



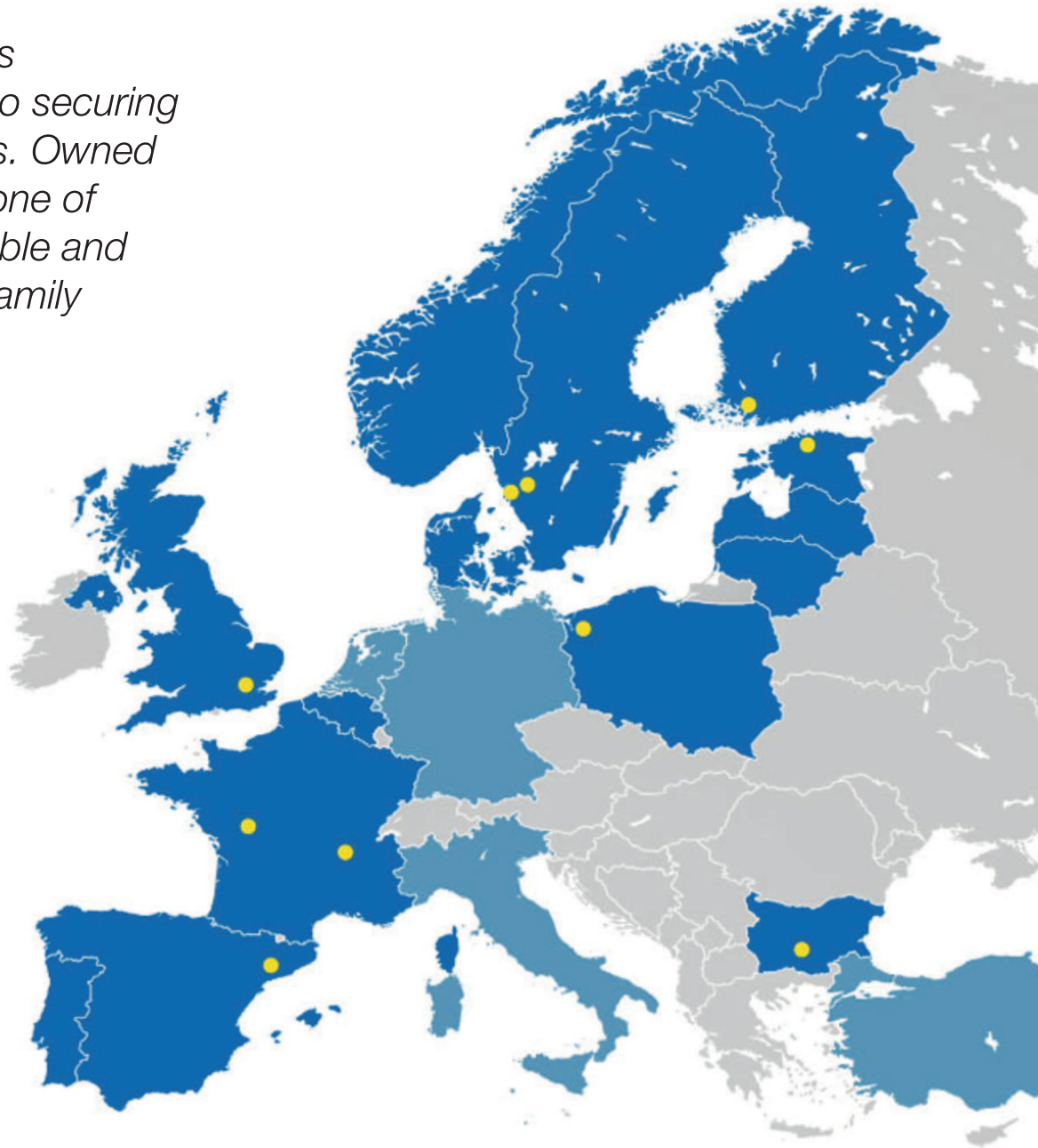
forankra



LIFTING, LASHING AND MATERIAL HANDLING PRODUCTS FOR PROFESSIONALS

www.forankra.pl

*More than 40 years
experience of cargo securing
and lifting solutions. Owned
by Axel Johnson, one of
Swedens most stable and
long term owned family
groups.*



FORANKRA GROUP

Forankra offers products and customized solutions in cargo securing, lifting and cargo optimization through the whole logistic chain from straps and lashings to technically advanced cargo securing systems for road, air and sea transports.

Forankra delivers to countries in whole Europe and has subsidiaries like Forankra Pol also in Sweden, Finland, Spain, France, Bulgaria and GB.

With research and development (R&D) as well as certified production capabilities in Europe we can assure both customized solutions and fast deliveries.



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Product Groups

- 1 Webbing Slings and Roundslings
- 2 Lifting Chains, Components and Steel Wire Rope Slings
- 3 Chain Hoists, Wire Rope Hoists, Lever Hoists and Trolleys
- 4 Lifting Clamps
- 5 Packing Equipment
- 6 Jacks
- 7 Drum Handling Equipment, Crane Beams, Crane Scales And Forklift Accessories
- 8 Winches
- 9 Lifting Points
- 10 Shackles, Swivels and Snatch Blocks
- 11 Lashing Systems. Truck Body Building Equipment and Accessories
- 12 Corner Protectors
- 13 Steel Wire Ropes, Components, Shackles, Swivels, Pulleys etc.

1. Webbing slings and roundslings

Eye webbing slings

Webbing sling endless

Extra-wide webbing slings

Roundslings

Roundslings with self-locking hooks



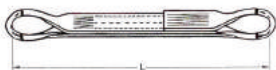
EYE WEBBING SLINGS DUPLEX 500 - 30000 KG

- double layer Duplex webbing slings
- folded reinforced eyes as standard
- also available with flat eye
- material 100% polyester
- safety factor 7: 1
- color coded
- EN 1492



| WLL Color Sling width | 500 KG | Package size | 1000 KG | Package size | 2000 KG | Package size | 3000 KG | Package size |
|-----------------------------|----------------|-----------------|-----------------|-----------------|----------------|-----------------|-----------------|-----------------|
| | white 25 mm | | violet 50 mm | | green 60 mm | | yellow 90 mm | |
| 1 m | SNV0501 | 100 | SNV101 | 40 | SNV201 | 24 | SNV301 | 15 |
| 2 m | SNV0502 | 50 | SNV102 | 30 | SNV202 | 20 | SNV302 | 14 |
| 3 m | SNV0503 | 40 | SNV103 | 24 | SNV203 | 16 | SNV303 | 11 |
| 4 m | SNV0504 | 35 | SNV104 | 20 | SNV204 | 12 | SNV304 | 9 |
| 5 m | SNV0505 | 25 | SNV105 | 18 | SNV205 | 12 | SNV305 | 8 |
| 6 m | SNV0506 | - | SNV106 | 15 | SNV206 | 10 | SNV306 | 7 |
| 8 m | SNV0508 | - | SNV108 | 15 | SNV208 | 8 | SNV308 | 5 |
| 10 m | SNV0510 | - | SNV110 | 10 | SNV210 | 6 | SNV310 | 4 |

| WLL Color Sling width | 4000 KG | Package size | 5000 KG | Package size | 6000 KG | Package size | 8000 KG | 10000 KG | 12000 KG |
|-----------------------------|---------------|-----------------|---------------|-----------------|-----------------|-----------------|----------------|------------------|------------------|
| | grey 120mm | | red 150 mm | | brown 180 mm | | blue 240 mm | orange 300 mm | orange 300 mm |
| 1 m | SNV401 | - | - | - | - | - | - | - | - |
| 2 m | SNV402 | 8 | SNV502 | 6 | SNV602 | 5 | SNV802 | SNV1002 | - |
| 3 m | SNV403 | 7 | SNV503 | 5 | SNV603 | 4 | SNV803 | SNV1003 | - |
| 4 m | SNV404 | 5 | SNV504 | 4 | SNV604 | 3 | SNV804 | SNV1004 | SNV1204 |
| 5 m | SNV405 | 4 | SNV505 | 3 | SNV605 | 2 | SNV805 | SNV1005 | SNV1205 |
| 6 m | SNV406 | 4 | SNV506 | 3 | SNV606 | 2 | SNV806 | SNV1006 | SNV1206 |
| 8 m | SNV408 | 3 | SNV508 | 2 | SNV608 | 2 | SNV808 | SNV1008 | SNV1208 |
| 10 m | SNV410 | 2 | SNV510 | 2 | SNV610 | 1 | SNV810 | SNV1010 | SNV1210 |



Last number(s) is/are the length code.
When ordering, for example, an eye webbing sling 3000 kg, length 12m, the product code is SNV312

Note! Standard dimensional tolerance is $\pm 3\%$. Lengths can vary within the tolerance range.

Thanks to our own production unit, we can also make quick deliveries of special types and lengths as well as lifting slings with higher WLL up to 30t.

See Corner Protectors in Product group 12, and web sling hooks on page 2-5.

WEBBING SLINGS ENDLESS 500 - 10000 KG

- single-layer endless webbing slings are also available with a double layer, which doubles the workload capacity for the same sling width
- material 100 % polyester
- safety factor 7 : 1
- color coded
- EN 1492



| WLL Color Sling width | 500 KG white 25 mm | Package size | 1000 KG violet 50 mm | Package size | 2000 KG green 60 mm |
|-----------------------------|--------------------------|--------------|----------------------------|--------------|---------------------------|
| 1 m | UNV0501 | 250 | UNV101 | 100 | UNV201 |
| 1,5 m | UNV0501.5 | 300 | - | - | - |
| 2 m | UNV0502 | 250 | UNV102 | - | UNV202 |
| 3 m | UNV0503 | 160 | UNV103 | 80 | UNV203 |
| 4 m | UNV0504 | 100 | UNV104 | 60 | UNV204 |
| 5 m | UNV0505 | - | UNV105 | - | UNV205 |
| 6 m | UNV0506 | - | UNV106 | - | UNV206 |
| 8 m | UNV0508 | - | UNV108 | - | UNV208 |
| 10 m | UNV0510 | - | UNV110 | - | UNV210 |

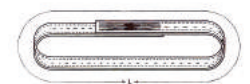
| WLL Color Sling width | 3000 KG yellow 90 mm | 4000 KG grey 120 mm | 5000 KG red 150 mm | 6000 KG brown 180 mm | 8000 KG blue 240 mm | 10000 KG orange 300 mm |
|-----------------------------|----------------------------|---------------------------|--------------------------|----------------------------|---------------------------|------------------------------|
| 1 m | UNV301 | - | - | - | - | - |
| 2 m | UNV302 | UNV402 | UNV502 | UNV602 | UNV802 | UNV1002 |
| 3 m | UNV303 | UNV403 | UNV503 | UNV603 | UNV803 | UNV1003 |
| 4 m | UNV304 | UNV404 | UNV504 | UNV604 | UNV804 | UNV1004 |
| 5 m | UNV305 | UNV405 | UNV505 | UNV605 | UNV805 | UNV1005 |
| 6 m | UNV306 | UNV406 | UNV506 | UNV606 | UNV806 | UNV1006 |
| 8 m | UNV308 | UNV408 | UNV508 | UNV608 | UNV808 | UNV1008 |
| 10 m | UNV310 | UNV410 | UNV510 | UNV610 | UNV810 | UNV1010 |

Note! Standard dimensional tolerance is $\pm 3\%$. Lengths can vary within the tolerance range.

Thanks to our own production unit, we can also make quick deliveries of special types and lengths as well as lifting slings with higher WLL.

Last number(s) is/are the length code. When ordering, for example, an eye webbing sling 3000 kg, circumference 12m, the product code is UNV312

See Corner Protectors in Product group 12.



Note! circumference length

A broad range of single use endless webbing slings straight from the warehouse with quick delivery.

- Safety factor 4 : 1
- Ask more from our Sales



EYE WEBBING SLINGS SECUTEX 1000 - 10000 KG

- double layer Duplex lifting slings,
- which are covered with special plastic
- extreme cut and abrasion resistance
- these slings can be used to lift sharp-edged items without special corner protectors
- also available with one-sided and partial plastic coating
- material 100 % polyester
- safety factor 7 : 1
- EN 1492



| WLL Color Sling width | 2000 KG green 80 mm | 3000 KG yellow 100 mm | 4000 KG grey 130 mm |
|-----------------------------|---------------------------|-----------------------------|---------------------------|
| 1 m | SNVS201 | SNVS301 | SNVS401 |
| 2 m | SNVS202 | SNVS302 | SNVS402 |
| 3 m | SNVS203 | SNVS303 | SNVS403 |
| 4 m | SNVS204 | SNVS304 | SNVS404 |
| 5 m | SNVS205 | SNVS305 | SNVS405 |
| 6 m | SNVS206 | SNVS306 | SNVS406 |
| 8 m | SNVS208 | SNVS308 | SNVS408 |
| 10 m | SNVS210 | SNVS310 | SNVS410 |

Note! Standard dimensional tolerance is $\pm 3\%$. Lengths can vary within the tolerance range.

Last number(s) is/are the length code. When ordering, for example, an eye webbing sling 3000 kg, length 12m, the product code is SNVS312.

Delivery about 4-5 weeks

TIGHTENING WEBBING SLING WITH HOOK 1600 - 2200 KG

- A webbing sling with a special hook, which tightens easily and securely around the item or bundle to be lifted
- material 100 % polyester
- safety factor 4 : 1
- EN 1492



| WLL Color Sling width | 1600 KG green 60 mm | 2200 KG yellow 75 mm |
|-----------------------------|---------------------------|----------------------------|
| 1 m | NVK1601 | NVK2201 |
| 2 m | NVK1602 | NVK2202 |
| 3 m | NVK1603 | NVK2203 |
| 4 m | NVK1604 | NVK2204 |
| 5 m | NVK1605 | NVK2205 |
| 6 m | NVK1606 | NVK2206 |
| 8 m | NVK1608 | NVK2208 |
| 10 m | NVK1610 | NVK2210 |

Delivery 3-5 days.

Thanks to our own production unit, we can also make quick deliveries of special types and lengths as well as lifting slings with higher WLL.

Last number(s) is/are the length code. When ordering, for example, an eye webbing sling 3000 kg, length 12m, the product code is NKV1612.



WIDER EYE WEBBING SLINGS SINGLE 1000 - 5000 KG

- single layer lifting slings
- the width of the sling is high with respect to the workload
- perfect for places where minimal surface pressure on the load to be lifted is needed, for example when lifting boats
- folded reinforced eyes as standard
- also available with flat eyes
- material 100 % polyester
- safety factor 7 : 1
- EN 1492



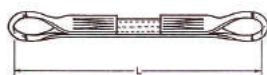
| WLL Color Sling width | 1000 KG green 60 mm | 2000 KG grey 120 mm | 3000 KG brown 180 mm | 4000 KG blue 240 mm | 5000 KG orange 300 mm |
|-----------------------------|---------------------------|---------------------------|----------------------------|---------------------------|-----------------------------|
| 1 m | SNVY101 | SNVY201 | - | - | - |
| 2 m | SNVY102 | SNVY202 | SNVY302 | SNVY402 | - |
| 3 m | SNVY103 | SNVY203 | SNVY303 | SNVY403 | SNVY503 |
| 4 m | SNVY104 | SNVY204 | SNVY304 | SNVY404 | SNVY504 |
| 5 m | SNVY105 | SNVY205 | SNVY305 | SNVY405 | SNVY505 |
| 6 m | SNVY106 | SNVY206 | SNVY306 | SNVY406 | SNVY506 |
| 8 m | SNVY108 | SNVY208 | SNVY308 | SNVY408 | SNVY508 |
| 10 m | SNVY110 | SNVY210 | SNVY310 | SNVY410 | SNVY510 |

Delivery 3-5 days.

Thanks to our own production unit, we can also make quick deliveries of special types and lengths as well as lifting slings with higher WLL.

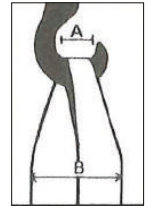
Last number(s) is/are the length code. When ordering, for example, an eye webbing sling 3000 kg, length 12m, the product code is SNVY312.

Note! Standard dimensional tolerance is ± 3%. Lengths can vary within the tolerance range.



EXTRA WIDE WEBBING SLINGS 7000 - 22500 KG

- extra wide webbing slings for paper machine reels and other extra heavy loads
- perfect for when the surface pressure on the load to be lifted should be as low as possible
- folded reinforced eyes as standard
- elongation with maximum workload approx. 5%
- material 100 % polyester
- safety factor 7 : 1



| WLL (straight) | 7000 KG | 11000 KG | 16000 KG | 22500 KG |
|----------------|---------|----------|----------|----------|
| Sling width B | 360 mm | 600 mm | 480 mm | 600 mm |
| Sling width A | 100 mm | 160 mm | 130 mm | 160 mm |
| 2 m | NOM1402 | NOM2202 | - | - |
| 3 m | NOM1403 | NOM2203 | NOM3203 | NOM4503 |
| 4 m | NOM1404 | NOM2204 | NOM3204 | NOM4504 |
| 5 m | NOM1405 | NOM2205 | NOM3205 | NOM4505 |
| 6 m | NOM1406 | NOM2206 | NOM3206 | NOM4506 |
| 8 m | NOM1408 | NOM2208 | NOM3208 | NOM4508 |
| 10 m | NOM1410 | NOM2210 | NOM3210 | NOM4510 |

Delivery 3-5 days.

Thanks to our own production unit, we can also make quick deliveries of special types and lengths as well as lifting slings with higher WLL.

Last number(s) is/are the length code. When ordering, for example webbing sling 22000 kg, length 12 m Product code is NOM2212 (In the code WLL is on U-shape)

Note! Standard dimensional tolerance is $\pm 3\%$. Lengths can vary within the tolerance range!

ROUNDSLINGS 1000 - 500.000 KG

- fibre roundslings with extra strong single cover
- for any lifting
- material 100 % polyester
- safety factor 7 : 1

- Special lengths and roundslings with higher WLL are also available up to 500t.
- EN 1492-2
- Colour coded



| WLL Color | 1000 kg violet | Package size | 2000 kg green | Package size | 3000 kg yellow | Package size | 4000 kg grey | Package size | 5000 kg red | Package size | 6000 kg brown | Package size |
|-----------|----------------|--------------|---------------|--------------|----------------|--------------|--------------|--------------|-------------|--------------|---------------|--------------|
| 1 m | PAR101S | 75 | PAR201S | 60 | PAR301S | 40 | PAR401S | 50 | PAR501S | - | - | - |
| 2 m | PAR102S | 50 | PAR202S | 40 | PAR302S | 30 | PAR402S | 20 | PAR502S | 15 | PAR602S | - |
| 3 m | PAR103S | 40 | PAR203S | 25 | PAR303S | 20 | PAR403S | 14 | PAR503S | 10 | PAR603S | 8 |
| 4 m | PAR104S | 30 | PAR204S | 40 | PAR304S | 12 | PAR404S | 12 | PAR504S | 8 | PAR604S | 6 |
| 5 m | PAR105S | 25 | PAR205S | 15 | PAR305S | 12 | PAR405S | 8 | PAR505S | 7 | PAR605S | 6 |
| 6 m | PAR106S | 15 | PAR206S | 12 | PAR306S | 10 | PAR406S | 8 | PAR506S | 6 | PAR606S | 4 |
| 8 m | PAR108S | 15 | PAR208S | 8 | PAR308S | 8 | PAR408S | 6 | PAR508S | 4 | PAR608S | 4 |
| 10 m | PAR110S | 10 | PAR210S | 7 | PAR310S | 6 | PAR410S | 5 | PAR510S | 4 | PAR610S | 3 |
| 12 m | PAR112S | 10 | PAR212S | 6 | PAR312S | 5 | PAR412S | 4 | PAR512S | 3 | PAR612S | 2 |

| WLL Color | 8000 kg blue | 10000 kg orange | 15000 kg orange | 20000 kg orange | 25000 kg orange | 30000 kg orange | 50000 kg orange |
|-----------|--------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 2 m | PAR802S | PAR1002S | PAR1502S | - | - | - | - |
| 3 m | PAR803S | PAR1003S | PAR1503S | PAR2003S | - | - | - |
| 4 m | PAR804S | PAR1004S | PAR1504S | PAR2004S | - | - | - |
| 5 m | PAR805S | PAR1005S | PAR1505S | PAR2005S | *PAR2505S | *PAR3005S | *PAR5005S |
| 6 m | PAR806S | PAR1006S | PAR1506S | PAR2006S | PAR2506S | *PAR3006S | *PAR5006S |
| 8 m | PAR808S | PAR1008S | PAR1508S | PAR2008S | PAR2508S | PAR3008S | *PAR5008S |
| 10 m | PAR810S | PAR1010S | PAR1510S | PAR2010S | PAR2510S | PAR3010S | *PAR5010S |
| 12 m | PAR812S | PAR1012S | PAR1512S | PAR2012S | PAR2512S | PAR3012S | PAR5012S |
| 16 m | PAR816S | PAR1016S | PAR1516S | PAR2016S | PAR2516S | *PAR3016S | PAR5016S |
| 20 m | *PAR820S | PAR1020S | PAR1520S | PAR2020S | PAR2520S | *PAR3020S | PAR5020S |
| 24 m | *PAR824S | *PAR1024S | *PAR1524S | PAR2024S | *PAR2524S | *PAR3024S | *PAR5024S |



Last number(s) is/are the length code
When ordering, for example, a roundsling 3000 kg, circumference 12m, the product code is PAR312

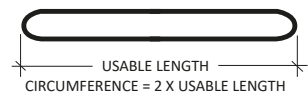
Thanks to our own production unit, we can also make quick deliveries of roundslings with useful length of 30 m and workloads up to 500t.

Lifting of a 305t Azipod unit with 100t roundslings

*delivery 2-3 weeks on products marked with star.

We also deliver GB Extreema® roundslings, manufactured from the world's strongest fiber, Dyneema®, ask more from our Sales.

Note! Standard dimensional tolerance is ± 3%. Lengths can vary within the tolerance range!



ROUNDSLING COMBINATIONS

- 1-, 2-, 3- and 4-leg combinations are suitable for lifting anything
- a lighter alternative to a chain combination in, for example, transformer lifting
- no risk of insulator damage
- material 100 % polyester
- safety factor 4 : 1
- total lengths from approx. 1m, the largest type approx. 2m
- lengths are provided in steps of 0.5m
- also available with self-locking hooks,
- rotatina swivel hooks. shackles etc.



| WLL Lifting angle 0 - 90° | WLL Lifting angle 90 - 120° | Product code |
|---------------------------------|-----------------------------------|--------------|
| 1-leg | | |
| 1000 KG | | PRK1101 |
| 2000 KG | | PRK2101 |
| 3000 KG | | PRK3101 |
| 5000 KG | | PRK5101 |
| 8000 KG | | PRK8102 |
| 2-leg | | |
| 1400 KG | 1000 KG | PRK1201 |
| 2800 KG | 2000 KG | PRK2201 |
| 4200 KG | 3000 KG | PRK3201 |
| 7000 KG | 5000 KG | PRK5201 |
| 11200 KG | 8000 KG | PRK8202 |
| 3-leg | | |
| 2100 KG | 1500 KG | PRK1301 |
| 4200 KG | 3000 KG | PRK2301 |
| 6300 KG | 4500 KG | PRK3301 |
| 10500 KG | 7500 KG | PRK5301 |
| 17000 KG | 11800 KG | PRK8302 |
| 4-leg | | |
| 2100 KG | 1500 KG | PRK1401 |
| 4200 KG | 3000 KG | PRK2401 |
| 6300 KG | 4500 KG | PRK3401 |
| 10500 KG | 7500 KG | PRK5401 |
| 17000 KG | 11800 KG | PRK8402 |

Delivery 3-5 days.

When ordering, for example, a 1-leg PAR/Hook combination 3000 kg, length 1,5 m, the product code is PRK3101,5.

PERMITTED WORKLOADS

ROUND SLINGS



| Lifting method | Direct lift WLL M = 1,0 | Tightening lift WLL M = 0,8 | Open lift WLL M = 2,0 | Angle lift WLL $\beta = 0^\circ-45^\circ$ M = 1,4 | Angle lift WLL $\beta = 45^\circ-60^\circ$ M = 1,0 | Angle lift WLL $\beta = 0^\circ-45^\circ$ M = 0,7 | Angle lift WLL $\beta = 45^\circ-60^\circ$ M = 0,5 |
|-------------------|-------------------------------|-----------------------------------|-----------------------------|--|---|--|---|
| Form factor | | | | | | | |
| PÄR = ROUND SLING | | | | | | | |
| Diameter/colour | WLL kg | WLL kg | WLL kg | WLL kg | WLL kg | WLL kg | WLL kg |
| 15 mm violet | 1000 | 800 | 2000 | 1400 | 1000 | 700 | 500 |
| 20 mm green | 2000 | 1600 | 4000 | 2800 | 2000 | 1400 | 1000 |
| 25 mm yellow | 3000 | 2400 | 6000 | 4200 | 3000 | 2100 | 1500 |
| 30 mm grey | 4000 | 3200 | 8000 | 5600 | 4000 | 2800 | 2000 |
| 33 mm red | 5000 | 4000 | 10000 | 7000 | 5000 | 3500 | 2500 |
| 36 mm brown | 6000 | 4800 | 12000 | 8400 | 6000 | 4200 | 3000 |
| 40 mm blue | 8000 | 6400 | 16000 | 11200 | 8000 | 5600 | 4000 |
| 45 mm orange | 10000 | 8000 | 20000 | 14000 | 10000 | 7000 | 5000 |
| 50 mm orange | 12000 | 9600 | 24000 | 16800 | 12000 | 8400 | 6000 |
| 60 mm orange | 15000 | 12000 | 30000 | 21000 | 15000 | 10500 | 7500 |
| 80 mm orange | 20000 | 16000 | 40000 | 28000 | 20000 | 14000 | 10000 |
| 100 mm orange | 25000 | 20000 | 50000 | 35000 | 25000 | 17500 | 12500 |
| 120 mm orange | 30000 | 24000 | 60000 | 42000 | 30000 | 21000 | 15000 |

WEBBING SLINGS

- WEBBING SLING WITH EYES (SNV)
- ENDLESS WEBBING SLING (UNV)



| Lifting method | Direct lift WLL M = 1,0 | Tightening lift WLL M = 0,8 | Open lift WLL M = 2,0 | Angle lift WLL $\beta = 0^\circ-45^\circ$ M = 1,4 | Angle lift WLL $\beta = 45^\circ-60^\circ$ M = 1,0 | Angle lift WLL $\beta = 0^\circ-45^\circ$ M = 0,7 | Angle lift WLL $\beta = 45^\circ-60^\circ$ M = 0,5 |
|--|-------------------------------|-----------------------------------|-----------------------------|--|---|--|---|
| Form factor | | | | | | | |
| SNV = WEBBING SLINGS UNV = ENDLESS WEBBING SLINGS | | | | | | | |
| Diameter/colour | WLL kg | WLL kg | WLL kg | WLL kg | WLL kg | WLL kg | WLL kg |
| 25 mm white | 500 | 400 | 1000 | 700 | 500 | 350 | 250 |
| 50 mm violet | 1000 | 800 | 2000 | 1400 | 1000 | 700 | 500 |
| 60 mm green | 2000 | 1600 | 4000 | 2800 | 2000 | 1400 | 1000 |
| 90 mm yellow | 3000 | 2400 | 6000 | 4200 | 3000 | 2100 | 1500 |
| 120 mm grey | 4000 | 3200 | 8000 | 5600 | 4000 | 2800 | 2000 |
| 150 mm red | 5000 | 4000 | 10000 | 7000 | 5000 | 3500 | 2500 |
| 180 mm brown | 6000 | 4800 | 12000 | 8400 | 6000 | 4200 | 3000 |
| 240 mm blue | 8000 | 6400 | 16000 | 11200 | 8000 | 5600 | 4000 |
| 300 mm orange | 10000 | 8000 | 20000 | 14000 | 10000 | 7000 | 5000 |
| 300 mm orange | 12000 | 9600 | 24000 | 16800 | 12000 | 8400 | 6000 |

LIFTING INSTRUCTIONS

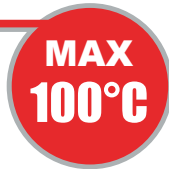
CHECK THE LOAD WEIGHT

PAY ATTENTION TO THE LIFTING ANGLE

β = LIFTING ANGLE

USE CORNER PROTECTORS ON SHARP EDGES

DO NOT USE BROKEN SLINGS



✓ CHECK LIFTING TOOLS REGULARLY ✓

SEE CORNER PROTECTORS IN PRODUCT GROUP 12!

2. Lifting chains, components and steel wire rope slings

Lifting chains grade 80, 10 and 12 and stainless

Chain Components grade 80, 10 and 12 and stainless

Lifting chain combinations grade 80, 10 and 12 and stainless

Steel wire rope slings



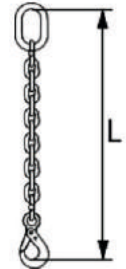
Material/structure:

Chain slings are manufactured from short link chain, GRADE 80, 10 or 12. In multiple legged slings, every leg has to be the same size and grade. The working load limit of every component has to be at least the same as the chains WLL. With 3- and 4-legged chain slings, a master link with additional links for 3- and 4-legged assemblies has to be used.

Safety factor: 4:1.

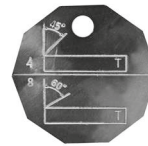
Length tolerance

The nominal length (L) is measured between the lifting points or from the edge of the solid sling. The actual length of each leg of the sling may exceed the nominal length by no more than 2 chain links. The length must not be shorter than the nominal length. The shortest and longest legs of a multiple legged sling, with equal nominal lengths, length difference must not exceed 10 mm, if the sling has a nominal length of 2 m or less. In longer slings not more than 5 mm/m, provided that the sling is assembled with mechanical joints. If welded, the corresponding figures are 6 mm and 3 mm/m.



Marking

Chain slings have a label with manufacturer logo, unique identification mark, workload, class, leg number, nominal size of the chain, date of manufacture and the CE marking.



Acid conditions

GRADE 80 chain slings must not be used immersed in acid or exposed to acidic gases. For the same reason, chain slings must not hot galvanized or retreated without the manufacturer's permission.

Chemical effects

If the chain slings are simultaneously exposed to both high-strength chemicals and high temperatures, you should ask for more instructions from the manufacturer.

Dangerous conditions

Particularly hazardous operational situations include offshore functions and lifting people and dangerous loads such as molten metal, corrosive materials and nuclear material. In these cases, risk assessment should be given to an expert who defines the workload.

Before starting

Prior to the use, check that:

- the chain sling is in accordance with the order
- there is a certificate
- the identification and workload markings are same as in the certificate
- the equipment is marked in the inspection report
- it is appropriate for that particular lifting

Storing the chain slings

When the chain slings are not in use, they must be kept in a rack suitable for this purpose, not on the ground or on the floor where they may be damaged. If the chain sling is left to hang on the crane hook, its legs has to be attached to the master link so that they can't swing or jam anywhere to cause danger. If there is a long interruption in the use of the chain sling, they must be cleaned, dried and protected from corrosion, for example by oiling them lightly.



The effect of temperature on the workload

| Grade | Workload % nominal load | | | |
|-------|-------------------------|-----------|-----------|-------------|
| | Temperature °C | | | |
| | -40 - 200 | 201 - 300 | 301 - 400 | 401 - 475 |
| 8 | 100% | 90% | 75% | not allowed |

| Grade | Workload % nominal load | |
|-------|-------------------------|-------------|
| | Temperature °C | |
| | -29 - 205 | 206 > |
| 10 | 100% | not allowed |

| Grade | Workload % nominal load | |
|-------|-------------------------|-------------|
| | Temperature °C | |
| | -40 - 200 | 201 > |
| 12 | 100% | not allowed |

Inspection of lifting aids must be done annually. The employer is responsible for that the lifting aids used for lifting work are properly checked and that they comply with the valid regulations.

Annual inspections and maintenance of our customers lifting aids are part of our daily job.



“Professional inspections guarantee work safety and the maximum productivity of the hardware”

According machinery directive 2006/42/EC and producer operation manualh for the safe use and inspection of machinery and tools used at work obligates, that the work equipment must be kept safe to use throughout their life cycle.

The key to security is regular maintenance and upkeep.

The definition of a tool covers all lifting aids:

- e.g hoists, clamps, lift magnets
- lifting aid combinations
- movable lifting aids (e.g shackles and lifting brackets)

We take care of your lifting equipment throughout the life cycle

- Product inventory and product information administration in our inspection system
- Reminders under the audit program automatically to the customer
- The inspection of lifting aids is carried out in accordance with the planned timetable, which ensures minimum interference for the work
- Our maintenance service repairs the faults found during the inspection - this way the hardware will always be in the same operating condition as new
- Our inspection service covers all lifting aids available on the market

LIFTING CHAINS GRADE 80

- short link GRADE 80 chains
- paint coated
- safety factor 4 : 1
- FS/EN 818-2



| Chain size | WLL | A | B | Weight | Product code |
|------------|-------|-----|----|--------|--------------|
| D mm | t | mm | mm | kg/m | |
| 6 | 1,12 | 18 | 9 | 0,80 | NK6 |
| 7 | 1,50 | 22 | 10 | 1,10 | NK7 |
| 8 | 2,00 | 24 | 12 | 1,35 | NK8 |
| 10 | 3,15 | 30 | 14 | 2,15 | NK10 |
| 13 | 5,30 | 39 | 19 | 3,50 | NK13 |
| 16 | 8,00 | 48 | 23 | 5,50 | NK16 |
| 20 | 12,50 | 60 | 25 | 8,40 | NK20 |
| 22 | 15,00 | 66 | 28 | 10,35 | NK22 |
| 26 | 21,20 | 78 | 35 | 15,80 | NK26 |
| 32 | 31,50 | 96 | 43 | 23,00 | NK32 |
| 36 | 40,00 | 108 | 49 | 29,00 | *NK36 |
| 40 | 50,00 | 120 | 54 | 36,00 | *NK40 |

* Items marked with an asterisk only available as a factory order

PRE-PACKAGED GRADE 80 CHAINS



| Chain size | WLL | Length | Weight | Product code |
|------------|------|--------|--------|--------------|
| mm | t | m | kg | |
| 6 | 1,12 | 50 | 41,00 | NK6VP |
| 8 | 2,00 | 40 | 55,00 | NK8VP |
| 10 | 3,15 | 30 | 66,00 | NK10VP |
| 13 | 5,30 | 20 | 71,00 | NK13VP |

LIFTING CHAINS DACROME

- short link chains
- electroplating
- safety factor 4 : 1
- FS/EN 818-2



| Chain size | WLL | A | B | Weight | Product code |
|------------|------|----|----|--------|--------------|
| D mm | t | mm | mm | kg/m | |
| 6 | 1,12 | 18 | 9 | 0,80 | NKES6 |
| 8 | 2,00 | 24 | 12 | 1,35 | NKES8 |
| 10 | 3,15 | 30 | 14 | 2,15 | NKES10 |

LIFTING CHAINS GRADE 100



- short link GRADE 100 chains
- the same chain size as GRADE 80, but a 30% higher workload capacity
- operating temperature -29 - (+)205°C.
- paint coated
- safety factor 4 : 1



| Chain size | WLL | A | B | Weight | Product code |
|------------|-------|----|------|--------|--------------|
| D mm | t | mm | mm | kg/m | |
| 6 | 1,40 | 18 | 9 | 0,96 | NK106 |
| 8 | 2,50 | 24 | 11 | 1,57 | NK108 |
| 10 | 4,00 | 30 | 14 | 2,46 | NK1010 |
| 13 | 6,70 | 39 | 18 | 4,18 | NK1013 |
| 16 | 10,00 | 48 | 22 | 6,28 | NK1016 |
| 20 | 16,00 | 62 | 25,6 | 10,10 | NK1020 |
| 22 | 19,00 | 66 | 30 | 11,88 | NK1022 |
| 26 | 26,50 | 78 | 35 | 16,18 | *NK1026 |

The chain is also available for operating temperatures -30 - (+)380°C, ask for more.

