



Deployed all over Europe



Visit us in the internet

You will get updated information on our web page. You will find all products and news clearly arranged.

Furthermore we have prepared PDF files for all product groups, which you can download conveniently.

www.wistra.eu

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WISTRA GmbH

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Our experience guarantees your safety!





Mark Zubel

Dear customer,

We are pleased to present our Catalogue 2012 to you.

On the following pages you will be able to acquaint yourself with WISTRA GmbH.

In the individual categories you can get an impression of the capability of our modern company and of our products and services.

Besides our well known products we present the latest product developments and accessories of our product range.

We look forward to cooperate with you and wish you pleasant browsing in our catalogue.

Your

Your



WISTRA company building in Lübeck-Selmsdorf

The company

More than 25 years WISTRA GmbH. More than 25 years of quality, continuous further development and technical modernisation.

During these years we have continuously expanded our range of products, thanks to the demands of our customers on our products. This close cooperation with our customers has resulted in a number of special products being developed as standard products in our range of products. In this way we can offer you products for all aspects of load securing and safety, which have already been proven in practice.

In international and global business and movement of goods it is of importance to us that our products and services always comply with new requirements. We employ highly skilled specialists in our team of 50 permanent employees in order to meet these increased requirements.

With their dedication they will in future ensure that our company remains successful in the market with excellent products.

1986

Founding of the WISTRA company by Mr. Peter Wiskow. World-wide sales under license of the Powerbrace door gears.

1988

Foundation of WISTRA **GmbH Transport-**Sicherheit-Systeme. Sales of load securing systems.

1991

Relocation to the new building in the industrial supplier of customs area Lübeck-Selmsdorf as new company head office with production facility for load securing systems.

1993

WISTRA is the official seals in the German customs domain.

1994

Start of the Far East cooperation as an additional production

1997

Certification in terms of DIN EN ISO 9002. Introduction of own Quality Management.

1998

Expansion and development of the Production department for textile load securing at the Lübeck-Selmsdorf site.

Certified safety in development and production



View of Production

Production

Almost all products of textile and mechanical load securing are developed and designed by us.

Competent specialists ensure the installation and production of all our products in compliance with quality requirements with our modern machinery.

Years of cooperation with companies in the Far East and Eastern Europe allow us to offer you an excellent price-performance ratio.

As a result of this cooperation we can already offer you a broad spectrum of special solutions, like for instance the products of the POWER-BRACE door brace series, which are manufactured under licence of an American development

and marketed by us. In the area of security seals and theft protection we can offer you a broad spectrum of practice-proven products.

You will certainly find the right solution for your individual requirements at WISTRA!

Quality

All products of the WISTRA product range are subjected to stringent safety tests.

Our Quality Management forms the basis for guaranteeing our consistently high quality.

Most of the products in our program are subjected to extraordinary continuous loading. Therefore the materials processed by us have been subjected to extensive test series all along.

This is pure safety for our customers.



Materialprüfung bei WISTRA



2002

Development of the sales network by the establishment of further cooperation in Eastern Europe.

2004

Increase of the production capacity through the acquisition of further automatic sewing machines.

2006

Mark Zubel is appointed in company management.

2007

Founding of a subsidiary in the Baltic states, Wistra u.a.b.

2008

Expansion of the warehouse and production area by 1,600 m².

2009

Sales cooperation on the Russian market

2012

Implementation of most modern fully automatic sewing machines for the expansion of production capacity and flexibility

Overview of our security program



Textile load securing

Our decades of experience and the continuous further development and supplementation of our product range enable us to offer you exceptionally designed solutions for textile load securing.

Be it air, water, rail or road - we have solutions for the individual requirements of your company regarding load securing.

Daily deployment under the most varied conditions proves the high degree of reliability of our products and affirms us in the application of the latest thermal processes.

WISTRA lashing straps are manufactured according to the current state of the art in terms of DIN EN 12 195-2 and are GS-certified to a large extent.

Our patented SAFEGUARD load securing nets are developed specifically for transportation goods, adapted and made up individually.

Many logistics companies, amongst them Deutsche Post, GLS and Hermes, use our SAFEGUARD nets successfully in the areas railway, post, parcel service and general cargo.



Renowned logistics companies rely on WISTRA products



Example: Cargo nets to hold down loads

Mechanical load securing

We have developed customs-proven load securing devices of the highest level in cooperation with the Customs Crime Institute.

The patented WISTRA shore beam POWERSTOP resulted from this, which is used to seal cavities in vehicles and can withstand loads of up to 2.5 t.

POWERSTOP is a real Hercules among load securing systems and is mainly used in the combined load traffic on road and rail.

The rigid load securing devices are generally summarised in the mechanical load securing product group. We protect the cargo in all vehicles safely and in form-fit shape.

WISTRA has designed many of these products as unit construction systems. This enables the use of various load securing devices for the rails and wall panels currently installed in vehicles.

For vans and trailers

Textile load securing systems such as lashing straps and particularly cargo nets from the SAFE-GUARD series form part of the program for vans and trailers. These nets are available in many standard versions proven during practical experience as well as individual solutions according to customer requirements.

WISTRA cargo nets can be used to partition cargo space, rear load securing and tying down. They can be fixed to the standard lashing points mounted by the vehicle manufacturer. Matching end-fittings can be found in the chapter End-fittings in this catalogue.

Of course all other load securing systems, such as shoring beams and lashing straps, can be adapted to vans and trailers. All WISTRA systems offer easy installation in the tracks and wall panels already mounted in the vehicles. WISTRA thereby offers a complete and individual solution for load securing in vans and trailers.

Feel free to request a solution proposal for your special transport securing system. Our specialist team will be happy to offer advice and to prepare a corresponding offer for you.



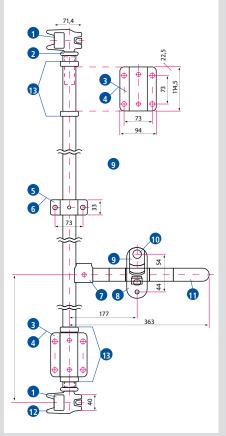
Door gears

The door gears from our POWERBRACE series are well suited for containers boxes and compact vehicles as well as swap bodies.

WISTRA door gears are designed and constructed for extreme conditions. Even if a door has not been closed properly it cannot open. The "over centre action" prevents the door from opening.

The POWERBRACE door gears are very slim and their main feature is the extreme gathering capability (both horizontally and vertically).

POWERBRACE - this means: security in the transport units, even before loading the goods.





Powerbrace door gears with a patented locking action

Matured mechanical engineering

Security seals/ theft protection

Owing to the the opening of many borders for national and international trade, the requirements for a safe transport of goods are increasing.

WISTRA has for a long time prepared for this situation and offers a broad product range of security seals for your requirements regarding load securing.

WISTRA is one of the few authorised suppliers of the customs seal Mini Breakaway in the area of jurisdiction of the German Customs Act.

Wistra has compiled an extensive program of theft prevention systems in order to curb theft and manipulation. They are conceptualised in such a way that the entire means of transport is protected, at the same time preventing unauthorised access to the cargo.





Theft protection for every means of transport

Lifting technology

The lifting technology range of WISTRA comprises round slings and lifting slings with reinforced end slings.

They are only manufactured from tested material in order to meet the highest demands.

Our round slings and lifting slings range in load bearing capacity from 1,000 to 10,000 kg.

Our lifting slings and round slings are manufactured according to current standards and are available in various lengths.

Consultation, analysis and implementation

WISTRA convinces when it comes to individual solutions for difficult transportation tasks.

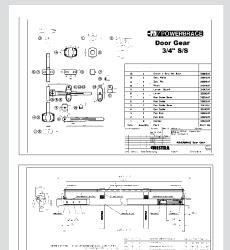
The WISTRA development engineers analyse the specific tasks on site together with the customer and develop individual transport securing concepts.

Thanks to our close contact with forwarders and manufacturers we are in a position to develop quick and specific solutions.

WISTRA dispose of a high standard of technical expertise regarding transport and load securing and use their wealth of experience with products and transport routes to work out optimal security systems.



Competent and detailed consultation, on site or on our premises



Wistra training

More than 25 years of intensive analysis of all aspects of the topic of load securing have resulted in a lot of technical know-how and experience.

In our seminars on the topic of load securing in terms of VDI Guideline 2700 (a) we gladly share our technical know-how and experience with our customers and prospects.

Quite often these seminars help in clarifying upfront, which load securing systems would be the best choice for the relevant requirements.

We have prepared these topics for you:

- Basic theoretical knowledge in the field of "StVO", "StVzo", "HGB", "UVV", "VDI" or "DIN" and "EN"
- · Physical basic knowledge
- Practical advice and demonstration

Call us for a training session.

Special requests

Various special products represent a special advantage for you.

WISTRA can for instance supply lashing strap material in all colours and lengths, if they do not appear in this catalogue.

Upon your request we can supply many items with your company logo and/or company name.

Even customer-specific special products represent solvable challenges to us.

If you do not find an item in this catalogue, please contact us.

Together we will surely find the right solution for vou.

WISTRA training trailer

Technical knowledge for your events

Distinguish yourself from other providers and use the WISTRA demo trailer as an attraction for your next customer event.

Use our trailer and our qualified consultants to draw potential and existing customers.

Present your visitors with useful technical knowledge at no cost and stay in their minds.

You can create a lot of added value for your visitors, even without a huge framework event, and put yourself ahead of other competitors with this special service - just by using our WISTRA demotrailer.

We provide the trailer with our qualified consultants for training purposes as added value for every sales and exhibition stand. The costs are based on actual costs for the deployment.

Call us to arrange a date!



Numerous exhibits, samples and training material - presented in just a few minutes

WISTRA Service

Eye-catching information on the current topic are an efficient attraction. Our training trailer with qualified consultants is available for your events.

WISTRA App — the proven lashing strap slider as application



WISTRA app icon

Calculate the required number of lashing straps to tie down a stable load or use the form-fit calculator to determine the maximum load unit weights, based on the maximum blocking capacity of the form-fit device.

The menu of the app is intuitive and practical. The data of the integrated angle meter can be taken over directly for the exact calculation as an effi-

You can find further aids regarding load securing in the information of both areas.

It is our goal that you reach your destination safely!

http://itunes.apple.com/de/app/wistraapp/ id442392262?mt=8



Lashing strap calculator

tying down stable loads

- · Selection of additional STF values up to 2,000 daN initial tension
- · Load weights up to 30 t New infinitely variable in 0.1 t steps!
- · Reference table of sliding friction coefficients included for information



Form-fit calculator

- · Form-fit calculator up to 10,000 daN blocking capacity
- Sliding friction coefficient setting from 0.0 to 0.6 µD in 0.1 steps
- Reference table of sliding friction coefficients included for information



Textile load securing

On the following pages you can find a wide selection of lashing straps. In principle two performance characteristics are of importance to you, depending on the application of the lashing straps.

For classic tying down, mainly the tension forces $S_{TF}-Standard$ Tension Force — are of importance to you.

If you use the lashing straps for direct/diagonal lashing, please select the lashing strap according to the required lashing capacity LC – Lashing Capacity.

Besides the lashing straps we also offer options, like for instance property marking by means of printing the lashing straps, as well as a number of accessories.

We offer two versions as a further aid in the calculation:

- · WISTRA lashing strap slider
- · the WISTRA APP lashing strap calculator



Lashing straps

The WIS label

Re-usable polyester lashing straps are furnished with one blue label for single-part lashing straps and with one label on each of the loose end and the fixed end for two-part lashing straps, which contain the following information:

WIS label short end

Lashing Capacity:
 LC value in daN

Standard Hand Force: SHF 50 daN

Standard Tension Force: STF value in daN

· Warning:

May not be used for lifting!

Material specification:
 PES (for lashing straps with polyester webbing)

- Stretching of the lashing strap in % for LC value
- Name or symbol of the manufacturer
- WIS tracking code
- Standard specification: EN 12195-2
- · Year of manufacture

WIS label long end

- Lashing Capacity:
 LC value in daN
- Warning: May not be used for lifting!
- Material specification:
 PES (for lashing straps with polyester webbing)
- Stretching of the lashing strap in % for LC value
- · Name or symbol of the manufacturer



The WIS label (example WTL 5550-006 short end 0.5 m)

- · WIS tracking code
- Standard specification: EN 12195-2
- · Year of manufacture

User information, Additional label and User Manual

Benutzerinformation

Es dürfen nur unbeschädigte
Zurrgurte verwendet werden
deren Etikett lesbar ist.
Unsachgemäße Ladungssicherung
stellt eine Gefahr für das Leben
won Personen, Tieren oder Götern
im Gefahrenbereich dar.
Die praktischen Hinweise zur
Benutzung und Pflege von
Zurrgurten gemäß
DIN EN 12195 – 2 Anhang B
sind unbedingt einzuhalten.

Reverse side



Front side

Lashing strap types

- 1 The single-part lashing strap consists of the strap and a ratchet as a tensioning element. It is used for bundling or strapping load items into a loading unit.
- 2 The two-part lashing strap consists of the fixed end and the loose end. The fixed end consists of a short, non-adjustable lashing strap to which the ratchet and a hook are fastened as

connecting element. The loose end, for instance, is an approximately 7.5 metre long lashing strap, to which a hook is fastened as connecting element.





Handling of straps

Only lashing straps which are furnished with legible labels may be used. The label must prove that the strap complies with DIN EN12195-2. No mechanical aids like rods or levers, which do not belong to the tensioning element, may be used. Lashing straps may not be knotted. Lashing straps must be protected against friction and abrasion as well as against sharp edges (see edge protectors page 62 - 64).

Lashing straps may not be used for lifting loads.



Correct handling of ratchets

1. After pulling the function slider, lift up the ratchet lever and then insert the strap.

Handling of ratchets

The strap end of the loose end is threaded in the winding shaft of the ratchet. By actuating the ratchet lever, the belt strap is wound up and thus tensioned, due to the rotation of the shaft. The lashing strap must be wound at least 1.5 times around the winding shaft so that the belt strap fits tightly. However, more than three strap layers must not be wound up, otherwise the lock slider can get stuck. The function slider must be pulled and the ratchet lever must be swung by approximately 180 degrees up to the limit stop for releasing the belt strap. The initial tension is thereby released with a jolt. Therefore the load must be checked beforehand for possible danger.



2. Pull the function slider and turn down the ratchet lever by approximately 100 degrees to release.

Checking lashing straps and load securing devices.

In terms of the VDI 2700 Guideline, all devices used for load securing must in principle be subjected to an annual test by a qualified and authorised person. As a supplementary measure in terms of DIN EN 12 195-2, testing of lashing straps made of chemical fibres is recommended before and after every use. WISTRA recommends this for all load securing devices.

Rope discard means that the use of a lashing strap must be stopped if specified signs of wear become visible.

Some criteria for rope discard of lashing straps:

- · Data on the lashing strap labels is illegible
- · Cuts in the material width of more than 10% e.g. for lashing straps with a width of 50 mm = approx. 5 mm
- · Damage through heat or chemical influences
- · Increased formation of rust, cracks and/or other deformations on the connecting elements (hooks) as well as the tensioning element (ratchet) Note: The winding elements must particularly be inspected.
- $\cdot \;\;$ A lashing strap must not only be replaced based on its year of manufacture!

Terms

Lashing devices

Consist of the tensioning device (e.g. strap, chain, cord), the tensioning element (e.g. ratchet, winding mechanism, clamp lock) and possibly the connecting element (end-fitting, hook)

Lashing strap

Is a lashing device consisting of the tensioning element or a lashing strap clamp and a lashing strap with or without connecting element.

Strap

Is a woven textile strap.

Tensioning element

Is a mechanical device for introducing the tension force in a lashing device.

End-fitting

Is a device for connecting the lashing strap or the tensioning element with the lashing point or the fixture point of the load.

Initial tension indicator

Is a device indicating the initial tension in the lashing system.

Single-part lashing strap

Is a lashing device consisting of a textile strap and a tensioning element (use of freely moveable endfittings is possible).

Two-part lashing strap

Is a lashing device, consisting of two woven textile straps, one with a tensioning element, and both with one end-fitting

IG length - single-part lashing strap

Measured from the end of the lashing strap up to the outer turn radius of its connection with the tensioning element

IGF length - fixed end

Measured from the bearing point of the terminal bracket up to the outer turn radius of its connection with the tensioning element

IGL length - loose end

Measured from the end of the strap up to the bearing point of the terminal bracket piece

Minimum breaking force BF_{min}

The breaking force for which a lashing strap is designed

Lashing capacity LC

The highest force for use in straight traction for which a lashing strap is designed

Functional factor

The relation between fixed minimum breaking force $\mathrm{BF}_{\mathrm{min}}$ and lashing capacity LC

2 – for tensioning element and terminal bracket

 $3-for\ strap$

Hand force HF

Force on the grip of the tensioning element that produces traction in the lashing strap

Standard hand force SHF

Prescribed hand force of $500\ N=50\ daN$ specified on the label

Standard tension force STF

The remaining force after the grip of a ratchet has been let go at the prescribed hand force of 50 daN.

Lashing straps · Heavy duty lashing straps

WISTRA lashing straps are manufactured according to the valid standard DIN EN 12195-2:2000 Safety Part 2: "Lashing straps made of chemical fibres".

Our wide range of lashing straps offers you a large variety of versions for every application in order to tie down your transport goods safely and properly in compliance with the regulations.

Besides standard straps we also offer individually manufactured lashing straps with the required length and end-fittings of your choice.

The straps can be furnished with ratchets, overcenter locks or clamp locks.



Overview of the lashing strap options

Sorted according to initial tension STF

350 daN	450 daN	550 daN	700 daN	900 daN	1100 daN
WTQ 5350	WTQ 5450	WTU 10550	WTN 3700	WTE 545A	WTL 555A
WTQ 4350	WTQ 4450	WTQ 5550	WTR 535A		
WTR 5000	WTE 5450	WTQ 4550			
WTR 4000	WTE 4450	WTL 5550			
WTF 5350	WTF 5450	WTL 4550			
		WTF 5550			

Sorted according to LC in straight tension

1600 daN	2000 daN	2500 daN	5000 daN
WTN 3700	WTQ 4550	WTQ 5550	WTR 10000
	WTQ 4450	WTQ 5450	WTU 10550
	WTQ 4350	WTQ 5350	
	WTL 4550	WTL 5550	
	WTE 4450	WTE 5450	
	WTR 4000	WTR 5000	
		WTF 5000	
		WTR 535A	
		WTE 545A	
		WTL 555A	

WISTRA WTR 10000 pressure ratchet lashing strap

- · Lashing capacity LC 5,000 daN in straight tension
- · Manufactured and tested in terms of EN 12195-2: current version
- · Tensioning element ratchet 975
- · Strap durable due to PU coated webbing (PES)

End-fittings:



More end-fittings on pages 90 to 98.



Standard version	Short designation	Item No.
with end-fitting 067 - pointed hook		
two-part – FE 0.5 m + LE 3.5 m yellow webbing	WTR 10000-067 0.5+3.5 yellow	1750535
two-part – FE 0.5 m + LE 7.5 m yellow webbing	WTR 10000-067 0.5+3.5 yellow	1750575
two-part – FE 0.5 m + LE 9.5 m yellow webbing	WTR 10000-067 0.5+9.5 yellow	1750595
Fixed end 0.5 m yellow webbing	WTR 10000-067 FE 0.5 yellow	1750580
Loose end 9.5 m yellow webbing	WTR 10000-067 FE 9.5 yellow	1750590

WISTRA WTR 10550 tension ratchet lashing strap

- Normal tension force STF 550 daN for normal hand force SHF 50 daN
- · Lashing capacity LC 5,000 daN in straight tension
- · manufactured and tested in terms of EN 12195-2: current version
- · Tensioning element ratchet 818
- · Strap 50 mm durable due to PU coated webbing (PES)

End-fittings:



More end-fittings on pages 90 to 98.



Standard version	Short designation	Item No.
with end-fitting 067 - pointed hook		
single-part - application 1.0 m to 4.0 m red webbing	WTU 10550-067 1.0/4.0 red	1501031
single-part - application 1.0 m to 8.0 m red webbing	WTU 10550-067 1.0/8.0 red	1501032

WISTRA WTQ 5550 tension ratchet lashing strap

- Normal tension force STF 550 daN for normal hand force SHF 50 daN
- · Lashing capacity LC 2,500 daN in straight tension
- · manufactured and tested in terms of EN 12195-2: current version
- · Tensioning element ratchet 818
- · Version with additional quick view label
- · Can be supplied with factory certificate / test certificate



Quick View Label

Accessories



Edge protection



Anti-slip mat

WISTRA WTQ 555K tension ratchet lashing strap

Version with body tissue

Strap 50 mm - the special body-binding technology and modern ultra sound refining ensure a significantly higher abrasion resistance for this polyester webbing (PES), and thereby for a longer service life.

WISTRA WTQ 555W tension ratchet lashing strap

Version with water-repelling webbing

Strap 50 mm - due to special surface coating, water does not penetrate into the polyester webbing (PES) and guarantees optimal application characteristics even with winter temperatures.

WISTRA WTQ 555R tension ratchet lashing strap

Version with two reflective strips in the webbing

Strap 50 mm - visual emphasis as a result of the two reflective strips

End-fittings:



You can find additional end-fittings with a minimum breaking force MBL 5,000 daN on pages 90 to 98.

WISTRA WTQ 555K tension ratchet lashing strap



Standard version	Short designation	Item No.
single-part - 8.0 m	WTQ 555K single-part 8.0 lemon yellow	1501033
with end-fitting 006 - pointed hook		
two-part – FE 0.5 m + LE 7.5 m lemon yellow webbing	WTQ 555K-006 0.5+7.5 lemon yellow	1501034
two-part – FE 0.5 m + LE 8.5 m lemon yellow webbing	WTQ 555K-006 0.5+8.5 lemon yellow	1501035
two-part – FE 0.5 m + LE 9.5 m lemon yellow webbing	WTQ 555K-006 0.5+9.5 lemon yellow	1501036
two-part – FE 0.5 m + LE 11.5 m lemon yellow webbing	WTQ 555K-006 0.5+11.5 lemon yellow	1501037

WISTRA WTQ 555W tension ratchet lashing strap



Standard version	Short designation	Item No.
single-part - 8.0 m	WTQ 555W single-part 8.0 m orange	1501038
with end-fitting 006 - pointed hook		
two-part – FE 0.5 m + LE 7.5 m orange webbing	WTQ 555W-006 0.5+7.5 orange	1501039
two-part – FE 0.5 m + LE 8.5 m orange webbing	WTQ 555W-006 0.5+8.5 orange	1501040
two-part – FE 0.5 m + LE 9.5 m orange webbing	WTQ 555W-006 0.5+9.5 orange	1501041
two-part – FE 0.5 m + LE 11.5 m orange webbing	WTQ 555W-006 0.5+11.5 orange	1501042

WISTRA WTQ 555R tension ratchet lashing strap



Standard version	Short designation	Item No.		
single-part - 8.0 m	WTQ 555R single-part 8.0 orange	1501043		
with end-fitting 006 - pointed hook				
two-part – FE 0.5 m + LE 7.5 m orange webbing	WTQ 555R-006 0.5+7.5 orange	1501044		
two-part – FE 0.5 m + LE 8.5 m orange webbing	WTQ 555R-006 0.5+8.5 orange	1501045		
two-part – FE 0.5 m + LE 9.5 m orange webbing	WTQ 555R-006 0.5+9.5 orange	1501046		
two-part – FE 0.5 m + LE 11.5 m orange webbing	WTQ 555R-006 0.5+11.5 orange	1501047		

WISTRA WTQ 5450 tension ratchet lashing strap

- Normal tension force STF 450 daN for normal hand force SHF 50 daN
- · Lashing capacity LC 2,500 daN in straight tension
- · Manufactured and tested in terms of EN 12195-2: current version
- · Tensioning element ratchet 814
- · Version with additional quick view label
- · Can be supplied with factory certificate / test certificate



Quick View Label

Accessories



Strap rolling-up system



Parking device

WISTRA WTQ 545K tension ratchet lashing strap

Version with body tissue

Strap 50 mm - the special body-binding technology and modern ultra sound refining ensure a significantly higher abrasion resistance for this polyester webbing (PES), and thereby for a longer service life.

WISTRA WTQ 545W tension ratchet lashing strap

Version with water-repelling webbing

Strap 50 mm - due to special surface coating, water does not penetrate into the polyester webbing (PES) and guarantees optimal application characteristics even with winter temperatures.

WISTRA WTQ 545R tension ratchet lashing strap

Version with two reflective strips in the webbing

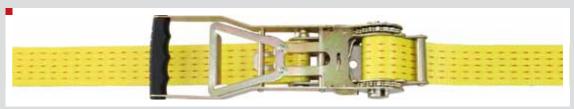
Strap 50 mm - visual emphasis as a result of the two reflective strips

End-fittings:



You can find additional end-fittings with a minimum breaking force MBL 5,000 daN on pages 90 to 98.

WISTRA WTQ 545K tension ratchet lashing strap



Standard version	Short designation	Item No.		
single-part - 8.0 m	WTQ 545K single-part 8.0 lemon yellow	1501048		
with end-fitting 006 - pointed hook				
two-part – FE 0.5 m + LE 7.5 m lemon yellow webbing	WTQ 545K-006 0.5+7.5 lemon yellow	1501049		
two-part – FE 0.5 m + LE 8.5 m lemon yellow webbing	WTQ 545K-006 0.5+8.5 lemon yellow	1501050		
two-part – FE 0.5 m + LE 9.5 m lemon yellow webbing	WTQ 545K-006 0.5+9.5 lemon yellow	1501051		
two-part – FE 0.5 m + LE 11.5 m lemon yellow webbing	WTQ 545K-006 0.5+11.5 lemon yellow	1501052		

WISTRA WTQ 545W tension ratchet lashing strap



Standard version	Short designation	Item No.	
single-part - 8.0 m	WTQ 545W single-part 8.0 m orange	1501053	
with end-fitting 006 - pointed hook			
two-part – FE 0.5 m + LE 7.5 m orange webbing	WTQ 545W-006 0.5+7.5 orange	1501054	
two-part – FE 0.5 m + LE 8.5 m orange webbing	WTQ 545W-006 0.5+8.5 orange	1501055	
two-part – FE 0.5 m + LE 9.5 m orange webbing	WTQ 545W-006 0.5+9.5 orange	1501056	
two-part – FE 0.5 m + LE 11.5 m orange webbing	WTQ 545W-006 0.5+11.5 orange	1501057	

WISTRA WTQ 545R tension ratchet lashing strap



Standard version	Short designation	Item No.		
single-part - 8.0 m	WTQ 545R single-part 8.0 orange	1501058		
with end-fitting 006 - pointed hook				
two-part – FE 0.5 m + LE 7.5 m orange webbing	WTQ 545R-006 0.5+7.5 orange	1501059		
two-part – FE 0.5 m + LE 8.5 m orange webbing	WTQ 545R-006 0.5+8.5 orange	1501060		
two-part – FE 0.5 m + LE 9.5 m orange webbing	WTQ 545R-006 0.5+9.5 orange	1501061		
two-part – FE 0.5 m + LE 11.5 m orange webbing	WTQ 545R-006 0.5+11.5 orange	1501062		

WISTRA WTQ 5350 pressure ratchet lashing strap

- Normal tension force STF 350 daN for normal hand force SHF 50 daN
- · Lashing capacity LC 2,500 daN in straight tension
- · Manufactured and tested in terms of EN 12195-2: current version
- Tensioning element ratchet 811
- · Version with additional quick view label
- · Can be supplied with factory certificate / test certificate



Quick View Label

Accessories



Lashing strap slider



Edge protection

WISTRA WTQ 535K pressure ratchet lashing strap

Version with body tissue

Strap 50 mm - the special body-binding technology and modern ultra sound refining ensure a significantly higher abrasion resistance for this polyester webbing (PES), and thereby for a longer service life.

WISTRA WTQ 535W pressure ratchet lashing strap

Version with water-repelling webbing

Strap 50 mm - due to special surface coating, water does not penetrate into the polyester webbing (PES) and guarantees optimal application characteristics even with winter temperatures.

WISTRA WTQ 535R pressure ratchet lashing strap

Version with two reflective strips in the webbing

Strap 50 mm - visual emphasis as a result of the two reflective strips

End-fittings:



You can find additional end-fittings with a minimum breaking force MBL 5,000 daN on pages 90 to 98.

WISTRA WTQ 535K pressure ratchet lashing strap



Standard version	Short designation	Item No.
single-part - 8.0 m	WTQ 535K single-part 8.0 lemon yellow	1501002
with end-fitting 006 - pointed hook		
two-part – FE 0.5 m + LE 7.5 m lemon yellow webbing	WTQ 535K-006 0.5+7.5 lemon yellow	1501003
two-part – FE 0.5 m + LE 8.5 m lemon yellow webbing	WTQ 535K-006 0.5+8.5 lemon yellow	1501004
two-part – FE 0.5 m + LE 9.5 m lemon yellow webbing	WTQ 535K-006 0.5+9.5 lemon yellow	1501005
two-part – FE 0.5 m + LE 11.5 m lemon yellow webbing	WTQ 535K-006 0.5+11.5 lemon yellow	1501006

WISTRA WTQ 535W pressure ratchet lashing strap



Standard version	Short designation	Item No.
single-part - 8.0 m	WTQ 535W single-part 8.0 orange	1501007
with end-fitting 006 - pointed hook		
two-part – FE 0.5 m + LE 5.5 m orange webbing	WTQ 535W-006 0.5+5.5 orange	1500688
two-part – FE 0.5 m + LE 7.5 m orange webbing	WTQ 535W-006 0.5+7.5 orange	1501008
two-part – FE 0.5 m + LE 8.5 m orange webbing	WTQ 535W-006 0.5+8.5 orange	1501009
two-part – FE 0.5 m + LE 9.5 m orange webbing	WTQ 535W-006 0.5+9.5 orange	1501010

WISTRA WTQ 535R pressure ratchet lashing strap



Standard version	Short designation	Item No.
single-part - 8.0 m	WTQ 535R single-part 8.0 orange	1501012
with end-fitting 006 - pointed hook		
two-part – FE 0.5 m + LE 7.5 m orange webbing	WTQ 535R-006 0.5+7.5 orange	1501013
two-part – FE 0.5 m + LE 8.5 m orange webbing	WTQ 535R-006 0.5+8.5 orange	1501014
two-part – FE 0.5 m + LE 9.5 m orange webbing	WTQ 535R-006 0.5+9.5 orange	1501015
two-part – FE 0.5 m + LE 11.5 m orange webbing	WTQ 535R-006 0.5+11.5 orange	1501016

WISTRA WTQ 4550 tension ratchet lashing strap

- Normal tension force STF 550 daN for normal hand force SHF 50 daN
- · Lashing capacity LC 2,000 daN in straight tension
- · Manufactured and tested in terms of EN 12195-2: current version
- · Tensioning element ratchet 818
- · Version with additional quick view label
- · Can be supplied with factory certificate / test certificate

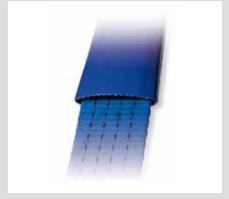


Quick View Label

Accessories



Edge protection, steel



Edge protection hose, rubberised

WISTRA WTQ 455K tension ratchet lashing strap

Version with body tissue

Strap 50 mm - the special body-binding technology and modern ultra sound refining ensure a significantly higher abrasion resistance for this polyester webbing (PES), and thereby for a longer service life.

WISTRA WTQ 455W tension ratchet lashing strap

Version with water-repelling webbing

Strap 50 mm - due to special surface coating, water does not penetrate into the polyester webbing (PES) and guarantees optimal application characteristics even with winter temperatures.

WISTRA WTQ 455R tension ratchet lashing strap

Version with two reflective strips in the webbing

Strap 50 mm - visual emphasis as a result of the two reflective strips

End-fittings:



You can find additional end-fittings with a minimum breaking force MBL 4,000 daN on pages 90 to 98.

WISTRA WTQ 455K tension ratchet lashing strap



Standard version	Short designation	Item No.
single-part - 8.0 m	WTQ 455K single-part 8.0 lemon yellow	1501063
with end-fitting 006 - pointed hook		
two-part – FE 0.5 m + LE 7.5 m lemon yellow webbing	WTQ 455K-006 0.5+7.5 lemon yellow	1501064
two-part – FE 0.5 m + LE 8.5 m lemon yellow webbing	WTQ 455K-006 0.5+8.5 lemon yellow	1501065
two-part – FE 0.5 m + LE 9.5 m lemon yellow webbing	WTQ 455K-006 0.5+9.5 lemon yellow	1501066
two-part – FE 0.5 m + LE 11.5 m lemon yellow webbing	WTQ 455K-006 0.5+11.5 lemon yellow	1501067

WISTRA WTQ 455W tension ratchet lashing strap



Standard version	Short designation	Item No.
single-part - 8.0 m	WTQ 455W single-part 8.0 m orange	1501068
with end-fitting 006 - pointed hook		
two-part – FE 0.5 m + LE 7.5 m orange webbing	WTQ 455W-006 0.5+7.5 orange	1501069
two-part – FE 0.5 m + LE 8.5 m orange webbing	WTQ 455W-006 0.5+8.5 orange	1501070
two-part – FE 0.5 m + LE 9.5 m orange webbing	WTQ 455W-006 0.5+9.5 orange	1501071
two-part – FE 0.5 m + LE 11.5 m orange webbing	WTQ 455W-006 0.5+11.5 orange	1501072

WISTRA WTQ 455R tension ratchet lashing strap



Standard version	Short designation	Item No.
single-part - 8.0 m	WTQ 455R single-part 8.0 orange	1501073
with end-fitting 006 - pointed hook		
two-part – FE 0.5 m + LE 7.5 m orange webbing	WTQ 455R-006 0.5+7.5 orange	1501074
two-part – FE 0.5 m + LE 8.5 m orange webbing	WTQ 455R-006 0.5+8.5 orange	1501075
two-part – FE 0.5 m + LE 9.5 m orange webbing	WTQ 455R-006 0.5+9.5 orange	1501076
two-part – FE 0.5 m + LE 11.5 m orange webbing	WTQ 455R-006 0.5+11.5 orange	1501077

WISTRA WTQ 4450 tension ratchet lashing strap

- Normal tension force STF 450 daN for normal hand force SHF 50 daN
- · Lashing capacity LC 2,000 daN in straight tension
- · manufactured and tested in terms of EN 12195-2: current version
- · Tensioning element ratchet 814
- · Version with additional quick view label
- · Can be supplied with factory certificate / test certificate



Quick View Label

Accessories



Lashing strap app



Ratchet base

WISTRA WTQ 445K tension ratchet lashing strap

Version with body tissue

Strap 50 mm - the special body-binding technology and modern ultra sound refining ensure a significantly higher abrasion resistance for this polyester webbing (PES), and thereby for a longer service life.

WISTRA WTQ 445W tension ratchet lashing strap

Version with water-repelling webbing

Strap 50 mm - due to special surface coating, water does not penetrate into the polyester webbing (PES) and guarantees optimal application characteristics even with winter temperatures.

WISTRA WTQ 445R tension ratchet lashing strap

Version with two reflective strips in the webbing

Strap 50 mm - visual emphasis as a result of the two reflective strips $\,$

End-fittings:



You can find additional end-fittings with a minimum breaking force MBL 4,000 daN on pages 90 to 98.

