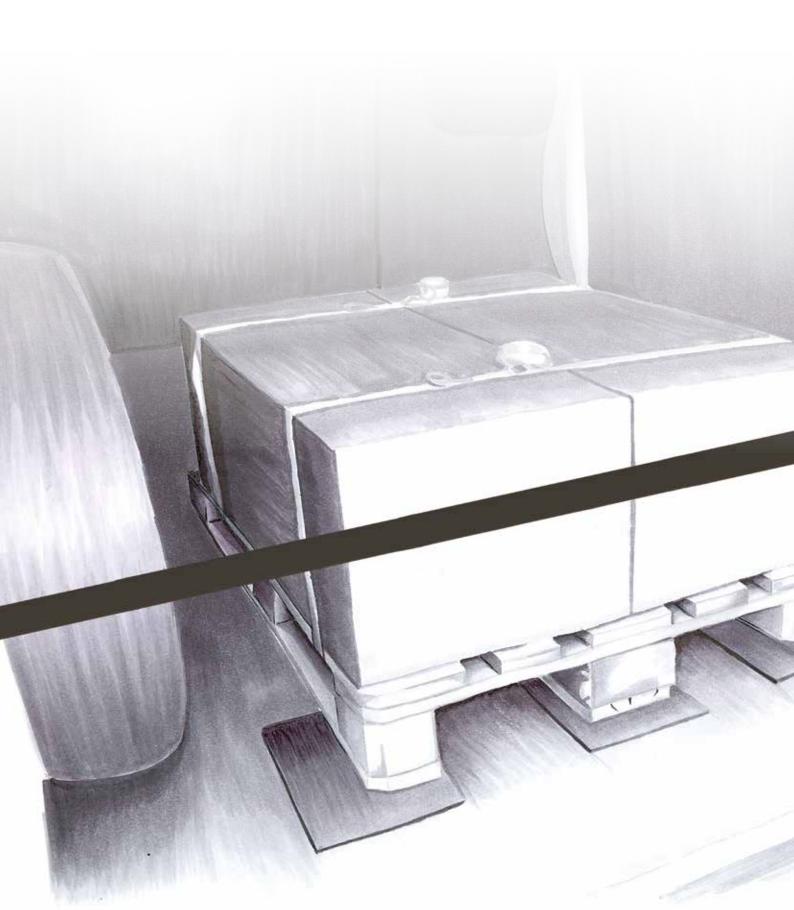
Mechanical load securing





With our WISTRA products in the area of mechanical load protection 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.

Airline lashing tracks



The WISTRA airline lashing tracks as well as the accessories are subjected to permanent material and quality tests.

With our constantly expanding design variants, we can offer our customers airline lashing tracks for the most varied applications in transport vehicles, trailers and boxes.

An extensive offer of lashing straps, load securing nets, safeguard, shoring and clamping beam systems, garment transport rails as well as attachment systems and various end caps round off our range.

The WISTRA airline lashing tracks range includes designs with surface finishes like powder or anodised coatings as well as untreated surfaces.

On the next pages you will find already processed versions in the standard range with countersunk holes every 25 mm or every 75 mm.

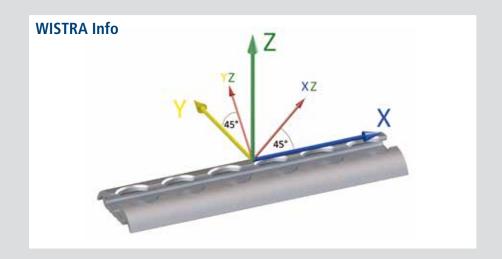
Special solutions and designs are also available on request.

We purposely do not state any standard strength values. The LC values stated for the respective designs for single and double-fittings are determined on our in-house test stand with the stated attachments.

Please keep in mind that the type of connection (screws, rivets, adhesive, etc.) as well as the solidity of the base material (struts, beams, sheet metal, etc.) are decisive for the installation of the airline lashing tracks.

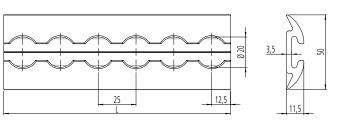
The type of lashing strap and the type of endfitting (single, double or quadruple) as well as the respective angle are also decisive for the application.

Our sales team will gladly assist you with the right selection.









LC Lashing Capacity			
WIS end-fitting	382	380	
Z 90°	500 daN	1,000 daN	
X-Z 45°	500 daN	1,000 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. uncoated	Item No. anodised
Airline lashing track 5503	500 mm	21550320-0500	21550325-0500
Airline lashing track 5503	1,000 mm	21550320-1000	21550325-1000
Airline lashing track 5503	1,975 mm	21550320-1975	21550325-1975
Airline lashing track 5503	2,000 mm	21550320-2000	21550325-2000
Airline lashing track 5503	3,000 mm	21550320-3000	21550325-3000
Airline lashing track 5503	6,000 mm	21550320-6000	21550325-6000

with 6.5 mm countersunk hole - every 25 mm

Weight: 670 g/m

Weight: 700 g/m



Designation	length	Item No.
Airline lashing track 5503B25 untreated	1,975 mm	21550320B25-1975
Airline lashing track 5503B25 untreated	3,000 mm	21550320B25-3000
Airline lashing track 5503B25 untreated	6,000 mm	21550320B25-6000
Airline lashing track 5503B25 anodised	1,975 mm	215503B25-1975
Airline lashing track 5503B25 anodised	3,000 mm	215503B25-3000
Airline lashing track 5503B25 anodised	6,000 mm	215503B25-6000
Airline lashing track 5503B25 black powder-coated	1,975 mm	21550315B25-1975
Airline lashing track 5503B25 black powder-coated	3,000 mm	21550315B25-3000
Airline lashing track 5503B25 black powder-coated	6,000 mm	21550315B25-6000

End caps for airline lashing track 5503



Item No. 215106501240 Plastic, grey RAL 7001



Item No. 215106501540 Plastic, black

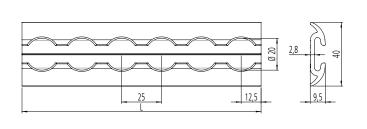


Item No. 215106001540 Clicker without screws Plastic, black

Aluminium airline lashing track 5513 – slim version

Weight: 420 g/m





LC Lashing Capacity			
WIS end-fitting 382 380			
Z 90°	600 daN	600 daN	
X-Z 45°	500 daN	500 daN	
Y-Z 45°	350 daN	400 daN	

Lashing capacity for attachment: every 75 mm centrally with a countersunk screw M5 DIN 7991 10.9

Designation	length	Item No. uncoated	Item No. anodised
Airline lashing track 5513	500 mm	21551320-0500	auf Anfrage
Airline lashing track 5513	1,000 mm	21551320-1000	auf Anfrage
Airline lashing track 5513	1,975 mm	21551320-1975	auf Anfrage
Airline lashing track 5513	2,000 mm	21551320-2000	auf Anfrage
Airline lashing track 5513	3,000 mm	21551320-3000	auf Anfrage

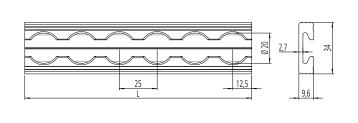
End cap for airline lashing track 5513



Item No. 215113001540 Clicker without screws Plastic, black







LC Lashing Capacity			
WIS end-fitting 382 380			
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 M5 DIN 7991 10.9

Designation	length	Item No. untreated	Item No. anodised
Airline lashing track 5504	500 mm	21550420-0500	21550425-0500
Airline lashing track 5504	1,000 mm	21550420-1000	21550425-1000
Airline lashing track 5504	1,975 mm	21550420-1975	21550425-1975
Airline lashing track 5504	2,000 mm	21550420-2000	21550425-2000
Airline lashing track 5504	3,000 mm	21550420-3000	21550425-3000
Airline lashing track 5504	6,000 mm	21550420-6000	21550425-6000

with countersunk hole M5 - every 25 mm





Designation	length	Item No.
Airline lashing track 5504B25 untreated	1,975 mm	21550420B25-1975
Airline lashing track 5504B25 untreated	3,000 mm	21550420B25-3000
Airline lashing track 5504B25 untreated	6,000 mm	21550420B25-6000
Airline lashing track 5504B25 anodised	1,975 mm	215504B25-1975
Airline lashing track 5504B25 anodised	3,000 mm	215504B25-3000
Airline lashing track 5504B25 anodised	6,000 mm	215504B25-6000
Airline lashing track 5504B25 black powder-coated	1,975 mm	21550415B25-1975
Airline lashing track 5504B25 black powder-coated	3,000 mm	21550415B25-3000
Airline lashing track 5504B25 black powder-coated	6,000 mm	21550415B25-6000

End caps for airline lashing track 5504



Item No. 21510341040 Plastic, grey RAL 7001

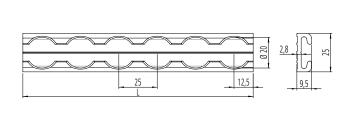


Item No. 215103001540 Clicker without screws Plastic, black

Aluminium airline lashing track 5514 - slim version

Weight: 290 g/m





LC Lashing Capacity			
WIS end-fitting 382 380			
Z 90°	450 daN	450 daN	
X-Z 45°	350 daN	400 daN	
Y-Z 45°	250 daN	300 daN	

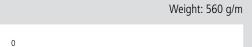
Lashing capacity for attachment: every 75 mm centrally with a countersunk screw M5 DIN 7991 10.9

Item No. anodised Designation length Item No. untreated Airline lashing track 5514 500 mm 21551420-0500 on request Airline lashing track 5514 1,000 mm 21551420-1000 on request Airline lashing track 5514 1,975 mm 21551420-1975 on request Airline lashing track 5514 2,000 mm 21551420-2000 on request Airline lashing track 5514 21551420-3000 3,000 mm on request

End cap for airline lashing track 5514



Item No. 215114001540 Clicker without screws Plastic, black



Item No. uncoated



Designation

L -5	11
2	3

Length

LC Lashing Capacity				
WIS end fitting 382 380				
Z 90°	1,000 daN			
X-Z 45°	1,000 daN			
Y-Z 45°	400 daN	900 daN		

 Airline lashing track 5508
 500 mm
 21550820-0500

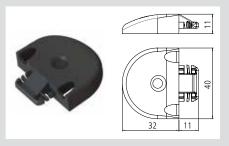
 Airline lashing track 5508
 1,000 mm
 21550820-1000

 Airline lashing track 5508
 1,975 mm
 21550820-1975

 Airline lashing track 5508
 2,000 mm
 21550820-2000

 Airline lashing track 5508
 3,000 mm
 21550820-3000

LC when attached: every 75mm, centrally with a countersunk screw M6 DIN 7991 10.9

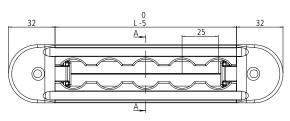


Accessories	Material/colour	Unit of quantity	Item No.
"Click" end cap for one-time installation in airline lashing track 5508 Additional screw connection not required.	Plastic, black	Pieces	215104001540
Round rubber band 6 mm	Rubber, black	50 metres	21550800-50000

"Click" end cap for airline lashing track 5508

Aluminium airline lashing track 5508, cut to specification



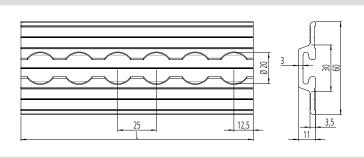


12,4		
A-A	40	

Designation	Length L = airline lashing track cut	Total length	Item No.
Airline lashing track 5508, cut to specification	500 mm	564 mm	21550877-0500
Airline lashing track 5508, cut to specification	1,000 mm	1,064 mm	21550877-1000
Airline lashing track 5508, cut to specification	1,500 mm	1,564 mm	21550877-1500
Airline lashing track 5508, cut to specification	1,900 mm	1,964 mm	21550877-1900
Airline lashing track 5508, cut to specification	2,000 mm	2,064 mm	21550877-2000
Airline lashing track 5508, cut to specification	3,000 mm	3,064 mm	21550877-3000