* Items marked with an asterisk only available as a factory order

LIFTING CHAINS GRADE 120



- the same chain size as GRADE 80, but approx. 50% higher WLL
- operating temperature -40 - (+)200°C.
- paint coated
- safety factor 4 : 1



| Chain size | WLL | A | B | Weight | Product code |
|------------|-------|----|------|--------|--------------|
| D mm | t | mm | mm | kg/m | |
| 7 | 2,36 | 21 | 9,8 | 1,33 | *NK127 |
| 8 | 3,00 | 24 | 11,0 | 1,69 | NK128 |
| 10 | 5,00 | 30 | 14,3 | 2,66 | NK1210 |
| 13 | 8,00 | 39 | 18,0 | 4,43 | NK1213 |
| 16 | 12,20 | 48 | 21,5 | 6,73 | NK1216 |

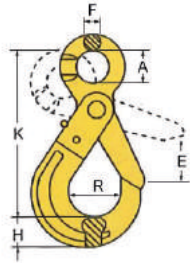
STAINLESS LIFTING CHAINS

- short link chains
- material AISI 316
- safety factor 4 : 1



| Chain size | WLL | A | B | Weight | Product code |
|------------|------|------|----|--------|--------------|
| D mm | t | mm | mm | kg/m | |
| 6 | 0,90 | 18,0 | 8 | 0,8 | NKHK6 |
| 8 | 1,55 | 24,0 | 10 | 1,4 | NKHK8 |
| 10 | 2,00 | 30,0 | 13 | 2,2 | NKHK10 |
| 13 | 3,20 | 39,0 | 17 | 3,8 | NKHK13 |

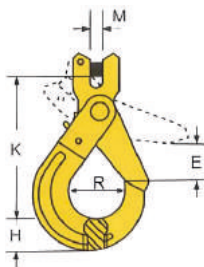
EYE SELF-LOCKING HOOK



- the hook locks automatically when lifting starts
- paint coated
- safety factor 4 : 1
- EN-1677

| For chain mm | WLL t | K mm | H mm | E mm | F mm | R mm | A mm | Weight kg | Product code |
|-----------------|----------|---------|---------|---------|---------|---------|---------|--------------|--------------|
| 6 | 1,12 | 110 | 19 | 28 | 10 | 34 | 22 | 0,50 | VAK6 |
| 7/8 | 2,00 | 136 | 24 | 34 | 12 | 46 | 25 | 0,80 | VAK78 |
| 10 | 3,15 | 171 | 30 | 44 | 15 | 56 | 32 | 1,43 | VAK10 |
| 13 | 5,30 | 208 | 30 | 52 | 19,5 | 69 | 40 | 2,86 | VAK13 |
| 16 | 8,00 | 257 | 50 | 60 | 22 | 86 | 56 | 5,64 | VAK16 |
| 20 | 12,50 | 275 | 55 | 81 | 27 | 100 | 64 | 7,60 | VAK20 |
| 22 | 15,00 | 320 | 67 | 82 | 30 | 98 | 70 | 13,00 | VAK22 |
| 26 | 21,20 | 363 | 75 | 110 | 34 | 110 | 80 | 18,00 | VAK26 |
| 32 | 31,50 | 472 | 97 | 168 | 45 | 166 | 105 | 44,50 | VAK32 |

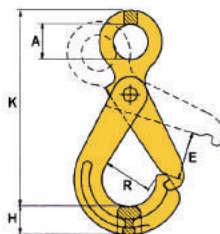
CLEVIS SELF-LOCKING HOOK



- the lifting chain is attached directly to the hook without a connection link
- the hook locks automatically when lifting starts
- paint coated
- safety factor 4 : 1
- EN-1677

| For chain mm | WLL t | K mm | H mm | E mm | M mm | R mm | Weight kg | Product code |
|-----------------|----------|---------|---------|---------|---------|---------|--------------|--------------|
| 6 | 1,12 | 95 | 19 | 29 | 8 | 34 | 0,5 | VAKH6 |
| 7/8 | 2,00 | 121 | 24 | 34 | 9 | 46 | 0,8 | VAKH78 |
| 10 | 3,15 | 146 | 30 | 44 | 12 | 56 | 1,5 | VAKH10 |
| 13 | 5,30 | 182 | 40 | 52 | 15 | 69 | 2,8 | VAKH13 |
| 16 | 8,00 | 218 | 50 | 60 | 18 | 86 | 5,6 | VAKH16 |
| 20 | 12,50 | 240 | 55 | 83 | 25 | 100 | 7,5 | VAKH20 |
| 22 | 15,00 | 276 | 67 | 88 | 25 | 98 | 11,5 | VAKH22 |

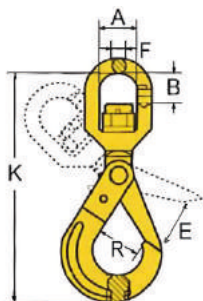
EYE SELF-LOCKING HOOK WITH GRIP



- a support structure against twisting on the tip of the hook
- the hook locks automatically when lifting starts
- paint coated
- safety factor 4 : 1
- EN-1677

| For chain mm | WLL t | K mm | H mm | E mm | R mm | A mm | Weight kg | Product code |
|-----------------|----------|---------|---------|---------|---------|---------|--------------|--------------|
| 7/8 | 2,00 | 163 | 21 | 34 | 40 | 25 | 0,75 | VAKKT78 |
| 10 | 3,15 | 201 | 26 | 42 | 50 | 32 | 1,20 | VAKKT10 |
| 13 | 5,30 | 243 | 31 | 50 | 60 | 40 | 2,00 | VAKKT13 |
| 16 | 8,00 | 298 | 39 | 60 | 70 | 50 | 4,10 | VAKKT16 |

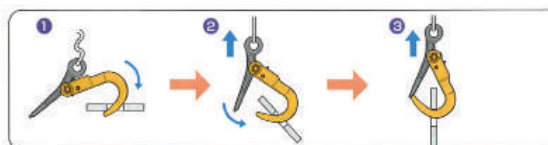
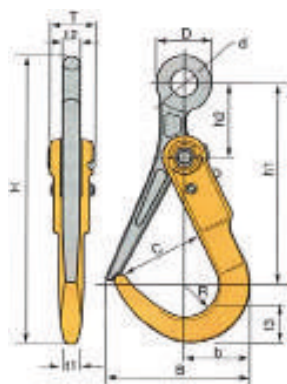
EYE SELF-LOCKING HOOK WITH SWIVEL



- the hook locks automatically when lifting starts
- swivel structure allows the hook to rotate
- paint coated
- safety factor 4 : 1
- EN-1677

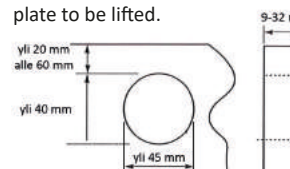
| For chain mm | WLL t | K mm | E mm | B mm | F mm | R mm | A mm | Weight kg | Product code |
|-----------------|----------|---------|---------|---------|---------|---------|---------|--------------|--------------|
| 6 | 1,12 | 170 | 29 | 22 | 11 | 34 | 32 | 0,71 | VAKL6 |
| 7/8 | 2,00 | 210 | 34 | 26 | 12 | 46 | 35 | 1,10 | VAKL78 |
| 10 | 3,15 | 247 | 44 | 34 | 15 | 56 | 42 | 2,00 | VAKL10 |
| 13 | 5,30 | 302 | 52 | 38 | 16 | 69 | 50 | 4,00 | VAKL13 |
| 16 | 8,00 | 383 | 60 | 55 | 21 | 86 | 61 | 7,30 | VAKL16 |
| 20 | 12,50 | 418 | 83 | 61 | 26 | 100 | 72 | 11,60 | VAKL20 |

SUPER SELF-LOCKING HOOK



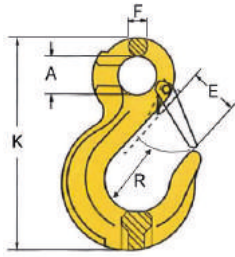
- wide self-locking safety hooks
- two workloads
- normal and swivel hook models
- perfect for e.g handling large bags as well as lifting items and equipment, which can be lifted directly from their holes
- paint coated
- safety factor 4 : 1
- EN-1677

The minimum and maximum dimensions of the hole and the plate to be lifted.



| WLL kg | C mm | B mm | b mm | D mm | d mm | H mm | h1 mm | h2 mm | R mm | T mm | t1 mm | t2 mm | t3 mm | Weight kg | Product code |
|-----------|---------|---------|---------|---------|---------|---------|----------|----------|---------|---------|----------|----------|----------|--------------|--------------|
| 2000 | 96 | 166 | 75 | 64 | 32 | 339 | 236 | 89 | 38 | 54 | 29 | 18 | 30 | 3,2 | VAK2SUPER |
| 3000 | 96 | 169 | 78 | 64 | 32 | 339 | 236 | 89 | 38 | 54 | 31 | 18 | 33 | 3,4 | VAK3SUPER |

EYE SLING HOOK WITH LATCH

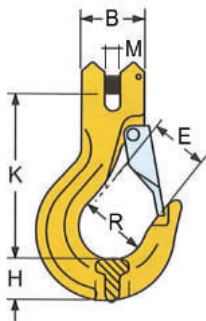


- hooks with spring-loaded safety latch
- paint coated
- safety factor 4 : 1
- EN-1677

| For chain mm | WLL t | K mm | E mm | F mm | R mm | A mm | Weight kg | Product code |
|-----------------|----------|---------|---------|---------|---------|---------|--------------|-----------------|
| 6 | 1,12 | 108 | 24 | 9 | 21 | 20 | 0,30 | SALK6 |
| 7/8 | 2,00 | 133 | 30 | 11 | 26 | 25 | 0,40 | SALK78 |
| 10 | 3,15 | 167 | 34 | 15 | 39 | 38 | 0,90 | SALK10 |
| 13 | 5,30 | 213 | 39 | 19 | 54 | 43 | 1,70 | SALK13 |
| 16 | 8,00 | 255 | 46 | 23 | 64 | 50 | 3,20 | SALK16 |
| 20 | 12,50 | 305 | 40 | 24 | 80 | 62 | 5,80 | SALK20 |
| 22 | 15,00 | 348 | 71 | 32 | 80 | 62 | 8,50 | SALK22 |
| 26 | 21,20 | 394 | 81 | 35 | 82 | 64 | 13,00 | SALK26 |
| 32 | 31,50 | 480 | 102 | 37 | 112 | 68 | 17,00 | SALK32 |
| 36 | 40,00 | n.530 | 109 | - | - | 72 | 32,30 | *SALK36 |
| 40 | 50,00 | n.580 | 124 | - | - | 84 | 47,00 | *SALK40 |

* Items marked with asterisk delivery in 4 - 5 weeks

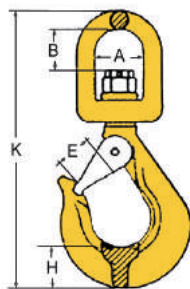
CLEVIS SLING HOOK WITH LATCH



- the lifting chain is attached directly to the hook without a connection link
- paint coated
- safety factor 4 : 1
- EN-1677

| For chain mm | WLL t | K mm | H mm | E mm | M mm | R mm | B mm | Weight kg | Product code |
|-----------------|----------|---------|---------|---------|---------|---------|---------|--------------|-----------------|
| 6 | 1,12 | 76 | 23 | 26 | 8 | 35 | 32 | 0,32 | SALKH6 |
| 7/8 | 2,00 | 85 | 32 | 29 | 9,5 | 37 | 37 | 0,48 | SALKH78 |
| 10 | 3,15 | 104 | 35 | 32 | 13 | 46 | 49 | 0,95 | SALKH10 |
| 13 | 5,30 | 128 | 42 | 27 | 16 | 56 | 56 | 1,80 | SALKH13 |
| 16 | 8,00 | 150 | 54 | 55 | 21 | 60 | 70 | 3,40 | SALKH16 |
| 20 | 12,50 | 180 | 58 | 61 | 24 | 79 | 77 | 6,00 | SALKH20 |

LATCH HOOK WITH SWIVEL



- swivel structure that enables the hook to rotate
- paint coated
- safety factor 4 : 1
- EN-1677

| For chain mm | WLL t | K mm | E mm | A mm | B mm | Weight kg | Product code |
|-----------------|----------|---------|---------|---------|---------|--------------|-----------------|
| 6 | 1,12 | 170 | 22 | 32,5 | 22 | 0,34 | SALKL6 |
| 7/8 | 2,00 | 210 | 27 | 35,5 | 26 | 0,85 | SALKL78 |
| 10 | 3,15 | 247 | 32 | 42 | 34 | 1,54 | SALKL10 |
| 13 | 5,30 | 302 | 40 | 50 | 38,5 | 3,40 | SALKL13 |
| 16 | 8,00 | 382 | 45 | 61 | 55 | 5,36 | SALKL16 |
| 20 | 12,50 | 418 | 49 | 72 | 61 | 7,40 | SALKL20 |
| 22 | 15,00 | 527 | 54 | 95 | 95 | 10,60 | SALKL22 |
| 26 | 21,20 | 610 | 81 | 122 | 115 | 21,40 | SALKL26 |

EYE SLING HOOK WITH BALL BEARING SWIVEL

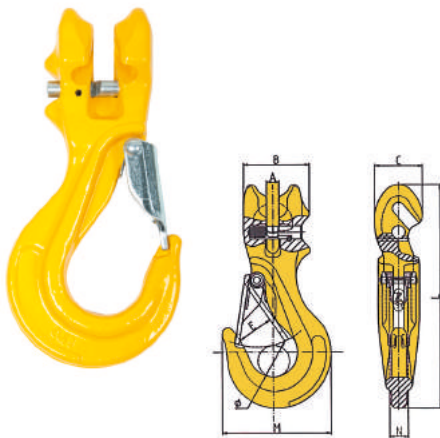
- hook rotates easily also with full load
- powder paint coated
- safety factor 4 : 1
- EN-1677



| Chain size mm | WLL t | K mm | P mm | B mm | A mm | D mm | T mm | H mm | Weight kg | Product code |
|---------------|-------|------|------|------|------|------|------|------|-----------|--------------|
| 6 | 1,12 | 149 | 29 | 22 | 31 | 12 | 15 | 19 | 0,70 | SALKL6KL |
| 8 | 2,00 | 186 | 34 | 29 | 36 | 14 | 20 | 24 | 1,20 | SALKL78KL |
| 10 | 3,15 | 220 | 44 | 34 | 40 | 16 | 26 | 30 | 2,00 | SALKL10KL |
| 13 | 5,30 | 267 | 52 | 43 | 46 | 22 | 30 | 39 | 4,20 | SALKL13KL |
| 16 | 8,00 | 328 | 60 | 50 | 60 | 24 | 36 | 49 | 7,30 | SALKL16KL |
| 20 | 12,50 | 388 | 90 | 82 | 75 | 26 | 48 | 62 | 11,70 | SALKL20KL |

EYE SLING HOOK WITH Shortening

- the lifting chain is attached directly to the hook without a connection link, and can be removed quickly
- the hook can be used to replace eye grab hook
- paint coated
- safety factor 4 : 1
- EN-1677



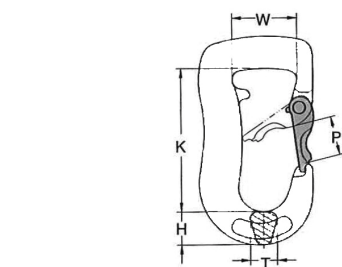
| For chain mm | WLL t | A mm | B mm | C mm | E mm | M mm | N mm | L mm | Ø mm | Weight kg | Product code |
|--------------|-------|------|------|------|------|------|------|------|------|-----------|--------------|
| 6 | 1,12 | 8 | 40 | 29 | 20 | 66 | 11 | 136 | 17 | 0,5 | SALKH6TK |
| 7/8 | 2,00 | 10 | 45 | 33 | 27 | 84 | 13 | 172 | 27 | 0,9 | SALKH78TK |
| 10 | 3,15 | 12 | 56 | 42 | 33 | 103 | 11 | 215 | 34 | 1,7 | SALKH10TK |
| 13 | 5,30 | 15 | 75 | 57 | 40 | 133 | 20 | 258 | 45 | 3,4 | SALKH13TK |

WEB SLING HOOK, GRADE 100

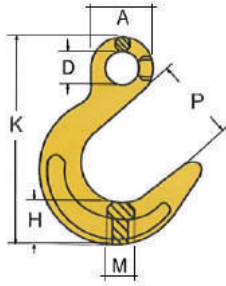
- sling hook for webbing- and round-slings
- hook is slid on a belt
- paint coated
- safety factor 4 : 1
- EN-1677

| WLL kg | K mm | P mm | W mm | T mm | H mm | Weight kg | Product code |
|--------|------|------|------|------|------|-----------|--------------|
| 1000 | 88 | 25 | 43 | 14 | 20 | 0,7 | JOKERKOU1 |
| 2000 | 115 | 30 | 52 | 20 | 26 | 1,5 | JOKERKOU2 |
| 3000 | 118 | 32 | 63 | 26 | 32 | 2,3 | JOKERKOU3 |
| 5000 | 154 | 43 | 73 | 26 | 38 | 3,3 | JOKERKOU5 |
| 6000 | 147 | 43 | 70 | 36 | 40 | 4,5 | *JOKERKOU6 |
| 8000 | 200 | 65 | 105 | 40 | 60 | 9,7 | *JOKERKOU8 |
| 10000 | 200 | 65 | 105 | 40 | 60 | 9,7 | *JOKERKOU10 |

* Items marked with asterisk delivery in 3 - 4 weeks



FOUNDRY EYE HOOK

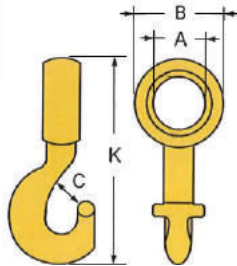


- wide mouth open hooks for foundry use
- paint coated
- safety factor 4 : 1
- EN-1677

| For chain mm | WLL t | P mm | H mm | K mm | D mm | A mm | M mm | Weight kg | Product code |
|-----------------|----------|---------|---------|---------|---------|---------|---------|--------------|-----------------|
| 6 | 1,12 | 62 | 29 | 163 | 17 | 39 | 26 | 1,00 | VAL6 |
| 7/8 | 2,00 | 63 | 31 | 163 | 18 | 39 | 25 | 1,09 | VAL78 |
| 10 | 3,15 | 76 | 38 | 200 | 22 | 50 | 32 | 2,04 | VAL10 |
| 13 | 5,30 | 89 | 44 | 238 | 27 | 63 | 38 | 3,22 | VAL13 |
| 16 | 8,00 | 102 | 52 | 278 | 32 | 76 | 46 | 5,53 | VAL16 |
| 20 | 12,50 | 114 | 65 | 325 | 38 | 89 | 55 | 8,75 | VAL20 |
| 22 | 15,00 | 127 | 69 | 361 | 45 | 102 | 57 | 11,93 | VAL22 |
| 26 | 21,20 | 140 | 77 | 402 | 67 | 126 | 66 | 16,80 | * VAL26 |
| 32 | 31,50 | 153 | 97 | 461 | 81 | 151 | 80 | 26,60 | * VAL32 |

* Items marked with asterisk delivery in 3 - 4 weeks

EYE CHOKE HOOK



- used for loop lifting in automatic choker slings
- paint coated
- safety factor 4 : 1
- EN-1677

| For chain mm | WLL t | A mm | B mm | C mm | K mm | Weight kg | Product code |
|-----------------|----------|---------|---------|---------|---------|--------------|-----------------|
| 7/8 | 2,00 | 30 | 52 | 16 | 123 | 0,4 | LIUA78 |
| 10 | 3,15 | 39 | 68 | 20 | 156 | 0,8 | LIUA10 |
| 13 | 5,30 | 52 | 85 | 26 | 195 | 1,9 | LIUA13 |
| 16 | 8,00 | 64 | 108 | 30 | 246 | 3,0 | LIUA16 |

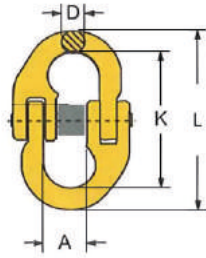
BARREL HOOK



- used in e.g. barrel lifting slings (see page 7-1)
- paint coated
- safety factor 4 : 1
- EN-1677

| WLL t | Length mm | Width mm | Link diameter mm | Weight kg | Product code |
|----------|--------------|-------------|------------------------|--------------|--------------|
| 1,00 | 120 | 60 | 37 | 0,4 | TYNKOU |

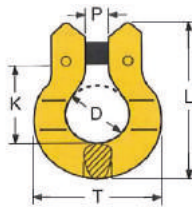
CONNECTING LINK



- for connecting short link GRADE 80 chains to different kinds of lifting links and hooks
- paint coated
- safety factor 4 : 1
- EN-1677

| For chain mm | WLL t | L mm | K mm | A mm | D mm | Weight kg | Product code |
|-----------------|----------|---------|---------|---------|---------|--------------|--------------|
| 6 | 1,12 | 58 | 42 | 15 | 7 | 0,08 | LL6 |
| 7/8 | 2,00 | 79 | 60 | 18 | 8 | 0,146 | LL78 |
| 10 | 3,15 | 90 | 68 | 25 | 11 | 0,30 | LL10 |
| 13 | 5,30 | 117 | 87 | 29 | 15 | 0,65 | LL13 |
| 16 | 8,00 | 148 | 108 | 34 | 19 | 1,15 | LL16 |
| 20 | 12,50 | 154 | 121 | 41 | 24 | 2,10 | LL20 |
| 22 | 15,00 | 193 | 141 | 48 | 26 | 2,87 | LL22 |
| 26 | 21,20 | 220 | 158 | 57 | 30 | 4,50 | LL26 |
| 32 | 31,50 | 281 | 205 | 67 | 37 | 8,21 | LL32 |

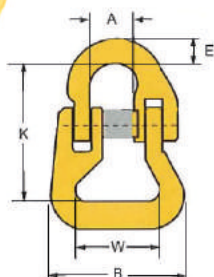
OMEGA LINK



- used on choker chain slings or instead of a connection link
- paint coated
- safety factor 4 : 1
- EN-1677

| For chain mm | WLL t | T mm | L mm | D mm | K mm | P mm | Weight kg | Product code |
|-----------------|----------|---------|---------|---------|---------|---------|--------------|--------------|
| 7/8 | 2,00 | 8 | 68 | 23 | 35 | 10 | 0,22 | OMEA78 |
| 10 | 3,15 | 12 | 81 | 31 | 40 | 12 | 0,36 | OMEA10 |
| 13 | 5,30 | 21 | 108 | 41 | 54 | 15 | 0,71 | OMEA13 |
| 16 | 8,00 | 32 | 126 | 49 | 64 | 19 | 1,30 | OMEA16 |

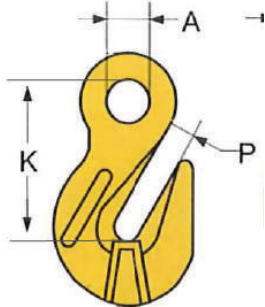
ROUNDSLING AND WEBBING SLING CONNECTOR



- for connecting short link grade – 8 chains to roundslings and webbing slings
- paint coated
- safety factor 4 : 1
- EN-1677

| For chain mm | WLL t | W mm | B mm | A mm | K mm | E mm | Weight kg | Product code |
|-----------------|----------|---------|---------|---------|---------|---------|--------------|--------------|
| 7/8 | 2,00 | 40 | 61 | 20 | 63 | 9 | 0,30 | PRL78 |
| 10 | 3,15 | 39 | 66 | 24 | 83 | 11 | 0,68 | PRL10 |
| 13 | 5,30 | 55 | 68 | 28 | 93 | 16 | 1,47 | PRL13 |
| 16 | 8,00 | 65 | 88 | 34 | 120 | 19 | 2,30 | PRL16 |
| 20 | 12,50 | 80 | 108 | 41 | 138 | 23 | 3,30 | PRL20 |

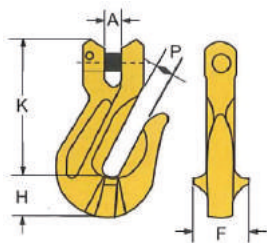
EYE GRAB HOOK



- to be attached to the lifting link with the same connection link as the chain
- used for shortening chain legs
- paint coated
- safety factor 4 : 1
- EN-1677

| For chain mm | WLL t | A mm | K mm | P mm | Weight kg | Product code |
|-----------------|----------|---------|---------|---------|--------------|--------------|
| 6 | 1,12 | 13 | 51 | 8 | 0,14 | LYK6 |
| 7/8 | 2,00 | 18 | 61,5 | 10 | 0,245 | LYK78 |
| 10 | 3,15 | 20 | 80 | 13 | 0,65 | LYK10 |
| 13 | 5,30 | 26 | 99 | 16 | 1,39 | LYK13 |
| 16 | 8,00 | 30 | 104 | 20 | 2,20 | LYK16 |
| 20 | 12,50 | 37 | 140 | 25 | 4,60 | LYK20 |
| 22 | 15,00 | 44 | 165 | 28 | 8,20 | LYK22 |
| 26 | 21,20 | 41 | 188 | 30 | 9,80 | LYK26 |
| 32 | 31,50 | 57 | 228 | 38 | 19,40 | LYK32 |

CLEVIS GRAB HOOK

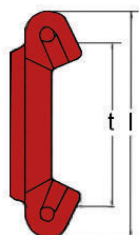


- attached to the lifting link with a separate connection link and chain
- other features same as in hooks listed above
- safety factor 4 : 1
- EN-1677

| For chain mm | WLL t | A mm | K mm | P mm | F mm | H mm | Weight kg | Product code |
|-----------------|----------|---------|---------|---------|---------|---------|--------------|--------------|
| 7/8 | 2,00 | 9 | 70 | 11 | 33 | 18 | 0,32 | LYKH78 |
| 10 | 3,15 | 12 | 97 | 13 | 46 | 29 | 0,73 | LYKH10 |
| 13 | 5,30 | 15 | 121 | 16 | 57 | 42 | 1,60 | LYKH13 |
| 16 | 8,00 | 18 | 141 | 19 | 74 | 42 | 2,80 | *LYKH16 |
| 20 | 12,50 | 23 | 163 | 24 | 74 | 56 | 5,00 | *LYKH20 |

* Items marked with an asterisk delivery in 2 weeks

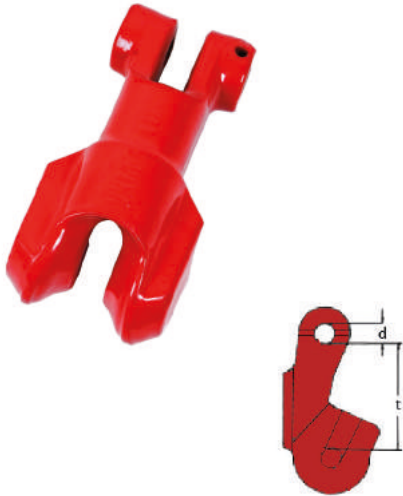
SHORTENING CLUTCH



- separate shortening clutch, which can be attached to any part of the chain without tools
- paint coated
- safety factor 4 : 1
- EN-1677

| For chain mm | WLL t | t mm | l mm | Weight kg | Product code |
|-----------------|----------|---------|---------|--------------|--------------|
| 6 | 1,00 | 79 | 100 | 0,3 | LYKT16 |
| 8 | 2,00 | 91 | 142 | 0,9 | LYKT18 |
| 10 | 3,20 | 121 | 162 | 1,3 | LYKT110 |
| 13 | 5,30 | 160 | 210 | 2,4 | LYKT113 |

SHORTENING CLUTCH, FIXED VK

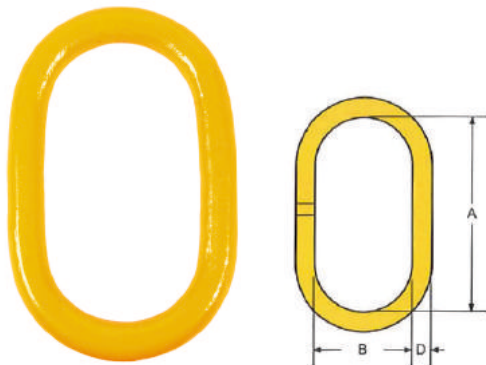


- attachment to a lifting link with a separate chain, to which the hook is attached with a pin
- can be used for normal shortening or for making a loop around the item to be lifted
- paint coated
- safety factor 4 : 1
- EN-1677

| For chain mm | WLL t | d mm | t mm | Weight kg | Product code |
|-----------------|----------|---------|---------|--------------|-----------------|
| 6 | 1,00 | 8 | 45 | 0,2 | LYKTK6 |
| 8 | 2,00 | 10 | 54 | 0,5 | LYKTK8 |
| 10 | 3,20 | 12 | 74 | 0,9 | LYKTK10 |
| 13 | 5,30 | 16 | 77 | 1,5 | LYKTK13 |
| 16 | 8,00 | 20 | 92 | 2,6 | LYKTK16 |

MASTER LINK FOR 1- AND 2-LEG LIFTING CHAIN ASSEMBLIES DIN 5688

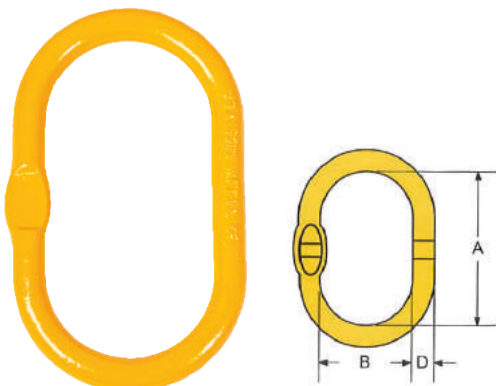
- standard size master links for chain assemblies
- paint coated
- safety factor 4 : 1
- EN-1677



| 1-leg for chain mm | 2-leg for chain mm | WLL t | A mm | B mm | D mm | Weight kg | Product code |
|--------------------------|--------------------------|----------|---------|---------|---------|--------------|-----------------|
| 6/7 | 6 | 1,6 | 110 | 60 | 13 | 0,34 | NOR76 |
| 8 | 7 | 2,12 | 110 | 60 | 16 | 0,53 | NOR87 |
| 10 | 8 | 3,15 | 135 | 75 | 18 | 0,80 | NOR108 |
| 13 | 10 | 5,3 | 160 | 90 | 22 | 1,50 | NOR1310 |
| 16 | 13 | 8,0 | 180 | 100 | 26 | 2,30 | NOR1613 |
| 18 | 16 | 11,2 | 200 | 110 | 32 | 3,90 | NOR1816 |
| 20 | 18 | 14,0 | 260 | 140 | 36 | 6,35 | NOR2218 |
| 22 | 20 | 17,0 | 300 | 160 | 40 | 9,00 | NOR2220 |
| 26 | 22 | 21,2 | 340 | 180 | 45 | 12,80 | NOR2622 |
| 32 | 26 | 31,5 | 350 | 190 | 50 | 17,20 | NOR3226 |
| 36 | 32 | 45,0 | 400 | 200 | 56 | 24,20 | NOR3632 |

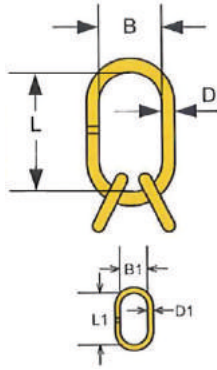
MASTER LINK, EXTRA LARGE

- larger than normal master links for chain assemblies
- paint coated
- safety factor 4 : 1
- EN-1677



| 1-leg for chain mm | 2-leg for chain mm | WLL t | A mm | B mm | D mm | Weight kg | Product code |
|--------------------------|--------------------------|----------|---------|---------|---------|--------------|-----------------|
| 10 | 7/8 | 3,2 | 190 | 100 | 16 | 0,86 | NOR16B7 |
| 13 | 10 | 6,4 | 300 | 210 | 25 | 5,53 | NORY025 |
| 13 | 10 | 7,0 | 210 | 110 | 22 | 1,83 | NOR22B7 |
| 16 | 13 | 11,0 | 300 | 210 | 32 | 5,94 | NORY032 |
| 16 | 13/16 | 11,5 | 270 | 140 | 28 | 3,80 | NOR28B7 |
| 22 | 20 | 17,0 | 270 | 140 | 32 | 5,05 | NOR32B6 |
| 22 | 20 | 19,0 | 420 | 220 | 38 | 10,78 | NOR38B7 |
| 26 | 22 | 28,0 | 270 | 140 | 38 | 7,29 | NOR38B6 |
| 26 | 22 | 27,0 | 470 | 250 | 45 | 17,06 | NOR45B7 |
| 36 | 32 | 45,0 | 380 | 200 | 50 | 17,65 | NOR50B6 |
| 36 | 32 | 65,0 | 430 | 220 | 60 | 28,85 | NOR60B6 |

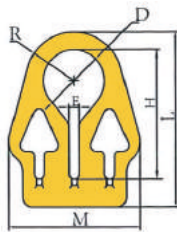
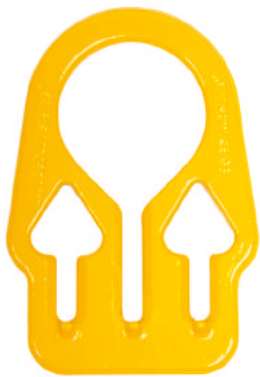
MASTER LINK ASSEMBLY FOR 3- AND 4-LEG ASSEMBLIES DIN 5688



- used for 3- and 4-leg lifting chain assemblies
- paint coated
- safety factor 4 : 1
- EN-1677

| 3/4-leg for chain mm | WLL t | L mm | B mm | D mm | B1 mm | D1 mm | L1 mm | Weight kg | Product code |
|----------------------|-------|------|------|------|-------|-------|-------|-----------|--------------|
| 6 | 2,4 | 135 | 75 | 18 | 25 | 14 | 54 | 1,2 | NRLI6 |
| 7/8 | 4,3 | 160 | 90 | 22 | 34 | 16 | 70 | 2,2 | NRLI78 |
| 10 | 6,7 | 180 | 100 | 26 | 40 | 18 | 85 | 3,4 | NRLI10 |
| 13 | 11,2 | 200 | 110 | 32 | 50 | 22 | 115 | 6,0 | NRLI13 |
| 16 | 17,0 | 260 | 140 | 36 | 65 | 26 | 140 | 10,0 | NRLI16 |
| 20 | 26,5 | 350 | 190 | 51 | 70 | 32 | 150 | 23,3 | NRLI20 |
| 22 | 32,0 | 350 | 190 | 51 | 75 | 36 | 170 | 25,9 | NRLI22 |
| 26 | 45,0 | 400 | 200 | 57 | 80 | 40 | 170 | 35,2 | NRLI26 |
| 32 | 67,0 | 460 | 250 | 72 | | | | 67,6 | NRLI32 |

