

Profiled rubber surface, for car transport lashing straps with webbing width 50 mm, green, length 750 mm.

142138711



Chock for car transporters

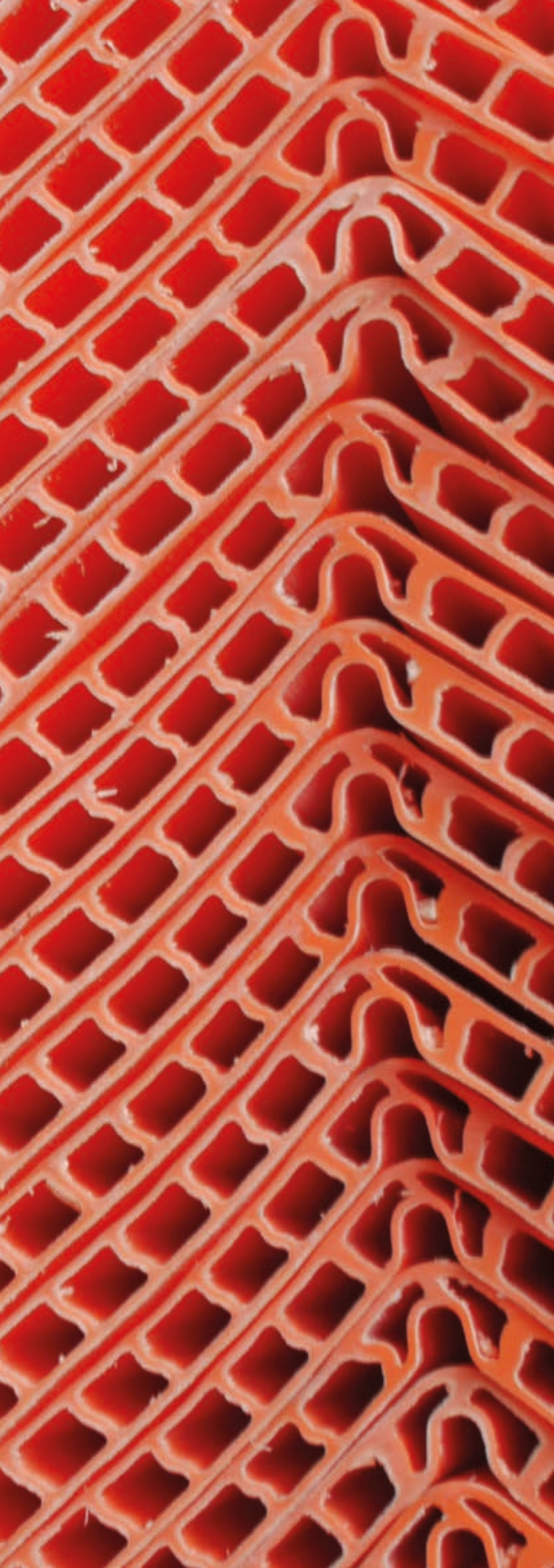
Dimensions ca. 515 x 120 x 149 mm, galvanized steel, weight 3.97 kg.

250141723

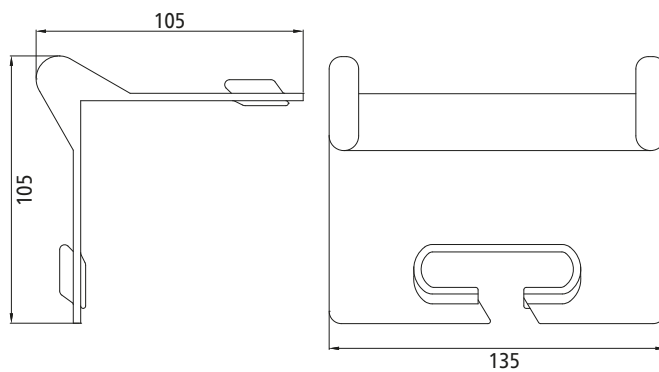




AUXILIARIES



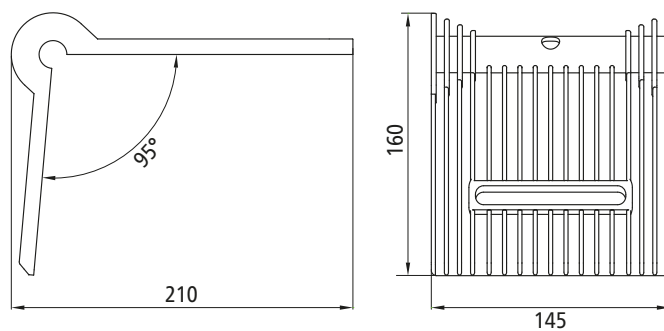
EDGE PROTECTION	110
DEPOT HOLDER FOR EDGE PROTECTORS	113
ANTI-SLIP MAT	114
ANTI-SLIP FLOOR	115
WRIST STRAP	115



S-Line® Edge protector

White plastic, with open slot for strap guidance.

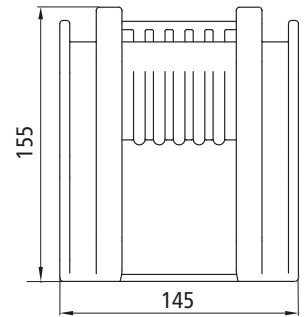
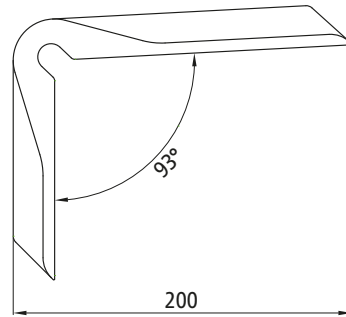
	Side length [mm]	Width [mm]	Weight [kg]
142138519	105 x 105	135	0,07



S-Line® Edge protector

Red plastic, with reinforcement and hollow channelling.
 Suitable for paper transport or similarly delicate goods.

	Side length [mm]	Width [mm]	Weight [kg]
142138825	210 x 160	145	0,20



S-Line® Edge protector

Black plastic, with reinforcement and hollow channelling.
Suitable for paper transport or similarly delicate goods.

	Side length [mm]	Width [mm]	Weight [kg]
142131857	200 x 155	145	0,24



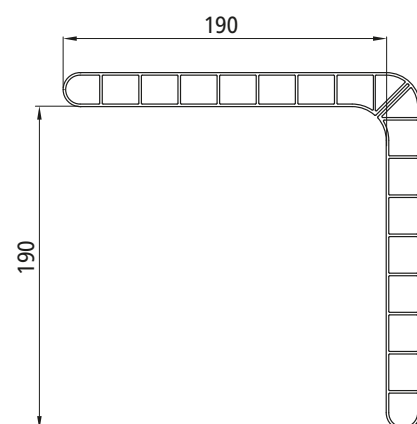


S-Line® Edge protector

Orange plastic.

Length can be shortened individually.

	Side length [mm]	Length [m]	Weight [kg/m]
142138840	190 x 190	0,80	2,51
142138704	190 x 190	1,20	2,51
142131856	190 x 190	5,85	2,51



S-Line® Depot holder Set 1

Installation on sideboards, length individually adjustable.

142138857

Content consisting of:

1 Stück S-Line® Depot holder for edge protectors (see below)

142138848

2 Stück S-Line® Cam buckle strap 350 (see below)

142139002

S-Line® Depot holder Set 2

Installation on sideboards, length individually adjustable.

142138858

Content like Set 1 plus:

10 Stück S-Line® Edge protector 1200 mm (see page 112)

142138704



S-Line® Depot holder Set 3

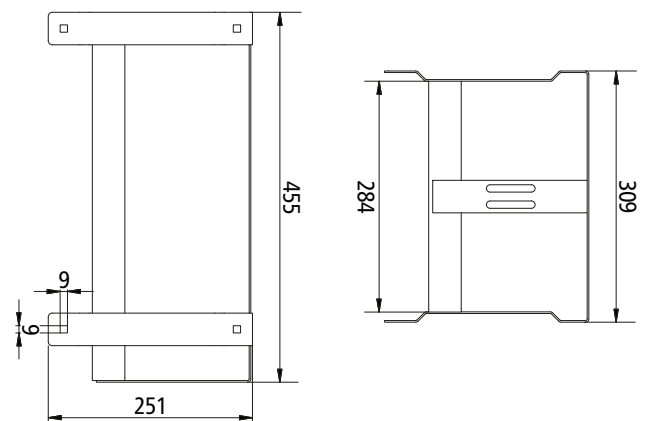
Installation on sideboards, length individually adjustable.

142138859

Content like Set 1 plus:

14 Stück S-Line® Edge protector 800 mm (see page 112)

142138840



S-Line® Cam buckle strap 350

Single, cam buckle K25S, strap width 25 mm, colour red, elongation < 7 %, according to DIN EN 12195-2.

Length [m]	FE [m]	LE [m]	SHF [daN]	STF [daN]	LC [daN]	LC [daN]
142139002	2,0	--	--	--	--	350

S-Line® Depot holder for edge protectors

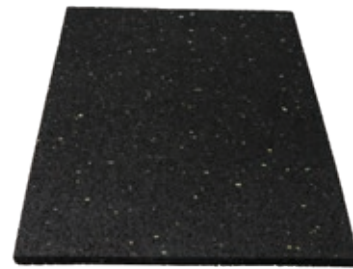
Consisting of 2 retaining plates, galvanized steel. Installation on sideboards, length individually adjustable. Suitable for up to 14 edge protectors 142138840 or 142138704.

142138848

S-Line® Anti-slip mat pad

PU bonded rubber granulat, black flecked.
 Certified by Fraunhofer Institut.

	Dimensions [mm]	Friction coefficient [μ]	Weight [kg]
142131387	300 x 200 x 8	0,6	0,35



Individual sizes for pads and rolls on request - maximum width 1500 mm.

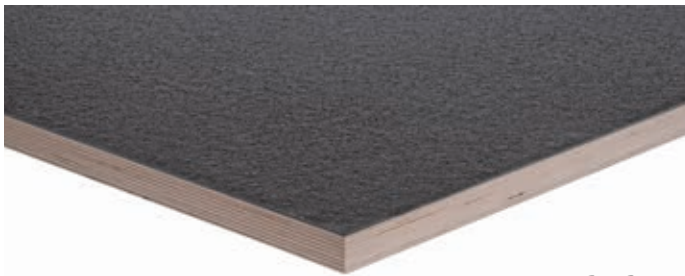
S-Line® Anti-slip mat roll

PU bonded rubber granulat, black flecked.
 Certified by Fraunhofer Institut.

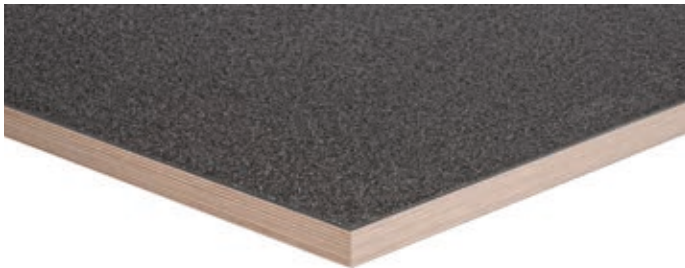
	Dimensions [mm]	Friction coefficient [μ]	Weight [kg]
142131386	5000 x 250 x 8	0,6	7,20



No slipping up to an angle of 40°.



Without Granulat



With Granulat



Anti-slip floor WISA®-TopGrip EVO2

Birch veneer plywood panel with a non-slip coating. Weatherproof gluing with phenolic resin in accordance with standard EN 314-2/Class 3 exterior, EN 636-3. PU-based surface Coating (with or without granule admixture) with friction coefficient (VDI2700 sheet 14) > 0.8 measured between WISA®-TopGrip EVO2 and euro pallet Taber Abrasion value for abrasion resistance (DIN 53799) 20,000 revolutions, dark brown phenolic resin film resin as moisture barrier on the back, edge protection: acrylic resin paint.

	Size [mm]	Nominal thickness/coating [mm]	Weight [kg/m ²]	Granules
360713309	1250 x 2500	30/2	22,4	without
360713327	1250 x 2500	27/3	20,4	with
360713337	1500 x 2500	27/3	20,4	with

WISA®-TopGrip is a stable birch veneer plywood with a non-slip coating. It was developed specifically for applications requiring a high slip resistance.

WISA®-TopGrip is particularly suitable for the transport of wooden pallets. Since the floor is already provided with a non-slip material, there is no need for separate non-slip mats for single use. This has a positive effect on the company's work processes and accelerates the loading process.

A durable and sustainable floor not only saves time but also money and also relieves the environment.

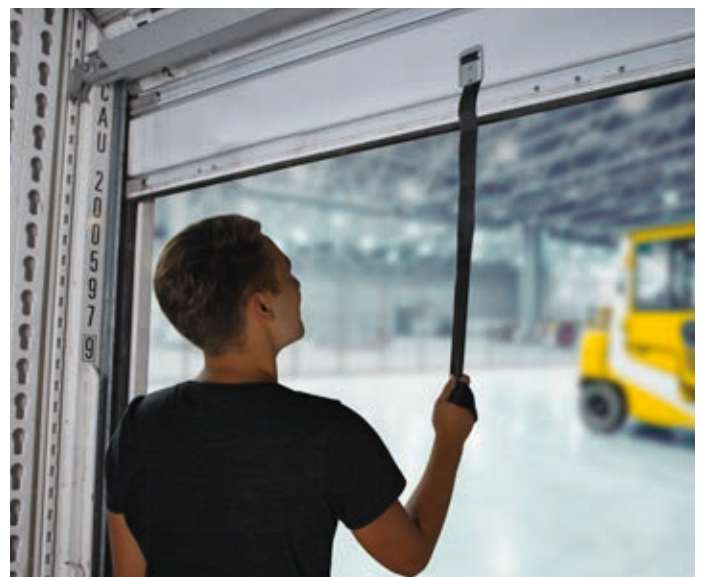
(Manufacturers information)



S-Line® Wrist strap with retaining plate

For rolling and folding doors, black, with 2 fixing holes, fabric width 50 mm.

	Length [mm]
142138876	500
142138877	1200



LOAD SECURING SETS





LOAD SECURING SET NO. 1

118

LOAD SECURING SET NO. 2

119

Nothing amiss!

S-Line® Load securing set No. 1a

Without tool box.

142138784

S-Line® Load securing set No. 1b

With tool box "Magic 100" (390141690).

1000 x 500 x 490 mm (w/h/d), with rotary lock and cylinder lock.