WISTRA WTQ 445K tension ratchet lashing strap



Standard version	Short designation	Item No.
single-part - 8.0 m	WTQ 445K single-part 8.0 lemon yellow	1501078
with end-fitting 006 - pointed hook		
two-part – FE 0.5 m + LE 7.5 m lemon yellow webbing	WTQ 445K-006 0.5+7.5 lemon yellow	1501079
two-part – FE 0.5 m + LE 8.5 m lemon yellow webbing	WTQ 445K-006 0.5+8.5 lemon yellow	1501080
two-part – FE 0.5 m + LE 9.5 m lemon yellow webbing	WTQ 445K-006 0.5+9.5 lemon yellow	1501081
two-part – FE 0.5 m + LE 11.5 m lemon yellow webbing	WTQ 445K-006 0.5+11.5 lemon yellow	1501082

WISTRA WTQ 445W tension ratchet lashing strap



Standard version	Short designation	Item No.
single-part - 8.0 m	WTQ 445W single-part 8.0 m orange	1501083
with end-fitting 006 - pointed hook		
two-part – FE 0.5 m + LE 7.5 m orange webbing	WTQ 445W-006 0.5+7.5 orange	1501084
two-part – FE 0.5 m + LE 8.5 m orange webbing	WTQ 445W-006 0.5+8.5 orange	1501085
two-part – FE 0.5 m + LE 9.5 m orange webbing	WTQ 445W-006 0.5+9.5 orange	1501086
two-part – FE 0.5 m + LE 11.5 m orange webbing	WTQ 445W-006 0.5+11.5 orange	1501087

WISTRA WTQ 445R tension ratchet lashing strap



Standard version	Short designation	Item No.
single-part - 8.0 m	WTQ 445R single-part 8.0 orange	1501088
with end-fitting 006 - pointed hook		
two-part – FE 0.5 m + LE 7.5 m orange webbing	WTQ 445R-006 0.5+7.5 orange	1501089
two-part – FE 0.5 m + LE 8.5 m orange webbing	WTQ 445R-006 0.5+8.5 orange	1501090
two-part – FE 0.5 m + LE 9.5 m orange webbing	WTQ 445R-006 0.5+9.5 orange	1501091
two-part – FE 0.5 m + LE 11.5 m orange webbing	WTQ 445R-006 0.5+11.5 orange	1501092

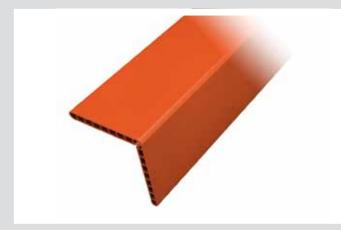
WISTRA WTQ 4350 pressure ratchet lashing strap

- Normal tension force STF 350 daN for normal hand force SHF 50 daN
- · Lashing capacity LC 2,000 daN in straight tension
- · Manufactured and tested in terms of EN 12195-2: current version
- · Tensioning element ratchet 811
- · Version with additional quick view label
- · Can be supplied with factory certificate / test certificate



Quick View Label

Accessories



Edge protection



Rolling-up system

WISTRA WTQ 435K pressure ratchet lashing strap

Version with body tissue

Strap 50 mm - the special body-binding technology and modern ultra sound refining ensure a significantly higher abrasion resistance for this polyester webbing (PES), and thereby for a longer service life.

WISTRA WTQ 435W pressure ratchet lashing strap

Version with water-repelling webbing

Strap 50 mm - due to special surface coating, water does not penetrate into the polyester webbing (PES) and guarantees optimal application characteristics even with winter temperatures.

WISTRA WTQ 435R pressure ratchet lashing strap

Version with two reflective strips in the webbing

Strap 50 mm - visual emphasis as a result of the two reflective strips

End-fittings:



You can find additional end-fittings with a minimum breaking force MBL 4,000 daN on pages 90 to 98.

WISTRA WTQ 435K pressure ratchet lashing strap



Standard version	Short designation	Item No.
single-part - 8.0 m	WTQ 435K single-part 8.0 lemon yellow	1501017
with end-fitting 006 - pointed hook		
two-part – FE 0.5 m + LE 7.5 m lemon yellow webbing	WTQ 435K-006 0.5+7.5 lemon yellow	1501018
two-part – FE 0.5 m + LE 8.5 m lemon yellow webbing	WTQ 435K-006 0.5+8.5 lemon yellow	1501019
two-part – FE 0.5 m + LE 9.5 m lemon yellow webbing	WTQ 435K-006 0.5+9.5 lemon yellow	1501020
two-part – FE 0.5 m + LE 11.5 m lemon yellow webbing	WTQ 435K-006 0.5+11.5 lemon yellow	1501021

WISTRA WTQ 435W pressure ratchet lashing strap



Standard version	Short designation	Item No.
single-part - 8.0 m	WTQ 435W single-part 8.0 m orange	1501022
with end-fitting 006 - pointed hook		
two-part – FE 0.5 m + LE 7.5 m orange webbing	WTQ 435W-006 0.5+7.5 orange	1501023
two-part – FE 0.5 m + LE 8.5 m orange webbing	WTQ 435W-006 0.5+8.5 orange	1501024
two-part – FE 0.5 m + LE 9.5 m orange webbing	WTQ 435W-006 0.5+9.5 orange	1501025
two-part – FE 0.5 m + LE 11.5 m orange webbing	WTQ 435W-006 0.5+11.5 orange	1501026

WISTRA WTQ 435R pressure ratchet lashing strap



Standard version	Short designation	Item No.
single-part - 8.0 m	WTQ 435R single-part 8.0 orange	1501027
with end-fitting 006 - pointed hook		
two-part – FE 0.5 m + LE 7.5 m orange webbing	WTQ 435W-006 0.5+7.5 orange	1501028
two-part – FE 0.5 m + LE 8.5 m orange webbing	WTQ 435W-006 0.5+8.5 orange	1501029
two-part – FE 0.5 m + LE 9.5 m orange webbing	WTQ 435W-006 0.5+9.5 orange	1501093
two-part – FE 0.5 m + LE 11.5 m orange webbing	WTQ 435W-006 0.5+11.5 orange	1501094

WISTRA WTL 5550 tension ratchet lashing strap

- Normal tension force STF 550 daN for normal hand force SHF 50 daN
- · Lashing capacity LC 2,500 daN in straight tension
- · Manufactured and tested in terms of EN 12195-2: current version
- · Tensioning element ratchet 818
- · Strap 50 mm durable due to PU coated webbing (PES)



End-fittings:







You can find additional end-fittings with a minimum breaking force MBL 5,000 daN on pages 90 to 98.

Optional with Quick View Label





Standard version	Short designation	Item No.
single-part - 6.0 m red webbing	WTL 5550 single-part 6.0 red	1506986
single-part - 8.0 m red webbing	WTL 5550 single-part 8.0 red	1502588
single-part - 10.0 m red webbing	WTL 5550 single-part 10.0 red	1506987
with end-fitting 006 - pointed hook		
two-part – FE 0.5 m + LE 5.5 m red webbing	WTL 5550-006 0.5+5.5 red	1506988
two-part – FE 0.5 m + LE 7.5 m red webbing	WTL 5550-006 0.5+7.5 red	1502589
two-part – FE 0.5 m + LE 8.5 m red webbing	WTL 5550-006 0.5+8.5 red	1502590
two-part – FE 0.5 m + LE 9.5 m red webbing	WTL 5550-006 0.5+9.5 red	1502591
two-part – FE 0.5 m + LE 11.5 m red webbing	WTL 5550-006 0.5+11.5 red	1502592
Fixed end 0.5 m red webbing	WTL 5550-006 FE 0.5 red	1500714
Loose end 5.5 m red webbing	WTL 5000-006 FE 5.5 red	1506990
Loose end 7.5 m red webbing	WTL 5000-006 FE 7.5 red	1506989
Loose end 8.5 m red webbing	WTL 5000-006 FE 8.5 red	1506991
Loose end 9.5 m red webbing	WTL 5000-006 FE 9.5 red	1506992
Loose end 11.5 m red webbing	WTL 5000-006 FE 11.5 red	1506993
with end-fitting 006 - pointed hook, loose ends wi	th individual "print"	
two-part – FE 0.5 m + LE 5.5 m red webbing	WTL 5550-006 0.5+5.5 red "print"	1506994
two-part – FE 0.5 m + LE 7.5 m red webbing	WTL 5550-006 0.5+7.5 red "print"	1506995
two-part – FE 0.5 m + LE 8.5 m red webbing	WTL 5550-006 0.5+8.5 red "print"	1506996
two-part – FE 0.5 m + LE 9.5 m red webbing	WTL 5550-006 0.5+9.5 red "print"	1506997
two-part – FE 0.5 m + LE 11.5 m red webbing	WTL 5550-006 0.5+11.5 red "print"	1506998

WISTRA WTE 5450 tension ratchet lashing strap

- Normal tension force STF 450 daN for normal hand force SHF 50 daN
- · Lashing capacity LC 2,500 daN in straight tension
- · Manufactured and tested in terms of EN 12195-2: current version

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- · Tensioning element ratchet 814
- · Strap 50 mm durable due to PU coated webbing (PES)

End-fittings:







You can find additional end-fittings with a minimum breaking force MBL 5,000 daN on pages 90 to 98.

Optional with Quick View Label





Standard version	Short designation	Item No.		
single-part - 6.0 m red webbing	WTE 5450 single-part 6.0 red	1501496		
single-part - 8.0 m red webbing	WTE 5450 single-part 8.0 red	1506606		
single-part - 10.0 m red webbing	WTE 5450 single-part 10.0 red	1506607		
with end-fitting 006 - pointed hook				
two-part – FE 0.4 m + LE 5.6 m red webbing	WTE 5450-006 0.4+5.6 red	11814090060456		
two-part – FE 0.4 m + LE 7.6 m red webbing	WTE 5450-006 0.4+7.6 red	11814090060476		
two-part – FE 0.4 m + LE 8.6 m red webbing	WTE 5450-006 0.4+8.6 red	11814090060486		
two-part – FE 0.4 m + LE 9.6 m red webbing	WTE 5450-006 0.4+9.6 red	11814090060496		
two-part – FE 0.4 m + LE 11.6 m red webbing	WTE 5450-006 0.4+11.6 red	118140900604116		
Fixed end 0.4 m red webbing	WTE 5450-006 FE 0.4 red	11814090060400		
Loose end 5.6 m red webbing	WTR 5000-006 FE 5.6 red	11000090060056		
Loose end 7.6 m red webbing	WTR 5000-006 FE 7.6 red	11000090060076		
Loose end 8.6 m red webbing	WTR 5000-006 FE 8.6 red	11000090060086		
Loose end 9.6 m red webbing	WTR 5000-006 FE 9.6 red	11000090060096		
Loose end 11.6 m red webbing	WTR 5000-006 FE 11.6 red	110000900600116		
with end-fitting 006 - pointed hook, loose ends with individual "print"				
two-part – FE 0.4 m + LE 5.6 m red webbing	WTE 5450-006 0.4+5.6 red "print"	1506632		
two-part – FE 0.4 m + LE 7.6 m red webbing	WTE 5450-006 0.4+7.6 red "print"	1500691		
two-part – FE 0.4 m + LE 8.6 m red webbing	WTE 5450-006 0.4+8.6 red "print"	1506626		
two-part – FE 0.4 m + LE 9.6 m red webbing	WTE 5450-006 0.4+9.6 red "print"	1506621		
two-part – FE 0.4 m + LE 11.6 m red webbing	WTE 5450-006 0.4+11.6 red "print"	1506614		

 $\label{thm:colours} \textit{Versions with other end-fittings, other webbing colours, individual property markings or other special requirements on request$

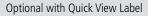
WISTRA WTL 4550 tension ratchet lashing strap

- Normal tension force STF 550 daN for normal hand force SHF 50 daN
- · Lashing capacity LC 2,000 daN in straight tension
- · Manufactured and tested in terms of EN 12195-2: current version
- · Tensioning element ratchet 818
- · Strap 50 mm durable due to PU coated webbing (PES)

End-fittings:



You can find additional end-fittings with a minimum breaking force MBL 4,000 daN on pages 90 to 98.







Standard version	Short designation	Item No.		
with end-fitting 006 - pointed hook	•			
two-part – FE 0.5 m + LE 7.5 m yellow webbing	WTL 4550-006 0.5+7.5 yellow	1502630		
two-part – FE 0.5 m + LE 9.5 m yellow webbing	WTL 4550-006 0.5+9.5 yellow	1502632		
two-part – FE 0.5 m + LE 11.5 m yellow webbing	WTL 4550-006 0.5+11.5 yellow	1502633		
Fixed end 0.5 m	WTL 4550-006 FE 0.5 yellow	1507050		
Loose ends - see WTR 4000 - page 37				
with end-fitting 006 - pointed hook, loose ends with individual "print"				
two-part – FE 0.5 m + LE 7.6 m yellow webbing	WTL 4550-006 0.5+7.6 yellow "print"	1507051		
two-part – FE 0.5 m + LE 9.6 m yellow webbing	WTL 4450-006 0.5+9.6 yellow "print"	1507052		
two-part – FE 0.5 m + LE 11.6 m yellow webbing	WTL 4450-006 0.5+11.6 yellow "print"	1507053		

WISTRA WTE 4450 tension ratchet lashing strap

- Normal tension force STF 450 daN for normal hand force SHF 50 daN
- · Lashing capacity LC 2,000 daN in straight tension
- · Manufactured and tested in terms of EN 12195-2: current version
- · Tensioning element ratchet 814
- · Strap 50 mm durable due to PU coated webbing (PES)

End-fittings:

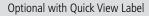








You can find additional end-fittings with a minimum breaking force MBL 4,000 daN on pages 90 to 98.







Standard version	Short designation	Item No.		
with end-fitting 006 - pointed hook				
two-part – FE 0.4 m + LE 7.6 m yellow webbing	WTE 4450-006 0.4+7.6 yellow	11814060060476		
two-part – FE 0.4 m + LE 9.6 m yellow webbing	WTE 4450-006 0.4+9.6 yellow	11814060060496		
two-part – FE 0.4 m + LE 11.6 m yellow webbing	WTE 4450-006 0.4+11.6 yellow	118140600604116		
Fixed end 0.4 m	WTE 4450-006 FE 0.4 yellow	11814060060400		
Loose ends - see WTR 4000 - page 37				
with end-fitting 006 - pointed hook, loose ends with individual "print"				
two-part – FE 0.4 m + LE 7.6 m yellow webbing	WTE 4450-006 0.4+7.6 yellow "print"	1507060		
two-part – FE 0.4 m + LE 9.6 m yellow webbing	WTE 4450-006 0.4+9.6 yellow "print"	1507061		
two-part – FE 0.4 m + LE 11.6 m yellow webbing	WTL 4450-006 0.4+11.6 yellow "print"	1507062		

WISTRA WTR 5000 pressure ratchet lashing strap

- Normal tension force STF 350 daN for normal hand force SHF 50 daN
- · Lashing capacity LC 2,500 daN in straight tension
- · Manufactured and tested in terms of EN 12195-2: current version
- · Tensioning element ratchet 811
- · Strap 50 mm durable due to PU coated webbing (PES)



End-fittings:



You can find additional end-fittings with a minimum breaking force MBL 5,000 daN on pages 90 to 98.

Optional with Quick View Label





Standard version	Short designation	Item No.		
single-part - 6.0 m red webbing	WTR 5000 single-part 6.0 red	11811090006000		
single-part - 8.0 m red webbing	WTR 5000 single-part 8.0 red	11811090008000		
single-part - 10.0 m red webbing	WTR 5000 single-part 10.0 red	118110900010000		
with end-fitting 006 - pointed hook				
two-part – FE 0.4 m + LE 7.6 m red webbing	WTR 5000-006 0.4+5.6 red	11811090060456		
two-part – FE 0.4 m + LE 7.6 m red webbing	WTR 5000-006 0.4+7.6 red	11811090060476		
two-part – FE 0.4 m + LE 8.6 m red webbing	WTR 5000-006 0.4+8.6 red	11811090060486		
two-part – FE 0.4 m + LE 9.6 m red webbing	WTR 5000-006 0.4+9.6 red	11811090060496		
two-part – FE 0.4 m + LE 11.6 m red webbing	WTR 5000-006 0.4+11.6 red	118110900604116		
Fixed end 0.4 m red webbing	WTR 5000-006 FE 0.4 red	11811090060400		
Loose end 5.6 m red webbing	WTR 5000-006 FE 5.6 red	11000090060056		
Loose end 7.6 m red webbing	WTR 5000-006 FE 7.6 red	11000090060076		
Loose end 8.6 m red webbing	WTR 5000-006 FE 8.6 red	11000090060086		
Loose end 9.6 m red webbing	WTR 5000-006 FE 9.6 red	11000090060096		
Loose end 11.6 m red webbing	WTR 5000-006 FE 11.6 red	110000900600116		
with end-fitting 006 - pointed hook, loose ends with individual "print"				
two-part – FE 0.4 m + LE 5.6 m red webbing	WTR 5000-006 0.4+5.6 red "print"	1507069		
two-part – FE 0.4 m + LE 7.6 m red webbing	WTR 5000-006 0.4+7.6 red "print"	1507070		
two-part – FE 0.4 m + LE 8.6 m red webbing	WTR 5000-006 0.4+8.6 red "print"	1507071		
two-part – FE 0.4 m + LE 9.6 m red webbing	WTR 5000-006 0.4+9.6 red "print"	1507072		
two-part – FE 0.4 m + LE 11.6 m red webbing	WTR 5000-006 0.4+11.6 red "print"	1507073		

WISTRA WTR 4000 pressure ratchet lashing strap

- Normal tension force STF 350 daN for normal hand force SHF 50 daN
- · Lashing capacity LC 2,000 daN in straight tension
- · Manufactured and tested in terms of EN 12195-2: current version
- · Tensioning element ratchet 811
- · Strap 50 mm durable due to PU coated webbing (PES)

A-V Geprüte Sicherheit

End-fittings:







You can find additional end-fittings with a minimum breaking force MBL 4,000 daN on pages 90 to 98.

Optional with Quick View Label





Standard version	Short designation	Item No.
single-part - 6.0 m yellow webbing	WTR 4000 single-part 6.0 yellow	11811060006000
single-part - 8.0 m yellow webbing	WTR 4000 single-part 8.0 yellow	11811060008000
single-part - 10.0 m yellow webbing	WTR 4000 single-part 10.0 yellow	1501673
with end-fitting 006 - pointed hook		
two-part – FE 0.4 m + LE 5.6 m yellow webbing	WTR 4000-006 0.4+5.6 yellow	11811060060456
two-part – FE 0.4 m + LE 7.6 m yellow webbing	WTR 4000-006 0.4+7.6 yellow	11811060060476
two-part – FE 0.4 m + LE 8.6 m yellow webbing	WTR 4000-006 0.4+8.6 yellow	11811060060486
two-part – FE 0.4 m + LE 9.6 m yellow webbing	WTR 4000-006 0.4+9.6 yellow	11811060060496
two-part – FE 0.4 m + LE 11.6 m yellow webbing	WTR 4000-006 0.4+11.6 yellow	118110600604116
Fixed end 0.4 m yellow webbing	WTR 4000-006 FE 0.4 yellow	11811060060400
Loose end 5.6 m yellow webbing	WTR 4000-006 FE 5.6 yellow	1504414
Loose end 7.6 m yellow webbing	WTR 4000-006 FE 7.6 yellow	11000060060076
Loose end 8.6 m yellow webbing	WTR 4000-006 FE 8.6 yellow	11000060060086
Loose end 9.6 m yellow webbing	WTR 4000-006 FE 9.6 yellow	11000060060096
Loose end 11.6 m yellow webbing	WTR 4000-006 FE 11.6 yellow	110000600600116
with end-fitting 006 - pointed hook, loose ends wi	th individual "print"	
two-part – FE 0.4 m + LE 5.6 m yellow webbing	WTR 4000-006 0.4+5.6 yellow "print"	1507063
two-part – FE 0.4 m + LE 7.6 m yellow webbing	WTR 4000-006 0.4+7.6 yellow "print"	1507064
two-part – FE 0.4 m + LE 8.6 m yellow webbing	WTR 4000-006 0.4+8.6 yellow "print"	1507065
two-part – FE 0.4 m + LE 9.6 m yellow webbing	WTR 4000-006 0.4+9.6 yellow "print"	1507066
two-part – FE 0.4 m + LE 11.6 m yellow webbing	WTR 4000-006 0.4+11.6 yellow "print"	1507067

 $\label{thm:colours} \textit{Versions with other end-fittings, other webbing colours, individual property markings or other special requirements on request$

WISTRA WTN 3700 tension ratchet lashing strap

with high tension force for tying down

- · Normal tension force STF 704 daN
 - for normal hand force SHF 50 daN
- · Lashing capacity LC 1,600 daN in straight tension
- · Manufactured and tested in terms of EN 12195-2: current version
- · Tensioning element ratchet 818
- · Strap 50 mm durable due to PU coated webbing (PES)

End-fittings:



You can find additional end-fittings with a minimum breaking force MBL 1,600 daN on pages 90 to 98.



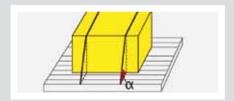
Standardausführung	Kurzbezeichnung	Artikelnr.
mit Endbeschlag 006 – Spitzhaken		
zweiteilig – FE 0,5 m + LE 7,5 m	WTN 3700-006 0,5 + 7,5 gelb	1502672
zweiteilig – FE 0,5 m + LE 8,5 m	WTN 3700-006 0,5 + 8,5 gelb	1502673
zweiteilig – FE 0,5 m + LE 9,5 m	WTN 3700-006 0,5 + 9,5 gelb	1502674
zweiteilig – FE 0,5 m + LE 11,5 m	WTN 3700-006 0,5 + 11,5 gelb	1502675

Versions with other end-fittings, other webbing colours, individual property markings or other special requirements on request

Optional with Quick View Label



Tying down stable loads



- \cdot calculated with an acceleration value 0.8 according to DIN EN 12195-1:2004 and VDI 2700 ff.
- Transfer coefficient = 1.5 for STF 350 daN, 450 daN, 550 daN and 700 daN
- · for STF 1,100 daN (k = 2 for both fixed ends STF 550 daN)
- · $\mu D = dynamic sliding friction coefficient$
- · Stf = normal initial tension force according to lashing strap label (fixed end)

	Inclination angle (alpha) 30° - 44°				Inclination a	angle (alpha) 4				Inclination angle (alpha) 80° - 90°							
Load weight	μD	350 daN	450 daN	550 daN	700 daN	1100 daN	350 daN	450 daN	for ST 550 daN	F value 700 daN	1100 daN	350 daN	450 daN	550 daN	700 daN	1100 daN	μD
Load	Ė						C	alculated nun	ber of require	ed lashing stra							
	0,2	2	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	0,2
100 kg	0,4	1 *)	1 *) 1 *)	1 *)	1 *) 1 *)	1 *) 1 *)	1 *) 1 *)	1 *)	1 *) 1 *)	1 *) 1 *)	1 *)	1 *)	1 *)	1 *) 1 *)	1 *) 1 *)	1 *)	0,4
	0,6	1 *) 3	3	1 *)	2	2	2	1 *)	2	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *) 1 *)	0,6
250 kg	0,4	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	0,4
	0,6	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	0,6
	0,2	6	5	4	3	3	4	4	3	2	2	3	3	2	2	2	0,2
500 kg	0,4	2	2	2	1 *)	1 *)	2	2	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	0,4
	0,6 0,2	1 *) 9	1 *)	1 *) 6	1 *)	1 *) 5	1 *)	1 *)	1 *)	1 *)	1 *)	1 *) 5	1 *) 4	1 *)	1 *)	1 *)	0,6
750 kg	0,2	3	3	2	2	2	2	2	2	1 *)	1 *)	2	2	1 *)	1 *)	1 *)	0,2
	0,6	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	0,6
	0,2	12	9	8	6	6	8	7	6	4	4	6	5	4	3	3	0,2
1 t	0,4	4	3	3	2	2	3	3	2	2	2	2	2	2	1 *)	1 *)	0,4
	0,6	2	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	0,6
1,25 t	0,2	15 5	11	9	8	7	10	8	7	5	5	8	6	5 2	2	2	0,2
1,231	0,4	2	2	1 *)	1 *)	1*)	2	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	0,4
	0,2	17	14	11	9	9	12	10	8	6	6	9	7	6	5	5	0,2
1,5 t	0,4	6	5	4	3	3	4	4	3	2	2	3	3	2	2	2	0,4
	0,6	2	2	2	1 *)	1 *)	2	2	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	1 *)	0,6
	0,2	23	18	15	12	11	16	13	11	8	8	12	9	8	6	6	0,2
2 t	0,4	8	6	5	4	4	6	5	4	3	3	4	3	3	2	2	0,4
	0,6 0,2	3 29	2 22	2 18	2 15	2 14	20	2 16	13	1 *)	1 *)	2 15	1 *) 12	1 *) 10	1 *) 8	1 *) 7	0,6
2,5 t	0,2	1 *)	8	6	5	5	7	6	5	4	4	5	4	4	3	3	0,2
,	0,6	4	3	2	2	2	3	2	2	2	2	2	2	2	1 *)	1 *)	0,6
	0,2	34	27	22	17	17	24	19	16	12	12	18	14	11	9	9	0,2
3 t	0,4	12	9	8	6	6	8	7	6	4	4	6	5	4	3	3	0,4
	0,6	4	3	3	2	2	3	3	2	2	2	2	2	2	1 *)	1 *)	0,6
3,5 t	0,2	40 14	31 11	25 9	20 7	19 7	28 10	22 8	18 6	14 5	14	20 7	16 6	13 5	10 4	10	0,2
3,3 (0,4	5	4	3	3	3	4	3	2	2	2	3	2	2	2	2	0,4
	0,2	45	35	29	23	22	32	25	21	16	16	23	18	15	12	11	0,2
4 t	0,4	15	12	10	8	8	11	9	7	6	6	8	6	5	4	4	0,4
	0,6	5	4	4	3	3	4	3	3	2	2	3	2	2	2	2	0,6
	0,2	57	44	36	29	27	40	31	26	20	19	29	23	19	15	14	0,2
5 t	0,4 0,6	19 7	15 5	12 4	10	9	14 5	11	9	7	7	10 4	8	7	5 2	5	0,4
	0,0	68	53	43	34	33	48	37	31	24	23	35	27	22	18	17	0,0
6 t	0,4	23	18	15	12	11	16	13	11	8	8	12	9	8	6	6	0,4
	0,6	8	6	5	4	4	6	5	4	3	3	4	3	3	2	2	0,6
	0,2	79	62	50	40	38	56	44	36	28	27	40	31	26	20	20	0,2
7 t	0,4	27	21	17	14	13	19	15	12	10	9	14	11	9	7	7	0,4
	0,6	9	7	6	5	5	7	5	4	4	3	5	4	3	3	3	0,6
8 t	0,2	90 30	70 24	58 20	45 15	43 15	64 22	50 17	41 14	32 11	31	46 16	36 12	29 10	23 8	22 8	0,2
	0,4	10	8	7	5	5	8	6	5	4	4	6	4	4	3	3	0,4
	0,2	101	79	65	51	49	72	56	46	36	35	52	40	33	26	25	0,2
9 t	0,4	34	27	22	17	17	24	19	16	12	12	18	14	11	9	9	0,4
	0,6	12	9	8	6	6	8	7	6	4	4	6	5	4	3	3	0,6
4.0	0,2	113	88	72	57	54	80	62	51	40	38	57	45	37	29	28	0,2
10 t	0,4	38	30	24	19	18	27	21	17	14	13	19	15	13	10	10	0,4
	0,6	13	10	8	7	6	9	7	6	5	5	7	5	5	4	4	0,6

^{*)} The use of at least two lashing straps prevents a possible twisting of load units.

WISTRA WTF 5000-306/006 ratchet lashing strap

Version with adjustable length of the fixed end

- · Lashing capacity LC 2,500 daN in straight tension
- · Manufactured and tested in terms of EN 12195-2: current version
- · Strap 50 mm durable due to PU coated webbing (PES)
- · Version with additional quick view label
- · Can be supplied with factory certificate / test certificate



Quick View Label

Accessories



Ratchet bases



Label cover

WISTRA WTF 5550-306/006 tension ratchet lashing strap

- Normal tension force STF 550 daN for normal hand force SHF 50 daN
- · Tensioning element ratchet 818

WISTRA WTF 5450-306/006 tension ratchet lashing strap

- Normal tension force STF 450 daN for normal hand force SHF 50 daN
- · Tensioning element ratchet 814

WISTRA WTF 5350-306/006 pressure ratchet lashing strap

- Normal tension force STF 350 daN for normal hand force SHF 50 daN
- · Tensioning element ratchet 811

End-fittings:











You can find additional end-fittings with a minimum breaking force MBL 5,000 daN on pages 90 to 98.

WISTRA WTF 5550-306/006 tension ratchet lashing strap



Standard version	Short designation	Item No.
Fixed end with end-fitting 306 - pointed hook, loose end	with end-fitting 006 - pointed hook	
two-part – FE 0.3 m to 1.5 m + LE 7.6 m red webbing	WTF 5550-306/006 0.3/1.5 m + 7.6 m red	1502796
two-part – FE 0.3 m to 1.5 m + LE 9.6 m red webbing	WTF 5550-306/006 0.3/1.5 m + 9.6 m red	1502797
two-part – FE 0.3 m to 1.5 m + LE 11.6 m red webbing	WTF 5550-306/006 0.3/1.5 m + 11.6 m red	1502795

WISTRA WTF 5450-306/006 tension ratchet lashing strap



Standard version	Short designation	Item No.
Fixed end with end-fitting 306 - pointed hook, loose end	with end-fitting 006 - pointed hook	
two-part – FE 0.3 m to 1.5 m + LE 7.6 m red webbing	WTF 5450-306/006 0.3/1.5 m + 7.6 m red	1502827
two-part – FE 0.3 m to 1.5 m + LE 9.6 m red webbing	WTF 5450-306/006 0.3/1.5 m + 9.6 m red	1502828
two-part – FE 0.3 m to 1.5 m + LE 11.6 m red webbing	WTF 5450-306/006 0.3/1.5 m + 11.6 m red	1502826

WISTRA WTF 5350-306/006 tension ratchet lashing strap



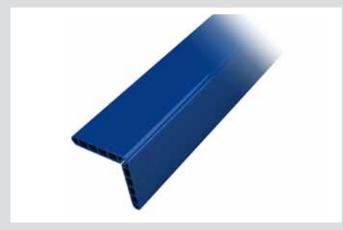
Standard version	Short designation	Item No.
Fixed end with end-fitting 306 - pointed hook, loose end	with end-fitting 006 - pointed hook	
two-part – FE 0.3 m to 1.5 m + LE 7.6 m red webbing	WTF 5350-306/006 0.3/1.5 m + 7.6 m red	1502860
two-part – FE 0.3 m to 1.5 m + LE 9.6 m red webbing	WTF 5350-306/006 0.3/1.5 m + 9.6 m red	1502861
two-part – FE 0.3 m to 1.5 m + LE 11.6 m red webbing	WTF 5350-306/006 0.3/1.5 m + 11.6 m red	1502858

WISTRA WTL/E/R 500A-006 ratchet lashing strap

Version with high tension force for tying down with fixed ends on both sides - Type A

- System normal initial tension force STF x 2 (Transfer coefficient k=2) for normal hand force 2 x SHF 50 daN
- · Lashing capacity LC 2,500 daN in straight tension
- · Manufactured and tested in terms of EN 12195-2: current version
- Strap 50 mm durable due to PU coated webbing (PES)

Accessories



Edge protection



Kantenschutzecke

WISTRA WTL 555A-006 tension ratchet lashing strap

- System normal tension force STF 550 daN x 2 = 1,100 daN (Transfer coefficient k=2) for normal hand force $2 \times SHF 50$ daN
- · Tensioning element ratchet 818

WISTRA WTE 545A-006 tension ratchet lashing strap

- System normal tension force STF 450 daN x 2 = 900 daN (Transfer coefficient k=2)
 for normal hand force 2 x SHF 50 daN
- · Tensioning element ratchet 814

WISTRA WTR 535A-006 pressure ratchet lashing strap

- System normal tension force STF 350 daN x 2 = 700 daN (Transfer coefficient k=2) for normal hand force 2 x SHF 50 daN
- · Tensioning element ratchet 811

End-fittings:



You can find additional end-fittings with a minimum breaking force MBL 5,000 daN on pages 90 to 98.

WISTRA WTL 555A-006 tension ratchet lashing strap



Standard version	Short designation	Item No.
Fixed ends with end-fitting 006 - pointed hook		
three-part – 2 x FE 0.5 m + LE 7.0 m red webbing	WTL 555A-006 2x0.5+7.0 red	1502923
three-part – 2 x FE 0.5 m + LE 9.0 m red webbing	WTL 555A-006 2x0.5+9.0 red	1502924
three-part – 2 x FE 0.5 m + LE 11.0 m red webbing	WTL 555A-006 2x0.5+11.0 red	1502925

WISTRA WTE 545A-006 tension ratchet lashing strap



Standard version	Short designation	Item No.
Fixed ends with end-fitting 006 - pointed hook		
three-part – 2 x FE 0.4 m + LE 7.0 m red webbing	WTE 545A-006 2x0.4+7.0 red	1502953
three-part – 2 x FE 0.4 m + LE 9.0 m red webbing	WTE 545A-006 2x0.4+9.0 red	1502954
three-part – 2 x FE 0.4 m + LE 11.0 m red webbing	WTE 545A-006 2x0.4+11.0 red	1502955

WISTRA WTR 535A-006 pressure ratchet lashing strap



Standard version	Short designation	Item No.
Fixed ends with end-fitting 006 - pointed hook		
three-part – 2 x FE 0.4 m + LE 7.0 m red webbing	WTR 535A-006 2x0.4+7.0 red	1502983
three-part – 2 x FE 0.4 m + LE 9.0 m red webbing	WTR 535A-006 2x0.4+9.0 red	1502984
three-part – 2 x FE 0.4 m + LE 11.0 m red webbing	WTR 535A-006 2x0.4+11.0 red	1502985

WISTRA WTB 5000 head lashing straps

Round slings with traverse arches

- · Lashing capacity LC 2,500 daN in straight tension
- · Manufactured and tested in terms of EN 12195-2: current version
- · Strap 50 mm durable due to PU coated webbing (PES)



Standard version both with free-running D-ring	Short designation	Item No.
Round sling for 2.4 m wide goods	WTB 5000-2400-018	1503026
Round sling for 1.2 m wide goods	WTB 5000-1200-018	1503027
Round sling for 0.8 m wide goods	WTB 5000-0800-018	1503028

Lashing straps ⋅ to LC 1,000 daN

On the following pages you can find a wide selection of lashing straps for the most diverse areas.

The WISTRA team will gladly assist you if you have any questions.







WTR 2000

Overview of the lashing strap options

Sorted according to LC in straight tension

1000 daN	750 daN	500daN	400 daN	300 daN	250 daN	175 daN
WTR 2000	WTR 1500	WTR 1000	WTR 800	WTK 600	WTK 500	WTK 350
WTR 2200		WTK 1000				
		WTS 1000				

WISTRA WTR 2000 pressure ratchet lashing strap

- Normal tension force STF 240 daN for normal hand force SHF 50 daN
- · Lashing capacity LC 2,500 daN in straight tension
- · Manufactured and tested in terms of EN 12195-2: current version
- · Tensioning element ratchet 908
- · Strap 35 mm durable due to PU coated webbing (PES)



End-fittings:



You can find additional end-fittings with a minimum breaking force MBL 2,000 daN on pages 90 to 98.



Standard version	Short designation	Item No.
single-part - 3.0 m orange webbing	WTR 2000 single-part 3.0 orange	1350995
single-part - 4.0 m orange webbing	WTR 2000 single-part 4.0 orange	1350996
single-part - 5.0 m orange webbing	WTR 2000 single-part 5.0 orange	1350997
single-part - 6.0 m orange webbing	WTR 2000 single-part 6.0 orange	1350998
single-part - 8.0 m orange webbing	WTR 2000 single-part 8.0 orange	1351000
with end-fitting 520 - pointed hook		
two-part – FE 0.3 m + LE 3.7 m orange webbing	WTR 2000-520 0.3+3.7 orange	1350592
two-part – FE 0.3 m + LE 5.7 m orange webbing	WTR 2000-520 0.3+5.7 orange	1350593
two-part – FE 0.5 m + LE 5.5 m orange webbing	WTR 2000-520 0.5+5.5 orange	1350607
two-part – FE 0.5 m + LE 7.5 m orange webbing	WTR 2000-520 0.5+7.5 orange	1350609

WISTRA WTR 2200 pressure ratchet lashing strap

- Normal tension force STF 200 daN for normal hand force SHF 50 daN
- · Lashing capacity LC 2,500 daN in straight tension
- · Manufactured and tested in terms of EN 12195-2: current version
- · Tensioning element ratchet 917
- · Strap 35 mm durable due to PU coated webbing (PES)

End-fittings:







You can find additional end-fittings with a minimum breaking force MBL 2,000 daN on pages 90 to 98.