MASTER LINK WITH SHORTENING POCKETS FOR 1- AND 2-LEG ASSEMBLIES

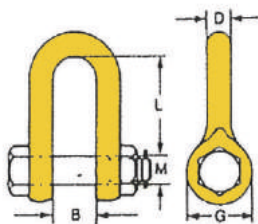


- master link with integrated chain shortenings, no shortening hook needed
- master link removable from chains
- paint coated
- safety factor 4 : 1
- EN-1677

NEW

| For chain mm | WLL t | E mm | D mm | R mm | H mm | M mm | L mm | Weight kg | Product code |
|--------------|-------|------|------|------|------|------|------|-----------|--------------|
| 8 | 0,95 | 8 | 51 | 40 | 107 | 109 | 144 | 0,46 | NOR8L |
| 10 | 1,58 | 10 | 78 | 56 | 151 | 133 | 196 | 1,30 | NOR10L |
| 13 | 3,22 | 12 | 81 | 69 | 148 | 167 | 234 | 1,89 | NOR13L |

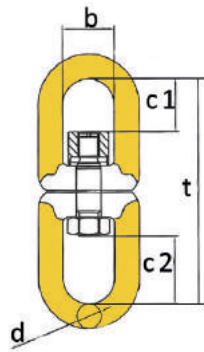
CHAIN SHACKLE



- can be attached straight to lift chain without connection link
- paint coated
- safety factor 4 : 1
- EN-1677

| For chain mm | WLL t | B mm | D mm | G mm | L mm | M mm | Weight kg | Product code |
|--------------|-------|------|------|------|------|------|-----------|--------------|
| 7/8 | 2,00 | 15 | 8 | 20 | 30 | 10 | 0,15 | SAKSA78 |
| 10 | 3,15 | 20 | 11 | 35 | 39 | 12 | 0,34 | SAKSA10 |
| 13 | 5,30 | 24 | 13 | 42 | 52 | 16 | 0,66 | SAKSA13 |
| 16 | 8,00 | 33 | 16 | 51 | 65 | 20 | 1,14 | SAKSA16 |

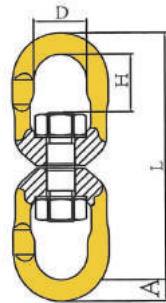
LIFTING SWIVEL WITH BEARING, EYE/EYE



- duration lubricated, easily rotating swivels for using with lifting chains
- rotates easily also with full load
- large eye / eye ends
- paint coated
- safety factor 4 : 1 / EN-1677

| For chain mm | WLL t | b mm | c1 mm | c2 mm | d mm | t mm | Weight kg | Product code |
|--------------|-------|------|-------|-------|------|------|-----------|--------------|
| 7/8 | 2,0 | 37 | 40 | 40 | 14 | 153 | 1,07 | LEIK78SS |
| 10 | 3,2 | 39 | 35 | 65 | 19 | 168 | 1,50 | LEIK10SS |
| 13 | 5,0 | 61 | 65 | 100 | 28 | 258 | 3,40 | LEIK13SS |

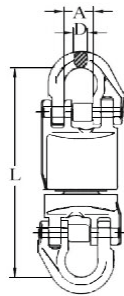
LIFTING SWIVEL, EYE/EYE



- rotating swivels with sliding surface for using with lifting chains
- can be rotated to desired position before lifting
- large eye / eye end
- paint coated
- safety factor 4 : 1 / EN-1677

| For chain mm | WLL t | A mm | D mm | H mm | L mm | Weight kg | Product code |
|--------------|-------|------|------|------|------|-----------|--------------|
| 7/8 | 2,0 | 12 | 35 | 28 | 164 | 0,60 | LELIU78SS |
| 10 | 3,2 | 15 | 42 | 34 | 194 | 1,50 | LELIU10SS |
| 13 | 5,0 | 18 | 50 | 43 | 216 | 1,75 | LELIU13SS |
| 16 | 8,0 | 21 | 61 | 56 | 289 | 4,52 | LELIU16SS |

BEARING SWIVEL, EYE/EYE, ELECTRICALLY ISOLATED

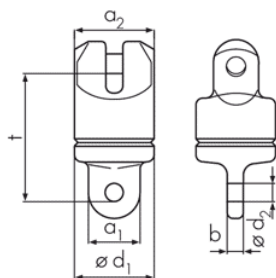


- small, duration lubricated, easily rotating swivels for using with lifting chains
- connection link / connection link ends
- paint coated
- safety factor 4 : 1 / EN-1677



| For chain mm | WLL t | A mm | D mm | L mm | Weight kg | Product code |
|--------------|-------|------|------|------|-----------|--------------|
| 7/8 | 2,0 | 18 | 9 | 131 | 0,7 | LEIK78LL |
| 10 | 3,15 | 25 | 11 | 162 | 1,5 | LEIK10LL |
| 13 | 5,3 | 30 | 16 | 214 | 3,2 | LEIK13LL |
| 16 | 8,0 | 36 | 19 | 243 | 5,4 | LEIK16LL |
| 20 | 12,5 | 42 | 22 | 285 | 9,0 | *LEIK20LL |

BEARING SWIVEL, CLEVIS/EYE GRADE 100



- small, duration lubricated, easily rotating swivels for using with lifting chains, GRADE 100
- rotates easily also with full load
- fork / eye ends
- paint coated/yellow passivated
- safety factor 4 : 1



| For chain mm | WLL t | a1 mm | a2 mm | b mm | Ød1 mm | Ød2 mm | t mm | Weight kg | Product code |
|--------------|-------|-------|-------|------|--------|--------|------|-----------|--------------|
| 6 | 1,40 | 20 | 36 | 6 | 36 | 8 | 51 | 0,26 | LEIK6SH |
| 8 | 2,50 | 26 | 43 | 8 | 41 | 10 | 56 | 0,41 | LEIK8SH |
| 10 | 4,00 | 35 | 52 | 10 | 51 | 13 | 73 | 0,86 | LEIK10SH |
| 13 | 6,70 | 43 | 65 | 13 | 59 | 17 | 88 | 1,51 | LEIK13SH |

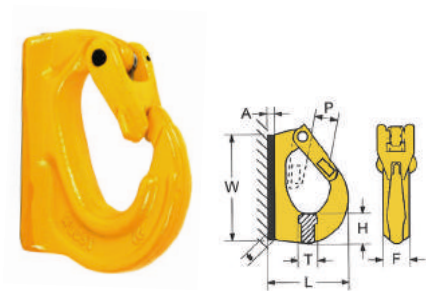
RELEASE-A-MATIC HOOK GRADE 80



- hooks that can be launched / opened by using a rope
- surface treatment electric galvanizing
- safety factor 4 : 1
- EN-1677

| WLL t | A Ø mm | Weight kg | Product code |
|----------|-----------|--------------|--------------|
| 1,6 | 23 | 0,9 | LAUK16 |
| 8,1 | 38 | 5,0 | LAUK8 |

EXCAVATOR HOOK, WELDABLE



- weld-on hooks for excavator dippers, work machines and vehicles
- paint coated
- safety factor 4 : 1 / EN-1677

| WLL t | A mm | W mm | P mm | T mm | L mm | H mm | F mm | Weight kg | Product code |
|----------|---------|---------|---------|---------|---------|---------|---------|--------------|--------------|
| 2,0 | 5 | 80 | 25 | 20 | 94 | 24 | 34 | 0,80 | KAKO02 |
| 3,0 | 6 | 115 | 30 | 24 | 105 | 30 | 36 | 1,20 | KAKO03 |
| 5,0 | 10 | 155 | 34 | 28 | 132 | 43 | 44 | 2,50 | KAKO05 |
| 8,0 | 12 | 160 | 34 | 38 | 135 | 51 | 51 | 3,30 | KAKO08 |
| 10,0 | 15 | 200 | 50 | 39 | 167 | 55 | 53 | 5,20 | KAKO10 |
| 15,0 | 14 | 241 | 54 | 45 | 184 | 67 | 61 | 7,90 | KAKO15 |

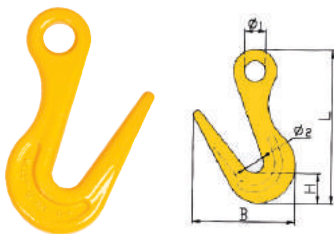
NEW

SPARE PART KITS FOR EXCAVATOR HOOK



| Product | Product code |
|---|--------------|
| spare part kit 1-3 t for excavator hook | KASizeR02 |
| spare part kit 5-8 t for excavator hook | KASizeR05 |
| spare part kit 10 t for excavator hook | KASizeR10 |

FARM HOOK



- for lifting e.g. large sacks
- paint coated
- safety factor 4 : 1 / EN-1677

| WLL t | Ø1 mm | B mm | Ø2 mm | L mm | H mm | Weight kg | Product code |
|----------|----------|---------|----------|---------|---------|--------------|--------------|
| 2,0 | 35 | 170 | 33 | 254 | 49 | 3,1 | MKOU2 |

S-HOOK



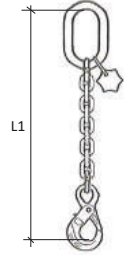
- GRADE 80 hooks for lifting
- paint coated
- safety factor 4 : 1 / EN-1677

| WLL t | a mm | b mm | c mm | Weight kg | Product code |
|----------|---------|---------|---------|--------------|--------------|
| 0,3 | 13 | 100 | 30 | 0,2 | SKOU803 |
| 0,5 | 16 | 130 | 40 | 0,5 | SKOU805 |
| 1,0 | 20 | 180 | 55 | 1,0 | SKOU810 |
| 1,5 | 26 | 220 | 65 | 2,0 | SKOU815 |
| 2,0 | 32 | 260 | 80 | 3,6 | SKOU820 |
| 3,0 | 36 | 320 | 95 | 5,6 | SKOU830 |
| 4,0 | 40 | 360 | 110 | 7,9 | *SKOU840 |
| 5,0 | 45 | 400 | 120 | 11,0 | *SKOU850 |
| 6,0 | 50 | 450 | 135 | 15,3 | *SKOU860 |

* Items marked with an asterisk delivery in 1-2 weeks.

1- AND 2-LEG CHAIN SLINGS

- self-locking safety hooks or latch hooks as standard ends
 - alternative ends are also available, e.g. weld-on hooks, shackles etc.
 - the assemblies include a load plate
 - paint coated
 - safety factor 4 : 1
 - EN 818-4
- The last two numbers of the product code refer to the length, when ordering, e.g. a 3m 2-leg assembly with a 10mm chain and a safety hook, the product code is NKV10203. If you want to include shortening hooks in the assembly, the product code is NKV10203L.
- Note! The leg length of the chain assembly, unless specifically ordered, is as presented in the image L1.



1-LEG

| Chain size mm | WLL t | Safety hooks Product code | Safety hooks + Shortening hooks Product code | Latch hooks Product code | Latch hooks + Shortening hooks Product code |
|------------------|----------|------------------------------|--|-----------------------------|---|
| 6 | 1,12 | NKV06101 | NKV06101L | NKS06101 | NKS06101L |
| 7 | 1,50 | NKV07101 | NKV07101L | NKS07101 | NKS07101L |
| 8 | 2,00 | NKV08101 | NKV08101L | NKS08101 | NKS08101L |
| 10 | 3,15 | NKV10101 | NKV10101L | NKS10101 | NKS10101L |
| 13 | 5,30 | NKV13101 | NKV13101L | NKS13101 | NKS13101L |
| 16 | 8,00 | NKV16101 | NKV16101L | NKS16101 | NKS16101L |
| 20 | 12,50 | NKV20101 | NKV20101L | NKS20101 | NKS20101L |
| 22 | 15,00 | NKV22101 | NKV22101L | NKS22101 | NKS22101L |
| 26 | 21,20 | NKV26101 | NKV26101L | NKS26101 | NKS26101L |
| 32 | 31,50 | - | - | NKS32101 | NKS32101L |

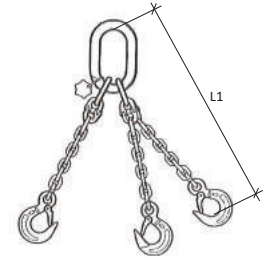


2-LEG

| Chain size mm | WLL t 0 - 45° chain angle | WLL t 45 - 60° chain angle | Safety hooks Product code | Safety hooks + Shortening hooks Product code | Latch hooks Product code | Latch hooks + Shortening hooks Product code |
|------------------|------------------------------------|-------------------------------------|------------------------------|---|-----------------------------|--|
| 6 | 1,60 | 1,12 | NKV06201 | NKV06201L | NKS06201 | NKS06201L |
| 7 | 2,12 | 1,50 | NKV07201 | NKV07201L | NKS07201 | NKS07201L |
| 8 | 2,80 | 2,00 | NKV08201 | NKV08201L | NKS08201 | NKS08201L |
| 10 | 4,25 | 3,15 | NKV10201 | NKV10201L | NKS10201 | NKS10201L |
| 13 | 7,50 | 5,30 | NKV13201 | NKV13201L | NKS13201 | NKS13201L |
| 16 | 11,20 | 8,00 | NKV16201 | NKV16201L | NKS16201 | NKS16201L |
| 20 | 17,00 | 12,50 | NKV20201 | NKV20201L | NKS20201 | NKS20201L |
| 22 | 21,20 | 15,00 | NKV22201 | NKV22201L | NKS22201 | NKS22201L |
| 26 | 30,00 | 21,20 | NKV26201 | NKV26201L | NKS26201 | NKS26201L |
| 32 | 45,00 | 31,50 | - | - | NKS32201 | NKS32201L |

3- AND 4-LEG CHAIN SLINGS

- self-locking safety hooks or latch hooks as standard ends
 - alternative ends are also available, e.g. weld-on hooks, shackles etc.
 - the assemblies include a load plate
 - paint coated
 - safety factor 4 : 1
 - EN 818-4
- The last two numbers of the product code refer to the length, when ordering, e.g. a 3m 4-leg assembly with a 10mm chain and a safety hook, the product code is NKV10403. If you want to include shortening hooks in the assembly, the product code is NKV10403L
 - Note! The leg length of the chain assembly, unless specifically ordered, is as presented in the image L1



3-LEG



| Chain size mm | WLL t 0 - 45° chain angle | WLL t 45 - 60° chain angle | Safety hooks Product code | Safety hooks + Shortening hooks Product code | Latch hooks Product code | Latch hooks + Shortening hooks Product code |
|------------------|------------------------------------|-------------------------------------|------------------------------|--|-----------------------------|---|
| | | | | | | |
| 6 | 2,36 | 1,70 | NKV06301 | NKV06301L | NKS06301 | NKS06301L |
| 7 | 3,15 | 2,24 | NKV07301 | NKV07301L | NKS07301 | NKS07301L |
| 8 | 4,25 | 3,00 | NKV08301 | NKV08301L | NKS08301 | NKS08301L |
| 10 | 6,70 | 4,75 | NKV10301 | NKV10301L | NKS10301 | NKS10301L |
| 13 | 11,20 | 8,00 | NKV13301 | NKV13301L | NKS13301 | NKS13301L |
| 16 | 17,00 | 11,80 | NKV16301 | NKV16301L | NKS16301 | NKS16301L |
| 20 | 26,50 | 19,00 | NKV20301 | NKV20301L | NKS20301 | NKS20301L |
| 22 | 31,50 | 22,40 | NKV22301 | NKV22301L | NKS22301 | NKS22301L |
| 26 | 45,00 | 31,50 | NKV26301 | NKV26301L | NKS26301 | NKS26301L |
| 32 | 67,00 | 47,50 | - | - | NKS32301 | NKS32301L |

4-LEG



| Chain size mm | WLL t 0 - 45° chain angle | WLL t 45 - 60° chain angle | Safety hooks Product code | Safety hooks + Shortening hooks Product code | Latch hooks Product code | Latch hooks + Shortening hooks Product code |
|------------------|------------------------------------|-------------------------------------|------------------------------|--|-----------------------------|---|
| | | | | | | |
| 6 | 2,36 | 1,70 | NKV06401 | NKV06401L | NKS06401 | NKS06401L |
| 7 | 3,15 | 2,24 | NKV07401 | NKV07401L | NKS07401 | NKS07401L |
| 8 | 4,25 | 3,00 | NKV08401 | NKV08401L | NKS08401 | NKS08401L |
| 10 | 6,70 | 4,75 | NKV10401 | NKV10401L | NKS10401 | NKS10401L |
| 13 | 11,20 | 8,00 | NKV13401 | NKV13401L | NKS13401 | NKS13401L |
| 16 | 17,00 | 11,80 | NKV16401 | NKV16401L | NKS16401 | NKS16401L |
| 20 | 26,50 | 19,00 | NKV20401 | NKV20401L | NKS20401 | NKS20401L |
| 22 | 31,50 | 22,40 | NKV22401 | NKV22401L | NKS22401 | NKS22401L |
| 26 | 45,00 | 31,50 | NKV26401 | NKV26401L | NKS26401 | NKS26401L |
| 32 | 67,00 | 47,50 | - | - | NKS32401 | NKS32401L |

CHOKER CHAIN SLINGS

- used for tightening loop lift
 - perfect for lifting, among others, pipe bundles, lumber bundles and reinforcement steel
 - the assemblies include a load plate
 - paint coated
 - safety factor 4 : 1
 - EN 818-4
- The last two numbers of the product code refer to the length, when ordering, e.g. a 3m 2-leg assembly with a 10mm chain and a safety hook, the product code is NKLI10203. If you want to include shortening hooks in the assembly, the product code is NKLI10203L.
 - Note! The leg length of the chain assembly, unless specifically ordered, is as presented in the image L1.



1-Leg

| Chain size mm | WLL t | Choker chain sling Product code | Choker chain sling + Shortening hooks Product code |
|------------------|----------|------------------------------------|--|
| 7 | 1,2 | NKLI07101 | NKLI07101L |
| 8 | 1,6 | NKLI08101 | NKLI08101L |
| 10 | 2,5 | NKLI10101 | NKLI10101L |
| 13 | 4,2 | NKLI13101 | NKLI13101L |
| 16 | 6,3 | NKLI16101 | NKLI16101L |



2-Leg



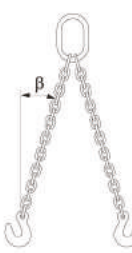
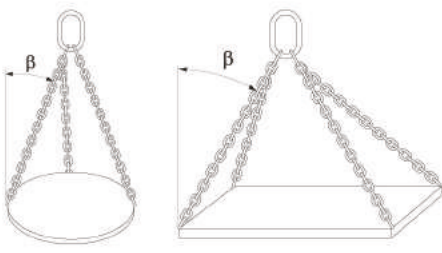
| Chain size mm | WLL t 0 - 45° chain angle | WLL t 45 - 60° chain angle | Choker chain sling Product code | Choker chain sling + Shortening hooks Product code |
|------------------|------------------------------------|-------------------------------------|------------------------------------|--|
| 7 | 1,7 | 1,2 | NKLI07201 | NKLI07201L |
| 8 | 2,2 | 1,6 | NKLI08201 | NKLI08201L |
| 10 | 3,5 | 2,5 | NKLI10201 | NKLI10201L |
| 13 | 6,0 | 4,2 | NKLI13201 | NKLI13201L |
| 16 | 8,9 | 6,3 | NKLI16201 | NKLI16201L |



Produkty do podnoszenia i mocowania dla profesjonalistów
Lifting, lashing and material handling products for professionals

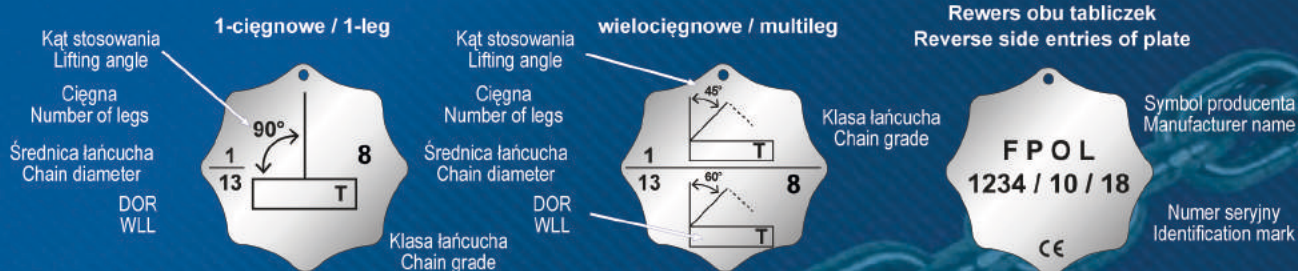
8 KLASA
GRADE

DOPUSZCZALNE OBCIĄŻENIE ROBOCZE ZAWIESI ŁAŃCUCHOWYCH WORKING LOAD LIMITS FOR CHAIN SLINGS

| EN 818-4 | 1-ciężnowe / legs | 2-ciężnowe / legs | | 3-4-ciężnowe / legs | |
|---|---|---|----------|---|---------|
|  Łańcuch / Chain Ø mm |  |  | |  | |
| | Kąt odchylenia od pionu β / Inclination angle β | | | | |
| | 0 - 45° | | 45 - 60° | | 0 - 45° |
| DOR / WLL kg | | | | | |
| 6 | 1120 | 1600 | 1120 | 2360 | 1700 |
| 7 | 1500 | 2120 | 1500 | 3150 | 2240 |
| 8 | 2000 | 2800 | 2000 | 4250 | 3000 |
| 10 | 3150 | 4250 | 3150 | 6700 | 4750 |
| 13 | 5300 | 7500 | 5300 | 11200 | 8000 |
| 16 | 8000 | 11200 | 8000 | 17000 | 11800 |
| 19 | 11200 | 16000 | 11200 | 23600 | 17000 |
| 20 | 12500 | 17000 | 12500 | 26500 | 19000 |
| 22 | 15000 | 21200 | 15000 | 31500 | 22400 |
| 26 | 21200 | 30000 | 21200 | 45000 | 31500 |
| 32 | 31500 | 45000 | 31500 | 67000 | 47500 |
| 36 | 40000 | 56000 | 40000 | 84000 | 60000 |
| 40 | 50000 | 70000 | 50000 | 105000 | 75000 |
| 45 | 63000 | 88200 | 63000 | 132300 | 94500 |
| Współczynniki stosowane do obliczenia DOR / Coefficients used in calculated WLL | | | | | |
| | 1,0 | 1,4 | 1,0 | 2,1 | 1,5 |
| Dla zastawania w obwiązaniu wartości z tabeli należy wymnożyć przez 0,8 / For a tightening lift, the table values are multiplied by 0,8 | | | | | |

Współczynnik bezpieczeństwa / safety factor 4:1

TABLICZKI ZNAMIONOWE ZAWIESI ŁAŃCUCHOWYCH WLL PLATES FOR CHAIN SLINGS



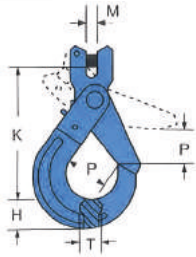
Temperatura użytkowania / Operating temperatures

| Limity obciążenia roboczego przedstawione jako procent wartości DOR The working load limits presented as a percentage of the WLL | | | |
|---|------------------|------------------|-------------------------|
| Temperatura / temperature, t. °C | | | |
| -40 < t < 200 °C | 200 < t < 300 °C | 300 < t < 400 °C | t > 400 °C |
| 100% | 90% | 75% | zakazane not allowed |

SPRAWDŹ STAN ELEMENTÓW ŁAŃCUCHA PRZED KAŻDYM UŻYCIEM
ORAZ PRZEPROWADŹ PRZEGLĄD PRZYNAJMNIEJ RAZ W ROKU.

ALWAYS CHECK LIFTING CHAIN ASSEMBLIES VISUALLY BEFORE USE
AND THOROUGHLY AT LEAST ONCE A YEAR.

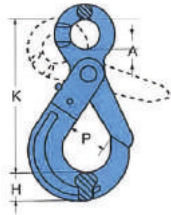
CLEVIS SELF-LOCKING HOOK



- the hook locks automatically when lifting starts
- the lifting chain is attached directly to the hook without a connection link
- paint coated
- safety factor 4 : 1

| For chain mm | WLL t | P mm | M mm | T mm | H mm | K mm | Weight kg | Product code |
|--------------|-------|------|------|------|------|------|-----------|--------------|
| 6 | 1,4 | 28 | 8 | 15 | 19 | 95 | 0,50 | VAKAH106 |
| 8 | 2,5 | 35 | 9 | 20 | 24 | 121 | 0,90 | VAKAH1078 |
| 10 | 4,0 | 45 | 12 | 26 | 28 | 146 | 1,60 | VAKAH1010 |
| 13 | 6,7 | 53 | 15 | 32 | 40 | 182 | 2,90 | VAKAH1013 |
| 16 | 10,0 | 62 | 18 | 38 | 51 | 218 | 5,80 | VAKAH1016 |
| 20 | 16,0 | 76 | 25 | 45 | 55 | 239 | 8,60 | VAKAH1020 |
| 22 | 19,0 | 80 | 25 | 52 | 67 | 280 | 12,1 | VAKAH1022 |

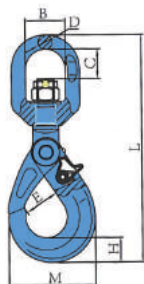
EYE SELF-LOCKING HOOK



- the hook locks automatically when lifting starts
- paint coated
- safety factor 4 : 1

| For chain mm | WLL t | A mm | P mm | H mm | K mm | Weight kg | Product code |
|--------------|-------|------|------|------|------|-----------|--------------|
| 6 | 1,4 | 21 | 28 | 20 | 110 | 0,50 | VAKA106 |
| 8 | 2,5 | 27 | 35 | 26 | 137 | 0,90 | VAKA1078 |
| 10 | 4,0 | 34 | 45 | 30 | 169 | 1,50 | VAKA1010 |
| 13 | 6,7 | 40 | 53 | 40 | 209 | 2,70 | VAKA1013 |
| 16 | 10,0 | 50 | 62 | 50 | 254 | 5,70 | VAKA1016 |
| 20 | 16,0 | 60 | 76 | 62 | 277 | 7,90 | VAKA1020 |
| 22 | 19,0 | 70 | 80 | 66 | 319 | 11,20 | VAKA1022 |

EYE SELF-LOCKING HOOK WITH SWIVEL



- swivel structure allows the hook to rotate
- can be rotated to desired position before lifting
- paint coated
- safety factor 4 : 1

| For chain mm | WLL t | B mm | C mm | D mm | E mm | H mm | M mm | L mm | Weight kg | Product code |
|--------------|-------|------|------|------|------|------|------|------|-----------|--------------|
| 6 | 1,4 | 32 | 23 | 11 | 28 | 20 | 70 | 184 | 0,60 | VAKAL106 |
| 8 | 2,5 | 36 | 28 | 13 | 35 | 26 | 90 | 229 | 1,10 | VAKAL1078 |
| 10 | 4,0 | 42 | 35 | 15 | 45 | 30 | 108 | 269 | 2,00 | VAKAL1010 |
| 13 | 6,7 | 50 | 40 | 17 | 53 | 40 | 138 | 330 | 4,00 | VAKAL1013 |
| 16 | 10,0 | 61 | 56 | 21 | 62 | 50 | 170 | 413 | 6,80 | VAKAL1016 |
| 20 | 16,0 | 72 | 62 | 26 | 76 | 62 | 192 | 463 | 12,50 | VAKAL1020 |
| 22 | 19,0 | 97 | 94 | 33 | 80 | 66 | 205 | 572 | 17,10 | VAKAL1022 |

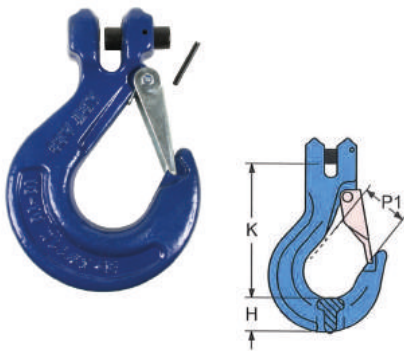
EYE SLING HOOK WITH LATCH



- extra strong forged safety latch
- paint coated
- chain connection with GRADE 100 link
- safety factor 4 : 1

| For chain mm | WLL t | P mm | A mm | K mm | H mm | Weight kg | Product code |
|--------------|-------|------|------|------|------|-----------|--------------|
| 6 | 1,4 | 18 | 20 | 80 | 21 | 0,32 | SALKA1006 |
| 8 | 2,5 | 25 | 25 | 98 | 27 | 0,60 | SALKA1078 |
| 10 | 4,0 | 28 | 34 | 120 | 33 | 1,20 | SALKA1010 |
| 13 | 6,7 | 38 | 43 | 152 | 43 | 2,20 | SALKA1013 |
| 16 | 10,0 | 44 | 50 | 183 | 50 | 3,50 | SALKA1016 |
| 20 | 16,0 | 52 | 55 | 217 | 56 | 7,15 | SALKA1020 |
| 22 | 19,0 | 66 | 60 | 241 | 62 | 11,5 | SALKA1022 |

CLEVIS SLING HOOK WITH LATCH



- like previous hook, but the lifting chain is attached directly to the hook without a connection link

| For chain mm | WLL t | P1 mm | H Mm | K mm | Weight kg | Product code |
|--------------|-------|-------|------|------|-----------|--------------|
| 6 | 1,4 | 18 | 21 | 75 | 0,33 | SALKAH1006 |
| 8 | 2,5 | 25 | 27 | 85 | 0,70 | SALKAH1078 |
| 10 | 4,0 | 28 | 33 | 104 | 1,30 | SALKAH1010 |
| 13 | 6,7 | 38 | 42 | 128 | 2,30 | SALKAH1013 |
| 16 | 10,0 | 44 | 50 | 150 | 3,60 | SALKAH1016 |
| 20 | 16,0 | 52 | 56 | 180 | 7,30 | SALKAH1020 |
| 22 | 19,0 | 66 | 62 | 213 | 12,10 | SALKAH1022 |

EYE GRAB HOOK



- for shortening chain legs
- attached to the lifting link with the same connection link as the chain
- paint coated
- safety factor 4 : 1

| For chain mm | WLL t | P mm | K mm | A mm | Weight kg | Product code |
|--------------|-------|------|------|------|-----------|--------------|
| 6 | 1,4 | 8 | 71 | 14 | 0,20 | LYKA1006 |
| 8 | 2,5 | 10 | 91 | 18 | 0,28 | LYKA1008 |
| 10 | 4,0 | 13 | 127 | 22 | 0,72 | LYKA1010 |
| 13 | 6,7 | 16 | 163 | 28 | 1,60 | LYKA1013 |
| 16 | 10,0 | 19 | 183 | 36 | 2,45 | LYKA1016 |
| 20 | 16,0 | 24 | 227 | 43 | 4,72 | LYKA1020 |
| 22 | 19,0 | 27 | 260 | 48 | 8,20 | LYKA1022 |

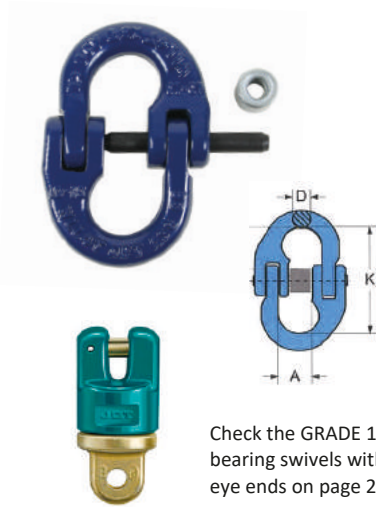
CLEVIS GRAB HOOK



- for shortening chain legs
- the hook is attached with own connection link and chain to master link
- paint coated
- safety factor 4 : 1

| For chain mm | WLL t | A mm | B mm | E mm | M mm | L mm | Weight kg | Product code |
|--------------|-------|------|------|------|------|------|-----------|--------------|
| 6 | 1,4 | 7 | 32 | 8 | 43 | 75 | 0,22 | LYKAH1006 |
| 8 | 2,5 | 9 | 36 | 10 | 53 | 91 | 0,34 | LYKAH1008 |
| 10 | 4,0 | 12 | 46 | 13 | 72 | 126 | 0,82 | LYKAH1010 |
| 13 | 6,7 | 15 | 59 | 16 | 96 | 163 | 1,75 | LYKAH1013 |
| 16 | 10,0 | 17 | 70 | 19 | 112 | 183 | 2,88 | LYKAH1016 |
| 20 | 16,0 | 24 | 85 | 24 | 143 | 224 | 4,84 | LYKAH1020 |
| 22 | 19,0 | 27 | 100 | 27 | 160 | 262 | 8,3 | LYKAH1022 |

CONNECTING LINK



- for connecting the chain and the hooks
- paint coated
- safety factor 4 : 1

| For chain mm | WLL t | D mm | K mm | A mm | Weight kg | Product code |
|--------------|-------|------|------|------|-----------|--------------|
| 6 | 1,4 | 7 | 44 | 14 | 0,10 | LLA106 |
| 8 | 2,5 | 10 | 61 | 18 | 0,22 | LLA1078 |
| 10 | 4,0 | 12 | 72 | 23 | 0,45 | LLA1010 |
| 13 | 6,7 | 16 | 89 | 27 | 1,15 | LLA1013 |
| 16 | 10,0 | 21 | 103 | 33 | 1,75 | LLA1016 |
| 20 | 16,0 | 24 | 116 | 42 | 2,70 | LLA1020 |
| 22 | 19,0 | 27 | 135 | 48 | 4,02 | LLA1022 |

Check the GRADE 100 ball bearing swivels with clevis/ eye ends on page 2-14

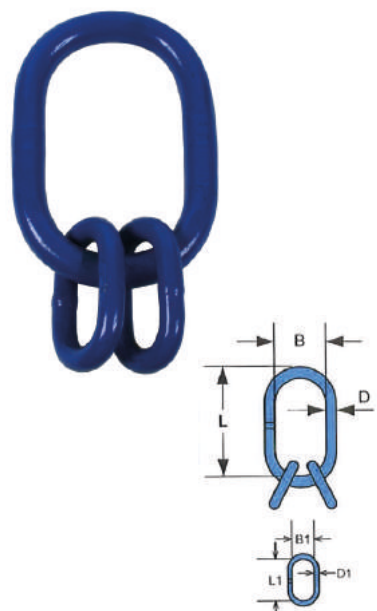
MASTER LINK FOR 1- AND 2-LEG CHAIN SLING



- the chain is attached with GRADE 100 connection links
- paint coated
- safety factor 4 : 1

| 1-leg for chain mm | 2-leg for chain mm | WLL t | D mm | B mm | A mm | Weight kg | Product code |
|--------------------|--------------------|-------|------|------|------|-----------|--------------|
| 6 | 6 | 2,1 | 13 | 60 | 110 | 0,3 | NORA1076 |
| 8 | - | 3,5 | 16 | 60 | 110 | 0,5 | NORA1087 |
| 10 | 8 | 5,0 | 18 | 75 | 135 | 0,9 | NORA10108 |
| 13 | 10 | 7,6 | 22 | 90 | 160 | 1,6 | NORA101310 |
| 16 | 13 | 10,0 | 26 | 100 | 180 | 2,4 | NORA101613 |
| - | 16 | 14,0 | 32 | 110 | 200 | 4,0 | NORA101816 |
| 22 | 20 | 25,0 | 36 | 140 | 260 | 6,3 | NORA102220 |
| - | 22 | 30,8 | 45 | 175 | 320 | 12,0 | NORA10222 |

MASTER LINK FOR 3- AND 4-LEG CHAIN SLING



- the chain is attached with a GRADE 100 connection link
- 20mm and 22mm master link includes connection links for attaching the chain
- paint coated
- safety factor 4 : 1

| 3-/4-leg for chain mm | WLL t 0 – 45° chain angle | WLL t 45 – 60° chain angle | D mm | B mm | L mm | L+L1 mm | Weight kg | Product code |
|-----------------------|---------------------------|----------------------------|------|------|------|---------|-----------|--------------|
| 6 | 3,15 | 2,25 | 18 | 75 | 153 | 207 | 1,1 | NRLIA6 |
| 8 | 5,30 | 3,75 | 22 | 90 | 182 | 252 | 2,2 | NRLIA8 |
| 10 | 8,00 | 6,00 | 26 | 100 | 206 | 291 | 3,4 | NRLIA10 |
| 13 | 13,70 | 9,80 | 32 | 110 | 232 | 347 | 6,1 | NRLIA13 |
| 16 | 21,00 | 15,00 | 36 | 140 | 296 | 436 | 9,9 | NRLIA16 |
| 20 | 33,60 | 24,00 | 45 | 180 | 430 | 670 | 26,5 | NRLIA20 |
| 22 | 42,00 | 30,00 | 50 | 200 | 480 | 800 | 32,8 | NRLIA22 |

CHAIN SLING ASSEMBLY WITH EYE LATCH HOOK

- 1-, 2-, 3- and 4-leg assemblies
- paint coated
- safety factor 4 : 1



| | Chain size | WLL t Chain angle 0 - 45° | WLL t Chain angle 45 - 60° | Latch hooks | Latch hooks + shortening hooks |
|-------|------------|---------------------------------------|--|--------------|-----------------------------------|
| | mm | | | Product code | Product code |
| 1-leg | 6 | 1,40 | | NKSE06101 | NKSE06101L |
| | 8 | 2,50 | | NKSE08101 | NKSE08101L |
| | 10 | 4,00 | | NKSE10101 | NKSE10101L |
| | 13 | 6,50 | | NKSE13101 | NKSE13101L |
| | 16 | 10,00 | | NKSE16101 | NKSE16101L |
| | 20 | 16,00 | | NKSE20101 | NKSE20101L |
| | 22 | 19,00 | | NKSE22101 | NKSE22101L |

| | | | | | |
|-------|----|-------|-------|-----------|------------|
| 2-leg | 6 | 1,96 | 1,40 | NKSE06201 | NKSE06201L |
| | 8 | 3,50 | 2,50 | NKSE08201 | NKSE08201L |
| | 10 | 5,60 | 4,00 | NKSE10201 | NKSE10201L |
| | 13 | 9,10 | 6,50 | NKSE13201 | NKSE13201L |
| | 16 | 14,00 | 10,00 | NKSE16201 | NKSE16201L |
| | 20 | 22,40 | 16,00 | NKSE20201 | NKSE20201L |
| | 22 | 26,60 | 19,00 | NKSE22201 | NKSE22201L |

| | | | | | |
|-------|----|-------|-------|-----------|------------|
| 3-leg | 6 | 2,94 | 2,10 | NKSE06301 | NKSE06301L |
| | 8 | 5,25 | 3,75 | NKSE08301 | NKSE08301L |
| | 10 | 8,00 | 5,70 | NKSE10301 | NKSE10301L |
| | 13 | 13,70 | 9,80 | NKSE13301 | NKSE13301L |
| | 16 | 21,00 | 15,00 | NKSE16301 | NKSE16301L |
| | 20 | 33,60 | 24,00 | NKSE20301 | NKSE20301L |
| | 22 | 39,90 | 28,50 | NKSE22301 | NKSE22301L |

| | | | | | |
|-------|----|-------|-------|-----------|------------|
| 4-leg | 6 | 2,94 | 2,10 | NKSE06401 | NKSE06401L |
| | 8 | 5,25 | 3,75 | NKSE08401 | NKSE08401L |
| | 10 | 8,00 | 5,70 | NKSE10401 | NKSE10401L |
| | 13 | 13,70 | 9,80 | NKSE13401 | NKSE13401L |
| | 16 | 21,00 | 15,00 | NKSE16401 | NKSE16401L |
| | 20 | 33,60 | 24,00 | NKSE20401 | NKSE20401L |
| | 22 | 39,90 | 28,50 | NKSE22401 | NKSE22401L |

The last two numbers of the product code refer to the length. When ordering, for example, 10mm 3m 2-leg assembly, the product code is NKSE10203

Note! The leg length of the chain assembly, unless specifically ordered, is as presented in the image L1.