142138785

Consisting of:

30 pieces Anti-slip matting pad 300 x 200 x 8 mm.

142131387

36 pieces Edge protector, black plastic, width 145 mm,
side length 200 x 155 mm.

142131857

18 pieces Lashing strap 5035, two-piece, 8 m, ratchet R50E1,
double J-hook 5002, strap width 50 mm, colour red,
label inside, GS and TÜV tested, elongation < 5 %.

142138239



S-Line® Load securing set No. 2a

Without tool box.

142138786

S-Line® Load securing set No. 2b (Illustration)

With tool box "Magic 60" (390141695).

600 x 450 x 470 mm (w/h/d), with rotary lock and cylinder lock.

142138787

Consisting of:

24 pieces Anti-slip matting pad 300 x 200 x 8 mm.

142131387

16 pieces Edge protector, black plastic, width 145 mm,
side length 200 x 155 mm.

142131857

9 pieces Lashing strap 5035, two-piece, 8 m, ratchet R50E1,
double J-hook 5002, strap width 50 mm, colour red,
label inside, GS and TÜV tested, elongation < 5 %.

142138239



CARGO NETS





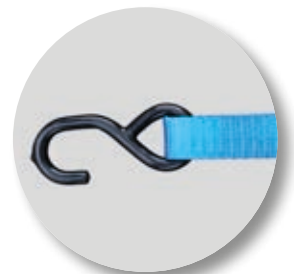
CARGO RESTRAINING NET	122
CARGO CONTROL NET	123
CARGO COVER NETS	124
INDIVIDUAL NETS	125



S-Line® Cargo restraining net

Polyester webbing 25 mm, blue, mesh width 175 x 175 mm.
 Protected label, with PVC coated S-hooks 2501 and flat hook safety catch 2504 for pins ø 8 mm.
 Additional 2 adapter straps 1000 mm with PVC coated S-hook 2501 and cam bucket K25G.

	Application height [mm]	Application width [mm]	LC net overall [daN]	LC net attachment point [daN]
142138820	1805	1550 - 1850	800	600

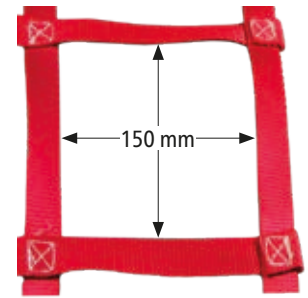
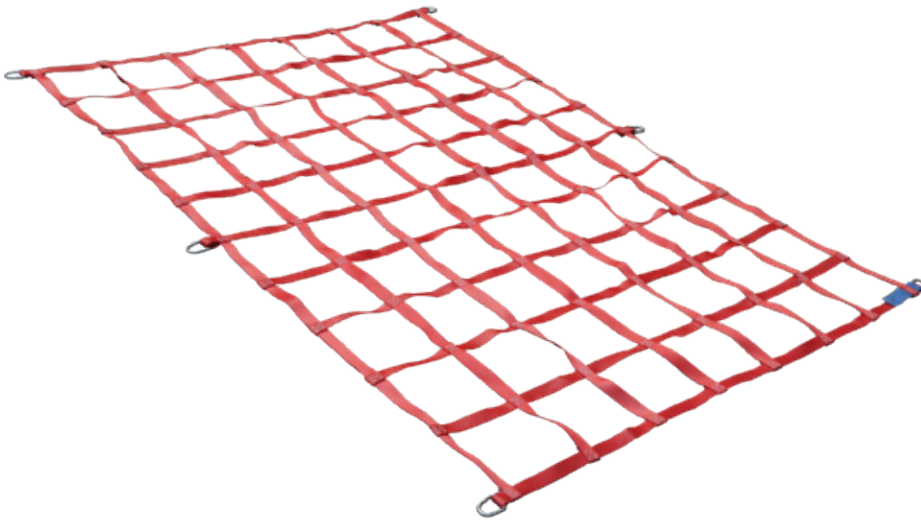


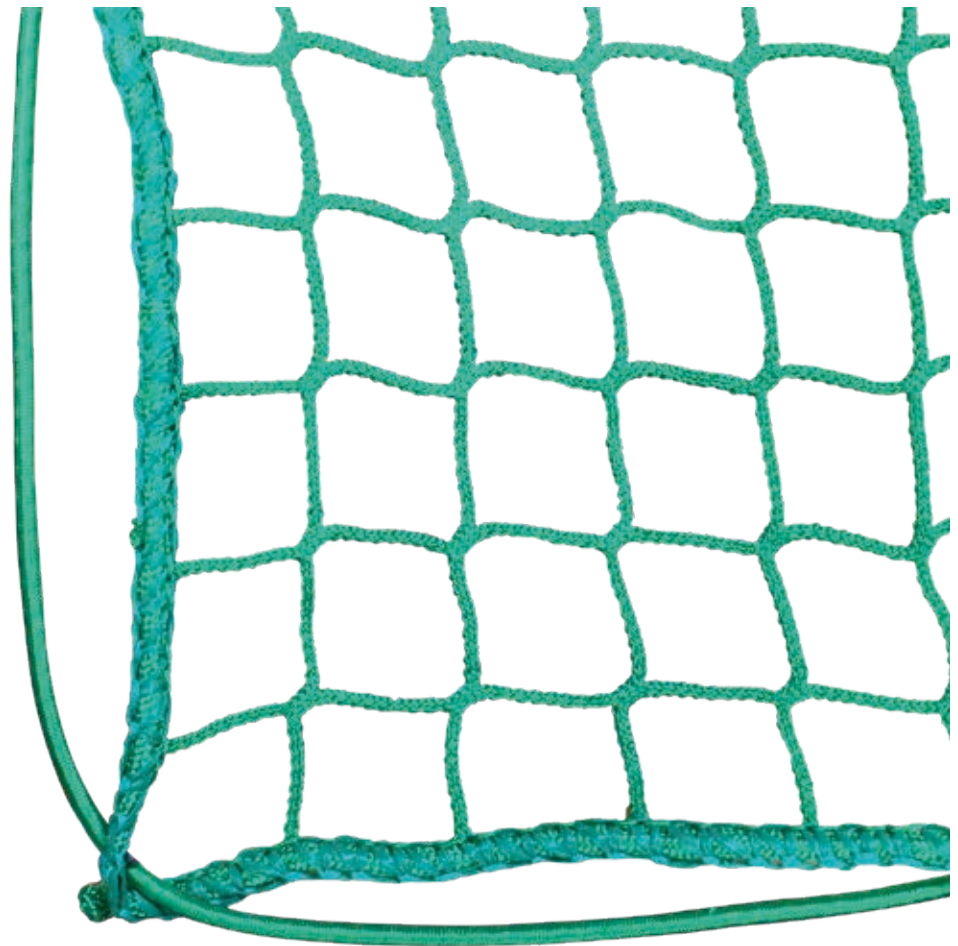
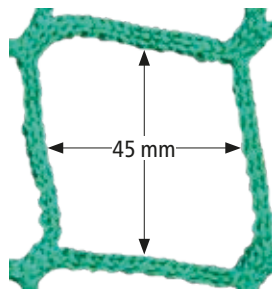


S-Line® Cargo net

Polyester webbing 25 mm, red, mesh width 150 x 150 mm.
Protected label, circumferential 6 D-rings.

	Dimensions [mm]	LC net overall [daN]	LC net attachment point [daN]
142138811	1800 x 1200	1000	500





S-Line® Cargo cover nets for car trailers, flatbeds and containers

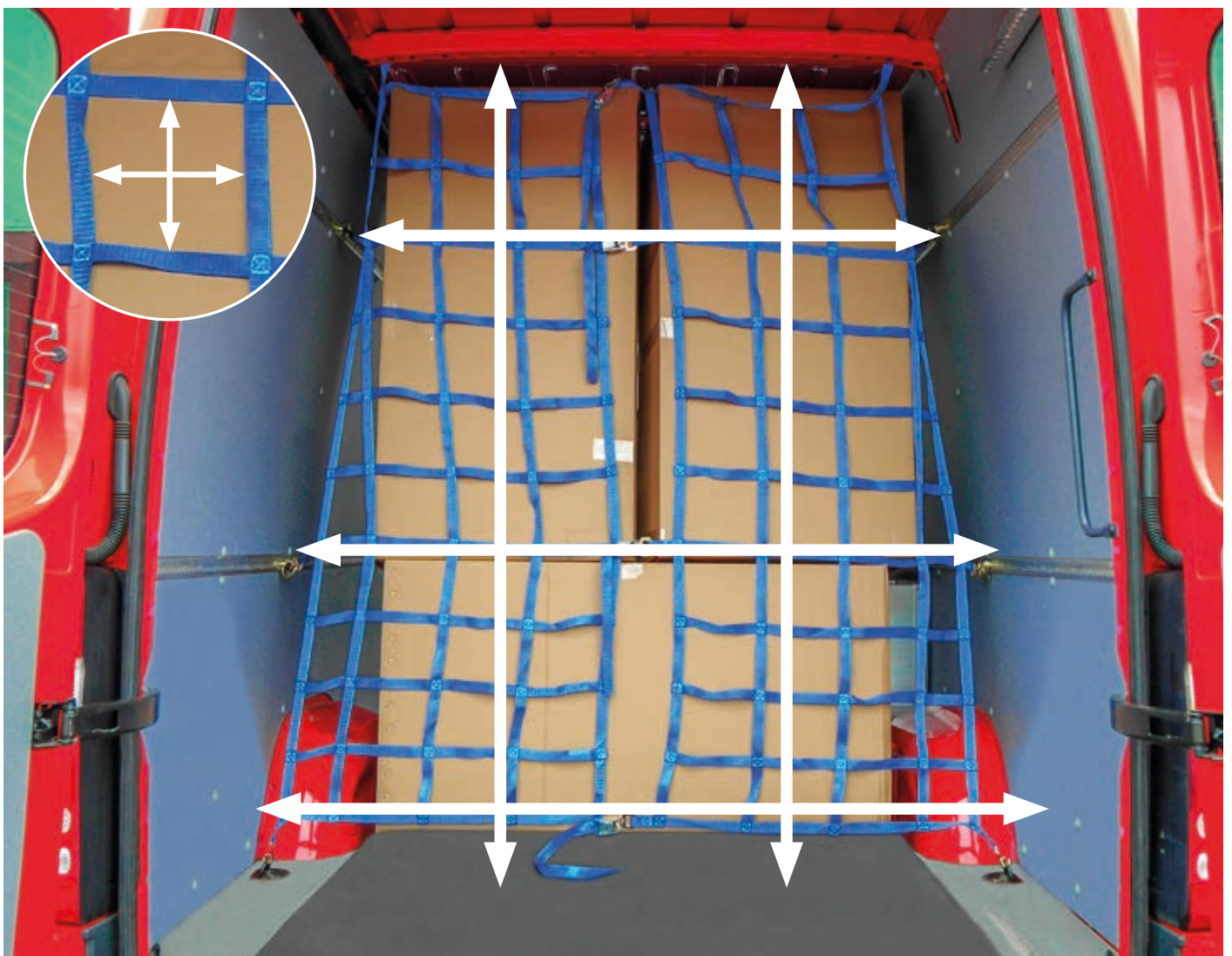
Mesh width 45 mm, with circumferential rubber stretch cord Ø 6 mm, PP multifilament thickness 3 mm, green.

	Width x Length [m]
142138517	1.5 x 1.5
142138518	2.0 x 2.5
142138758	2.0 x 3.0
142136070	2.5 x 3.5
142136069	3.0 x 3.5
142136071	3.0 x 4.0
142136067	3.5 x 5.0
142136068	3.5 x 6.0
142138759	3.5 x 7.0





All **S-Line**® cargo nets are supplied separately welded.



PERFECT FIT

Give us the clear inside dimensions (width and height), the height and distances of the mounting points of your vehicle and the required mesh width we configure the optimal net for your needs.

Also select the fabric color and the end fitting for attachment. Optionally, we print the web according to your specifications with font or logo.



AGRICULTURAL TOOLS



TOWING SLINGS

128

ACCESSORIES

128

S-Line® Towing slings

Produced from 100% polyester fibres.

With fixed red warning flag midpoint.

For towing and recovering wheeled agricultural vehicles on non-public roads..

	Colour	Length [m]	BC [daN]	Permissible GW [t]
142138615	red	4,0	35000	15
142138616	blue	4,0	56000	24
142138581	red	6,0	35000	15
142138582	blue	6,0	56000	24



Shackle for towing slings

Galvanized curled shackle, high-strength, with eye-bolt, 9,5 t load capacity.

848673000



Get the balance right!