Standard version	Short designation	Item No.
single-part - 3.0 m orange webbing	WTR 2200 single-part 3.0 orange	1353006
single-part - 4.0 m orange webbing	WTR 2200 single-part 4.0 orange	1353007
single-part - 5.0 m orange webbing	WTR 2200 single-part 5.0 orange	1353008
single-part - 6.0 m orange webbing	WTR 2200 single-part 6.0 orange	1353009
single-part - 8.0 m orange webbing	WTR 2200 single-part 8.0 orange	1353010
with end-fitting 520 - pointed hook		
two-part – FE 0.3 m + LE 3.7 m orange webbing	WTR 2200 520 0.3+3.7 orange	1353002
two-part – FE 0.3 m + LE 5.7 m orange webbing	WTR 2200 520 0.3+5.7 orange	1353003
two-part – FE 0.5 m + LE 5.5 m orange webbing	WTR 2200 520 0.5+5.5 orange	1353004
two-part – FE 0.5 m + LE 7.5 m orange webbing	WTR 2200 520 0.5+7.5 orange	1353005

WISTRA WTR 1500 pressure ratchet lashing strap

- Normal tension force STF 210 daN for normal hand force SHF 50 daN
- · Lashing capacity LC 2,500 daN in straight tension
- · Manufactured and tested in terms of EN 12195-2: current version
- · Tensioning element ratchet 916
- · Strap 50 mm durable due to PU coated webbing (PES)

End-fittings:









You can find additional end-fittings with a minimum breaking force MBL 1,500 daN on pages 90 to 98.



Standard version	Short designation	Item No.
single-part - 1.0 m green webbing	WTR 1500 single-part 1.0 green	1504467
single-part - 2.0 m green webbing	WTR 1500 single-part 2.0 green	1504474
single-part - 3.0 m green webbing	WTR 1500 single-part 3.0 green	1504475
single-part - 4.0 m green webbing	WTR 1500 single-part 4.0 green	1501838
single-part - 5.0 m green webbing	WTR 1500 single-part 5.0 green	1504476
single-part - 6.0 m green webbing	WTR 1500 single-part 6.0 green	1504477
single-part - 7.0 m green webbing	WTR 1500 single-part 7.0 green	1504478
single-part - 8.0 m green webbing	WTR 1500 single-part 8.0 green	1504479
with end-fitting 826 - anchor combi end-fitting		
two-part – FE 0.2 m + LE 0.8 m green webbing	WTR 1500-826 0.2+0.8 green	1504225
two-part – FE 0.2 m + LE 1.8 m green webbing	WTR 1500-826 0.2+1.8 green	1504226
two-part – FE 0.2 m + LE 2.8 m green webbing	WTR 1500-826 0.2+2.8 green	1504232
two-part – FE 0.2 m + LE 3.8 m green webbing	WTR 1500-826 0.2+3.8 green	1501344
two-part – FE 0.3 m + LE 3.0 m blue webbing	WTR 1500-826 0.3+ 3.0 blue	1501786
two-part – FE 0.5 m + LE 1.5 m green webbing	WTR 1500-826 0.5+1.5 green	1504244
two-part – FE 0.5 m + LE 2.5 m green webbing	WTR 1500-826 0.5+2.5 green	1504250
two-part – FE 0.5 m + LE 4.5 m green webbing	WTR 1500-826 0.5+4.5 green	1504252
two-part – FE 0.5 m + LE 5.5 m green webbing	WTR 1500-826 0.5+5.5 green	1504253
two-part – FE 1.0 m + LE 3.0 m green webbing	WTR 1500-826 1.0+3.0 green	1504271
two-part – FE 1.0 m + LE 4.0 m green webbing	WTR 1500-826 1.0+4.0 green	1504273
two-part – FE 1.2 m + LE 2.4 m green webbing	WTR 1500-826 1.2+2.4 green	1508001

Versions with other end-fittings, other webbing colours, individual property markings or other special requirements on request





Sticker inside lashing strap **Item No. 981002**

WISTRA WTR 1000 pressure ratchet lashing strap

- Normal tension force STF 200 daN for normal hand force SHF 50 daN
- · Lashing capacity LC 500 daN in straight tension
- · Manufactured and tested in terms of EN 12195-2: current version
- · Tensioning element ratchet 909
- · Strap 25 mm durable due to PU coated webbing (PES)

End-fittings:



You can find additional end-fittings with a minimum breaking force MBL 1,000 daN on pages 90 to 98.



Standard version	Short designation	Item No.
single-part - 1.0 m red webbing	WTR 1000 single-part 1.0 red	1251318
single-part - 2.0 m red webbing	WTR 1000 single-part 2.0 red	1257834
single-part - 3.0 m red webbing	WTR 1000 single-part 3.0 red	1257835
single-part - 3.5 m red webbing	WTR 1000 single-part 3.5 red	1250015
single-part - 4.0 m red webbing	WTR 1000 single-part 4.0 red	1257836
single-part - 5.0 m red webbing	WTR 1000 single-part 5.0 red	1257837
single-part - 6.0 m red webbing	WTR 1000 single-part 6.0 red	1257838
single-part - 8.0 m red webbing	WTR 1000 single-part 8.0 red	1257840
with end-fitting 002 - pointed hook		
two-part – FE 0.2 m + LE 0.8 m red webbing	WTR 1000-002 0.2+0.8 red	1255086
two-part – FE 0.2 m + LE 1.8 m red webbing	WTR 1000-002 0.2+1.8 red	1255087
two-part – FE 0.2 m + LE 2.8 m red webbing	WTR 1000-002 0.2+2.8 red	1251242
two-part – FE 0.2 m + LE 3.8 m red webbing	WTR 1000-002 0.2+3.8 red	1255093
two-part – FE 0.5 m + LE 1.5 m red webbing	WTR 1000-002 0.5+1.5 red	1255100
two-part – FE 0.5 m + LE 2.5 m red webbing	WTR 1000-002 0.5+2.5 red	1250144
two-part – FE 0.5 m + LE 3.5 m red webbing	WTR 1000-002 0.5+3.5 red	1255106
two-part – FE 0.5 m + LE 4.5 m red webbing	WTR 1000-002 0.5+4.5 red	1255107
two-part – FE 0.5 m + LE 5.5 m red webbing	WTR 1000-002 0.5+5.5 red	1255108
with end-fitting 025 - for bar tracks and safety sea of the loose end out of the ratchet	m to prevent slipping	
two-part – FE 0.3 m + LE 3.2 m blue webbing	WTR 1000-025 0.3+3.2 blue SN	1251293
with end-fitting 311 - for spring hook and safety so of the loose end out of the ratchet	eam to prevent slipping	
two-part – FE 0.2 m + LE 3.2 m blue webbing	WTR 1000-311 0.2+3.2 blue SN	1251306
two-part – FE 0.2 m + LE 5.8 m blue webbing	WTR 1000-311 0.2+5.8 blue SN	1251307
with end-fitting 382 - for airline lashing tracks and of the loose end out of the ratchet	safety seam to prevent slipping	
two-part – FE 0.2 m + LE 0.7 m blue webbing	WTR 1000-382 0.2+0.7 blue SN	1251286
two-part – FE 0.2 m + LE 3.2 m blue webbing	WTR 1000-382 0.2+3.2 blue SN	1251308
two-part – FE 0.2 m + LE 5.8 m blue webbing	WTR 1000-382 0.2+5.8 blue SN	1251309

WISTRA WTR 800 pressure ratchet lashing strap

- Normal tension force STF 160 daN for normal hand force SHF 50 daN
- · Lashing capacity LC 2,500 daN in straight tension
- · Manufactured and tested in terms of EN 12195-2: current version
- · Tensioning element ratchet 906
- · Strap 25 mm durable due to PU coated webbing (PES)

End-fittings:









You can find additional end-fittings with a minimum breaking force MBL 800 daN on pages 90 to 98.



Standard version	Short designation	Item No.
single-part - 1.0 m yellow webbing	WTR 800 single-part 1.0 yellow	1259465
single-part - 2.0 m yellow webbing	WTR 800 single-part 2.0 yellow	1259472
single-part - 3.0 m yellow webbing	WTR 800 single-part 3.0 yellow	1259473
single-part - 4.0 m yellow webbing	WTR 800 single-part 4.0 yellow	1259474
single-part - 5.0 m yellow webbing	WTR 800 single-part 5.0 yellow	1259475
single-part - 6.0 m yellow webbing	WTR 800 single-part 6.0 yellow	1259476
single-part - 8.0 m yellow webbing	WTR 800 single-part 8.0 yellow	1259477
with end-fitting 002 - pointed hook		
two-part – FE 0.2 m + LE 0.8 m yellow webbing	WTR 800-002 0.2+0.8 yellow	1257964
two-part – FE 0.2 m + LE 1.8 m yellow webbing	WTR 800-002 0.2+1.8 yellow	1257965
two-part – FE 0.2 m + LE 2.8 m yellow webbing	WTR 800-002 0.2+2.8 yellow	1257971
two-part – FE 0.2 m + LE 3.8 m yellow webbing	WTR 800-002 0.2+3.8 yellow	1257972
two-part – FE 0.5 m + LE 1.5 m yellow webbing	WTR 800-002 0.5+1.5 yellow	1257980
two-part – FE 0.5 m + LE 2.5 m yellow webbing	WTR 800-002 0.5+2.5 yellow	1257986
two-part – FE 0.5 m + LE 3.5 m yellow webbing	WTR 800-002 0.5+3.5 yellow	1257987
two-part – FE 0.5 m + LE 4.5 m yellow webbing	WTR 800-002 0.5+4.5 yellow	1257988
two-part – FE 0.5 m + LE 5.5 m yellow webbing	WTR 800-002 0.5+5.5 yellow	1257989

WISTRA WTK 1000 clamp lock lashing strap

- · Lashing capacity LC 2,500 daN in straight tension
- · Manufactured and tested in terms of EN 12195-2: current version
- · Tensioning element clamp lock 907
- · Strap 50 mm durable due to PU coated webbing (PES)

End-fittings:







You can find additional end-fittings with a minimum breaking force MBL 1,000 daN on pages 90 to 98.



Standard version	Short designation	Item No.
single-part - 1.0 m green webbing	WTK 1000 single-part 1.0 green	1504014
single-part - 2.0 m green webbing	WTK 1000 single-part 2.0 green	1504021
single-part - 3.0 m green webbing	WTK 1000 single-part 3.0 green	1504022
single-part - 4.0 m green webbing	WTK 1000 single-part 4.0 green	1504023
single-part - 5.0 m green webbing	WTK 1000 single-part 5.0 green	1504024
single-part - 6.0 m green webbing	WTK 1000 single-part 6.0 green	1504025
single-part - 8.0 m green webbing	WTK 1000 single-part 8.0 green	1504027
with end-fitting 826 - anchor combi end-fitting		
two-part – FE 0.2 m + LE 0.8 m green webbing	WTK 1000-826 0.2+0.8 green	1503782
two-part – FE 0.2 m + LE 1.8 m green webbing	WTK 1000-826 0.2+1.8 green	1503783
two-part – FE 0.2 m + LE 2.8 m green webbing	WTK 1000-826 0.2+2.8 green	1503789
two-part – FE 0.2 m + LE 3.8 m green webbing	WTK 1000-826 0.2+3.8 green	1503790
two-part – FE 0.5 m + LE 1.5 m green webbing	WTK 1000-826 0.5+1.5 green	1503798
two-part – FE 0.5 m + LE 2.5 m green webbing	WTK 1000-826 0.5+2.5 green	1503804
two-part – FE 0.5 m + LE 3.5 m green webbing	WTK 1000-826 0.5+3.5 green	1503805
two-part – FE 0.5 m + LE 4.5 m green webbing	WTK 1000-826 0.5+4.5 green	1501571
two-part – FE 0.5 m + LE 5.5 m green webbing	WTK 1000-826 0.5+5.5 green	1503806
two-part – FE 1.0 m + LE 3.0 m green webbing	WTK 1000-826 1.0+3.0 green	1501627
two-part – FE 1.0 m + LE 4.0 m green webbing	WTK 1000-826 1.0+4.0 green	1503826
two-part – FE 1.2 m + LE 2.4 m green webbing	WTK 1000-826 1.2+2.4 green	1508004

WISTRA WTK 600 clamp lock lashing strap with quick tensioning device

- · Lashing capacity LC 2,500 daN in straight tension
- · Manufactured and tested in terms of EN 12195-2: current version
- Tensioning element clamp lock 605
- · Strap 25 mm durable due to PU coated webbing (PES)

End-fittings:









You can find additional end-fittings with a minimum breaking force MBL 600 daN on pages 90 to 98.

Advantages



- · tensioning within seconds
- · no threading of the webbing
- easy opening of the quick tensioning device



Standard version	Short designation	Item No.
single-part - 1.0 m red webbing	WTK 600 - single-part 605/025 1,0 red	1255071
single-part - 2.0 m red webbing	WTK 600 - single-part 605/025 2,0 red	1255078
single-part - 3.0 m red webbing	WTK 600 - single-part 605/025 3,0 red	1255079
single-part - 4.0 m red webbing	WTK 600 - single-part 605/025 4,0 red	1255080
single-part - 5.0 m red webbing	WTK 600 - single-part 605/025 5,0 red	1255081
single-part - 6.0 m red webbing	WTK 600 - single-part 605/025 6,0 red	1255082
single-part - 8.0 m red webbing	WTK 600 - single-part 605/025 8,0 red	1255084
with end-fitting 002 - pointed hook		
two-part – FE 0.2 m + LE 0.8 m red webbing	WTK 600-605/025-002 0.2+0.8 red	1254982
two-part – FE 0.2 m + LE 1.8 m red webbing	WTK 600-605/025-002 0.2+1.8 red	1254983
two-part – FE 0.2 m + LE 2.8 m red webbing	WTK 600-605/025-002 0.2+2.8 red	1254984
two-part – FE 0.2 m + LE 3.8 m red webbing	WTK 600-605/025-002 0.2+3.8 red	1254985
two-part – FE 0.5 m + LE 1.5 m red webbing	WTK 600-605/025-002 0.5+1.5 red	1254986
two-part – FE 0.5 m + LE 2.5 m red webbing	WTK 600-605/025-002 0.5+2.5 red	1254987
two-part – FE 0.5 m + LE 3.5 m red webbing	WTK 600-605/025-002 0.5+3.5 red	1254988
two-part – FE 0.5 m + LE 4.5 m red webbing	WTK 600-605/025-002 0.5+4.5 red	1254989
two-part – FE 0.5 m + LE 5.5 m red webbing	WTK 600-605/025-002 0.5+5.5 red	1254990

WISTRA WTK 500 clamp lock lashing strap

- · Lashing capacity LC 2,500 daN in straight tension
- · Manufactured and tested in terms of EN 12195-2: current version
- · Tensioning element clamp lock 805
- · Strap 25 mm durable due to PU coated webbing (PES)

End-fittings:







You can find additional end-fittings with a minimum breaking force MBL 500 daN on pages 90 to 98.



Standard version	Short designation	Item No.				
single-part - 1.0 m yellow webbing	WTK 500 single-part 1.0 yellow	1254970				
single-part - 2.0 m yellow webbing	WTK 500 single-part 2.0 yellow	1254977				
single-part - 3.0 m yellow webbing	WTK 500 single-part 3.0 yellow	1254124				
single-part - 3.5 m blue webbing	WTK 500 single-part 3.5 blue	1251304				
single-part - 4.0 m yellow webbing	WTK 500 single-part 4.0 yellow	1250001				
single-part - 5.0 m yellow webbing	WTK 500 single-part 5.0 yellow	1254184				
single-part - 6.0 m yellow webbing	WTK 500 single-part 6.0 yellow	1254978				
single-part - 8.0 m yellow webbing	WTK 500 single-part 8.0 yellow	1254980				
with end-fitting 002 - pointed hook						
two-part – FE 0.2 m + LE 0.8 m yellow webbing	WTK 500-002 0.2+0.8 yellow	1253680				
two-part – FE 0.2 m + LE 1.8 m yellow webbing	WTK 500-002 0.2+1.8 yellow	1251366				
two-part – FE 0.2 m + LE 2.8 m yellow webbing	WTK 500-002 0.2+2.8 yellow	1253686				
two-part – FE 0.2 m + LE 3.8 m yellow webbing	WTK 500-002 0.2+3.8 yellow	1251344				
two-part – FE 0.5 m + LE 1.5 m yellow webbing	WTK 500-002 0.5+1.5 yellow	1253694				
two-part – FE 0.5 m + LE 2.5 m yellow webbing	WTK 500-002 0.5+2.5 yellow	1253700				
two-part – FE 0.5 m + LE 3.5 m yellow webbing	WTK 500-002 0.5+3.5 yellow	1250002				
two-part – FE 0.5 m + LE 4.5 m yellow webbing	WTK 500-002 0.5+4.5 yellow	1253701				
two-part – FE 0.5 m + LE 5.5 m yellow webbing	WTK 500-002 0.5+5.5 yellow	1253702				
with end-fitting 382 - for airline lashing tracks and safety seam to prevent slipping of the loose end out of the ratchet						
two-part – FE 0.2 m + LE 1.9 m blue webbing	WTK 500-382 0.2+1.9 blue SN	1251305				

WISTRA WTK 350 clamp lock lashing strap

- · Lashing capacity LC 2,500 daN in straight tension
- · Manufactured and tested in terms of EN 12195-2: current version
- Tensioning element clamp lock 804
- · Strap 25 mm durable due to PU coated webbing (PES)

End-fittings:







You can find additional end-fittings with a minimum breaking force MBL 350 daN on pages 90 to 98.



Standard version	Short designation	Item No.
single-part - 1.0 m yellow webbing	WTK 350 single-part 1.0 yellow	1253665
single-part - 2.0 m yellow webbing	WTK 350 single-part 2.0 yellow	1253672
single-part - 3.0 m yellow webbing	WTK 350 single-part 3.0 yellow	1253673
single-part - 4.0 m yellow webbing	WTK 350 single-part 4.0 yellow	1253674
single-part - 5.0 m yellow webbing	WTK 350 single-part 5.0 yellow	1253675
single-part - 6.0 m yellow webbing	WTK 350 single-part 6.0 yellow	1253676
single-part - 8.0 m yellow webbing	WTK 350 single-part 8.0 yellow	1253678
with end-fitting 002 - pointed hook		
two-part – FE 0.2 m + LE 0.8 m yellow webbing	WTK 350-002 0.2+0.8 yellow	1252504
two-part – FE 0.2 m + LE 1.8 m yellow webbing	WTK 350-002 0.2+1.8 yellow	1252505
two-part – FE 0.2 m + LE 2.8 m yellow webbing	WTK 350-002 0.2+2.8 yellow	1252511
two-part – FE 0.2 m + LE 3.8 m yellow webbing	WTK 350-002 0.2+3.8 yellow	1252512
two-part – FE 0.5 m + LE 1.5 m yellow webbing	WTK 350-002 0.5+1.5 yellow	1252520
two-part – FE 0.5 m + LE 2.5 m yellow webbing	WTK 350-002 0.5+2.5 yellow	1252526
two-part – FE 0.5 m + LE 3.5 m yellow webbing	WTK 350-002 0.5+3.5 yellow	1252527
two-part – FE 0.5 m + LE 4.5 m yellow webbing	WTK 350-002 0.5+4.5 yellow	1252528
two-part – FE 0.5 m + LE 5.5 m yellow webbing	WTK 350-002 0.5+5.5 yellow	1252529

WISTRA WTS 1000 overcenter lock lashing strap

- · Lashing capacity LC 2,500 daN in straight tension
- · Manufactured and tested in terms of EN 12195-2: current version
- · Tensioning element clamp lock 912
- · Strap 50 mm durable due to PU coated webbing (PES)

End-fittings:







You can find additional end-fittings with a minimum breaking force MBL 1,000 daN on pages 90 to 98.



Standard version	Short designation	Item No.
single-part - 1.0 m green webbing	WTS 1000 single-part 1.0 green	1505332
single-part - 2.0 m green webbing	WTS 1000 single-part 2.0 green	1505339
single-part - 3.0 m green webbing	WTS 1000 single-part 3.0 green	1505340
single-part - 4.0 m green webbing	WTS 1000 single-part 4.0 green	1505341
single-part - 5.0 m green webbing	WTS 1000 single-part 5.0 green	1505342
single-part - 6.0 m green webbing	WTS 1000 single-part 6.0 green	1505343
single-part - 8.0 m green webbing	WTS 1000 single-part 8.0 green	1505345
with end-fitting 826 - anchor combi end-fitting		
two-part – FE 0.5 m + LE 1.5 m green webbing	WTS 1000-826 0.5+1.5 green	1505114
two-part – FE 0.5 m + LE 2.5 m green webbing	WTS 1000-826 0.5+2.5 green	1505120
two-part – FE 0.5 m + LE 3.5 m green webbing	WTS 1000-826 0.5+3.5 green	1505121
two-part – FE 0.5 m + LE 4.5 m green webbing	WTS 1000-826 0.5+4.5 green	1505122
two-part – FE 0.5 m + LE 5.5 m green webbing	WTS 1000-826 0.5+5.5 green	1505123
two-part – FE 1.0 m + LE 3.0 m green webbing	WTS 1000-826 1.0+3.0 green	1505144
two-part – FE 1.0 m + LE 4.0 m green webbing	WTS 1000-826 1.0+4.0 green	1505146
two-part – FE 1.2 m + LE 2.4 m green webbing	WTS 1000-826 1.2+2.4 green	1508005

Vehicle transport lashing straps

WISTRA WTA 3135 pressure ratchet lashing strap

- · Normal tension force Stf 240 daN for normal hand force Shf 50 daN
- · Lashing capacity LC 2,500 daN in straight tension
- · Version according to VDI 2700 Sheet 8 stretch 4%, manufactured and tested according to EN 12195-2: current version
- Tensioning element ratchet 908
- · Blue strap 35 mm durable due to PU coated webbing (PES)







Туре	Ratchet	Protection	FE hook	Hook loose	Hook Loose end	Length FE m	Length LE m	Item No.
WTA 3	908	A35	520	520	520	0,2	1,8	1350188
WTA 3	908	A35	520	520	520	0,2	2,3	1350189
WTA 3	908	A35	520	520	520	0,2	2,8	1350190
WTA 3	908	A35	531	531	531	0,2	1,8	1350191
WTA 3	908	A35	531	531	531	0,2	2,3	1350192
WTA 3	908	A35	531	531	531	0,2	2,8	1350193
WTA 3	908	B35	520	520	520	0,2	1,8	1350201
WTA 3	908	B35	520	520	520	0,2	2,3	1350202
WTA 3	908	B35	520	520	520	0,2	2,8	1350203
WTA 3	908	B35	531	531	531	0,2	1,8	1350205
WTA 3	908	B35	531	531	531	0,2	2,3	1350206
WTA 3	908	B35	531	531	531	0,2	2,8	1350207
WTA 3	908	C35	520	520	520	0,2	1,8	1350214
WTA 3	908	C35	520	520	520	0,2	2,3	1350215
WTA 3	908	C35	520	520	520	0,2	2,8	1350216

Туре	Ratchet	Protection	FE hook	Hook loose	Hook Loose end	Length FE m	Length LE m	Item No.
WTA 3	908	C35	531	531	531	0,2	1,8	1350217
WTA 3	908	C35	531	531	531	0,2	2,3	1350218
WTA 3	908	C35	531	531	531	0,2	2,8	1350219
WTA 3	908	D35	520	520	520	0,2	1,8	1350226
WTA 3	908	D35	520	520	520	0,2	2,3	1350227
WTA 3	908	D35	520	520	520	0,2	2,8	1350228
WTA 3	908	D35	531	531	531	0,2	1,8	1350229
WTA 3	908	D35	531	531	531	0,2	2,3	1350230
WTA 3	908	D35	531	531	531	0,2	2,8	1350231
WTA 3	908	E50	520	520	520	0,2	1,8	1350238
WTA 3	908	E50	520	520	520	0,2	2,3	1350239
WTA 3	908	E50	520	520	520	0,2	2,8	1350240
WTA 3	908	E50	531	531	531	0,2	1,8	1350241
WTA 3	908	E50	531	531	531	0,2	2,3	1350242
WTA 3	908	E50	531	531	531	0,2	2,8	1350243

Typ A35 **161021000040**



Typ B35 **161021000072**



Typ C35 **161035000041**



Typ D35 **161035000040**

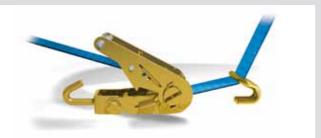


Typ E50 #165070-800

WISTRA WTA 3435 pressure ratchet lashing strap

- · Normal tension force STF 240 daN for normal hand force SHF 50 daN
- · Lashing capacity LC 2,500 daN in straight tension
- · Version according to VDI 2700 Sheet 8 stretch 4%, manufactured and tested according to EN 12195-2: current version
- · Tensioning element ratchet 908
- · Blue strap 35 mm durable due to PU coated webbing (PES)
- · Blue webbing





Туре	Ratchet	Protection	FE hook	Hook loose	Hook Loose end	Length FE	Length LE m	ltem No.
WTA 3	908	A35	371	531	531	FE	1,8	1350185
WTA 3	908	A35	371	531	531	FE	2,3	1350186
WTA 3	908	A35	371	531	531	FE	2,8	1350187
WTA 3	908	A35	356	531	531	FE	1,8	1350184
WTA 3	908	A35	356	531	531	FE	2,3	1350182
WTA 3	908	A35	356	531	531	FE	2,8	1350183
WTA 3	908	B35	371	531	531	FE	1,8	1350198
WTA 3	908	B35	371	531	531	FE	2,3	1350199
WTA 3	908	B35	371	531	531	FE	2,8	1350200
WTA 3	908	B35	356	531	531	FE	1,8	1350194
WTA 3	908	B35	356	531	531	FE	2,3	1350195
WTA 3	908	B35	356	531	531	FE	2,8	1350196
WTA 3	908	C35	371	531	531	FE	1,8	1350211
WTA 3	908	C35	371	531	531	FE	2,3	1350212
WTA 3	908	C35	371	531	531	FE	2,8	1350213

Туре	Ratchet	Protection	FE hook	Hook loose	Hook Loose end	Length FE	Length LE m	ltem No.
WTA 3	908	C35	356	531	531	FE	1,8	1350208
WTA 3	908	C35	356	531	531	FE	2,3	1350209
WTA 3	908	C35	356	531	531	FE	2,8	1350210
WTA 3	908	D35	371	531	531	FE	1,8	1350223
WTA 3	908	D35	371	531	531	FE	2,3	1350224
WTA 3	908	D35	371	531	531	FE	2,8	1350225
WTA 3	908	D35	356	531	531	FE	1,8	1350220
WTA 3	908	D35	356	531	531	FE	2,3	1350221
WTA 3	908	D35	356	531	531	FE	2,8	1350222
WTA 3	908	E50	371	531	531	FE	1,8	1350235
WTA 3	908	E50	371	531	531	FE	2,3	1350236
WTA 3	908	E50	371	531	531	FE	2,8	1350237
WTA 3	908	E50	356	531	531	FE	1,8	1350232
WTA 3	908	E50	356	531	531	FE	2,3	1350233
WTA 3	908	E50	356	531	531	FE	2,8	1350234

Typ A35 **161021000040**



Typ B35 **161021000072**



Typ C35 **161035000041**



Typ D35 **161035000040**





WISTRA WTA 3150 pressure ratchet lashing strap

- · Normal tension force Stf 240 daN for normal hand force Shf 50 daN
- · Lashing capacity LC 2,500 daN in straight tension
- · Version according to VDI 2700 Sheet 8 stretch ≤ 4%, manufactured and tested according to EN 12195-2: current version
- · Tensioning element ratchet 918
- · Blue strap 50 mm durable due to PU coated webbing (PES)





Туре	Ratchet	Protection	FE hook	Hook loose	Hook Loose end	Length FE m	Length LE m	Item No.
WTA 3	918	A50	006	006	006	0,2 m	1,8	1503141
WTA 3	918	A50	006	006	006	0,2 m	2,3	1503142
WTA 3	918	A50	006	006	006	0,2 m	2,8	1503143
WTA 3	918	A50	014	014	014	0,2 m	1,8	1503144
WTA 3	918	A50	014	014	014	0,2 m	2,3	1503145
WTA 3	918	A50	014	014	014	0,2 m	2,8	1503146
WTA 3	918	B50	006	006	006	0,2 m	1,8	1503150
WTA 3	918	B50	006	006	006	0,2 m	2,3	1503151
WTA 3	918	B50	006	006	006	0,2 m	2,8	1503152
WTA 3	918	B50	014	014	014	0,2 m	1,8	1503153
WTA 3	918	B50	014	014	014	0,2 m	2,3	1503154
WTA 3	918	B50	014	014	014	0,2 m	2,8	1503155
WTA 3	918	C50	006	006	006	0,2 m	1,8	1503159
WTA 3	918	C50	006	006	006	0,2 m	2,3	1503160
WTA 3	918	C50	006	006	006	0,2 m	2,8	1503161

Туре	Ratchet	Protection	FE hook	Hook loose	Hook Loose end	Length FE m	Length LE m	Item No.
WTA 3	918	C50	014	014	014	0,2 m	1,8	1503162
WTA 3	918	C50	014	014	014	0,2 m	2,3	1503163
WTA 3	918	C50	014	014	014	0,2 m	2,8	1503164
WTA 3	918	D50	006	006	006	0,2 m	1,8	1503168
WTA 3	918	D50	006	006	006	0,2 m	2,3	1503169
WTA 3	918	D50	006	006	006	0,2 m	2,8	1503170
WTA 3	918	D50	014	014	014	0,2 m	1,8	1503171
WTA 3	918	D50	014	014	014	0,2 m	2,3	1503172
WTA 3	918	D50	014	014	014	0,2 m	2,8	1503173
WTA 3	918	E50	006	006	006	0,2 m	1,8	1503177
WTA 3	918	E50	006	006	006	0,2 m	2,3	1503178
WTA 3	918	E50	006	006	006	0,2 m	2,8	1503179
WTA 3	918	E50	014	014	014	0,2 m	1,8	1503180
WTA 3	918	E50	014	014	014	0,2 m	2,3	1503181
WTA 3	918	E50	014	014	014	0,2 m	2,8	1503182

Typ A50 **161020000040**



Typ B50 **161020000071**



Typ C50 **161020000041**



Typ D50 **161050000040**

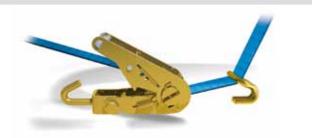


Typ E50 #165070-800

WISTRA WTA 3450 pressure ratchet lashing strap

- · Ratchet 918 Normal tension force STF 240 daN for normal hand force SHF 50 daN
- · Ratchet 811 Normal tension force STF 350 daN for normal hand force SHF 50 daN
- · Lashing capacity LC 2,500 daN in straight tension
- · Version according to VDI 2700 Sheet 8 stretch 4%, manufactured and tested according to EN 12195-2: current version
- · Tensioning element ratchet 918/811
- · Blue strap 50 mm durable due to PU coated webbing (PES)





Туре	Ratchet	Protection	FE hook	Hook loose	Hook Loose end	Length FE m	Length LE m	Item No.
WTA 3	918	A50	361	014	014	FE	1,8	1503147
WTA 3	918	A50	361	014	014	FE	2,3	1503148
WTA 3	918	A50	361	014	014	FE	2,8	1503149
WTA 3	918	B50	361	014	014	FE	1,8	1503156
WTA 3	918	B50	361	014	014	FE	2,3	1503157
WTA 3	918	B50	361	014	014	FE	2,8	1503158
WTA 3	918	C50	361	014	014	FE	1,8	1503165
WTA 3	918	C50	361	014	014	FE	2,3	1503166
WTA 3	918	C50	361	014	014	FE	2,8	1503167
WTA 3	918	D50	361	014	014	FE	1,8	1503174
WTA 3	918	D50	361	014	014	FE	2,3	1503175
WTA 3	918	D50	361	014	014	FE	2,8	1503176
WTA 3	918	E50	361	014	014	FE	1,8	1503183
WTA 3	918	E50	361	014	014	FE	2,3	1503184
WTA 3	918	E50	361	014	014	FE	2,8	1503185

Туре	Ratchet	Protection	FE hook	Hook loose	Hook Loose end	Length FE m	Length LE m	ltem No.
WTA 3	811	A50	353	014	014	FE	1,8	1503099
WTA 3	811	A50	353	014	014	FE	2,3	1503100
WTA 3	811	A50	353	014	014	FE	2,8	1503101
WTA 3	811	B50	353	014	014	FE	1,8	1503108
WTA 3	811	B50	353	014	014	FE	2,3	1503109
WTA 3	811	B50	353	014	014	FE	2,8	1503110
WTA 3	811	C50	353	014	014	FE	1,8	1503117
WTA 3	811	C50	353	014	014	FE	2,3	1503118
WTA 3	811	C50	353	014	014	FE	2,8	1503119
WTA 3	811	D50	353	014	014	FE	1,8	1503126
WTA 3	811	D50	353	014	014	FE	2,3	1503127
WTA 3	811	D50	353	014	014	FE	2,8	1503128
WTA 3	811	E50	353	014	014	FE	1,8	1503135
WTA 3	811	E50	353	014	014	FE	2,3	1503136
WTA 3	811	E50	353	014	014	FE	2,8	1503137

Typ A50 **161020000040**



Typ B50 **161020000071**



Typ C50 **161020000041**



Typ D50 **161050000040**



Typ E50 #165070-800

WISTRA car transportation pressure ratchet lashing straps

- · Ratchet 917 Normal tension force STF 200 daN for normal hand force SHF 50 daN
- Ratchet 908 Normal tension force STF 240 daN for normal hand force SHF 50 daN
- · Lashing capacity LC 2,500 daN in straight tension
- · manufactured and tested in terms of EN 12195-2: current version
- Tensioning element ratchet 917/908
- · Strap 35 mm durable due to PU coated webbing (PES)
- · Blue webbing
- · Can be supplied with factory certificate / test certificate

Accessories



Label cover

WISTRA WTA 2135 pressure ratchet lashing strap

· Stand version with traverse arch (flemish bend)

WISTRA WTA 2235 pressure ratchet lashing strap

Standard version with rim sling

WISTRA WTR 2000 pressure ratchet lashing strap

Standard version with rim hooks

End-fittings:



You can find additional end-fittings with a minimum breaking force MBL 2,000 daN on pages 90 to 98.

WISTRA WTA 2135 pressure ratchet lashing strap



Туре	Ratchet	Protection	Hook FE	Traverse arch	Hook Loose end	Length FE	Length LE	Item No.	
Standard versi	Standard version with traverse arch (flemish bend) 350 mm long								
WTA 2	917	035	520	888	520	0.2 m	2.5 m	1358741	
WTA 2	917	035	536	888	536	0.2 m	2.5 m	1357412	
Special version	Special version with traverse arch (flemish bend) 350 - 800 mm long								
WTA 2	917	035	520	877	520	0.2 m	2.5 m	1350023	
WTA 2	917	035	536	877	536	0.2 m	2.5 m	1350024	

WISTRA WTA 2235 pressure ratchet lashing strap



Туре	Ratchet	Protection	Hook FE	Hook central	Hook Loose end	Length FE	Length LE	Item No.
WTA 2	917	B35	536	536	016	0.2 m	1.5 m	1350025
WTA 2	908	B35	371	536	016	FE	1.5 m	1351235

WISTRA WTR 2000 pressure ratchet lashing strap



Туре	Ratchet	Protection	Hook FE	Hook central	Hook Loose end	Length FE	Length LE	Item No.
WTA 2	908	035	536	000	536	0.3 m	1.7 m	1350852

Lashing lift system

A significant time reduction system for the professional load securing!