Weight: 680 g/m





LC Lashing Capacity				
WIS end-fitting	380			
Z 90°	500 daN	1,000 daN		
X-Z 45°	500 daN	1,000 daN		
Y-Z 45°	400 daN	900 daN		

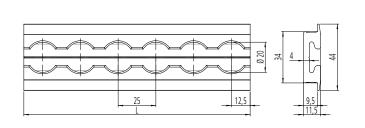
Lashing capacity for attachment: every 75 mm centrally with a countersunk screw M6 DIN 7991 10.9

Designation	length	Item No. untreated
Airline lashing track 5507	500 mm	21550720-0500
Airline lashing track 5507	1,000 mm	21550720-1000
Airline lashing track 5507	1,975 mm	21550720-1975
Airline lashing track 5507	2,000 mm	21550720-2000
Airline lashing track 5507	3,000 mm	21550720-3000

Aluminium airline lashing track 5502

Weight: 730 g/m





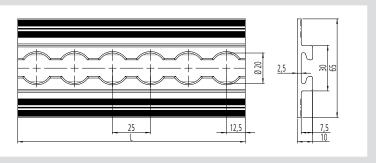
LC Lashing Capacity				
WIS end-fitting	380			
Z 90°	500 daN	1,000 daN		
X-Z 45°	500 daN	1,000 daN		
Y-Z 45°	400 daN	900 daN		

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

Designation	length	Item No. untreated	Item No. anodised
Airline lashing track 5502	500 mm	on request	21550225-0500
Airline lashing track 5502	1,000 mm	on request	21550225-1000
Airline lashing track 5502	1,975 mm	on request	21550225-1975
Airline lashing track 5502	2,000 mm	on request	21550225-2000
Airline lashing track 5502	3,000 mm	on request	21550225-3000
Airline lashing track 5502	6,000 mm	on request	21550225-6000

Weight: 690 g/m





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

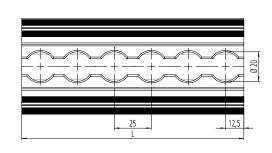
Lashing capacity for attachment: every 75 mm oppositely with a countersunk screw M6 DIN 7380 8.8

Designation	length	Item No. untreated	Item No. anodised
Airline lashing track 5501	500 mm	on request	21550125-0500
Airline lashing track 5501	1,000 mm	on request	21550125-1000
Airline lashing track 5501	1,975 mm	on request	21550125-1975
Airline lashing track 5501	2,000 mm	on request	21550125-2000
Airline lashing track 5501	3,000 mm	on request	21550125-3000
Airline lashing track 5501	6,000 mm	on request	21550125-6000

Aluminium airline lashing track 5510

Weight: 800 g/m





3,2	99
-	8 11

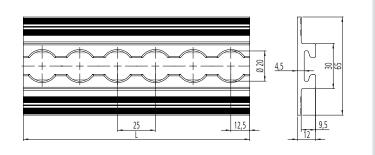
LC Lashing Capacity				
WIS end-fitting	380			
Z 90°	500 daN	1000 daN		
X-Z 45°	500 daN	1000 daN		
Y-Z 45°	400 daN	900 daN		

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

Designation	Länge	Item No. untreated	Item No. anodised
Airline lashing track 5510	500 mm	21551020-0500	on request
Airline lashing track 5510	1,000 mm	21551020-1000	on request
Airline lashing track 5510	1,975 mm	21551020-1975	on request
Airline lashing track 5510	2,000 mm	21551020-2000	on request
Airline lashing track 5510	3,000 mm	21551020-3000	on request
Airline lashing track 5510	6,000 mm	on request	on request

Weight: 860 g/m





LC Lashing Capacity				
WIS end-fitting	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 oppositely with a countersunk screw M6 DIN 7380 8.8

Designation	length	Item No. untreated	Item No. anodised
Airline lashing track 5506	500 mm	on request	21550625-0500
Airline lashing track 5506	1,000 mm	on request	21550625-1000
Airline lashing track 5506	1,975 mm	on request	21550625-1975
Airline lashing track 5506	2,000 mm	on request	21550625-2000
Airline lashing track 5506	3,000 mm	on request	21550625-3000
Airline lashing track 5506	6,000 mm	on request	21550625-6000

End cap for airline lashing track 5506



Item No. 215105001540 Clicker without screws Plastic, black

Lashing points

Lashing point

Item No.: 24 315 00 000 12



LC = 800 daN

Material: Steel electroplated

Weight: 0.5 kg EN 12640-8

Lashing point

Item No.: 24 330 00 000 12



LC = 800 daN

Material: Steel hot-dip galvanised

Weight: 0.54 Kg EN 12640-8

Lashing point

Item No.: 24 317 00 000 12



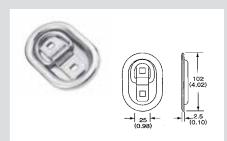
LC = 2,000 daN

Material: Steel electroplated

Weight:

Lashing point

Item No.: 24 360 00 000 12



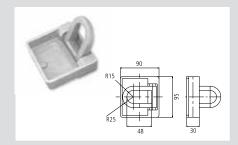
LC = 350 daN

Material: Steel electroplated

Weight: 0.18 kg

Lashing point

Item No.: 24 370 00 000 10



LC = 2,500 daN Material: steel Weight: 0.88 kg

Airline version, aluminium



Item No. 21 5400 00 10 20

Standard length: 45 mm Weight: 0.037 kg

LC Lashing Capacity		
WIS end-fitting	382	
Z 90°	300 daN	
X-Z 45°	300 daN	
Y-7 45°	300 daN	

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

Airline lashing point



Item No. 21 5601 25

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

LC Lashing Capacity		
WIS end-fitting	382	
Z 90°	500 daN	
X-Z 45°	500 daN	
Y-7 45°	500 daN	

Lashing capacity for attachment: with 2 countersunk screws M5 DIN 7991 10.9

Airline accessories

Airline Track Cover Profile



 Item No. 21 5109 01-1975

 Standard length:
 1,975 mm

 Weight:
 0.275 kg

 Plastic, grey RAL 7035

Storage rall



Item No. 215110010 for two Airline Beams Unit: Set (=2 pieces)

Hook 527



Item No. 140000052700 50 kg hooks for end fitting 382 for hanging up jackets, tools, etc.

Removal protection for end fitting 382



Item No. 143820101 End fitting 382 with locking rope

Item No. 21511225Locking plate (moving freely in the airline track)

WIS airline lashing tracks cleaning brush



Item No. 160014

Plastic protective plug, black



Item No. 21510100

T-nut



Item No. 215108200612

T-nut, electroplated 2x M6 threads (without screws)

T-nut



Item No. 215108300612

T-nut, electroplated 3x M6 threads (without screws)

Screw fitting 5107



Item No. 21510725

Screw fitting M8 electroplated 8.8 for airline lashing track consisting of: clamping bracket, screw, nut

Special screw	Effective thread length	Item No.
M8 x 25	15 mm	21510724
M8 x 30	20 mm	21510725
M8 x 40	30 mm	21510726
M8 x 60	50 mm	21510727

Screw fitting 5108



Item No. 21510825

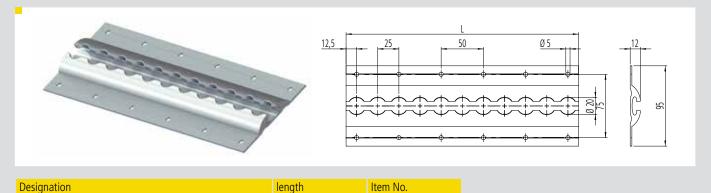
Screw fitting M8 electroplated Version for airline lashing tracks consisting of: clamping bracket, screw, star grip

Special screw Effective Item No. thread length

Airline lashing lashing tracks, processed

Aluminium airline lashing track 5000

Weight: 975 g/m



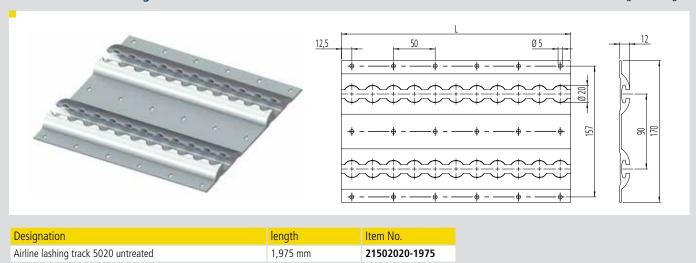
1,975 mm

21500020-1975

Aluminium airline lashing track 5020

Airline lashing track 5000 untreated

Weight: 1850 g/m



Steel airline lashing track 5001



Designation	Item No.
Steel galvanised	215001312012

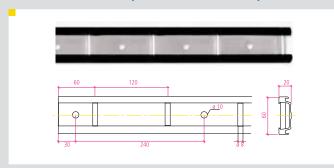
Standard length: 2,400 mm

WISTRA Info

Cannot be used with all end fittings or accessories.

Track with pins

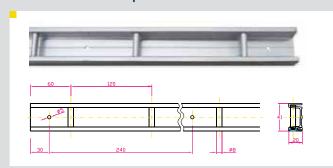
Aluminium track with pins 4710 with rubber protection



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	1,500 mm	21471020-1500
Track with pins 4710	1,980 mm	21471020-1980
Track with pins 4710	2,000 mm	21471020-2000
Track with pins 4710	3,000 mm	21471020-3000
Track with pins 4710	4,000 mm	21471020-4000
Track with pins 4710	5,000 mm	21471020-5000
Track with pins 4710	6,000 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	3,000 mm	21472020-3000
Track with pins 4720	4,000 mm	21472020-4000
Track with pins 4720	5,000 mm	21472020-5000
Track with pins 4720	6,000 mm	21472020-6000

End cap for lashing track with pins 4710



Item No. 212106662240 Plastic, grey RAL 7001

End cap for lashing track with pins 4710



Item No. 212106661540 Plastic, black

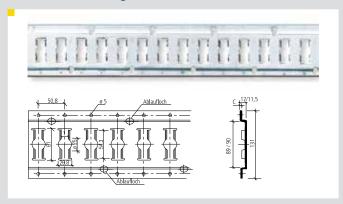
End cap for lashing track with pins 4720



Item No. 212106462040 Plastic, grey RAL 7001

Lashing tracks

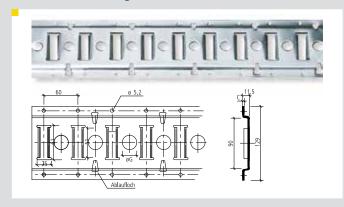
Anchor combi lashing track 3009



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: 3,000 mm

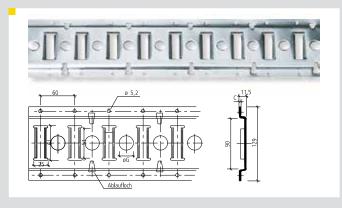
Anchor combi lashing track 3008 with 20 mm hole size



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: 3,000 mm

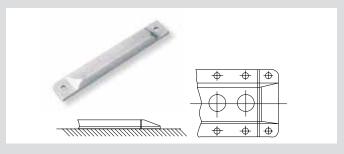
Anchor combi lashing track 3008 with 25 mm hole size