With the Suer concrete weights you keep the balance in every situation.



www.suer.de/downloads

Suer Concrete Weight

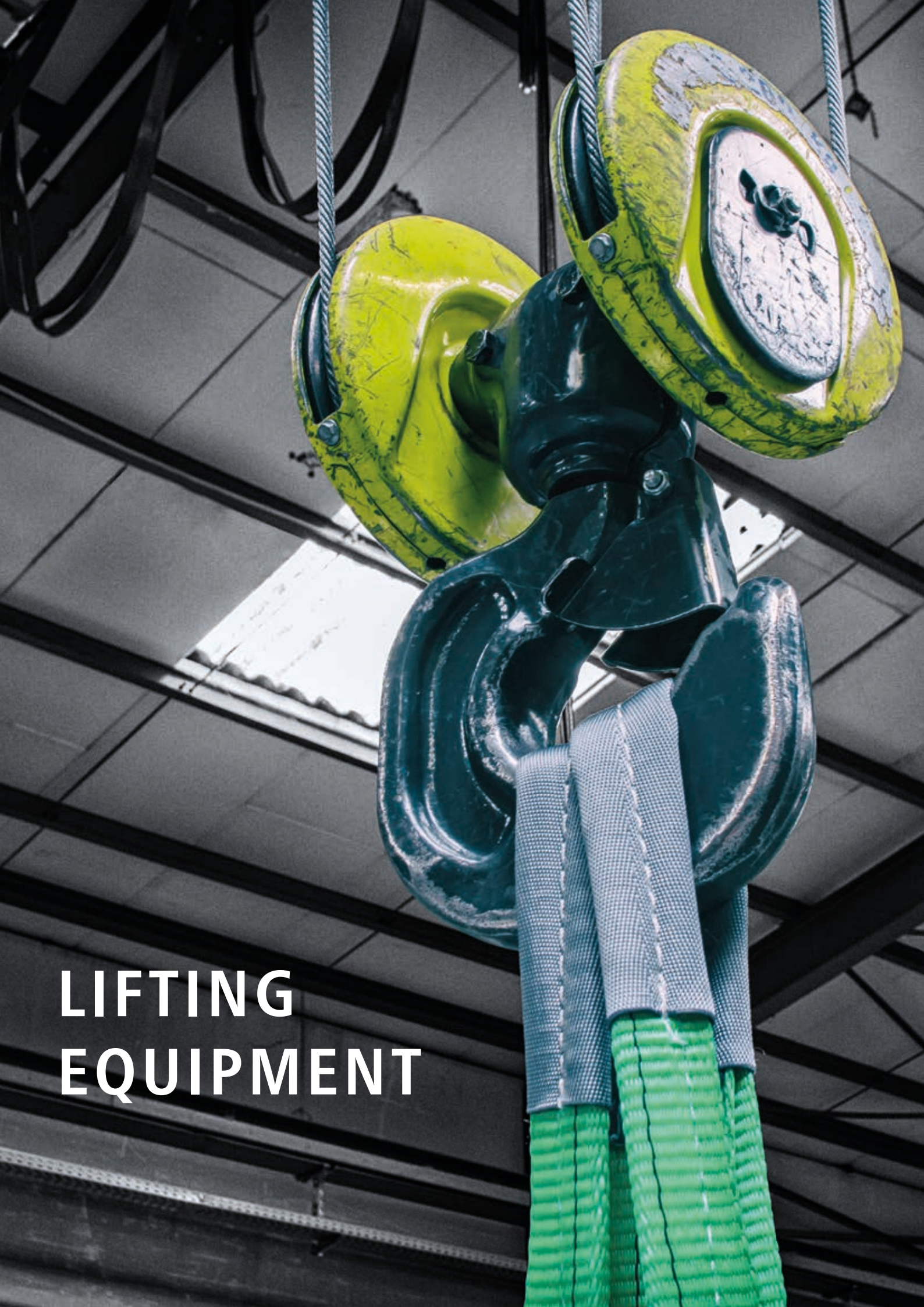
MADE IN GERMANY
Suer
2400KG

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From 2 pcs purchase pro-rata amount € 20,00
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LIFTING EQUIPMENT



ROUND SLINGS

132

LIFTING SLINGS

133

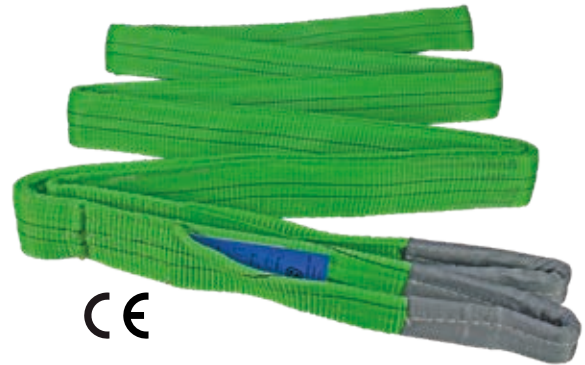


S-Line® Round slings

To DIN EN 1492-2, with declaration of conformity, tonnage stripe identification and sewn-in load capacity label. Produced from 100% polyester fibres, safety factor 7:1.

	Colour [Euro Standard]	Circumferential length [m]	Tonnage stripes		Perm. load relative to slinging method [daN]				
					1	2	3	0-45°	46-60°
142138546	violet	2,0	1	1000	2000	800	1400	1000	
142138547	violet	3,0	1	1000	2000	800	1400	1000	
142138548	violet	4,0	1	1000	2000	800	1400	1000	
142138549	violet	6,0	1	1000	2000	800	1400	1000	
142138550	green	2,0	2	2000	4000	1600	2800	2000	
142138551	green	3,0	2	2000	4000	1600	2800	2000	
142138552	green	4,0	2	2000	4000	1600	2800	2000	
142138553	green	6,0	2	2000	4000	1600	2800	2000	
142138554	yellow	2,0	3	3000	6000	2400	4200	3000	
142138555	yellow	3,0	3	3000	6000	2400	4200	3000	
142138556	yellow	4,0	3	3000	6000	2400	4200	3000	
142138557	yellow	6,0	3	3000	6000	2400	4200	3000	
142138558	gray	4,0	4	4000	8000	3200	5600	4000	





S-Line® Lifting slings

To DIN EN 1492-1, with declaration of conformity, tonnage stripe identification and sewn-in load capacity label.
Produced from 100% polyester fibres, safety factor 7:1.

	Colour [Euro Standard]	Usable length [m]	Tonnage stripes	Perm. load relative to slinging method [daN]				
				—	U	hook	0-45°	46-60°
142138559	violet	2,0	1	1000	2000	800	1400	1000
142138560	violet	4,0	1	1000	2000	800	1400	1000
142138561	violet	6,0	1	1000	2000	800	1400	1000
142138562	green	2,0	2	2000	4000	1600	2800	2000
142138563	green	4,0	2	2000	4000	1600	2800	2000
142138564	green	6,0	2	2000	4000	1600	2800	2000
142138565	yellow	2,0	3	3000	6000	2400	4200	3000
142138566	yellow	4,0	3	3000	6000	2400	4200	3000
142138567	yellow	6,0	3	3000	6000	2400	4200	3000



SUER 2500 dan

LASHING RINGS
RECESSED LASHING RINGS



LASHING RINGS	136
RECESSED LASHING RINGS	142
LASHING RING POCKETS	145
LASHING EYES	146
INFORMATION SIGNS	147

Lashing ring ①

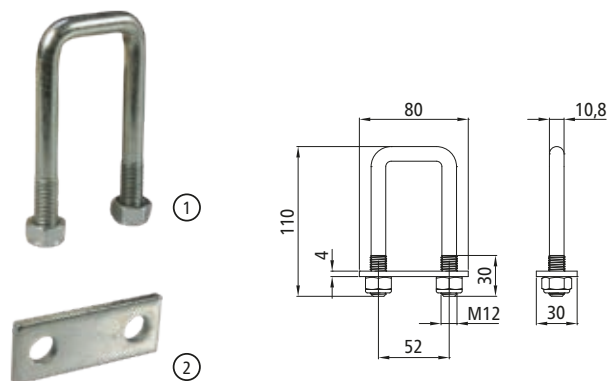
Galvanized, load capacity 800 daN, weight 0,20 kg. Including 2 hexagon nuts DIN 985 M12-8. Tested according to DIN EN 12640.

295131663

Plate for lashing ring ②

Galvanized, weight 0,08 kg.

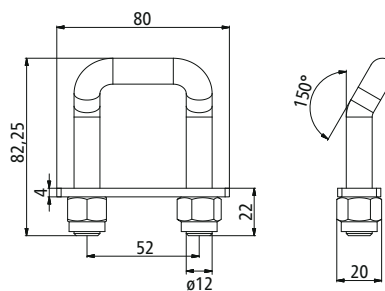
295131664



Lashing ring angled by 150°

Galvanized, load capacity 2000 daN, weight 0,30 kg. Including plate and 2 nuts. Tested according to DIN EN 12640.

295131972



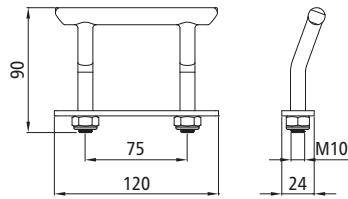


Lashing ring

Galvanized, load capacity 2500 daN, weight 0,33 kg.
Tested according to DIN EN 12640.

295131824

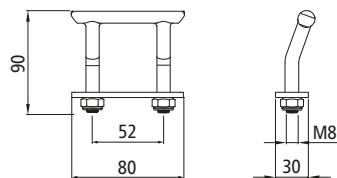
This lashing ring can be fitted to all Suer steel floor frame profiles with slanted/offset top/outer edge, e.g.: **372561440**.
We use these lashing rings as standard in our bolttable Cargotrail steel floor assemblies with platform or curtainsider bodies.



Zurrbügel

Verzinkt, Belastbarkeit 800 daN, Gewicht 0,2 kg.
Geprüft nach DIN EN 12640.

295131888





Lashing ring ①

Galvanized, load capacity 2000 daN, Weight 0,37 kg.
Tested according to DIN EN 12640.

295132672

Lashing ring ②

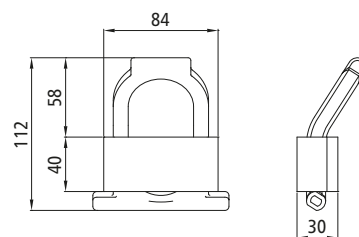
Self colour, load capacity 2000 daN, weight 0,37 kg.
Tested according to DIN EN 12640.

295131672

Weld-in-pocket for lashing ring ③

Self colour, weight 0,18 kg.

295131698



PWP Lashing ring ①

Galvanized, load capacity 2000 daN, weight 0,16 kg.
Tested according to DIN EN 12640.

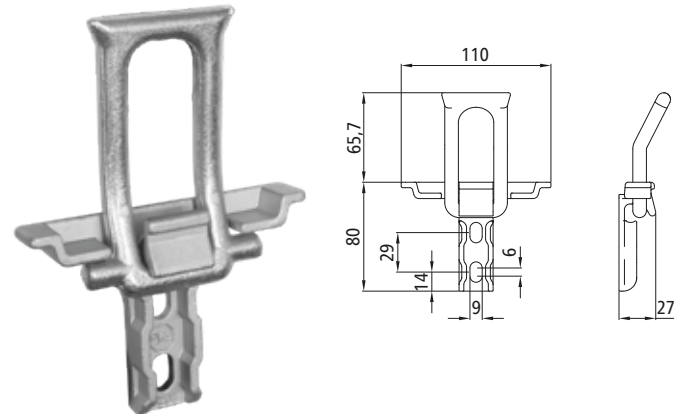
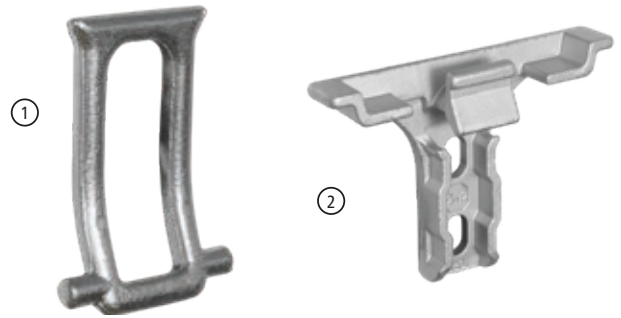
105131661

PWP Holder for lashing ring ②

Zinc galvanized, weight 0,19 kg.

105131658

The holder can be welded into the floor frame profile or screwed, making it particularly suitable for aluminium floor frame profiles. We use this lashing ring as standard on our Cargotrail aluminium platform bodies.



PWP Lashing ring "Pinguin" ①

Galvanized, load capacity 2000 daN, weight 0,25 kg.
Tested according to DIN EN 12640.

105131809

Pocket for lashing ring "Pinguin" ②

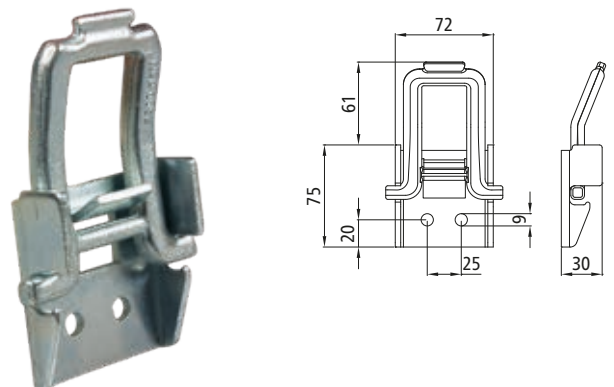
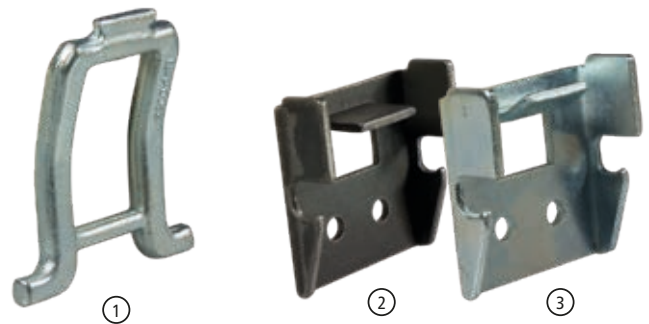
Self colour, weight 0,22 kg.

105131810

Pocket for lashing ring "Pinguin" ③

Galvanized, weight 0,22 kg.

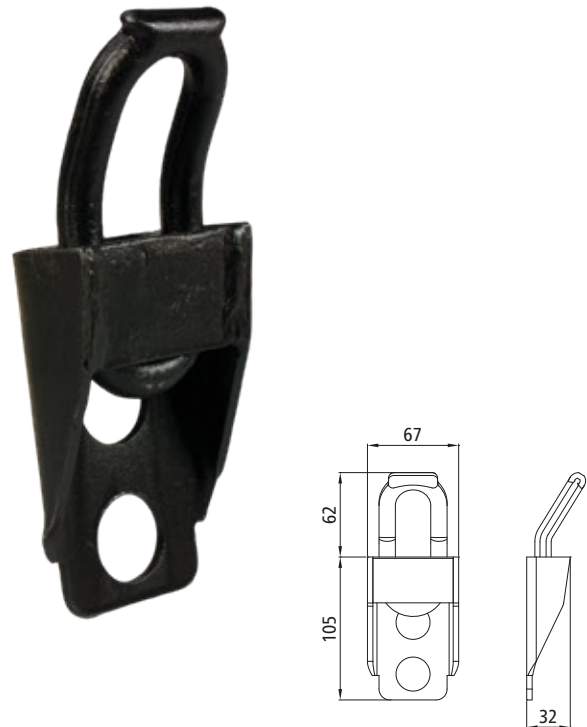
105131811



Lashing ring

Primer finished, load capacity 2500 daN, weight 0,60 kg.
Tested according to DIN EN 12640.