Produkty do podnoszenia i mocowania dla profesjonalistów
Lifting, lashing and material handling products for professionals

10 KLASA
GRADE

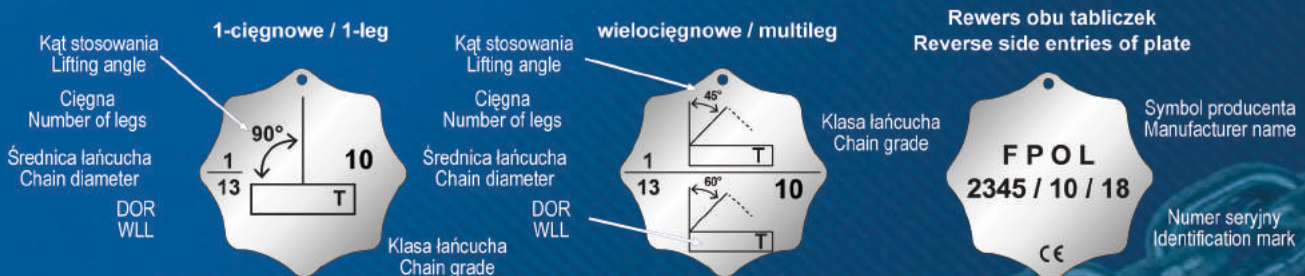
DOPUSZCZALNE OBCIĄŻENIE ROBOCZE ZAWIESI ŁAŃCUCHOWYCH
WORKING LOAD LIMITS FOR CHAIN SLINGS

| Łańcuch / Chain Ø mm | 1-ciężnowe / legs | | 2-ciężnowe / legs | | 3-4-ciężnowe / legs | |
|---|---|-------|-------------------|-------|---------------------|--|
| | Kąt odchylenia od pionu β / Inclination angle β | | | | | |
| | 0 - 45° | | 45 - 60° | | 0 - 45° | |
| | DOR / WLL kg | | | | | |
| 6 | 1400 | 1960 | 1400 | 2940 | 2100 | |
| 8 | 2500 | 3500 | 2500 | 5250 | 3750 | |
| 10 | 4000 | 5600 | 4000 | 8000 | 5700 | |
| 13 | 6500 | 9100 | 6500 | 13700 | 9800 | |
| 16 | 10000 | 14000 | 10000 | 21000 | 15000 | |
| 20 | 16000 | 22400 | 16000 | 33600 | 24000 | |
| 22 | 19000 | 26600 | 19000 | 39900 | 28500 | |
| Współczynniki stosowane do obliczenia DOR / Coefficients used in calculated WLL | | | | | | |
| | 1,0 | 1,4 | 1,0 | 2,1 | 1,5 | |

Dla zastawania w obwiązaniu wartości z tabeli należy wymnożyć przez 0,8 / For a tightening lift, the table values are multiplied by 0,8

Współczynnik bezpieczeństwa / safety factor 4:1

TABLICZKI ZNAMIONOWE ZAWIESI ŁAŃCUCHOWYCH
WLL PLATES FOR CHAIN SLINGS



TEMPERATURA UŻYTKOWANIA
OPERATING TEMPERATURE **-29°C ÷ 205°C**

SPRAWDŹ STAN ELEMENTÓW ŁAŃCUCHA PRZED KAŻDYM UŻYCIEM
ORAZ PRZEPROWADŹ PRZEGLĄD PRZYNAJMNIEJ RAZ W ROKU.
ALWAYS CHECK LIFTING CHAIN ASSEMBLIES VISUALLY BEFORE USE
AND THOROUGHLY AT LEAST ONCE A YEAR.

KWB
Safety in action

Lifting Equipment

Grade 100 | 120



Content

Star Alloy Grade 100

17

| | |
|--|-------|
| Advantages Star Alloy G 100 | 18 |
| Characteristics of Star Alloy G 100 | 19 |
| Sling Examples | 20-21 |
| Synoptical Table of Available Products | 22-23 |
| Star Alloy Chain and Star Alloy Plus+ /PAS Chain | 24 |
| Star Alloy G 100 Working Load Limits | 24 |
| Master Links, Sub-Assemblies & Accessories | 25-31 |
| Special Accessoires | 32 |
| Spare Parts | 33-34 |



Advantages of Star Alloy G 100

- Safe:** with the violet signal colour no risk of confusion with G 80
- Durability:** higher wear resistance due to increased hardness
- Simple:** easily adjustable with multi-function shortening hook
- Traceability:** appropriate marking on chains & components
- Quality:** ISO 9001 certified company
- Reliability:** Decades of experience
- Strong:** 25 % higher load capacity than G 80 allows the transition to smaller chain diameters

e.g. 2-leg chain slings

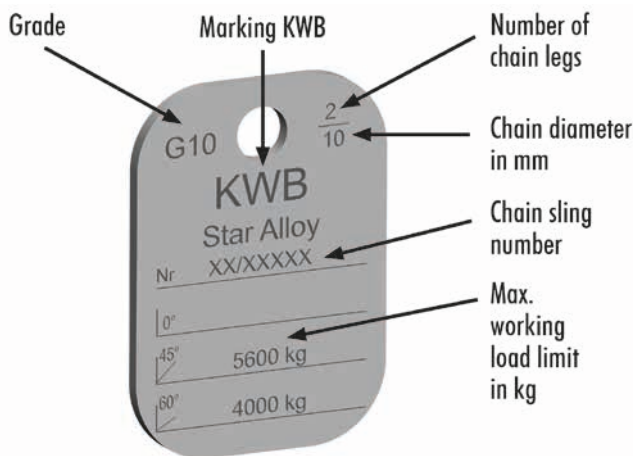
| Working Load Limit kg | Previous Chain – Ø G 80 mm | Star Alloy-Chain – Ø mm |
|-----------------------|----------------------------|-------------------------|
| 3,550 | 10 | 8 |
| 5,600 | 13 | 10 |
| 9,000 | 16 | 13 |

Light: with smaller chain dimensions considerable weight reduction compared to G-80, easier handling

e.g. with 2-leg chain slings 3 m length

| Working Load Limit kg | Previous Chain Weight G 80 mm | Star Alloy-Chain Weight kg |
|-----------------------|-------------------------------|----------------------------|
| 3,550 | 16.2 | 11.0 |
| 5,600 | 27.6 | 17.6 |
| 9,000 | 42.2 | 29.6 |

Clear Identification





Sample of tag for ready made chain sling

Certificate

A test certificate is issued for all our products which certifies all the specified characteristics.



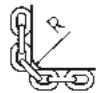


Star Alloy G 100 – Characteristics

| | | | |
|---|--|---------------|--|
| Chain Quality: | Star Alloy | SA/S | Corresponds with ASTM A973/A973M-01 & EN 818-2 but with higher working load limit (permissible operating temperature max. 200° C) & machinery directive 2006/42/EC |
| | Star Alloy Plus PAS | SAPP/S | Corresponds with PAS 1061 & machinery directive 2006/42/EC |
| | Star Alloy Plus + | SAP/S | Corresponds with EN 818-2 with a higher load capacity & machinery directive 2006/42/EC |
| Stress at Load Capacity Limit: | 250 N/mm ² | | |
| Test Stress: | 625 N/mm ² corresponds to 2.5 times the load capacity | | |
| Breaking Stress: | 1,000 N/mm ² corresponds to 4 times the load capacity | | |
| Breaking Elongation: | min. 20 % | | |
| Bending acc. to PAS 1061/EN 818-2: | 0.8 x nominal diameter | | |
| Permissible Working Temperature: | Star Alloy | SA/S | max. 200 °C |
| | Star Alloy Plus + | SAP/S | max. 380 °C |
| | Star Alloy Plus PAS | SAPP/S | max. 380 °C |
| | Components | | max. 380 °C |
| Grade Marking: | Star Alloy | SA/S | 10 at a spacing of approx. 300 mm up to dim. 16 (others 900 mm) and 10 on the back of each link |
| | Star Alloy Plus + | SAP/S | 8S at a spacing of approx. 900 mm up from dim. 19 |
| | Star Alloy Plus PAS | SAPP/S | 10 at a spacing of approx. 300 mm up to dim. 16 |
| | Components | | 10 (some components are still marked with 8S) |
| Surface: | Star Alloy | SA/S | Purple varnished |
| | Star Alloy Plus + | SAP/S | Violet varnished |
| | Star Alloy Plus PAS | SAPP/S | Violet varnished |
| | Components | | Violet powder coated |
| Working Load Tag: | Star Alloy | |  |
| | Star Alloy Plus PAS/ Star Alloy Plus + | |  |

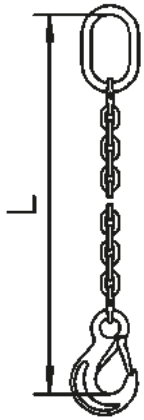
All the required data is shown on the working load tag.

Note: Working load tags should only be assembled acc. EN 818-4 and by competent persons. Working load tags can be used solely when the particular chain & KWB components are assembled in the chain sling. Should alternative Working load limits arise in the chain sling through the use of special parts, the tags are impermissible. Disregard of these instructions can lead to material damage and personal injury. KWB will not assume liability.

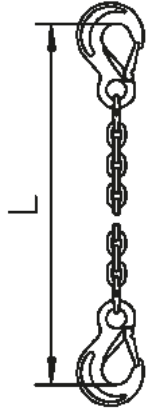
The performance concerning stress crack corrosion is identical to G 80.

| Temperature | -40° to 200 °C | above 200° to 300 °C | above 300° to 380 °C |
|--|--|---|---|
| Load Factor Star Alloy | 1 | impermissible | impermissible |
| Load Factor Star Alloy Plus +/PAS | 1 | 0.9 | 0.75 |
| Asymmetric Load Distribution | In this case the working load limit must be reduced by at least one chain leg, for example a 3-leg or 4-leg sling is to be classified as a 2-leg chain sling. In case of doubt, it must be supposed that only one of the chain legs carries the entire load. | | |
| Edge Loads | R = larger than 2x chain Ø  | R = larger than chain Ø  | R = chain Ø or smaller  |
| Load Factor | 1 | 0.7 | 0.5 |
| Impact Load | slight impact | medium impact | strong impact |
| Load Factor | 1 | 0.7 | impermissible |

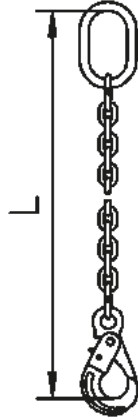
Sling Examples



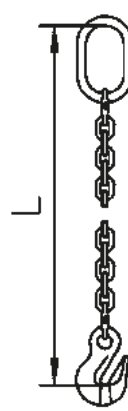
I A/S-HS/S V/S



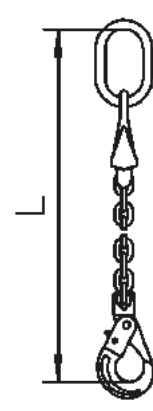
I HS/S-HS/S V/S



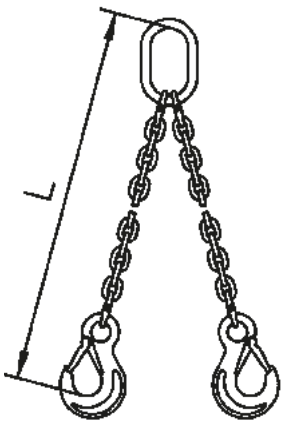
I A/S-HSB/S V/S



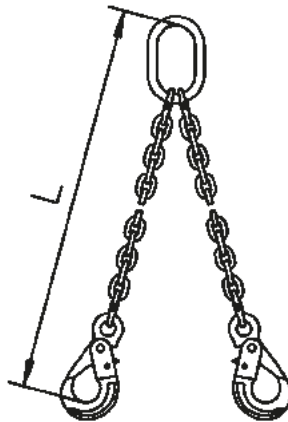
I A/S-P/S V/S



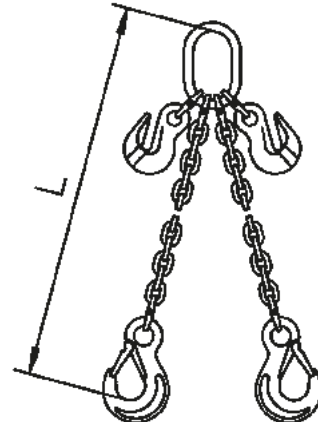
I GTVK/S-HKSB/S



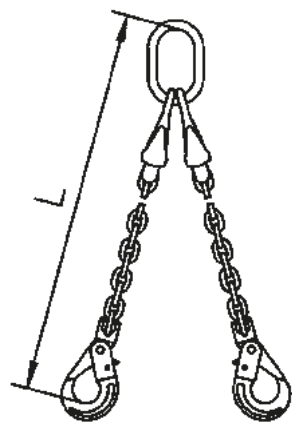
II A/S-HS/S V/S



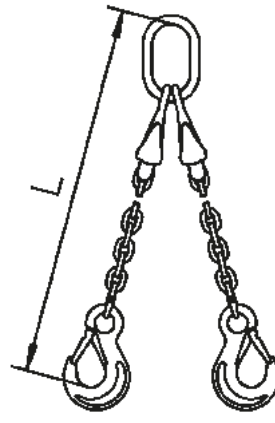
II A/S-HSB/S V/S



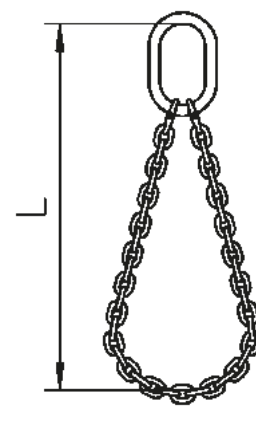
II A/S-HS/S-P/S V/S



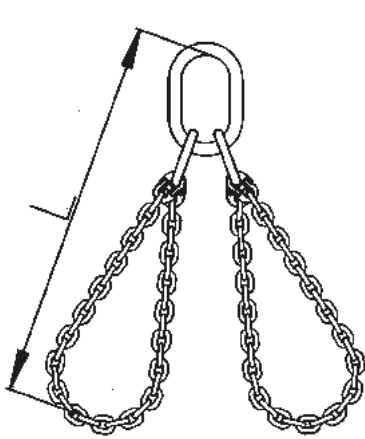
II GTVK/S-HKSB/S



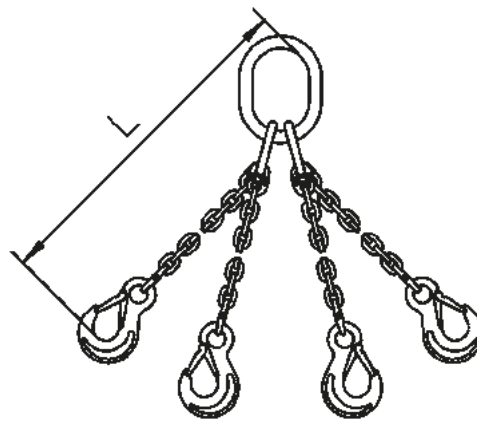
II GTVK/S-HS/S V/S



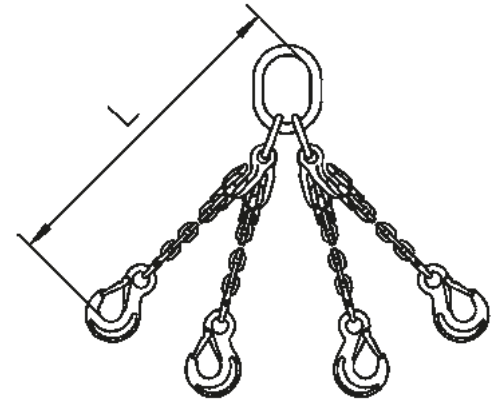
II A/S-S V/S



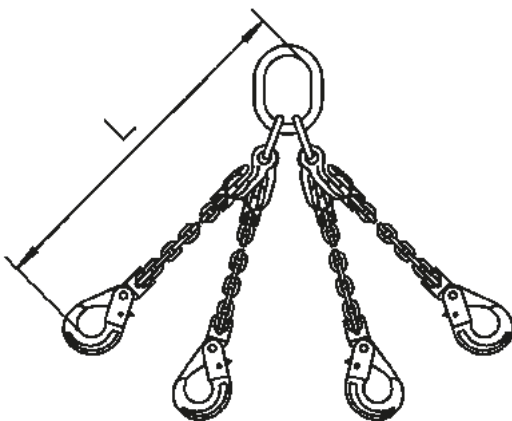
IV G/S-S V/S



IV G/S-HS/S V/S



IV GTVK/S-HS/S V/S



IV GTVKS/S-HKSB/S

Example of Order Text:

Chain Star Alloy SA/S 10 mm, 2 legs with Masterlink A/S and Eye Sling Hook with Forged Safety Latch HS/S, length 3,000 mm assembled with Connecting Link V/S.

SA/S 10 II A/S - HS/S 3000 V/S

Chain Nominal diameter Number of legs Master Link Hook Length Connecting link

Master Links & Sub-Assemblies 1-leg

| Chain Star Alloy Chain Star Alloy Plus PAS Chain Star Alloy Plus | | Master Link | Special Master Link | Special Master Link Assembly | Special Clevis Sub-Assembly |
|--|------|-------------|---------------------|------------------------------|-----------------------------|
| mm | inch | A/S Code | T/S Code | GL/S Code | GTVK/S 1 Code |
| 6 | 1/4 | A/S 13 | T/S 13 | | GTVK/S 1-6 |
| 7 | 9/32 | A/S 13 | T/S 13 | | GTVK/S 1-7 |
| 8 | 5/16 | A/S 16 | T/S 16 | | GTVK/S 1-8 |
| 10 | 3/8 | A/S 18 | T/S 18 | GL/S 1-10 | GTVK/S 1-10 |
| 13 | 1/2 | A/S 22 | T/S 22 | GL/S 1-13 | GTVK/S 1-13 |
| 16 | 5/8 | A/S 26 | T/S 26 | GL/S 1-16 | GTVK/S 1-16 |
| 19 | 3/4 | A/S 32 | T/S 32 | GL/S 1-19/22 | |
| 22 | 7/8 | A/S 36 | T/S 36 | GL/S 1-19/22 | |
| 26 | 1 | A/S 45 | | | |

Master Links & Sub-Assemblies 2-leg

| Chain Star Alloy Chain Star Alloy Plus PAS Chain Star Alloy Plus | | Master Link | Special Master Link | Special Master Link Assembly | Special Clevis Sub-Assembly |
|--|------|-------------|---------------------|------------------------------|-----------------------------|
| mm | inch | A/S Code | T/S Code | GL/S Code | GTVK/S 2 Code |
| 6 | 1/4 | A/S 13 | T/S 13 | GL/S 2-6/7/8/4-6 | GTVK/S 2-6 |
| 7 | 9/32 | A/S 16 | T/S 16 | GL/S 2-6/7/8/4-6 | GTVK/S 2-7 |
| 8 | 5/16 | A/S 18 | T/S 18 | GL/S 2-6/7/8/4-6 | GTVK/S 2-8 |
| 10 | 3/8 | A/S 22 | T/S 22 | GL/S 2-10/4-7/8 | GTVK/S 2-10 |
| 13 | 1/2 | A/S 26 | T/S 26 | GL/S 2-13/4-10 | GTVK/S 2-13 |
| 16 | 5/8 | A/S 32 | T/S 32 | GL/S 2-16/4-13 | GTVK/S 2-16 |
| 19 | 3/4 | A/S 36 | T/S 36 | GL/S 2-19/4-16 | |
| 22 | 7/8 | A/S 45 | | | |
| 26 | 1 | A/S 50 | T/S 56 | | |

Master Links & Sub-Assemblies 3 & 4-leg

| Chain Star Alloy Chain Star Alloy Plus PAS Chain Star Alloy Plus | | Sub-Assembly | Special Sub-Assembly | Special Sub-Assembly | Special Sub-Assembly | Special Clevis Sub-Assembly |
|--|------|--------------|----------------------|----------------------|----------------------|-----------------------------|
| mm | inch | G/S Code | GT/S Code | TG/S Code | GL/S Code | GTVK/S 4 Code |
| 6 | 1/4 | G/S 6 | GT/S 6 | TG/S 6 | GL/S 2-6/7/8/4-6 | GTVK/S 4-6 |
| 7 | 9/32 | G/S 7/8 | GT/S 7/8 | TG/S 7/8 | GL/S 2-10/4-7/8 | GTVK/S 4-7 |
| 8 | 5/16 | G/S 7/8 | GT/S 7/8 | TG/S 7/8 | GL/S 2-10/4-7/8 | GTVK/S 4-8 |
| 10 | 3/8 | G/S 10 | GT/S 10 | TG/S 10 | GL/S 2-13/4-10 | GTVK/S 4-10 |
| 13 | 1/2 | G/S 13 | GT/S 13 | TG/S 13 | GL/S 2-16/4-13 | GTVK/S 4-13 |
| 16 | 5/8 | G/S 16 | GT/S 16 | TG/S 16 | GL/S 2-19/4-16 | GTVK/S 4-16 |
| 19 | 3/4 | G/S 19/20 | | | | |
| 22 | 7/8 | G/S 22 | | | | |
| 26 | 1 | G/S 26 | | | | |

Connecting & Shortening Elements

| Chain Star Alloy Chain Star Alloy Plus PAS Chain Star Alloy Plus PAS | | Connecting Link V/S | Webbing Coupling Link RSK/S | Shortening Hook VK/S | Eye Grab Hook P/S | Eye Grab Hook with Safety Pin PS/S | Clevis Grab Hook PK/S |
|--|------|------------------------|-----------------------------------|-------------------------|----------------------|--|--------------------------|
| mm | inch | Code | Code | Code | Code | Code | Code |
| 6 | 1/4 | V/S 6 | | VK/S 6 | P/S 6 | | PK/S 6 |
| 7 | 9/32 | V/S 7 | | VK/S 7 | P/S 7/8 | PS/S 7/8 | PK/S 7 |
| 8 | 5/16 | V/S 8 | RSK/S 8 | VK/S 8 | P/S 7/8 | PS/S 7/8 | PK/S 8 |
| 10 | 3/8 | V/S 10 | RSK/S 10 | VK/S 10 | P/S 10 | PS/S 10 | PK/S 10 |
| 13 | 1/2 | V/S 13 | RSK/S 13 | VK/S 13 | P/S 13 | PS/S 13 | PK/S 13 |
| 16 | 5/8 | V/S 16 | RSK/S 16 | VK/S 16 | P/S 16 | | PK/S 16 |
| 19 | 3/4 | V/S 19/20 | | | P/S 19/20 | | PK/S 19/20 |
| 22 | 7/8 | V/S 22 | RSK/S 22 | | P/S 22 | | PK/S 22 |
| 26 | 1 | V/S 26 | | | P/S 26 | | |

Sling Hooks

| Chain Star Alloy Chain Star Alloy Plus PAS Chain Star Alloy Plus PAS | | Clevis Sling Hook with Forged Safety Latch HKS/S | Wide Bowl Clevis Sling Hook VHKS/S | Clevis Self Locking Hook HKSB/S | Clevis Foundry Hook GHK/S | Eye Sling Hook with Forged Safety Latch HS/S | Eye Self Locking Hook HSB/S | Swivel Safety Hook WSB/S | Foundry Hook GH/S |
|--|------|---|---|--|---------------------------------|---|-----------------------------------|--------------------------------|-------------------------|
| mm | inch | Code | Code | Code | Code | Code | Code | Code | Code |
| 6 | 1/4 | HKS/S 6 | | HKSB/S 6 | | HS/S 6 | HSB/S 6 | WSB/S 6 | |
| 7 | 9/32 | HKS/S 7 | | HKSB/S 7 | | HS/S 7/8 | HSB/S 7/8 | WSB/S 7/8 | GH/S 7/8 |
| 8 | 5/16 | HKS/S 8 | VHKS/S 8 | HKSB/S 8 | GHK/S 8 | HS/S 7/8 | HSB/S 7/8 | WSB/S 7/8 | GH/S 7/8 |
| 10 | 3/8 | HKS/S 10 | VHKS/S 10 | HKSB/S 10 | GHK/S 10 | HS/S 10 | HSB/S 10 | WSB/S 10 | GH/S 10 |
| 13 | 1/2 | HKS/S 13 | | HKSB/S 13 | GHK/S 13 | HS/S 13 | HSB/S 13 | WSB/S 13 | GH/S 13 |
| 16 | 5/8 | HKS/S 16 | | HKSB/S 16 | | HS/S 16 | HSB/S 16 | WSB/S 16 | GH/S 16 |
| 19 | 3/4 | HKS/S 19/20 | | | | HS/S 19/20 | HSB/S 19/20 | | GH/S 19/20 |
| 22 | 7/8 | HKS/S 22 | | | | HS/S 22 | HSB/S 22 | | |
| 26 | 1 | | | | | HS/S 26 | | | |

Special Accessories

| Chain Star Alloy Chain Star Alloy Plus PAS Chain Star Alloy Plus PAS | | Sheet Metal Plate Hook BH/S | Ratchet Load Binder RLS/S |
|--|------|--------------------------------|------------------------------|
| mm | inch | Code | Code |
| 6 | 1/4 | | |
| 7 | 9/32 | BH/S 7/8 | |
| 8 | 5/16 | BH/S 7/8 | RLS/S 8 |
| 10 | 3/8 | BH/S 10 | RLS/S 10 |
| 13 | 1/2 | BH/S 13 | RLS/S 13 |
| 16 | 5/8 | BH/S 16 | |
| 19 | 3/4 | BH/S 19/20 | |
| 22 | 7/8 | BH/S 22 | |
| 26 | 1 | | |

Star Alloy Chain and Star Alloy Plus+ /PAS Chain

Chain Star Alloy SA/S – Measurements, Load Values, Weights

| Chain | | Pitch | Li/min. | Le/max. | Weight | Working Load Limit | Breaking Load |
|-------|------|-------|---------|---------|--------|--------------------|---------------|
| D | P | | | | | | |
| mm | inch | mm | mm | mm | kg/m | kg | kN |
| 6 | 1/4 | 18 | 9 | 22 | 0.96 | 1,400 | 56.5 |
| 7 | 9/32 | 21 | 10 | 25 | 1.20 | 1,900 | 77 |
| 8 | 5/16 | 24 | 11 | 29 | 1.57 | 2,500 | 101 |
| 10 | 3/8 | 30 | 14 | 36 | 2.46 | 4,000 | 157 |
| 13 | 1/2 | 39 | 18 | 47 | 4.18 | 6,700 | 265 |
| 16 | 5/8 | 48 | 22 | 58 | 6.28 | 10,000 | 402 |
| 19 | 3/4 | 57 | 27 | 69 | 8.90 | 14,000 | 567 |
| 22 | 7/8 | 66 | 30 | 79 | 11.88 | 19,000 | 760 |
| 26 | 1 | 78 | 35 | 94 | 16.18 | 26,500 | 1,060 |

Chain acc. ASTM A973/A973M-01

Chain Star Alloy Plus PAS SAPP/S - Chain Star Alloy Plus+ SAP/S – Measurements, Load Values, Weights

| Chain | | Pitch | Li/min. | Le/max. | Weight | Working Load Limit | Breaking Load |
|-------|------|-------|---------|---------|--------|--------------------|---------------|
| D | P | | | | | | |
| mm | inch | mm | mm | mm | kg/m | kg | kN |
| 6 | 1/4 | 18 | 9 | 22 | 0.96 | 1,400 | 56.5 |
| 7 | 9/32 | 21 | 10 | 25 | 1.20 | 1,900 | 77 |
| 8 | 5/16 | 24 | 11 | 29 | 1.57 | 2,500 | 101 |
| 10 | 3/8 | 30 | 14 | 36 | 2.46 | 4,000 | 157 |
| 13 | 1/2 | 39 | 18 | 47 | 4.18 | 6,700 | 265 |
| 16 | 5/8 | 48 | 22 | 58 | 6.28 | 10,000 | 402 |
| 19 | 3/4 | 57 | 27 | 69 | 8.90 | 14,000 | 567 |
| 22 | 7/8 | 66 | 30 | 79 | 11.88 | 19,000 | 760 |
| 26 | 1 | 78 | 35 | 94 | 16.18 | 26,500 | 1,060 |

Dimension 6 to 16 acc. PAS 1061 (SAPP/S).
Dimension 19 to 26 acc. EN 818-2
with higher working load limit (SAP/S).

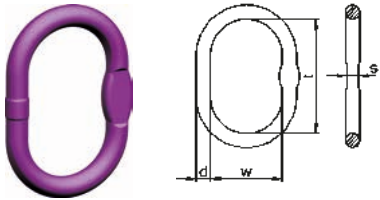
Maximum Working Load Limit for Star Alloy Chains

| Safety factor | 1-leg Chains | | 2-leg Chains | | | | 3- and 4-leg Chains | |
|---------------|--------------------|--------|--------------|---------|-----------|---------|---------------------|---------|
| 4 | | | | | | | | |
| | - | - | up to 45° | 45°-60° | up to 45° | 45°-60° | up to 45° | 45°-60° |
| Load Factor | 1 | 0.8 | 1.4 | 1 | 1.12 | 0.8 | 2.1 | 1.5 |
| Ø | Load Capacity [kg] | | | | | | | |
| 6 | 1,400 | 1,120 | 2,000 | 1,400 | 1,600 | 1,120 | 3,000 | 2,120 |
| 7 | 1,900 | 1,500 | 2,650 | 1,900 | 2,120 | 1,500 | 4,000 | 2,800 |
| 8 | 2,500 | 2,000 | 3,550 | 2,500 | 2,800 | 2,000 | 5,300 | 3,750 |
| 10 | 4,000 | 3,150 | 5,600 | 4,000 | 4,250 | 3,150 | 8,000 | 6,000 |
| 13 | 6,700 | 5,300 | 9,500 | 6,700 | 7,500 | 5,300 | 14,000 | 10,000 |
| 16 | 10,000 | 8,000 | 14,000 | 10,000 | 11,200 | 8,000 | 21,200 | 15,000 |
| 19 | 14,000 | 11,200 | 20,000 | 14,000 | 16,000 | 11,200 | 30,000 | 21,200 |
| 22 | 19,000 | 15,000 | 26,500 | 19,000 | 21,200 | 15,000 | 40,000 | 28,000 |
| 26 | 26,500 | 21,200 | 37,500 | 26,500 | 30,000 | 21,200 | 56,000 | 40,000 |

If the chain slings are used in more demanding conditions (e.g. high temperature, asymmetric load distribution, edge loads, impacts) the maximum load capacities in the table must be reduced. Please use the load factors on page 19 and refer to the specification in the user information.