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	213008302520

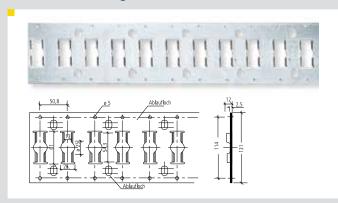
Standard length: 3,000 mm

End cap for lashing tracks



Item No. 212109951240 Plastic, grey RAL 7001 for lashing tracks 3008, 3009

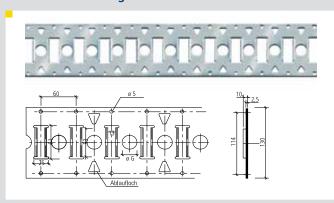
Anchor combi lashing track 3109



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

Standard length: 3,000 mm

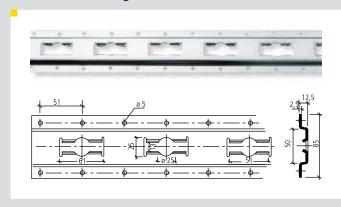
Anchor combi lashing track 3108



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: 3,000 mm

Anchor combi lashing track 2010



Designation	Dimension C	Item No.
Steel galvanised	2.5 mm	212010250812

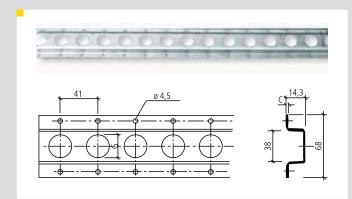
Standard length: 2,400 mm

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

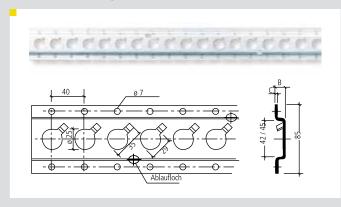
Standard length: 3,000 mm



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

Standard length: 30,00 mm

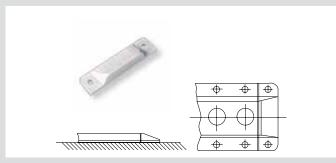
Round hole lashing track 1806 with cut-out



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

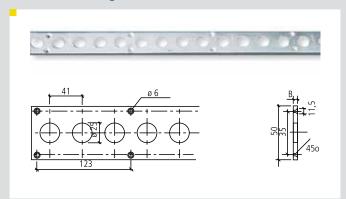
Standard length: 3,000 mm

End cap for lashing tracks



Item No. 212106501240 Plastic, grey RAL 7001 e.g. for lashing tracks 1806

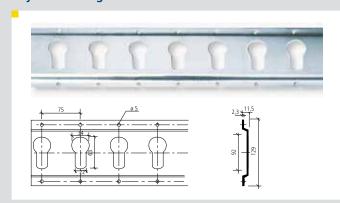
Round hole lashing track 3004



Designation	Dimension B	Item No.
Steel galvanised	5 mm	213004502512
Aluminium	6 mm	213004602520

Standard length: 3,000 mm

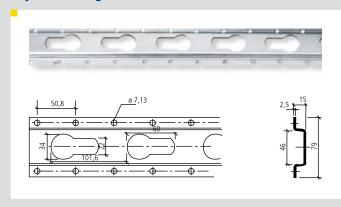
Key-hole lashing track 1803 horizontal



Designation	Dimension C	Item No.
Steel galvanised	2.3 mm	211803200852

Standard length: 3,000 mm

Key-hole lashing track 1803 vertical



Designation	Dimension C	Item No.
Steel galvanised	2.5 mm	211803200152

Standard length: 3,000 mm

WISTRA parting walls and parting grids

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

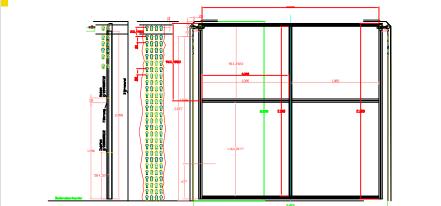
They can fulfil different functions like:

- 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 $</=0.7 \text{ W}/(\text{m}^2 \cdot \text{K})$
- R: Increased thermal insulation with a K value $</=0.4 \text{ W}/(\text{m}^2 \cdot \text{K})$

The WISTRA cold safe walls have a K value of 0.4 $W/(m^2 \cdot K)$



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 on request.



When ordering please specify:

- B Clear inside width between the inner walls
- H Clear inside height between ceiling and
- 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
- \cdot µD = dynamic sliding friction coefficient

Blocking capacity of the			Maximum weight	of the load unit/s		
form-fit	for µ	D 0.2	for µ	D 0.4	for μD 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	1,000 kg	500 kg	*)
150 daN	250 kg	500 kg	370 kg	1,500 kg	750 kg	*)
200 daN	330 kg	660 kg	500 kg	2,000 kg	1,000 kg	*)
250 daN	410 kg	830 kg	620 kg	2,500 kg	1,250 kg	*)
300 daN	500 kg	1,000 kg	750 kg	3,000 kg	1,500 kg	*)
350 daN	580 kg	1,160 kg	870 kg	3,500 kg	1,750 kg	*)
400 daN	660 kg	1,330 kg	1,000 kg	4,000 kg	2,000 kg	*)
450 daN	750 kg	1,500 kg	1,120 kg	4,500 kg	2,250 kg	*)
500 daN	830 kg	1,660 kg	1,250 kg	5,000 kg	2,500 kg	*)
550 daN	910 kg	1,830 kg	1,370 kg	5,500 kg	2,750 kg	*)
600 daN	1,000 kg	2,000 kg	1,500 kg	6,000 kg	3,000 kg	*)
650 daN	1,080 kg	2,160 kg	1,620 kg	6,500 kg	3,250 kg	*)
750 daN	1,250 kg	2,500 kg	1,870 kg	7,500 kg	3,750 kg	*)
800 daN	1,330 kg	2,660 kg	2,000 kg	8,000 kg	4,000 kg	*)
900 daN	1,500 kg	3,000 kg	2,250 kg	9,000 kg	4,500 kg	*)
1,000 daN	1,660 kg	3,330 kg	2,500 kg	10,000 kg	5,000 kg	*)
1,250 daN	2,080 kg	4,160 kg	3,120 kg	12,500 kg	6,250 kg	*)
1,500 daN	2,500 kg	5,000 kg	3,750 kg	15,000 kg	7,500 kg	*)
1,750 daN	2,910 kg	5,830 kg	4,370 kg	17,500 kg	8,750 kg	*)
2,000 daN	3,330 kg	6,660 kg	5,000 kg	20,000 kg	10,000 kg	*)
3,000 daN	5,000 kg	10,000 kg	7,500 kg	30,000 kg	15,000 kg	*)
4,000 daN	6,660 kg	13,330 kg	10,000 kg	40,000 kg	20,000 kg	*)
5,000 daN	8,330 kg	16,660 kg	12,500 kg	50,000 kg	25,000 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 Aluminium COMBI-BEAM 1858

Design with black PVC coating





The COMBI-BEAM 1858 + 1859 is a WISTRA development with focus on user-friendliness and gentle application in pressure-sensitive vehicle sections.

- Design for anchor combination lashing tracks
- Round aluminium locking bar: Design 1858 with black PVC coating design 1859 without PVC coating
- without spring action

- Design 1858 supporting tube diameter 42 mm plus PVC coating = 47 mm
- · Design 1859 supporting tube diameter 42 mm
- specially suited for the "cooler" section and on the basis of the applied materials, explosion protection classification is possible.
- Plastic end pieces with stainless steel latch



	Advantages		
	for the user	for the transport vehicle/the load	compared to similar products
In connection with anti-slip materials, loads up to 2,000 kg can be secured in driving direction with one COMBI-BEAM.	X	Х	X
Extensive technical documentation/operation manual	Х		X
Easy telescoping, up to 70mm by standard	Х		X
No bulging operating elements in the complete application area	Х	Х	X
Silent design with plastic centring piece	Х		X
Design 1858 Supporting tube with PVC coating for comfortable handling even in cold outside temperatures, as well as for protection of the load	X	X	Х
The COMBI pins on both sides latch into the COMBI lashing track.	Х	Х	X
The COMBI pins do not damage the material within the lashing track.	Х	Х	X
Insertion of the COMBI-BEAM by the user does not require simultaneous application of pressure.	Х	Х	X
The COMBI pins cannot slide out because they lock into place when pressure is applied on the side wall.	X	Х	X
Based on the locking in the COMBI lashing track, the system does not damage the transport vehicle.	Х	Х	X
High-quality product designation affixed to the telescope	Х		X

Designation	Equipment	for inside dimension	Marking	Blocking force*)	Item No.
COMBI-BEAM 1858	with PVC coating	2,430 - 2,500 mm	WIS label	400 daN	221858-2430
COMBI-BEAM 1858	with PVC coating	2,430 - 2,500 mm	Customer label	400 daN	221858999-2430
COMBI-BEAM 1858	with PVC coating	Special length of 458 mm to 6,000 mm (70 mm adjusting range)	WIS label	on request depending on length	on request
COMBI-BEAM 1858	with PVC coating	Special length of 458 mm to 6,000 mm (70 mm adjusting range)	Customer label	on request depending on length	on request

WISTRA Aluminium COMBI-BEAM 1859

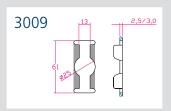


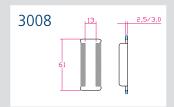


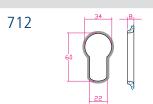
Designation	Equipment	Telescoping range	Marking	Blocking force*)	Item No.
COMBI- BEAM 1859	without	2,430 - 2,500 mm	WIS label	400 daN	221859-2430
COMBI- BEAM 1859	without	2,430 - 2,500 mm	Customer label	400 daN	221859999-2430
COMBI- BEAM 1859	without	Special length of 458 mm to 6,000 mm (70 mm adjusting range)	WIS label	on request depending on length	on request
COMBI- BEAM 1859	without	Special length of 458 mm to 6,000 mm (70 mm adjusting range)	Customer label	on request depending on length	on request



Use of aluminium COMBI-BEAM 1858 and 1859 with lashing tracks:







WISTRA aluminium shoring beam modular construction system





Strength meets individuality

The new WISTRA shoring beam system is based on a novel 50x50 mm aluminium profile.

In construction, we focused on the numerous customer requests submitted to us.





The carrier

The new WISTRA shoring beam system is based on a novel 50x50 mm aluminium profile. In construction, we focused on the numerous customer requests submitted to us.



The connection systems

The novel square shoring beams can be equipped in their basic design or additionally with inserted airline lashing tracks and/or with a rubber protection across the entire length or in sections.

We achieved blocking forces BC of up to 900 daN on our in-house test stand, depending on the design.

The true strength becomes evident in the versatile use and the individual connection options to the inserted integrated airline track profile.

Besides the Airline Beam 1855, WISTRA lashing straps as well as safeguard load securing nets or additional accessories can be used for the airline lashing tracks.

You will find version variants on the next pages. We will gladly process individual requirements.

The WISTRA team is looking forward to your inquiries and requests.

WISTRA aluminium "Spairbalken 1851" (shoring beam)







Pin version







Version 19, anti-twist Observe position!