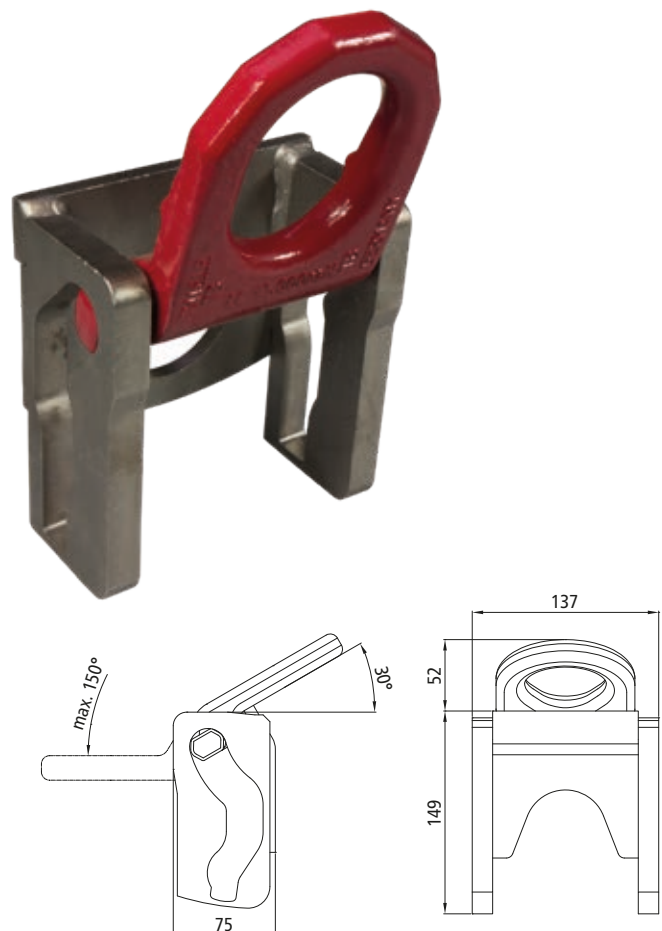
295131743



Lashing ring

Self colour/primer finished, load capacity 10000 daN, weight 3,40 kg.
Tested according to DIN EN 12640.

295131916

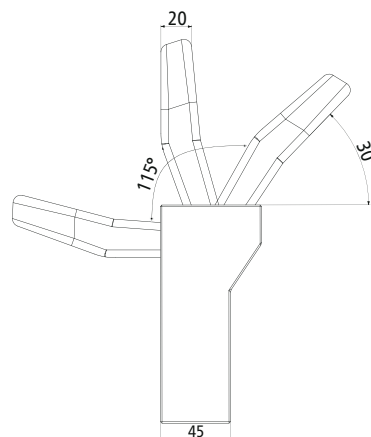
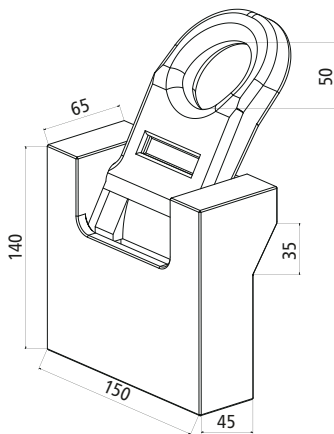


12 tons lashing ring

Forged, ring Galvanized, body plain steel, lashing capacity 12000 daN, weight 4,61 kg. Tested according to DIN EN 12640.

For "special transport" trucks.

295161274



Recessed lashing ring ①

Recess plate hot-dip galvanized, lashing ring zinc galvanized, load capacity 1000 daN, weight 0,52 kg. Tested according to DIN EN 12640.

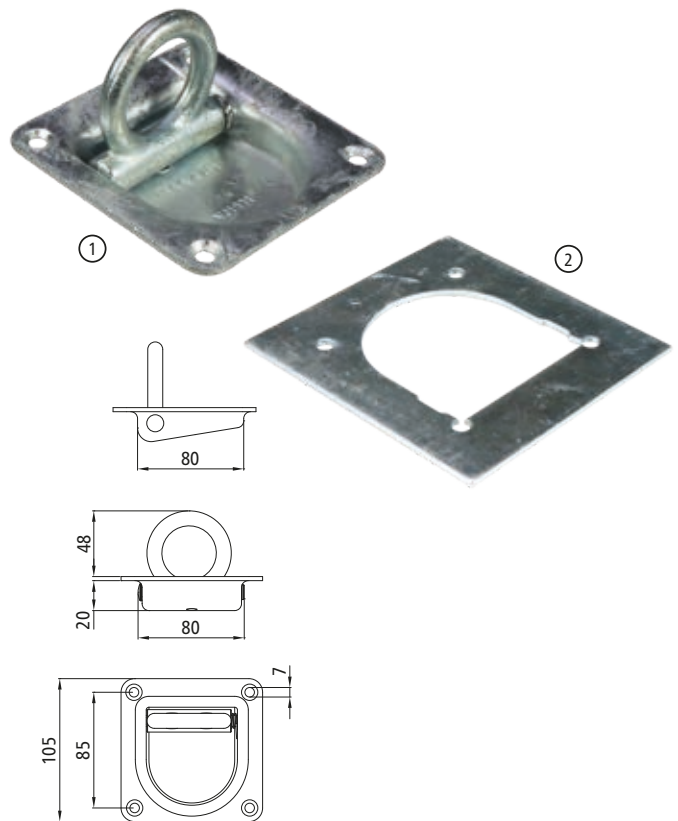
295133563

Reinforcing plate ②

Galvanized, 133 x 143 x 3 mm, weight 0,29 kg.

295131794

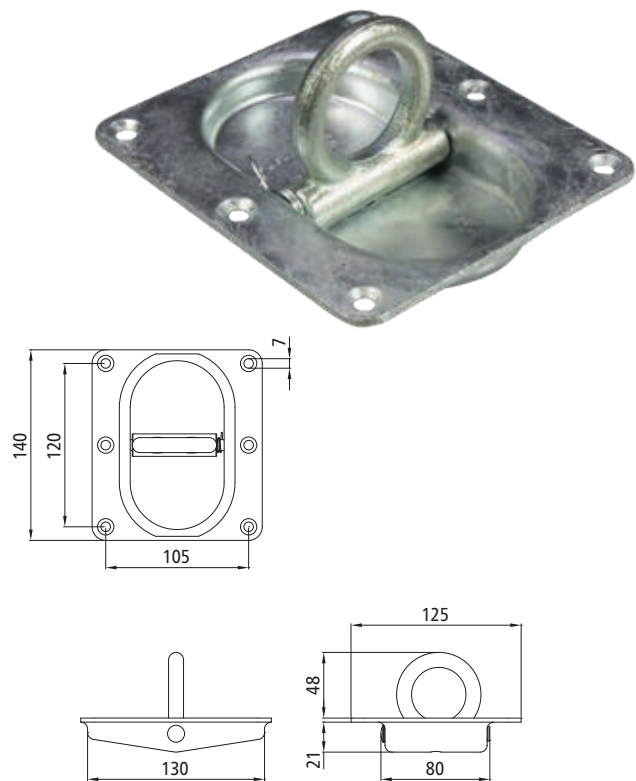
For recessed lashing ring [295133563](#).
Use the reinforcing plate when fitting the recessed lashing ring in phenolic plywood boards or timber floors to maintain a favourable load transmission due to the increased supporting face area.



Recessed lashing ring

Recess plate hot-dip galvanized, lashing ring zinc galvanized, load capacity 1000 daN, weight 0,65 kg. Tested according to DIN EN 12640.

295133562



Lashing ring ①

Hot-dip galvanized, load capacity with recess plate 2000 daN, weight 0.11 kg. Tested according to DIN EN 12640.

295131391

Plate for lashing ring ②

Hot-dip galvanized, weight 0.11 kg.

295131392

Lash tray ③

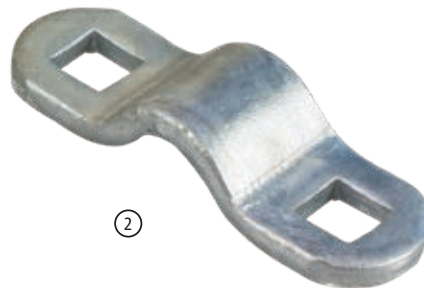
Hot-dip galvanized, load capacity 1000 daN, weight 0.24 kg.

295131393

The complete lashing ring/recess plate is fixed using two M 12 carriage bolts to DIN 603. The bolts are not included in the supply.



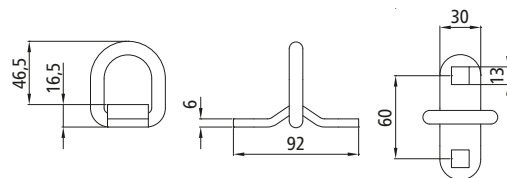
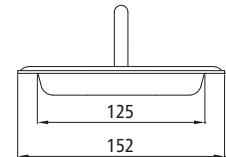
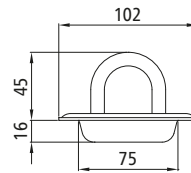
①



②



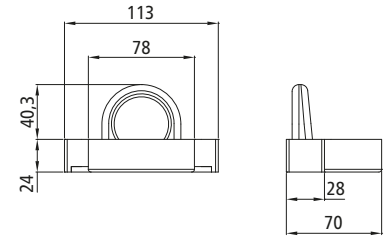
③



Recessed lashing ring

Self colour, load capacity 2000 daN, weight 0.57 kg.
Tested according to DIN EN 12640.

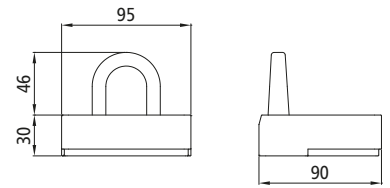
105131557



Recessed lashing ring

Self colour, load capacity 2500 daN, weight 0.78 kg.
Tested according to DIN EN 12640.

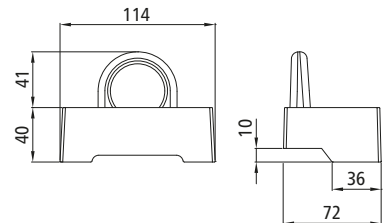
295131560



Recessed lashing ring

Self colour, load capacity 2500 daN, weight 0.75 kg.
Tested according to DIN EN 12640.

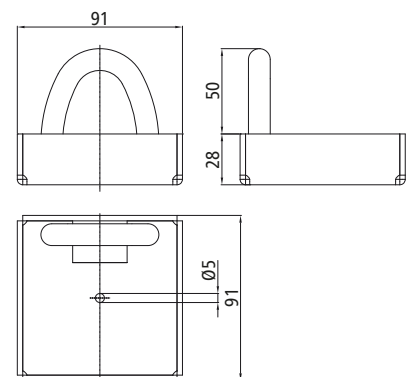
295131590

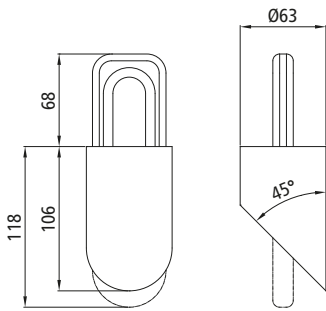


Recessed lashing ring

Primer finished, load capacity 6000 daN, weight 0.70 kg.
Tested according to DIN EN 12640.

122131801

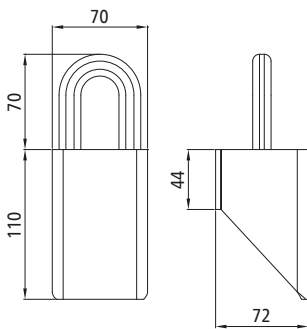




Lashing ring

Primer finished, load capacity 2500 daN, Weight 0.92 kg.
Tested according to DIN EN 12640.

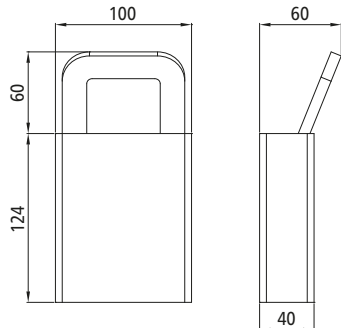
295131739



Lashing ring pocket

Primer finished, load capacity 2500 daN, vertical breaking load 7000 daN, weight 1.64 kg. Tested according to DIN EN 12640.

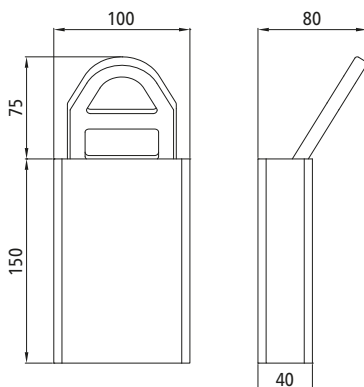
295131746



Lashing ring pocket

Primer finished, load capacity 3000 daN, weight 1.12 kg.
Tested according to DIN EN 12640.

295131544

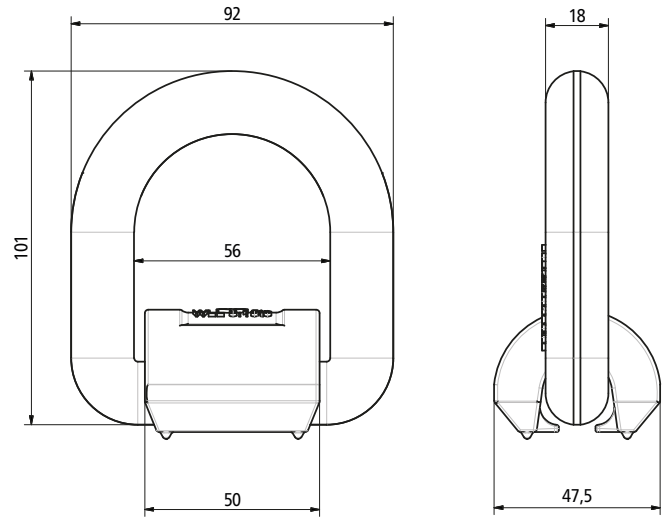


Lashing ring pocket

Primer finished, load capacity 6500 daN, weight 1.90 kg.

This lashing ring pocket is NOT tested according to DIN EN 12640.
It may not be used in Germany as a load securing device in accordance with the directives of the BG (German professional trade association) guidelines for vehicle operating.
The stated load ratings are manufacturer's values.

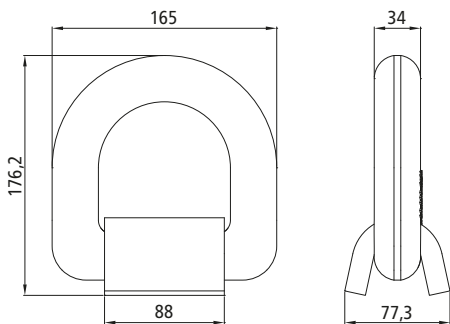
295131543



Anchor point

Steel, quality class 8, with weld-on lug, load capacity 3.15 t, weight 0.69 kg. Tested according to DIN EN 12640.