- $\cdot\$ no need to climb on the loading area
- easy positioning of the tensioning strap from the ground
- · no separate fixing of the straps in the hooks
- $\cdot \;\;$ no more throwing of the straps over the load
- time saving by more than 50 %



Designation	Unit of quantity	Item No.
Lashing lift system for "Hamburger Verdeck"	Set for 6 pieces of lashing straps	160101
	Set for 12 pieces of lashing straps	160103
Lashing lift system for "Schiebeverdeck"	Set for 6 pieces of lashing straps	160100
	Set for 12 pieces of lashing straps	160102







- · Sendzimir-galvanised 1 mm-thick steel sheet
- Lid powder-coated in RAL 9016 / other RAL colours at surcharge
- Easy to open with patented PK3000 lid guide system
- · Lid can be slid in at the bottom
- \cdot 2 × PK locks on the sides
- \cdot 3 × buckles for fastening in the EK 1000
- Easy installation without drilling with 3 supplied buckles and 2 set screws in the spare wheel cradle EK 1000

"LadeBOX"insert

- 2 drawer troughs with ball bearing guides for up to 20 lashing straps and 20 ratchets, galvanised
- · variable partition walls, galvanised
- $\cdot~2\times$ plastic containers 600 \times 400 \times 130 mm for 60 anti-slip mats and up to 26 edge protectors
- \cdot 1 OSB plate 400 \times 930 mm
- Optional: Battery-powered magnetic LED lamp (batteries not included in scope of supply)





Designation	Unit of quantity	Item No.
"Ladebox" set, type A Consisting of: 20 × WTL 5550-046 FE 0.5 m + LE 7.5 m blue with QuickView label + print LE "Ladepartner" 40 × edge protectors red 50 mm heavy load 60 × anti-slip mats 200 × 8 × 300 mm 2 × round slings 3,000 kg, yellow, 3.0 m circumference	Set	190001
"Ladebox"set, type Construction Consisting of: 20 × WTL 5550-046 FE 0.5 m + LE 7.5 m blue with QuickView label + print LE "Ladepartner" 26 × edge protectors orange, 190 × 190 mm, length approx. 800 mm 60 × anti-slip mats 200 × 8 × 300 mm 2 × round slings 3,000 kg, yellow, 3,0 m circumference	Set	190002
"Ladebox" for PK 3000 consisting of: 2 × drawer troughs with ball bearing guides 2 × plastic containers 600 × 400 × 130 mm	Set	1921001421
"Ladebox" spare wheel cradle EK 1000 frame Powder coated Height 490 mm, 30 µm +/–10% Without accessories Including clamping claws M16 screws not included in scope of supply	Pieces	1921006120
"Ladebox" LED lamp 135 mm dia. magnetic	Pieces	1936745130
"Ladebox" plastic container Grated, $600 \times 400 \times 130 \text{ mm}$	Pieces	1970305050
Steel "Ladebox" for EK 1000 1,080 × 450 × 965 mm With 1 × lid, can be slid in at the bottom Standard colour RAL 9016 With 2 × PK locks on the sides With 3 × buckles for fastening in the EK 1000 2 × drawer troughs with ball bearing guides 2 × plastic containers 600 × 400 × 130 mm Load maximum 130 kg in EK 1000 Net weight approx. 75 kg	Pieces	1971701080



LadeBOX EK1000 (without load securing sets)



LadeBOX insert PK3000

WISTRA lashing strap accessories

Edge protection 5500



Material: Plastic Colour: black Weight: 0.250 kg

Designation	Unit of quantity	Item No.
Edge protection black 50 mm	Pieces	165500000040

Edge protection 6660



Material: Plastic Colour: red Weight: 0.205 kg

Designation	Unit of quantity	Item No.
Edge protection red 50 mm	Pieces	166600000040

Edge protection 7000



Material: steel Colour: galvanised Weight: 0.380 kg

Designation	Unit of quantity	Item No.
Edge protection steel 50 mm	Pieces	16700000012

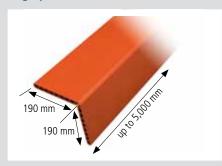
Edge protection 2200



Material: Polyethylene Colour: white Weight: 0.060 kg

Designation	Unit of quantity	Item No.
Edge protection white 50 mm open	Pieces	162200000240

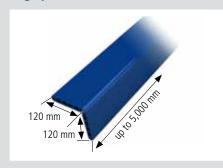
Edge protection 3000



Material: Plastic Weight: 2.510 kg/m
Colour: orange Length: up to 5,000 mm

Designation	Unit of quantity	Item No.
Edge protection 190x190 orange 500 mm	Pieces	16300040-0500
Edge protection 190x190 orange 800 mm	Pieces	16300040-0800
Edge protection 190x190 orange 1000 mm	Pieces	16300040-1000
Edge protection 190x190 orange 1,200 mm	Pieces	16300040-1200
Edge protection 190x190 orange 2,000 mm	Pieces	16300040-2000
Edge protection 190x190 orange 2,400 mm	Pieces	16300040-2400
Edge protection 190x190 orange 2,500 mm	Pieces	16300040-2500
Edge protection 190x190 orange 3,000 mm	Pieces	16300040-3000
Edge protection 190x190 orange 4,000 mm	Pieces	16300040-4000
Edge protection 190x190 orange 5,000 mm	Pieces	16300000040

Edge protection 3010



Material: Plastic Weight: 0.990 kg/m
Colour: blue Length: up to 5,000 mm

Designation	Unit of quantity	Item No.
Edge protection 120x120 blue 500 mm	Pieces	16301040-0500
Edge protection 120x120 blue 800 mm	Pieces	16301040-0800
Edge protection 120x120 blue 1000 mm	Pieces	16301040-1000
Edge protection 120x120 blue 1,200 mm	Pieces	16301040-1200
Edge protection 120x120 blue 2,000 mm	Pieces	16301040-2000
Edge protection 120x120 blue 2,400 mm	Pieces	16301040-2400
Edge protection 120x120 blue 2,500 mm	Pieces	16301040-2500
Edge protection 120x120 blue 3,000 mm	Pieces	16301040-3000
Edge protection 120x120 blue 4,000 mm	Pieces	16301040-4000
Edge protection 120x120 blue 5,000 mm	Pieces	163010000040

Edge protection flat profile 3006



Material: Plastic Weight: 1.000 kg/m
Colour: blue/black Length: up to 6,000 mm

Designation	Unit of quantity	Item No.
Edge protection flat profile 190x190 blue/black 2,000 mm	Pieces	163006190-0500
Edge protection flat profile 190x190 blue/black 2,000 mm	Pieces	163006190-0800
Edge protection flat profile 190x190 blue/black 1,000 mm	Pieces	163006190-1000
Edge protection flat profile 190x190 blue/black 1,200 mm	Pieces	163006190-1200
Edge protection flat profile 190x190 blue/black 2,000 mm	Pieces	163006190-2000
Edge protection flat profile 190x190 blue/black 2,400 mm	Pieces	163006190-2400
Edge protection flat profile 190x190 blue/black 2,500 mm	Pieces	163006190-2500
Edge protection flat profile 190x190 blue/black 3,000 mm	Pieces	163006190-3000
Edge protection flat profile 190x190 blue/black 4,000 mm	Pieces	163006190-4000
Edge protection flat profile 190x190 blue/black 5,000 mm	Pieces	163006190-5000
Edge protection flat profile 190x190 blue/black 6,000 mm	Pieces	163006190-6000

Other lengths available upon request

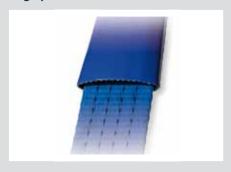
Ratchet base



Material: Plastic

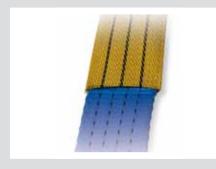
Designation	Unit of quantity	Item No.
Edge protection/ratchet base 50 mm	Pieces	163001
Edge protection/ratchet base 50 mm, slotted	Pieces	163003

Edge protection hose, rubberised



Designation	Unit of quantity	Item No.
Edge protection hose 35 mm blue rubberised	m	161021000040
Edge protection hose 50 mm blue rubberised	m	161020000040

Edge protection hose, polyester



Designation	Unit of quantity	Item No.
Edge protection hose 35 mm PES violet	m	161021000072
Edge protection hose 50 mm PES yellow	m	161020000071
Edge protection hose 50 mm PES orange	m	161030000071
Edge protection hose 50 mm PES black	m	161020000171
Edge protection hose 50 mm PES natural white	m	1610271

Edge protection controller, profiled rubber hose



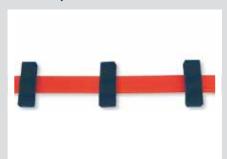
Designation	Unit of quantity	Item No.
Edge protection controller 35 mm rubber 700 mm	Pieces	161035000041
Edge protection controller 50 mm rubber 700 mm	Pieces	161020000041

Edge protection controller



Designation	Unit of quantity	Item No.
Edge protection controller 50 mm rubber/textile 800 mm	Pieces	165070-800
Edge protection controller 50 mm rubber/textile 1200 mm	Pieces	165070-1200

Abrasion protection block



Material: Plastic Colour: black

Designation	Unit of quantity	Item No.
Edge protection abrasion protection 35 mm for WTRA	Pieces	161035000040
Edge protection abrasion protection 50 mm for WTRA	Pieces	161050000040

Label protection



Designation	Unit of quantity	Item No.
Label protection for lashing straps 35 mm and 50 mm - 100 mm long	Pieces	160010000000
Label protection for lashing straps 35 mm and 50 mm - 250 mm long	Pieces	160004

Parking device



Designation	Unit of quantity	Item No.
Fixed end parking device roof bar	Pieces	1250011

Lashing strap slider / form-fit slider



Designation	Unit of quantity	Item No.
Lashing strap slider EN 12195:2004	Pieces	160009

WISTRA App for iPhone lashing strap calculator / form-fit calculator



WISTRA App — the proven lashing strap slider as application

Calculate the required number of lashing straps to tie down a stable load or use the form-fit calculator to determine the maximum load unit weights, based on the maximum blocking capacity of the form-fit device.

The menu of the app is intuitive and practical.

The data of the integrated angle meter can be taken over directly for the exact calculation as an efficient tool.

You can find further aids regarding load securing in the information of both areas.

http://itunes.apple.com/de/app/wistraapp/id442392262?mt=8

Lashing strap rolling-up system for up to 50 mm wide lashing straps



Material: Steel, black powder coated

Designation	Unit of quantity	Item No.
Lashing strap rolling-up system	Pieces	160020000000

WIS ratchet tensioning support



Designation	Unit of quantity	Item No.
WIS ratchet tensioning support	Pieces	160050
Hand force limiting Shr to 50 daN		

Slip-resistant material



The slip-resistant mats are used to increase the friction coefficient up to μD 0.6 according to the calculation principles DIN EN 12195-1:2004 and VDI 2700 ff.

When they are used, the initial tension forces required according to the calculation for tying down are reduced and in the form-fit area the performance of employed load securing aids as well as vehicle components used for load securing is increased.

WIS anti-slip mats with a friction coefficient μD 0.6.

Measuring procedure according to derective "VDI 2700 page 15".

3 mm RH mats

Designation	Dimensions	Unit of quantity	Item No.
3 mm RH mat	150 mm x 150 mm	Pieces	161503015081
3 mm RH mat	150 mm x 600 mm	Pieces	166003015081
3 mm RH mat	150 mm x 1250 mm	Roll	161503125081
3 mm RH mat	150 mm x 20,000 mm	Roll	161503020081
3 mm RH mat	250 mm x 5,000 mm	Roll	162503500081

8 mm RH mats

Designation	Dimensions	Unit of quantity	Item No.
8 mm RH mat	100 x 2400mm	Pieces	1601008240081
8 mm RH mat	110 x 130 mm	Pieces	161108013081
8 mm RH mat	200 x 300 mm	Pieces	162008030081
8 mm RH mat	250 x 5000 mm	Roll	162508500081
8 mm RH mat	500 x 5,000 mm	Roll	165008500081
8 mm RH mat	1250 x 10,000 mm	Roll	161250810081

Other lengths available upon request!

WISTRA Safeguard load securing nets





WISTRA GmbH offers load securing nets in their range of products for more than 17 years.

Our broad range of products offers a multitude of application options - also beyond load securing. The common lashing strap widths 25 mm, 35 mm and 50 mm and the different mesh apertures in combination with connection adapters for the vehicle or trailer, offer a variety of options.

We could implement more than 300 different versions for our customers up to now. The Safeguard load securing nets are planned and manufactured according to customer requirements.

Besides many individual products, customerspecific solutions have proven themselves and have been manufactured more than 10,000 times. The application focuses on the areas:

- Rear load securing in closed structures, different exchangeable containers, containers and special containers
- · Side load securing, e.g. for Curtainsider
- Load securing above the goods on the floor and to the sides
- · Retaining nets for short-wood transports
- · Retaining nets for transporters
- · Tie-down load securing nets











A multitude of implementation options results from this, which must be determined on the basis of many years of experience of WISTRA, based on the requirement profiles of the customers.

- · Use, handling and loading specifications
- · Mesh aperture and use of webbing
- · Quantity and kind of lashing and connecting elements
- · Use of linkages
- · Use of additional anti-theft-devices

The WISTRA team is at your disposal with many years of experience.

Safeguard load securing nets are manufactured for renowned customers like Deutsche Post, GLS, Hermes and many others and are proven in practice across Europe.

On the following pages you can find a wide selection of net options. Please contact us if these do not meet your requirements.

As mentioned earlier, we also manufacture nets individually in quantities from 1 piece upwards.

Vertical versions

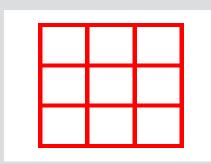


Standard grid mesh apertures for 25 mm webbing

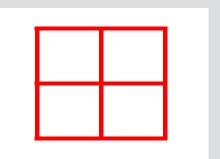
Webbing minimum breaking force 2,000 daN



Mesh aperture 150 mm Example size 725 mm x 725 mm



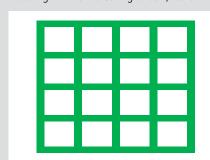
Mesh aperture 250 mm Example size 850 mm x 850 mm



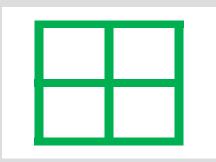
Mesh aperture 350 mm Example size 775 mm x 775 mm

Standard grid mesh apertures for 50 mm webbing

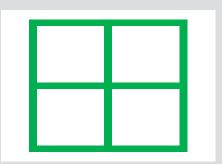
Webbing minimum breaking force 4,000 daN



Mesh aperture 200 mm Example size 1050 mm x 1050 mm



Mesh aperture 350 mm Example size 850 mm x 850 mm



Mesh aperture 450 mm Example size 1050 mm x 1050 mm

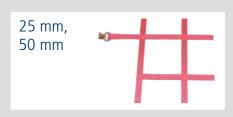
Individual mesh apertures are possible, even within a load securing net!



Property marking



Side connecting components



Attachment, rigid

Length - according to specification

Type A	Type A2
with end-fitting (see page 88 to 96)	with two end-fittings (see page 88 to 96)
e.g. Type A EB025 – 200 mm	e.g. Type A2 EB025/002 – 200 mm



Attachment

Length - according to specification

Type B	
without end-fitting	
e.g. Type B – 150 mm	



Attachment, adjustable with buckle 806

Length - according to specification (at least 100 mm + adjustment range in mm)

Type C 806	Type C2 806
with end-fitting (see page 88 to 96)	with two end-fittings (see page 88 to 96)
e.g. Type C EB826 le – 100 mm	e.g. Type C2 EB826/828 le – 100 mm

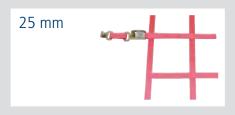


Tensioning device

with clamp lock 805

Length - according to specification (at least 200 mm + adjustment range in mm)

Type K 805	Type K2 805
with end-fitting (see page 88 to 96)	with two end-fittings (see page 88 to 96)
e.g. Type K 805 EB025 – 250 mm	e.g. Type K2 805 EB025/002 – 250 mm



Quick tensioning device with clamp lock 605/025

Length - according to specification (at least 200 mm + adjustment range in mm)

Type SK 605/025	Type A2 605/025
with end-fitting (see page 88 to 96)	with two end-fittings (see page 88 to 96)
e.g. Type SK 605/025 EB025 – 300 mm	e.g. Type SK2 605/02 EB025/002 – 300 mm



Tensioning device with ratchet 909

Length - according to specification (at least 200 mm + adjustment range in mm)

Type R 906	Type R2 906
with end-fitting (see page 88 to 96)	with two end-fittings (see page 88 to 96)
e.g. Type R 909 EB379 – 300 mm	e.g. Type R2 909 EB025/002 – 300 mm



Tensioning device with clamp lock 907

Length - according to specification (at least 200 mm + adjustment range in mm)

Туре К 907	Туре К2 907
with end-fitting (see page 88 to 96)	with two end-fittings (see page 88 to 96)
e.g. Type K 907 EB826 le – 250 mm	e.g. Type K2 907 EB826/828 le – 250 mm



Tensioning device with ratchet 916

Length - according to specification (at least 200 mm + adjustment range in mm)

Type R 916	Type R2 916
with end-fitting (see page 88 to 96)	with two end-fittings (see page 88 to 96)
e.g. Type R 916 EB828 le – 300 mm	e.g. Type R2 916 EB826/828 le – 300 mm

Central connecting components



Central quick tensioning device with clamp lock 605/025

Length - according to specification (at least 100 mm) + adjustment range in mm

Type MSK

e.g. Type MSK 605/025 MW VS 100-300 mm



Central tensioning device

with ratchet 909

Length - according to specification (at least 100 mm) + adjustment range in mm

Type MR 909

e.g. Type MR 909 MW VS 100-400 mm



Central tensioning device

with clamp lock 907

Length - according to specification (at least 80 mm) + adjustment range in mm

Type MK 907

e.g. Type MK 907 MW VS 80-400 mm



Central tensioning device

with ratchet 916

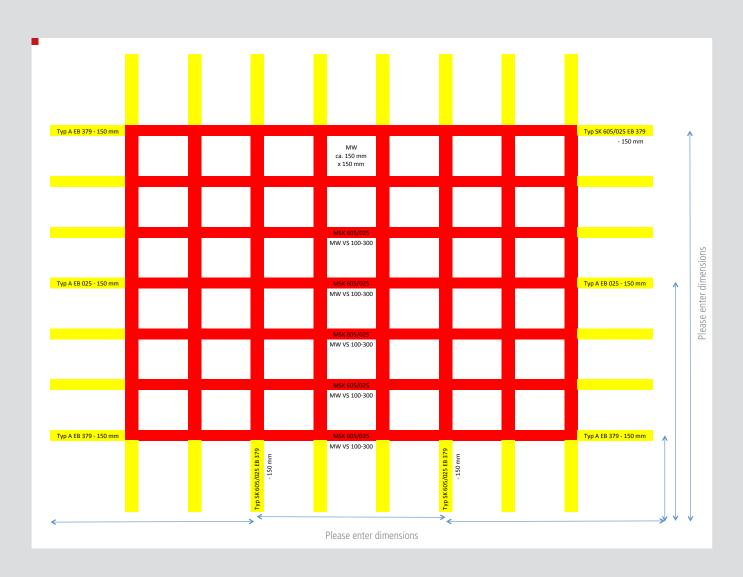
Length - according to specification (at least 120 mm) + adjustment range in mm

Type MR 916

e.g. Type MR 916 MW VS 120-400 mm

Vertical versions - Ordering template / example



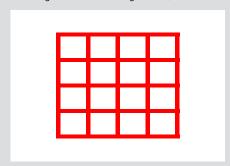


Horizontal versions

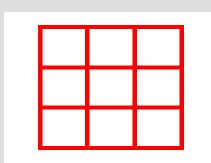


Standard grid mesh apertures for 25 mm webbing

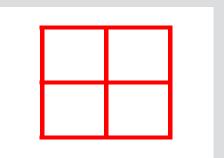
Webbing minimum breaking force 2,000 daN



Mesh aperture 150 mm Example size 725 mm x 725 mm



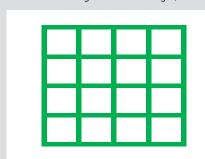
Mesh aperture 250 mm Example size 850 mm x 850 mm



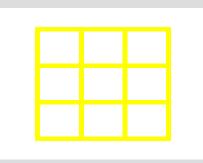
Mesh aperture 350 mm Example size 775 mm x 775 mm

Standard grid mesh apertures for 50 mm webbing

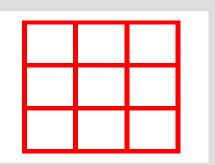
Minimum breaking force of webbing 4,000 daN, 6,000 daN, 7,600 daN



Mesh aperture 300 mm Example size 1450 mm x 1450 mm



Mesh aperture 400 mm Example size 1400 mm x 1400 mm



Mesh aperture 500 mm Example size 1700 mm x 1700 mm

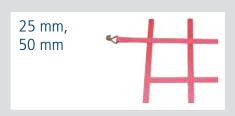
Individual mesh apertures are possible, even within a load securing net!



Property marking



Side connecting components



Attachment, rigid Length - according to specification *)

Туре А	Type A2
with end-fitting (see page 88 to 96)	with two end-fittings (see page 88 to 96)
e.g. Type A EB002 – 200 mm	e.g. Type A2 EB025/002 – 200 mm



Attachment

Length - according to specification

Type B	
without end-fitting	
e.g. Type B – 1000 mm	

For this version you can use fixed ends.



Attachment, adjustable with buckle 806

Length - according to specification (at least 100 mm)

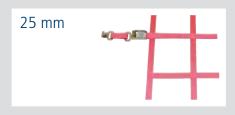
Type C 806	Type C2 806
with end-fitting (see page 88 to 96)	with two end-fittings (see page 88 to 96)
e.g. Type C EB007 – 500 mm	e.g. Type C2 EB381/007 – 500 mm



Tensioning device with clamp lock 805

Length - according to specification (at least 150 mm + adjustment range in mm)

Type K 805	Type K2 805
with end-fitting (see page 88 to 96)	with two end-fittings (see page 88 to 96)
e.g. Type K 805 EB025 – 250 mm	e.g. Type K2 805 EB025/002 – 250 mm



Quick tensioning device with clamp lock 605/025

Length - according to specification (at least 150 mm + adjustment range in mm)

Type SK 605/025	Type SK2 605/025
with end-fitting (see page 88 to 96)	with two end-fittings (see page 88 to 96)
e.g. Type SK 605/025 EB025 – 300 mm	e.g. Type SK2 605/02 EB025/002 – 300 mm

*

25 mm webbing with 2,000 daN minimum breaking force: at least 100 mm plus end-fitting

50 mm webbing with 4,000 daN minimum breaking force: at least 200 mm plus end-fitting

50 mm webbing with 6,000/7,500 daN minimum breaking force: at least 230 mm plus end-fitting



Tensioning device with ratchet 909

Length - according to specification (at least 200 mm + adjustment range in mm)

Type R 909	Type R2 909	
with end-fitting (see page 88 to 96)	with two end-fittings (see page 88 to 96)	
e.g. Type R 909 EB379 – 300 mm	e.g. Type R2 909 EB025/379 – 300 mm	



Tensioning device with clamp lock 907

Length - according to specification (at least 200 mm + adjustment range in mm)

Туре К 907	Туре К2 907
with end-fitting (see page 88 to 96)	with two end-fittings (see page 88 to 96)
e.g. Type K 907 EB007 – 250 mm	e.g. Type K2 907 EB007/381 – 250 mm



Tensioning device with ratchet 916

Length - according to specification (at least 200 mm + adjustment range in mm)

Type R 916	Type R2 916
with end-fitting (see page 88 to 96)	with two end-fittings (see page 88 to 96)
e.g. Type R 916 EB007 – 300 mm	e.g. Type R2 916 EB007/381 – 300 mm



Tensioning device

with ratchet 811

Length - according to specification (at least 400 mm + adjustment range in mm)

Type R 811	Type R2 811
with end-fitting (see page 88 to 96)	with two end-fittings (see page 88 to 96)
e.g. Type R 811 EB006 – 400 mm	e.g. Type R2 811 EB006/065 – 400 mm



Tensioning device with ratchet 814

Length - according to specification (at least 400 mm + adjustment range in mm)

Type R 814	Type R2 814
with end-fitting (see page 88 to 96)	with two end-fittings (see page 88 to 96)
e.g. Type R 814 EB006 – 400 mm	e.g. Type R2 814 EB006/065 – 400 mm



Tensioning device with ratchet 818

Length - according to specification (at least 500 mm + adjustment range in mm)

Type R 818	Type R2 818
with end-fitting (see page 88 to 96)	with two end-fittings (see page 88 to 96)
e.g. Type R 818 EB006 – 500 mm	e.g. Type R2 818 EB006/065 – 500 mm

WISTRA Safeguard load securing net



Item No. 27 222 00 000 01

Dimensions:1375 mm x 1225 mmMesh aperture:125 mm x 125 mmWebbing:25 mm wideColour:blueBreaking strength:2,000 daN

On each of the corners 1 flat hook with safety device (14 000 00 025 00)

In the net additionally diagonally inwards

4 loose ends to adapt with a length of 1.00 m with clamp lock (12 605 00 000 12) and flat hook with safety device (14 000 00 025 00) are contained in the set

WISTRA Safeguard load securing net



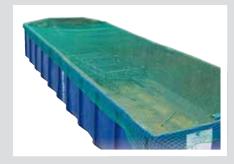
Item No. 27 213 00 000 00

Dimensions: 1,575 mm x 1,350 mm
Mesh aperture: 200 mm x 200 mm
Webbing: 25 mm wide
Colour: red
Breaking strength: 2,000 daN

14 D-rings are sewn around the circumference of the net, additionally 4 flat hooks with safety device (14 000 00 025 00) are sewn to the short sides Including 4 fastening straps WTR 1000 singlepart 4.00 m with 4 loose standard double finger hooks

WISTRA covering nets

WISTRA covering nets with edge finishing and 6 mm circular rubber rope







Designation	Dimensions	Unit of quantity	Item No.
WIS covering net 2 mm MW 30	1.4 m x 2.3 m	Pieces	275200312314
WIS covering net 2 mm MW 30	1.6 m x 2.8 m	Pieces	275200312816
WIS covering net 2 mm MW 30	1.8 m x 3.3 m	Pieces	275200313318
WIS covering net 2 mm MW 30	2.0 m x 3.0 m	Pieces	275200312030
WIS covering net 2 mm MW 30	2.0 m x 3.5 m	Pieces	275200312035
WIS covering net 2 mm MW 30	2.5 m x 3.5 m	Pieces	275200313525
WIS covering net 2 mm MW 30	2.5 m x 4.5 m	Pieces	275200314525
WIS covering net 2 mm MW 30	3.0 m x 4.5 m	Pieces	275200314530

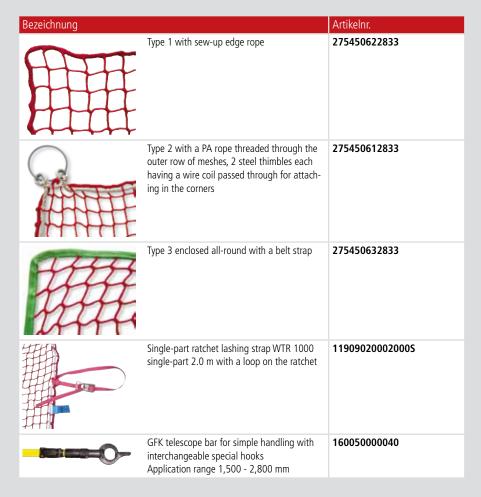
Designation	Dimensions	Unit of quantity	Item No.
WIS covering net 3 mm MW 50	1.5 m x 2.2 m	Pieces	275300511522
WIS covering net 3 mm MW 50	1.5 m x 2.5 m	Pieces	275300511525
WIS covering net 3 mm MW 50	1.5 m x 2.7 m	Pieces	275300512715
WIS covering net 3 mm MW 50	2.0 m x 3.0 m	Pieces	275300512030
WIS covering net 3 mm MW 50	2.5 m x 3.5 m	Pieces	275300512535
WIS covering net 3 mm MW 50	2.5 m x 4.5 m	Pieces	275300514525
WIS covering net 3 mm MW 50	3.0 m x 3.5 m	Pieces	275300513035
WIS covering net 3 mm MW 50	3.0 m x 4.0 m	Pieces	275300513040
WIS covering net 3 mm MW 50	3.5 m x 5.0 m	Pieces	275300513550
WIS covering net 3 mm MW 50	3.5 m x 5.5 m	Pieces	275300515535
WIS covering net 3 mm MW 50	3.5 m x 6.0 m	Pieces	275300513560
WIS covering net 3 mm MW 50	3.5 m x 7.0 m	Pieces	275300513570
WIS covering net 3 mm MW 50	3.5 m x 8.0 m	Pieces	275300513580

Designation	Dimensions	Unit of quantity	Item No.
Rubber rope	Ø 6 mm	m	2756000G0000
Rubber rope	Ø 12 mm	m	27512000G0000

WISTRA retaining nets

Versions

Material PPM thickness 4.5 mm, mesh aperture 60 mm, colour red, standard dimensions 2.80 x 3.30 m, the edge is reinforced additionally.





Application example

Retaining net used for short-wood transports.

- Secures the load in case of cavern/tunnel formation
 - in the block
 - on a stanchion
 - in the saddle position that was not reached by the lashing means.
- · Reliable in use, sufficient strength
- · Simple and quick handling
- · Cost-effective and long service life
- · Clearly visible and noticeable
- · Marking

Load securing systems

WISTRA load securing system SAFECON

WISTRA SAFECON is a novel and modular load unit securing system that enables safe transport of Octabin containers and quick loading and unloading without planning.



No anti-slip mats are required for SAFECON.

SAFECON is a system for securing IBC octabins made of corrugated cardboard onto CP3 wooden flat pallets.

Safecon has been specially developed for platform trucks and certified by DEKRA.

Safecon can also be retrofitted quickly and economically to any vehicle bodies, even Curtainsider (code L) in particular.



Handling is quick and easy:

- · Securing is done from the vehicle base
- · The curtains of the vehicle need not be rolled up



Designation	Item No.
WIS SAFECON system code XL - 2480 mm Version for side lashing rails - for 22 octabins, - individual weight up to 1,200 kg consisting of: 16 pieces longitudinal bars 11 pieces Safecon decking beams 2 pieces Safecon diagonal straps, blue 1 piece Safecon lashing straps, yellow 8 pieces Safecon enlacement straps, yellow 8 pieces Safecon enlacement straps, red 2 pieces Safecon enlacement straps, orange	200001
WIS SAFECON system code XL - 2480 mm Version for floor lashing points - for 22 octabins, - individual weight up to 1,200 kg consisting of: 16 pieces longitudinal bars 11 pieces Safecon decking beams 2 pieces Safecon diagonal straps, blue 1 piece Safecon lashing straps, yellow 8 pieces Safecon enlacement straps, yellow 8 pieces Safecon enlacement straps, red 2 pieces Safecon enlacement straps, orange	200003

Designation	Item No.
Safecon bars max. 3,500 mm long	22639-3500
Insert bars Safecon	160003
Safecon decking beams / free inside dimension 2,480 mm	22183903
Safecon diagonal strap Item 7	1507018
Safecon parking device pieces	221839990001
Safecon securing strap Item 3 complete, yellow	1507011
Safecon enlacement strap Item 4 FE, yellow	1507012
Safecon enlacement strap Item 4 LE 006, yellow	1507021
Safecon enlacement strap Item 4 LE 206, yellow	1507015
Safecon enlacement strap Item 5 FE, red	1507013
Safecon enlacement strap Item 5 LE 006, red	1507020
Safecon enlacement strap Item 5 LE 206, red	1507016
Safecon enlacement strap Item 6 FE orange	1507014
Safecon enlacement strap Item 6 LE 006 orange	1507019
Safecon enlacement strap Item 6 LE 206 orange	1507017

WISTRA Info

No anti-slip mats are required!



Your WISTRA team will gladly help you to select the system components.

WISTRA load securing system SAFETAINER



IBCs made of corrugated cardboard like Palmtainer or octabins as well as other cargo.

This three dimensional net secures the load in all directions with the diagonal lashings.

Lashing points according to DIN EN 12640 are a prerequisite for the proper use.

No anti-slip mats are required for WISTRA SAFETAINER.

The SAFETAINER load securing systems are conceptualised and made up individually according to the cargo.

We would be pleased to advise you!

WISTRA load securing system GTS





WISTRA GTS can be used for the following standard dimensions:

SUDEX KEG having an outer diameter of 381 mm and volume of 30 and 50 litres, steel

PLUS KEG having an outer diameter of 395 mm and polyurethane foam sheathing 300 x 400 mm beverage crates

WISTRA GTS is a system for protecting beverage crates and containers on platform trucks.

Advantages:

- Extremely quick handling through simple laying and fixing with the help of mouldadapted lashes
- · Safe belt strap guidance
- · Can be used for all platform trucks
- The GTS load securing system can be used for transporting all types of beverages on standard platform trucks
- Owing to the option of reliable tie-down lashing, load can be safely transported even using vehicles without any special equipment.
- There is no need of expensive securing methods for forming load units: stop using the tiresome securing process with one-way lashing or using winding-foils or shrink foils!

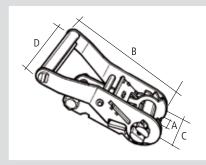
Simple application

- GTS securing elements are laid in pairs across two opposite pallet slots having the same height.
- Stacked beverage crates as well as containers can be secured.
- Use in case of 50-litre containers in two tiers or 30-litre containers in three tiers.