Master Links, Sub-Assemblies & Accessories

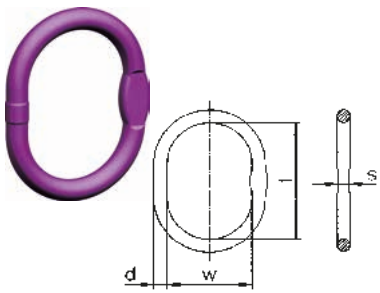
Master Link A/S



| Chain Ø | | Code | Can be used to single hook acc. to DIN15401 no. | Dimensions | | | | Weight | Working Load Limit 0°-45° *) |
|---------|----|--------|---|------------|-----|-----|----|--------|------------------------------|
| ⊥ | ∧ | | | d | t | w | s | | |
| mm | mm | | | mm | | | | kg | kg |
| 6+7 | 6 | A/S 13 | 2.5 | 13 | 110 | 60 | 10 | 0.34 | 2,300 |
| 8 | 7 | A/S 16 | 2.5 | 17 | 110 | 60 | 14 | 0.58 | 3,500 |
| 10 | 8 | A/S 18 | 5 | 19 | 135 | 75 | 14 | 0.92 | 5,000 |
| 13 | 10 | A/S 22 | 6 | 23 | 160 | 90 | 17 | 1.60 | 7,600 |
| 16 | 13 | A/S 26 | 8 | 27 | 180 | 100 | 20 | 2.46 | 10,000 |
| 19 | 16 | A/S 32 | 10 | 33 | 200 | 110 | 26 | 4.04 | 14,000 |
| 22 | 19 | A/S 36 | 16 | 36 | 260 | 140 | | 6.22 | 25,100 |
| 26 | 22 | A/S 45 | 25 | 45 | 340 | 180 | | 12.82 | 30,800 |
| | 26 | A/S 50 | 32 | 50 | 350 | 190 | | 16.60 | 40,000 |
| | | A/S 56 | 32 | 56 | 400 | 200 | | 23.3 | 64,000 |

*) Please refer to table „Maximum working load Limit“ on page 24 when using in chain slings.

Special Master Link T/S

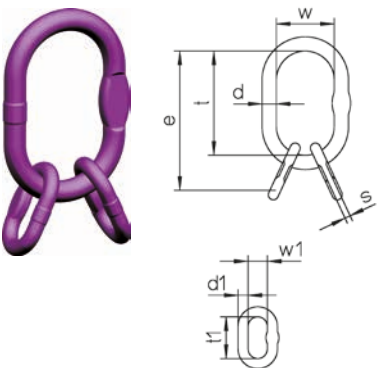


Similar to master link A/S, but due to larger inside dimensions suitable for next sized crane hook or special hook.

| Chain Ø | | Code | Can be used to single hook acc. to DIN15401 no. | Dimensions | | | | Weight | Working Load Limit 0°-45° *) |
|---------|----|--------|---|------------|-----|-----|----|--------|------------------------------|
| ⊥ | ∧ | | | d | t | w | s | | |
| mm | mm | | | mm | | | | kg | kg |
| 6+7 | 6 | T/S 13 | 4 | 14 | 120 | 70 | 10 | 0.44 | 2,300 |
| 8 | 7 | T/S 16 | 5 | 16 | 140 | 80 | 13 | 0.67 | 3,200 |
| 10 | 8 | T/S 18 | 6 | 19 | 160 | 95 | 14 | 1.09 | 4,200 |
| 13 | 10 | T/S 22 | 10 | 23 | 170 | 105 | 17 | 1.74 | 6,700 |
| 16 | 13 | T/S 26 | 10 | 27 | 190 | 110 | 20 | 2.65 | 10,100 |
| 19 | 16 | T/S 32 | 12 | 33 | 230 | 130 | 26 | 4.78 | 16,000 |
| 22 | 19 | T/S 36 | 20 | 38 | 275 | 150 | 29 | 7.48 | 21,200 |
| | 26 | T/S 56 | 50 | 56 | 350 | 250 | | 21.98 | 40,000 |

*) Please refer to table „Maximum working load Limit“ on page 24 when using in chain slings.

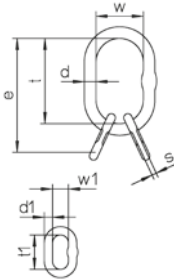
Sub-Assembly G/S



| Chain Ø | Code | Can be used to single hook acc. to DIN15401 no. | Dimensions | | | | | | | | Weight | Working Load Limit 0°-45° *) |
|---------|-----------|---|------------|----|-----|-----|----|-----|----|----|--------|------------------------------|
| ∧ | | | e | d | t | w | d1 | t1 | w1 | s | | |
| mm | | | mm | | | | | | | | kg | kg |
| 6 | G/S 6 | 5 | 189 | 19 | 135 | 75 | 13 | 54 | 25 | 10 | 1.26 | 4,200 |
| 7+8 | G/S 7/8 | 6 | 230 | 23 | 160 | 90 | 17 | 70 | 34 | 14 | 2.32 | 7,600 |
| 10 | G/S 10 | 8 | 265 | 27 | 180 | 100 | 20 | 85 | 40 | 14 | 3.68 | 9,600 |
| 13 | G/S 13 | 10 | 315 | 33 | 200 | 110 | 23 | 115 | 50 | 17 | 6.46 | 14,000 |
| 16 | G/S 16 | 16 | 400 | 36 | 260 | 140 | 27 | 140 | 65 | 20 | 10.06 | 21,200 |
| 19 | G/S 19/20 | 32 | 500 | 50 | 350 | 190 | 33 | 150 | 70 | 26 | 22.87 | 34,100 |
| 22 | G/S 22 | 32 | 520 | 50 | 350 | 190 | 36 | 170 | 75 | | 24.79 | 40,000 |
| 26 | G/S 26 | 32 | 570 | 56 | 400 | 200 | 45 | 170 | 80 | | 41.31 | 56,000 |

*) Please refer to table „Maximum working load Limit“ on page 24 when using in chain slings.

Special Sub-Assembly GT/S

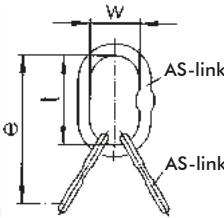


Similar to G/S but also suitable for larger crane hooks and special hooks.

| Chain Ø | Code | Can be used to single hook acc. to DIN15401 no. | Dimensions | | | | | | | | Weight | Working Load Limit 0°-45° *) |
|---------|----------|---|------------|----|-----|-----|----|-----|----|----|--------|------------------------------|
| | | | e | d | t | w | d1 | f1 | w1 | s | | |
| 6 | GT/S 6 | 6 | 214 | 19 | 160 | 95 | 13 | 54 | 25 | 10 | 1.43 | 4,200 |
| 7+8 | GT/S 7/8 | 10 | 240 | 23 | 170 | 105 | 17 | 70 | 34 | 14 | 2.41 | 6,600 |
| 10 | GT/S 10 | 10 | 275 | 27 | 190 | 110 | 20 | 85 | 40 | 14 | 4.01 | 10,100 |
| 13 | GT/S 13 | 12 | 345 | 33 | 230 | 130 | 23 | 115 | 50 | 17 | 7.10 | 15,700 |
| 16 | GT/S 16 | 25 | 415 | 38 | 275 | 150 | 27 | 140 | 65 | 20 | 11.32 | 21,200 |

*) Please refer to table „Maximum working load Limit“ on page 24 when using in chain slings.

Special Sub-Assembly TG/S

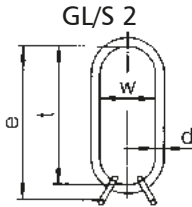
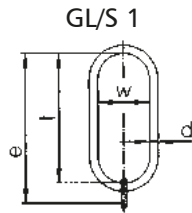


For 4-leg slings, when shortening hooks are to be assembled separately, and for slings with thimble eyes.

| Chain Ø | Code | Can be used to single hook acc. to DIN15401 no. | Dimensions | | | | | Weight | Working Load Limit 0°-45° *) |
|---------|----------|---|------------|-----|-----|-----|----|--------|------------------------------|
| | | | d | e | t | w | d1 | | |
| 6 | TG/S 6 | 5 | 19 | 245 | 135 | 75 | 13 | 1.60 | 3,000 |
| 7+8 | TG/S 7/8 | 6 | 23 | 270 | 160 | 90 | 16 | 2.66 | 5,300 |
| 10 | TG/S 10 | 10 | 33 | 360 | 200 | 110 | 23 | 7.34 | 10,100 |
| 13 | TG/S 13 | 16 | 36 | 440 | 260 | 140 | 27 | 11.14 | 14,300 |
| 16 | TG/S 16 | 25 | 45 | 540 | 340 | 180 | 33 | 21.10 | 22,200 |

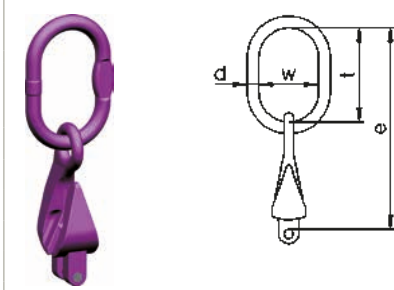
*) Please refer to table „Maximum working load Limit“ on page 24 when using in chain slings.

Special Master Link Assembly GL/S



| Chain Ø | | | Code | Consisting of | Dimensions | | | | Can be used to single hook acc. to DIN15401 no. | Weight | Working Load Limit 0°-45° |
|---------|-----|---|------------------|---------------|------------|-----|-----|-----|---|--------|---------------------------|
| ⊥ | ∧ | ∧ | | | d | t | w | e | | | |
| 10 | | | GL/S 1-10 | L/S27+B/S16 | 27 | 340 | 180 | 410 | 25 | 4.80 | 4,000 |
| 13 | | | GL/S 1-13 | L/S27 | 27 | 340 | 180 | 340 | 25 | 4.40 | 6,700 |
| 16 | | | GL/S 1-16 | L/S32 | 33 | 340 | 180 | 340 | 25 | 6.70 | 10,000 |
| 19+22 | | | GL/S 1-19/22 | L/S40 | 40 | 340 | 180 | 340 | 25 | 10.00 | 19,000 |
| 0°-45°* | | | | | | | | | | | |
| 6+7+8 | 6 | | GL/S 2-6/7/8/4-6 | L/S 22+2B/S13 | 23 | 340 | 180 | 394 | 25 | 3.50 | 3,550 |
| 10 | 7+8 | | GL/S 2-10/4-7/8 | L/S 27+2B/S16 | 27 | 340 | 180 | 410 | 25 | 5.10 | 5,600 |
| 13 | 10 | | GL/S 2-13/4-10 | L/S 32+2B/S20 | 33 | 340 | 180 | 425 | 25 | 8.00 | 9,500 |
| 16 | 13 | | GL/S 2-16/4-13 | L/S 40+2B/S22 | 40 | 340 | 180 | 455 | 25 | 12.30 | 14,000 |
| 19 | 16 | | GL/S 2-19/4-16 | L/S 40+2B/S26 | 40 | 340 | 180 | 480 | 25 | 13.80 | 21,200 |

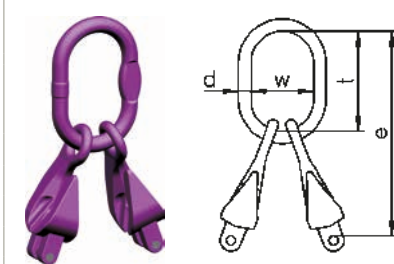
1 Special Clevis Sub-Assembly GTVK/S



For 1-leg slings with shortening element.

| Chain Ø | | Code | Can be used to single hook acc. to DIN15401 no. | Dimensions | | | | Weight | Working Load Limit | |
|------------|------|-------------|---|------------|----|-----|-----|--------|--------------------|--------|
| mm | inch | | | d | t | w | e | | kg | kg |
| 6 | 1/4 | GTVK/S 1-6 | | 4 | 14 | 120 | 70 | 204 | 0.74 | 1,400 |
| 7 | 9/32 | GTVK/S 1-7 | | 4 | 14 | 120 | 70 | 242 | 1.06 | 1,900 |
| 8 | 5/16 | GTVK/S 1-8 | | 5 | 16 | 140 | 80 | 262 | 1.30 | 2,500 |
| 10 | 3/8 | GTVK/S 1-10 | | 6 | 19 | 160 | 95 | 319 | 2.34 | 4,000 |
| 13 | 1/2 | GTVK/S 1-13 | | 10 | 23 | 170 | 105 | 373 | 4.39 | 6,700 |
| 16 | 5/8 | GTVK/S 1-16 | | 10 | 27 | 190 | 110 | 424 | 7.45 | 10,000 |

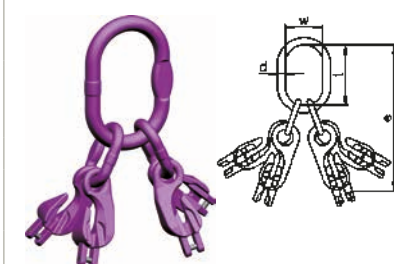
2 Special Clevis Sub-Assembly GTVK/S



For 2-leg slings with shortening element.

| Chain Ø | | Code | Can be used to single hook acc. to DIN15401 no. | Dimensions | | | | Weight | Working Load Limit β | | |
|------------|------|-------------|---|------------|----|-----|-----|--------|----------------------|--------|--------|
| mm | inch | | | d | t | w | e | | kg | kg | kg |
| 6 | 1/4 | GTVK/S 2-6 | | 4 | 14 | 120 | 70 | 204 | 1.04 | 2,000 | 1,400 |
| 7 | 9/32 | GTVK/S 2-7 | | 5 | 16 | 140 | 80 | 262 | 1.91 | 2,650 | 1,900 |
| 8 | 5/16 | GTVK/S 2-8 | | 6 | 19 | 160 | 95 | 282 | 2.35 | 3,550 | 2,500 |
| 10 | 3/8 | GTVK/S 2-10 | | 10 | 23 | 170 | 105 | 329 | 4.19 | 5,600 | 4,000 |
| 13 | 1/2 | GTVK/S 2-13 | | 10 | 27 | 190 | 110 | 393 | 8.05 | 9,500 | 6,700 |
| 16 | 5/8 | GTVK/S 2-16 | | 12 | 33 | 230 | 130 | 464 | 14.38 | 14,000 | 10,000 |

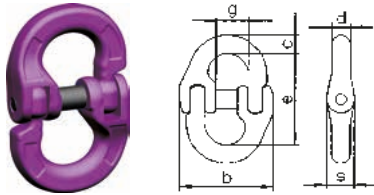
4 Special Clevis Sub-Assembly GTVK/S



For 3 and 4-leg slings with shortening element.

| Chain Ø | | Code | Can be used to single hook acc. to DIN15401 no. | Dimensions | | | | Weight | Working Load Limit β | | |
|------------|------|-------------|---|------------|----|-----|-----|--------|----------------------|--------|--------|
| mm | inch | | | d | t | w | e | | kg | kg | kg |
| 6 | 1/4 | GTVK/S 4-6 | | 6 | 19 | 160 | 95 | 298 | 2.63 | 3,000 | 2,120 |
| 7 | 9/32 | GTVK/S 4-7 | | 10 | 23 | 160 | 110 | 352 | 4.89 | 4,000 | 2,800 |
| 8 | 5/16 | GTVK/S 4-8 | | 10 | 23 | 170 | 105 | 362 | 4.93 | 5,300 | 3,750 |
| 10 | 3/8 | GTVK/S 4-10 | | 10 | 27 | 190 | 110 | 434 | 9.01 | 8,000 | 6,000 |
| 13 | 1/2 | GTVK/S 4-13 | | 12 | 33 | 230 | 130 | 548 | 17.90 | 14,000 | 10,000 |
| 16 | 5/8 | GTVK/S 4-16 | | 20 | 38 | 275 | 150 | 649 | 30.52 | 21,200 | 15,000 |

Connecting Link V/S

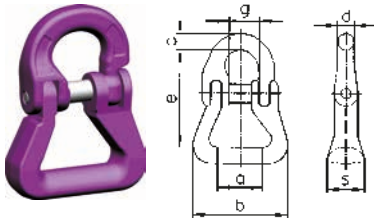


Connecting link for:
Master Link – Chain
Chain – Chain
Hook – Chain
Only for straight pull!

Load pin and bush are also separately available.

| Chain | | Code | Dimensions | | | | | | | Weight | Working Load Limit |
|-------|------|-----------|------------|----|----|----|-----|----|------|--------|--------------------|
| mm | inch | | e | c | s | d | b | g | | | |
| 6 | 1/4 | V/S 6 | 44 | 8 | 11 | 8 | 39 | 14 | 0.06 | 1,400 | |
| 7 | 9/32 | V/S 7 | 51 | 10 | 13 | 9 | 47 | 17 | 0.12 | 1,900 | |
| 8 | 5/16 | V/S 8 | 62 | 12 | 14 | 10 | 55 | 18 | 0.23 | 2,500 | |
| 10 | 3/8 | V/S 10 | 72 | 15 | 18 | 13 | 64 | 24 | 0.42 | 4,000 | |
| 13 | 1/2 | V/S 13 | 88 | 20 | 22 | 17 | 79 | 28 | 0.84 | 6,700 | |
| 16 | 5/8 | V/S 16 | 103 | 21 | 29 | 21 | 106 | 33 | 1.40 | 10,000 | |
| 19/20 | 3/4 | V/S 19/20 | 115 | 30 | 35 | 24 | 123 | 42 | 2.40 | 16,000 | |
| 22 | 7/8 | V/S 22 | 161 | 34 | 39 | 25 | 148 | 51 | 4.15 | 19,000 | |
| 26 | 1 | V/S 26 | 190 | 40 | 46 | 30 | 175 | 60 | 6.70 | 26,500 | |

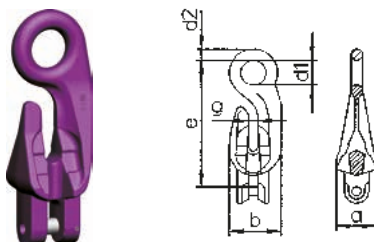
Webbing Coupling Link RSK/S



Link for webbing slings mounted in one V/S-half. Reduced risk of damage due to wide surface.

| Chain | | Code | Dimensions | | | | | | | Weight | Working Load Limit |
|-------|------|----------|------------|-----|----|----|-----|----|----|--------|--------------------|
| mm | inch | | a | e | c | d | b | s | g | | |
| 8 | 5/16 | RSK/S 8 | 29 | 66 | 12 | 10 | 68 | 18 | 18 | 0.40 | 2,500 |
| 10 | 3/8 | RSK/S 10 | 40 | 81 | 15 | 13 | 82 | 21 | 24 | 0.55 | 4,000 |
| 13 | 1/2 | RSK/S 13 | 44 | 104 | 20 | 17 | 101 | 28 | 28 | 1.20 | 6,700 |
| 16 | 5/8 | RSK/S 16 | 47 | 113 | 21 | 21 | 110 | 40 | 33 | 2.00 | 10,000 |
| 22 | 7/8 | RSK/S 22 | 110 | 190 | 34 | 25 | 215 | 58 | 51 | 6.50 | 19,000 |

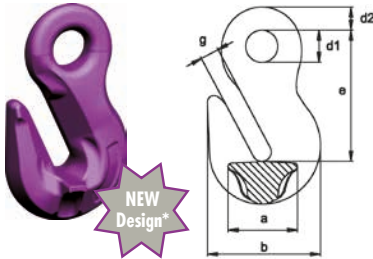
Shortening Hook VK/S



Can be mounted in any chain leg due to Clevis part. No WLL reduction.

| Chain | | Code | Dimensions | | | | | | Weight | Working Load Limit |
|-------|------|---------|------------|-----|----|----|----|----|--------|--------------------|
| mm | inch | | e | b | a | d1 | d2 | g | | |
| 6 | 1/4 | VK/S 6 | 84 | 37 | 29 | 18 | 9 | 8 | 0.30 | 1,400 |
| 7 | 9/32 | VK/S 7 | 122 | 54 | 39 | 24 | 12 | 11 | 0.62 | 1,900 |
| 8 | 5/16 | VK/S 8 | 122 | 54 | 39 | 24 | 12 | 11 | 0.63 | 2,500 |
| 10 | 3/8 | VK/S 10 | 159 | 70 | 50 | 31 | 14 | 13 | 1.25 | 4,000 |
| 13 | 1/2 | VK/S 13 | 203 | 92 | 64 | 37 | 18 | 15 | 2.70 | 6,700 |
| 16 | 5/8 | VK/S 16 | 234 | 102 | 80 | 48 | 24 | 20 | 4.80 | 10,000 |

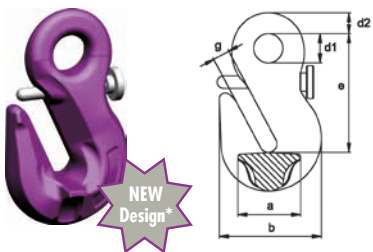
Eye Grab Hook P/S



For shortening and for slings that must not tighten. Reduction of load capacity not required due to 4-fold safety.

| Chain | | Code | Dimensions | | | | | | Weight | Working Load Limit |
|-------|-----------|-----------|------------|-----|----|----|----|-----|--------|--------------------|
| mm | inch | | e | b | d1 | d2 | g | a | | |
| 6 | 1/4 | P/S 6 * | 50 | 42 | 12 | 9 | 7 | 26 | 0.15 | 1,400 |
| 7+8 | 9/32+5/16 | P/S 7/8 * | 65 | 56 | 16 | 12 | 9 | 35 | 0.37 | 2,500 |
| 10 | 3/8 | P/S 10 * | 77 | 70 | 20 | 14 | 12 | 46 | 0.70 | 4,000 |
| 13 | 1/2 | P/S 13 * | 101 | 91 | 26 | 19 | 15 | 60 | 1.52 | 6,700 |
| 16 | 5/8 | P/S 16 * | 121 | 113 | 32 | 23 | 19 | 69 | 2.90 | 10,000 |
| 19/20 | 3/4 | P/S 19/20 | 151 | 150 | 36 | 27 | 25 | 84 | 6.15 | 16,000 |
| 22 | 7/8 | P/S 22 | 170 | 165 | 42 | 31 | 27 | 91 | 8.30 | 19,000 |
| 26 | 1 | P/S 26 | 201 | 195 | 50 | 37 | 32 | 107 | 13.80 | 26,500 |

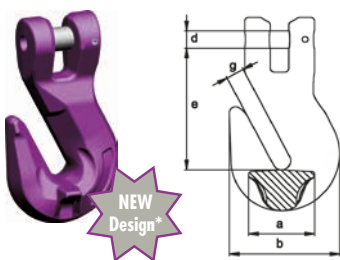
Eye Grab Hook with Safety Pin PS/S



Shortening hook protected against accidental release of the chain. Reduction of load capacity not required due to 4-fold safety.

| Chain | | Code | Dimensions | | | | | | Weight | Working Load Limit |
|-------|-----------|------------|------------|----|----|----|----|----|--------|--------------------|
| mm | inch | | e | b | d1 | d2 | g | a | | |
| 7+8 | 9/32+5/16 | PS/S 7/8 * | 65 | 42 | 16 | 12 | 9 | 35 | 0.37 | 2,500 |
| 10 | 3/8 | PS/S 10 * | 77 | 70 | 20 | 14 | 12 | 46 | 0.70 | 4,000 |
| 13 | 1/2 | PS/S 13 * | 101 | 91 | 26 | 19 | 15 | 60 | 1.52 | 6,700 |

Clevis Grab Hook PK/S



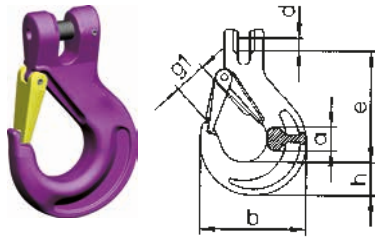
For shortening and for slings that must not tighten. Reduction of load capacity not required due to 4-fold safety.

| Chain | | Code | Dimensions | | | | | Weight | Working Load Limit |
|-------|------|------------|------------|-----|------|----|----|--------|--------------------|
| mm | inch | | e | b | d | g | a | | |
| 6 | 1/4 | PK/S 6 * | 47 | 42 | 7.4 | 7 | 26 | 0.17 | 1,400 |
| 7 | 9/32 | PK/S 7 * | 63 | 56 | 9 | 9 | 35 | 0.44 | 1,900 |
| 8 | 5/16 | PK/S 8 * | 63 | 56 | 10 | 9 | 35 | 0.44 | 2,500 |
| 10 | 3/8 | PK/S 10 * | 78 | 70 | 12.5 | 12 | 46 | 0.85 | 4,000 |
| 13 | 1/2 | PK/S 13 * | 93 | 92 | 16 | 15 | 60 | 1.75 | 6,700 |
| 16 | 5/8 | PK/S 16 * | 115 | 113 | 20 | 19 | 70 | 3.30 | 10,000 |
| 19/20 | 3/4 | PK/S 19/20 | 141 | 150 | 24 | 25 | 84 | 6.15 | 16,000 |
| 22 | 7/8 | PK/S 22 | 158 | 165 | 27 | 27 | 91 | 9.00 | 19,000 |



It is very important and intended from the technical point of view that the middle chain link no longer contacts the bearing surface of the KWB Eye Grab Hook P/S and Clevis Grab Hook PK/S, since the Star Alloy chain is supported by the side faces of the KWB Grab Hook. Reduction of load capacity is not required due to 4-fold safety!

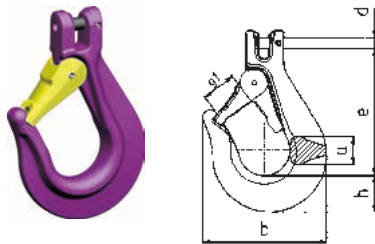
Clevis Sling Hook with Forged Safety Latch HKS/S



General purpose hook.

| Chain | | Code | Dimensions | | | | | | Weight | Working Load Limit |
|-------|------|-------------|------------|----|----|------|----|-----|--------|--------------------|
| mm | inch | | e | h | a | d | g1 | b | | |
| 6 | 1/4 | HKS/S 6 | 69 | 20 | 15 | 7 | 19 | 66 | 0.20 | 1,400 |
| 7 | 9/32 | HKS/S 7 | 95 | 28 | 19 | 9 | 26 | 90 | 0.60 | 1,900 |
| 8 | 5/16 | HKS/S 8 | 95 | 28 | 19 | 10 | 26 | 90 | 0.60 | 2,500 |
| 10 | 3/8 | HKS/S 10 | 109 | 35 | 25 | 12.5 | 31 | 108 | 1.10 | 4,000 |
| 13 | 1/2 | HKS/S 13 | 136 | 41 | 34 | 16 | 39 | 131 | 2.00 | 6,700 |
| 16 | 5/8 | HKS/S 16 | 155 | 49 | 37 | 20 | 45 | 153 | 3.48 | 10,000 |
| 19/20 | 3/4 | HKS/S 19/20 | 184 | 53 | 51 | 24 | 53 | 177 | 5.00 | 16,000 |
| 22 | 7/8 | HKS/S 22 | 214 | 62 | 52 | 27 | 62 | 196 | 12.10 | 19,000 |

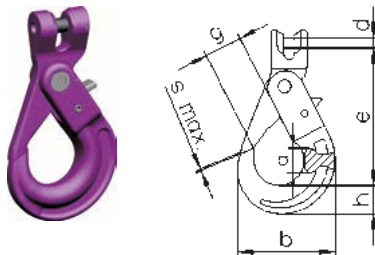
Wide Bowl Clevis Sling Hook with Forged Safety Latch VHKS/S



Alternative for the HKS/S with wider throat opening.

| Chain | | Code | Dimensions | | | | | | Weight | Working Load Limit |
|-------|------|-----------|------------|----|----|------|----|-----|--------|--------------------|
| mm | inch | | e | h | a | d | g1 | b | | |
| 8 | 5/16 | VHKS/S 8 | 116 | 33 | 25 | 10 | 32 | 113 | 1.10 | 2,500 |
| 10 | 3/8 | VHKS/S 10 | 126 | 40 | 30 | 12.5 | 35 | 132 | 1.70 | 4,000 |

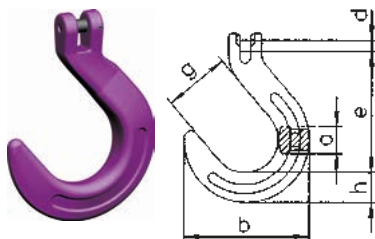
Clevis Self Locking Hook HKSB/S



Closes and locks automatically.

| Chain | | Code | Dimensions | | | | | | | Weight | Working Load Limit |
|-------|------|-----------|------------|----|----|-----|------|----|--------|--------|--------------------|
| mm | inch | | e | h | a | b | d | g | s max. | | |
| 6 | 1/4 | HKSB/S 6 | 94 | 20 | 17 | 71 | 7.5 | 28 | 1 | 0.50 | 1,400 |
| 7 | 9/32 | HKSB/S 7 | 123 | 26 | 20 | 88 | 9 | 34 | 1 | 0.90 | 1,900 |
| 8 | 5/16 | HKSB/S 8 | 123 | 26 | 20 | 88 | 10 | 34 | 1 | 0.90 | 2,500 |
| 10 | 3/8 | HKSB/S 10 | 144 | 30 | 29 | 107 | 12.5 | 45 | 1 | 1.60 | 4,000 |
| 13 | 1/2 | HKSB/S 13 | 180 | 40 | 35 | 138 | 16 | 52 | 1.5 | 2.90 | 6,700 |
| 16 | 5/8 | HKSB/S 16 | 218 | 50 | 41 | 168 | 20 | 60 | 2 | 5.80 | 10,000 |

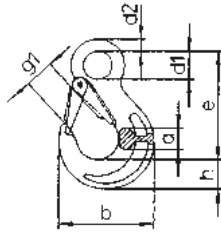
Clevis Foundry Hook GHK/S



For applications where jaw size „g“ of the VHKS/S hook is inadequate; mainly in foundries. Before using the hook, check whether hooks without safety latch are allowed to be used for this particular application.

| Chain | | Code | Dimensions | | | | | Weight | Working Load Limit | |
|-------|------|----------|------------|----|----|----|------|--------|--------------------|-------|
| mm | inch | | e | h | a | g | d | | | b |
| 8 | 5/16 | GHK/S 8 | 120 | 29 | 25 | 64 | 10 | 118 | 1.00 | 2,500 |
| 10 | 3/8 | GHK/S 10 | 140 | 35 | 32 | 76 | 12.5 | 143 | 1.78 | 4,000 |
| 13 | 1/2 | GHK/S 13 | 170 | 42 | 40 | 89 | 16 | 170 | 2.96 | 6,700 |

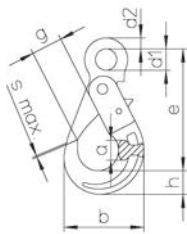
Eye Sling Hook with Forged Safety Latch HS/S



For general lifting applications.

| Chain | | Code | Dimensions | | | | | | | Weight | Working Load Limit |
|-------|-----------|------------|------------|----|----|----|----|----|-----|--------|--------------------|
| mm | inch | | e | h | a | d1 | d2 | g1 | b | | |
| 6 | 1/4 | HS/S 6 | 85 | 21 | 17 | 20 | 10 | 19 | 68 | 0.30 | 1,400 |
| 7+8 | 9/32+5/16 | HS/S 7/8 | 106 | 27 | 19 | 25 | 11 | 26 | 88 | 0.50 | 2,500 |
| 10 | 3/8 | HS/S 10 | 131 | 33 | 26 | 34 | 16 | 31 | 109 | 1.10 | 4,000 |
| 13 | 1/2 | HS/S 13 | 164 | 44 | 33 | 43 | 19 | 39 | 134 | 2.20 | 6,700 |
| 16 | 5/8 | HS/S 16 | 183 | 50 | 40 | 50 | 25 | 45 | 155 | 3.50 | 10,000 |
| 19 | 3/4 | HS/S 19/20 | 205 | 55 | 48 | 55 | 27 | 53 | 178 | 5.80 | 16,000 |
| 22 | 7/8 | HS/S 22 | 225 | 62 | 50 | 60 | 29 | 62 | 196 | 8.00 | 19,000 |
| 26 | 1 | HS/S 26 | 259 | 75 | 70 | 70 | 37 | 73 | 235 | 13.40 | 26,500 |

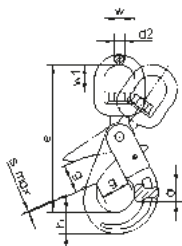
Eye Self Locking Hook HSB/S



Large eye, therefore suitable for ropes and webbing slings. Automatically closes and locks under load, and requires the load to be grounded before load can be released. Not for welded system!

| Chain | | Code | Dimensions | | | | | | | | Weight | Working Load Limit |
|-------|-----------|-------------|------------|----|----|-----|----|----|----|--------|--------|--------------------|
| mm | inch | | e | h | a | b | d1 | d2 | g | s max. | | |
| 6 | 1/4 | HSB/S 6 | 110 | 20 | 17 | 71 | 21 | 11 | 28 | 1 | 0.50 | 1,400 |
| 7+8 | 9/32+5/16 | HSB/S 7/8 | 136 | 26 | 20 | 88 | 25 | 12 | 34 | 1 | 0.90 | 2,500 |
| 10 | 3/8 | HSB/S 10 | 169 | 30 | 29 | 107 | 35 | 15 | 45 | 1 | 1.50 | 4,000 |
| 13 | 1/2 | HSB/S 13 | 205 | 40 | 35 | 138 | 40 | 20 | 52 | 1.50 | 2.70 | 6,700 |
| 16 | 5/8 | HSB/S 16 | 251 | 50 | 41 | 168 | 50 | 27 | 60 | 2 | 5.70 | 10,000 |
| 19 | 3/4 | HSB/S 19/20 | 290 | 62 | 50 | 194 | 60 | 30 | 70 | 2 | 9.80 | 16,000 |
| 22 | 7/8 | HSB/S 22 | 322 | 65 | 52 | 211 | 70 | 32 | 81 | 2 | 12.40 | 19,000 |

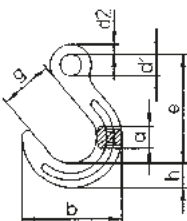
Swivel Safety Hook WSB/S



Standard type can not be swiveled when loaded. Not for welded system!