295134121



Lashing eye ①

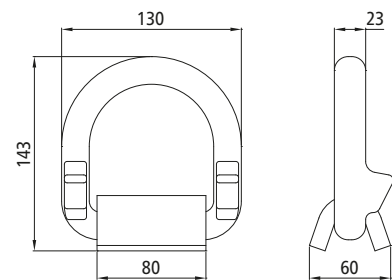
Self colour, load capacity 20000 daN, weight 3.27 kg. Tested according to DIN EN 12640.

295131917

Weld-on lug for lashing eye ②

Self colour, weight 1.32 kg.

295131918



Lashing eye ①

Galvanized, load capacity 15000 daN, weight 1.32 kg. Tested according to DIN EN 12640.

295131711

Weld-on lug for lashing eye ②

Self colour, weight 0.63 kg.

295131712



Lashing eye for RoRo ships ①

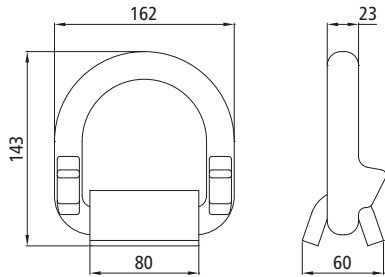
Galvanized, load capacity 10000 daN to DIN EN 29367-2 for RoRo ships, load capacity 15000 daN to DIN EN 12640 weight 1.94 kg.

295131943

Weld-on lug for lashing eye ②

Self colour, weight 0.79 kg.

295131944

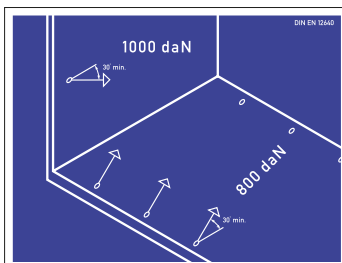


Lashing point information signs

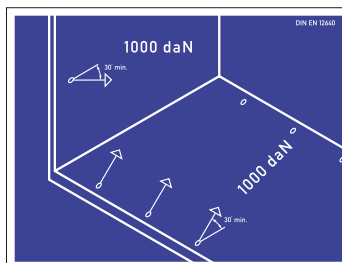
Adhesive film.

	Type	DIN	Dimensions [mm]	
345551190	①	400 daN	DIN 75410-1	200 x 120
345551746	②	800 daN	DIN EN 12640	210 x 160
345551747	③	1000 daN	DIN EN 12640	210 x 160
345551748	④	2000 daN	DIN EN 12640	210 x 160
345552085	⑤	2500 daN	DIN EN 12640	210 x 160

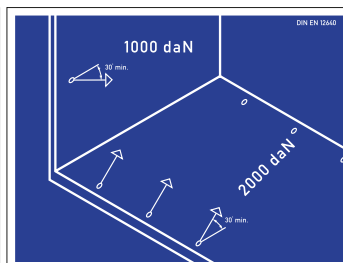
①



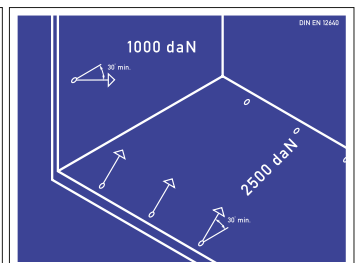
②



③



④



⑤

CABLES · CHAINS · WINCHES



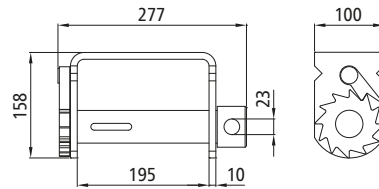


CABLE AND STRAP WINCHES	150
CABLES	152
CABLE ACCESSORIES	154
CHAINS	155
CHAIN ACCESSORIES	156

Lashing winch 1820

Red primed, for lashing straps max. 50 x 8 mm, weight 4.86 kg.

122138110

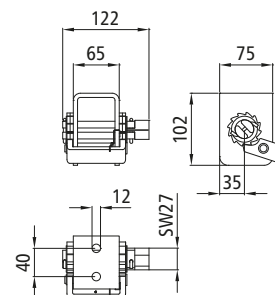


The lashing winches 1820 and 1880 have not been tested by the German professional trade association for vehicle operating. For this reason, no load values have been specified for these winches and they may not be used in Germany.

Lashing winch 1880

Painted/galvanized, with spring-assisted anti-backlash device, for lashing straps max. 50 x 6 mm, weight 1.66 kg.

122138113

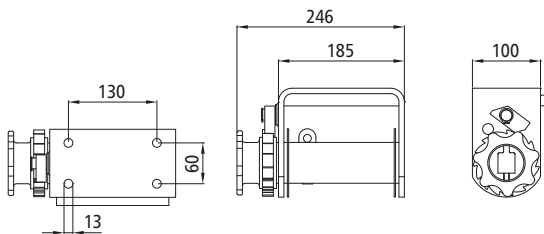




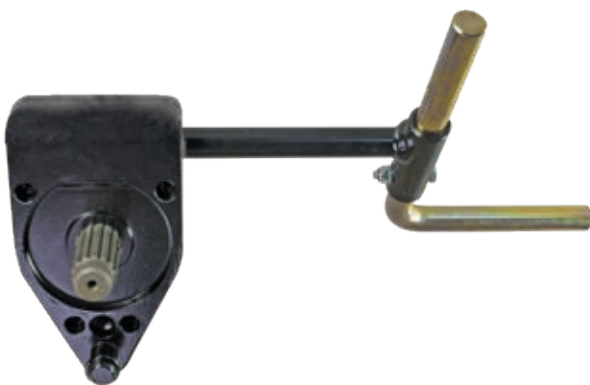
Lashing winch 2622

Black painted, for lashing straps max. 50 x 5 mm, length 3000 mm or steel cable max. Ø 8 mm, length 9000 mm. Permissible straining force 20 kN, standard tension force 5 kN, weight 6.15 kg.

295161107



In conjunction with the slip-on gearbox 4504, item no. 295161108, the lashing winch 2622 complies with the requirements of the German professional trade association. This combination has been distinguished with the GS mark for tested safety.



Slip-on gearbox 4504

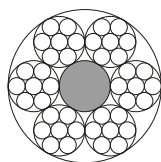
Black painted, for lashing winch 2622, torque 150 Nm, weight 3.15 kg.

295161108



Round strand cable 6 x 7

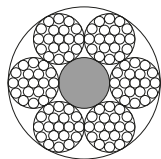
With fibre inlay, to DIN EN 12385-4, galvanized.



	Cable Ø [mm]	Length [m]	Weight [kg/m]	Max. breaking force [kN]
271151081	3	30	0.03	5.29
271151082	4	30	0.06	9.41
271151083	5	30	0.09	14.70
271151085	8	10	0.23	37.60
271151088	14	30	0.70	115.00

Round strand cable 6 x 19

With fibre inlay, to DIN EN 12385-4, galvanized.



	Cable Ø [mm]	Length [m]	Weight [kg/m]	Max. breaking force [kN]
271153084	6	30	0.13	19.60
271155084	6	50	0.13	19.60
271153085	8	30	0.22	34.80
271155085	8	50	0.22	34.80
271153086	10	30	0.35	54.40



Tipper cables Ø 10 mm

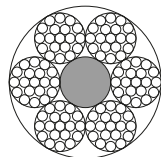
From round strand cable 6 x 19 with fibre inlay, to DIN EN 12385-4.
Both ends with A 9 thimble, DIN 6899, for pin Ø 20 mm.
Minimum breaking strain 4920 N, Galvanized.

	Nominal length [mm]	Weight [kg]
270151145	700	0.36
270151148	800	0.41
270151151	900	0.44
270151154	1000	0.48
270151155	1100	0.52
270151123	1300	0.60

Tipper cables Ø 13 mm

From round strand cable 6 x 19 with fibre inlay, to DIN EN 12385-4.
Both ends with A 12 thimble, DIN 6899, for pin Ø 26 mm.
Minimum breaking strain 8310 N, galvanized.

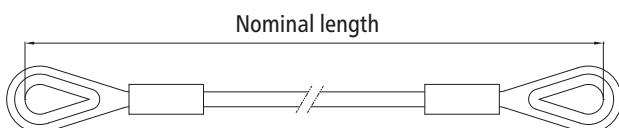
	Nominal length [mm]	Weight [kg]
270151156	620	0.76
270151126	950	0.98
270151127	1000	1.00
270151128	1100	1.07
270151129	1150	1.10
270151167	1200	1.14
270151130	1250	1.16
270151168	1300	1.20
270151169	1400	1.26

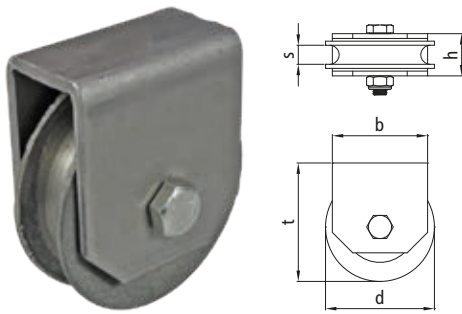


Tipper cables Ø 16 mm

From round strand cable 6 x 19 with fibre inlay, to DIN EN 12385-4.
Both ends with A 15 thimble, DIN 6899, for pin Ø 32 mm.
Minimum breaking strain 12600 N, galvanized.

	Nominal length [mm]	Weight [kg]
270151133	1000	1.50
270151134	1100	1.59
270151135	1200	1.67
270151172	1300	1.76
270151136	1350	1.80
270151173	1400	1.85

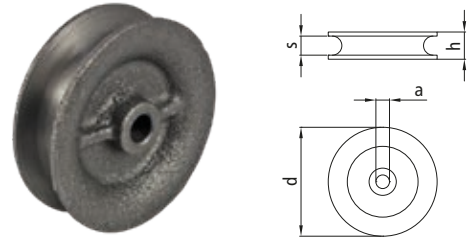




Cable pulley with bracket

Self colour.

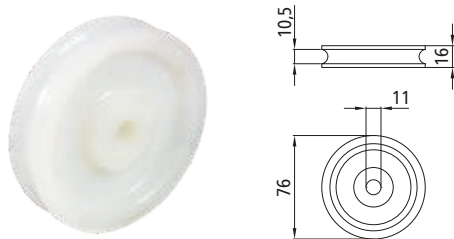
	Dim. d [mm]	Dim. b [mm]	Dim. h [mm]	Dim. s [mm]	Dim. t [mm]	Weight [kg]
270151143	60	50	28	11	79	0.36
125151117	80	70	31	13	87	0.58



Cable pulley

Self colour.

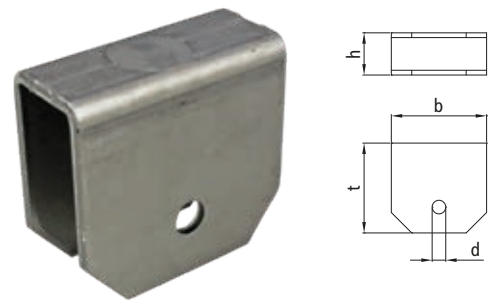
	Dim. d [mm]	Dim. a [mm]	Dim. h [mm]	Dim. s [mm]	Weight [kg]
215151114	60	8,0	18	11	0.17
215151142	70	8,5	21	13	0.26
215151115	80	10,0	21	13	0.28



Cable pulley

Plastic, Ø 76 mm, weight 0.04 kg.

215151260



Bracket

Steel, self colour.

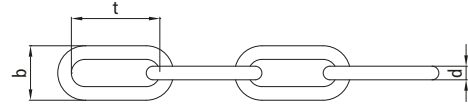
	Dim. b [mm]	Dim. d [mm]	Dim. h [mm]	Dim. t [mm]	Weight [kg]
270151144	50	8,5	28	56	0.17
125151118	70	10,0	31	65	0.28



Straight C-link chain

Galvanized, DIN 5685.

	Dim. d [mm]	Dim. b [mm]	Dim. t [mm]	~ Breaking force [N]	Length [m]	Weight [kg/m]
271151198	2	8	22	1250	30	0.06
271151200	3	12	26	2800	30	0.15
271152202	4	16	32	5000	10	0.27
271151202	4	16	32	5000	30	0.27
271151204	5	20	35	7750	30	0.43
271151206	6	24	42	11500	30	0.63
271151209	8	32	52	20000	30	1.10
271151211	10	40	65	31000	30	1.75



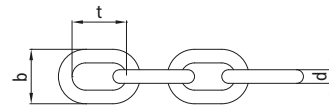
Round steel link chains to DIN 5685 are not tested for strength and therefore may not be used as a load bearing, slinging or transporting medium. The given breaking strains are only calculated values.



Straight A-link chain

Galvanized, DIN 5685.

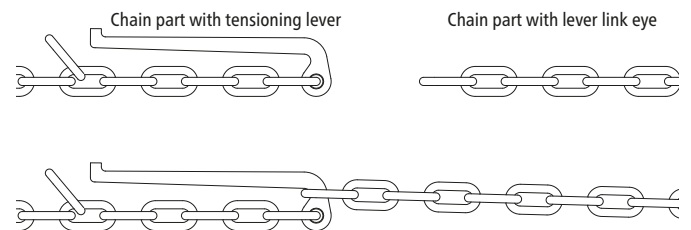
	Dim. d [mm]	Dim. b [mm]	Dim. t [mm]	~ Breaking force [N]	Length [m]	Weight [kg/m]
271151229	2	8	12	1250	30	0.07
271151233	4	16	19	5000	30	0.30
271151239	7	28	28	15000	30	1.00

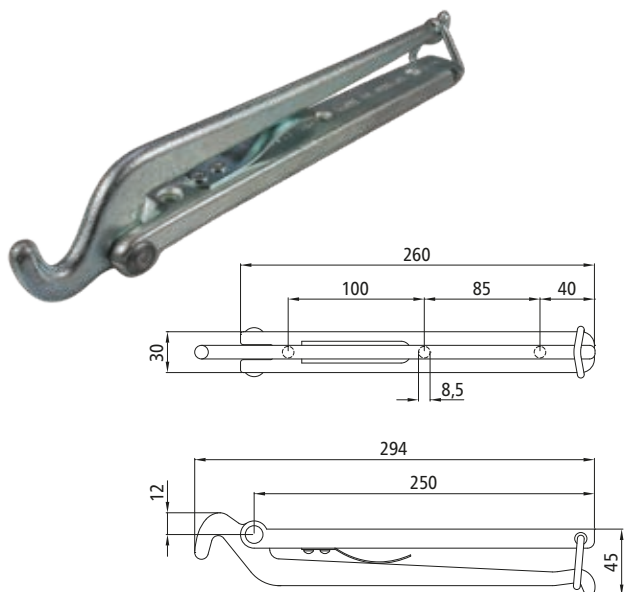


Tensioning chains DIN 691

To DIN 763 with form A tensioning lever and form C eye bolt. Consisting of individual parts: chain part with tensioning lever and chain part with lever link eye. Chain thickness 6 mm, overall length 2300 mm; chain thickness 8 mm, overall length 2500 mm.