Designation	Unit of quantity	Item No.
WISTRA GTS glued-on anti-slip pads	Pieces	160060000015
Material: steel, surface yellow powder coated		
Weight: 6.0 kg		

Ratchet



- A = Webbing width
- B = Overall length
- C = Overall width
- D = Width of handle
- FB = Breaking force

¹⁾ used in the WISTRA lashing straps Supply of locks and end-fittings subject to dimensional deviations



Item No. 129750000013

Webbing width: 75 mm
Overall length: 325 mm
Overall width: 137 mm
Width of handle: 118 mm



Item No. 128180000013

Webbing width: 50 mm
Overall length: 410 mm
Overall width: 90 mm
Width of handle: 110 mm
Stf1): 704/550 daN



Item No. 129100000013

Webbing width: 50 mm
Overall length: 163 mm
Overall width: 95 mm
Width of handle: 76 mm



Item No. 128140000013

Webbing width: 50 mm
Overall length: 331 mm
Overall width: 94 mm
Width of handle: 105 mm
STFD: 450 daN



Item No. 129180000013A

Webbing width: 50 mm
Overall length: 180 mm
Overall width: 98 mm
Width of handle: 95 mm
STFD: 240 daN

50 mm

Minimum breaking force: 5,000 daN



Item No. 128110000013KG

Webbing width: 50 mm
Overall length: 230 mm
Overall width: 95 mm
Width of handle: 98 mm
STFD: 350 daN

50 mm



Minimum breaking force: 2,000 daN

Item No. 129160000013

Webbing width: 50 mm
Overall length: 133 mm
Overall width: 76 mm
Width of handle: 84 mm
STFD: 210 daN

86 Textile load securing ⋅ ratchets



Item No. 129080000013

Webbing width: 35 mm
Overall length: 153 mm
Overall width: 85 mm
Width of handle: 55 mm
STE®: 240 daN



Item No. 129090000013

Webbing width: 25 mm
Overall length: 120 mm
Overall width: 55 mm
Width of handle: 56 mm
STFD: 200 daN



Item No. 129060000013

Webbing width: 25 mm Overall length: 115 mm Overall width: 53 mm Width of handle: 35 mm S_{TF} ": 120 daN



Item No. 129170000013

Webbing width: 35 mm
Overall length: 132 mm
Overall width: 62 mm
Width of handle: 65 mm
STF®: 200 daN



Item No. 129090000030

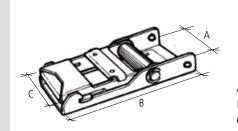
Webbing width: 25 mm
Overall length: 128 mm
Overall width: 55 mm
Width of handle: 64 mm



Item No. 129190000013

Webbing width: 25 mm
Overall length: 131 mm
Overall width: 55 mm
Width of handle: 56 mm

Overcenter locks



A = Webbing width

B = Overall length

C = Overall width

FB = Breaking force

¹⁾ used in the WISTRA lashing straps Supply of locks and end-fittings subject to dimensional deviations



Item No. 129120000013

Webbing width: 50 mm Overall length: 140 mm Overall width: 65 mm



Item No. 129600000013

Webbing width: 50 mm
Overall length: 185 mm
Overall width: 68 mm



Item No. 12970000030

Webbing width: 45 mm
Overall length: 160 mm
Overall width: 60 mm



Item No. 129510000030

Webbing width: 50 mm
Overall length: 140 mm
Overall width: 60 mm



Item No. 129600000016

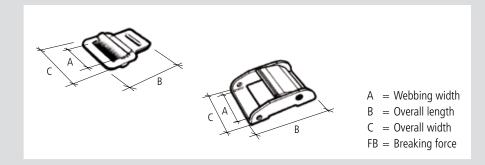
Webbing width: 50 mm Overall length: 185 mm Overall width: 68 mm



Item No. 129130000013

Webbing width: 45 mm Overall length: 156 mm Overall width: 65 mm

Clamp locks





Item No. 129070000012

Webbing width: 50 mm
Overall length: 74 mm
Overall width: 65 mm



Item No. 128350000020

Webbing width: 35 mm
Overall length: 60 mm
Overall width: 52 mm



Item No. 128040000020

Webbing width: 25 mm
Overall length: 53 mm
Overall width: 32 mm



Item No. 128060000016

Webbing width: 50 mm Overall length: 45 mm Overall width: 75 mm



Item No. 126050000013

Webbing width: 25 mm Overall length: 65 mm Overall width: 40 mm



Item No. 128020000012

Webbing width: 50 mm
Overall length: 57 mm
Overall width: 68 mm



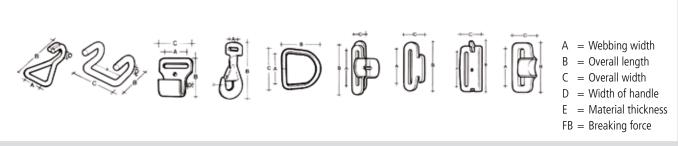
Minimum breaking force: 500 daN



Item No. 128050000020

Webbing width: 25 mm
Overall length: 50 mm
Overall width: 34 mm

End-fittings



Supply of locks and end-fittings subject to dimensional deviations

75 mm Pointed hook



Minimum breaking force: 10,000 daN

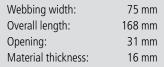
Item No. 14000006700

Webbing width:	75 mm
Overall length:	142 mm
Opening:	31 mm
Material thickness:	15 mm

75 mm Eye hook with strap hoop



Item No. 140000006600



80 mm Strap hoop



Item No. 14000006800

Vebbing width:	80 mm
Opening:	85 mm
Naterial thickness	16 mm

50 mm Pointed hook

Minimum breaking force: 5,000 daN

Item No. 140000000600

Webbing width: 50 mm Overall length: 70 mm Overall width: 71 mm Opening: 30 mm Material thickness: 11 mm

50 mm Single finger pointed hook



Minimum breaking force: 5,000 daN

Item No. 14000001400

Webbing width: 50 mm Overall length: 130 mm Overall width: 80 mm Opening: 25 mm Material thickness: 15 mm

50 mm Pointed hook with hook safety



Minimum breaking force: 5,000 daN

Item No. 14000002060001

Webbing width:	50 mm
Overall length:	118 mm
Overall width:	74 mm
Opening:	29 mm
Material thickness:	13 mm

50 mm Pointed hook

Minimum breaking

force: 3,000 daN



Item No. 14000000700

Webbing width: 50 mm Overall length: 70 mm Overall width: 71 mm Opening: 20 mm Material thickness: 10 mm

50 mm flat hook



Minimum breaking force: 5,000 daN

Item No. 14000001300

Webbing width: 50 mm Overall length: 112 mm Overall width: 77 mm Opening: 15 mm Material thickness: 11 mm

50 mm Hook with safety ring



Minimum breaking force: 4,000 daN

Item No. 140000000800

Webbing width:	50 mm
Overall length:	72 mm
Overall width:	68 mm
Opening:	28 mm
Material thickness:	8 mm

50 mm Pointed hook cropped

Minimum breaking force: 5,000 daN



Item No. 140000004600

Webbing width:	50 mm
Overall length:	80 mm
Overall width:	76 mm
Opening:	25 mm
Material thickness:	12 mm

50 mm flat hook



Minimum breaking force: 3,000 daN

Item No. 14000001200

Webbing width:	50 mm
Overall length:	75 mm
Overall width:	66 mm
Opening:	14 mm
Material thickness:	4.2 mm

50 mm

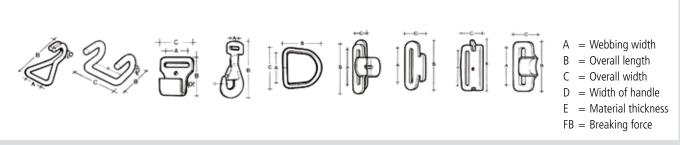






Item No. 140000030600

Webbing width:	50 mm
Overall length:	137 mm
Overall width:	80 mm
Opening:	30 mm
Material thickness:	11 mm



Supply of locks and end-fittings subject to dimensional deviations

50 mm Triangle spring hook

Minimum breaking force: 5,000 daN



Item No. 140000007500

Webbing width: 50 mm
Overall length: 165 mm
Overall width: 84 mm
Opening: 29 mm

50 mm Anchor hook

Minimum breaking force: 5,000 daN



Item No. 140000083400

Webbing width: 50 mm
Overall length: 120 mm
Material thickness: 50 mm

50 mm Spring hook

Minimum breaking force: 5,000 daN

Item No. 140000021000

Webbing width: 50 mm
Overall length: 153 mm
Overall width: 72 mm
Opening: 25 mm
Material thickness: 6 mm

50 mm

Minimum breaking force: 5,000 daN

Item No. 14000006500

Webbing width: 50 mm
Overall length: 60 mm
Overall width: 78 mm
Opening: 14 mm
Material thickness: 12.5 mm

50 mm Spring hook

Minimum breaking force: 5,000 daN



Item No. 14000005000

Webbing width: 50 mm
Overall length: 152 mm
Overall width: 72 mm
Opening: 25 mm
Material thickness: 6 mm

50 mm Triangle

Minimum breaking force: 5,000 daN



Item No. 14000001800

Webbing width: 50 mm
Overall length: 78 mm
Overall width: 80 mm
Material thickness: 6 mm

50 mm Crown hook



Minimum breaking force: 2,500 daN

Item No. 140000084012

Webbing width: 50 mm Overall length: 86 mm Overall width: 85 mm Opening: 9 mm Material thickness: 6.5 mm

45 mm D-ring



Minimum breaking force: 1,700 daN

Item No. 140000070500

Webbing width: 45 mm 60 mm Overall length: Overall width: 67 mm Material thickness: 7 mm

50 mm Pointed hook for Ratchet 918



Minimum breaking force: 3,000 daN

Item No. 140000036100

Overall length: 106 mm Overall width: 52 mm Opening: 24 mm Material thickness: 15 mm

35 mm Pointed hook for Ratchet 908



Minimum breaking force: 3,000 daN

Item No. 140000035600

108 mm
60 mm
24 mm
13 mm

50 mm D-ring



Item No. 140000070800

Webbing width: 50 mm Overall length: 69 mm Overall width: 80 mm Material thickness: 10 mm

50 mm Pointed hook



Minimum breaking force: 5,000 daN

Item No. 140000035000

Webbing width: 50 mm Overall length: 95 mm Overall width: 50 mm Opening: 18 mm Material thickness: 16 mm

50 mm Pointed hook



Minimum breaking force: 3,000 daN

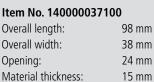
Item No. 140000035100

Webbing width: 50 mm Overall length: 108 mm Overall width: 82 mm Opening: 24 mm Material thickness: 13 mm

35 mm



Minimum breaking force: 3,000 daN



50 mm D-ring



Minimum breaking force: 2,270 daN

Item No. 140000070600

Webbing width: 50 mm Overall length: 62 mm Overall width: 64 mm Material thickness: 8 mm

50 mm



Minimum breaking force: 3,000 daN



Item No. 140000035300

Overall length: 108 mm Overall width: 51 mm Opening: 24 mm Material thickness: 13 mm

50 mm Pointed hook



Minimum breaking force: 3,000 daN

Item No. 140000036000

Webbing width: 50 mm Overall length: 108 mm Overall width: 82 mm Opening: 24 mm Material thickness: 15 mm

35 mm Pointed hook



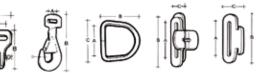
Minimum breaking force: 3,000 daN

Item No. 140000035400

Webbing width:	35 mm
Overall length:	108 mm
Overall width:	65 mm
Opening:	24 mm
Material thickness:	13 mm















A = Webbing width

= Overall length

= Overall width

= Width of handle

E = Material thickness

FB = Breaking force

Supply of locks and end-fittings subject to dimensional deviations

35 mm Pointed hook

Minimum breaking force: 3,000 daN



Item No. 140000037000

Webbing width: 35 mm Overall length: 72 mm Overall width: 82 mm 24 mm Opening: Material thickness: 15 mm



50 mm

End-fitting for Anchor combi lashing tracks

Minimum breaking



Webbing width: 50 mm Overall length: 75 mm 34 mm

Overall width:



50 mm End-fitting for

Guiding tracks Minimum breaking force: 500 daN



Webbing width: 50 mm Overall length: 65 mm Overall width: 35 mm Material thickness: 4 mm

35 mm

Pointed hook

Minimum breaking force: 3,000 daN



Item No. 140000035200

Webbing width: 50 mm Overall length: 112 mm Overall width: 81 mm 24 mm Opening: Material thickness: 13 mm



50 mm

End-fitting for Anchor combi lashing tracks

Minimum breaking force: 2,000 daN

Item No. 140000082200

Webbing width: 50 mm Overall length: 74 mm Overall width: 24 mm



End-fitting for

Keyhole

Minimum breaking force: 1,500 daN



Item No. 140000082800

Webbing width: 50 mm Overall length: 80 mm Overall width: 37 mm Material thickness: 6 mm

35 mm Pointed hook

Minimum breaking force: 3,000 daN



Item No. 140000035500

Webbing width: 35 mm Overall length: 112 mm Overall width: 60 mm 24 mm Opening: Material thickness: 13 mm

50 mm

End-fitting for Anchor combi lashing tracks

Minimum breaking force: 2,000 daN



Art.-Nr. 140000082100

Webbing width: 50 mm Overall length: 80 mm Overall width: 13 mm Overall width (ring): 66 mm

25 mm Airline end-fitting

Minimum breaking force: 1,000 daN



Item No. 140000038200

Webbing width: 25 mm Overall length: 60 mm Overall width: 45 mm





Item No. 140000038100

Webbing width: up to 35 mm Overall length: 97 mm Overall width: 24 mm

35 mm Single-finger hook

Minimum breaking force: 3,000 daN

Item No. 140000053100

Webbing width: 35 mm Overall length: 94 mm Overall width: 61 mm Opening: 23 mm Material thickness: 14 mm

35 mm Spring hook

Minimum breaking force: 3,000 daN

Item No. 140000053000

Webbing width: 35 mm Overall length: 130 mm Overall width: 55 mm Opening: 16 mm Material thickness: 5 mm

25 mm Airline end-fitting

Minimum breaking force: 1,000 daN

Item No. 140000037900

Webbing width: 25 mm Overall length: 34 mm Overall width: 61 mm

50 mm

Airline end-fitting

Minimum breaking force: 5,000 daN

Item No. 140000038300

Webbing width: 50 mm Overall length: 113 mm Overall width: 20 mm

35 mm

Single-finger hook

Minimum breaking force: 2,500 daN

Item No. 140000053600

Webbing width: 35 mm Overall length: 91 mm Overall width: 60 mm Opening: 23 mm Material thickness: 12 mm

35 mm D-ring

Minimum breaking force: 3,000 daN

Item No. 140000001600

Webbing width: 35 mm Overall length: 47 mm Overall width: 50 mm Material thickness: 5 mm

50 mm Airline end-fitting

Minimum breaking force: 2,000 daN

Item No. 140000038000

Webbing width: up to 50 mm Overall length: 62 mm Overall width:

35 mm Pointed hook

Minimum breaking force: 3,000 daN

Item No. 140000052000

Webbing width: 35 mm Overall length: 83 mm Overall width: 54 mm Opening: 22 mm Material thickness: 9 mm

35 mm Claw hook

Minimum breaking force: 2,500 daN

Item No. 140000053200

Webbing width: 35 mm Overall length: 50 mm Overall width: 60 mm Opening: 19 mm Material thickness: 10 mm

35 mm Spring hook

Minimum breaking force: 2.000 daN

Item No. 140000031100

Webbing width: up to 35 mm 90 mm Overall length: Overall width: 48 mm 16 mm Opening: Material thickness: 12.5 mm

























= Webbing width

= Overall length

= Overall width

= Width of handle

E = Material thickness

FB = Breaking force

Supply of locks and end-fittings subject to dimensional deviations

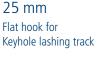
25 mm Pointed hook

Minimum breaking force: 1,500 daN



Item No. 140000000200

Webbing width: 25 mm Overall length: 60 mm 40 mm Overall width: Opening: 18 mm Material thickness: 7 mm



Minimum breaking force: 1,500 daN



Item No. 140000002500

Webbing width: 25 mm Overall length: 55 mm Overall width: 45 mm Opening: 10 mm Material thickness: 3 mm

25 mm Claw hook

Mindestbruchkraft: ohne Kennzeichnung



Art.-Nr. 140000052500

Webbing width: 25 mm Overall length: 55 mm Overall width: 42 mm Opening: 24 mm Material thickness: 6 mm

25 mm S hook

Minimum breaking force: 500 daN



Item No. 140000072500

Webbing width: 25 mm Overall length: 104 mm Overall width: 37 mm Opening: 38 mm Material thickness: 6 mm

25 mm Spring hook

Minimum breaking force: 1,360 daN



Item No. 140000020100

Webbing width: 25 mm Overall length: 95 mm Overall width: 47 mm Opening: 13 mm Material thickness: 3.5 mm

25 mm Sort-rack flat hook

Minimum breaking force: 500 daN



Item No. 140000039000

Webbing width: 25 mm Overall length: 63 mm Overall width: 35 mm Opening: 8 mm Material thickness: 4 mm

25 mm S hook

Minimum breaking force: 800 daN



Item No. 140000072600

Webbing width: 25 mm Overall length: 104 mm Overall width: 40 mm Opening: 38 mm Material thickness: 8 mm

25 mm flat hook

Minimum breaking force: 340 daN



Item No. 140000021300

Webbing width: 25 mm Overall length: 30 mm 40 mm Overall width: Opening: 8 mm Material thickness: 2.5 mm

25 mm Platform hook

Minimum breaking



force: 250 daN

Art.-Nr. 140000052600 Webbing width: 25 mm Overall length: 63 mm Overall width: 38 mm Opening: 28 mm Material thickness: 6 mm

25 mm D-ring with drill hole

Minimum breaking force: 1,500 daN

Item No. 140000031400

Webbing width: 25 mm
Overall length: 28 mm
Overall width: 36 mm
Drill hole: 8 mm
Material thickness: 3 mm

50 mm

End-fitting for Round hole Ø 25 mm



Item No. 140000081700

Webbing width: 50 mm
Overall length: 71 mm
Overall width: 27 mm

25 mm D-ring

Minimum breaking force: 1,050 daN

0

Item No. 140000070300

Webbing width: 25 mm
Overall length: 32 mm
Overall width: 36 mm
Material thickness: 6 mm

50 mm

End-fitting for Round hole Ø 20 mm

Minimum breaking force: 680 daN

Item No. 140000081800

Webbing width: 50 mm Overall length: 71 mm Overall width: 27 mm

25 mm D-ring

Minimum breaking force: 1,050 daN

Item No. 140000070400

Webbing width: 25 mm
Overall length: 46 mm
Overall width: 39 mm
Material thickness: 6 mm

25 mm

End-fitting for Round hole Ø 20 mm

Minimum breaking force: 1,000 daN



Item No. 140000081900

Webbing width: 25 mm
Overall length: 71 mm
Overall width: 27 mm

Loop version

Version A Bolt loop

Item No. 14999A

Loop length: according to specification

Reference value: Bolt \emptyset x 4 = Loop length



Item No. 14999B

Loop length: according to specification

Reference value: Bolt \emptyset x 4 = Loop length



Item No. 14999C

Loop length: according to specification



Item No. 14999K



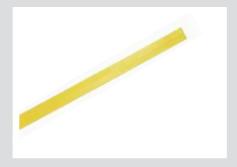
Item No. 14999D

Loop length: according to specification



Item No. 14999I

25 mm webbing



Roll form

Minimum breaking force	Colour	Unit of quantity	Item No.
1200 daN	blue	m	000565
1200 daN	yellow	m	000105
1200 daN	grey	m	000314
1200 daN	green	m	000108
1200 daN	sky blue	m	000102
1200 daN	black	m	000122
1200 daN	signal blue	m	000569
2000 daN	blue	m	000564
2000 daN	grey	m	000118
2000 daN	sky blue	m	000114
2000 daN	red	m	000131

35 mm webbing



Roll form

Minimum breaking force	Colour	Unit of quantity	Item No.
3000 daN	grey	m	000502
3000 daN	green	m	000142
3000 daN	orange	m	000145
3000 daN	black	m	000150
4500 daN	blue	m	000506

50 mm webbing



Roll form

Other webbing colours available upon request.

Minimum breaking force	Colour	Unit of quantity	Item No.
4000 daN	blue	m	000563
4000 daN	grey	m	000459
4000 daN	green	m	000192
4000 daN	olive green	m	000571
4000 daN	signal blue	m	000166
6000 daN	blue	m	000203
6000 daN	yellow	m	000220
6000 daN	green	m	000222
6000 daN	orange	m	000231
6000 daN	red	m	000327
6000 daN	black	m	000238
7600 daN	blue	m	000249
7600 daN	yellow	m	000269
7600 daN	orange	m	000288
7600 daN	red	m	000347

WISTRA One-way lashings

WIS hoop

The WIS hoop consists of high strength polyester yarn and offers the following advantages:

- $\cdot \hspace{0.1in}$ one way strap at low cost
- · high elasticity, extremely shock absorbing
- · does not rust
- · no risk of injury
- · can easily be re-tensioned
- · carrying capacity as steel strap, up to 2 t
- · weatherproof
- · considerably lighter than steel





Designation	Width	Breaking	Unit of quanti-	Item No.
		force	ty	
WIS hoop 30 S	9 mm	300 kP	1500 m/roll	420080300000
WIS hoop 40 S	13 mm	400 kP	1100 m/roll	420080400000
WIS hoop 50 S	16 mm	500 kP	850 m/roll	420080500000
WIS hoop 60 S	19 mm	600 kP	600 m/roll	420080600000
WIS hoop 45 S	13 mm	520 kP	800 m/roll	420080450000
WIS hoop 55 S	16 mm	700 kP	600 m/roll	420080550000
WIS hoop 65 S	19 mm	830 kP	500 m/roll	420080650000
WIS hoop 85 S	25 mm	950 kP	500 m/roll	420080850000
WIS hoop 95 S	30 mm	1170 kP	150 m/roll	420080950000
WIS hoop 105 S	32 mm	1350 kP	150 m/roll	420081050000

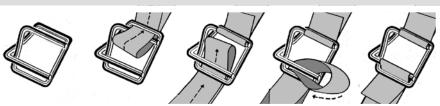


Designation	for webbing width	Unit of quantity	Item No.
WIS buckle B-3	9 mm	1000 pieces/box	42030000012
WIS buckle B-4	13 mm	1000 pieces/box	420400000012
WIS buckle B-5	16 mm	1000 pieces/box	420500000012
WIS buckle B-6	19 mm	1000 pieces/box	420600000012
WIS buckle B-8	25 mm	500 pieces/box	420800000012
WIS buckle B-10	35 mm	250 pieces/box	421000000012



with cutting device

Designation	for webbing width	Unit of quantity	Item No.
Windlass tensioner Type AVT	up to 20 mm	Pieces	420000000615



WISTRA one-way lashings key-lock quick lashing system



The **WISTRA** one-way lashing system is an economic alternative for commercially available lashing straps and consists of polypropylene webbing, locking buckle and a tensioning tool.

The **KEY-LOCK system** is primarily used for securing cargo in containers, on ships, in aircraft, on trucks and on trains.

The re-usable tensioning devices guarantee easy and quick lashing.



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Designation	Width	Breaking force	Unit of quantity	Item No.
Key-Lock webbing	50 mm	2000 daN	100 m/roll	410013850070



Buckle

Designation	Width	Breaking force	Unit of quantity	Item No.
Key-Lock buckle	50 mm	2000 daN	50 pieces	411800000015



Hand tensioner

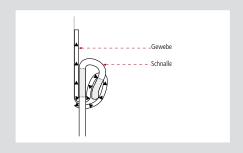


Hand tensioner Type AVT 50

Designation	up to webbing width	Unit of quantity	Item No.
Hand tensioner	50 mm	1 pieces	410000008120
Hand tensioner Type AVT 50	50 mm	1 pieces	410000004215
Ratchet tensioner	50 mm	1 pieces	418110000112



Ratchet tensioner







WISTRA one-way lashing straps

WISTRA belt straps are a cost-effective alternative for lashing straps.

Handling is easy and with a high breaking force of up to 5,000 daN the application is versatile in containers, on ships, on trains or in trucks.



Designation	Width	Breaking force in straight tension	Unit of quantity	Item No.
WIS lashing strap	32 mm	1600 daN	250 m/bag	42321600
WIS lashing strap	32 mm	2000 daN	250 m/bag	42322000
WIS lashing strap	32 mm	2300 daN	250 m/bag	42322300
WIS lashing strap	40 mm	5000 daN	250 m/bag	42405000
WIS lashing strap	50 mm	5000 daN	250 m/bag	42505000



Designation	for webbing width	Breaking force in straight tension	Unit of quantity	Item No.
WIS lashing buckle, forged	32 mm	3000 daN	70 pieces/box	413230001
WIS lashing buckle, forged	40 mm	4000 daN	50 pieces/box	414040001
WIS lashing buckle, forged	50 mm	5000 daN	40 pieces/box	415050001



Designation		Breaking force in straight tension	Unit of quantity	Item No.
WIS lashing buckle, welded	40 mm	3000 daN	70 pieces/box	414030002
WIS lashing buckle, welded	50 mm	5000 daN	50 pieces/box	415050002



Designation		Breaking force in straight tension	Unit of quantity	Item No.
WIS lashing buckle, bent	35 mm	1600 daN	220 pieces/box	413516003
WIS lashing buckle, bent	50 mm	2000 daN	125 pieces/box	415020003

Thread the lashing strap into the buckle:





LogiStrap™

Logistrap™ is a reusable belt strap for securing goods on pallets when transporting and offers many advantages compared to disposable packaging:

- Costs for disposable packagings such as shrink foils or plastic and metal bands are reduced.
- · Less wastage
- · Quick and easy handling
- · Multi-purpose





Material: Polyamide
Width: 50 mm
Total breaking force
of the strap: 105 daN

	Bezeichnung	Artikelnr.
- Angliota	Logistrap 4 m yellow	43 00 01-4000
■ mplittes	Logistrap 5 m orange	43 00 02-5000
■	Logistrap 6 m green	43 00 03-6000
	Logistrap 7 m blue	43 00 04-7000
350 mm		

WISTRA Tip

Other widths, lengths, colours or with customer logo upon request

Lifting technology

Lifting equipment / load securing devices according to BGR 500 Chapter 2.8
Lifting slings according to EN 1492-1 and round slings 1492-2 made of polyester according to EN 1492-2

WIS Operating Manual

The Operating Manual must have been read and understood before using lifting equipment.

Furthermore the user must absolutely be familiar with the legal and operational regulations as well as the acknowledged rules.

Improper handling of lifting equipment represents a life-threatening risk to persons and a risk of damage to goods. The risk of endangering people and/or damaging the load and/or other technical facilities must be avoided by the owner and the user.

The owner may only task trained persons to independently operate lifting equipment.

Environmental parameters must be checked as a matter of principle. This applies particularly to chemicals which could make contact with the lifting equipment directly or indirectly.

The ambient temperature in the application area and during storage must be observed! -40°C up to a maximum of 100°C. Negative influences by for instance icing up, soiling etc. must be avoided.

Testing of the lifting equipment by a qualified and authorised person before first use must be documented.

Selection of the right lifting equipment / load securing devices

- The carrying capacity of the lifting equipment may not be exceeded.
- Lifting slings and round slings are not suitable for loads with sharp edges without the use of additional edge protectors. Damage must be avoided.
- The data of the goods to be lifted must be known: Weight as well as centre of gravity carrying capacity of the lifting points - note the angle of inclination - observe possible bending of the load.
- Secure seating of the lifting equipment slipping or uncoupling can lead to the load dropping or tilting.
- Use only sufficiently dimensioned and connections between the lifting point and the load securing device.
- The load securing devices are stressed differently for symmetrical or unsymmetrical loads. The inclination angle may not exceed 60°.
- When selecting the length, observe that the carrying capacity is different for differing types of lifting equipment.

- Observe usable length and material for different lifting equipment - differing lengths or stretch characteristics can lead to an asymmetrical load distribution.
- The crane or lifting device must be suitable for the lifting process.
- For lifting slings the maximum loop opening of 20° (bearing width (e.g. of the crane hook) x
 3.5 = minimum loop length) may not be exceeded.
- Lifting slings and round slings must be attached so that they carry the load over the full width
- Never twist or knot round slings or lifting slings.
- Labels must be present and legible as a matter of principle.
- You will find the following data on the label: Nominal carrying capacity, material, manufacturer identification, tracking code, specification of the applicable standard, date of manufacture, length, CE mark.

Note that the load and the lifting equipment are subject to dynamic loads during the lifting process.

Round slings



Туре	Nominal	Art.Nr.	NL	0,5 m	1,0 m	1,5 m	2,0 m	2,5 m	3,0 m	3,5 m	4,0 m	4,5 m	5,0 m	6,0 m
	carrying capacity		Umfang	1,0 m	2,0 m	3,0 m	4,0 m	5,0 m	6,0 m	7,0 m	8,0 m	9,0 m	10 m	12 m
								Item num	ber XX					
SX 10	1000 kg	61010 XX 0	00027	01	02	03	04	05	06	07	08	09	10	12
SX 20	2000 kg	61020 XX 0	00027	01	02	03	04	05	06	07	08	09	10	12
SX 30	3000 kg	61030 XX 0	00027	01	02	03	04	05	06	07	08	09	10	12
SX 40	4000 kg	61040 XX 0	00027	01	02	03	04	05	06	07	08	09	10	12
SX 50	5000 kg	61050 XX 0	00027	01	02	03	04	05	06	07	08	09	10	12
SX 60	6000 kg	61060 XX 0	00027	01	02	03	04	05	06	07	08	09	10	12
SX 80	8000 kg	61080 XX 0	00027	01	02	03	04	05	06	07	08	09	10	12
SX 100	10000 kg	61100 XX 0	00027	01	02	03	04	05	06	07	08	09	10	12

Carrying capacity WLL for different sling types

Type	Nominal carrying capacity	single direct	Noose	laid singly	laid up to 45°	laid up to 60°
		Factor 1.0	Factor 0.8	Factor 2	Factor 1.4	Factor 1.0
SX 10	1000 kg	1000 kg	800 kg	2000 kg	1400 kg	1000 kg
SX 20	2000 kg	2000 kg	1600 kg	4000 kg	2800 kg	2000 kg
SX 30	3000 kg	3000 kg	2400 kg	6000 kg	4200 kg	3000 kg
SX 40	4000 kg	4000 kg	3200 kg	8000 kg	5600 kg	4000 kg
SX 50	5000 kg	5000 kg	4000 kg	10000 kg	7000 kg	5000 kg
SX 60	6000 kg	6000 kg	4800 kg	12000 kg	8400 kg	6000 kg
SX 80	8000 kg	8000 kg	6400 kg	16000 kg	11200 kg	8000 kg
SX 100	10000 kg	10000 kg	8000 kg	20000 kg	14000 kg	10000 kg

Lifting slings



Туре	Nominal	Webbing	Art.Nr.	Länge	1 m	2 m	3 m	4 m	5 m	6 m	7 m	8 m	9 m	10 m	12 m
	carrying capacity	width							Item nur	nber XX					
MC 10	1000 kg	30 mm	62010 XX 0	3021	01	02	03	04	05	06	07	80	09	10	12
MC 20	2000 kg	60 mm	62010 XX 0	6021	01	02	03	04	05	06	07	80	09	10	12
MC 30	3000 kg	90 mm	62010 XX 0	9021	01	02	03	04	05	06	07	80	09	10	12
MC 40	4000 kg	120 mm	62010 XX 1	2021	01	02	03	04	05	06	07	80	09	10	12
MC 50	5000 kg	150 mm	62010 XX 1	5021	01	02	03	04	05	06	07	80	09	10	12
MC 60	6000 kg	180 mm	62010 XX 1	8021	01	02	03	04	05	06	07	80	09	10	12
MC 80	8000 kg	240 mm	62010 XX 2	4021	01	02	03	04	05	06	07	80	09	10	12
MC 100	10000 kg	300 mm	62010 XX 3	0021	01	02	03	04	05	06	07	80	09	10	12

Carrying capacity WLL for different sling types

Тур2	Nominal carrying capacity		8	U	2	2
		single direct Factor 1.0	Noose Factor 0.8	laid singly Factor 2	laid up to 45° Factor 1.4	laid up to 60° Factor 1.0
MC 10	1000 kg	1000 kg	800 kg	2000 kg	1400 kg	1000 kg
MC 20	2000 kg	2000 kg	1600 kg	4000 kg	2800 kg	2000 kg
MC 30	3000 kg	3000 kg	2400 kg	6000 kg	4200 kg	3000 kg
MC 40	4000 kg	4000 kg	3200 kg	8000 kg	5600 kg	4000 kg
MC 50	5000 kg	5000 kg	4000 kg	10000 kg	7000 kg	5000 kg
MC 60	6000 kg	6000 kg	4800 kg	12000 kg	8400 kg	6000 kg
MC 80	8000 kg	8000 kg	6400 kg	16000 kg	11200 kg	8000 kg
MC 100	10000 kg	10000 kg	8000 kg	20000 kg	14000 kg	10000 kg

Mechanical load securing



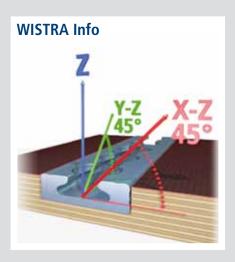


With our WISTRA products in the area of mechanical load production aids we offer quick and safe options of form-fit load securing for the most diverse means of transport.

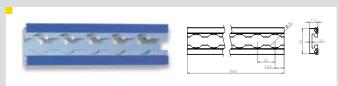
Many items in this product range were developed in close cooperation with vehicle body manufacturers, the railway, haulage companies, post, parcel services, dispatch departments and others. They have been proven in practice. They distinguish themselves through easy and quick handling and offer optimal load securing through form-fit.