| Chain | | Code | Dimensions | | | | | | | | Weight | Working Load Limit |
|-------|-----------|-----------|------------|----|----|----|----|----|----|--------|--------|--------------------|
| mm | inch | | e | h | a | w | w1 | d2 | g | s max. | | |
| 6 | 1/4 | WSB/S 6 | 161 | 20 | 17 | 35 | 36 | 12 | 28 | 1 | 0.60 | 1,400 |
| 7+8 | 9/32+5/16 | WSB/S 7/8 | 182 | 26 | 20 | 35 | 36 | 12 | 34 | 1 | 1.10 | 2,500 |
| 10 | 3/8 | WSB/S 10 | 218 | 30 | 29 | 42 | 40 | 16 | 45 | 1 | 2.00 | 4,000 |
| 13 | 1/2 | WSB/S 13 | 269 | 40 | 35 | 49 | 47 | 20 | 52 | 1.5 | 4.00 | 6,700 |
| 16 | 5/8 | WSB/S 16 | 319 | 50 | 41 | 60 | 60 | 24 | 60 | 2 | 6.80 | 10,000 |

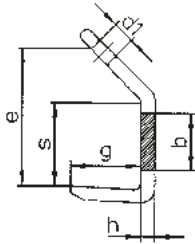
Foundry Hook GH/S



| Chain | | Code | Dimensions | | | | | | | Weight | Working Load Limit |
|-------|-----------|------------|------------|----|----|----|----|-----|-----|--------|--------------------|
| mm | inch | | e | h | a | d1 | d2 | g | b | | |
| 7+8 | 9/32+5/16 | GH/S 7/8 | 131 | 29 | 25 | 24 | 11 | 64 | 118 | 0.92 | 2,500 |
| 10 | 3/8 | GH/S 10 | 158 | 35 | 32 | 31 | 14 | 76 | 143 | 1.77 | 4,000 |
| 13 | 1/2 | GH/S 13 | 190 | 42 | 40 | 39 | 17 | 89 | 170 | 2.82 | 6,700 |
| 16 | 5/8 | GH/S 16 | 224 | 50 | 46 | 47 | 22 | 102 | 200 | 5.03 | 10,000 |
| 19 | 3/4 | GH/S 19/20 | 260 | 61 | 54 | 56 | 28 | 114 | 231 | 7.60 | 16,000 |

Special Accessories

Sheet Metal Plate Hook BH/S

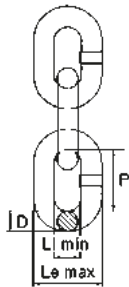


For lifting sheet metal stacks and boards. Recommended angle of inclination of the sling: 15-30°. Use min. 3-leg chain sling.

| Chain | | Code | Dimensions | | | | | | | Weight | Working Load Limit |
|-------|-----------|------------|------------|-----|-----|----|----|-----|-------|--------|--------------------|
| e | s | | b | h | d1 | g | | | | | |
| mm | inch | | mm | | | | | | | kg | kg |
| 7+8 | 9/32+5/16 | BH/S 7/8 | 131 | 80 | 50 | 15 | 28 | 55 | 1.20 | 2,500 | |
| 10 | 3/8 | BH/S 10 | 170 | 100 | 70 | 20 | 36 | 65 | 2.89 | 4,000 | |
| 13 | 1/2 | BH/S 13 | 209 | 130 | 80 | 25 | 40 | 90 | 5.23 | 6,700 | |
| 16 | 5/8 | BH/S 16 | 263 | 160 | 100 | 30 | 50 | 110 | 9.79 | 10,000 | |
| 19 | 3/4 | BH/S 19/20 | 306 | 185 | 120 | 40 | 60 | 130 | 18.39 | 16,000 | |
| 22 | 7/8 | BH/S 22 | 368 | 220 | 140 | 50 | 75 | 150 | 31.65 | 19,000 | |

Special types available upon request

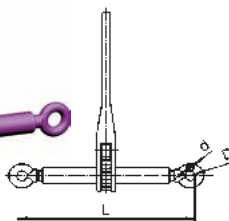
Lashing Chain Star Alloy SA/S – Measurements, Load Values, Weights



Chain acc. ASTM A973/A973M-01

| Chain | | Pitch | Li/min. | Le/max. | Weight | LC Lashing Capacity | Breaking Force |
|-------|------|-------|---------|---------|--------|---------------------|----------------|
| D | p | | | | | | |
| mm | inch | mm | mm | mm | kg/m | kN | kN |
| 8 | 5/16 | 24 | 11 | 29 | 1.57 | 50 | 101 |
| 10 | 3/8 | 30 | 14 | 36 | 2.46 | 80 | 157 |
| 13 | 1/2 | 39 | 18 | 47 | 4.18 | 134 | 265 |

Ratchet Load Binder RLS/S



According to EN-specifications

| Code | Max. Permissible Lashing Capacity | Normal Tension Force | Dimensions | | | | | Weight |
|----------|-----------------------------------|----------------------|-----------------|---------------|---------------|----|----|--------|
| | | | Length L closed | Length L open | Tension range | D | d | |
| LC | STF | | | | | | | |
| kN | daN | | mm | | | | | kg |
| RLS/S 8 | 50 | 1,900 | 355 | 500 | 145 | 20 | 16 | 3.20 |
| RLS/S 10 | 80 | 3,000 | 365 | 510 | 145 | 26 | 18 | 3.80 |
| RLS/S 13 | 134 | 2,500 | 576 | 866 | 290 | 31 | 22 | 9.90 |

Spare Parts

Forged Safety Latch Kits for Eye Sling Hooks and Clevis Sling Hooks

| Chain | Chain | | Code | Spare Part for |
|-------|-------|-----------|--------|------------------------------|
| | mm | inch | | |
| | 6 | 1/4 | FG 6 | HKS/S 6 + HS/S 6 |
| | 7+8 | 9/32+5/16 | FG 7/8 | HKS/S 7 + HKS/S 8 + HS/S 7/8 |
| | 10 | 3/8 | FG 10 | HKS/S 10 + HS/S 10 |
| | 13 | 1/2 | FG 13 | HKS/S 13 + HS/S 13 |
| | 16 | 5/8 | FG 16 | HKS/S 16 + HS/S 16 |
| | 19 | 3/4 | FG 19 | HKS/S 19/20 + HS/S 19/20 |
| | 22 | 7/8 | FG 22 | HKS/S 22 + HS/S 22 |
| | 26 | 1 | FG 26 | HS/S 26 |

Forged Safety Latch Kits for Wide Bowl Clevis Sling Hook with Safety Latch VHKS/S

| Chain | Chain | | Code | Spare Part for |
|-------|-------|------|---------|----------------|
| | mm | inch | | |
| | 8 | 5/16 | FG-V 8 | VHKS/S 8 |
| | 10 | 3/8 | FG-V 10 | VHKS/S 10 |

Pin Kits for Clevis Sling Hook and Shortening Hook

| Chain | Chain | | Code | Spare Part for |
|-------|-------|------|----------|---|
| | mm | inch | | |
| | 6 | 1/4 | KBG/S 6 | HKS/S 6 + VK/S 6 + PK/S 6 |
| | 7 | 9/32 | KBG/S 7 | HKS/S 7 + VK/S 7 + PK/S 7 + GHK/S 7 |
| | 8 | 5/16 | KBG/S 8 | HKS/S 8 + VK/S 8 + PK/S 8 + VHKS/S 8 + GHK/S 8 |
| | 10 | 3/8 | KBG/S 10 | HKS/S 10 + VK/S 10 + PK/S 10 + VHKS/S 10 + GHK/S 10 |
| | 13 | 1/2 | KBG/S 13 | HKS/S 13 + VK/S 13 + PK/S 13 + GHK/S 13 |
| | 16 | 5/8 | KBG/S 16 | HKS/S 16 + VK/S 16 + PK/S 16 |
| | 19 | 3/4 | KBG/S 19 | HKS/S 19/20 + PK/S 19/20 |
| | 22 | 7/8 | KBG/S 22 | HKS/S 22 + PK/S 22 |

Pin Kit for Clevis Self Locking Hook

| Chain | Chain | | Code | Spare Part for |
|-------|-------|------|-----------------|----------------|
| | mm | inch | | |
| | 6 | 1/4 | KBG - HKSB/S 6 | HKSB/S6 |
| | 7 | 9/32 | KBG - HKSB/S 7 | HKSB/S7 |
| | 8 | 5/16 | KBG - HKSB/S 8 | HKSB/S8 |
| | 10 | 3/8 | KBG - HKSB/S 10 | HKSB/S 10 |
| | 13 | 1/2 | KBG - HKSB/S 13 | HKSB/S 13 |
| | 16 | 5/8 | KBG - HKSB/S 16 | HKSB/S 16 |

Pin Kit for Connecting Link and Webbing Coupling Link

| Chain | Code | | Spare Part for |
|-------|------|-----------|-------------------|
| | mm | inch | |
| 6 | 1/4 | BG-V/S 6 | V/S 6 |
| 7 | 9/32 | BG-V/S 7 | V/S 7 |
| 8 | 5/16 | BG-V/S 8 | V/S 8 + RSK/S 8 |
| 10 | 3/8 | BG-V/S 10 | V/S 10 + RSK/S 10 |
| 13 | 1/2 | BG-V/S 13 | V/S 13 + RSK/S 13 |
| 16 | 5/8 | BG-V/S 16 | V/S 16 + RSK/S 16 |
| 19 | 3/4 | BG-V/S 19 | V/S 19 |
| 22 | 7/8 | BG-V/S 22 | V/S 22 + RSK/S 22 |
| 26 | 1 | BG-V/S 26 | V/S 26 |

Trigger Kit for Self Locking Hooks

| Chain | Code | | Spare Part for |
|-------|-----------|-------------|---|
| | mm | inch | |
| 6 | 1/4 | HBG/S 06-8 | HSB/S 6 + HKSB/S 6 + WSB/S 6 |
| 7+8 | 9/32+5/16 | HBG/S 7/8-8 | HSB/S 7/8 + HKSB/S 7 + HKSB/S 8 + WSB/S 7/8 |
| 10 | 3/8 | HBG/S 10-8 | HSB/S 10 + HKSB/S 10 + WSB/S 10 |
| 13 | 1/2 | HBG/S 13-8 | HSB/S 13 + HKSB/S 13 + WSB/S 13 |
| 16 | 5/8 | HBG/S 16-8 | HSB/S 16 + HKSB/S 16 + WSB/S 16 |
| 19+22 | 3/4, 7/8 | HBG/S 19+22 | HSB/S 19+22 |

Safety Catch Kit for Eye Grab Hook with Safety Pin PS/S

| Chain | Code | | Spare Part for |
|-------|-----------|-----------|----------------|
| | mm | inch | |
| 7+8 | 9/32+5/16 | PGS/S 7/8 | PS/S 7/8 |
| 10 | 3/8 | PGS/S 10 | PS/S 10 |
| 13 | 1/2 | PGS/S 13 | PS/S 13 |

Working Load Tag with Wire Rope Binder and Fastener

| Code | Code |
|--------|--------------|
| ID-Set | 1/2/3/4-legs |



GRADE 120



WHAT BENEFIT CAN BE ACHIEVED WITH THE GRADE 120 PRODUCTS

With grade 120 products 50% more WLL can be achieved with the same chain size compared to GRADE 80 products.

You can, for example, replace a grade 80 10 mm chain assembly by grade 120 assembly and achieve the same WLL with lighter product.

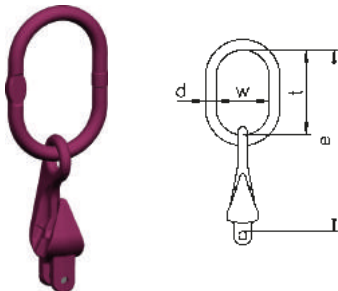
Note! We provide also the GRADE 100 KWB products.

Ask more from our Sales.



MASTER LINK WITH SHORTENING HOOK FOR 1-LEGGED CHAIN ASSEMBLY

- chain is attached directly to the shortening hook linked to the master link
- paint coated
- safety factor 4 : 1



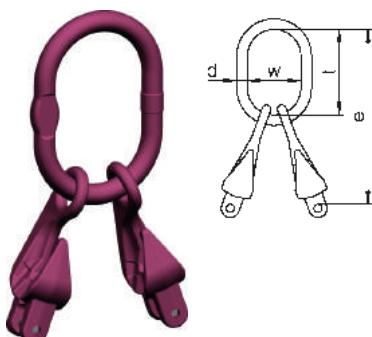
| For chain mm | WLL t | d mm | t mm | w mm | e mm | Weight kg | Product code |
|-----------------|----------|---------|---------|---------|---------|--------------|--------------|
| 7 | 2,36 | 14 | 120 | 70 | 244 | 1,21 | *NOR1207 |
| 8 | 3,00 | 17 | 140 | 80 | 264 | 1,44 | NOR1208 |
| 10 | 5,00 | 19 | 160 | 95 | 318 | 2,72 | NOR1210 |
| 13 | 8,00 | 27 | 190 | 110 | 391 | 5,83 | NOR1213 |
| 16 | 12,20 | 30 | 190 | 110 | 423 | 9,50 | *NOR1216 |

* Items marked with an asterisk delivery about 2 weeks



MASTER LINK WITH SHORTENING HOOKS FOR 2-LEGGED CHAIN ASSEMBLY

- chains are attached directly to the shortening hooks linked to the master link
- paint coated
- safety factor 4 : 1

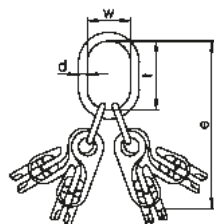


| For chain mm | WLL t Chain angle 0 - 45° | WLL t Chain angle 45 - 60° | d mm | t mm | w mm | e mm | Weight kg | Product code |
|-----------------|------------------------------------|-------------------------------------|---------|---------|---------|---------|--------------|--------------|
| 7 | 3,35 | 2,36 | 19 | 160 | 95 | 284 | 2,75 | *NRLI1207 |
| 8 | 4,25 | 3,00 | 19 | 160 | 95 | 284 | 2,75 | NRLI1208 |
| 10 | 7,10 | 5,00 | 23 | 170 | 105 | 328 | 4,76 | NRLI1210 |
| 13 | 11,20 | 8,00 | 30 | 190 | 110 | 391 | 9,56 | NRLI1213 |
| 16 | 17,08 | 12,20 | 38 | 275 | 150 | 508 | 18,66 | *NRLI1216 |

* Items marked with an asterisk delivery about 2 weeks

MASTER LINK WITH SHORTENING LINKS FOR 3 AND 4 -LEGGED ASSEMBLY

- chains are attached directly to the shortening hooks linked to the master link
- paint coated
- safety factor 4 : 1



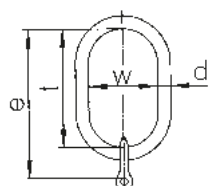
| For chain mm | WLL t Chain angle 0 - 45° | WLL t Chain angle 45 - 60° | d mm | t mm | w mm | e mm | Weight kg | Product code |
|-----------------|---------------------------------------|--|---------|---------|---------|---------|--------------|--------------|
| 7 | 5,00 | 3,55 | 27 | 190 | 110 | 368 | 6,45 | *NRLI124H07 |
| 8 | 6,30 | 4,50 | 27 | 190 | 110 | 368 | 6,45 | NRLI124H08 |
| 10 | 10,60 | 7,50 | 30 | 190 | 110 | 433 | 11,70 | NRLI124H10 |
| 13 | 17,00 | 11,80 | 38 | 275 | 150 | 616 | 23,84 | NRLI124H13 |
| 16 | 25,62 | 18,30 | 38 | 275 | 150 | 658 | 36,16 | *NRLI124H16 |

* Items marked with an asterisk delivery about 2 weeks



MASTER LINK WITH OMEGA LINK FOR 1-LEGGED CHAIN ASSEMBLY

- chain is attached directly to the omega link linked to the master link
- paint coated
- safety factor 4 : 1



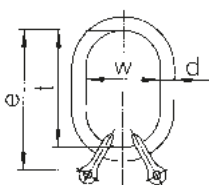
| For chain mm | WLL t | d mm | t mm | w mm | e mm | Weight kg | Product code |
|-----------------|----------|---------|---------|---------|---------|--------------|--------------|
| 7 | 2,36 | 14 | 120 | 70 | 163 | 0,66 | *NOR1207OME |
| 8 | 3,00 | 17 | 140 | 80 | 183 | 0,89 | *NOR1208OME |
| 10 | 5,00 | 19 | 160 | 95 | 211 | 1,62 | *NOR1210OME |
| 13 | 8,00 | 27 | 190 | 110 | 254 | 3,47 | *NOR1213OME |
| 16 | 12,20 | 30 | 190 | 110 | 268 | 5,80 | *NOR1216OME |

* Items marked with an asterisk delivery about 2 weeks



MASTER LINK WITH OMEGA LINKS FOR 2-LEGGED CHAIN ASSEMBLY

- chains are attached directly to the omega links linked to the master link
- paint coated
- safety factor 4 : 1



| For chain mm | WLL t Chain angle 0 - 45° | WLL t Chain angle 45 - 60° | d mm | t mm | w mm | e mm | Weight kg | Product code |
|-----------------|---------------------------------------|--|---------|---------|---------|---------|--------------|--------------|
| 7 | 3,35 | 2,36 | 19 | 160 | 95 | 203 | 3,35 | *NRLI1207OM |
| 8 | 4,25 | 3,00 | 19 | 160 | 95 | 203 | 4,25 | NRLI1208OM |
| 10 | 7,10 | 5,00 | 23 | 170 | 105 | 221 | 7,10 | NRLI1210OM |
| 13 | 11,20 | 8,00 | 30 | 190 | 110 | 257 | 11,20 | NRLI1213OM |
| 16 | 17,08 | 12,20 | 38 | 275 | 150 | 353 | 17,50 | *NRLI1216OM |

* Items marked with an asterisk delivery about 2 weeks

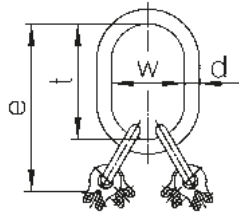
MASTER LINK WITH OMEGA LINKS FOR FOR 3 AND 4 -LEGGED CHAIN ASSEMBLY

- chains are attached directly to the omega links linked to the master link
- paint coated
- safety factor 4 : 1



| For chain mm | WLL t Chain angle 0 - 45° | WLL t Chain angle 45 - 60° | d mm | t mm | w mm | e mm | Weight kg | Product code |
|-----------------|---------------------------------------|--|---------|---------|---------|---------|--------------|---------------|
| 7 | 5,00 | 3,55 | 27 | 190 | 110 | 287 | 4,25 | *NRLI124H07OM |
| 8 | 6,30 | 4,50 | 27 | 190 | 110 | 287 | 4,25 | NRLI124H08OM |
| 10 | 10,60 | 7,50 | 30 | 190 | 110 | 326 | 7,34 | NRLI124H10OM |
| 13 | 17,00 | 11,80 | 38 | 275 | 150 | 479 | 14,40 | NRLI124H13OM |
| 16 | 25,62 | 18,30 | 38 | 275 | 150 | 503 | 19,48 | *NRLI124H16OM |

* Items marked with an asterisk delivery about 2 weeks



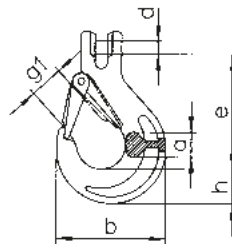
CLEVIS LATCH HOOK

- chain linked directly to the hook without a connecting link
- paint coated
- safety factor 4 : 1



| For chain mm | WLL t | e mm | h mm | a mm | b mm | d mm | g1 mm | Weight kg | Product code |
|-----------------|----------|---------|---------|---------|---------|---------|----------|--------------|--------------|
| 7 | 2,36 | 93 | 27 | 21 | 89 | 9,5 | 26 | 0,63 | *SALKH1207 |
| 8 | 3,00 | 92 | 27 | 21 | 89 | 11 | 26 | 0,63 | SALKH1208 |
| 10 | 5,00 | 108 | 33 | 25 | 110 | 14 | 31 | 1,18 | SALKH1210 |
| 13 | 8,00 | 130 | 41 | 34 | 132 | 17,5 | 38 | 2,35 | SALKH1213 |
| 16 | 12,20 | 158 | 49 | 37 | 160 | 21 | 45 | 3,82 | *SALKH1216 |

* Items marked with an asterisk delivery about 2 weeks



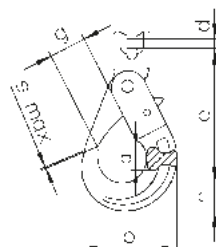
CLEVIS SELF-LOCKING HOOK

- chain linked directly to the hook without a connecting link
- paint coated
- safety factor 4 : 1



| For chain mm | WLL t | e mm | h mm | a mm | b mm | d mm | g mm | s max. mm | Weight kg | Product code |
|-----------------|----------|---------|---------|---------|---------|---------|---------|-----------------|--------------|--------------|
| 7 | 2,36 | 125 | 26 | 21 | 92 | 9,5 | 32 | 1 | 0,93 | *VAKH1207 |
| 8 | 3,00 | 124 | 26 | 21 | 92 | 11 | 32 | 1 | 0,93 | VAKH1208 |
| 10 | 5,00 | 143 | 31 | 26 | 115 | 14 | 45 | 1 | 1,60 | VAKH1210 |
| 13 | 8,00 | 183 | 42 | 35 | 145 | 17,5 | 54 | 2 | 3,50 | VAKH1213 |
| 16 | 12,20 | 218 | 51 | 41 | 169 | 21 | 60 | 2 | 6,50 | *VAKH1216 |

* Items marked with an asterisk delivery about 2 weeks






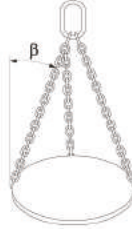
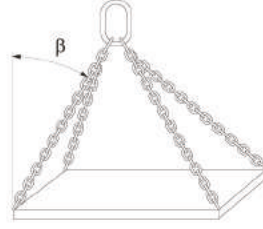
O szczegóły zapytaj naszych sprzedawców. Zawiesia łańcuchowe produkujemy na zamówienie.
Ask our sellers for details. We will build just the right chain sling combination for your needs



Produkty do podnoszenia i mocowania dla profesjonalistów
Lifting, lashing and material handling products for professionals

**12 KLASA
GRADE**

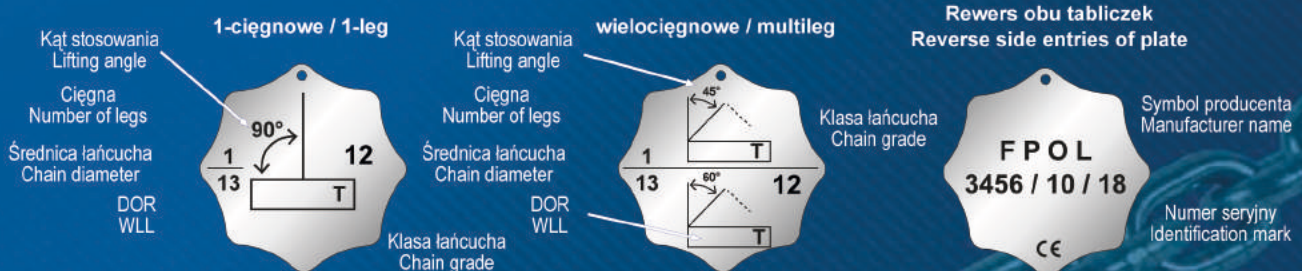
**DOPUSZCZALNE OBCIĄŻENIE ROBOCZE ZAWIESI ŁAŃCUCHOWYCH
WORKING LOAD LIMITS FOR CHAIN SLINGS**

|  Łańcuch / Chain Ø mm | 1-ciężnowe / legs | 2-ciężnowe / legs | | 3-4-ciężnowe / legs | |
|---|--|---|---|---|-------|
| |  0 - 45° |  45 - 60° |  0 - 45° |  45 - 60° | |
| Kąt odchylenia od pionu β / Inclination angle β | | | | | |
| DOR / WLL kg | | | | | |
| 7 | 2360 | 3350 | 2360 | 5000 | 3550 |
| 8 | 3000 | 4250 | 3000 | 6300 | 4500 |
| 10 | 5000 | 7100 | 5000 | 10600 | 7500 |
| 13 | 8000 | 11200 | 8000 | 17000 | 11800 |
| 16 | 12200 | 17080 | 12200 | 25620 | 18300 |
| Współczynniki stosowane do obliczenia DOR / Coefficients used in calculated WLL | | | | | |
| | 1,0 | 1,4 | 1,0 | 2,1 | 1,5 |

Dla zastawiania w obwiązaniu wartości z tabeli należy wymnożyć przez 0,8 / For a tightening lift, the table values are multiplied by 0,8

Współczynnik bezpieczeństwa / safety factor 4:1

**TABLICZKI ZNAMIONOWE ZAWIESI ŁAŃCUCHOWYCH
WLL PLATES FOR CHAIN SLINGS**



TEMPERATURA UŻYTKOWANIA
OPERATING TEMPERATURE **-40°C ÷ 200°C**

SPRAWDŹ STAN ELEMENTÓW ŁAŃCUCHA PRZED KAŻDYM UŻYCIEM
ORAZ PRZEPROWADŹ PRZEGLĄD PRZYNAJMNIEJ RAZ W ROKU.
ALWAYS CHECK LIFTING CHAIN ASSEMBLIES VISUALLY BEFORE USE
AND THOROUGHLY AT LEAST ONCE A YEAR .

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pewag[®] profilift lifting points

PLAW alpha



| Code | Thread [mm] | Load capacity [kg] |
|----------------|-------------|--------------------|
| PLAW 0,3 t | M8 | 300 |
| PLAW 0,63 t | M10 | 630 |
| PLAW 1 t | M12 | 1,000 |
| PLAW 1,5 t | M16 | 1,500 |
| PLAW 2,5 t | M20 | 2,500 |
| PLAW 4 t (/13) | M24 | 4,000 |
| PLAW 6 t | M30 | 6,000 |
| PLAW 7 t | M36 | 7,000 |
| PLAW 8 t | M36 | 8,000 |
| PLAW 10 t | M42 | 10,000 |
| PLAW 15 t | M42 | 15,000 |
| PLAW 20 t | M48 | 20,000 |

PLBW beta



| Code | Thread [mm] | Load capacity [kg] |
|-------------|-------------|--------------------|
| PLBW 0,3 t | M8 | 300 |
| PLBW 0,6 t | M10 | 600 |
| PLBW 1 t | M12 | 1,000 |
| PLBW 1,3 t | M14 | 1,300 |
| PLBW 1,6 t | M16 | 1,600 |
| PLBW 2 t | M18 | 2,000 |
| PLBW 2,5 t | M20 | 2,500 |
| PLBW 3 t | M22 | 3,000 |
| PLBW 4 t | M24 | 4,000 |
| PLBW 5 t | M27 | 5,000 |
| PLBW 6,3 t | M30 | 6,300 |
| PLBW 8 t | M33 | 8,000 |
| PLBW 10 t | M36 | 10,000 |
| PLBW 12,5 t | M42 | 12,500 |
| PLBW 15 t | M48 | 15,000 |

PLGW gamma



| Code | Thread [mm] | Load capacity [kg] |
|------------|-------------|--------------------|
| PLGW 0,3 t | M8 | 300 |
| PLGW 0,5 t | M10 | 500 |
| PLGW 0,7 t | M12 | 700 |
| PLGW 1,5 t | M16 | 1,500 |
| PLGW 2,3 t | M20 | 2,300 |
| PLGW 3,2 t | M24 | 3,200 |
| PLGW 4,9 t | M30 | 4,900 |
| PLGW 7 t | M36 | 7,000 |
| PLGW 9 t | M42 | 9,000 |
| PLGW 12 t | M48 | 12,000 |

PLDW delta



| Code | Thread [mm] | Load capacity [kg] |
|-------------|-------------|--------------------|
| PLDW 0,3 t | M8 | 300 |
| PLDW 0,5 t | M10 | 500 |
| PLDW 0,7 t | M12 | 700 |
| PLDW 1 t | M14 | 1,000 |
| PLDW 1,5 t | M16 | 1,500 |
| PLDW 2,5 t | M20 | 2,500 |
| PLDW 4 t | M24 | 4,000 |
| PLDW 6,7 t | M30 | 6,700 |
| PLDW 8 t | M36 | 8,000 |
| PLDW 10 t | M42 | 10,000 |
| PLDW 12 t | M45 | 12,000 |
| PLDW 12,5 t | M48 | 12,500 |
| PLDW 24 t | M56 | 24,000 |
| PLDW 25 t | M64 | 25,000 |
| PLDW 40 t | M72 | 40,000 |
| PLDW 45 t | M80 | 45,000 |

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NEW



Video

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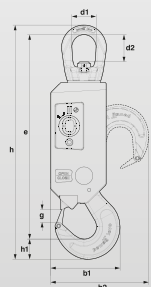
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Video

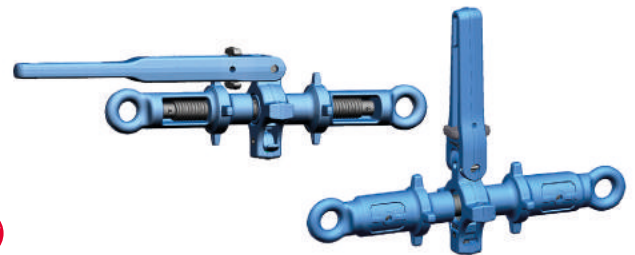
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pewag[®] winner PRO lashing chains

| Code | LC lashing capacity [kN] | STF Standard tension force [daN] |
|---|--------------------------|----------------------------------|
| ZRSWP 8 200 KHSWP-KHSWP-PSWP 3500 Connex | 60 | 1,900 |
| ZRSWP 10 200 KHSWP-KHSWP-PSWP 3500 Connex | 100 | 3,000 |
| ZRSWP 13 200 KHSWP-KHSWP-PSWP 3500 Connex | 160 | 2,500 |
| ZRSKWP 8 200 KHSWP-KHSWP-PWP 3500 Connex | 60 | 2,200 |
| ZRSKWP 10 200 KHSWP-KHSWP-PWP 3500 Connex | 100 | 2,500 |

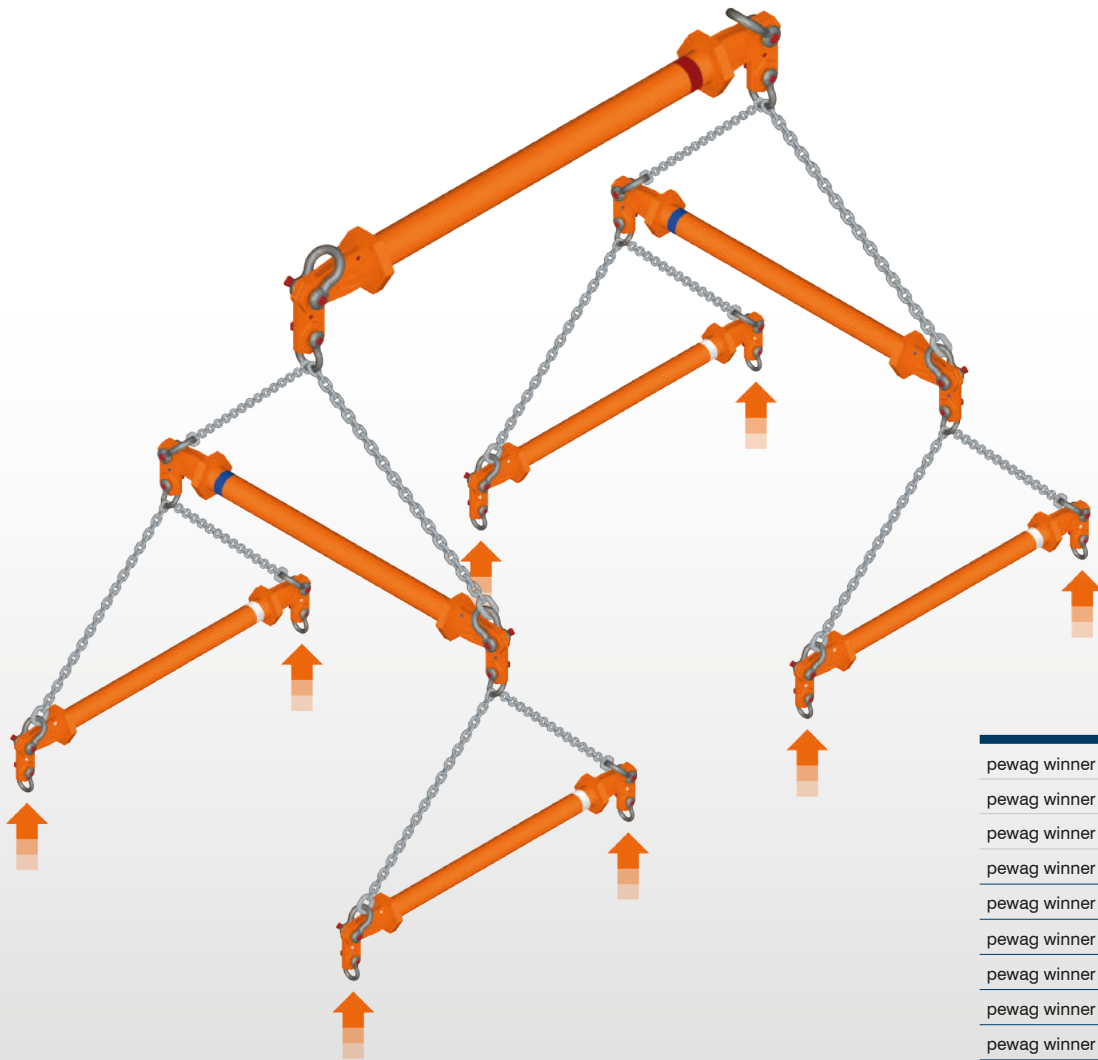


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pewag[®] spreader beams



- pewag winner FIT ST-07
- pewag winner FIT ST-15
- pewag winner FIT ST-24
- pewag winner FIT ST-34
- pewag winner FIT ST-50
- pewag winner FIT ST-70
- pewag winner FIT ST-110
- pewag winner FIT ST-170
- pewag winner FIT ST-250
- pewag winner FIT ST-400

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ENOUGH**
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pewag[®] PCWI pump chains



| Code | Load capacity [kg] |
|------------|--------------------|
| PCWI 4/320 | 320 |
| PCWI 4/400 | 400 |
| PCWI 5/560 | 560 |
| PCWI 5/630 | 630 |
| PCWI 6 | 850 |
| PCWI 7 | 1,250 |
| PCWI 8 | 1,600 |
| PCWI 10 | 2,500 |
| PCWI 13 | 3,500 |
| PCWI 16 | 6,300 |
| PCWI 20 | 8,000 |
| PCWI 26 | 12,000 |



Video

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IS NOT
ENOUGH**
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pewag security chains

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pewag panzer 7mm 1500mm

pewag panzer 8mm 1500mm

pewag panzer 10mm 1500mm

pewag panzer 12mm 1500mm

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LIFTING CHAINS

- short linked chains
- material AISI 316
- safety factor 4 : 1



| Chain size | WLL | A | B | Weight | Product code |
|------------|------|------|----|--------|--------------|
| D mm | t | mm | mm | kg/m | |
| 6 | 0,90 | 18,0 | 8 | 0,8 | NKHK6 |
| 8 | 1,55 | 24,0 | 10 | 1,4 | NKHK8 |
| 10 | 2,00 | 30,0 | 13 | 2,2 | NKHK10 |
| 13 | 3,20 | 39,0 | 17 | 3,8 | NKHK13 |