	Chain thickness [mm]	Weight [kg]	Description	Finish
270151077	6	0.90	with tensioning lever	self colour
270151078	6	0.70	with lever link eye	self colour
270152077	6	0.90	with tensioning lever	galvanized
270152078	6	0.70	with lever link eye	galvanized
270151079	8	1.66	with tensioning lever	self colour
270151080	8	1.23	with lever link eye	self colour
270152079	8	1.66	with tensioning lever	galvanized
270152080	8	1.23	with lever link eye	galvanized

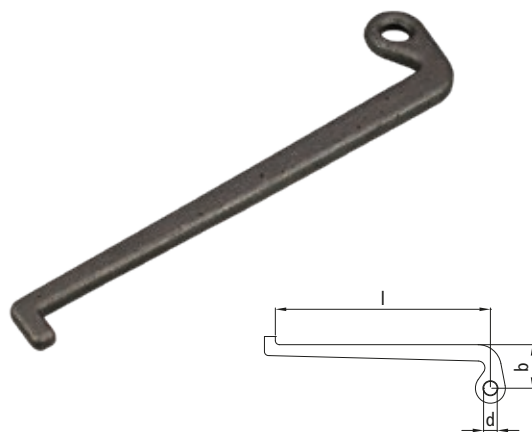




Chain tensioner 221C

Galvanized, weight 0.73 kg.

103131538



Chain tensioning lever

Self colour, to DIN 691 Form A.

	For link thickness [mm]	Dim. d [mm]	Dim. b [mm]	Dim. l [mm]	Weight [kg]
215131056	6	10	32	160	0.13
215131057	8	12	42	200	0.23



Chain quick-repair links

Galvanized.

	Nominal thickness [mm]	Weight [kg]
270151174	3	0.004
270151176	4	0.008
270151180	6	0.024
270151183	8	0.055



Chain quick-repair links

Galvanized, with threaded sleeve.

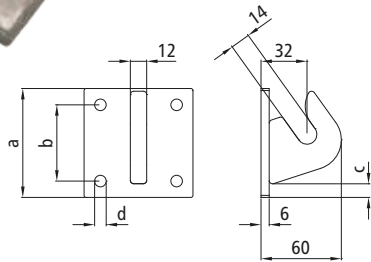
	Nominal thickness [mm]	Weight [kg]
848110000	6	0.036
848111000	8	0.077
848112000	10	0.145
848113000	12	0.237



Chain hook

Self colour, welded to rectangular steel plate.

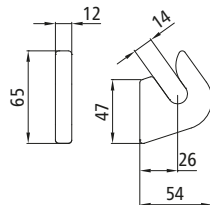
	Dim. a [mm]	Dim. b [mm]	Dim. c [mm]	Dim. d [mm]	Weight [kg]
125131005	80 x 80	55 x 55	12	8	0,50
125131006	90 x 90	65 x 65	15	10	0,55



Chain hook

Self colour, weight 0,18 kg.

215131004

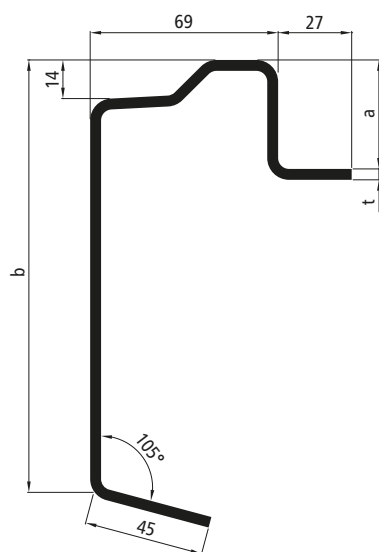
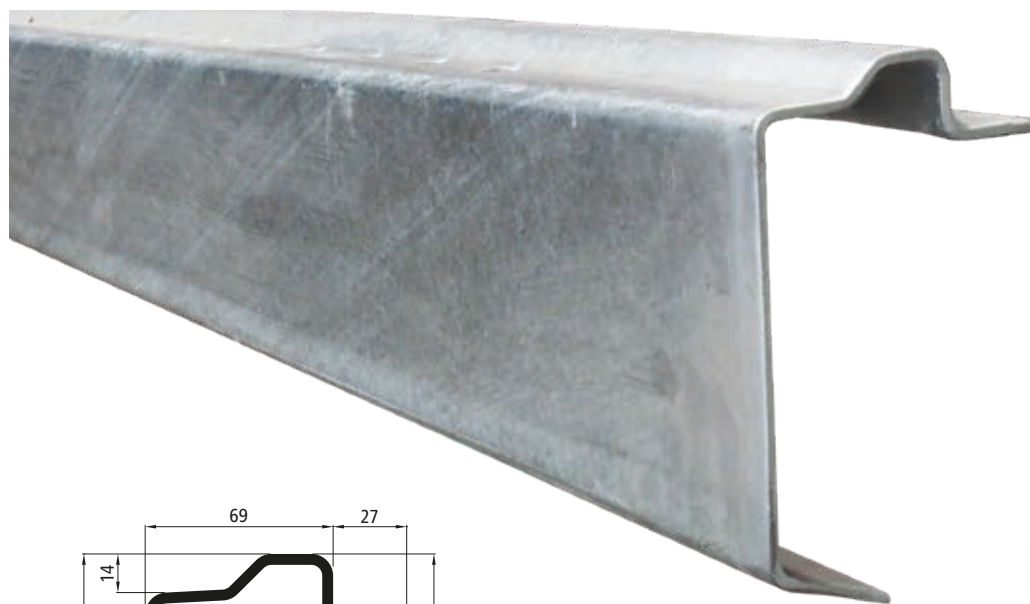


A close-up photograph of a vehicle's body structure. The left side of the image shows a dark, reddish-brown painted metal surface. On the right side, a silver-colored metal frame is visible, featuring several horizontal bars connected by vertical rivets. The text 'LOAD SECURING IN THE VEHICLE BODY' is printed in white, bold, sans-serif capital letters in the lower-left quadrant of the image.

**LOAD SECURING IN
THE VEHICLE BODY**



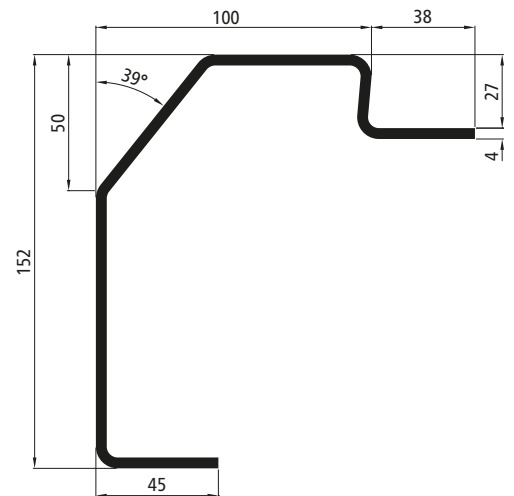
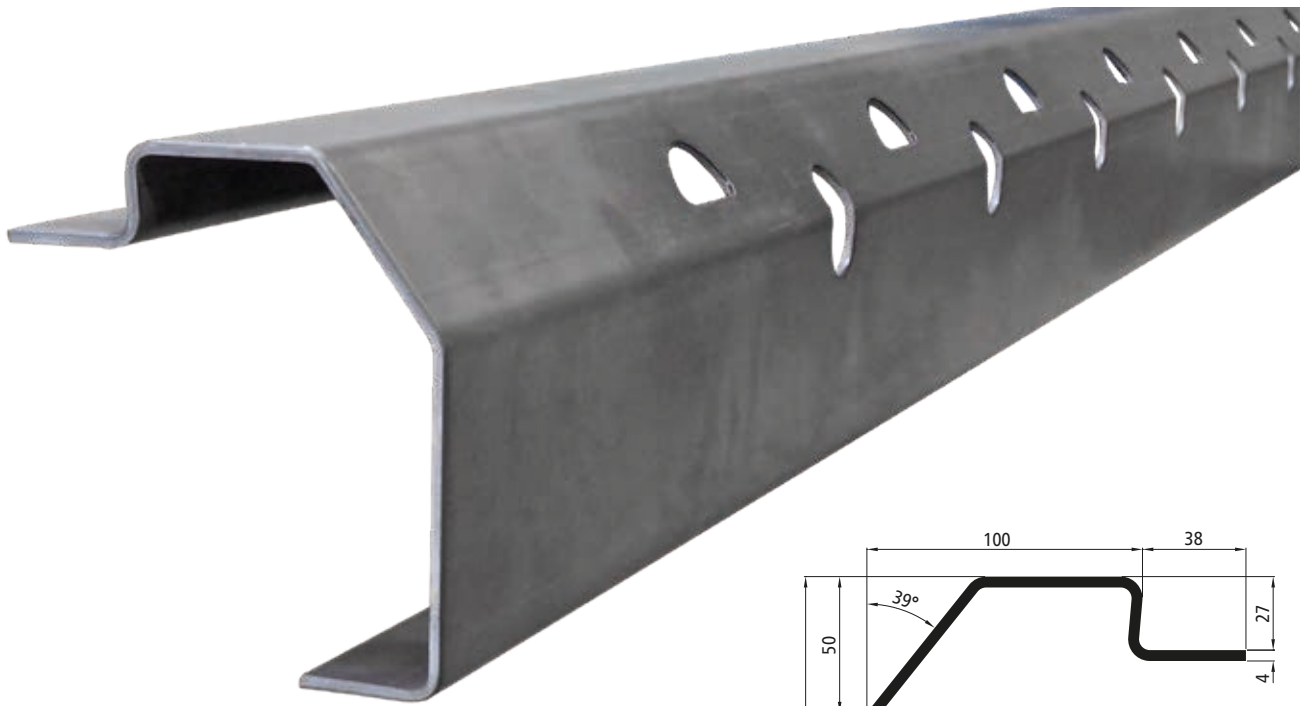
FLOOR FRAMES	160
MULTIFIXX	162
MULTISAVE	165
MULTI-X	165
MULTI-X	166



Floor frame for lashing rings

With hole pattern for lashing ring [295131824](#), grade S355MC.

	Length	Dimension a [mm]	Dimension b [mm]	Dimension t [mm]	W _{fl} [mm]	W _{fl} [cm ²]	Weight [cm ²]	Finish [kg/m]
372561440	7300	18	110	2,5	17,26	26,19	4,90	self colour
373561440	7300	18	110	2,5	17,26	26,19	4,90	primer finish
372562440	7300	18	110	2,5	17,26	26,19	4,90	galvanized
372561436	7300	21	140	3,0	27,44	40,68	6,61	self colour
373561436	7300	21	140	3,0	27,44	40,68	6,61	primer finish
372562436	7300	21	140	3,0	27,44	40,68	6,61	galvanized
372561437	7300	27	140	4,0	35,21	51,68	8,82	self colour
373561460	7300	27	140	4,0	35,21	51,68	8,82	sandblasted (self colour)
373561437	7300	27	140	4,0	35,21	51,68	8,82	primer finish
372562437	7300	27	140	4,0	35,21	51,68	8,82	galvanized
372561434	7300	27	160	4,0	42,48	61,68	9,45	self colour
373561479	7300	27	160	4,0	42,48	61,68	9,45	sandblasted (self colour)
373561434	7300	27	160	4,0	42,48	61,68	9,45	primer finish
372562434	7300	27	160	4,0	42,48	61,68	9,45	galvanized
372561435	7300	30	160	4,0	42,40	61,75	9,55	self colour
373561435	7300	30	160	4,0	42,40	61,75	9,55	primer finish
372561439	7300	40	160	4,0	42,09	61,63	9,86	self colour



Floor frame with lashing eyes

Self coloured steel, grade S355MC, canted. With hole pattern/lashing anchor points (oval hole and "half-moon" alternating) for diagonal und vertical tensioning with lashing straps.

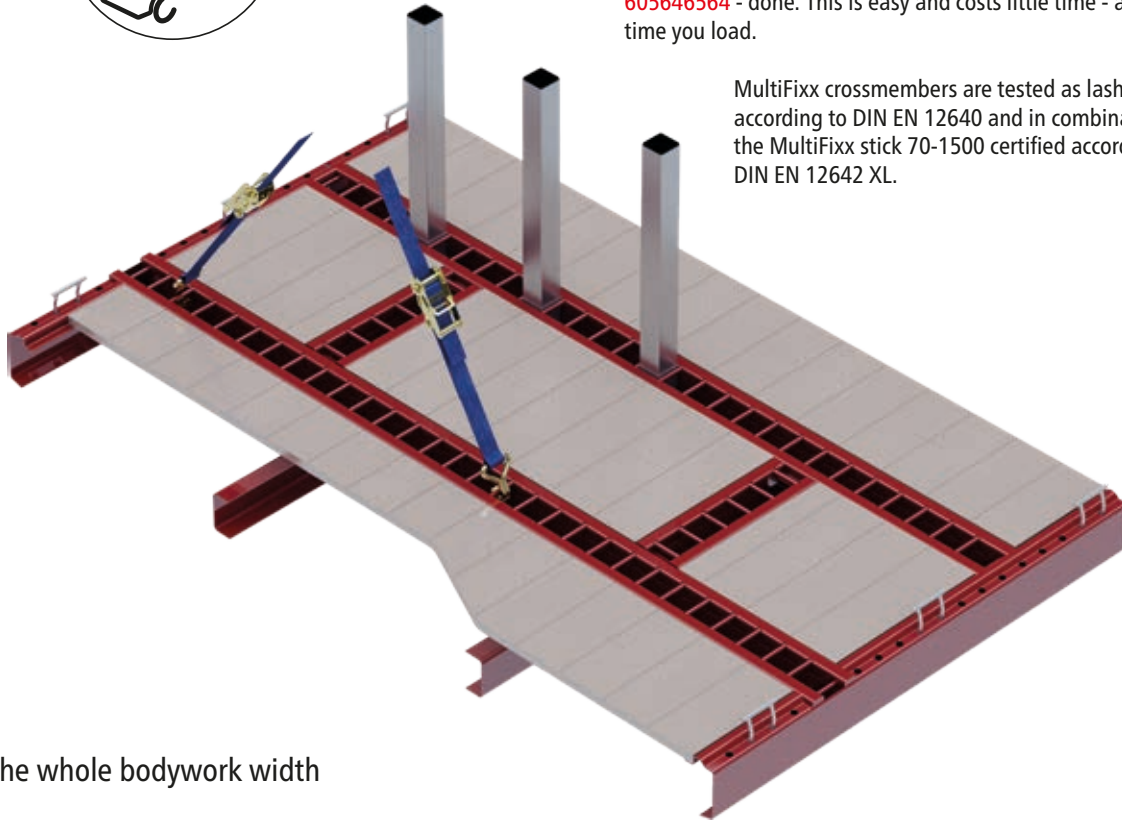
	Length [mm]	W ₁ [cm ³]	W ₂ [cm ³]	Weight [kg]	LC [daN]
372561810	7500	53,40	82,34	75,00	2000



Secure and form-fitting load securing at any point of the structure:
With the new MultiFixx crossmembers load securing is a part of the vehicle construction.