Lashing tracks

Airline lashing tracks



Aluminium airline lashing track 5500 with rubber protection

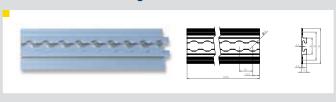


LC Lashing Capacity							
WIS end-fitting	379	380					
Z 90°	500 daN	500 daN					
X-Z 45°	500 daN	500 daN					
Y-Z 45°	400 daN	400 daN					

Lashing capacity for attachment: every 75 mm centrally with a countersunk screw M6 DIN 7991 10.9

m 21550025-0500 mm 21550025-1000
mm 21550025-1000
mm 21550025-1500
mm 21550025-1975
mm 21550025-2000
mm 21550025-3000
mm 21550025-4000
mm 21550025-5000
mm 21550025-6000

Aluminium airline lashing track 5501



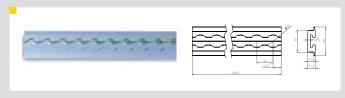
LC Lashing Capacity							
WIS end-fitting	379	380					
Z 90°	500 daN	500 daN					
X-Z 45°	500 daN	500 daN					
Y-Z 45°	400 daN	400 daN					

Lashing capacity for attachment: every 75 mm oppositely with a countersunk screw M6 DIN 7380 $8.8\,$

Designation	length	Item No.
Airline lashing track 5501	500 mm	21550125-0500
Airline lashing track 5501	1,000 mm	21550125-1000
Airline lashing track 5501	1,500 mm	21550125-1500
Airline lashing track 5501	1,975 mm	21550125-1975
Airline lashing track 5501	2,000 mm	21550125-2000
Airline lashing track 5501	3,000 mm	21550125-3000
Airline lashing track 5501	4,000 mm	21550125-4000
Airline lashing track 5501	5,000 mm	21550125-5000
Airline lashing track 5501	6,000 mm	21550125-6000

Special lengths upon request

Aluminium airline lashing track 5502

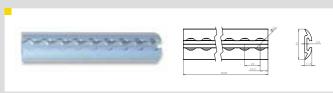


LC Lashing Capacity		
WIS end-fitting	379	380
Z 90°	500 daN	1000 daN
X-Z 45°	500 daN	1000 daN
Y-Z 45°	400 daN	900 daN

Lashing capacity for attachment: every 75 mm centrally with a countersunk screw M6 DIN 7991 10.9

Designation	length	Item No.
Airline lashing track 5502	500 mm	21550225-0500
Airline lashing track 5502	1000 mm	21550225-1000
Airline lashing track 5502	1500 mm	21550225-1500
Airline lashing track 5502	1975 mm	21550225-1975
Airline lashing track 5502	2000 mm	21550225-2000
Airline lashing track 5502	3000 mm	21550225-3000
Airline lashing track 5502	4000 mm	21550225-4000
Airline lashing track 5502	5,000 mm	21550225-5000
Airline lashing track 5502	6,000 mm	21550225-6000

Aluminium airline lashing track 5503

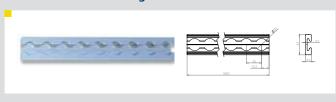


LC Lashing Capacity		
WIS end-fitting	379	380
Z 90°	500 daN	1000 daN
X-Z 45°	500 daN	1000 daN
Y-Z 45°	400 daN	900 daN

Lashing capacity for attachment: every 75 mm centrally with a countersunk screw M6 DIN 7991 10.9 $\,$

Designation	length	Item No.
Airline lashing track 5503	500 mm	21550325-0500
Airline lashing track 5503	1,000 mm	21550325-1000
Airline lashing track 5503	1,500 mm	21550325-1500
Airline lashing track 5503	1,975 mm	21550325-1975
Airline lashing track 5503	2,000 mm	21550325-2000
Airline lashing track 5503	3,000 mm	21550325-3000
Airline lashing track 5503	4,000 mm	21550325-4000
Airline lashing track 5503	5,000 mm	21550325-5000
Airline lashing track 5503	6,000 mm	21550325-6000

Aluminium airline lashing track 5504



LC Lashing Capacity		
WIS end-fitting	379	380
Z 90°	500 daN	500 daN
X-Z 45°	500 daN	500 daN
Y-Z 45°	400 daN	400 daN

Lashing capacity for attachment: every 75 mm centrally with a countersunk screw M6 DIN 7991 10.9

Designation	length	Item No.
Airline lashing track 5504	500 mm	21550425-0500
Airline lashing track 5504	1,000 mm	21550425-1000
Airline lashing track 5504	1,500 mm	21550425-1500
Airline lashing track 5504	1,975 mm	21550425-1975
Airline lashing track 5504	2,000 mm	21550425-2000
Airline lashing track 5504	3,000 mm	21550425-3000
Airline lashing track 5504	4,000 mm	21550425-4000
Airline lashing track 5504	5,000 mm	21550425-5000
Airline lashing track 5504	6,000 mm	21550425-6000

Airline lashing lashing tracks, processed

Aluminium airline lashing track 5500 with rubber protection



Designation	length	Item No.	
with 6.5 mm countersunk hole - every 75 mm			
Airline lashing track 5500B75	3,000 mm	215500B75-3000	
Airline lashing track 5500B75	6000 mm	215500B75-6000	
with 6.5 mm countersunk hole - every 25 mm			
Airline lashing track 5500B25	3000 mm	215500B25-3000	
Airline lashing track 5500B25	6000 mm	215500B25-6000	

Aluminium airline lashing track 5501



Designation	length	Item No.	
with 6.5 mm countersunk hole - every 7!	5 mm		
Airline lashing track 5501B75	3,000 mm	215501B75-3000	
Airline lashing track 5501B75	6000 mm	215501B75-6000	
with 6.5 mm countersunk hole - every 25 mm			
Airline lashing track 5501B25	3,000 mm	215501B25-3000	
Airline lashing track 5501B25	6000 mm	215501B25-6000	

Aluminium airline lashing track 5502



Designation	length	Item No.	
with 6.5 mm countersunk hole - every 75 mm			
Airline lashing track 5502B75	3,000 mm	215502B75-3000	
Airline lashing track 5502B75	6000 mm	215502B75-6000	
with 6.5 mm countersunk hole - every 25 mm			
Airline lashing track 5502B25	3,000 mm	215502B25-3000	
Airline lashing track 5502B25	6000 mm	215502B25-6000	

Aluminium airline lashing track 5503



Designation	length	Item No.
with 6.5 mm countersunk hole - every 7	5 mm	
Airline lashing track 5503B75	3,000 mm	215503B75-3000
Airline lashing track 5503B75	6000 mm	215503B75-6000
with 6.5 mm countersunk hole - every 25 mm		
Airline lashing track 5503B25	3,000 mm	215503B25-3000
Airline lashing track 5503B25	6000 mm	215503B25-6000

Aluminium airline lashing track 5504



length	Item No.		
with 6.5 mm countersunk hole - every 75 mm			
3,000 mm	215504B75-3000		
6000 mm	215504B75-6000		
with 6.5 mm countersunk hole - every 25 mm			
3,000 mm	215504B25-3000		
6000 mm	215504B25-6000		
	5 mm 3,000 mm 6000 mm 5 mm 3,000 mm		

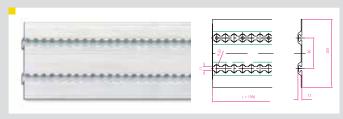
Airline lashing lashing tracks, processed

Aluminium airline lashing track 5100



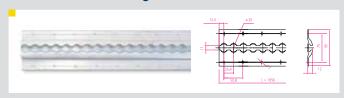
Designation	length	Item No.
Airline lashing track 5100	1956 mm	215100252020

Aluminium airline lashing track 5120



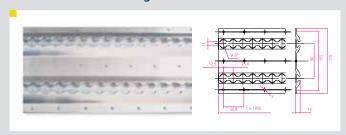
Designation	length	Item No.
Airline lashing track 5120	1956 mm	215120252020

Aluminium airline lashing track 5000



Designation	length	Item No.
Airline lashing track 5000	1956 mm	215000252020

Aluminium airline lashing track 5020



Designation	length	Item No.
Airline lashing track 5020	1956 mm	215020252020

Steel airline lashing track 5001

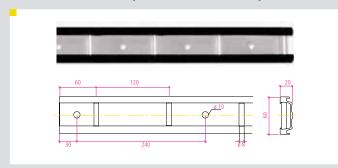


Designation	Item No.
Steel galvanised	215001312012

Standard length: 2400 mm

Track with pins

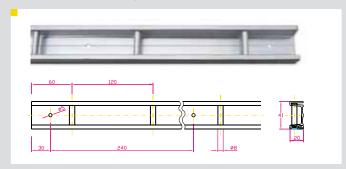
Aluminium track with pins 4710 with rubber protection



Pin diameter 8 mm

Designation	length	Item No.
Track with pins 4710	500 mm	21471020-0500
Track with pins 4710	1000 mm	21471020-1000
Track with pins 4710	1500 mm	21471020-1500
Track with pins 4710	1980 mm	21471020-1980
Track with pins 4710	2000 mm	21471020-2000
Track with pins 4710	3000 mm	21471020-3000
Track with pins 4710	4000 mm	21471020-4000
Track with pins 4710	5000 mm	21471020-5000
Track with pins 4710	6000 mm	21471020-6000

Aluminium track with pins 4720

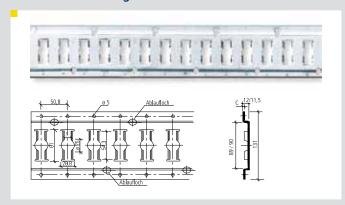


Pin diameter 8 mm

Designation	length	Item No.
Track with pins 4720	500 mm	21472020-0500
Track with pins 4720	1000 mm	21472020-1000
Track with pins 4720	1,500 mm	21472020-1500
Track with pins 4720	1,980 mm	21472020-1980
Track with pins 4720	2,000 mm	21472020-2000
Track with pins 4720	3000 mm	21472020-3000
Track with pins 4720	4000 mm	21472020-4000
Track with pins 4720	5000 mm	21472020-5000
Track with pinst 4720	6000 mm	21472020-6000

Lashing tracks

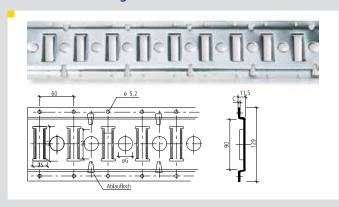
Anchor combi lashing track 3009



Designation	Dimension C	Item No.
Steel galvanised	2.5 mm	213009250012
Steel galvanised	3.0 mm	213009300012
Steel hot-dip galvanised	2.5 mm	213009250014
Steel hot-dip galvanised	3.0 mm	213009300014
Stainless steel	2.5 mm	213009250030
Aluminium	3.0 mm	213009300020

Standard length: 3000 mm

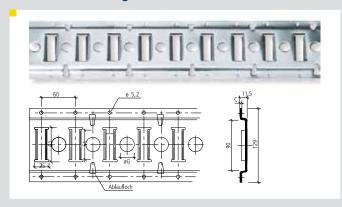
Anchor combi lashing track 3008 with 20 mm hole size



Designation	Dimension C	Item No.
Steel galvanised	2.5 mm	213008252012
Steel galvanised	3.0 mm	213008302012
Steel hot-dip galvanised	2.5 mm	213008252014
Steel hot-dip galvanised	3.0 mm	213008302014
Stainless steel	2.5 mm	213008252030
Aluminium	3.0 mm	213008302020

Standard length: 3000 mm

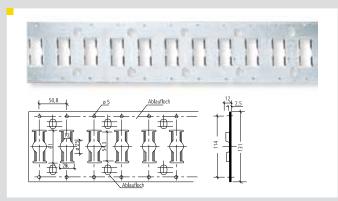
Anchor combi lashing track 3008 with 25 mm hole size



Designation	Dimension C	Item No.
Steel galvanised	2.5 mm	213008252512
Steel galvanised	3.0 mm	213008302512
Steel hot-dip galvanised	2.5 mm	213008252514
Steel hot-dip galvanised	3.0 mm	213008302514
Stainless steel	2.5 mm	213008252530
Aluminium	3.0 mm	213008302525

Standard length: 3000 mm

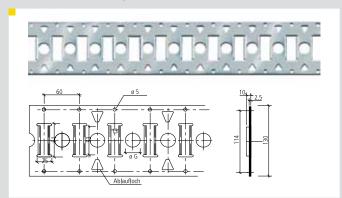
Anchor combi lashing track 3109



Designation	Dimension C	Item No.
Steel galvanised	2.5 mm	213109250012
Stainless steel	2.5 mm	213109250030

Standard length: 3000 mm

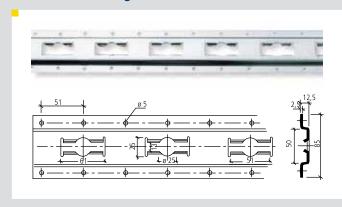
Anchor combi lashing track 3108



Designation	Dimension C	Item No.
with hole size 20 mm		
Steel galvanised	2.5 mm	213108252012
Stainless steel	2.5 mm	213108252030
with hole size 25 mm		
Steel galvanised	2.5 mm	213108252512
Stainless steel	2.5 mm	213108252530

Standard length: 3000 mm

Anchor combi lashing track 2010



Designation	Dimension C	Item No.
Steel galvanised	2.5 mm	212010250812

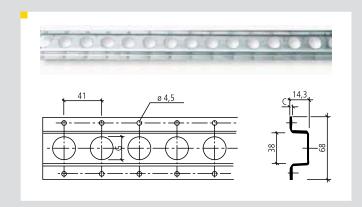
Standard length: 2400 mm

Round hole lashing track 1805



Designation	Dimension C	Item No.
with hole size 20 mm		
Steel galvanised	1.8 mm	211805182012
Steel galvanised	2.0 mm	211805202012
with hole size 25 mm		
Steel galvanised	1.8 mm	211805182512
Steel galvanised	2.0 mm	211805202512

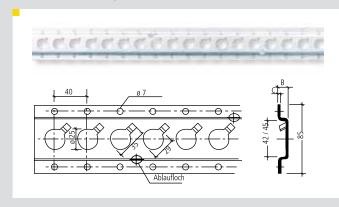
Standard length: 3000 mm



Designation	Dimension C	Item No.
with hole size 25 mm		
Steel galvanised	2.0 mm	211805122512

Standard length: 3000 mm

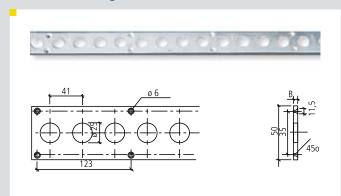
Round hole lashing track 1806 with cut-out



Designation	Dimension C	Item No.
with mounting height 12 mm (dimensio	n B)	
Steel galvanised	2.5 mm	211806251212
Steel galvanised	3.0 mm	211806301212
Stainless steel	2.0 mm	211806201230
with mounting height 15 mm (dimension B)		
Steel galvanised	2.0 mm	211806201552
Steel galvanised	2.5 mm	211806251512
Stainless steel	2.0 mm	211806201530

Standard length: 3000 mm

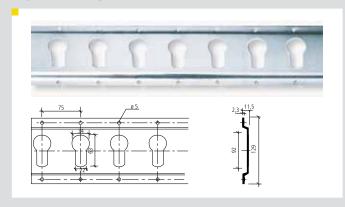
Round hole lashing track 3004



Bezeichnung	Maß C	Artikelnr.
Stahl verzinkt	5 mm	213004502512
Aluminium	6 mm	213004602520

Standard length: 3,000 mm

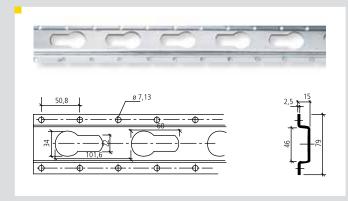
Key-hole lashing track 1803 horizontal



Bezeichnung	Maß C	Artikelnr.
Stahl verzinkt	2,3 mm	211803200852

Standard length: 3,000 mm

Key-hole lashing track 1803 vertical



Bezeichnung	Maß C	Artikelnr.
Stahl verzinkt	2,5 mm	211803200152

Standard length: 3,000 mm

Lashing points

Lashing point

Item No.: 24 315 00 000 12



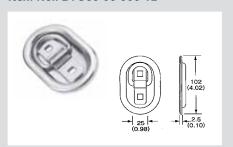
LC = 800 daN

Material: Steel electroplated

Weight: 0.5 kg

Lashing point

Item No.: 24 360 00 000 12



LC = 350 daN

Material: Steel electroplated

Weight: 0.18 kg

Lashing point Item No.: 24 330 00 000 14



LC = 1,000 daN

Material: Steel hot-dip galvanised

Weight: 0.54 kg

Lashing point

Item No.: 24 317 00 000 12



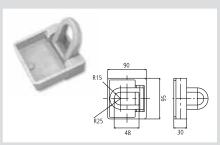
LC = 2,000 daN

Material: Steel electroplated

Weight:

Lashing point

Item No.: 24 370 00 000 10



LC = 2,500 daN

Material: steel

Weight: 0.88 kg

Floor lashing point



LC = 3,048 daN

Material: Steel galvanised, lashing point on

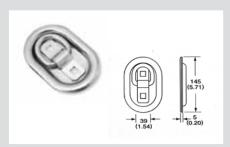
swivel to be welded to load bearing

part

Weight: 0.38 kg

Lashing point

Item No.: 24 361 00 000 12



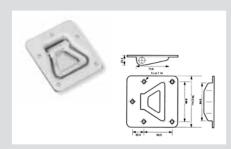
LC = 2,200 daN

Material: Steel electroplated

Weight: 0.4 kg

Lashing point

Item No.: 24 320 00 000 14



LC = 1,000 daN

Material: Steel hot-dip galvanised

Weight: 0.36 kg

Airline version, aluminium



Item No. 21 5400 00 10 20Standard length: 45 mm
Weight: 0.037 kg

LC Lashing Capacity		
WIS end-fitting	379	
Z 90°	300 daN	
X-Z 45°	300 daN	
Y-Z 45°	300 daN	

Lashing capacity for attachment: with 4 head screws M4 DIN 7380 8.8

Airline lashing point



Item No. 21 5600 25

Material: Aluminium, with 2 drill holes
20 mm round shape

LC Lashing Capacity		
WIS end-fitting	379	
Z 90°	500 daN	
X-Z 45°	500 daN	
Y-Z 45°	500 daN	

Lashing capacity for attachment: with 2 countersunk screws M6 DIN 7991 10.9

Airline Track Cover Profile



 Item No. 21 5109 01-1975

 Standard length:
 1975 mm

 Weight:
 0.275 kg

 Plastic, grey RAL 7035

Lashing track accessories

End cap for airline lashing track



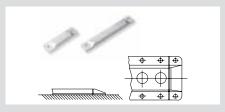
Item No. 21510341040 Plastic, grey RAL 7001 Unit of quantity: Pieces

End cap for lashing track with pins 4710



Item No. 212106662240 Plastic, grey RAL 7001 Unit of quantity: Pieces

End cap for lashing tracks



Item No. 212109951240 Plastic, grey RAL 7001 e.g. for lashing tracks 3008, 3009 Unit of quantity: Pieces

Screw fitting including plate



Item No. 21510725Screw fitting M8 galvanised Zn. 8.8 for airline track consisting of: clamping bracket, screw, nut

End cap for airline lashing track



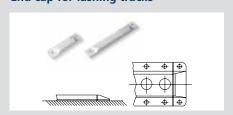
Item No. 215106501340 Plastic, blue Unit of quantity: Pieces

End cap for lashing track with pins 4720



Item No. 212106462040 Plastic, grey RAL 7001 Unit of quantity: Pieces

End cap for lashing tracks



Plastic, grey RAL 7001 e.g. for lashing tracks 1806 Unit of quantity: Pieces

End cap for airline lashing track



Item No. 215106501240 Plastic, grey RAL 7001 Unit of quantity: Pieces

WISTRA parting walls and parting grids

The WISTRA parting walls and parting grids are manufactured according to individual customer requirements and application purposes.

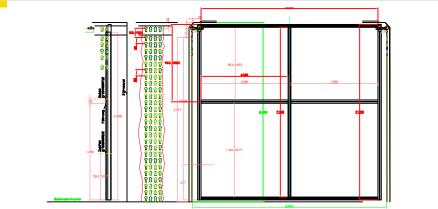
They can fulfil different functions like:

- local partition by means of frame and tarpaulin
- local partition by means of hole sheet panel guided by rolls and upward tilting
- · parting grids as cargo control



Can be supplied in all sizes





Successfully implemented:





WISTRA Safepart Theft protected partitioning of cargo space

Version

- · integrated theft protection
- · easy partitioning of partial lots at low costs
- · spatial and visual partitioning
- · easy to mount and remove
- variable for commercial hole panel walls and lashing tracks
- · lightweight can be rolled up if not in use

WISTRA cold safe wall



A division is possible for large cold safe walls. The cold safe wall shown here is additionally fixed to the existing lashing tracks.

The new cold safe wall separates the storage room of refrigerated vehicles into different temperature zones. The flexibility of the used vehicles are thereby increased, as for example deepfrozen goods and fresh fruits can be transported in one vehicle.

The energy consumption is further reduced by the need-based separation into different temperature zones.

- · Moveable light cold safe wall
- · Customisation in required number of pieces
- · With two-side carry straps
- · Hygienic PVC outer wrapping
- · Lateral seals for complete seating
- · Clamped on the vehicle body without any tools

Temperature zones for deep freezer, refrigerator and normal temperature are required for the transport of foodstuffs.

The transport of easily perishable foodstuff in international transport requires vehicle structures with a valid ATP certificate, e.g. an FRC classification is used.

The middle letter stands for thermal insulation.

- N: Normal thermal insulation with a K value $</=0.7~\mathrm{Wm^2K}$
- R: Increased thermal insulation with a K value $</=0.4 \, \text{Wm}^2 \text{K}$

The WISTRA cold safe walls have a K value of $0.4 \, \text{Wm}^2 \text{K}$



Due to the multi-layered structure the cold safe walls are easy to handle and rugged in application. The bottom edge is constructed as a shock-proof base edge.

The total wall thickness is 70 mm with a 50 mm thick PUR rigid foam core inside.

The lateral seals fix the cold safe wall at the same time.

The cold safe walls are custom-made.

Special colours and markings are possible upon request.



When ordering please specify:

- B Clear inside width between the inner walls
- H Clear inside height between ceiling and floor
- H1 If applicable, central lashing track height and specification of the lashing track type
- H2 ditto

Parting: 1/2 and 1/2 or 2/3 and 1/3, attach drawing if applicable

Delineation of all components located in the clearance of B and H with dimensioning of the position and output.

Description of all specifications required for the production and application.

For vehicles and structures with curved walls, please dimension the contour accurately and provide a template.

WISTRA form-fit calculations

Form-fit load securing

by directly attaching the load unit for instance to the front head wall, side walls, decking beams, shoring beams, cargo bars, cargo against each other, filling of voids with intermediate constructions of other load securing aids as well as slanted / diagonal / horizontal lashings.

- vertical movement of the load units may possibly require additional load securing measures!
- Observe the maximum vehicle load capacity and the allowed load distribution.
- the load units are designed for the possible pressure in the areas where the form-fit attaches!



Form-fit (with even loading) according to DIN EN 12195-1:2004/VDI 2700 ff

- calculated with acceleration coefficient 0.8 and 0.5
- · $\mu D = dynamic sliding friction coefficient$

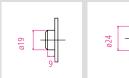
Blocking capacity of the	Maximum weight of the load unit/s					
form-fit	for μD 0,2		for μ l	0,4	for μ	D 0,6
	0,8	0,5	0,8	0,5	0,8	0,5
50 daN	80 kg	160 kg	120 kg	500 kg	250 kg	*)
100 daN	160 kg	330 kg	250 kg	1000 kg	500 kg	*)
150 daN	250 kg	500 kg	370 kg	1500 kg	750 kg	*)
200 daN	330 kg	660 kg	500 kg	2000 kg	1000 kg	*)
250 daN	410 kg	830 kg	620 kg	2500 kg	1250 kg	*)
300 daN	500 kg	1000 kg	750 kg	3000 kg	1500 kg	*)
350 daN	580 kg	1160 kg	870 kg	3500 kg	1750 kg	*)
400 daN	660 kg	1330 kg	1000 kg	4000 kg	2000 kg	*)
450 daN	750 kg	1500 kg	1120 kg	4500 kg	2250 kg	*)
500 daN	830 kg	1660 kg	1250 kg	5000 kg	2500 kg	*)
550 daN	910 kg	1830 kg	1370 kg	5500 kg	2750 kg	*)
600 daN	1000 kg	2000 kg	1500 kg	6000 kg	3000 kg	*)
650 daN	1080 kg	2160 kg	1620 kg	6500 kg	3250 kg	*)
750 daN	1250 kg	2500 kg	1870 kg	7500 kg	3750 kg	*)
800 daN	1330 kg	2660 kg	2000 kg	8000 kg	4000 kg	*)
900 daN	1500 kg	3000 kg	2250 kg	9000 kg	4500 kg	*)
1000 daN	1660 kg	3330 kg	2500 kg	10000 kg	5000 kg	*)
1250 daN	2080 kg	4160 kg	3120 kg	12500 kg	6250 kg	*)
1500 daN	2500 kg	5000 kg	3750 kg	15000 kg	7500 kg	*)
1750 daN	2910 kg	5830 kg	4370 kg	17500 kg	8750 kg	*)
2000 daN	3330 kg	6660 kg	5000 kg	20000 kg	10000 kg	*)
3000 daN	5000 kg	10000 kg	7500 kg	30000 kg	15000 kg	*)
4000 daN	6660 kg	13330 kg	10000 kg	40000 kg	20000 kg	*)
5000 daN	8330 kg	16660 kg	12500 kg	50000 kg	25000 kg	*)

^{*)} The maximum load unit weight is directly related to the maximum load capacity and the allowed load distribution of the vehicle. The acceleration coefficient is smaller than the dynamic sliding friction coefficient µD

Shoring beam

WISTRA standard aluminium power shoring beam 1850

End pin versions







24 mm pin, conical Version: 24



24 / 33 mm combi pin, conical Version: 43



pin, conical Version: 44



hole track, cylindrical Version: 45



19 / 24 / 33 mm combi 19 / 24 mm pin for key- 24 mm pin for key-hole track, conical





Version of rod lashing tracks is deviant

Standard version	Item No. XX for pin version	For vehicle internal dimension
Aluminium shoring beam 185015 XX	22185015 XX 20	2400-2480 mm
Aluminium shoring beam 185020 XX	22185020 XX 20	2440-2520 mm
Aluminium shoring beam 185025 XX	22185025 XX 20	2500-2580 mm

customer specime reision	Item No. XX for pin version
Aluminium shoring beam 185080 XX-3000	22185080 XX 20

Please include the following data with your order

- Lashing track panel version
- free inside dimension between the tracks

Options



PVC cover with property marking



Additional property markings



Needle embossing

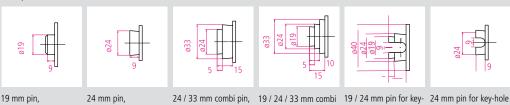


Powder coated versions



WISTRA standard shoring beams

End pin versions



Additional pin versions upon request



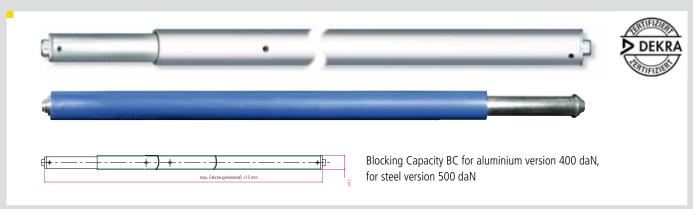
24 mm pin, conical Version: 24

conical Version: 43

pin, conical Version: 44

hole track, cylindrical Version: 45





Version of rod lashing tracks is deviant

Standard version	Item No.	For vehicle internal dimension
	XX for pin version	
Aluminium shoring beam 1813 XX	22181300 XX 20	2000-2080 mm
Steel shoring beam 1813 XX	22181300 XX 12	2000-2080 mm
Aluminium shoring beam 1818 XX	22181800 XX 20	2400-2480 mm
Steel shoring beam 1818 XX	22181800 XX 12	2400-2480 mm
Aluminium shoring beam 1817 XX	22181700 XX 20	2440-2520 mm
Steel shoring beam 1817 XX	22181700 XX 12	2440-2520 mm
Aluminium shoring beam 1819 XX	22181900 XX 20	2500-2580 mm
Steel shoring beam 1819 XX	22181900 XX 12	2500-2580 mm

Standard versions with PVC Cover	Item No. XX for pin version	For vehicle internal dimension
Aluminium shoring beam 1813 XX PVC	22181300 XX 20Ü	2000-2080 mm
Steel shoring beam 1813 XX PVC	22181300 XX 12Ü	2000-2080 mm
Aluminium shoring beam 1818 XX PVC	22181800 XX 20Ü	2400-2480 mm
Steel shoring beam 1818 XX PVC	22181800 XX 12Ü	2400-2480 mm
Aluminium shoring beam 1817 XX PVC	22181700 XX 20Ü	2440-2520 mm
Steel shoring beam 1817 XX PVC	22181700 XX 12Ü	2440-2520 mm
Aluminium shoring beam 1819 XX PVC	22181900 XX 20Ü	2500-2580 mm
Steel shoring beam 1819 XX PVC	22181900 XX 12Ü	2500-2580 mm

WISTRA shoring beams with special lengths

End pin versions



19 mm pin, cylindrical Version: 09



24 mm pin, conical Version: 24



conical Version: 43



24 / 33 mm combi pin, 19 / 24 / 33 mm combi pin, conical Version: 44

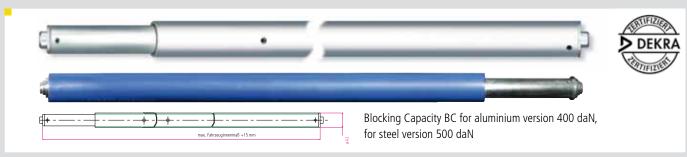


hole track, cylindrical Version: 45



19 / 24 mm pin for key- 24 mm pin for key-hole track, conical Version: 49





Version of rod lashing tracks is deviant

Versions to shorten on the stay pipe side with included pin, telescope side already mounted	Item No. XX for pin version
Aluminium shoring beam 1898 XX-2380 mm carrier	221898 XX 20-2380
Steel shoring beam 1898 XX-2380 mm carrier	221898 XX 12-2380
Aluminium shoring beam 1898 XX-3000 mm carrier	See version 1850
Steel shoring beam 1898 XX-3000 mm carrier	221898 XX 12-3000

Versions with PVC cover for shortening on the stay pipe end with included pin, telescope side already mounted	Item No. XX for pin version
Aluminium shoring beam 1898 XX-2380 mm carrier PVC	221898 XX 20Ü-2380
Steel shoring beam 1898 XX-2380 mm carrier PVC	221898 XX 12Ü-2380
Aluminium shoring beam 1898 XX-3000 mm carrier PVC	upon request
1898 XX-3000 mm carrier PVC	221898 XX 12Ü-3000

Customer-specific version	Item No. XX for pin version
Aluminium shoring beam 1899 XX-max. 2380 mm carrier	221899 XX 20-2380
Steel shoring beam 1899 XX-max. 2380 mm carrier	221899 XX 12-2380
Aluminium shoring beam 1899 XX-max. 3000 mm carrier	See version 1850
Steel shoring beam 1899 XX-max. 3000 mm carrier	221899 XX 12-3000

Please include the following data with your order

- Lashing track panel version
- free inside dimension between the tracks

Customer-specific version with PVC cover	lt
Aluminium shoring beam 1899 XX-max. 2380 mm carrier PVC	2
Steel shoring beam 1899 XX-max. 2380 mm carrier PVC	2
Aluminium shoring beam 1899 XX-max. 3000 mm carrier PVC	S
Steel shoring beam 1899 XX-max. 3000 mm carrier PVC	2

tem No. **XX** for pin version 221899 XX 20Ü-2380 221899 XX 12Ü-2380 See version 1850 - upon request 221899 XX 12Ü-3000

Please include the following data with your order

- Lashing track panel version
- free inside dimension between the tracks

Options











PVC cover with property marking

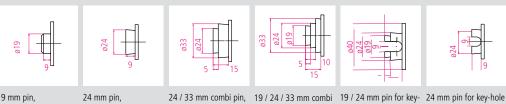
Additional property markings

Needle embossing

Powder coated versions

WISTRA shoring beams with special lengths for transporter

End pin versions



19 mm pin, cylindrical **Version: 09**

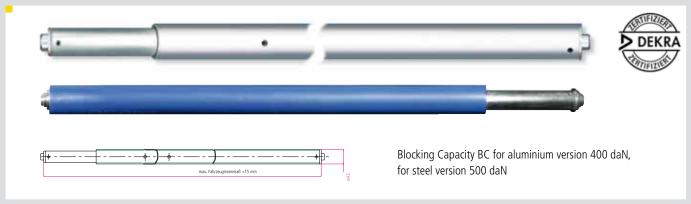
24 mm pin, conical **Version: 24** 24 / 33 mm combi pin, conical **Version: 43**

pin, conical

Version: 44

i 19 / 24 mm pin for keyhole track, cylindrical **Version: 45**

for key- 24 mm pin for key-hole drical track, conical **Version: 49** Additional pin versions upon request



Version of rod lashing tracks is deviant

Customer-specific version	Item No. XX for pin version	Please include the following data with your order - Lashing track panel version - free inside dimension between the tracks
Aluminium shoring beam 1888 XX-max. 2380 mm carrier	221888 XX 20	nee inside dimension between the tracks
Steel shoring beam 1888 XX-max. 2380 mm carrier	221888 XX 12	
Customer-specific version with PVC cover	Item No.	Please include the following data with your order
	XX for pin version	Lashing track panel version free inside dimension between the tracks
Aluminium shoring beam 1888 XX-max. 2380 mm carrier PVC	221888 XX 20Ü	nee inside dimension between the tracks
1888 XX-max. 2380 mm carrier PVC	221888 XX 12U	

Options



PVC cover with property marking



Additional property markings



Needle embossing

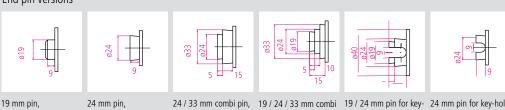


Powder coated versions



WISTRA standard shoring beams, adjustable

End pin versions



19 mm pin, cylindrical Version: 09 24 mm pin, conical Version: 24 conical Version: 43

pin, conical Version: 44

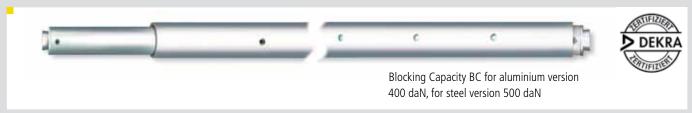
22180800 XX 20Ü

22181100 XX 12Ü

Version: 45

19 / 24 mm pin for key- 24 mm pin for key-hole hole track, cylindrical track, conical Version: 49

Additional pin versions upon



Version of rod lashing tracks is deviant

Aluminium shoring beam 1808 XX PVC

Steel shoring beam 1811 XX PVC

Standard version	Item No. XX for pin version	For vehicle internal dimension
Aluminium shoring beamn 1808 XX	22180800 XX 20	2220 – 2650 mm
Steel shoring beam 1811 XX	22181100 XX 12	2220 – 2650 mm
Standard versions with PVC cover	Item No.	For vehicle internal dimension
	XX for pin version	

2220 - 2650 mm

2220 - 2650 mm

WISTRA shoring beams, adjustable with special lengths

End pin versions







24 mm pin, conical Version: 24



24 / 33 mm combi pin, 19 / 24 / 33 mm combi conical Version: 43



pin, conical Version: 44



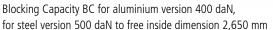
hole track, cylindrical Version: 45



19 / $24\ mm$ pin for key- $24\ mm$ pin for key-hole track, conical Version: 49









Customer-specific version	Item No. XX for pin version	Maximum expanded length	Please include the following data with your order
Aluminium shoring beam 180899 XX	22180899 XX 20	up to vehicle internal dimension max. 2650 mm	
Aluminium shoring beam 180899 XX-3000	upon request	for longer versions	version
Steel shoring beam 181199 XX	22181199 XX 12	up to vehicle internal dimension max. 2650 mm	- free inside dimension between
Steel shoring beam 181199 XX-3000	upon request	for longer versions	from - to

Customer-specific version with PVC cover	Item No. XX for pin version	Maximum expanded length
Aluminium shoring beam 180899 XX PVC	22180899 XX 20Ü	up to vehicle internal dimension max. 2650 mm
Aluminium shoring beam 180899 XX-3000	upon request	for longer versions
Steel shoring beam 181199 XX PVC	22181199 XX 12Ü	up to vehicle internal dimension max. 2650 mm
Steel shoring beam 181199 XX-3000 PVC	upon request	for longer versions

Please include the following data with your order

- Lashing track panel version
- free inside dimension between from - to

Options



PVC cover with property marking



Additional property markings



Needle embossing

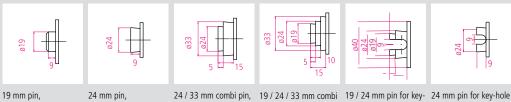


Powder coated versions



WISTRA standard square shoring beams

End pin versions



cylindrical con

Version: 09

Ver

conical
Version: 24

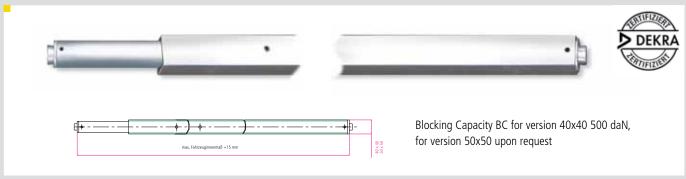
24 / 33 mm combi pir conical **Version: 43**

19 / 24 / 33 mm com pin, conical **Version: 44**

nbi 19 / 24 mm pin for key hole track, cylindrical **Version: 45**

for key- 24 mm pin for key-hole track, conical **Version: 49**

Additional pin versions upon



Version of rod lashing tracks is deviant

Standard version 40x40 mm	Item No. XX for pin version	For vehicle internal dimension
Steel shoring beam 1828 XX	22182800 XX 12	2400-2480 mm
Steel shoring beam 1827 XX	22182700 XX 12	2440-2520 mm
Steel shoring beam 1829 XX	22182900 XX 12	2500-2580 mm

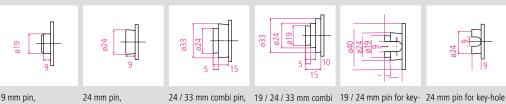
Standard version 50x50	Item No. XX for pin version
Steel shoring beam 1852 XX	upon request

Please include the following data with your order

- Lashing track panel version
- free inside dimension between the tracks

WISTRA standard square shoring beams, adjustable

End pin versions



19 mm pin, cylindrical **Version: 09** 24 mm pin, conical **Version: 24** 24 / 33 mm combi pi conical **Version: 43**

19 / 24 / 33 mm con pin, conical **Version: 44** 19 / 24 mm pin for keyhole track, cylindrical **Version: 45**

ey- 24 mm pin for key-hole track, conical **Version: 49** Additional pin versions upon request



Standard version 40x40 mm	Item No. XX for pin version	For vehicle internal dimension
Steel shoring beam 1812 XX	22181200 XX 12	2220 – 2650 mm

Options







customer-spezialized versions upon request

Needle embossing

Powder coated versions

WISTRA shoring beam system lock

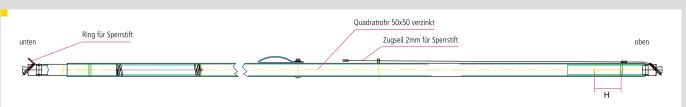


WISTRA shoring beam lock is a form-fit system with pin latching in the lashing tracks.

This system was primarily developed for vertical form-fit securing with hatches.