EYE LATCH HOOK

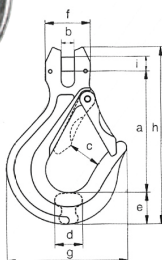
- material AISI 316
- safety factor 4 : 1




| For chain | WLL | e | h | a | d1 | d2 | g1 | b | Weight | Product code |
|-----------|------|-----|----|----|----|----|----|-----|--------|--------------|
| mm | t | mm | mm | mm | mm | mm | mm | mm | kg | |
| 5/6 | 0,90 | 84 | 20 | 14 | 21 | 8 | 22 | 67 | 0,25 | SALKHK6SI |
| 7/8 | 1,60 | 112 | 29 | 20 | 27 | 13 | 32 | 98 | 0,70 | SALKHK78SI |
| 10 | 2,50 | 133 | 33 | 28 | 37 | 15 | 39 | 115 | 1,35 | SALKHK10SI |
| 13 | 4,25 | 172 | 43 | 35 | 48 | 18 | 51 | 147 | 2,60 | SALKHK13SI |

CLEVIS LATCH HOOK

- material AISI 316
- safety factor 4 : 1



| For chain | WLL | a | b | c | d | e | f | g | h | i | Weight | Product code |
|-----------|------|-----|----|----|----|----|----|-----|-----|----|--------|--------------|
| mm | t | mm | mm | mm | mm | mm | mm | mm | mm | mm | kg | |
| 6 | 0,70 | 76 | 7 | 25 | 15 | 19 | 27 | 73 | 109 | 8 | 0,29 | *SALKHK6 |
| 8 | 1,20 | 95 | 9 | 28 | 20 | 22 | 32 | 85 | 133 | 9 | 0,55 | *SALKHK78 |
| 10 | 1,60 | 113 | 11 | 28 | 24 | 28 | 41 | 106 | 164 | 13 | 0,97 | *SALKHK10 |
| 13 | 2,70 | 138 | 15 | 38 | 32 | 40 | 52 | 133 | 208 | 16 | 1,86 | *SALKHK13 |

* Items marked with an asterisk delivery 2 weeks

OMEGA LINK

- used in the same way as connection links
- material AISI 316
- safety factor 4 : 1



| For chain mm | WLL t | B mm | L mm | Weight kg | Product code |
|-----------------|----------|---------|---------|--------------|--------------|
| 5/6 | 0,70 | 20 | 25 | 0,07 | OMER6 |
| 7/8 | 1,20 | 23 | 34 | 0,16 | OMER78 |
| 10 | 1,60 | 31 | 41 | 0,28 | OMER10 |
| 13 | 2,70 | 40 | 54 | 0,63 | OMER13 |

MASTER LINK

- for 1- and 2-leg lifting chain assemblies
- material AISI 316
- safety factor 4 : 1



| 1-leg for chain mm | 2-leg for chain mm | WLL 1-leg t | WLL 2-leg 45° t | WLL 2-leg 60° t | L mm | B mm | D mm | Weight kg | Product code |
|--------------------------|--------------------------|-------------------|--------------------------|--------------------------|---------|---------|---------|--------------|--------------|
| 6 | - | 0,75 | - | - | 110 | 60 | 13 | 0,34 | NORHK66 |
| 8 | 6 | 1,25 | 1,40 | 1,00 | 110 | 60 | 16 | 0,53 | NORHK86 |
| 10 | 8 | 2,00 | 1,70 | 1,25 | 135 | 75 | 18 | 0,82 | NORHK108 |
| 13 | 10 | 3,20 | 2,80 | 2,00 | 160 | 90 | 22 | 1,50 | NORHK1310 |
| - | 13 | - | 4,50 | 3,20 | 180 | 100 | 26 | 2,31 | NORHK1613 |

MASTER LINK WITH ADDITIONAL LINKS

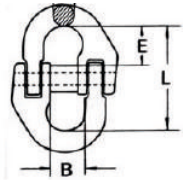
- for 3- and 4-leg lifting chain assemblies
- material AISI 316
- safety factor 4 : 1



| 3/4-leg for chain mm | WLL 45° t | WLL 60° t | L mm | B mm | D mm | L1 mm | Weight kg | Product code |
|----------------------------|-----------------|-----------------|---------|---------|---------|----------|--------------|--------------|
| 6 | 1,60 | 1,10 | 135 | 75 | 18 | 189 | 1,16 | *NRLIH6 |
| 8 | 2,65 | 1,80 | 160 | 90 | 22 | 230 | 2,22 | *NRLIH78 |
| 10 | 4,25 | 3,00 | 180 | 100 | 26 | 265 | 3,37 | *NRLIH10 |
| 13 | 6,70 | 4,75 | 200 | 110 | 32 | 315 | 6,07 | *NRLIH13 |

* Items marked with an asterisk delivery 2 weeks

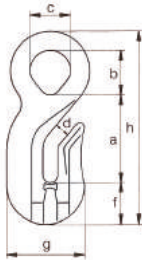
CONNECTING LINK



- for connecting chains to master links and hooks
- material AISI 316
- safety factor 4 : 1

| For chain | WLL | E | B | L | Weight | Product code |
|-----------|------|----|----|----|--------|--------------|
| | t | mm | mm | mm | kg | |
| 6 | 0,70 | 14 | 16 | 45 | 0,10 | LLHK6 |
| 7/8 | 1,20 | 18 | 20 | 55 | 0,16 | LLHK78 |
| 10 | 1,60 | 25 | 25 | 73 | 0,36 | LLHK10 |
| 13 | 2,70 | 32 | 28 | 92 | 0,73 | LLHK13 |

EYE GRAB HOOK



- used for shortening chain legs
- AISI 316

| For chain | WLL | a | b | c | d | f | g | h | i | Weight | Product code |
|-----------|------|----|----|----|----|----|----|-----|----|--------|--------------|
| mm | t | mm | mm | mm | mm | mm | mm | mm | mm | kg | |
| 6 | 0,70 | 41 | 24 | 23 | 8 | 20 | 42 | 94 | 9 | 0,25 | *LYKHK6 |
| 8 | 1,20 | 53 | 27 | 26 | 10 | 23 | 53 | 115 | 10 | 0,32 | *LYKHK8 |
| 10 | 1,60 | 65 | 38 | 36 | 12 | 29 | 66 | 146 | 14 | 0,53 | *LYKHK10 |
| 13 | 2,70 | 83 | 42 | 41 | 15 | 40 | 88 | 183 | 16 | 1,96 | *LYKHK13 |

* Items marked with an asterisk delivery 2 weeks

SHORTENER

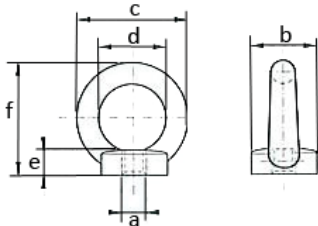


- used for shortening chain legs
- AISI 316

| For chain | WLL | Weight | Product code |
|-----------|------|--------|--------------|
| mm | t | kg | |
| 6 | 0,75 | 0,205 | *LYKHNV06 |
| 8 | 1,25 | 0,345 | *LYKHNV08 |
| 10 | 2,00 | 0,790 | *LYKHNV10 |
| 13 | 3,20 | 1,230 | *LYKHNV13 |

* Items marked with an asterisk delivery 2 weeks

LIFTING EYE NUT DIN 582

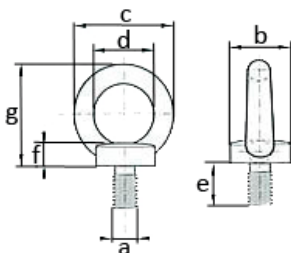


- polished surface
- material AISI 316

| Size | b | c | d | e | f | Weight kg/ 100 pcs | Product code |
|------|------|------|------|------|------|--------------------|--------------|
| a | mm | mm | mm | mm | mm | | |
| M6 | 20,0 | 36,0 | 20,0 | 8,5 | 36,0 | 5,0 | NSMH06L |
| M8 | 20,0 | 36,0 | 20,0 | 8,5 | 36,0 | 5,0 | NSMH08L |
| M10 | 25,0 | 45,0 | 25,0 | 10,0 | 45,0 | 9,0 | NSMH10L |
| M12 | 30,0 | 54,0 | 30,0 | 11,0 | 53,0 | 16,0 | NSMH12L |
| M16 | 35,0 | 63,0 | 35,0 | 13,0 | 62,0 | 24,0 | NSMH16L |
| M20 | 39,0 | 71,0 | 39,0 | 14,0 | 70,0 | 36,0 | NSMH20L |

Also other sizes available

LIFTING EYE SCREW DIN 580



- polished surface
- material AISI 316

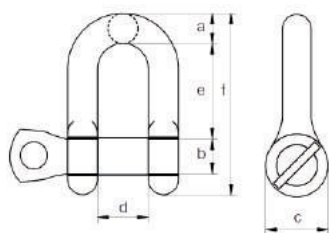
| Size | b | c | d | e | f | g | Weight kg/ 100 pcs | Product code |
|------|------|------|------|------|------|------|--------------------|--------------|
| a | mm | mm | mm | mm | mm | mm | | |
| M6 | 20,0 | 36,0 | 20,0 | 13,0 | 6,0 | 36,0 | 6,0 | NSRH06L |
| M8 | 20,0 | 36,0 | 20,0 | 13,0 | 6,0 | 36,0 | 6,0 | NSRH08L |
| M10 | 25,0 | 45,0 | 25,0 | 17,0 | 8,0 | 45,0 | 11,0 | NSRH10L |
| M12 | 30,0 | 54,0 | 30,0 | 20,5 | 10,0 | 53,0 | 18,0 | NSRH12L |
| M16 | 35,0 | 63,0 | 35,0 | 27,0 | 12,0 | 62,0 | 28,0 | NSRH16L |
| M20 | 39,0 | 71,0 | 39,0 | 30,0 | 14,0 | 70,0 | 45,0 | NSRH20L |

WLL

| thread | | | | | | | | |
|--------|-------|-------------|-------|-------------|---------------|----------------|---------------|----------------|
| | WLL t | WLL t | WLL t | WLL t | WLL t 0 - 45° | WLL t 45 - 60° | WLL t 0 - 45° | WLL t 45 - 60° |
| M6 | 0,08 | not allowed | 0,16 | not allowed | - | not allowed | - | not allowed |
| M8 | 0,14 | not allowed | 0,28 | not allowed | 0,10 | not allowed | 0,14 | not allowed |
| M10 | 0,23 | not allowed | 0,46 | not allowed | 0,17 | not allowed | 0,23 | not allowed |
| M12 | 0,34 | not allowed | 0,68 | not allowed | 0,24 | not allowed | 0,34 | not allowed |
| M16 | 0,70 | not allowed | 1,40 | not allowed | 0,50 | not allowed | 0,70 | not allowed |
| M20 | 1,20 | not allowed | 2,40 | not allowed | 0,86 | not allowed | 1,20 | not allowed |

Also other sizes available

STAINLESS STEEL SHACKLE



- D-shackles approved for lifting
- material AISI 316
- safety factor 5 : 1

| WLL t | a | b | c | d | e | f | Weight kg | Product code |
|-------|----|----|----|----|----|-----|-----------|--------------|
| mm | mm | mm | mm | mm | mm | mm | | |
| 0,40 | 8 | 8 | 16 | 16 | 32 | 52 | 0,06 | SAKDH0400 |
| 0,60 | 10 | 10 | 19 | 20 | 40 | 64 | 0,12 | SAKDH0600 |
| 0,90 | 12 | 12 | 24 | 25 | 48 | 78 | 0,21 | SAKDH0900 |
| 1,50 | 13 | 16 | 31 | 24 | 52 | 90 | 0,34 | SAKDH1500 |
| 2,50 | 16 | 20 | 38 | 28 | 64 | 110 | 0,61 | SAKDH2500 |
| 3,00 | 19 | 22 | 44 | 32 | 72 | 124 | 0,90 | SAKDH3000 |
| 4,00 | 22 | 25 | 50 | 37 | 74 | 134 | 1,08 | SAKDH4000 |
| 6,00 | 25 | 30 | 57 | 40 | 94 | 162 | 2,25 | SAKDH6000 |

Product delivery in 2 weeks

LIFTING CHAIN COMBINATIONS WITH LATCH HOOKS



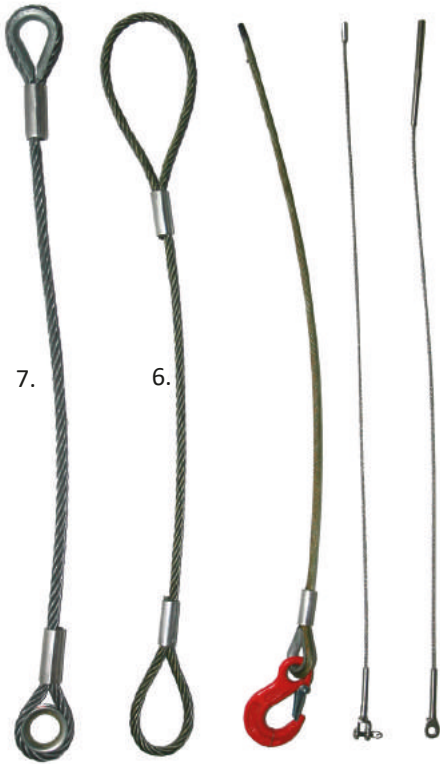
- 1-, 2-, 3- and 4-leg assemblies
- equipped with load plate and CE markings
- material AISI 316
- safety factor 4 : 1

| | Chain size | WLL t Chain angle 0 - 45° | WLL t Chain angle 45 - 60° | Latch hooks |
|-------|------------|---------------------------------------|--|--------------|
| | mm | | | Product code |
| 1-leg | 6 | 0,70 | | NKSH06101 |
| | 8 | 1,20 | | NKSH08101 |
| | 10 | 1,60 | | NKSH10101 |
| | 13 | 2,70 | | NKSH13101 |
| 2-leg | 6 | 1,00 | 0,70 | NKSH06201 |
| | 8 | 1,60 | 1,20 | NKSH08201 |
| | 10 | 2,20 | 1,60 | NKSH10201 |
| | 13 | 3,70 | 2,70 | NKSH13201 |
| 3-leg | 6 | 1,50 | 1,00 | NKSH06301 |
| | 8 | 2,50 | 1,80 | NKSH08301 |
| | 10 | 3,30 | 2,40 | NKSH10301 |
| | 13 | 5,70 | 4,00 | NKSH13301 |
| 4-leg | 6 | 1,50 | 1,00 | NKSH06401 |
| | 8 | 2,50 | 1,80 | NKSH08401 |
| | 10 | 3,30 | 2,40 | NKSH10401 |
| | 13 | 5,70 | 4,00 | NKSH13401 |

The last two numbers of the product code refer to the length. When ordering, for example, a 10mm item in a 2-leg 3 m assembly, the product code is NKSH10230

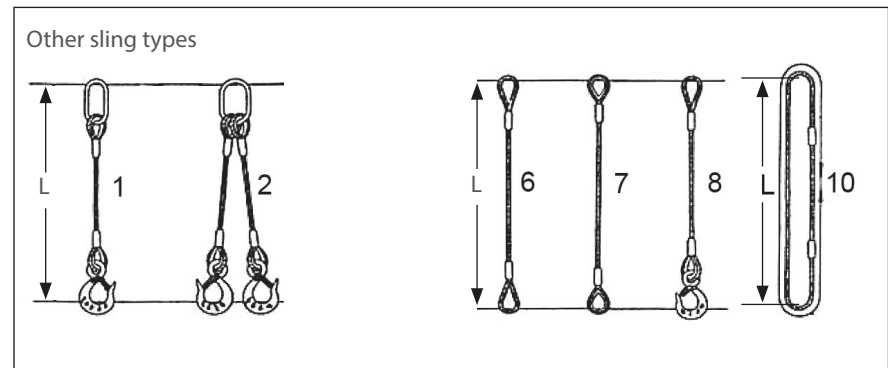
Note! The leg length of the chain assembly, unless specifically ordered, is as presented in the image L1.

STEEL WIRE ROPE SLINGS



- slings with eyes (type 6) and slings with eyes and thimbles (type 7) as standard types.
- made from galvanized 216-wire rope with pressing buckles
- also available with spliced connections
- also higher workloads and special types with thread ends, turnbuckle ends etc.
- safety factor 5:1

When ordering, for example, a 16mm Steel wire rope roundsling type 8, length 9m, the product code is TER81609



| WLL t | Rope diameter mm | Standard eye length mm | Product code type 6 | Product code type 7 |
|----------|---------------------|---------------------------|------------------------|------------------------|
| 0,35 | 6 | 100 | TER60601 | TER70601 |
| 0,70 | 8 | 150 | TER60801 | TER70801 |
| 1,05 | 10 | 150 | TER61001 | TER71001 |
| 1,55 | 12 | 200 | TER61201 | TER71201 |
| 2,12 | 14 | 200 | TER61401 | TER71401 |
| 2,70 | 16 | 250 | TER61601 | TER71601 |
| 3,40 | 18 | 250 | TER61801 | TER71801 |
| 4,35 | 20 | 300 | TER62002 | TER72002 |
| 5,20 | 22 | 300 | TER62202 | TER72202 |
| 6,30 | 24 | 350 | TER62402 | TER72402 |
| 7,20 | 26 | 350 | TER62602 | TER72602 |
| 8,40 | 28 | 400 | TER62802 | TER72802 |
| 9,70 | 30 | 400 | TER63002 | TER73002 |
| 11,00 | 32 | 400 | TER63202 | TER73202 |
| 14,00 | 36 | - | TER63603 | TER73603 |
| 17,00 | 40 | - | TER64003 | TER74003 |
| 21,00 | 44 | - | TER64403 | TER74403 |
| 25,00 | 48 | - | TER64803 | TER74803 |
| 29,00 | 52 | - | TER65203 | TER75203 |
| 33,50 | 56 | - | TER65603 | TER75603 |
| 39,00 | 60 | - | TER66003 | TER76003 |













Delivery 5-7 days



Produkty do podnoszenia i mocowania dla profesjonalistów
Lifting, lashing and material handling products for professionals

DOPUSZCZALNE OBCIĄŻENIE ROBOCZE ZAWIESI Z LIN STALOWYCH WORKING LOAD LIMITS FOR STEEL WIRE SLINGS

Współczynnik bezpieczeństwa / safety factor 5:1 EN-13414-1

| Średnica liny/ Rope diameter | 1-cięgnowe 1-legs | | | 2-cięgnowe 2-legs | | | | 3-4-cięgnowe 3-4-legs | | bezköncowe endless | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Proste Straight | Pętlowe Choke | Litera U U-shape | Proste Straight | Pętlowe Choke | Proste Straight | Pętlowe Choke | Proste Straight | | Proste Straight | Pętlowe Choke | Litera U U-shape |
| | | | $0^\circ < \beta < 45^\circ$ | | $45^\circ < \beta < 60^\circ$ | | $0^\circ < \beta < 45^\circ$ | $45^\circ < \beta < 60^\circ$ | | | | |
| 6x36-IWRC 1960 N/mm ² Rdzeń stalowy/ Steel core |  |  |  |  |  |  |  |  |  |  |  |  |
| Ø mm | DOR / WLL kg | | | | | | | | | | | |
| 6 | 400 | 320 | 800 | 560 | 448 | 400 | 320 | 840 | 600 | 800 | 640 | 1600 |
| 8 | 800 | 640 | 1600 | 1120 | 896 | 800 | 640 | 1680 | 1200 | 1600 | 1280 | 3200 |
| 10 | 1300 | 1040 | 2600 | 1820 | 1456 | 1300 | 1040 | 2730 | 1950 | 2600 | 2080 | 5200 |
| 12 | 1800 | 1440 | 3600 | 2520 | 2016 | 1800 | 1440 | 3780 | 2700 | 3600 | 2880 | 7200 |
| 14 | 2500 | 2000 | 5000 | 3500 | 2800 | 2500 | 2000 | 5250 | 3750 | 5000 | 4000 | 10000 |
| 16 | 3300 | 2640 | 6600 | 4620 | 3696 | 3300 | 2640 | 6930 | 4950 | 6600 | 5280 | 13200 |
| 18 | 4100 | 3280 | 8200 | 5740 | 4592 | 4100 | 3280 | 8610 | 6150 | 8200 | 6560 | 16400 |
| 20 | 5100 | 4080 | 10200 | 7140 | 5712 | 5100 | 4080 | 10710 | 7650 | 10200 | 8160 | 20400 |
| 22 | 6200 | 4960 | 12400 | 8680 | 6944 | 6200 | 4960 | 13020 | 9300 | 12400 | 9920 | 24800 |
| 24 | 7400 | 5920 | 14800 | 10360 | 8288 | 7400 | 5920 | 15540 | 11100 | 14800 | 11840 | 29600 |
| 26 | 8700 | 6960 | 17400 | 12180 | 9744 | 8700 | 6960 | 18270 | 13050 | 17400 | 13920 | 34800 |
| 28 | 10000 | 8000 | 20000 | 14000 | 11200 | 10000 | 8000 | 21000 | 15000 | 20000 | 16000 | 40000 |
| 32 | 13000 | 10400 | 26000 | 18200 | 14560 | 13000 | 10400 | 27300 | 19500 | 26000 | 20800 | 52000 |
| 36 | 16600 | 13280 | 33200 | 23240 | 18592 | 16600 | 13280 | 34860 | 24900 | 33200 | 26560 | 66400 |
| 40 | 20500 | 16400 | 41000 | 28700 | 22960 | 20500 | 16400 | 43050 | 30750 | 41000 | 32800 | 82000 |
| 44 | 25000 | 20000 | 50000 | 35000 | 28000 | 25000 | 20000 | 52500 | 37500 | 50000 | 40000 | 100000 |
| 48 | 29500 | 23600 | 59000 | 41300 | 33040 | 29500 | 23600 | 61950 | 44250 | 59000 | 47200 | 118000 |
| 52 | 35000 | 28000 | 70000 | 49000 | 39200 | 35000 | 28000 | 73500 | 52500 | 70000 | 56000 | 140000 |
| 56 | 40000 | 32000 | 80000 | 56000 | 44800 | 40000 | 32000 | 84000 | 60000 | 80000 | 64000 | 160000 |
| 60 | 46000 | 36800 | 92000 | 64400 | 51520 | 46000 | 36800 | 96600 | 69000 | 92000 | 73600 | 184000 |
| Współczynniki stosowane do obliczenia DOR / Coefficients used in calculated WLL | | | | | | | | | | | | |
| | 1 | 0,80 | 2 | 1,4 | 1,12 | 1 | 0,8 | 2,1 | 1,5 | 2 | 1,6 | 4 |

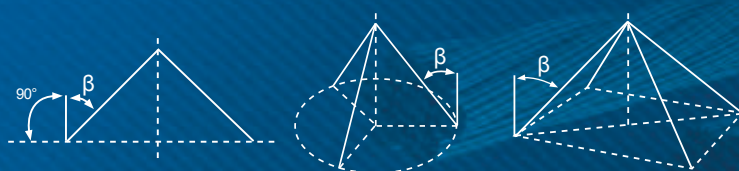
TEMPERATURA UŻYTKOWANIA / OPERATING TEMPERATURE

| Dopuszczalne obciążenie robocze wyrażono jako procent nominalnej wartości DOR The working load limits presented as a percentage of the WLL | | | | | | |
|---|-----------------------|---|-------------|--------------------------|--------------------------|--------------------------|
| Typ zakończenia / end type | Skuwka / ferrule | Temperatura pracy / working temperature | | | | |
| | | -40 - 100°C | 101 - 150°C | 151 - 200°C | 201 - 300°C | 301 - 400°C |
| Zaciskane / clamping bush | Aluminium / aluminium | 100% | 100% | zabronione / not allowed | zabronione / not allowed | zabronione / not allowed |
| Zaciskane / clamping bush | Stal / steel | 90% | 90% | 90% | 75% | 65% |
| Zapiątane / splice | - | 90% | 90% | 90% | 75% | 65% |

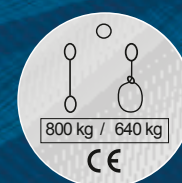
Wartość dopuszczalnego obciążenia roboczego w tabeli ma zastosowanie gdy ładunek jest równomiernie rozłożony między cięgnami.
Working load limits given in table values apply only when the load is evenly distributed among the legs.

Sprawdź stan elementów łańcucha przed każdym użyciem oraz przeprowadź przegląd przynajmniej raz w roku.
Always check steel wire rope slings visually before use and thoroughly at least once a year

KĄT ROZWARCIA / INCLINATION ANGLES



TABLICZKA ZNAMIONOWA / WLL PLATE



3. Chain Hoists, Wire Rope Hoists, Lever Hoists and Trolleys

Electric Chain Hoists

Compressed Air Hoists and Winches

Trolleys

Lever Hoists

Hand Chain Hoists

Wire Rope Hoists / Hand Strap Pullers

Electric Wire Hoists

Wire Rope Pulling Hoists



ED electric chain hoists

| Type | Load capacity | Speed | Lifting height | Control cable | KITO code | Lifting speed | Ø Load chain | No. of falls | ED | Head-room C | FEM | Weight |
|------|---------------|--------|----------------|---------------|-----------------|---------------|--------------|--------------|----|-------------|-----|--------|
| | kg | | m | m | | m/min | | | % | mm | | kg |
| ED | 60 | single | 3.0 | 2.5 | ED0612NH030S030 | 20.1 | 4.0 x 12.0 | 1 | 30 | 315 | 1Am | 11.5 |
| | | dual | | | ED06S2NH030S030 | 20.1/4.0 | 4.0 x 12.0 | 1 | 30 | 315 | 1Am | 12.0 |
| ED | 100 | single | 3.0 | 2.5 | ED1012NH030S030 | 12.5 | 4.0 x 12.0 | 1 | 30 | 315 | 1Am | 11.5 |
| | | dual | | | ED10S2NH030S030 | 12.5/3.0 | 4.0 x 12.0 | 1 | 30 | 315 | 1Am | 12.0 |
| ED | 160 | single | 3.0 | 2.5 | ED1612NH030S030 | 19.2 | 4.0 x 12.0 | 1 | 30 | 330 | 1Am | 15.5 |
| | | dual | | | ED16S2NH030S030 | 19.2/4.0 | 4.0 x 12.0 | 1 | 30 | 330 | 1Am | 16.0 |
| ED | 180 | single | 3.0 | 2.5 | ED1812NH030S030 | 7.7 | 4.0 x 12.0 | 1 | 30 | 315 | 1Am | 11.5 |
| | | dual | | | ED18S2NH030S030 | 7.7/3.0 | 4.0 x 12.0 | 1 | 30 | 315 | 1Am | 12.0 |
| ED | 240 | single | 3.0 | 2.5 | ED2412NH030S030 | 12.9 | 4.0 x 12.0 | 1 | 30 | 330 | 1Am | 15.5 |
| | | dual | | | ED24S2NH030S030 | 12.9/3.0 | 4.0 x 12.0 | 1 | 30 | 330 | 1Am | 16.0 |
| ED | 480 | single | 3.0 | 2.5 | ED4812NH030S030 | 6.4 | 4.0 x 12.0 | 2 | 30 | 520 | 1Am | 21.0 |
| | | dual | | | ED48S2NH030S030 | 6.4/2.0 | 4.0 x 12.0 | 2 | 30 | 520 | 1Am | 21.0 |

- 230 V/50 Hz single-phase
- Hook suspension
- High-performance mechanical brake with friction clutch
- Range limit switch for lifting
- Single or dual lifting speed
- Weather-tight and corrosion resistant
- Aluminium gear casing
- Nickel-plated load chain, grade DAT (G 80) in accordance with standard EN 818-7

Options

- Radio remote control
- TMH plain trolley
- Foam hook protector



Mini TMH trolley



ED 24



ED 48

EQ electric chain hoist

| Type | Load capacity kg | Lifting height m | Control cable | KITO code | Lifting speed m/min | ∅ Load chain mm | No. of falls | ED % | Headroom C mm | FEM | Weight kg |
|------|---------------------|---------------------|---------------|------------------|------------------------|--------------------|--------------|---------|------------------|-----|--------------|
| EQ | 125 | 3.0 | 2.5 | EQ001S41B030P030 | 17.0 / 2.8 | 5.6 x 15.7 | 1 | 40 / 20 | 395 | 3m | 30.0 |
| EQ | 250 | 3.0 | 2.5 | EQ003S41B030P030 | 10.0 / 1.7 | 5.6 x 15.7 | 1 | 40 / 20 | 395 | 3m | 30.0 |
| EQ | 500 | 3.0 | 2.5 | EQ005S41B030P030 | 7.6 / 1.3 | 5.6 x 15.7 | 1 | 40 / 20 | 410 | 3m | 32.0 |
| EQ | 1,000 | 3.0 | 2.5 | EQ010S41B030P030 | 7.1 / 1.2 | 7.1 x 19.9 | 1 | 40 / 20 | 465 | 2m | 42.0 |

- 380–440 V/3 phases
- 24 V control voltage
- Frequency inverter for precise positioning of the load
- Eye suspension
- Overload protection thanks to frequency inverter and friction clutch
- Operating hours counter/load cycle counter
- Range limit switch for lifting/lowering
- Cylinder anchor brake
- Nickel-plated load chain, grade DAT (G 80) in accordance with standard EN 818-7

Options

- Top hook
- Radio remote control
- Plain, geared or motorised trolley

EQ 010



ER2 electric chain hoist

| Type | Load capacity | Version | Speed | Lifting height | Control cable | KITO code | Lifting speed | Ø Load chain | No. of falls | ED | Head-room C | FEM | Weight |
|------|---------------|---------|--------|----------------|---------------|-------------------|---------------|--------------|--------------|---------|-------------|-----|--------|
| | kg | | | m | m | | m/min | mm | | % | mm | | kg |
| ER2 | 125 | H | single | 3.0 | 2.5 | ER2001341H030S030 | 14.1 | 4.3 x 12.0 | 1 | 60 | 350 | 2m | 27.0 |
| | | IH | dual | | | ER2001H41H030S030 | 16.6/2.8-1.4 | | | 40 / 20 | | 3m | 27.0 |
| ER2 | 250 | S | single | 3.0 | 2.5 | ER2003141H030S030 | 9.1 | 4.3 x 12.0 | 1 | 60 | 350 | 2m | 27.0 |
| | | IS | dual | | | ER2003S41H030S030 | 10.8/1.8-0.9 | | | 40 / 20 | | 3m | 27.0 |
| | | H | single | | | ER2003341H030S030 | 13.4 | 6.0 x 16.8 | 1 | 60 | 370 | 2m | 37.0 |
| | | IH | dual | | | ER2003H41H030S030 | 15.7/2.6-1.3 | | | 40 / 20 | | 3m | 36.0 |
| ER2 | 500 | L | single | 3.0 | 2.5 | ER2005241H030S030 | 3.8 | 6.0 x 16.8 | 1 | 60 | 370 | 2m | 33.0 |
| | | IL | dual | | | ER2005L41H030S030 | 4.5/0.8-0.4 | | | 40 / 20 | | 3m | 32.0 |
| | | S | single | | | ER2005141H030S030 | 7.3 | | | 60 | | 2m | 37.0 |
| | | IS | dual | | | ER2005S41H030S030 | 8.5/1.4-0.7 | | | 40 / 20 | | 3m | 36.0 |
| ER2 | 1,000 | L | single | 3.0 | 2.5 | ER2010241H030S030 | 3.5 | 7.7 x 21.5 | 1 | 60 | 430 | 2m | 47.0 |
| | | IL | dual | | | ER2010L41H030S030 | 4.2/0.7-0.3 | | | 40 / 20 | | 2m | 45.0 |
| | | S | single | | | ER2010141H030S030 | 7.1 | | | 60 | | 2m | 54.0 |
| | | IS | dual | | | ER2010S41H030S030 | 8.2/1.4-0.7 | | | 40 / 20 | | 2m | 52.0 |
| ER2 | 1,600 | S | single | 3.0 | 2.5 | ER2016141H030S030 | 4.5 | 10.2 x 28.5 | 1 | 60 | 510 | 2m | 72.0 |
| | | IS | dual | | | ER2016S41H030S030 | 5.3/0.9-0.4 | | | 40 / 20 | | 2m | 72.0 |
| ER2 | 2,000 | L | single | 3.0 | 2.5 | ER2020241H030S030 | 3.7 | 10.2 x 28.5 | 1 | 60 | 575 | 1Am | 73.0 |
| | | IL | dual | | | ER2020L41H030S030 | 4.3/0.7-0.4 | | | 40 / 20 | | 1Am | 73.0 |
| | 2,000 | S | single | 3.0 | 2.5 | ER2020141H030S030 | 7.0 | 10.2 x 28.5 | 1 | 60 | 590 | 1Am | 91.0 |
| | | IS | dual | | | ER2020S41H030S030 | 8.2/1.4-0.7 | | | 40 / 20 | | 1Am | 89.0 |
| ER2 | 2,500 | S | single | 3.0 | 2.5 | ER2025141H030S030 | 5.7 | 11.2 x 31.3 | 1 | 60 | 625 | 1Am | 104.0 |
| | | IS | dual | | | ER2025S41H030S030 | 6.6/1.1-0.6 | | | 40 / 20 | | 1Am | 100.0 |
| ER2 | 3,200 | S | single | 3.0 | 2.5 | ER2032141H030S030 | 4.4 | 10.2 x 28.5 | 2 | 60 | 785 | 1Am | 107.0 |
| | | IS | dual | | | ER2032S41H030S030 | 5.2/0.9-0.4 | | | 40 / 20 | | 1Am | 105.0 |
| ER2 | 5,000 | S | single | 3.0 | 2.5 | ER2050141H030S030 | 2.9 | 11.2 x 31.3 | 2 | 60 | 850 | 1Am | 132.0 |
| | | IS | dual | | | ER2050S41H030S030 | 3.3/0.6-0.3 | | | 40 / 20 | | 1Am | 128.0 |
| ER2 | 10,000 | L | single | 3.0 | 2.5 | ER2100241H030S030 | 1.4 | 11.2 x 31.3 | 4 | 60 | 1,370 | 1Am | 280.0 |
| | | S | single | | | ER2100141H030S030 | 2.9 | | | 60 | | 1Am | 303.0 |
| | | IS | dual | | | ER2100S41H030S030 | 3.3/0.6-0.3 | | | 40 / 20 | | 1Am | 303.0 |
| ER2 | 15,000 | S | single | 3.0 | 2.5 | ER2150141H030S030 | 1.9 | 11.2 x 31.3 | 6 | 60 | 1,595 | 1Am | 404.0 |
| | | IS | dual | | | ER2150S41H030S030 | 2.2/0.4-0.2 | | | 40 / 20 | | 1Am | 404.0 |
| ER2 | 20,000 | S | single | 3.0 | 2.5 | ER2200141H030S030 | 1.4 | 11.2 x 31.3 | 8 | 60 | 1,710 | 1Am | 476.0 |
| | | IS | dual | | | ER2200S41H030S030 | 1.7/0.3-0.2 | | | 40 / 20 | | 1Am | 476.0 |

- 400 V/50 Hz
- 24 V control voltage
- Single or dual lifting speed
- Frequency inverter for dual lifting speeds
- Overload limiter thanks to carbon friction clutch
- Operating hours counter/load cycle counter
- Range limit switch for lifting/lowering
- Thermal motor protection
- Nickel-plated load chain, grade DAT (G 80) in accordance with standard EN 818-7

Options

- Radio remote control
- Stepless speed control
- Limit lock = programmable limit switch to restrict and define the hook path when lifting and lowering
- Foam hook protector
- Plain, geared or motorised trolley
- Special voltages on request



LIFTKET ELECTRIC CHAIN HOISTS 400 V / 50 Hz

- lifting capacity 125 kg - 25000 kg
- available with a hook suspension or an integrated motor trolley
- 400 V model has 2-lifting speeds
- standard lifting height 6 m, other heights available for individual order
- if the lifting height is over 20m, it may lower the hoist WLL
- control cable standard length 4.5m, other lengths for individual order
- the control switch is equipped with an emergency stop
- normal lifting heights are always equipped with a chain bag
- operating temperature -20°C - $+40^{\circ}\text{C}$. If environment temperature is higher, running time has to be reduced.
- protection class IP55
- made in Germany

Haklift push trolleys can also be used with hoists that are equipped with a hook suspension.