When using floor frames with integrated lashing rings or lashing eyes, in combination with the MultiFixx crossmembers, a system platform is created that can be used to solve a wide variety of safety tasks.

Reposition the load form-fit with the MultiFixx sticks 70-1500 **605646564** - done. This is easy and costs little time - a win every time you load.



MultiFixx crossmembers are tested as lashing point according to DIN EN 12640 and in combination with the MultiFixx stick 70-1500 certified according to DIN EN 12642 XL.

Over the whole bodywork width

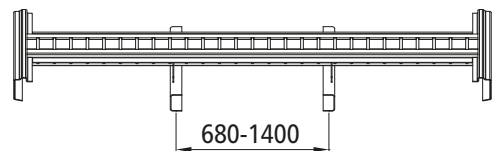
The MultiFixx crossmember in welded version is available in two length. With corresponding notched side floor frame (shown in the lower section of the figure) all 29 slots of the MultiFixx crossmember Basic **605646560** can be used for MultiFixx sticks 70-1500 - with a floor frame outer width of 2550 mm.

The MultiFixx crossmember SU-1 **605646561** is designed for floor frame outer width of 2480 mm and offers 28 slots.

Both crossmembers can be individually shortened and adapted to the outer frame.

A large frame area

MultiFixx crossmembers Basic and SU-1 can be mounted on a subframe/chassis width between 680 - 1400 mm (center of the run).

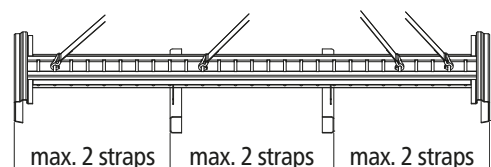


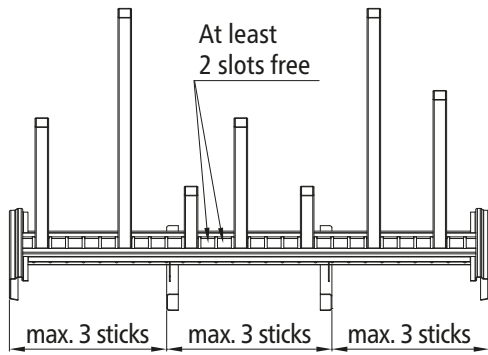
Up to 30 additional lashing points

The MultiFixx crossmembers and longitudinal members are tested as a lashing point according to DIN EN 12640 with a permissible load of 2000 daN.

Please also note the maximum permitted number of lashing straps.

Type	Number of lashing points	Slots for MultiFixx stick
605646560 MultiFixx crossmember Basic	30	29
605646561 MultiFixx crossmember SU-1	29	28
605646562 MultiFixx longitudinal member Basic	6	5



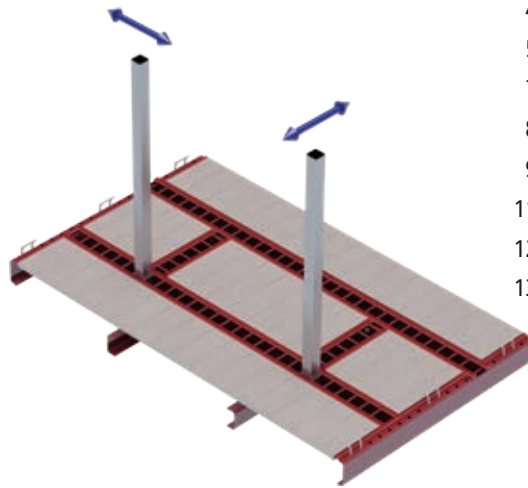


Load values MultiFixx

The MultiFixx crossmember/MultiFixx longitudinal member in combination with the MultiFixx stick 70-1500 is certified as a load securing element according to DIN EN12642 XL. The permissible load values can be found in the table.

The minimum distance between two MultiFixx sockets 70-1500 should not be less than 2 slots.

Height of force application [mm]	Longitudinal direction vehicle [daN]	Cross direction vehicle [daN]
200	2500	2500
400	1550	1550
500	1050	1050
700	900	900
800	750	750
950	650	650
1100	550	550
1200	500	500
1380	450	450



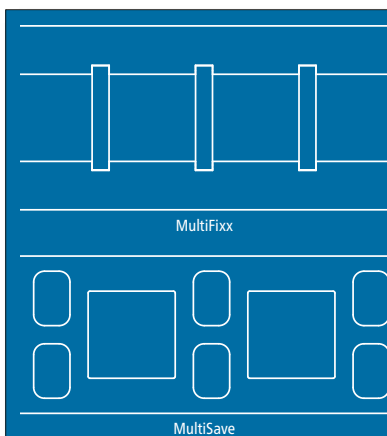
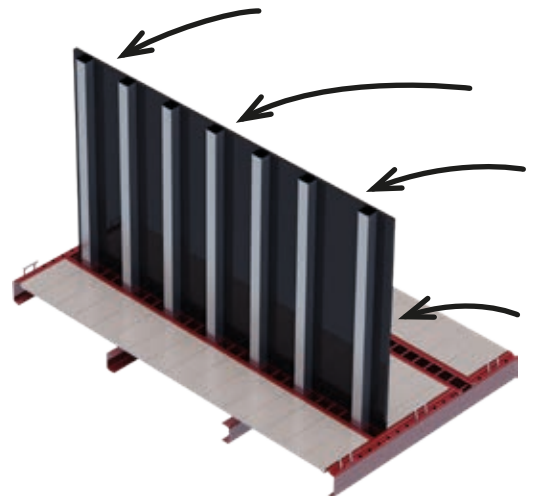
Second headboard to DIN EN 12642 XL

When used as an additional headboard with a maximum height of 1500 mm, a maximum of seven MultiFixx sticks 70-1500 per MultiFixx crossmember are allowed for load securing in the longitudinal direction. The permissible force (distributed load) in and against the driving direction is depends on the MultiFixx crossmember, see table.

The minimum distance between two MultiFixx sticks 70-1500 should not be less than two slots/space pockets.

Type		Max. strain [daN]	Correspond to a payload of [kg]
605646560	MultiFixx crossmember Basic	4600	9000
605646561	MultiFixx crossmember SU-1	4600	9000

* Means that the wall secures a positive-fit payload of 9 respectively 6 t to DIN EN 12642 XL in driving direction.



Difference between MultiSave- and MultiFixx system

MultiSave- and MultiFixx crossmembers in combination with steel sticks are systems for form-fit load restraint certified to DIN EN 12642 XL. In addition lashing points were successfully tested with permitted load of 2000n daN according to DIN EN 12640.

Using the MultiSave system, the lashing straps can be used in any directions. Using the MultiFixx crossmembers and longitudinal members it is only permitted to use in driving direction (crossmember) or transverse to driving direction (longitudinal member) and also diagonal to these directions. The MultiFixx System has a lot more spave pockets for the form-fitted load restraint (steel sticks).

MultiFixx crossmember Basic ①

Steel self colour, welding version.

For floor frame outer width 2550 mm/29 slots
für sticks 70 x 70 mm.



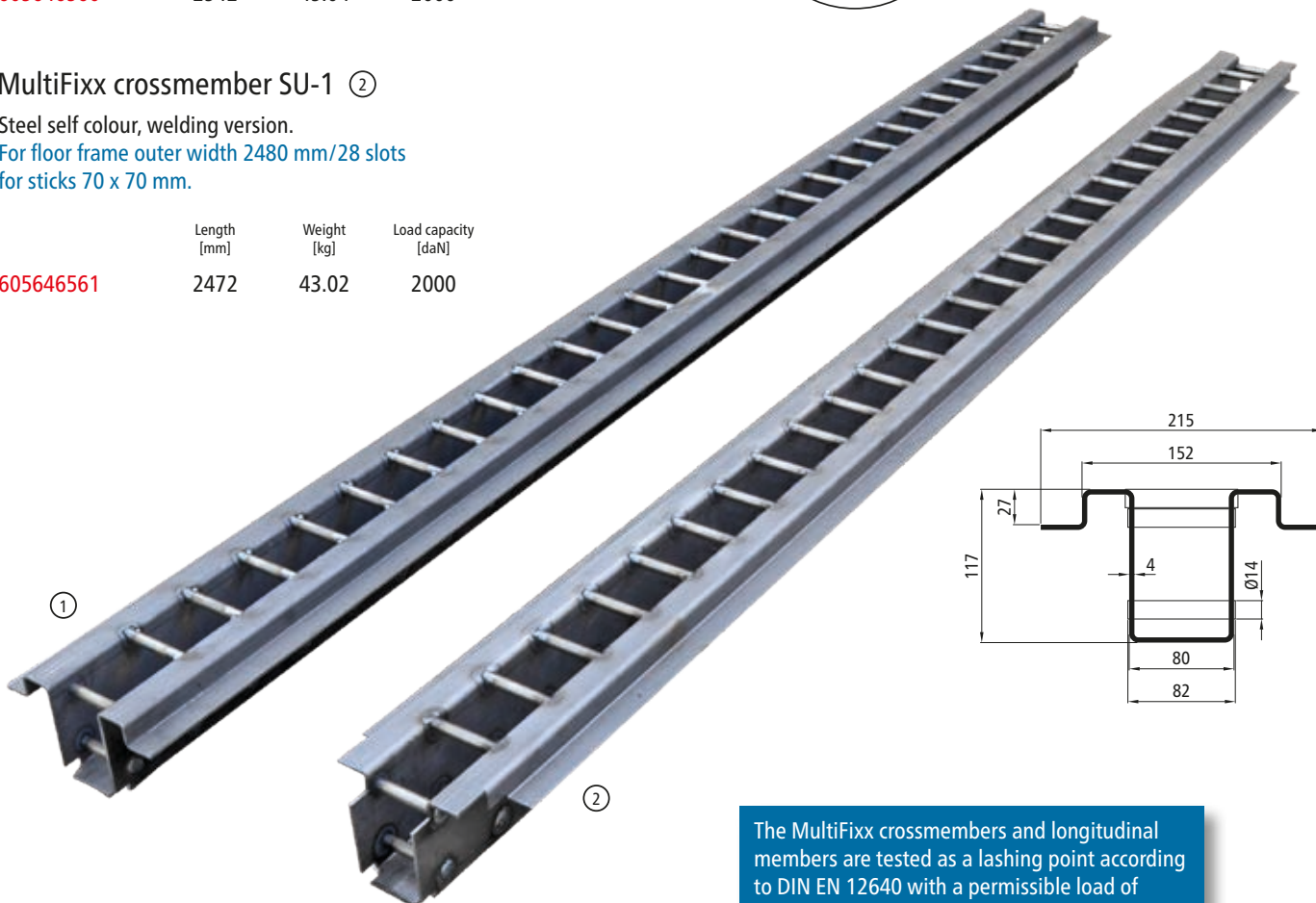
	Length [mm]	Weight [kg]	Load capacity [daN]
605646560	2542	45.04	2000

MultiFixx crossmember SU-1 ②

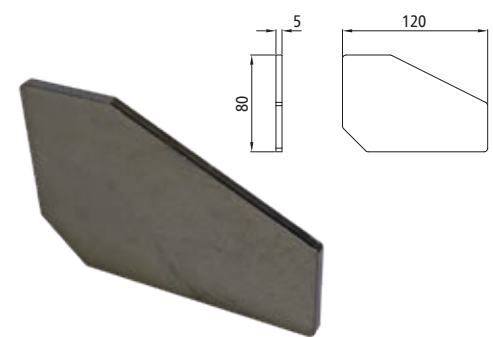
Steel self colour, welding version.

For floor frame outer width 2480 mm/28 slots
for sticks 70 x 70 mm.

	Length [mm]	Weight [kg]	Load capacity [daN]
605646561	2472	43.02	2000



The MultiFixx crossmembers and longitudinal members are tested as a lashing point according to DIN EN 12640 with a permissible load of 2000 daN.



MultiFixx longitudinal member Basic

Steel self colour, welding version.

For welding between two MultiFixx crossmembers Basic 605646560 oder SU-1 605646561.

	Length [mm]	Weight [kg]	Load capacity [daN]
605646562	572	9.16	2000

Weld-on gusset plate

Steel self colour, weight 0,32 kg.

For MultiFixx crossmembers.

605646541



MultiSave crossmember

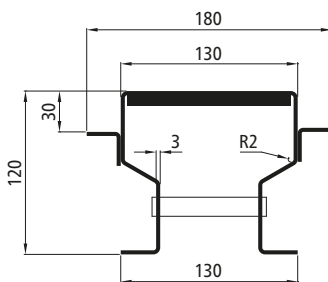
Steel self colour, welding version.
Can be shortened individually.

	Length [mm]	Weight [kg]	LC [daN]
605646477	2542	35,52	2000

Mounting bracket for MultiSave crossmember

Steel self colour, for riveting. For a recessed floor.