Advantages:

- quick handling due to easy insertion and securing
- · secure attachment to the lashing tracks
- Spring pressure only for easier handling when applying
- · Steel profile 50 x 50 mm, galvanised
- Latching end pins on both sides with 24 mm diameter
- High blocking capacity BC 1,000 daN at constant line load
- Strong individuality for customer-specific requirements



Designation	Unit of quantity	Item No.
WISTRA shoring beam system lock	Pieces	upon request
Lashing tracks 3004 flat	Pieces	upon request
Lashing tracks 3004 U-profile	Pieces	upon request

WISTRA shoring beam system Power Stop



The use of transport means with a high payload, especially for combined transports, places extremely high demands on load securing devices.

The WISTRA POWER Stop shoring beam system passes the acid test of standing paper reels with flying colours.

The tandem hole track system and the dual pins allow the square tubes to be turned by 30°. In this way contact with the fragile cargo is over a large area and damage by excessive edge pressure is prevented. VDI regulation 2700, Sheet 9, prescribes the use of anti-slip mats for the transport of of paper reels.

Advantages:

- quick handling due to easy insertion and securing
- · Steel profile 50 x 90 mm, galvanised
- Dual end pins on both sides with 24 mm diameter
- Very high blocking capacity BC 2,500 daN at constant line load
- Strong individuality for customer-specific requirements

Designation	Unit of quantity	Item No.
WISTRA shoring beam system POWER Stop	Pieces	upon request
Lashing tracks 3004 53 flat	Pieces	upon request
Lashing tracks 3004 53 U-profile	Pieces	upon request

WISTRA shoring beam system Power Stop, guided by rolls



Parking position

The Power Stop shoring beam - with guiding rolls - was developed specifically for the combined "road-rail" traffic, which gains more and more importance in the domestic and European traffic. The system can be used for swap bodies and other boxes.

The special solution consists of vertically latched shoring beams, which are guided in running rails with rollers.

This ensures easy handling. Unintentional removal or theft is also prevented.

Positioning is accomplished by means of hole tracks in the floor and the ceiling.

Up to four Power Stops - roller guided - can be used in a standard swap body.

Due to its rugged construction, this new solution is also suitable for securing WISTRA Safeguard load securing nets.

The Power Stop shoring beam can be lifted up and locked under the running rail.

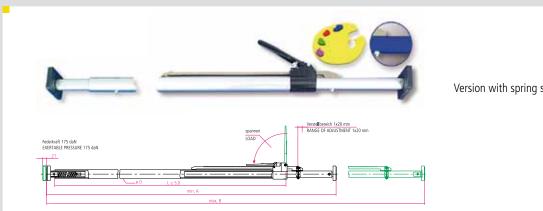
Designation	Unit of quantity	Item No.
WISTRA shoring beam system Power Stop, guided by rolls Material profile steel	Pieces	upon request
WISTRA shoring beam system Power Stop, guided by rolls Material profile aluminium	Pieces	upon request
Lashing tracks 3004 flat pieces	Pieces	upon request
Lashing tracks 3004 50 U-profile	Pieces	upon request

Advantages:

- · quick handling due to roller guiding
- optional galvanised steel profile or aluminium profile
- Dual end pins on both sides with 24 mm diameter
- Very high blocking capacity BC 2,500 daN at constant line load
- Strong individuality for customer-specific requirements

Cargo bar

WISTRA aluminium cargo bar

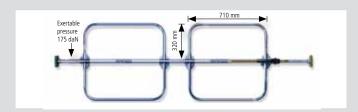


Version with spring system



Standard versions 38 mm	Item No.	Application range	Weight	Blocking capacity *)
Cargo bar 1867	2218670003	1,300 - 1,670 mm	3.1 kg	
Cargo bar 1867	2218670004	1,680 - 2,050 mm	3.5 kg	up to 150 daN
Cargo bar 1867	221867010020TW	2,260 - 2,630 mm	4.2 kg	

Standard versions 42 mm	Item No.	Application range	Weight	Blocking capacity *)
Cargo bar 1843	2218430003	1,300 - 1,670 mm	4.3 kg	
Cargo bar 1843	2218430004	1,680 - 2,050 mm	4.4 kg	
Cargo bar 1842	221842010020TW	2,100 – 2,470 mm	4.6 kg	up to 150 daN
Cargo bar 1843	221843010020TW	2,350 – 2,720 mm	4.7 kg	up to 150 duit
Cargo bar 1844	221844010020TW	2500 - 2870 mm	4.8 kg	
Cargo bar 1845	221845010020TW	2,650 - 3,020 mm	4.9 kg	



Spares	Item No.
Housing with tensioner and toothed rack for version 38 mm	221867991000
for version 42 mm	221867991000TW
Rubber pad	221867990300



Accessories	Item No.
Hoop set	
for version 38 mm	226700000012
for version 42 mm	224300000012

Options



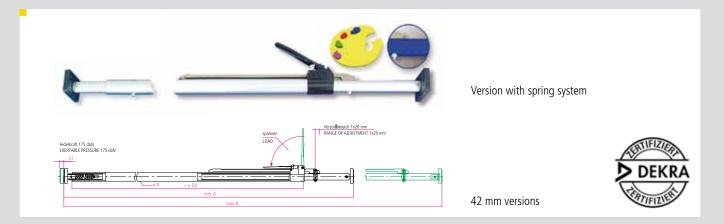


Needle embossing

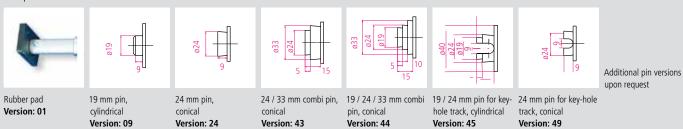
Powder coated versions

*) Blocking capacity depends on the rigidity of the vehicle body and the anti slip properties of the base

WISTRA aluminium cargo bar



End pin versions



When ordering, please note the positions of the end pins: the first one is on the stay pipe / the second one on the telescope tube!

Standard versions 38 mm	Item No.	Application range	Weight	Blocking capacity *)
Cargo bar 1867 rubber pad/pin XX	22186701 XX 20		4,2 kg	
Cargo bar 1867 pin XX/rubber pad	221867 XX 0120	2260 – 2630 mm	4,2 kg	up to 150 daN
Cargo bar 1867 pin XX/pin XX	221867 XX XX 20		4,2 kg	

Standardausführungen 42 mm	Item No.	Application range	Weight	Blocking capacity *)
Cargo bar 1842 rubber pad/pin XX	22184201 XX 20	2100 – 2470 mm	4,6 kg	
Cargo bar 1842 pin XX/rubber pad	221842 XX 0120		4,6 kg	
Cargo bar 1842 pin XX/pin XX	221842 XX XX 20		4,6 kg	
Cargo bar 1843 rubber pad/pin XX	22184301 XX 20		4,7 kg	
Cargo bar 1843 pin XX/rubber pad	221843 XX 0120	2350 – 2720 mm	4,7 kg	up to 150 daN
Cargo bar 1843 pin XX/pin XX	221843 XX XX 20		4,7 kg	
Cargo bar 1844 rubber pad/pin XX	22184401 XX 20	2500 – 2870 mm	4,8 kg	
Cargo bar 1844 pin XX/rubber pad	221844 XX 0120		4,8 kg	
Cargo bar 1844 pin XX/pin XX	221844 XX XX 20		4,8 kg	
Cargo bar 1845 rubber pad/pin XX	22184501 XX 20	2650 – 3020 mm	4,9 kg	
Cargo bar 1845 pin XX/rubber pad	221845 XX 0120		4,9 kg	
Cargo bar 1845 pin XX/pin XX	221845 XX XX 20		4,9 kg	

Options





Needle embossing Powder coated versions

^{*)} Blocking capacity depends on the rigidity of the vehicle body and the anti slip properties of the base

WISTRA steel cargo bar



Version	Item No.	Application range	Weight
Cargo bar 1868, infinitely variable	2218680	2,260 - 2,650 mm	4.85 kg



Version	Item No.	Application range	Weight
Cargo bar 1840	221840000012	1,900 - 2,800 mm	7.0 kg



Version	Item No.	Application range	Weight
Cargo bar 1938	221938010012	2,300 - 2,900 mm	6.6 kg



Version	Item No.	Application range	Weight
Cargo bar SmartBar™	220550100012	1,220 - 2,740 mm	7.0 kg



Version	Item No.	Application range	Weight
Cargo bar BabyBar™	220552250012	1,220-1,980 mm	2.0 kg

Decking beam

WISTRA aluminium decking beam 1839 HQ

End pin versions





Type B

T

Type C

Type AS

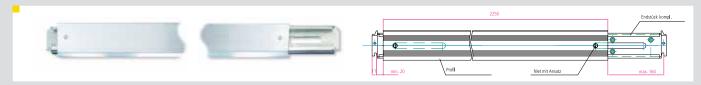


Complete extension of the end pieces possible on both ends

On one side end piece fixed, on the other side complete extension possible

On one side end piece fixed, on the other side complete extension possible with longitudinal latching

for key hole: Complete extension of the end pieces possible on both ends



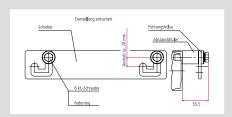
Version with stay pipe length 2,250 mm	Item No.	Application range	Blocking capacity / bearing capacity *)
Decking beam 1839 Type A	22183900-2250	2,310-2,530 mm	1,100/1,300 daN
Decking beam 1839 Type B	22183901-2250	2,310-2,400 mm	1,100/1,300 daN
Decking beam 1839 Type C	22183902-2250	2,310-2,400 mm	1,100/1,300 daN
Decking beam 1839 Type AS	22183930-2250	2,310-2,530 mm	1,100/1,300 daN

Version with stay pipe length 2,350 mm	Item No.	Application range	Blocking capacity / bearing capacity *)
Decking beam 1839 Type A	22183900-2350	2,410 - 2,630 mm	1,100/1,300 daN
Decking beam 1839 Type B	22183901-2350	2,410 - 2,500 mm	1,100/1,300 daN
Decking beam 1839 Type C	22183902-2350	2,410 - 2,500 mm	1,100/1,300 daN
Decking beam 1839 Type AS	22183930-2350	2,410 - 2,630 mm	1,100/1,300 daN

Palette for decking beams and sliding decking beams

Double storey loading systems allow loading of palettes on the 2nd level for non-stackable load units . The decking beam is thereby used as support and securing of the load units. Under certain circumstances only one decking beam may be possible in the vicinity of the door due to space availability. The WISTRA palette securing on the decking beam is a cost-effective and safe

option of preventing sliding of load units during braking and accelerating.





Version with stay pipe length 2,250 mm and three mounted safety features for palettes	Item No.	Application range	Blocking capacity / bearing capacity *)
Decking beam 1839 Type B - PL3	22183901-2250-3	2,310-2,400 mm	1,300/1,000 daN
Decking beam 1839 Type C - PL3	22183902-2250-3	2,310-2,400 mm	1,300/1,000 daN
Decking beam 1839 Type AS - PL3	22183930-2250-3	2,310-2,530 mm	1,300/1,000 daN
Decking beam 1839 Type C - PL3	22183902-2250-3	2,310-2,400 mm	1,300/1,000 daN

Version with stay pipe length 2,350 mm and three mounted safety features for palettes	Item No.	Application range	Blocking capacity / bearing capacity *)
Decking beam 1839 Type B - PL3	22183901-2350-3	2,410 - 2,500 mm	1,300/1,000 daN
Decking beam 1839 Type C - PL3	22183902-2350-3	2,410 - 2,500 mm	1,300/1,000 daN
Decking beam 1839 Type AS - PL3	22183930-2350-3	2,410 - 2,630 mm	1,300/1,000 daN

WISTRA aluminium decking beam 1838

End pin versions

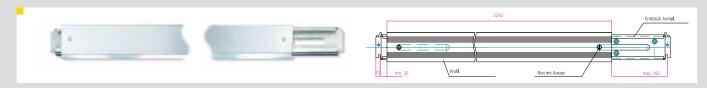


Complete extension of the end pieces possible on both ends

On one side end piece fixed, on the other side complete extension possible

On one side end piece fixed, on the other side complete extension possible with longitudinal latching

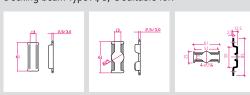
for key hole: Complete extension of the end pieces possible on both ends



Version with stay pipe length 2,250 mm	Item No.	Application range	Blocking capacity / bearing capacity *)
Decking beam 1838 Type A	22183800-2250	2,310-2,530 mm	1,000/1,000 daN
Decking beam 1838 Type B	22183801-2250	2,310-2,400 mm	1,000/1,000 daN
Decking beam 1838 Type C	22183802-2250	2,310-2,400 mm	1,000/1,000 daN
Decking beam 1838 Type AS	22183830-2250	2,310-2,530 mm	1,000/1,000 daN

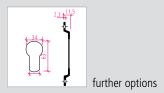
^{*)} Blocking capacities up to application range maximum 2,500 mm

Decking beam Type A, B, C suitable for:



further options

Decking beam Type AS suitable for:



WIS repair set for decking beam 221839/221838 Type A/B

consisting of:

- · 1 x end piece for decking beam
- · 1 x sleeve nut
- · 2 x head screw I-6Kt.
- · Unit of quantity set

Item No. 22183905

Options for the shown shoring beams







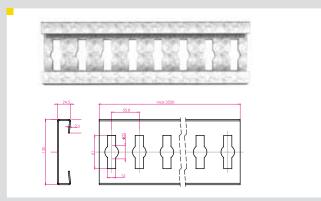
Engraving

Needle embossing

Powder coated versions

Longitudinal Bars

Longitudinal Bars



Item No. 22 6030 09 XXXX

Application: together with clamp keeper

Material: steel, zinc plated

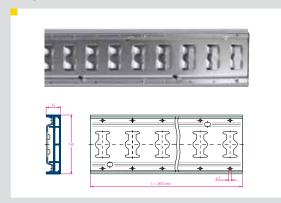
Suitability: longitudinal tracks with decking beams for form-fit load

securing and lashings with end-fitting 826 and 822

Standard length: 3500 mm

Important: when placing the order please indicate the required length

Longitudinal Bars



Item No. 22 4030 09 XXXX

Application: together with clamp keeper

Material: Aluminium profile with anchor-combi-track 3009 steel,

zinc plated – other lashing tracks as option

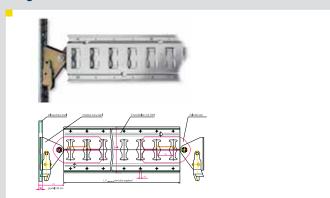
Suitability: longitudinal tracks with decking beams for form-fit load

securing and lashings with end-fitting 826 and 822

Standard length: on request

Important: when placing the order please indicate the required length

Longitudinal Bars with slide



Item No. 22 4130 09 XXXX

Application: together with airline steel track 21 5001 312012

Material: Aluminium profile with anchor-combi-track 3009 steel,

zinc plated – other lashing tracks as option

Suitability: as longitudinal bars adjustable in height with decking

beams for form-fit load securing and lashings with

end-fitting 826 and 822

Standard length: on request

Important: when placing the order please indicate the required length

and the internal dimension between beads

Parting wall locks

WISTRA aluminium parting wall lock 7452



Version	Item No.	Application range	Weight	Blocking capacity *)
Parting wall lock with cast end pieces	237452900020	2,400-2,700 mm	10.0 kg	400 daN
Parting wall lock with cast end pieces, individually packed in box	237452900020K	2,400-2,700 mm	10.3 kg	400 daN
Parting wall lock with cast end pieces	2374529-2100	2,100-2,400 mm	9.1 kg	400 daN
Parting wall lock with cast end pieces	2374529-1800	1,800-2,100 mm	8.9 kg	400 daN

Accessories	Item No.
Insert sleeve profile	237459900440

WISTRA Aluminium parting wall lock 7453



Version	Item No.	Application range	Weight	Blocking capacity *)
parting wall lock	237453000020	2400-2700 mm	7,7 kg	400 daN

^{*)} Blocking capacity: BC 400 daN for constant surface loading to 2,700mm application range

Options



Needle embossing

WISTRA steel parting wall lock

Parting wall lock \$4



Parting wall lock CurtainBar™



Version	Item No.	Application range	Weight
CurtainBar™	237552000020	1,140 - 2,720 mm	8.0 kg

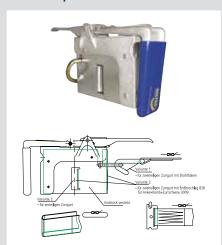
Options



Needle embossing

WISTRA parting wall options

Vario end piece



Clamping range 21 - 36 mm

LC up to a maximum of 2,000 daN in straight tension

Designation	Unit of quantity	Weight	Item No.
Vario end piece	Pieces	3.0 kg	237420000012







Lashing strap with anchor combi end-fitting

Lashing strap with pointed hook

Single-part lashing strap

BoardClamp™

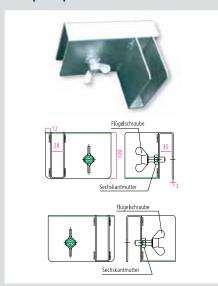


Clamping range 8 - 54 mm

LC up to 500 daN

Designation	Unit of quantity	Item No.
BoardClamp WTR 1000 0,5+3,0 green	Pieces	237552001
BoardClamp WTR 1000 0,5+3,5 green	Pieces	237552002
BoardClamp WTR 1000 0,5+4,5 green	Pieces	237552003
BoardClamp WTR 1000 0,5+5,5 green	Pieces	237552004
BoardClamp WTR 1000 0,5+6,5 green	Pieces	237552005
BoardClamp WTR 1000 0,5+7,5 green	Pieces	237552006

Clamp keepers



Steel, galvanised

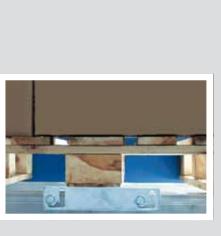
Designation	Unit of quantity	Item No.
Clamp keeper - left	Pieces	235001000012
Clamp keeper - right	Pieces	235000000012

WISTRA double storey systems

WISTRA sliding decking beams are manufactured from high strength aluminium profile 66 x 84 mm. Due to their high carrying capacity, sliding beams can be used both for rear load securing and for creating a second loading level.

The toothed profile surface offers secure standing of the loading unit. Sliding decking beams are manufactured with different end pieces, which are applied in connection with guiding tracks as double storey systems.

The rigidly mounted inserts allow a wide range of application in the free inside dimension due to their telescoping capability.



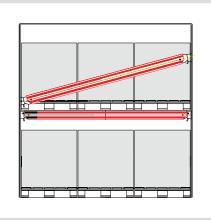
WISTRA double storey systems are manufactured in different versions and can be attached at variable heights.

WISTRA sliding decking beams can be slid under the ceiling when they are not in use.

WISTRA palette securing can additionally be mounted on the sliding decking beam.

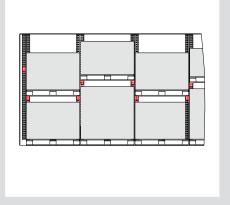
A palette is easily pushed over the profile edge, so that the palette is secured by form-fit in the longitudinal direction.





Rear view:

Use of sliding decking beams as double storey system and for rear load securing

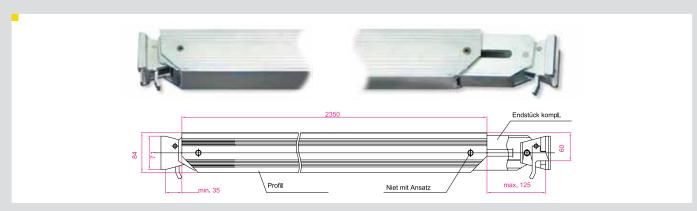


Side view:

Use of sliding decking beams as double storey system

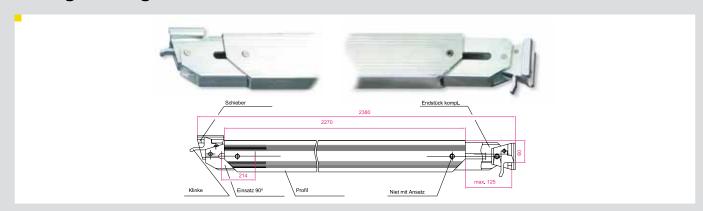
WISTRA sliding decking beams

Sliding decking beam 7007 (Guiding tracks 7002, 7003 + 7103)



Version	Item No.	Application range	Weight	Blocking capacity / bearing capacity *)
Sliding decking beam 7007	227007000020	2,450- approx. 2,530 mm	7.7 kg	1,000 daN / 1,000 daN
Sliding decking beam 7007 with 3-fold palette securing	227007000020-PL3	2,450- approx. 2,530 mm	10.7 kg	1,000 daN / 1,000 daN

Sliding decking beam 7907 (Guiding tracks 7002, 7003 + 7103)



Version	Item No.	Application range	Weight	Blocking capacity / bearing capacity *)
Sliding decking beam 7907 One side with hinged slider up to 90° for ceiling track / park bracket	227907000020	2,450- approx. 2,675 mm	7.7 kg	1,000 daN / 1,000 daN
Sliding decking beam 7907 with 3-fold palette securing	227907000020-PL3	2,450- approx. 2,675 mm	10.7 kg	1,000 daN / 1,000 daN

^{*)} Blocking capacity / carrying capacity for constant surface loading

Options for the shown shoring beams











Engraving

Needle embossing

Powder coated versions

PL3

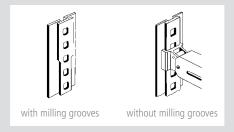
Unlocking bar

WISTRA guiding tracks for sliding decking beams 7007, 7907

Guiding tracks for sliding decking beams are mainly used for a height adjustable double storey configuration. The mounted tracks have an installation height of 12 mm / 17 mm.

The distance between the lower edge of the grid hole to the roof should be 65 mm for optimal utilisation of the internal height.

A clearance of approximately 75 mm to the floor or the baseboard should be maintained or else the version with milling grooves should be selected to allow insertion of the tracks.



Single aluminium guiding track 7002



Designation	Weight	length	Item No.
Single aluminium guiding track without milling groove	2.4 kg	1,960 mm	227002000020
Single aluminium guiding track with milling groove	2.4 kg	1,960 mm	227002010020

Tandem aluminium guiding track 7002



Designation	Weight	length	Item No.
Tandem aluminium guiding track without milling groove	4.7 kg	1,960 mm	227002040020
Tandem aluminium guiding track with milling grooves	4.7 kg	1,960 mm	227002050020

Single steel guiding track 7003



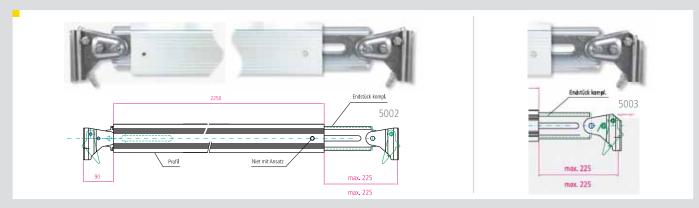
Designation	Weight	length	Item No.
Single steel guiding track without milling groove, primed	4.7 kg	2,500 mm	227003010015
Single steel guiding track with milling groove, primed	4.7 kg	2,500 mm	227103010015

Tandem steel guiding track 7003



Designation	Weight	Length	Item No.
Tandem steel guiding track without milling groove, primed	9.9 kg	2,500 mm	227003020015
Tandem steel guiding track with milling groove, primed	9.9 kg	2,500 mm	227103020015

Sliding decking beam 5002/5003



Version	Item No.	Application range / maximum extension	Weight	Blocking capacity / bearing capacity *)
Sliding decking beam 5002	225002000012	2,450- approx. 2,530 mm	10.9 kg	1,000 daN / 1,000 daN
Sliding decking beam 5002 with 3-fold palette securing	225002000012-3	2,450- approx. 2,530 mm	10.9 kg	1,000 daN / 1,000 daN
Sliding decking beam 5003 with bevelled slider	225003000012	2,450- approx. 2,530 mm	13.9 kg	1,000 daN / 1,000 daN
Sliding decking beam 5003 with bevelled slider and 3-fold palette securing	225003000012-3	2,450- approx. 2,530 mm	13.9 kg	1,000 daN / 1,000 daN

^{*)} Blocking capacity / carrying capacity for constant surface loading

Single steel guiding track 7004



Designation	Weight	length	Item No.
Single steel guiding track without milling groove, primed	6.3 kg	2,480 mm	upon request
Single steel guiding track without milling groove, steel galvanised	6.3 kg	2,480 mm	upon request

Tandem steel guiding track 7004



Designation	Weight	length	Item No.
Tandem steel guiding track without milling groove, primed	13.0 kg	2,480 mm	upon request
Tandem steel guiding track without milling groove, steel galvanised	13.0 kg	2,480 mm	upon request

Options











Engraving

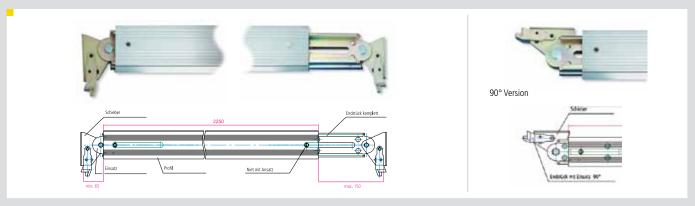
Needle embossing

Powder coated versions

PL3

Unlocking bar

Sliding decking beam 5001



Version	Item No.	Application range	Weight	Blocking capacity / bearing capacity *)
Sliding decking beam 5001	225001000012	2,450- approx. 2,530 mm	10.7 kg	1,000 daN / 1,000 daN
Sliding decking beam 5001 with 3-fold palette securing	225001000012-3	2,450- approx. 2,530 mm	13.7 kg	1,000 daN / 1,000 daN
Sliding decking beam 5001 One side with hinged slider up to 90° for ceiling track / park bracket	225001009012	2,450- approx. 2,530 mm	10.7 kg	1,000 daN / 1,000 daN
Sliding decking beam 5001 with 3-fold palette securing One side with hinged slider up to 90° for ceiling track / park bracket	225001009012-3	2,450- approx. 2,530 mm	13.7 kg	1,000 daN / 1,000 daN

^{*)} Blocking capacity / carrying capacity for constant surface loading

Single steel airline lashing track 5001



Designation	Weight	length	Item No.
Single steel airline lashing track without milling groove, steel galvanised	13.0 kg	2,400 mm	215001312012

Options











Needle embossing

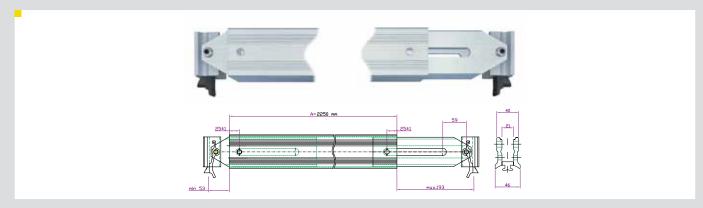
Powder coated versions

PL3

Unlocking bar

Engraving

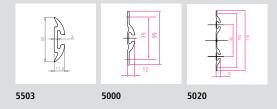
Sliding decking beam 7104



Version with single fixing	Item No.	Application range	Weight	Blocking capacity / bearing capacity *)
Sliding decking beam 7104	227104000020	2,370- approx. 2,600 mm	7.3 kg	1,000 daN / 1,000 daN
Sliding decking beam 7104 with 3-fold palette securing	227104000020-3	2,370- approx. 2,600 mm	10.3 kg	1,000 daN / 1,000 daN
Sliding decking beam 7104	227104001020	2,470- approx. 2,700 mm	7.3 kg	1,000 daN / 1,000 daN
Sliding decking beam 7104 with 3-fold palette securing	227104001020-3	2,470- approx. 2,700 mm	10.3 kg	1,000 daN / 1,000 daN

^{*)} Blocking capacity / carrying capacity for constant surface loading

Suitable for half-round airline lashing track



Options











Engraving

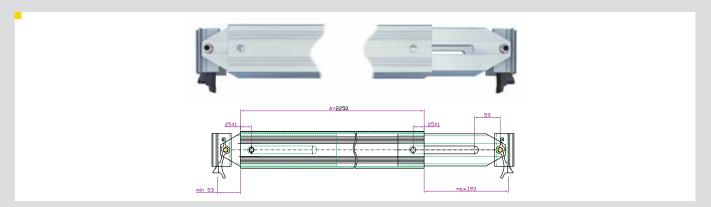
Needle embossing

Powder coated versions

PL3

Unlocking bar

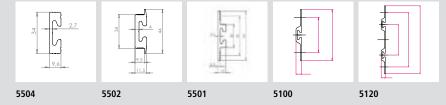
Sliding decking beam 7105



Version with single fixing	Item No.	Application range	Weight	Blocking capacity / bearing capacity *)
Sliding decking beam 7105	227105000020	2,370- approx. 2,600 mm	7.3 kg	1,000 daN / 1,000 daN
Sliding decking beam 7105 with 3-fold palette securing	227105000020-3	2,370- approx. 2,600 mm	10.3 kg	1,000 daN / 1,000 daN
Sliding decking beam 7105	227105001020	2,470- approx. 2,700 mm	7.3 kg	1,000 daN / 1,000 daN
Sliding decking beam 7105 with 3-fold palette securing	227105001020-3	2,470- approx. 2,700 mm	10.3 kg	1,000 daN / 1,000 daN

^{*)} Blocking capacity / carrying capacity for constant surface loading

Suitable for flat airline lashing track



Options











Engraving Needle embossing

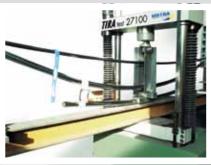
Powder coated versions

PL3

Unlocking bar

WISTRA transport garment rails





The garment rails are subjected to load carrying tests at regular intervals in the own test facilities.

In this way it is ensured that the WISTRA garment rails distinguish themselves with high practical value characterised.

WISTRA garment rails made of high strength steel are extremely light with high carrying capacity.

Carrying capacity of up to 400 kg for constant line load.

The weight of the light version of 7 kg could be reduced by 16% through the use of a patented end piece.

Thereby the new garment rail KST L6 has a weight of only 6 kg with the same carrying capacity.

The 35 mm stay pipe made of high strength special steel is chrome plated and offers optimal utilisation of the inside width of the vehicle body.

The fixing axle $15 \times 15 \text{ mm}$ is fixed by 2 Velcro strips.

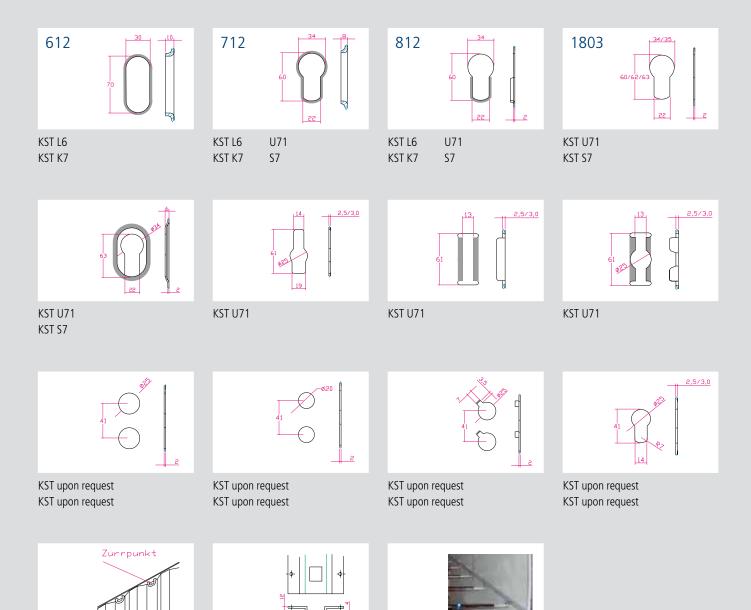
Assembly in the standard version

- Chrome plated stay pipe length 2,370 mm other dimensions upon request
- Aluminium fixing axle black powder coated – 15x15 mm other dimensions upon request
- 2 pieces Velcro strip other quantities upon request
- End pieces and spring function, matching end piece / transport means

Option

Fixing axle covered with plastic spiral hose prevents sideways displacement of the hangers.

Lashing tracks and perforated plate forms



KST TA

The forms can have small dimensional deviations. Please contact your WISTRA team if you have any questions.

We will gladly coordinate customer-specific solutions with you.

KST F7

KST C7

Garment rail L6

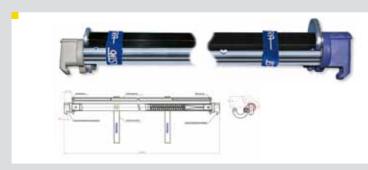




- Plastic end pieces
- · Stay pipe chrome plated 2,370 mm
- · Tension spring function

Version	Item No.	Application range	Weight	Carrying capacity *)
Garment rail L6	268011237017	2,420 - 2,500 mm	6.0 kg	400 kg
Garment rail L6 in special length - stay pipe shorter than 2,370 mm	upon request	according to specification		400 kg
Garment rail L6 in special length - stay pipe longer than 2,370 mm	upon request	according to specification		**)

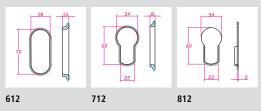
Garment rail K7



- · Plastic end pieces with steel core
- · Stay pipe chrome plated 2,370 mm
- · Tension spring function

Version	Item No.	Application range	Weight	Carrying capacity *)
Garment rail K7	267191237017	2,420 - 2,500 mm	7.0 kg	400 kg
Garment rail K7 in special length - stay pipe shorter than 2,370 mm	upon request	according to specification		400 kg
Garment rail K7 in special length - stay pipe longer than 2,370 mm	upon request	according to specification		**)

Suitable for



^{*)} Carrying capacity for constant loading
**) The carrying capacity must be determined separately for this version.

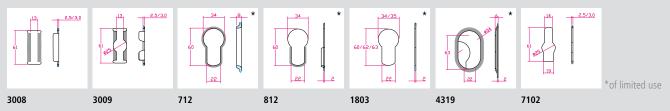
D) The following data must be provided by the customer: free dimension(s) between lashing tracks

Garment rail U71



Version	Item No.	Application range	Weight	Carrying capacity *)
Garment rail U71	267382137017	2,420 – 2,500 mm		400 kg
Garment rail U71 in special length – stay pipe shorter than 2370 mm	upon request	According to specification D)		400 kg
Garment rail U71 in special length – stay pipe longer than 2370 mm	upon request	According to specification D)		**)

Suitable for



Options







Velcro strip options

Needle embossing

Fixing axle with spiral hose

^{*)} Carrying capacity for constant loading
**) The carrying capacity must be determined separately for this version.

D) The following data must be provided by the customer: free dimension(s) between lashing tracks

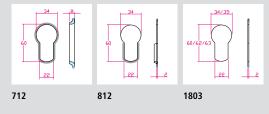
Garment rail S7



- Steel end piece
- Stay pipe chrome plated 2,370 mm
- · With/without spring function

Version	Item No.	Application range	Weight	Carrying capacity *)
Garment rail S7 - without spring function	267390337017	2,420 - 2,500 mm		400 kg
Garment rail S7 - pressure spring function	267290337017	2,420 - 2,500 mm		400 kg
Garment rail S7 - without spring function in special length - stay pipe shorter than 2,370 mm	upon request	According to specification D)		400 kg
Garment rail S7 - pressure spring function in special length - stay pipe shorter than 2,370 mm	upon request	According to specification D)		400 kg
Garment rail S7 - without spring function in special length - stay pipe longer than 2,370 mm	upon request	According to specification D)		**)
Garment rail S7 - pressure spring function in special length - stay pipe longer than 2,370 mm	upon request	According to specification D)		**)

Suitable for

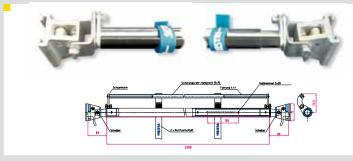


Other combination options available upon request

^{*)} Carrying capacity for constant loading
**) The carrying capacity must be determined separately for this version.