Version 24



Version 25, anti-twist Observe position!

for lashing track









Boring ø 20 mm

Airline design

Boring ø 25 mm

Combi track ø 25 mm

Version examples

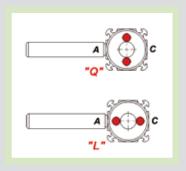
Example	Designation	Item No.	Item No.				
1	Spairbalken 1851	221851	09	1111	-2000		
2	Spairbalken 1851	221851	19	2222	-2000	L	
3	Spairbalken 1851	221851	19	1212	-2500	T	
4	Spairbalken 1851	221851	24	1222	-2500		

Technical information

Example	Pin Version	Profile fitting	Application length +/-25 mm	Carrier length L **)	Pin position	BC daN *)
1	09	A, B, C, D complete with airline lashing track	2.000 mm	1.900 mm		
2	19	A, B, C, D complete with elastic cord	2.000 mm	1.900 mm	Longitudinal AC	between 500
3	19	A, C complete with airline lashing track B, D complete with elastic cord	2.500 mm	2.400 mm	Transverse BD	and 900 daN depending on
4	24	A complete with airline lashing track B, C, D complete with elastic cord	2.500 mm	2.400 mm		version



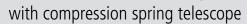
		•					
221851	XX	ABCD	-LLLL	LorT			
221851 shoring t	beam version						
XX = pin version – see above							
		Profile fitting A = side A fitted with B = side B fitted with C = side C fitted with D = side D fitted with		Replace letters with desired version: 0 = without fitting 1 = fitted with airline lashing track along max. usable length 2 = fitted with elastic cord along max. usable length For accessory parts, see Page 148.			
-LLLL = application length +/-25 mm							
				With "anti-twist" model pin version 19 + version 25 L = in longitudinal direction from side A to side C T = transverse from side B to side D			



^{*)} Blocking force with even surface load

^{**)} Up to 2500 mm application range, the carrier is 100 mm shorter. From application range > 2500 mm, carrier length = 2400 mm

WISTRA aluminium, Spairbalken 1857" (shoring beam)

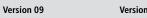






Pin version







Version 19, anti-twist Observe position!



Version 24



Version 25, anti-twist Observe position!



Version 32

for lashing track









Boring ø 20 mm

Airline design

Boring ø 25 mm

Combi track ø 25 mm

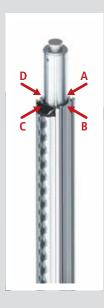
Keyhole 34/22

Version examples

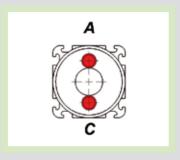
Example	Designation	Item No.			
1	Spairbalken 1857	221857	09	1111	-2000
2	Spairbalken 1857	221857	19	2222	-2000
3	Spairbalken 1857	221857	19	1212	-2500
4	Spairbalken 1857	221857	24	1222	-2500

Technical information

Example	Pin Version	Profile fitting	Application length +/-25 mm	Carrier length L **)	BC daN *)	
1	09	A, B, C, D complete with airline lashing track	2.000 mm	1.900 mm		
2	19	A, B, C, D complete with elastic cord	2.000 mm	1.900 mm	between 500 and 900	
3	19	A, C complete with airline lashing track B, D complete with elastic cord	2.500 mm	2.400 mm	daN depending on version	
4	24	A complete with airline lashing track B, C, D complete with elastic cord	2.900 mm	2.400 mm	,	



221857	XX	ABCD	-LLLL			
221857 shoring b	oeam version					
XX = pin version – see above						
		Profile fitting A = side A fitted with B = side B fitted with C = side C fitted with D = side D fitted with	1 1	Replace letters with desired version: 0 = without fitting 1 = fitted with airline lashing track along max. usable length 2 = fitted with elastic cord along max. usable length for accessory parts, see Page 148.		
-LLLL = application length +/-25 mm						
				With the "anti-twist" model version 19 + version 25, the pin is installed in longitudinal direction from side A to side C		



^{*)} Blocking force with even surface load

^{**)} Up to 2500 mm application range, the carrier is 100 mm shorter. From application range > 2500 mm, carrier length = 2400 mm

WISTRA aluminium "Spairbalken 1856" (shoring beam)





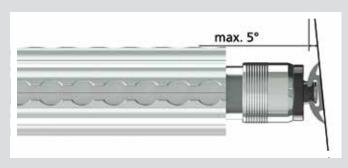
Product description

In connection with the parallel-running airline lashing track in the vehicle, the trailer or other means of transport, the "Spairbalken" ensures form-locking load securing.

The "Spairbalken" can be used horizontally and vertically for load securing.

The automatic airline pins on both sides each engage in one hole pair of the airline lashing track.





1. Unlocking



2. Inserting



3. Shifting



4. Locking

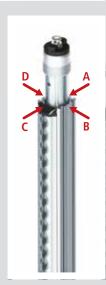


Version examples

Example	Designation	Item No.			
1	Spairbalken 1856	221856	03	1111	-900
2	Spairbalken 1856	221856	03	2222	-1300
3	Spairbalken 1856	221856	03	1212	-1500
4	Spairbalken 1856	221856	05	1222	-1500

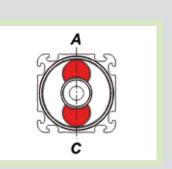
Technical information

Example	Extension	Profile fitting	Telescoping range L1 – L2	BC daN *)
1	300 mm	A, B, C, D complete with airline lashing track	900-1.200 mm	
2	300 mm	A, B, C, D complete with elastic cord	1.300-1.600 mm	
3	300 mm	7, C complete with all life lashing track		between 500 and 900 daN depending on version
4	500 mm	A complete with airline lashing track B, C, D complete with elastic cord	1.500-2.000 mm **)	

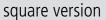


221856	XX	ABCD	-LLLL				
221856 Spairbalken (shoring beam) version							
XX = Extension e.g. 03 = 300 mm							
A B C		Profile fitting A = side A fitted with B = side B fitted with C = side C fitted with D = side D fitted with		Replace letters with desired version: 0 = without fitting 1 = fitted with airline lashing track along max. usable length 2 = fitted with elastic cord along max. usable length For accessory parts, see Page 148.			
			-LLLL = shortest appli	cation length			
				With the automatic pins, the pin is installed in longitudinal direction from side A to side C			

^{*)} Blocking force with even surface load , **) In case of vertical application observe working height



WISTRA Aluminium "Spairbalken 1861" (shoring beam)







Strength meets individuality

The COMBI-BEAM 1861 is a WISTRA development with focus on user-friendliness and gentle application in pressure-sensitive vehicle sections.

Besides a high blocking force, version 1861 offers additional connection options through optional equipment with airline lashing track for horizontal and vertical connections like the Airline-Beam, WIS Safeguard load securing nets, WIS lashing straps, etc

- · Design for anchor combination lashing tracks
- · Optionally equipped with airline lashing track and/or rubber band
- · without spring action
- suited for the "cooler" section and on the basis of the applied materials, explosion protection classification is possible
- Aluminium square tube 50x50 mm:
 Plastic end pieces with stainless steel latch



	Advantages		
	for the user	for the transport vehicle/the load	compared to similar products
In connection with anti-slip materials, loads up to 4,000 kg can be secured in driving direction with one COMBI-BEAM.	X	X	X
Extensive technical documentation/operation manual	Х		Х
Easy telescoping, up to 70 mm by standard	X		X
No bulging operating elements in the complete application area	X	Х	Х
Silent design with plastic centring piece	X		X
Square carrier tube, can be optionally fitted with airline lashing track and/or rubber band	Х	Х	Х
Connection options in connection with optional equipment with airline lashing track — also in individual sections	Х	Х	X
The COMBI pins on both sides latch into the COMBI lashing track.	Х	Х	X
The COMBI pins do not damage the material within the lashing track.	Х	Х	Х
Insertion of the COMBI-BEAM by the user does not require simultaneous application of pressure in both directions.	Х	Х	X
The COMBI pins cannot slide out because they lock into place when pressure is applied on the side wall.	Х	X	X
Based on the locking in the COMBI lashing track, the system does not damage the transport vehicle.	X	Х	Х
High-quality product designation affixed to the telescope	Х		Х

Designation	Equipment	Telescoping range	Marking	Blocking force*)	Item No.
Spairbalken 1861	without	2,430 - 2,500 mm	WIS label	400 daN	2218610000-2430
Spairbalken 1861	without	2,430 - 2,500 mm	Customer label	400 daN	2218619990000-2430
Spairbalken 1861	without	Special length of 458 mm to 3,000 mm (70 mm adjusting range)	WIS label	400 daN	on request
Spairbalken 1861	without	Special length of 458 mm to 3,000 mm (70 mm adjusting range)	Customer label	400 daN	on request

Examples with optional equipment

Designation	Equipment	for inside dimension	Marking	Blocking force*)	Item No.
Spairbalken 1861	Side A fitted with airline lashing track Side B fitted with rubber band Side C without equipment Side D fitted with rubber band	2,430 - 2,500 mm	WIS label	400 daN	2218610000-2430
Spairbalken 1861	Side A fitted with rubber band Side B fitted with rubber band Side C fitted with rubber band Side D fitted with rubber band	2,430 - 2,500 mm	WIS label	400 daN	2218610000-2430
Spairbalken 1861	Side A fitted with rubber band Side B fitted with airline lashing track Side C without equipment Side D fitted with airline lashing track	2,430 - 2,500 mm	WIS label	400 daN	2218610000-2430

221857	ABCD	-LLLL		
221857 shoring bean	n version			
	Profile fitting A = side A fitted with B = side B fitted with C = side C fitted with D = side D fitted with		Replace letters with desired version: 0 = without fitting 1 = fitted with airline lashing track along max. usable length 2 = fitted with elastic cord along max. usable length for accessory parts, see Page 148.	
-LLLL = minimum total lenght				

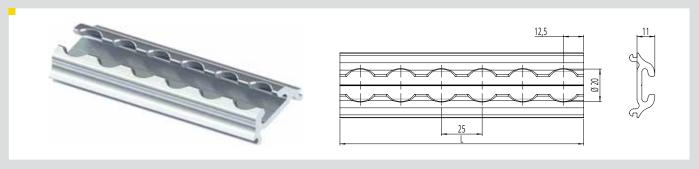
^{*)} Blocking force with even surface load



"Spairbalken" accessories

Aluminium airline lashing track for inserting 5509

Weight: 560 g/m



Designation	length	Item No. untreated
Airline lashing track 5509	500 mm	21550920-0500
Airline lashing track 5509	1,000 mm	21550920-1000
Airline lashing track 5509	1,975 mm	21550920-1975
Airline lashing track 5509	2,000 mm	21550920-2000
Airline lashing track 5509	2,400 mm	21550920-2400

End cap for airline lashing track 5509



Item No. 215111001540 Plastic, black Unit of quantity: Pieces

Round rubber band 6 mm



Item No. 21550800-50000 Rubber, black Unit of quantity: 50 m

Bow base for 25mm profile



Item No. 1618510000012 Material: Steel galvanised

The bracket is clamped on the square profile and can be positioned as required. A dividing wall can be easily constructed with the connecting slabs.

WISTRA Airline Beam 1855





Example of a label

Can be customised with your logo and your address on request!

1. Unlocking



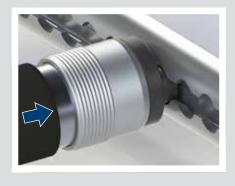
2. Inserting



3. Shifting



4. Locking



Design	Item No.	Telescoping range L1 – L2	Blocking force*)
Airline Beam 1855	221855-0800	800 – 950 mm	450 – 350 daN
Airline Beam 1855	221855-0900	900 – 1150 mm	350 – 300 daN
Airline Beam 1855	221855-1000	1000 – 1350 mm	350 – 250 daN
Airline Beam 1855	221855-1100	1100 – 1550 mm	300 – 200 daN
Airline Beam 1855	221855-1200	1200 – 1750 mm	300 – 200 daN
Airline Beam 1855	221855-1300	1300 – 1900 mm	300 – 150 daN
Airline Beam 1855	221855-1400	1400 – 2050 mm	300 – 150 daN
Airline Beam 1855	221855-1500	1500 – 2200 mm	300 – 150 daN
Airline Beam 1855	221855-1600	1600 – 2350 mm **)	300 – 150 daN
Airline Beam 1855	221855-1700	1700 – 2500 mm **)	300 – 100 daN
Airline Beam 1855	221855-1800	1800 – 2650 mm **)	300 – 100 daN
Airline Beam 1855	221855-1900	1900 – 2800 mm **)	300 – 100 daN

^{*)} Blocking force with even surface load depending on extension length

^{**)} In case of vertical application observe working height

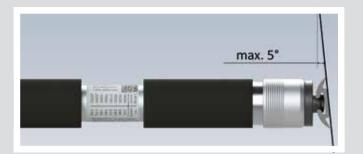
Product description

In connection with the parallel-running airline lashing track in the vehicle, the trailer or other means of transport, the AIRLINE BEAM ensures form-locking load securing.