	Length [mm]	Weight [kg]
605646478	2542	2,69

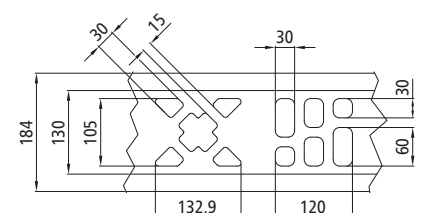
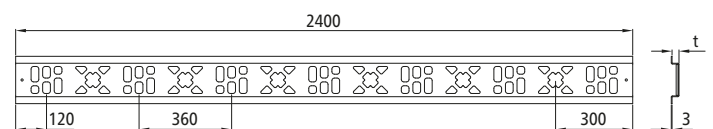
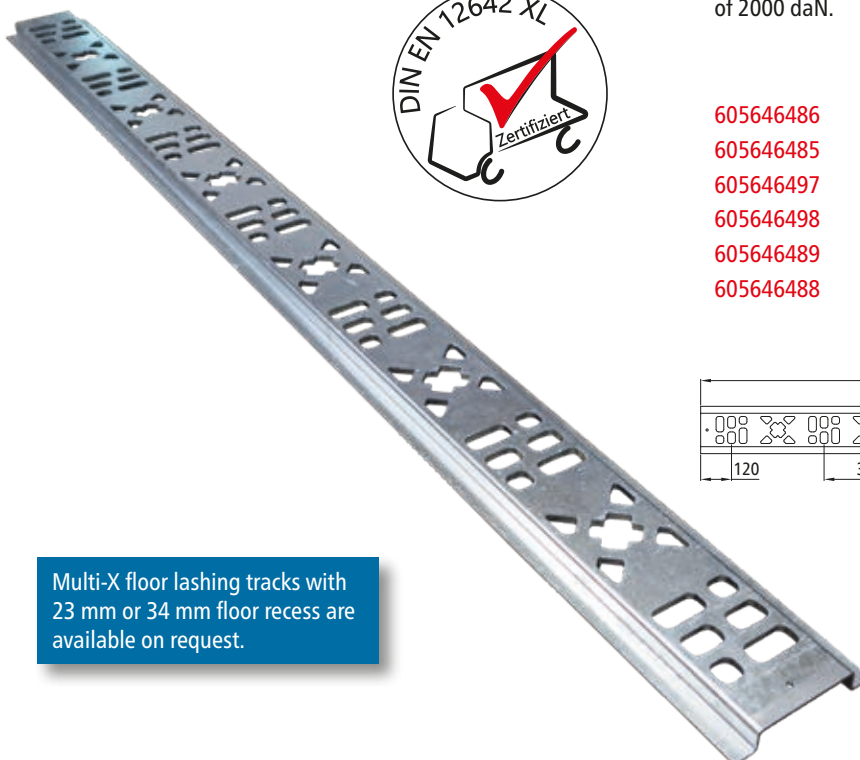


The MultiSave crossmember is certified to DIN EN 12642 XL and tested as a lashing anchor point to DIN EN 12640 with a permissible load of 2000 daN in the vehicle longitudinal and lateral directions.

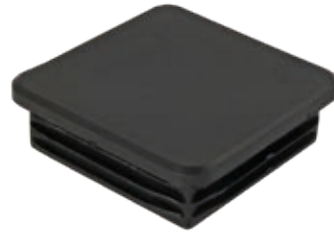
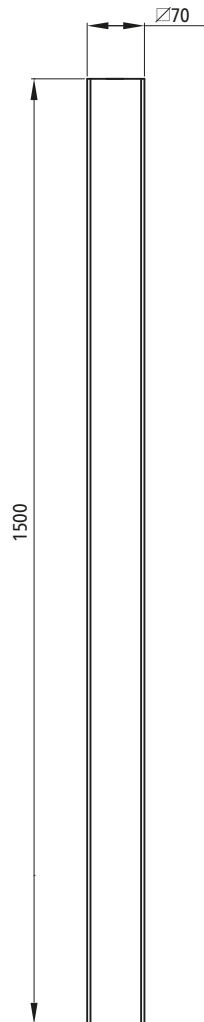
Multi-X floor lashing track

Steel self colour/microZINQ® 5.
Weldable/screwable with countersunk screws M8. Certified to DIN EN 12640, approved as lashing point stop for a maximum load of 2000 daN.

	Length [mm]	Weight [kg]	Floor recess [mm]	Material surface
605646486	2400	22,72	27 + 3	self colour
605646485	2400	22,72	27 + 3	microZINQ® 5
605646497	2400	23,18	31 + 3	self colour
605646498	2400	23,18	31 + 3	microZINQ® 5
605646489	2400	24,19	40 + 3	self colour
605646488	2400	24,19	40 + 3	microZINQ® 5



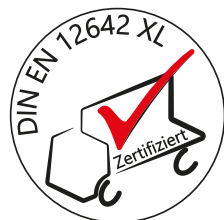
Multi-X floor lashing tracks with 23 mm or 34 mm floor recess are available on request.



Plastic cap

PE/LLD plastic, black, weight 0.02 kg.
For MultiSticks and MultiFixx sticks.

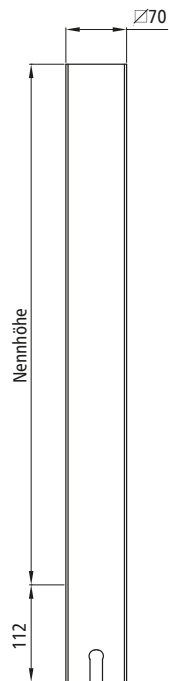
605646496



MultiFixx stick 70-1500

Steell microZINQ® 5.
Stick for MultiFixx system.
Can be shortened individually.

	Height [mm]	Weight [kg]	Tube- \varnothing [mm]
605646564	1500	12.38	70 x 70



MultiStick 70

Steel microZINQ® 5. Plug-in pillar for MultiSave crossmembers.
DEKRA certified to DIN EN 12642 XL.

	Nominal height [mm]	Weight [kg]	Tube-∅ [mm]
605646475	600	5.29	70 x 70
605646484	800	6.78	70 x 70
605646476	1000	8.29	70 x 70

103131538	156	142138239	85, 118, 119	142138567	133	142138722	19
105102682	43	142138240	85	142138568	83	142138723	43
105131557	144	142138247	85	142138568	85	142138725	68
105131658	139	142138248	88	142138569	88	142138730	54
105131661	139	142138254	18	142138570	26	142138731	54
105131809	139	142138269	18	142138571	26	142138732	54
105131810	139	142138289	13	142138572	90	142138733	54
105131811	139	142138296	46	142138573	96	142138734	54
122131801	144	142138500	50	142138574	96	142138742	74
122138006	10	142138501	51	142138575	96	142138743	18
122138110	150	142138502	50	142138576	95	142138745	27
122138113	150	142138503	51	142138577	95	142138746	61, 64, 96
125131005	157	142138504	50	142138578	95	142138747	94
125131006	157	142138505	51	142138579	26	142138748	96
125151117	154	142138506	50	142138580	85	142138749	91
125151118	154	142138507	51	142138581	128	142138750	25
142102144	43	142138508	52	142138582	128	142138751	70
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142131854	83	142138518	124	142138587	100	142138759	124
142131855	83	142138519	110	142138588	84	142138761	54
142131856	112	142138522	68	142138589	21	142138762	54
142131857	111, 118, 119	142138523	94	142138590	22	142138763	54
142131858	83	142138524	93	142138591	101	142138764	54
142131859	83	142138525	93	142138596	46	142138765	55
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142131860	86	142138527	92	142138598	8	142138767	55
142131861	86	142138528	93	142138599	25	142138768	55
142131864	32	142138529	93	142138600	26	142138769	55
142131865	32	142138530	92	142138610	10, 64	142138770	55
142136067	124	142138531	92	142138611	9, 64	142138771	55
142136068	124	142138532	92	142138612	14	142138772	55
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142136070	124	142138534	90	142138616	128	142138775	50
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142137045	74	142138536	89	142138623	85	142138777	50
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142137071	82	142138540	90	142138636	18	142138779	51
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142138005	9	142138548	132	142138702	26	142138783	32
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142138031	22	142138558	132	142138712	23	142138794	84
142138032	21	142138559	133	142138713	87	142138800	75
142138034	23	142138560	133	142138715	87	142138801	105
142138073	70	142138561	133	142138716	89	142138802	27
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Clause 8 LIABILITY RESTRICTIONS

- (1) Suer's liability for damages, irrespective of the legal ground, in particular due to impossibility, delay, defective or incorrect delivery, contractual violation, violation of obligations during contractual negotiations and illegal action is, as far as there is a question of culpability, restricted in terms of this clause 8.
- (2) Suer is not liable in the event of simple negligence of its organs, legal representatives, employees or other vicarious agents as far as it does not relate to a violation of essential contractual obligations. Essential contractual obligations comprise the obligation for the timely delivery and installation of the delivery item, its freedom of legal defects as well as such material defects which make its functionality or usability more than merely insignificantly hampered, as well as obligations to advise, protect and exercise proper care which make it possible for the Customer to use the delivery item in terms of the contract or have the purpose of protecting body or life of the Customer's employees or to protect his property from considerable damage.
- (3) As far as Suer, is liable for damages in terms of Clause 8 (2), this liability is restricted to damages which Suer foresaw as a possible consequence of a contractual violation when concluding the contract or should have seen by applying customary care. Indirect damages and consequential damages resulting from defects in the delivery item are only eligible for compensation as far as such damage could be typically expected when using the goods for their intended purpose.
- (4) In the event of a liability for simple negligence Suer's liability for material damage and any resultant further loss of income is restricted to an amount of EUR 5.200.000 per claim (corresponding to the current sum insured by Suer's product liability insurance or liability insurance) even if it relates to a violation of essential contractual obligations.
- (5) The aforementioned liability exclusions and restrictions apply to the same extent in favour of Suer's organs, legal representatives, employees and other vicarious agents.
- (6) As far as Suer provides technical information or acts as a consultant, and this information or consultation is not part of its owed contractually agreed scope of service, this takes place free of charge and excludes any kind of liability.
- (7) The restrictions of this clause 8 do not apply to Suer's liability for any intentional and grossly negligent behaviour, for guaranteed quality characteristics, harm to life, body or health or in terms of the Product Liability Act.

Clause 9 RESERVATION OF TITLE

- (1) The delivered goods (reserved goods) remain the property of Suer until all demands to which Suer is entitled to claim against the Customer now and in future have been settled; this includes all balance claims from the current account. As far as the Customer's behaviour is in breach of the contract - in particular as far as he is in arrears in settling a payment

request - Suer has the right to take back the reserved goods after Suer has set a reasonable period of grace for the performance. Any incurred transport costs are for the Customer's account. As far as Suer takes back the reserved goods, this represents a withdrawal from the contract. If Suer pledges the reserved goods, this is equally considered to be a withdrawal from the contract. Suer may further exploit the reserved goods it has taken back. The proceeds from the exploitation is set off against the amounts which the Customer owes Suer after Suer has deducted a reasonable amount for the cost of such exploitation.

(2) The Customer shall treat the reserved goods with care. He shall adequately insure them at their replacement value against damage caused by fire, water and theft at his expense. In the event that maintenance and inspection work is required, the Customer shall perform such services in good time at his own expense.

(3) The Customer may use the reserved goods and sell them during the course of normal business as long as he is not in default of payment. He may, however, not pledge or assign them by way of security. The Customer's already now assigns Suer by way of security his entire payment claims against his customers resulting from the sale of the reserved goods as well as those claims the Customer has with regard to the reserved goods arising from another legal ground against his own buyers or third parties (in particular claims due to illegal action and entitlements to insurance benefits) including all balance claims from the current account. Suer accepts this assignment. The Customer may collect the claims assigned to Suer at his expense and on his own behalf for Suer as long as Suer does not revoke this authorization. This does not affect Suer's right to collect these claims itself; however, Suer will not assert this right and will not revoke the collection authorization as long as the Customer properly meets his payment obligations. However, should the Customer behave contrary to the contract - in particular if he is in arrears with a payment claim - Suer can demand that the Customer notifies Suer of the assigned claims and the relevant debtors, and notify the relevant debtor of the assignment and hand over all the documents to Suer and provide Suer with all the information it needs to assert the claim.

(4) Processing or transformation of the reserved goods by the Customer is always carried out for Suer. If the reserved goods are processed with other items which do not belong to Suer, Suer acquires co-ownership in the new item proportionate to the value of the reserved goods (final invoice amount including value-added-tax) to the other processed items at the time of the processing. Apart from that, the same applies to the new item that was created through the processing as for reserved goods. If the reserved goods are inseparably combined or mixed with other goods which are not the property of Suer, Suer acquires co-ownership in the new item proportionate to the value of the reserved goods (final invoice amount including value-added-tax) to the other combined or mixed items at the time they are combined or mixed. If the reserved goods are combined or mixed in such a way that the Customer's item is to be seen as the main thing, the Customer and Suer already now agree that the Customer shall transfer proportional co-ownership of this item to Suer. Suer accepts this assignment. The Customer will keep the thus

created sole ownership or co-ownership of an item for Suer.

(5) In the event the reserved goods are pledged by a third party or other interventions by a third party, the Customer must point out Suer's ownership and must immediately inform Suer in writing so that Suer can assert its property rights. The Customer shall be liable in the event that the third party is unable to refund Suer any legal or out-of-court costs in this regard.

(6) At the Customer's request, Suer is obligated to release the securities to which Suer is entitled to the extent that the realisable value exceeds the value of Suer's entitled outstanding claims against the Customer by more than 10%.

Clause 10 FINAL PROVISIONS

(1) If the Customer is a merchant, a legal person under public law or a special fund under public law or does not have a general place of jurisdiction in the Federal Republic of Germany, Reimscheid shall be the place of jurisdiction for all possible disputes arising from the business relationship between Suer and the Customer. Mandatory statutory provisions regarding exclusive places of jurisdiction remain unaffected by this regulation.

(2) The relationships between Suer and the Customer are exclusively subject to the law of the Federal Republic of Germany. The agreement of the United Nations governing the international sale of goods of 11 April 1980 (UN Convention on Contracts for the International Sale of Goods (CISG)) does not apply.

(3) Should this agreement or these General Terms and Conditions of Business contain lacunae, such effective regulations to fill these lacunae, which the contracting partners would have agreed in terms of the commercial intent of the agreement and for the purpose of these General Terms and Conditions of Business had they known of the lacuna, are deemed agreed.

Note:

The Customer notes that Suer stores data in connection with the contractual relationship in terms of section 28 Federal Data Protection Act for the purpose of data processing and reserves the right to transfer these data to third parties (e.g. insurance companies), as far as they are required to fulfil the agreement.

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