D) The following data must be provided by the customer: free dimension(s) between lashing tracks

Garment rail F7



- Aluminium end piece
- Stay pipe chrome plated 2,300 mm
- · Without spring function

Version	Item No.	Application range	Weight	Carrying capacity *)
Garment rail F7	267382230017	2,460 - 2,500 mm	7.4 kg	400 kg
Garment rail F7 in special length - stay pipe shorter than 2,300 mm	upon request	According to specification D)		400 kg
Garment rail F7 in special length - stay pipe longer than 2,300 mm	upon request	According to specification D)		**)

Suitable for



7002

Options







Velcro strip options

Needle embossing

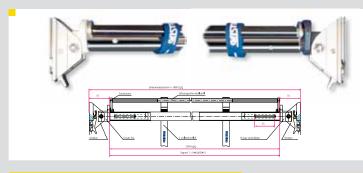
Fixing axle with spiral hose

^{*)} Carrying capacity for constant loading

**) The carrying capacity must be determined separately for this version.

D) The following data must be provided by the customer: free dimension(s) between lashing tracks

Garment rail A6 for half-round and flat airline lashing tracks



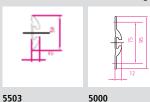
- · Aluminium end piece
- · Stay pipe chrome plated 2,300 mm
- · Without spring function

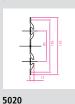
Version for half-round airline lashing tracks	Item No.	Application range	Weight	Carrying capacity *)
Garment rail A6H	268710037017	2,460 - 2,500 mm	7.4 kg	400 kg
Garment rail A6H in special length - stay pipe shorter than 2,300 mm	upon request	According to s pecification D)		400 kg
Garment rail A6H in special length - stay pipe longer than 2,300 mm	upon request	According to specification D)		**)

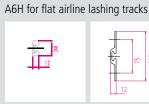
Version for flat airline lashing tracks	Item No.	Application range	Weight	Carrying capacity *)
Garment rail A6FL	268720037017	2,460 - 2,510 mm	7,4 kg	400 kg
Garment rail A6FL in special length - stay pipe shorter than 2,300 mm	upon request	According to specification D)		400 kg
Garment rail A6FL in special length - stay pipe longer than 2,300 mm	upon request	According to specification D)		**)

Suitable for

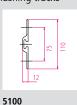
A6H for half-round airline lashing tracks



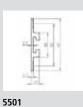




5504







Other combination options available upon request

^{*)} Carrying capacity for constant loading
**) The carrying capacity must be determined separately for this version.

D) The following data must be provided by the customer: free dimension(s) between lashing tracks

Garment rail TA for airline lashing tracks



- Steel end piece for end-fitting 380
- Stay pipe chrome plated 2,370 mm
- Without spring function
- Telescope function on both ends

Version for airline lashing tracks	Item No.	Application range	Weight	Carrying capacity *)
Garment rail TA in special length - stay pipe shorter than 2,370 mm	267500000000	According to specification D)		400 kg
Garment rail TA in special length - stay pipe longer than 2,370 mm	upon request	According to specification D)		**)

TA for lashing tracks in connection with



EB 380

Options







Velcro strip options

Needle embossing

Fixing axle with spiral hose

Other combination options available upon request

^{*)} Carrying capacity for constant loading
**) The carrying capacity must be determined separately for this version.

D) The following data must be provided by the customer: free dimension(s) between lashing tracks

Garment rail C7 "CONSTAR"



Hooks combined with rubber pad

- · Stay pipe chrome plated 2,280 mm
- · 3 Velcro strips
- · Fixing axle with plastic spiral hose
- · Pressure spring function
- Optional CONSTAR level straps to accommodate additional CONSTAR garment transport rails

Version for half-round airline lashing tracks	Item No.	Application range	Weight	Carrying capacity *)
Garment rail C7 CONSTAR	267286728017		7.3 kg	400 kg
Garment rail C7 CONSTAR in special length stay pipe shorter than 2,370 mm	upon request	According to specification D)		400 kg
Garment rail C7 CONSTAR in special length stay pipe longer than 2,370 mm	upon request	According to specification D)		**)
CONSTAR level strap with D rings	upon request			-
CONSTAR level strap	upon request	According to specification E)		-

^{*)} Carrying capacity for constant loading

Suitable for



Version for container and swap bodies with beaded inside wall and lashing points arranged at the top. The fixing axle covered with plastic spiral hose prevents sideways displacement of the hangers.

The WISTRA team will gladly support you in view of the manifold versions of containers and swap bodies.

Options





Velcro strip options

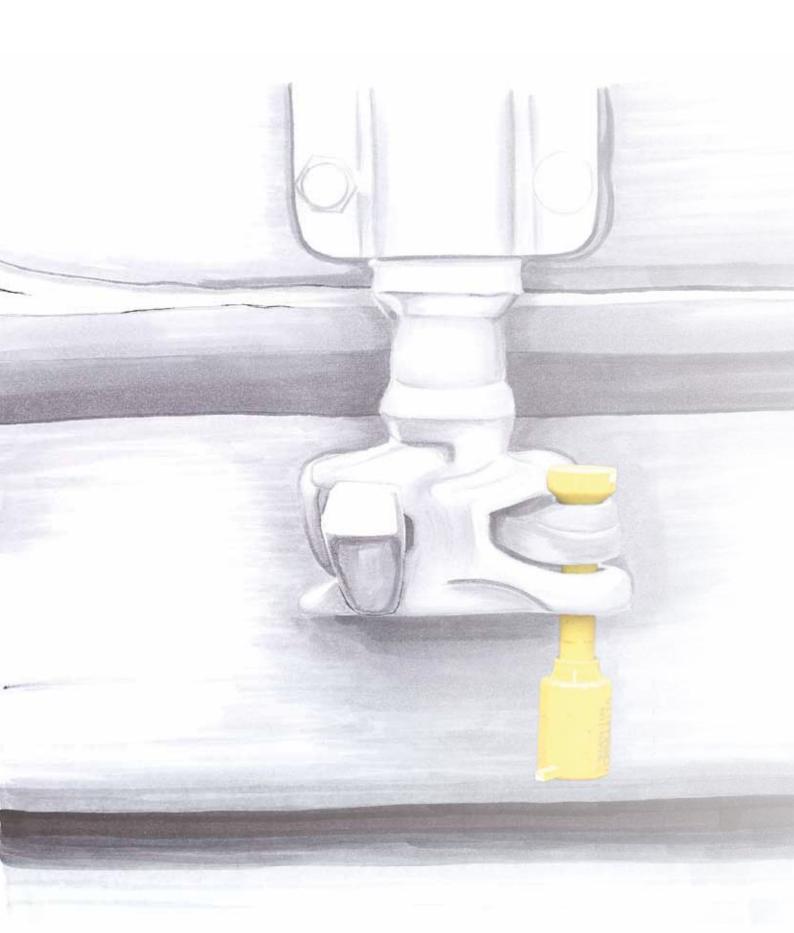
Needle embossing

^{**)} The carrying capacity must be determined separately for this version.

D) The following data must be provided by the customer: free dimension(s) between lashing tracks

E) The following data must be provided by the customer: requested positions of the D rings as well as overall length

Security



packaging units. mark the seals individually. mented individually. customs authorities.

■ The WISTRA security seals are products for the unambiguous identification of your packages and

The security seals are unambiguously marked with a serial number. We also offer the option to

The products of the high security seals serve as identification protection of the transport units. These versions are also marked with a serial number, which can optionally also be supple-

With the Mini Breakaway customs seal we have a version in our product range that is supervised by

Security seals

Arrow Seal



Length: 220 mm

Item No. 034 030 5

- solid and user-friendly seal
- Material: Polypropylene
- can also be supplied with bar code
- sequential numbering
- individual marking with company name possible

Fleet Lock



Item No. 034 209 1

- made of polypropylene (food grade)
- laser coding with serial number and company
- can also be supplied with bar code
- tensile strength: 19+ kg
- economic ring seal for trailers, tankers etc.

Dual Lock S304



Item No. 034 030 4

- made of ABS plastic
- available in many different colours
- sequential numbering
- individual marking with company name possible
- easy and quick to apply

Gear Lock





Item No. 034 208 1

- made of polypropylene (food grade)
- laser coding with serial number
- individual marking with company name possible
- tensile strength: 40+ kg
- designed with tear-off feature for all bags and sacks

Plast Seal



Length: 190 mm

Item No. 035 000 2

- identification seal
- light plastic seal
- easy and quick to apply
- 7-digit serial numbering
- individual marking with company name possible
- standard colour red, other colours upon request

Triple Tight Seal

Strap dimension: 3 mm - 5 mm



Item No. 034 203 1 for length 19 cm 2 for length 27 cm

3 for length 32 cm

- made of polypropylene (food grade), with ABS insert (lock)
- tensile strength 30+ kg
- best protection against manipulation through threefold locking mechanism
- the best seal for form-fit sealing

Chinch-up Seal S 306



Length: 375 mm

Item No. 034 030 6

- marking with pen possible
- easy handling
- different colours available
- sequential numbering
- individual marking with company name possible

Simulock Ring Seal

Length: 220 mm Strap dimension: 1 mm x 8 mm



Item No. 034 210 1

- made of polypropylene (food grade)
- tensile strength 30 kg
- outside seal with inspection window for all ring seal applications

SP Cable Lock MCL 200

Length: 15 cm or according to customer request Cord diameter: 2.0 mm



Item No. 034 219 1

- locking body of ABS, zinc die casting locking system and zinc plated wire cable
- laser coding with serial number
- individual marking with company name possible
- cost-effective seal for diverse applications during transport

162

Dragon Seal



Item No. 034 206 1 for length 34 cm **2** for length 40 cm

- · made of polypropylene (food grade)
- · metal locking insert for highest security
- · can also be supplied with bar code
- · long slip for logo
- · tensile strength: 45+ kg
- designed with tear-off feature for all bags and sacks

Plastic Base Padlock Seal



Item No. 034 030 3

- · two part plastic lock made of ABS plastic
- available with galvanised or stainless steel hoop
- · hoop may be notched for additional protection
- · sequential numbering
- individual marking with company name possible
- · available in many different colours

Domino



Length: 20 cm

Item No. 034 1010

- made of steel sheet and polypropylene (food grade)
- · laser coding with serial number
- · can also be supplied with bar code
- · tensile strength: 90 kg
- offers maximum protection against manipulation

Cable Breakaway



Small cable: Item No. 034 010 3 cable diameter: 1.5 mm | length: 180 mm

Mini cable: Item No. 034 010 4 cable diameter: 2.5 mm | length: 180 mm

Maxi cable: Item No. 034 010 1 cable diameter: 5.0 mm | length: 250 mm

- · metal security seal
- aluminium housing with lock and high strength steel cable
- · sequential numbering
- standard colour blue, other colours upon request
- · individual marking with company name and bar code possible
- tensile strength 290+ kg to 1.000 kg
- Length: Standard or according to customer request

High security seal

Mini Breakaway customs seal

Length: 180 mm Cord diameter: 1.6 mm



Item No. 034 003 0

- · metal security seal
- aluminium housing with high strength steel strip
- · sequential numbering
- consists of body and lock which must be broken off after tightening

Containersiegel S 201

Length: 230 mm Cord diameter: 1.2 mm



Item No. 034 020 1

- consists of body, pivot and cable
- · pivot made of zinc plated steel passivated
- · tensile strength 3 kN
- · sequential numbering
- individual marking with company name possible
- cable made of stranded wire

Sealing Lock

Length: 76 mm Diameter: 10 mm



Item No. 034 010 8

- · metal housing with ABS plastic cover
- metal bolt with ABS cover
- · sequential numbering
- individual marking with company name possible
- cylindrical form
- two-part bolt seal with tensile strength of more than 4 t

Container seal S 204

Length: 205 mm Strap dimension: 1.5 mm



Item No. 034 208 1

- body made of steel screw thread
- · surface of the body with plastic coating
- · sequential numbering
- individual marking with company name possible
- · lock must be broken off after tightening
- · tensile strength up to 4 kN

Container seal S 102

Length: 85 mm Diameter: 9 mm



Item No. 034 010 2

- \cdot housing made of spring steel with plastic cover
- · outer cover made of polycarbonate plastic
- $\cdot \;\;$ bolt made of steel coated with ABS plastic
- · sequential numbering
- individual marking with company name possible

Container lock S 302

Housing: 32 x 20 x 10 mm



Item No. 034 030 2

- · rectangular body made of ABS plastic
- U-shaped shackle made of zinc plated steel passivated
- tensile strength up to 4 kN
- · sequential numbering
- individual marking with company name possible

Container seal S 105

Length: 94 mm Diameter: 9 mm



Item No. 034 010 5

- housing made of expansion steel with polycarbonate plastic cover
- · sequential numbering
- individual marking with company name nossible
- · pivot made of zinc plated steel passivated
- · secure and reliable

Mega Cable Lock

Length: 125 mm or according to customer request



Item No. 034 224 2 for 2.5 mm

3 for 3.0 mm **5** for 5.0 mm

- · made of aluminium and steel
- · laser coding with serial number and company
- · tensile strength: 580 1,275 kg
- double lock for containers and trailers according to C-TPAT

"Klicker"

Locking length 45 cm Diameter: 9 mm



Item No. 034 221 1

- · made of steel and ABS
- · anti-twist feature
- suitable for containers and trailers
- · also available with double groove locking pin
- · according to ISO/PAS 17712 and C-TPAT

164 Security · High security seal



Small cable: Item No. 034 010 6 cable diameter: 2.5 mm | length: 200 mm

Mini cable: Item No. 034 010 9 cable diameter: 3.0 mm | length: 200 mm

Maxi cable: Item No. 034 010 7 cable diameter: 5.0 mm | length: 250 mm

- · metal security seal
- aluminium housing with lock and high strength steel cable
- · laser coding with serial number
- individual marking with company name possible
- tensile strength 580+ kg to 1.275 kg
- ideal for trailers, container, tankers, air freight etc.
- · according to ISO/PAS 17712 and C-TPAT
- Length: Standard or according to customer request

Theft protection

KingPin



Item No. 034 422 40

- · king pin lock for semi trailers
- · is pushed onto the king pin from below
- · easy and secure construction
- · key with security card

Fix Lock



Item No. 034 225 0

- security lock for outer container door gears
- additional securing against opening of container/swap body/compact vehicle
- · easy and safe handling
- · patented security system

WIS TubeSecure 230/460 with 3 keys



Item No. 034 226 2

- · application range 230 460 mm
- · up to pipe diameter 33 mm

Diebstahlschutz für Kraftstofftank



Art.-Nr. 034 226 3

- · für Ø 105 mm, verzinkte Ausführung
- · 2 Bajonettklauen für Original-Stopfen

Door gears & Bodybuilder Parts





- The POWERBRACE door gears of the series Quad Finger have proven themselves over many years in the area of vehicle and container construction.
 - The patented system of the holder in combination with the cams excludes torsion of the door gear.
- The vehicle components will supplement our supply program with various products in 2013.

Powerbrace series QF for 1" pipe



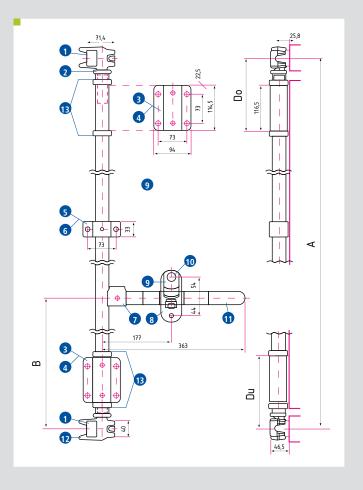
- Robust door lock system, for compact vehicles and trailers, swap bodies and containers etc.
- The patented system of the holder and the cams excludes torsion of the door gear.
- The "ice-breaker" nose on the cam allows even iced-up doors to be opened easily.
- Has been proven over many years in vehicle and container construction.

Designation	Item No.	Quantity
Powerbrace set 3491 consisting of:	3491000	1 set

Item	Designation	Item No.	Quantity
1	Holder, black	34237.01	2 pieces
2	Cam piece, black	34202.01	1 pieces
3	Rod guide, hot-dip galvanised	36008.05	2 pieces
4	Plastic bushing for Item 3	36009.01	2 pieces
5	Rod holder, hot-dip galvanised	36010.05	1 pieces
6	Plastic bushing for Item 5	36011.01	1 pieces
7	Lever mount	33071.01	1 pieces
8	Seal plate	34011.05	1 pieces
9	Seal pin, hot-dip galvanised	34012.05	1 pieces
10	Rivet, galvanised	33085.03	1 pieces
11	lever, hot-dip galvanised	34090.05	1 pieces
12	Cam piece, black	34201.01	1 pieces
13	Anti-rack ring, black	33901.01	4 pieces

weitere Optionen

Designation	Item No.	Quantity unit
1" pipe - standard length	upon request	Pieces
1" pipe - cut length (please specify length)	upon request	Pieces
Locking rod completely welded and hot-dip galvanised	upon request	Pieces



Vehicle components

Tool boxes





Material: Injection-moulded PEHD Colour: Black

1) 3-point locking system

Designation	Dimensions W/H/D	Weight	Quantity Unit	Item No.
Tool box	400/350/350 mm	3,0 kg	Pieces	391001
Tool box 1)	500/340/450 mm	4,1 kg	Pieces	391002
Tool box 1)	600/400/470 mm	6,0 kg	Pieces	391003
Tool box 1)	790/480/470 mm	7,6 kg	Pieces	391004

Tool boxes, Black Dog



Material: Polyethylene, rotated Colour: Black 1) with one lock 2) with two locks 3) with three locks

Designation	Dimensions W/H/D	Quantity Unit	Item No.
Tool box, Black Dog 1)	400/350/400 mm	Pieces	391006
Tool box, Black Dog ²⁾	500/350/400 mm	Pieces	391007
Tool box, Black Dog ²⁾	600/450/470 mm	Pieces	391008
Tool box, Black Dog ²⁾	600/450/650 mm	Pieces	391009
Tool box, Black Dog ²⁾	600/550/650 mm	Pieces	391010
Tool box, Black Dog ²⁾	700/450/470 mm	Pieces	391011
Tool box, Black Dog 2)	700/450/650 mm	Pieces	391012
Tool box, Black Dog ²⁾	750/350/360 mm	Pieces	391013
Tool box, Black Dog ²⁾	800/450/470 mm	Pieces	391014
Tool box, Black Dog ²⁾	1000/500/470 mm	Pieces	391015
Tool box, Black Dog 3)	1000/500/650 mm	Pieces	391016

Bracket for tool boxes



Material: Steel, hot-dip galvanised

Designation	Quantity Unit	Item No.
Bracket for tool boxes height 350 mm	Pieces	391040
Bracket for tool boxes height 450 mm	Pieces	391041
Bracket for tool boxes height 500 mm	Pieces	391042
Bracket for tool boxes height 600 mm	Pieces	391043

Fire extinguisher box



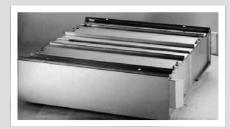
Material: Polypropylene, temperature resistant in the range $-40~^{\circ}\text{C}$ to $+80~^{\circ}\text{C}$ Colour: Lid red with inspection window, housing black Weight: 3.0 kg

Design

- · With quick locking mechanism
- · Three hinges and a seal eye
- · Fastening buckle

Designation	Quantity Unit	Item No.
Box for 6 kg fire extinguisher	Pieces	391025

Pallet boxes



Material: Aluminium-zinc sheet (Galvalume ®)

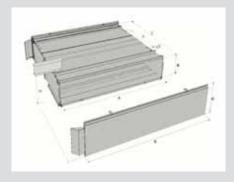
Version

- · Kit including complete installation set (screws, bolts and fixture)
- · No sharp edges, perfectly manufactured corners and edges
- · Pre-assembled neither welding nor drilling required
- Easy installation (installation plans and detailed installation instructions)
- · Supplied with front angle (width 2,300 mm)
- · Replaces side bumper
- · Can be used for different chassis types
- · Maximum loading with pallets: 1,000 kg



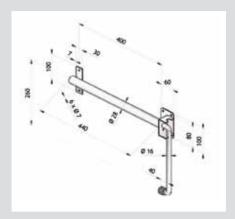
Designation	Quantity Unit	Item No.
Pallet boxes with roof for 24 pallets, weight 280 kg	Pieces	391049
Pallet boxes with roof for 30 pallets, weight 290 kg	Pieces	391050
Pallet boxes with roof for 36 pallets, weight 300 kg	Pieces	391051

Technical details



Item No.	Inside dii m	mensions m	Cover mm		nsions Cover mm Centre distance r		tance mm	e mm Outside height mm	
	А	В	С	D	Е	F	G	Н	
391049	2625	430	2445	2710	575	1305	100/140	485	
391050	2625	555	2445	2710	700	1305	100/140	610	
391051	2625	605	2445	2710	750	1305	100/140	660	

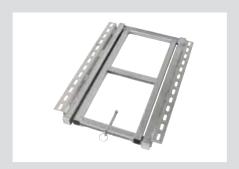
Door retainer



Material: Galvanised steel Rubber plug for greasing Weight: 2.1 kg

Designation	Quantity Unit	Item No.
Door retainer with flat fixture	Pieces	392001

Access ladder



Material: Steel, hot-dip galvanised

Angle: 110°

Designation	Quantity Unit	Item No.
Access ladder, 2-step	Pieces	392002

Shovel bracket



Material: Steel, hot-dip galvanised

Designation	Quantity Unit	Item No.
Shovel bracket with rubber straps	Pieces	392003

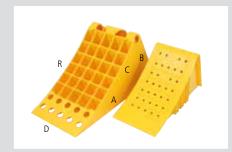
Contour marking



REFLEXITE VC 104+ Width 50 mm Single layer

Designation	Colour	Quantity Unit	Item No.
Contour marking	yellow	Pieces = 50 m	392501
Contour marking	red	Pieces = 50 m	392502
Contour marking	white	Pieces = 50 m	392503

Wheel chock



Material: Plastic PP DAPLEN Colour: Yellow

TÜV-tested

Weight saving of 2–2.5 kg compared to a steel wheel chock

UV- and weather-resistant between -30°C and +50°C

Recyclable material

Optimum ground grip thanks to embedded, galvanised steel rail

Central grip for easy handling

Suitable for semi-trailer tractors, semi-trailers, trucks and trailers

Maximum tyre radius TR, irrespective of its width

Designation	DIN	MR	Quantity Unit	Item No.
Wheel chock	76051-53	530 mm	Pieces	393001
Wheel chock	76051-46	460 mm	Pieces	393002

Technical details

Item No.	Dimensions				Reinforcing	Weight	
	R	А	В	С	D	rail	
393001	530 mm	325 mm	145 mm	220 mm	200 mm	-	1,6 kg
393002	460 mm	260 mm	125 mm	180 mm	155 mm	2	1,1 kg

Bracket for wheel chocks



Material: Steel sheet, hot-dip galvanised

With retaining spring TÜV-tested

Designation	Weight	Quantity Unit	Item No.
Bracket for wheel chock #393001	0,8 kg	Pieces	393004
Bracket for wheel chock #393002	1,3 kg	Pieces	393003

Bracket for wheel chocks



Material: Steel, galvanised

Designation	Weight	Quantity Unit	Item No.
Bracket for wheel chock	0,8 kg	Pieces	393005

Notes

Sales and supply conditions

General

- These conditions in the valid version underlie all the business transactions pertaining to deliveries and services and even those that will be made in future with us, with entrepreneurs, legal entities under public law and public law entities with special public funds. Deviating conditions of the customer, which are not explicitly recognised by us in writing, are not binding for us even if we do not object to them explicitly. Verbal declarations of our employees become effective only after our
- written confirmation. Individual agreements in accordance with § 305 b of the BGB [German Civil Code] are not covered by the existing regula-

Offers and acceptance of orders

- Our offers are always subject to confirmation. Subject to prior sale.
- Offers, cost estimates and drawings and brochures with all the docu-ments may not be disclosed to third parties. We retain the copyright of the same and even the ownership, as long as the order is not given to us.
- As for the rest, all the information from the business relationships must be treated as confidential.

 Quality, quantities and weights are determined in accordance with the
- DINJEN standards valid at the time of signing of the contract and in accordance with the commercial usage in the absence of such standards, particularly the latest Incoterms, and do not represent any warranties or guarantees, such as verification certificates, manufacturer's declarations and relevant signs such as CE and GS.

 Quantity and weight specifications established by us are definitive and
- are also subject to standard deviations. "Approximately" specified be-fore quantities authorises us to deliver up to 10% more or less. Our offer or our declaration of acceptance is decisive for the scope of
- services. Objections pertaining to these declarations must be immediately notified to us in writing before we start work on the order and at the latest within a week after acceptance.
- The customer is responsible under all circumstances for the legal and technical permissibility to use our products, even if we have expressed relevant suggestions. Our technical data sheets and processing specifications are decisive in case of doubt.

- The prices are understood as net cash ex works or ex warehouse exclusive of freight and costs for collecting and disposing packaging and VAT. Unforeseen additional expenditures that arise from performing services and for which surcharges are not agreed upon must be borne by the customer, unless we are responsible for their accrual.
- Payments are due without deduction in Euro. If already agreed upon, a cash discount is guaranteed if all the preceding bills have been settled, with the exception of those bills against which the customer has legitimate objections. The net bill amount after deduction of discounts, freight,
 - etc. is decisive for calculating the cash discount.

 All the payments are considered as settled on the day on which the amount is credited to our account.
- The customer may neither assert the right of retention nor object to the set-off from other transactions as well as that from the current business relationship. Charging by the customer is ruled out, unless the counterclaim is undisputed
- The customer is defaulted at the latest 14 days after delivery or on exceeding an agreed credit period beyond that.

 In such cases, we charge an interest of 8% over the basic interest rate.
- In such cases, we charge an interest of 5% over the basic interest rate. The right to assert any other claim is reserved. If it is noticed after the signing of the agreement that our pecuniary claim is at risk due to inability of the customer, we are entitled to the rights from § 321 of the BGB, and also to all the other outstanding payments from the business contacts with the customer. If the customer does not make the payment or he/she does not furnish security in a reasonable.
- make the payment or neishe does not turnish security in a reasonable time, we are also authorised to demand all the imprescriptible claims from this business relationship. In case of No. 3.4 and 3.5, we can take back all the goods subject to retention of the title (5.3), revoke the direct debit authorisation (5.5) and demand advance payment for deliveries that are still outstanding. The consequences mentioned in No. 3.5 and 3.6 can be averted by the
- customer by depositing surety to the amount of our pecuniary claim that
- 3.8. As for the rest, the legal regulations pertaining to the default in payment remain unaffected.

- 4.1.1. We deliver goods at customer's risk ex works or ex warehouse depending on the dispatch route and means of transport as well as the shipping agent or carrier. Free delivery to the shipping address of the customer means delivery without unloading on the condition that an access road is available that is accessible to a heavy truck trailer. The customer must unload the delivery immediately and properly. Waiting times are at the
- expense of the customer.

 4.1.2. If the transportation is not possible or considerably complicated on the intended route or to the intended location in the specified time for no fault of ours, we are authorised to deliver by using another route or to another location at the expense of the customer as long as this falls within the scope of the customer.
- Transport damages and losses during transport can be insured against only if the customer sends an explicit request on his/her behalf. A notification of loss must be given immediately on receiving the goods and
- must be notified in writing promptly depending on the nature and scope. Goods that are notified as ready for dispatch must be called immediately. If that does not happen, we are authorised to send them at our discretion at the expense and risk of the customer or to store them at our discretion and charge for it immediately.

 The customer must accept part deliveries, unless he/she proves that he/
- she is not obligated to accept them. We are allowed slight deviations in the rendering of the services that are customary in trade.

- For agreements involving continuous deliveries, we must be given the
- release orders for approximately the same number of months.
 If the individual release orders of the customer exceed the accepted quantities, we are authorised to deliver the surplus, but we are not under obligation for the same. We can calculate the surplus at the originally agreed prices or at the prices valid for the delivery.

 The fulfilment of the agreement as well as the adherence to the delivery
- - and service deadlines require the following:

 punctual and correct delivery to us by our suppliers, unless we are responsible for the non-delivery or delay,
 - correct and punctual fulfilment of the cooperation incumbent on the customer, particularly providing all the information, documents and approvals required for performing the services,
 - correct and punctual completion of the preliminary work by the cus-tomer or a third party necessary for performing our services, employ-ing suitable help for unloading in particular.
- Delivery times are binding for us only on the basis of a written confirma-tion. The delivery and service deadlines are extended by the period by which the customer does not fulfil his/her obligations towards us and in case of force majeure as well as in case of a labour dispute for the duration of the resulting interruption. The same applies to delivery and ervice schedules.

Reservation of proprietary rights

- 5.1.1. All the delivered goods remain our property (goods subject to retention of title) till the fulfilment of all the claims, especially the respective bal-ance claims, which we are entitled to within the scope of the business relationship. The same also applies to future and conditional claims, e.g. due to acceptor's changes, in case of the cheque/bill of exchange procedure till the payment of the bill of exchange by the customer, and in case of payments made for particularly designated claims.
- The value of the goods subject to retention of title is the net bill amount of the goods delivered by us plus a security surcharge of 50% (22% reduction in value, 4% in accordance with § 1711 InSO [Insolvency Act], 5% in accordance with § 1711 InSO and 19% turnover tax) that is however not considered if it conflicts with the rights of third parties. The overall reservation of title finally lapses with the settlement of all the claims that are till open at the time of the payment and are included in
- claims that are still open at the time of the payment and are included in
- claims that are still open at the time of the payment and are included in this overall reservation of title.

 We, the manufacturers, process goods subject to retention of title in accordance with § 950 of the BGB without committing ourselves. The processed goods are considered as goods subject to retention of title as defined by No. 1. If the goods subject to retention of title are processed, used or mixed with other goods by the customer, we are entitled to a joint ownership of the new object on a pro-rata basis in the ratio of the invoice value of the goods subject to retention of title to the invoice value of the other goods used. If our ownership lapses due to use or mixture with other goods to eustomer transfers his/her proprietary rights. value of the other goods used. If our ownership lapses due to use or mix-ture with other goods, the customer transfers his/her proprietary rights to the new stock or the new object within the scope of the value of the goods subject to retention of title to us immediately and stores the object free of charge for us. Our joint ownership rights are considered as goods subject to retention of title as defined by No. 1. The customer may sell the goods subject to retention of title during the normal business transaction as per the normal business conditions only if
- any of the cases mentioned in clauses 4.3. and 4.4. has not occurred and the claims from the resale are passed onto us in accordance with No. 4 to 6. He/she is not authorised to ownership of goods subject to retention of title in any other way. The goods subject to retention of title must be stored separately from
- other goods and/or must be marked as our property. We are authorised to guarantee the goods at the expense of the customer and enter the property or the premises of the customer for this purpose. The customer is under obligation to handle the delivered items with care and insure them at replacement value against loss, damage or destruction at his her own expense. The customer thus cedes his/her claims from the rel-evant insurances to us. We accept this cession. Regulations of the Insol-
- vency Act remain unaffected.

 The claims of the customer from the resale of the goods subject to retention of title, even during the course of the assembly as an important part of a site, are ceded to us at this stage along with all securities. They serve the purpose of security to the same extent as the goods subject to retention of title. If the goods subject to retention of title are resold by the customer along with other goods that are not sold by us, the claim from the resale is ceded to us equal to the value of the goods subject to
- In case of the resale of goods, which are co-owned by us according to No. 5.2, a part corresponding to our joint-ownership is ceded to us.
 The customer is authorised to collect claims from the resale, unless we
- revoke the collection authorisation in the cases mentioned in the paragraphs 3.5 and 3.6. We will exercise our right of revocation only if we see after the conclu
 - sion of the contract that our pecuniary claim is endangered because of this or any other contracts with the customer on account of his/her inef-
- On our request, the customer is obligated to immediately inform his buyers of the transfer to us, if we do not do so ourselves, and to provide us with the information and documents required for withdrawal. The customer is in no event authorised to further transfer the claims. This also applies to factoring businesses unless the transfer is during the course of the old-line factoring, which is displayed to us and in which case, the factoring revenue exceeds the value of our secured claim. Our claim immediately becomes payable with the credit note of the factoring revenue If the customer has agreed upon a prohibition of assignment, he/she thus authorises us to withdraw these claims.

 The customer must immediately inform us of a seizure or other inter-
- vention by third-parties. The customer bears all costs incurred for the recovery of the goods subject to retention of title, if the intervention was successful and the execution against the debtor has remained unsuc-

- if the value of the existing securities including the goods subject to reten-tion of title as defined by clause 5.1 exceeds the secured claims by a total of more than 50%, we are obliged to release the securities of our choice, if requested by the customer.

- Visible material defects must immediately be notified in writing at the latest within 7 days of the delivery. Entrepreneurs, legal entities under public law and public law entities with special public funds must also notify hidden material defects in writing, if they can be ascertained by means of an appropriate investigation, immediately after their discovery, before the expiry of the prescribed statutory limitation period at the latest; § 377 of the German Commercial Code (HGB) remains unaffected for the rest.
- If the order that was agreed upon or provided by law is not accepted due to reasons that we are not responsible for, material defects cannot be claimed in this respect.
- If material defects are only detected at the time of use, complaints can only be taken into consideration if the use of these defective articles is immediately discontinued.

 The material defect claims become inapplicable if the customer does not
- give us the immediate opportunity to assure ourselves of the material defect, or especially if he does not immediately provide the faulty goods or samples on request.
- In case of a legitimate notice of defects within the time limit, we can choose to either first eliminate the defect or deliver a defect-free replacement (subsequent fulfilment).
- In case of failure or refusal of subsequent fulfilment, the customer can reduce the purchasing price or choose to withdraw from the contract, provided that the defect is not negligible or the product is already sold, . used or redesianed.
- The customer is entitled to claims for damage, in accordance with the regulations of Clause 7.
- We only incur the expenses associated with the subsequent fulfilment if they are appropriate in individual cases, especially in proportion to the compensation for the performance. Expenses caused by the transfer of the goods to a location other than
- the place of delivery are not covered by us, unless this was in compliance with their use as per the contract.
- The claims of the customer on account of material defects lapse in a year after delivery to the customer even if they are used for a construction, unless this manner of use was agreed upon in writing. In cases of subsequent fulfilment, there is no renewed start of the statu-
- tory limitation period.

 The claims of the customer on account of deliberate or grossly negligent behaviour on our part, in case of the deceitful concealment of material defects or the assumption of a warranty by us and his/her recourse rights from § 478 of the (BGB) remain unaffected by the preceding regulations, as long as they fall within the scope of the legal material defect claims.
- The customer is obligated to adopt measures for mitigating the damage.

- On account of violation of contractual and non-contractual liabilities, we are also liable for our managerial employees and other agents, only in case of deliberate intention and gross negligence, limited to the damage typical of the contract, foreseeable when forming the contract. The regulations of clause 6.5 apply accordingly, with regard to the stat-
- ute of limitation.
- These limitations are not applicable in case of culpable violation of sub-These limitations are not applicable in case of culpable violation of sub-stantial contractual obligations if the achievement of the objective of the contract is at risk, in case of compulsory liability according to the Product Liability Act, in case of injury to life, limb and health or if we have concealed defects fraudulently or assumed guarantee. The regulations regarding the burden of proof remain unaffected.
- 7.4.

Applicable law, jurisdiction

- German law applies to all the businesses, even the foreign businesses. The application of the UN Convention on Contracts for the International Sale of Goods (CISG) is excluded.
- If the conditions for a jurisdiction agreement as per § 38 of the civil process order are present, the place of jurisdiction for all claims of the contract parties is Lübeck.
- However, we can also request the holding of disputes through friendly

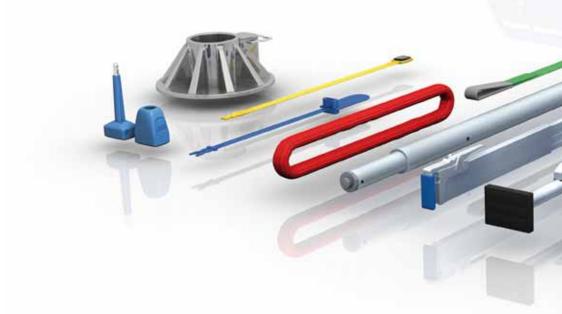
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