The AIRLINE BEAM can be used horizontally and vertically for load securing.

The automatic airline pins on both sides each engage in one hole pair of the airline lashing track.

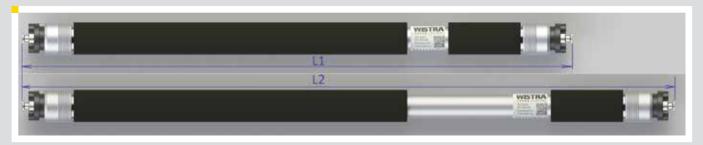




	Advantages					
	for the user	for the transport vehicle/the load	compared to similar products			
Suited for horizontal and vertical application	Х		Х			
Blocking forces BC between 450 daN and 150 daN in application ranges from 800 mm to 2300 mm, depending on design	Х	X	Х			
In connection with anti-slip materials, loads up to 2250 kg can be secured in driving direction with one AIRLINE BEAM.	Х	Х	Х			
Extensive technical documentation/operation manual	X		Х			
Smooth and continuous telescopic adjustment	Х		Х			
No bulging operating elements in the complete application area	Х	Х	Х			
Silent design with plastic slider and centring piece	Х		Х			
Supporting tube and hand piece with PVC coating for comfortable handling even in cold outside temperatures, as well as for protection of the load	Х	Х	Х			
The automatic airline pins on both sides each engage in a hole pair of the airline lashing track.	Х	Х	Х			
The automatic airline pins do not damage the material within the airline lashing track.	Х	Х	Х			
Insertion of the Airline Beam does not require simultaneous application of pressure in both directions.	Х	Х	Х			
The automatic airline pins cannot slide out because they lock into place when pressure is applied on the side wall.	Х	Х	Х			
Based on the locking in the airline lashing track, the system does not damage the transport vehicle.	X	X	X			
High-quality product label affixed in a protected spot on the telescopic tube near the hand piece	Х		Х			



Name	WIS item No.	Unit
Storage rail for two Airline Beams along the side	215110010	Set (= 2 pieces)



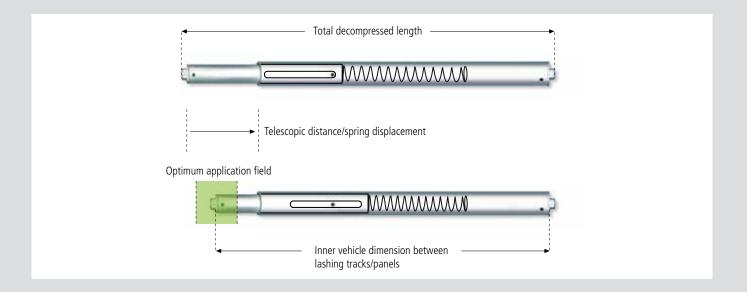
Telescoping range L1 – L2

WISTRA Airline Beam 1855 – blocking forces BC

	221855	221855	221855	221855	221855	221855	221855	221855	221855	221855	221855	221855
at	-800	-900	-1000	-1100	-1200	-1300	-1400	-1500	-1600	-1700	-1800	-1900
800 mm	450 daN											
850 mm	400 daN											
900 mm	350 daN	350 daN										
950 mm	350 daN	350 daN										
1000 mm		300 daN	350 daN									
1050 mm		300 daN	300 daN									
1100 mm		300 daN	300 daN	300 daN								
1150 mm		300 daN	300 daN	300 daN								
1200 mm			300 daN	300 daN	300 daN							
1300 mm			250 daN	250 daN	250 daN	300 daN						
1350 mm			250 daN	250 daN	250 daN	300 daN						
1400 mm				250 daN	250 daN	250 daN	300 daN					
1500 mm				200 daN	200 daN	250 daN	250 daN	300 daN				
1550 mm				200 daN	200 daN	200 daN	250 daN	300 daN				
1600 mm					200 daN	200 daN	200 daN	250 daN	300 daN			
1700 mm					200 daN	200 daN	200 daN	200 daN	250 daN	300 daN		
1750 mm					200 daN	200 daN	200 daN	200 daN	250 daN	300 daN		
1800 mm						150 daN	150 daN	200 daN	200 daN	250 daN	300 daN	
1900 mm						150 daN	150 daN	150 daN	200 daN	250 daN	250 daN	300 daN
1950 mm							150 daN	150 daN	150 daN	200 daN	250 daN	300 daN
2000 mm							150 daN	150 daN	150 daN	150 daN	200 daN	250 daN
2050 mm							150 daN	150 daN	150 daN	150 daN	200 daN	250 daN
2100 mm								150 daN	150 daN	150 daN	150 daN	200 daN
2200 mm								150 daN				
2250 mm									150 daN	150 daN	150 daN	150 daN
2300 mm									150 daN	150 daN	150 daN	150 daN
2350 mm									150 daN	100 daN	150 daN	150 daN
2400 mm										100 daN	100 daN	100 daN
2500 mm										100 daN	100 daN	100 daN
2550 mm											100 daN	100 daN
2650 mm											100 daN	100 daN
2800 mm												100 daN

The blocking forces apply with even surface load of the Airline Beam.

Selection aid for the right shoring beam



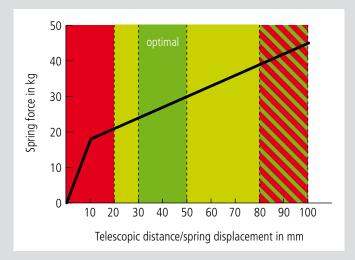
Recommendation

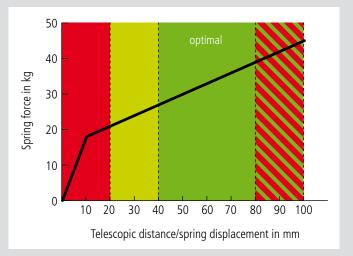
Application range: up to 2,000 mm inner dimension



Application range: as from 2,000 mm inner dimension



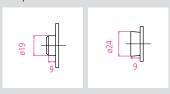




WISTRA standard aluminium power shoring beam 1850



End pin versions



Additional pin versions upon

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



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	2,400-2,480 mm
Aluminium shoring beam 185020 XX	22185020 XX 20	2,440-2,520 mm
Aluminium shoring beam 185025 XX	22185025 XX 20	2,500-2,580 mm

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 185080 XX-30	00 22185080 XX 20	

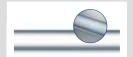
Options



PVC cover with property marking



Additional property markings



Needle embossing



Powder coated versions



Tracking-loop for telescopic

WISTRA standard aluminium power shoring beam ergo 1854



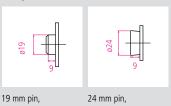


Ø 50 mm

End pin versions

cylindrical

Version: 09



conical

Version: 24

Additional pin versions upon request

Designation	Item No.			BC daN *)
Examples – application lengths according to customer specifications!	Version	Pin Version	Application length +/-25 mm	
Alu-Sperrbalken 1854	221854	09	-2000	700 daN
Alu-Sperrbalken 1854	221854	24	-2500	700 daN

^{*)} Blocking force with even surface load

WISTRA standard shoring beams

conical

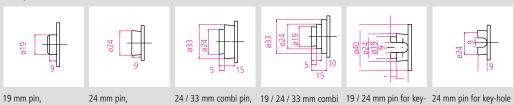
Version: 43



End pin versions

cylindrical

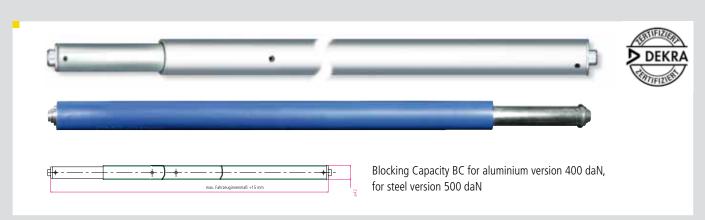
Version: 09



pin, conical

Version: 44

Additional pin versions upon request.



hole track, cylindrical

Version: 45

track, conical

Version: 49

Version of rod lashing tracks is deviant

conical

Version: 24

Standard version	Item No.	For vehicle internal dimension
	XX for pin version	
Aluminium shoring beam 1813 XX	22181300 XX 20	2,000-2,080 mm
Steel shoring beam 1813 XX	22181300 XX 12	2,000-2,080 mm
Aluminium shoring beam 1818 XX	22181800 XX 20	2,400-2,480 mm
Steel shoring beam 1818 XX	22181800 XX 12	2,400-2,480 mm
Aluminium shoring beam 1817 XX	22181700 XX 20	2,440-2,520 mm
Steel shoring beam 1817 XX	22181700 XX 12	2,440-2,520 mm
Aluminium shoring beam 1819 XX	22181900 XX 20	2,500-2,580 mm
Steel shoring beam 1819 XX	22181900 XX 12	2,500-2,580 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	2,000-2,080 mm
Steel shoring beam 1813 XX PVC	22181300 XX 12Ü	2,000-2,080 mm
Aluminium shoring beam 1818 XX PVC	22181800 XX 20Ü	2,400-2,480 mm
Steel shoring beam 1818 XX PVC	22181800 XX 12Ü	2,400-2,480 mm
Aluminium shoring beam 1817 XX PVC	22181700 XX 20Ü	2,440-2,520 mm
Steel shoring beam 1817 XX PVC	22181700 XX 12Ü	2,440-2,520 mm
Aluminium shoring beam 1819 XX PVC	22181900 XX 20Ü	2,500-2,580 mm
Steel shoring beam 1819 XX PVC	22181900 XX 12Ü	2,500-2,580 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



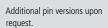
24 / 33 mm combi pin, 19 / 24 / 33 mm combi pin, conical Version: 44

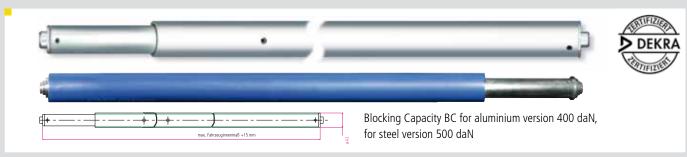


hole track, cylindrical Version: 45



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	on 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. 2,380 mm carrier	221899 XX 20-2380
Steel shoring beam 1899 XX-max. 2,380 mm carrier	221899 XX 12-2380
Aluminium shoring beam 1899 XX-max. 3,000 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
Aluminium shoring beam 1899 XX-max. 2,380 mm carrier PV
Steel shoring beam 1899 XX-max. 2,380 mm carrier PVC
Aluminium shoring beam 1899 XX-max. 3,000 mm carrier PV

Steel shoring beam 1899 XX-max. 3,000 mm carrier PVC

Item No. XX for pin version /C **221899** XX **20Ü-2380** 221899 XX 12Ü-2380 C See version 1850 - on 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

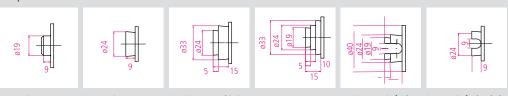


Tracking-loop for telescopic tube

WISTRA shoring beams with special lengths for transporter



End pin versions



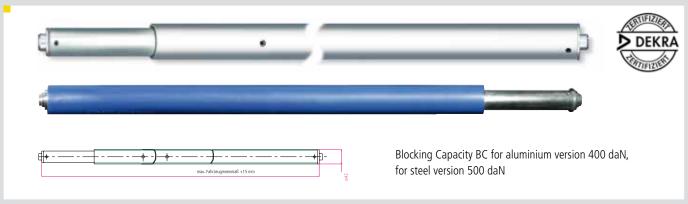
19 mm pin, cylindrical Version: 09 24 mm pin, conical Version: 24 $24\ /\ 33\ mm$ combi pin, $\ \ 19\ /\ 24\ /\ 33\ mm$ combi conical Version: 43

pin, conical Version: 44

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 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	
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 - Lashing track panel version
	XX for pin version	- free inside dimension between the tracks
Aluminium shoring beam 1888 XX-max. 2380 mm carrier PVC	221888 XX 20Ü	
1888 XX-max. 2380 mm carrier PVC	221888 XX 12Ü	

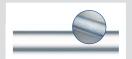
Options



PVC cover with property marking



Additional property markings



Needle embossing



Powder coated versions

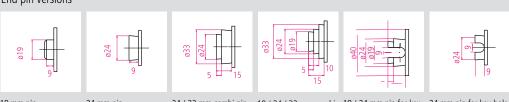


Tracking-loop for telescopic tube

WISTRA standard shoring beams, adjustable



End pin versions



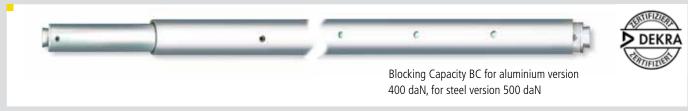
19 mm pin, cylindrical Version: 09 24 mm pin, conical Version: 24

conical Version: 43 pin, conical Version: 44

 $24\ /\ 33\ mm$ combi pin, $\ \ 19\ /\ 24\ /\ 33\ mm$ combi hole track, cylindrical Version: 45

19 / 24 mm pin 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	Item No.	For vehicle internal dimension
	XX for pin version	
Aluminium shoring beamn 1808 XX	22180800 XX 20	2,220 – 2,650 mm
Steel shoring beam 1811 XX	22181100 XX 12	2,220 – 2,650 mm
Standard versions with PVC cover	Item No.	For vehicle internal dimension
	XX for pin version	
Aluminium shoring beam 1808 XX PVC	22180800 XX 20Ü	2,220 – 2,650 mm
Steel shoring beam 1811 XX PVC	22181100 XX 12Ü	2,220 – 2,650 mm

WISTRA shoring beams, adjustable with special lengths





End pin versions



19 mm pin, cylindrical Version: 09



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









Blocking Capacity BC for aluminium version 400 daN, for steel version 500 daN to free inside dimension 2,650 mm

Customer-specific version	Item No.	Maximum expanded length
	XX for pin version	
Aluminium shoring beam 180899 XX	22180899 XX 20	up to vehicle internal dimension max. 2,650 mm
Aluminium shoring beam 180899 XX-3000	on request	for longer versions
Steel shoring beam 181199 XX	22181199 XX 12	up to vehicle internal dimension max. 2,650 mm
Steel shoring beam 181199 XX-3000	on request	for longer versions

Please include the following data with your order

- Lashing track panel version
- free inside dimension between 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. 2,650 mm
Aluminium shoring beam 180899 XX-3000	on request	for longer versions
Steel shoring beam 181199 XX PVC	22181199 XX 12Ü	up to vehicle internal dimension max. 2,650 mm
Steel shoring beam 181199 XX-3000 PVC	on 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



Tracking-loop for telescopic

conical

Version: 24

WISTRA standard square shoring beams

conical

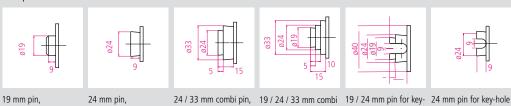
Version: 43



End pin versions

cylindrical

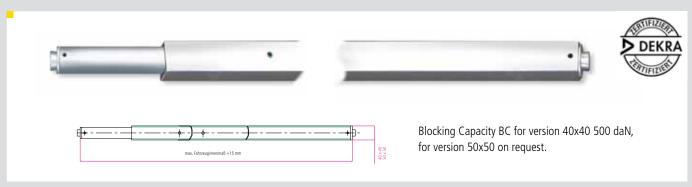
Version: 09



pin, conical

Version: 44

Additional pin versions upon request.



hole track, cylindrical

Version: 45

track, conical

Version: 49

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	2,400-2,480 mm
Steel shoring beam 1827 XX	22182700 XX 12	2,440-2,520 mm
Steel shoring beam 1829 XX	22182900 XX 12	2,500-2,580 mm

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

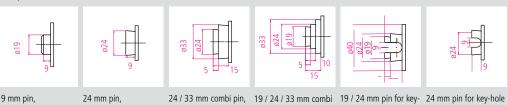
Please include the following data with your order

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

WISTRA standard square shoring beams, adjustable



End pin versions



Additional pin versions upon request.





24 / 33 mm combi pin, 19 / 24 / 33 mm combi conical pin, conical Version: 43 Version: 44



track, conical Version: 49



Block	rina	Car	acity	RC	500	daN
DIOCI	VIII I G	Cup	Jucity	\mathcal{L}	500	uui

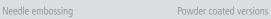
Standard version 40x40 mm	Item No. XX for pin version	For vehicle internal dimension
Steel shoring beam 1812 XX	22181200 XX 12	2,220 – 2,650 mm

hole track, cylindrical

Version: 45

Options







Tracking-loop for telescopic tube

Customer-specialised versions on 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	on request
WISTRA shoring beam system Power Stop, guided by rolls Material profile aluminium	Pieces	on request
Lashing tracks 3004 flat pieces	Pieces	on request
Lashing tracks 3004 50 U-profile	Pieces	on 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

WISTRA shoring beam system lock

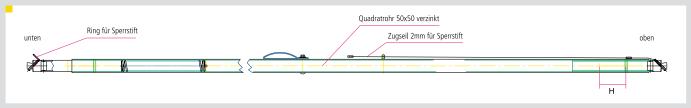


WISTRA shoring beam lock is a form-fit system with pin latching in the lashing tracks.

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	on request
Lashing tracks 3004 flat	Pieces	on request
Lashing tracks 3004 U-profile	Pieces	on 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.

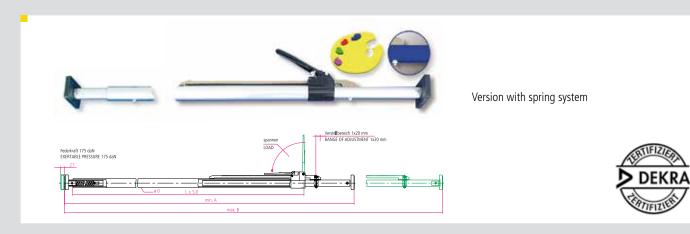
Advantages:

- 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	on request
Lashing tracks 3004 53 flat	Pieces	on request
Lashing tracks 3004 53 U-profile	Pieces	on request

Cargo bar

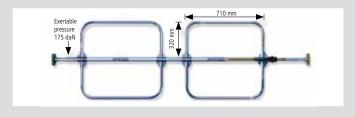
WISTRA aluminium cargo bar



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	2,500 - 2,870 mm	4.8 kg	
Cargo bar 1845	221845010020TW	2,650 - 3,020 mm	4.9 kg	

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



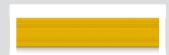
Spares	Item No.
Housing with tensioner and toothed rack for version 38 mm	221867991000
for version 42 mm	221867991000TW
Rubber pad for version 38 mm	221867990400
Rubber pad for version 42 mm	221867990300



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

Options

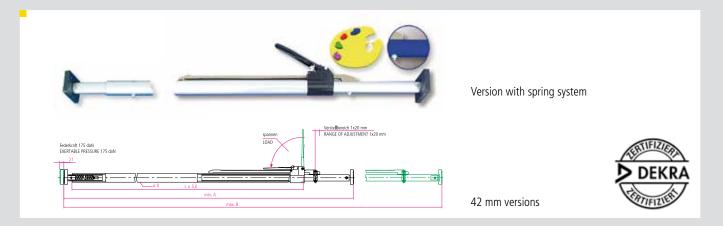




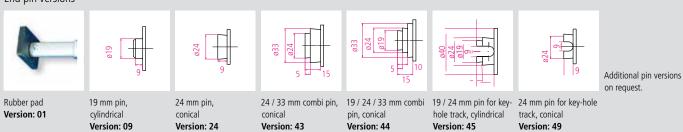
Needle embossing

Powder coated versions

WISTRA aluminium cargo bar



End pin versions



When ordering, please note the positions of the end pins: the first one is on the spring side/the second one on the telescope side!

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	2,260 - 2,630 mm	4.2 kg	up to 150 daN
Cargo bar 1867 pin XX/pin XX	221867 XX XX 20		4.2 kg	

Standard versions 42 mm	Item No.	Application range	Weight	Blocking capacity *)
Cargo bar 1842 rubber pad/pin XX	22184201 XX 20		4.6 kg	
Cargo bar 1842 pin XX/rubber pad	221842 XX 0120	2,100 – 2,470 mm	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	2,350 – 2,720 mm	4.7 kg	up to 150 daN
Cargo bar 1843 pin XX/rubber pad	221843 XX 0120		4.7 kg	
Cargo bar 1843 pin XX/pin XX	221843 XX XX 20		4.7 kg	
Cargo bar 1844 rubber pad/pin XX	22184401 XX 20		4.8 kg	
Cargo bar 1844 pin XX/rubber pad	221844 XX 0120	2,500 – 2,870 mm	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		4.9 kg	
Cargo bar 1845 pin XX/rubber pad	221845 XX 0120	2,650 – 3,020 mm	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

Weight

6.6 kg

Application range

2,300 - 2,900 mm

WISTRA steel cargo bar

Version

Cargo bar 1938



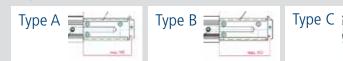
Item No.

221938010012

Decking beam

WISTRA aluminium decking beam 1839 HQ

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 other side complete extension possible the end pieces possible on both ends

On one side end piece fixed, on the with longitudinal latching

for key hole: Complete extension of

for Talfix system: Complete extension of the end pieces possible on both



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	2,370-2,590 mm	1,100/1,300 daN
Decking beam 1839 Type AT	22183940-2250	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	2,470 - 2,690 mm	1,100/1,300 daN
Decking beam 1839 Type AT	22183940-2350	2,410 - 2,630 mm	1,100/1,300 daN

^{*)} Blocking capacity/bearing capacity for constant surface loading to 2,500 mm application range

Decking beam Type A, B, C suitable for:

Decking beam Type AS suitable for:

Decking beam Type AT suitable for:











further options

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

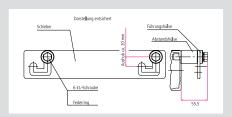
Item No. 22183905

WISTRA aluminium decking beam 1839 HQ with palette

Palette for decking beams and sliding decking beams

Double storey loading systems allow loading of palettes on the 2^{nd} 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	2,370-2,590 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 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
 2,470 - 2,690 mm
 1,300/1,000 daN

Palette is also available for Type A and Type AT.

Options for the shown shoring beams







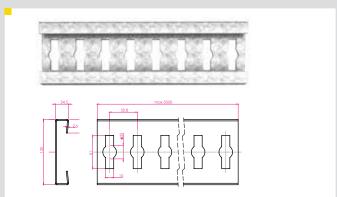
Engraving Needle embossing

Powder coated versions

^{*)} Blocking capacity/bearing capacity for constant surface loading to 2,500 mm application range

Longitudinal Bars

Longitudinal Bars



Item No. 22 6030 09 XXXX

Application: together with clamp keeper

Material: steel, zinc plated

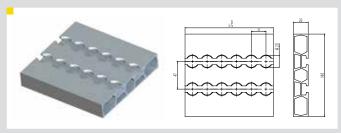
Length:

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

securing and lashings with end-fitting 826 and 822 3,500 mm or when placing the order please indicate the

required length (XXXX)

Longitudinal Bars



Item No. 22 2104 00 XXXX

Application: together with clamp keeper

Material: Aluminium

Suitability: as longitudinal bar/DDS-CS plank for inserting airline

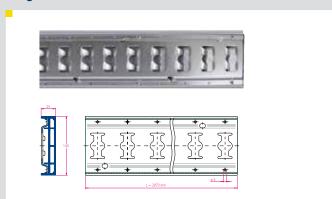
beams, shoring beams and lashing belts with airline end

fittings

Length: 3,500 mm or shorter according to individual specifications

possible (XXXX)

Longitudinal Bars



Item No. 22 4030 09 XXXX

Length:

Application: together with clamp keeper

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

zinc plated — other lashing tracks as option

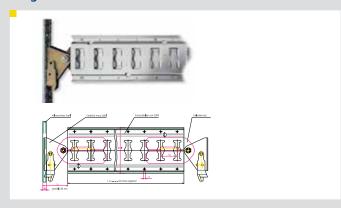
Suitability: longitudinal tracks with decking beams for form-fit load

securing and lashings with end-fitting 826 and 822

when placing the order please indicate the required length

(XXXX)

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

Length: when placing the order please indicate the required length

and the internal dimension between beads (XXXX)

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
Protective cap end piece	237459900140

WISTRA Aluminium parting wall lock 7453



Version	Item No.	Application range	Weight	Blocking capacity *)
parting wall lock	237453000020	2,400-2,700 mm	7.7 kg	400 daN

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

Options



Needle embossing

WISTRA parting wall lock with pressure part and BoardClamp



Example in combination with WISTRA parting wall lock 7452

By combining the parting wall lock, the pressure part and the BoardClamp lashing strap, the blocking force increases by up to 100%, depending on the structural strength.

Designation	Unit of quantity	Item No.
Deflector unit for parting wall lock	Pieces	160080000012

WISTRA steel parting wall lock

Parting wall lock \$4



Version	Item No.	Application range	Weight
Square parting wall lock S4	237430000012	1,920-2,720 mm	7.5 kg

Options



Needle embossing

WISTRA parting wall options

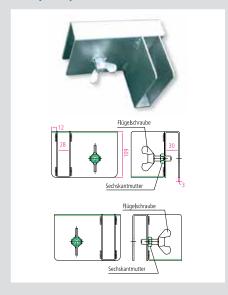
Parting wall lock WTV



- · Clamping range (Endstück 140000060200) 25-30 mm
- · Lashing capacity LC bis 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)
- · Stretch <= 7%

Designation	Unit of quantity	Item No.
WTV 1000 0,5+3,0 green	Pieces	237552010
WTV 1000 0,5+3,5 green	Pieces	237552011
WTV 1000 0,5+4,5 green	Pieces	237552012
WTV 1000 0,5+5,5 green	Pieces	237552013
WTV 1000 0,5+6,5 green	Pieces	237552014
WTV 1000 0,5+7,5 green	Pieces	237552015

Clamp keepers



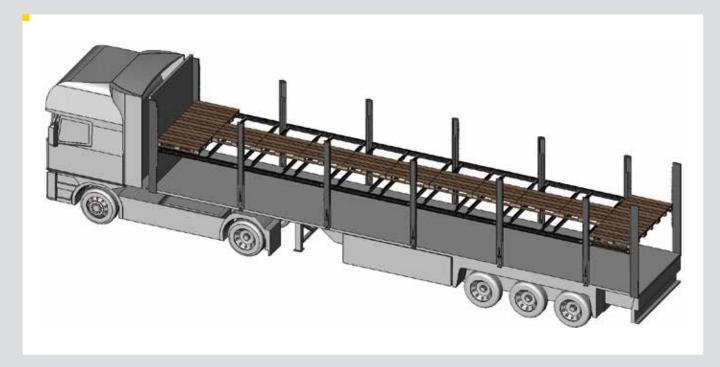
Steel, galvanised

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

Double-Decking-System for curtain-sider with 5 pairs of pillars

System components for 13.62m standard semi-trailer (other dimensions on request):

Designation	Standard length	Item No.	Max. load	Quantity
Longitudinal bar	2,220 mm	22 8000 97 01 15	1,500 daN	10
Longitudinal bar	1,070 mm	22 8000 97 02 15	1,500 daN	2
Carrier bar	2,220 mm - 2,510 mm	22 8000 87 00 20	1,000 daN	22



Description:

- Optimum use of the loading space by creating 33 Europallet storage positions on the 2nd loading level. Cargo with different heights can be effortlessly loaded.
- · Easy, intuitive operation
- · Variable in height in 50 mm grids
- Unused carrier bars are parked between the pillars.
- Longitudinal latching of the carrier bars for stabilizing the vehicle body
- The placement surface for the pallets is approx.
 15 mm below the top edge of the longitudinal bar and therefore serves as pallet stop. Pallets cannot slide into the tarpaulin.

- Form-closed load securing possible, also with axle load-optimised partial loading with additional carrier or longitudinal bars.
- The maximum strain on the form closure with even strain is 500 daN. The prerequisite is sufficient structural strength (Code XL certificate with standard semi-trailers)
- Total load-bearing capacity of the 2nd loading level is generally 10,000 kg to 11,000 kg (depending on the specifications of the trailer manufacturer)
- · Maximum pallet weight: 500 kg
- · Additional diagonal lashing is possible
- DDS-CS plank pockets can be installed in the double-decking pillars and adjusted in height

Note: The maximum strain on the 2nd loading level is specified by the semi-trailer or vehicle manufacturer.

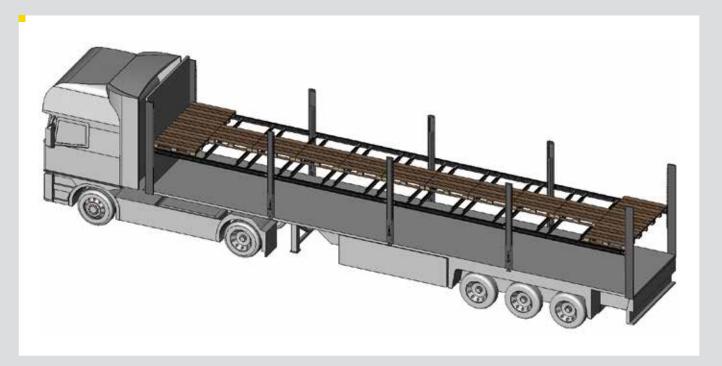
A retrospective installation that has not been approved by the manufacturer may lead to the withdrawal of the XL certificate and/or factory warranty.



Scan in QR code and watch video.

Double-Decking-System "light" for curtain-sider with 3 pairs of pillars in standard position

Designation	Special length	Item No.	Max. load	Quantity
Longitudinal bar	3,120 mm	22 8000 97 07 15	1.150 daN	8
Carrier bar	2,220 mm - 2,510 mm	22 8000 87 00 20	1.000 daN	22



Basic functionality as with the variant with 5 pairs of stanchions with the following deviations:

- The structure retains the serial triple pillars positions. With the corresponding approval of the trailer manufacturer, it is therefore very easy to retrofit the system with doubledecking pillars.
- Maximum load-bearing capacity on the top/ second loading level: approximately 6,000 kg (depending on the approval of the trailer manufacturer.
- Maximum pallet weight on the top/second loading level: approximately 275 kg
- Storage of unused carrier bars in the pallet storage box



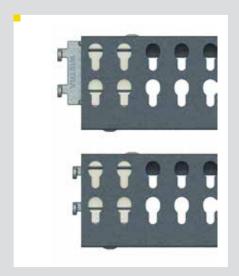
Scan in QR code and watch video.

Application range and special lengths

Longitudinal steel beams with keyhole:

Profile length = $2,200 \text{ mm} \rightarrow \text{Application range from } 2,225 \text{ mm} \dots 2,240 \text{ mm}$

1,070 mm \rightarrow Application range from 1.095 mm ... 1,110 mm 3.120 mm \rightarrow Application range from 3,145 mm ... 3,160 mm





Aluminium carrier bars with extensions on both sides and length limiter:

Profile length = $2,000 \text{ mm} \rightarrow \text{Application range from } 2,220 \text{ mm} \dots 2,510 \text{ mm}$



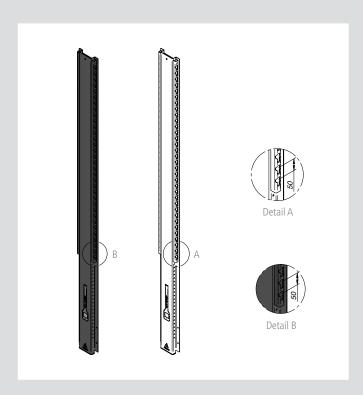


Bow base support for Double-Decking-System curtain-sider



Designation	Unit of quantity	Weight	Item No.
Bow base support for Double-Decking- system curtain-sider	Pieces	0.34 kg	228010001

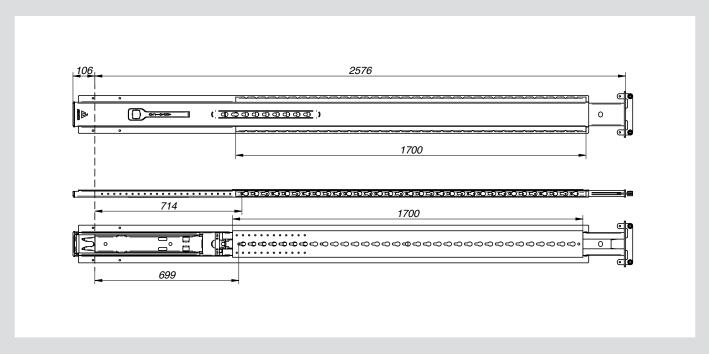
ADAICO vehicle construction components



WIS Item No. 228010002ADAICO sliding pillar with vertical and internal keyhole recesses, 2,587 to 2,987 mm, cathodic dip-coated, black

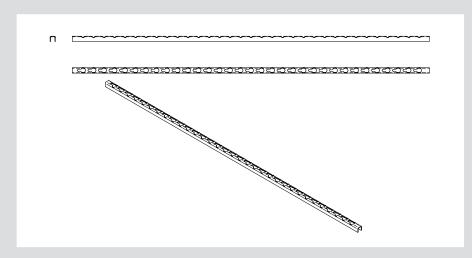


WIS Item No. 228010003ADAICO pillar extension kit with trolley, with cathodic dip coating, black



WIS Item No. 228010002

(drawing with 228010003)



WIS Item No. 228010004

ADAICO keyhole U-profile for front and rear portal for welding on, black



WIS-Artikelnr. 228010006

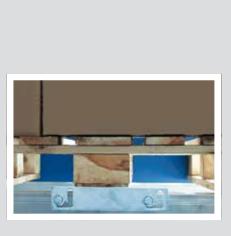
ADAICO pillar chassis hook for welding, 88 mm, black

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.



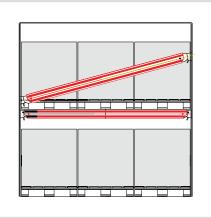
WISTRA double storey systems are manufactured in different versions and can be attached at variable heights.

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.

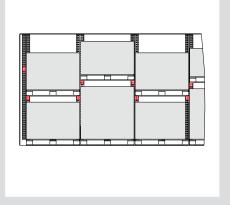
A palette is easily pushed over the profile edge, so that the palette is secured by form-fit in the longitudinal direction.





Rear view:

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



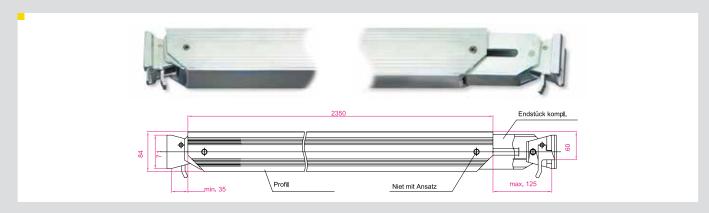
Side view:

Use of sliding decking beams as double storey system

WISTRA sliding decking beams

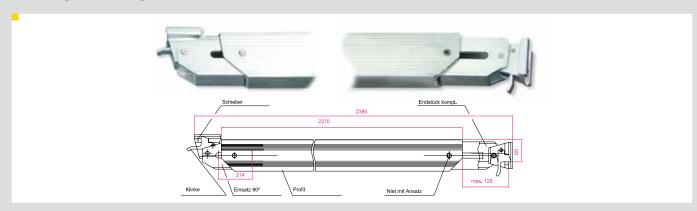
Sliding decking beam 7007 (Guiding tracks 7002, 7003 + 7103 – 50 mm track width)

Sliding decking beam 7008 (Guiding tracks – 68 mm track width)



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 pallet securing	227007000020-3	2,450- approx. 2,530 mm	10.7 kg	1,000 daN / 1,000 daN
Sliding decking beam 7008	227008000020	2,450- approx. 2,530 mm	7.7 kg	1,000 daN / 1,000 daN
Sliding decking beam 7008 with 3-fold pallet securing	227008000020-3	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 pallet 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

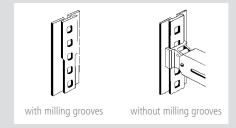
WISTRA guiding tracks for sliding decking beams 7007, 7907

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.

Track width: 50 mm



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



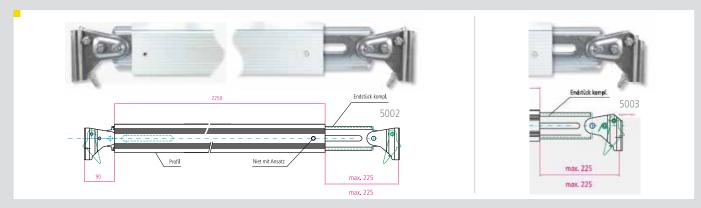
Designation	Weight	length	Item No.
Single steel guiding track without milling groove, primed	4.7 kg	2,500 mm	227003010015
Single steel guiding track with milling groove, primed	4.7 kg	2,500 mm	227103010015

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 pallet 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 pallet securing	225003000012-3	2,450- approx. 2,530 mm	13.9 kg	1,000 daN / 1,000 daN

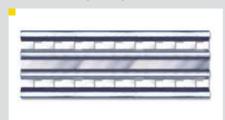
^{*)} Blocking capacity / carrying capacity for constant surface loading

Single steel guiding track 7004



Designation	Weight	length	Item No.
Single steel guiding track without milling groove, primed	6.3 kg	2,480 mm	on request
Single steel guiding track without milling groove, steel galvanised	6.3 kg	2,480 mm	on 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	on request
Tandem steel guiding track without milling groove, steel galvanised	13.0 kg	2,480 mm	on request

Options











Engraving

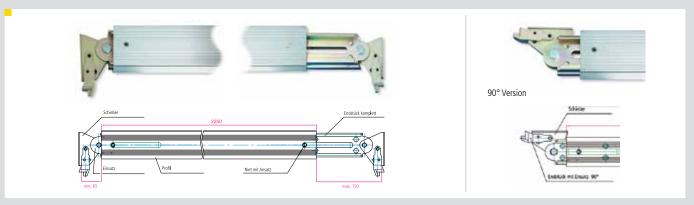
Needle embossing

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 pallet 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 pallet 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











Engraving

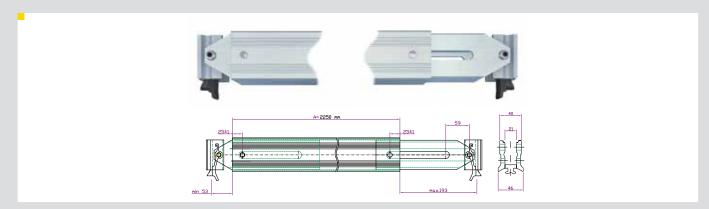
Needle embossing

Powder coated versions

PL3

Unlocking bar

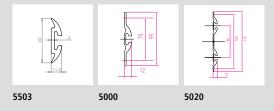
Sliding decking beam 7104



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 pallet 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 pallet 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

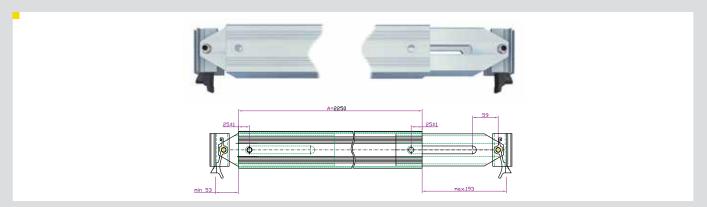
Needle embossing

Powder coated versions

PL3

Unlocking bar

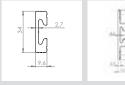
Sliding decking beam 7105



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 pallet 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 pallet 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





5504

5501

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 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.

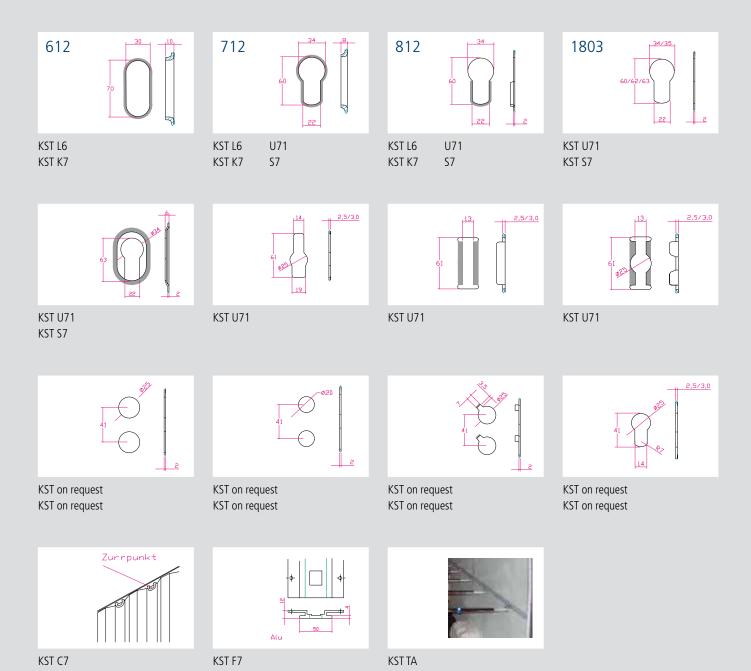
Assembly in the standard version

- Chrome plated stay pipe length 2,370 mm other dimensions on request
- Aluminium fixing axle black powder coated – 15x15 mm other dimensions on request
- · 2 pieces Velcro strip other quantities on 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



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.

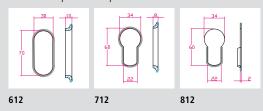
Garment rail K7



- · 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	5.3 kg	400 kg
Garment rail K7 in special length - stay pipe shorter than 2,370 mm	on request	according to specification		400 kg
Garment rail K7 in special length - stay pipe longer than 2,370 mm	on request	according to specification		**)

Suitable for perforated plate forms



^{*)} Carrying capacity for constant loading

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

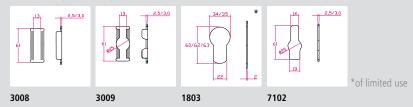
D) The following data must be provided by the customer: free dimension(s) between lashing tracks

Garment rail U71



Version	Item No.	Application range	Weight	Carrying capacity *)
Garment rail U71	267382137017	2,420 - 2,500 mm	5.5 kg	400 kg
Garment rail U71 in special length – stay pipe shorter than 2370 mm	on request	According to specification D)		400 kg
Garment rail U71 in special length – stay pipe longer than 2370 mm	on request	According to specification D)		**)

Suitable for perforated plate forms



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

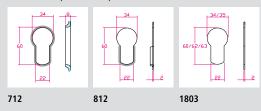
Garment rail S7



- 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	5.9 kg	400 kg
Garment rail S7 - pressure spring function	267290337017	2,420 - 2,500 mm	5.9 kg	400 kg
Garment rail S7 - without spring function in special length - stay pipe shorter than 2,370 mm	on request	According to specification D)		400 kg
Garment rail S7 - pressure spring function in special length - stay pipe shorter than 2,370 mm	on request	According to specification D)		400 kg
Garment rail S7 - without spring function in special length - stay pipe longer than 2,370 mm	on request	According to specification D)		**)
Garment rail S7 - pressure spring function in special length - stay pipe longer than 2,370 mm	on request	According to specification D)		**)

Suitable for perforated plate forms

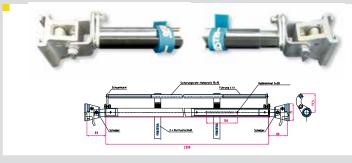


Other combination options available on request.

^{*)} 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	on request	According to specification D)		400 kg
Garment rail F7 in special length - stay pipe longer than 2,300 mm	on request	According to specification D)		**)

Suitable for perforated plate form



7002

Options







Velcro strip options

Needle embossing

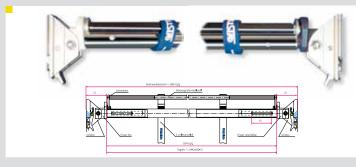
Fixing axle with spiral hose

^{*)} 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



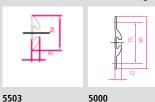
- · Aluminium end piece
- · Stay pipe chrome plated 2,300 mm
- · Without spring function

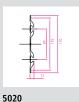
Version for half-round airline lashing tracks	Item No.	Application range	Weight	Carrying capacity *)
Garment rail A6H	268710037017	2,460 - 2,500 mm	7.4 kg	400 kg
Garment rail A6H in special length - stay pipe shorter than 2,300 mm	on request	According to s pecification D)		400 kg
Garment rail A6H in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

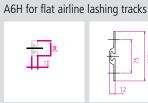
Version for flat airline lashing tracks	Item No.	Application range	Weight	Carrying capacity *)
Garment rail A6FL	268720037017	2,460 - 2,510 mm	7.4 kg	400 kg
Garment rail A6FL in special length - stay pipe shorter than 2,300 mm	on request	According to specification D)		400 kg
Garment rail A6FL in special length - stay pipe longer than 2,300 mm	on request	According to specification D)		**)

Suitable for

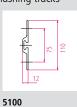
A6H for half-round airline lashing tracks



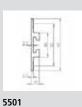




5504







Other combination options available on 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	on request	According to specification D)		**)

TA for lashing tracks in connection with End-fitting



EB 380

Options







Velcro strip options

Needle embossing

Fixing axle with spiral hose

Other combination options available on 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	on request	According to specification D)		400 kg
Garment rail C7 CONSTAR in special length stay pipe longer than 2,370 mm	on request	According to specification D)		**)
CONSTAR level strap with D rings	on request			-
CONSTAR level strap	on 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