Check the hoist schematics on the next page.

| WLL kg | No. of chains | Chain size mm | 1.speed m/min | 2.speed m/min | ED % | Engine power kW | Weight kg | With hook suspension Product code | With motor trolley Product code |
|-----------|------------------|---------------------|------------------|------------------|-----------|-----------------------|--------------|---|---------------------------------------|
| 125 | 1 | 4x12 | 8,00 | 2,00 | 50/40/240 | 0,32 | 16 | SKT125KV2 | *SKT125MV2 |
| 250 | 1 | 4x12 | 8,00 | 2,00 | 40/25/240 | 0,32 | 17 | SKT250KV2 | *SKT250MV2 |
| 500 | 2 | 7,2x21 | 4,00 | 1,00 | 40/25/240 | 0,32 | 18 | SKT500KV2 | *SKT500MV2 |
| 1000 | 2 | 7,2x21 | 5,00 | 1,25 | 60/25/240 | 1,10 | 47 | SKT1000KV2 | *SKT1000MV2 |
| 2000 | 2 | 7,2x21 | 3,00 | 0,75 | 60/25/240 | 1,10 | 47 | SKT2000KV2 | *SKT2000MV2 |
| 3200 | 2 | 9x27 | 5,00 | 1,25 | 60/25/240 | 3,00 | 88 | SKT3200KV2 | *SKT3200MV2 |
| 5000 | 2 | 11,3x31 | 5,00 | 1,25 | 40/24/240 | 4,40 | 125 | *SKT5000KV2 | *SKT5000MV2 |
| 6300 | 2 | 11,3x31 | 4,00 | 1,00 | 25/25/150 | 4,40 | 125 | - | *SKT6300MV2 |
| 8000 | 2 | 16x45 | 2,80 | 0,70 | 60/40/240 | 6,00 | 199 | - | *SKT8000MV2 |
| 10000 | 2 | 16x45 | 2,80 | 0,70 | 60/40/180 | 6,40 | 199 | - | *SKT10000MV2 |
| 12500 | 2 | 16x45 | 2,80 | 0,70 | 60/40/150 | 6,40 | 199 | - | *SKT12500MV2 |
| 25000 | 2 | 23,5x66 | 3,20 | 0,80 | 25/10/150 | 12,50 | 531 | - | *SKT25000MV2 |

* Items marked with an asterisk approx. 5 weeks delivery.

LIFTKET-ELECTRIC CHAIN HOISTS 230 V / 50 Hz

- lifting capacity 250 kg - 2000 kg
- available with a hook suspension or an integrated motor trolley
- 230 V model has 1-lifting speed
- standard lifting height 6 m, other heights available for individual order
- if the lifting height is over 20m, it may lower the hoist WLL
- control cable standard length 4.5m, other lengths for individual order
- the control switch is equipped with an emergency stop
- normal lifting heights are always equipped with a chain bag
- operating temperature -20°C – $+40^{\circ}\text{C}$. If environment temperature is higher, running time has to be reduced.
- protection class IP55
- made in Germany



Haklift push trolleys can also be used with hoists that are equipped with a hook suspension.

Check the hoist schematics on the next page.

| WLL kg | No. of chains | Chain size mm | Speed m/min | ED % | Engine power kW | Weight kg | With hook suspension Product code |
|-----------|---------------|------------------|----------------|--------|--------------------|--------------|--------------------------------------|
| 250 | 1 | 4x12 | 8 | 40/240 | 0,25 | 17 | SKT250KVVR |
| 500 | 2 | 4x12 | 4 | 40/240 | 0,25 | 18 | SKT500KVVR |
| 1000 | 2 | 7,2x21 | 5 | 40/240 | 1,10 | 42 | SKT1000KVVR |
| 2000 | 2 | 7,2x21 | 3 | 40/240 | 1,10 | 43 | SKT2000KVVR |

Items have approx. 5 weeks delivery time.

CHAIN OIL

It is important to take care of the lubrication of the hoist chain. Correctly lubricated chain has much longer life span, and it ensures safe, silent and trouble-free operation of the product.

LIFTING HOIST CHAIN OIL

- Practical spray for lubrication of chains, ropes and winches
- Prevents wearing, hits, moisture, dust and corrosive gases from harming the product
- High quality product regarding anti-corrosiveness and oxidation prevention
- Excellent lubrication film ability to attach the metal also in high temperatures. Elastic also in low temperatures
- Decreases the noise and trembling of the hoist
- Package 400 ml

Product code: KETSPRAY



ELECTRIC CHAIN HOISTS, BATTERY OPERATED

- packed in practical box, small sized and efficient electric chain hoist
- equipped with remote control with load / overload indicator and stepless speed control
- length of the remote control cable 2,0 m
- lifting height 3,0 m
- protection class IP54
- 2 pcs 18V 3,0 Ah batteries
- NI-MH battery operationable 15 min and Li-ion battery 20 min, with continuous full load
- package includes: hoist, wire bag, remote control, 2 batteries and charger
- usage temperature -10 - (+) 40°C

| WLL kg | Lift height m | Chain mm | No. of chains | Speed m/min | Battery | Body measures L x W x H | Weight kg | Product code |
|-----------|------------------|-------------|---------------|----------------|-------------------|----------------------------|--------------|--------------|
| 250 | 3,0 | 4,0 | 1 | 4,0 | 18V NI-MH 3.0 Ah | 173 x 257 x 355 | 6,70 | SKTH25018V |
| 500 | 3,0 | 4,0 | 2 | 2,0 | 18V Li-ion 3.0 Ah | 173 x 257 x 375 | 8,80 | SKTH50018V |



STEPLESS
SPEED CONTROL



ELECTRIC CHAIN HOISTS 230 V / 50 Hz



- small and compact aluminium body electric chain hoist
- equipped with a chain bag and both upper and lower limit switches
- protection class IP54
- longer control and power cables and chains available for individual order
- operating temperature -10 - (+)50°C

| WLL kg | Lifting height m | No. of chains | Lifting Chain mm | Speed m/min | ED % | Engine power kW | Product code |
|-----------|---------------------|---------------|---------------------|----------------|------|--------------------|--------------|
| 250 | 3 | 1 | 6,3 | 10 | 35 | 1,30 | SKTH250MINI |
| 500 | 6 | 1 | 6,3 | 5 | 35 | 1,30 | SKTH500MINI |
| 1000 | 6 | 2 | 6,3 | 2,5 | 35 | 1,30 | SKTH1000MINI |
| 2000 | 6 | 2 | 7,1 | 2,5 | 35 | 2,0 | SKTH1000MINI |

Measures

| Product code | Control cable length m | Power cable length m | Body width mm | Body depth mm | Body+ Chain min. height mm | Weight kg |
|--------------|---------------------------|-------------------------|------------------|------------------|-------------------------------|--------------|
| SKTH250MINI | 3 | 5 | 420 | 160 | 480 | 18,5 |
| SKTH500MINI | 6 | 5 | 420 | 160 | 480 | 21,0 |
| SKTH1000MINI | 6 | 5 | 420 | 160 | 500 | 26,0 |
| SKTH2000MINI | 6 | 5 | 456 | 214 | 675 | 31,0 |



Lubrication of the hoist chains is important. Look for the lubrication oil on page 3-2.

ELECTRIC CHAIN HOISTS 380 V / 50 Hz



- robust, steel bodied electric chain hoist
- induction engine
- 48V low voltage control
- equipped with a chain bag and both upper and lower limit switches
- thermal protection switch and over loading protection
- protection class IP65 (trolley IP54)
- longer control and power cables and chains available for individual order
- can be equipped with an electric trolley.
- operating temperature -10 - (+)50°C

| WLL | Lifting height | No. of chains | Lifting Chain | Speed | ED % | Engine power | Product code |
|------|----------------|---------------|---------------|-------|------|--------------|--------------|
| kg | m | | mm | m/min | | kW | |
| 1000 | 6 | 1 | 7,1 | 6 | 40 | 1,47 | SKTH1000 |
| 2000 | 6 | 2 | 7,1 | 3 | 40 | 1,47 | SKTH2000 |

Measures

| Product code | Control cable length | Power cable length | Body width | Body depth | Body+ Chain min. height | Weight |
|--------------|----------------------|--------------------|------------|------------|-------------------------|--------|
| | m | m | mm | mm | mm | kg |
| SKTH1000 | 6 | 1,5 | 430 | 290 | 600 | 53,0 |
| SKTH2000 | 6 | 1,5 | 430 | 290 | 600 | 61,0 |



Lubrication of the hoist chains is important. Look for the lubrication oil on page 3-2.

ELECTRIC TROLLEY 380 V / 50 Hz



- Trolley works with models SKTH1000 and SKTH2000

| WLL | Speed | Engine power | I-beam | Measures width x depth x height | Weight | Product code |
|------|-------|--------------|-----------|---------------------------------|--------|--------------|
| kg | m/min | kW | mm | mm | kg | |
| 2000 | 18 | 0,37 | 100 - 125 | 470x295x241 | 39,0 | SKTH2000MSIV |

ELECTRIC CHAIN HOIST UTILISATION RATE (ED %)

The utilisation rate and number of operating cycles per hour should not be higher than what is marked on the type plate or specifications chart. (FEM 9.682)

Utilisation rate, expressed as durability factor:
$$\frac{\text{operating time}}{\text{operating time} + \text{break time}}$$

Equation:

The utilisation rate is limited in order to prevent the engine from overheating. The operating time depends on the lifting height, lifting speed and the amount of lifting movements. As it is difficult to observe the operating time, the instructions are below.

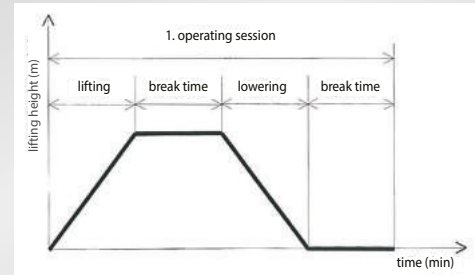
First operational period:
(chart 2.)

Operational period that is allowable without a break for cooling down the engine, when the motor temperature at start-up is about 20 °C.

This operating time is not allowable for low-speed engines. When the maximum operating time is reached, the operation of the hoist must be stopped.

First use after the operational period:
(chart 3.)

The operation must be stopped when the maximum allowable operating time is reached. The following breaks are mandatory, depending on the utilisation rate of the hoist.



Example:
Electric chain hoist type 500/1-10 is for 500kg loads and 5m lifting height.

Performance figures: Lifting load 500 kg
Lifting speed 10m / min
Continuous operation 40% (utilisation rate)

When operation is started, the hoist temperature is about 20 °C.

Operating for approximately 40 minutes without breaks is allowable.

This covers:
40 lifting/lowering movements * 500kg lifting load = 20,000kg of goods can be lifted
After 40 minutes, a break of 1.5 minutes per each operating minute must be take approx.
This break normally takes place when attaching or unloading a load.

Note! An engine thermal protection device is available separately (it is standard in 24V low voltage control systems).

Chart 2.

| Utilisation rate % | Running gear group DIN 5684 | Operation period min |
|--------------------|-----------------------------|----------------------|
| 20 | 1 Bm | 15 |
| 25 | 1 Bm | 20 |
| 40 | 2 Bm | 40 |

Chart 3.

| Utilisation rate % | Break min |
|--------------------|---------------------------|
| 15 | 5 times operating time |
| 20 | 4 times operating time |
| 25 | 3 times operating time |
| 30 | 2,5 times operating time |
| 40 | 1,5 times operating time |
| 50 | 1 times operating time |
| 60 | 0,66 times operating time |

RED ROOSTER AIR COMPRESSED HOISTS AND WINCHES

RED ROOSTER compressed air hoists and winches offer a wide selection for industrial and maritime use.

All Red Rooster winches and hoists are according to ATEX 94/9/EC directive and may be used in areas and surroundings with danger of fire or explosion due to gases, chemicals or dust. Red Rooster winches and hoists operate mechanically with compressed air hence causing no sparks unlike electric winches and hoists.

Red Rooster winches and hoists have been used and developed for 25 years and they are safe, easy to use and they function reliably even in difficult circumstances.

Red Rooster hoists

- WLL 0,25 - 50,0 t
- no sparks
- strong molded steel case
- steepless speed control
- safe automatic brake, load cannot fall with loss of pressure
- low noise level (80 dB)
- low consumption of air
- operational pressure for all products 4,5 - 6 bar (7 bar max.)
- operationable in demanding circumstances
- operating temperature -10 - (+) 70°C, also -20°C possible
- spare parts easy and fast to acquire
- Wide selection of accessories, incl. radio-operated remote control



Also available special low models

Hoists with hooks

| WLL t | No. of chains | Amount of air when lifting l/sek | Amount of air when lowering l/sek | Lifting speed with full load m/min | Weight 3 m lift kg |
|----------|---------------|----------------------------------|-----------------------------------|------------------------------------|--------------------|
| 0,25 | 1 | 13 | 15 | 9,3 | 7,0 |
| 0,25/0,5 | 1 | 25 | 27 | 12 / 10,5 | 9,0 |
| 0,5 | 2 | 13 | 15 | 4,6 | 19,0 |
| 0,5 | 1 | 28 | 33 | 17 | 31,1 |
| 0,98 | 2 | 28 | 33 | 8,5 | 23,5 |
| 1,0 | 2 | 25 | 27 | 5,3 | 35,2 |
| 1,0 | 1 | 25 | 28 | 6,0 | 34,0 |
| 2,0 | 2 | 25 | 30 | 3,0 | 39,7 |
| 3,0 | 1 | 33 | 43 | 2,8 | 69,0 |
| 6,0 | 2 | 33 | 43 | 1,4 | 91,0 |
| 9,0 | 3 | 33 | 43 | 0,9 | 150,0 |
| 10,0 | 2 | 90 | 100 | 1,5 | 210,0 |
| 12,0 | 4 | 33 | 43 | 0,6 | 170,0 |
| 15,0 | 5 | 33 | 43 | 0,5 | 210,0 |
| 15,0 | 3 | 90 | 100 | 1,0 | 320,0 |
| 20,0 | 4 | 90 | 100 | 0,75 | 470,0 |
| 25,0 | 2 | 90 | 100 | 0,6 | 490,0 |
| 37,5 | 3 | 90 | 100 | 0,35 | 870,0 |
| 50,0 | 4 | 90 | 100 | 0,3 | 1100,0 |

Lifting height to be defined according to needs of the client.

Trolleys

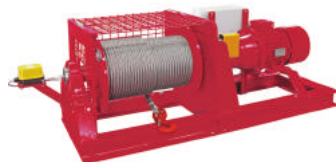
| For hoist t | Amount of wheels pcs | Amount of driving wheels pcs | Min. radius of the curve | Amount of air l/sek | Speed m/min |
|-------------|----------------------|------------------------------|--------------------------|---------------------|-------------|
| 0,25 - 2,0 | 4 | 2 | 1,5 | 25 | 9,6, 12 |
| 3,0 | 4 | 2 | 2 | 25 | 6 |
| 6,0 | 4 | 2 | 2,5 | 25 | 6 |
| 9 / 10 / 12 | 4 | 2 | 2,5 | 50 | 8 |
| 15,0 | 4 | 2 | 3 | 50 | 6 |
| 20,0 | 4 | 2 | 3 | 50 | 4 |
| 25,0 x 4 | 4 | 2 | 3 | 50 | 4 |
| 25,0 x 8 | 8 | 4 | Suora | 100 | 6 |
| 35,0 x 8 | 8 | 4 | Suora | 100 | 4 |
| 50,0 x 8 | 8 | 4 | Suora | 100 | 4 |

Note! In order to operate properly air compressed air, trolleys and winches need high quality air compression net equipped with moisture remover and lubrication system. Components required can be delivered with the product.

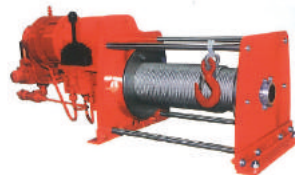
Red Rooster winches



FD-series, 8 models
Max WLL
800 - 5250 kg



SB-series for lifting, 14 models
Max WLL
1200 - 20000 kg



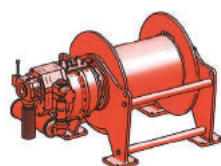
PFW-L-series for lifting, 6 models
Max WLL
500 - 3000 kg



LV-series, 6 models
Max WLL
250 - 2000 kg



RRI-series, 4 models
Max WLL
500 - 2000 kg

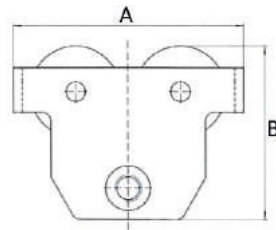
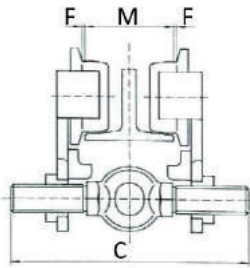


OAW offshore-series, 14 models
Max WLL
1955 - 14980 kg

Ask for more information on the products from our sales!
Each product tailored individually to meet the needs of the client

PUSH TROLLEYS

- suitable for IPE and T beams
- sizes 500 - 5000 kg
- the hoist/lifter is attached directly to the trolley eye with a hook or a shackle
- the wheels are equipped with duration lubricated ball bearings
- break supports
- paint coated
- EN 13157



| WLL | I/T-beam width | A | B | C | Min. radius of circle | Weight | Product code |
|------|----------------|-----|-------|-----|-----------------------|--------|--------------|
| kg | mm | mm | mm | mm | m | kg | |
| 500 | 50-220 | 225 | 176,5 | 292 | 0,9 | 8,30 | SIVA05ABT |
| 1000 | 50-220 | 252 | 188 | 300 | 1,0 | 10,90 | SIVA10ABT |
| 1000 | 160-305 | 252 | 188 | 385 | 1,0 | 11,40 | SIVA10LABT |
| 2000 | 66-220 | 300 | 226 | 310 | 1,2 | 18,20 | SIVA20ABT |
| 2000 | 160-305 | 300 | 226 | 395 | 1,2 | 19,00 | SIVA20LABT |
| 3000 | 74-220 | 360 | 290 | 324 | 1,3 | 31,40 | SIVA30ABT |
| 3000 | 160-305 | 360 | 290 | 409 | 1,3 | 32,50 | SIVA30LABT |
| 5000 | 149-220 | 492 | 313 | 329 | 1,4 | 42,60 | SIVA50ABT |
| 5000 | 160-305 | 492 | 313 | 414 | 1,4 | 44,00 | SIVA50LABT |

TIGER SPECIAL MODELS



Nonsparking

Meets the following requirements:

- ATEX Directive 94/9/EC and the Machinery Directive 2006/42/EC.
- Atex marked: Ex II 2 GD c IIC T4 IIIC T135°C.
- Zone 1 & 2 (gas) and Zone 21 & 22 (dust).



Corrosion resistant

- 1000 - 10000 kg
- protected bearings



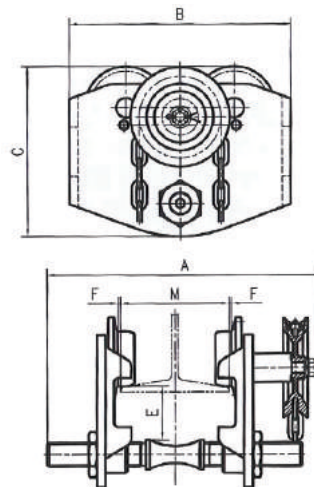
Adjustable models

- 1000 - 10000 kg
- width adjustable quick and easy

ASK MORE FROM OUR SALES!

CHAIN TROLLEYS

- the trolley moves on the beam by pulling the chain
- the standard length of a hand chain is appr. 3 m, allowing for mounting the trolley at about 4 m
- also available with a longer chain
- suitable for I and T beams
- sizes 1000 - 30000 kg
- the hoist/lifter is attached directly to the trolley eye with a hook or a shackle
- the wheels are equipped with duration lubricated ball bearings
- break supports are included
- paint coated
- EN 13157

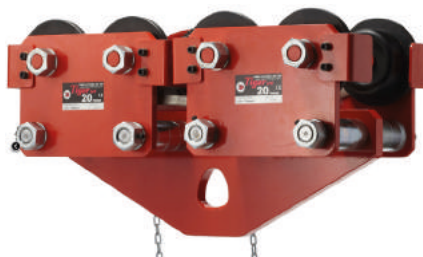


| WLL kg | IPE beam width M mm | A mm | B mm | C mm | E mm | Min. radius of circle m | Weight kg | Product code |
|-----------|------------------------------|---------|---------|---------|---------|----------------------------------|--------------|--------------|
| 1000 | 50-220 | 302.5 | 252 | 188 | 60 | 1,0 | 15,90 | SIVA10ABTKS |
| 2000 | 74-220 | 319.5 | 300 | 226 | 70 | 1,2 | 23,20 | SIVA20ABTKS |
| 3000 | 90-220 | 354 | 360 | 290 | 80 | 1,3 | 37,70 | SIVA30ABTKS |
| 5000 | 114-220 | 365 | 400 | 313 | - | 1,4 | 48,90 | SIVA50ABTKS |
| 10000 | 124-305 | 510 | 424 | 396 | - | 2,0 | 84,00 | SIVA100LABT |
| 20000 | 136-305 | 604 | 555 | 498 | - | 3,5 | 190,0 | SIVA200LABT |

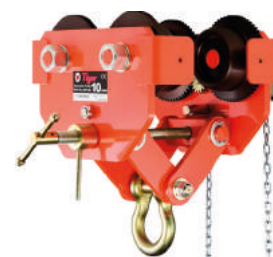
TIGER SPECIAL MODELS



- Corrosion resistant
- 500 - 3000 kg
 - also combination model with chain trolley / hoist available



- Large double trolleys
- 3000 - 20000 kg



- Adjustable models
- 1000 - 10000 kg
 - width adjustable quick and easy

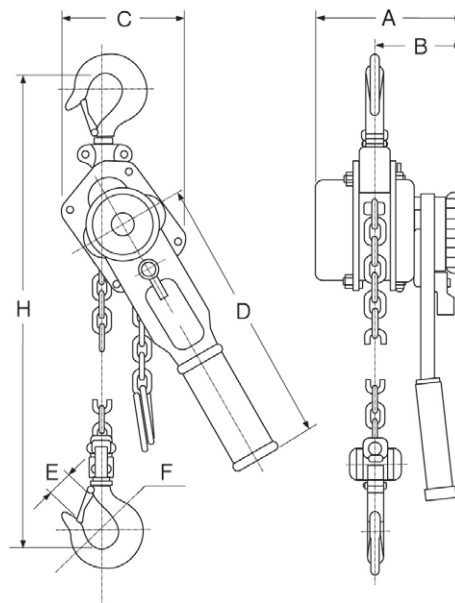
ASK MORE FROM OUR SALES!

CHAIN LEVER HOISTS



- high quality hoist
- available also with overload protection
- standard lifting height 3 m
- also other lifting heights delivered quickly
- upper and lower hook with swivel
- equipped with RFID
- inspection points on the hook
- works also as a pulling hoist
- paint coated
- EN 13157

| WLL kg | No. of chains | Chain mm | A mm | B mm | C mm | D mm | E mm | F mm | H mm | Weight with 3 m lift kg | Product code | Product code With overload protection |
|-----------|------------------|-------------|---------|---------|---------|---------|---------|---------|---------|----------------------------------|--------------|---|
| 250 | 1 | 4 x 12 | 100 | 70 | 56 | 163 | 20 | 31 | 235 | 2,5 | VTHA250 | VTHA250Y |
| 500 | 1 | 5 x 15 | 150 | 90 | 118 | 253 | 22 | 32 | 310 | 5,5 | VTHA500 | VTHA500Y |
| 800 | 1 | 5,6 x 17 | 158 | 98 | 132 | 273 | 23 | 36 | 340 | 6,5 | VTHA800 | VTHA800Y |
| 1600 | 1 | 7,1 x 21 | 185 | 111 | 145 | 378 | 29 | 43 | 400 | 10,2 | VTHA1600 | VTHA1600Y |
| 3200 | 1 | 10 x 28 | 212 | 124 | 198 | 418 | 37 | 50 | 520 | 22,0 | VTHA3200 | VTHA3200Y |
| 6300 | 2 | 10 x 28 | 212 | 124 | 230 | 418 | 43 | 53 | 640 | 34,0 | VTHA6000 | - |
| 9000 | 3 | 10 x 28 | 212 | 124 | 338 | 418 | 44 | 67 | 730 | 45,0 | VTHA9000 | - |



It is important to take care of the lubrication of the hoist chain. Correctly lubricated chain has much longer life span and it ensures safe, silent and trouble-free operation of the product.

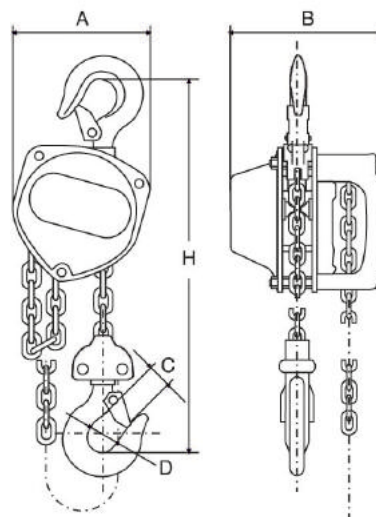
Product code: KETSPRAY

HAND CHAIN HOISTS



- high quality hoist
- lower and upper hook with swivel
- maximum workload is achieved with fairly low hand power
- length of the hand chain is always the same as the lifting height
- equipped with RFID
- also other lifting heights quickly delivered
- paint coated
- EN 13157

| WLL | Lifting height | No. of chains | Chain | A | B | C | D | H | Weight | Product code | Product code |
|-------|----------------|---------------|----------|-----|-----|----|----|------|--------|--------------------|--------------------|
| kg | m | | mm | mm | mm | mm | mm | mm | kg | Lifting height 3 m | Lifting height 6 m |
| 250 | 3 / 6 | 1 | 4 x 12 | 108 | 106 | 20 | 30 | 260 | 6,0 | KTHA250 | KTHA2506 |
| 500 | 3 / 6 | 1 | 5 x 15 | 130 | 128 | 22 | 34 | 280 | 9,0 | KTHA500 | KTHA5006 |
| 1000 | 3 / 6 | 1 | 6,3 x 19 | 150 | 142 | 26 | 39 | 330 | 12,0 | KTHA1000 | KTHA10006 |
| 2000 | 3 / 6 | 1 | 8 x 24 | 185 | 175 | 35 | 49 | 385 | 20,0 | KTHA2000 | KTHA20006 |
| 3000 | 3 / 6 | 2 | 7,1 x 21 | 220 | 158 | 37 | 50 | 510 | 24,0 | KTHA3000 | KTHA30006 |
| 5000 | 3 / 6 | 2 | 9 x 27 | 255 | 183 | 43 | 60 | 615 | 37,0 | KTHA5000 | KTHA50006 |
| 10000 | 6 | 4 | 9 x 27 | 360 | 183 | 47 | 65 | 820 | 104,6 | - | KTHA10000 |
| 20000 | 8 | 8 | 9 x 27 | 577 | 183 | 75 | 90 | 1060 | 200,0 | - | KTHA20000 (8m) |



ALSO AVAILABLE WITH OVERLOAD PROTECTION UP TO 5000 KG. (Y-letter to the end of the product code)



It is important to take care of the lubrication of the hoist chain. Correctly lubricated chain has much longer life span and it ensures safe, silent and trouble-free operation of the product.

Product code: KETSPRAY

LX lever hoist

| Type | Load capacity kg | Lifting height m | KITO Code | Ø Load chain mm | No. of falls | Lever pressure, full load daN | Headroom C mm | Weight kg |
|------|---------------------|---------------------|-----------|--------------------|--------------|----------------------------------|------------------|--------------|
| LX | 250 | 1.5 | LX003S015 | 3.2 x 9.0 | 1 | 20 | 205 | 1.7 |
| | | 3.0 | LX003S030 | | | | | 2.0 |
| LX | 500 | 1.5 | LX005S015 | 4.3 x 12.0 | 1 | 31 | 246 | 2.7 |
| | | 3.0 | LX005S030 | | | | | 3.3 |

- Compact and lightweight construction
- Freewheel function
- Nickel-plated load chain, grade V (G 100) in accordance with standard EN 818-7

For use in confined spaces

Options

- Belt pouch for LX 003

Freewheel function

Reliable load handling

Low-maintenance

Corrosion-resistant and durable

Precision gearing

Low manual force required

Nickel-plated load chain

Grade G 100 (V)
Standard EN 8187



Belt pouch for model LX 003

Available as an option

LB lever hoist

| Type | Load capacity kg | Lifting height m | KITO Code | Ø Load chain mm | No. of falls | Lever pressure, full load daN | Headroom C mm | Weight kg |
|------|---------------------|---------------------|-----------|--------------------|--------------|----------------------------------|------------------|--------------|
| LB | 800 | 1.5 | LB008S015 | 5.6 x 15.7 | 1 | 28.4 | 280 | 5.7 |
| | | 3.0 | LB008S030 | | | | | 6.8 |
| | | 6.0 | LB008S060 | | | | | 8.9 |
| LB | 1,000 | 1.5 | LB010S015 | 5.6 x 15.7 | 1 | 35.3 | 300 | 5.9 |
| | | 3.0 | LB010S030 | | | | | 7.0 |
| | | 6.0 | LB010S060 | | | | | 9.1 |
| LB | 1,600 | 1.5 | LB016S015 | 7.1 x 19.9 | 1 | 33.3 | 335 | 8.0 |
| | | 3.0 | LB016S030 | | | | | 9.7 |
| | | 6.0 | LB016S060 | | | | | 13.0 |
| LB | 2,500 | 1.5 | LB025S015 | 8.8 x 24.6 | 1 | 36.3 | 375 | 11.2 |
| | | 3.0 | LB025S030 | | | | | 13.8 |
| | | 6.0 | LB025S060 | | | | | 18.9 |
| LB | 3,200 | 1.5 | LB032S015 | 10.0 x 28.0 | 1 | 36.3 | 395 | 15.0 |
| | | 3.0 | LB032S030 | | | | | 18.5 |
| | | 6.0 | LB032S060 | | | | | 25.4 |
| LB | 6,300 | 1.5 | LB063S015 | 10.0 x 28.0 | 2 | 37.2 | 540 | 26.0 |
| | | 3.0 | LB063S030 | | | | | 33.1 |
| | | 6.0 | LB063S060 | | | | | 47.2 |
| LB | 9,000 | 1.5 | LB090S015 | 10.0 x 28.0 | 3 | 38.2 | 680 | 40.0 |
| | | 3.0 | LB090S030 | | | | | 50.5 |
| | | 6.0 | LB090S060 | | | | | 71.5 |

- Unique freewheel function
- Fine-toothed precision gearing to reduce required force
- More robust and ergonomic lever
- High-performance mechanical brake
- Nickel-plated load chain, grade V (G 100) in accordance with standard EN 818-7

Options

- Overload limiter (OLL)
- Without freewheel function (OF)
- Overload signal (LOS)
- Shipyard hook set (top and bottom hook)

Also available
with shipyard hook



LB 016

CX hand chain hoist aluminium body

| Type | Load capacity kg | Lifting height m | Hand chain m | KITO Code | | Ø Load chain mm | Ø Hand chain mm | No. of falls | Hand force, full load daN | Headroom C mm | Weight kg |
|------|---------------------|---------------------|-----------------|--------------|--|--------------------|--------------------|--------------|------------------------------|------------------|--------------|
| CX | 250 | 3.0 | 3.0 | CX003S030030 | | 3.2 x 9.0 | 2.5 x 14.2 | 1 | 14.7 | 217 | 2.4 |
| CX | 500 | 3.0 | 3.0 | CX005S030030 | | 4.3 x 12.0 | 3.5 x 20.0 | 1 | 18.6 | 260 | 4.5 |

- Extremely lightweight
- High-quality aluminium housing
- Overload limiter as standard
- Nickel-plated load chain, grade V (G 100) in accordance with standard EN 818-7

Options

- Belt pouch for CX 003
- Chain container

CX 003



CX 005



CF hand chain hoist aluminium body

| Type | Load capacity kg | Lifting height m | Hand chain m | KITO Code | Ø Load chain mm | Ø Hand chain mm | No. of falls | Hand force, full load daN | Head-room C mm | Weight kg |
|------|---------------------|---------------------|-----------------|---------------|--------------------|--------------------|--------------|------------------------------|-------------------|--------------|
| CF | 500 | 3.0 | 3.0 | CF005SH030030 | 5.0 x 15.1 | 5.0 x 25.0 | 1 | 30 | 325 | 10.8 |
| | | 6.0 | 6.0 | CF005SH060060 | | | | | | |
| CF | 1,000 | 3.0 | 3.0 | CF010SH030030 | 6.3 x 19.1 | 5.0 x 25.0 | 1 | 36 | 370 | 13.0 |
| | | 6.0 | 6.0 | CF010SH060060 | | | | | | |
| CF | 1,500 | 3.0 | 3.0 | CF015SH030030 | 7.1 x 21.2 | 5.0 x 25.0 | 1 | 42 | 440 | 18.0 |
| | | 6.0 | 6.0 | CF015SH060060 | | | | | | |
| CF | 2,000 | 3.0 | 3.0 | CF020SH030030 | 6.3 x 19.1 | 5.0 x 25.0 | 2 | 40 | 510 | 21.0 |
| | | 6.0 | 6.0 | CF020SH060060 | | | | | | |
| CF | 3,000 | 3.0 | 3.0 | CF030SH030030 | 7.1 x 21.2 | 5.0 x 25.0 | 2 | 46 | 590 | 28.0 |
| | | 6.0 | 6.0 | CF030SH060060 | | | | | | |

- Aluminium die-cast body
- Precision gearing
- Few components, low-maintenance
- Nickel-plated load chain, grade V (G 100) in accordance with standard EN 818-7

With pivoting top hook and hook latch

For easy and safe fastening of the load

Aluminium body

High corrosion resistance, low net weight

Zero-maintenance bearings

For a longer service life

Precision gearing

Single reduction gearing for an increased lifting speed

**Durable and safe.
Functional design.**

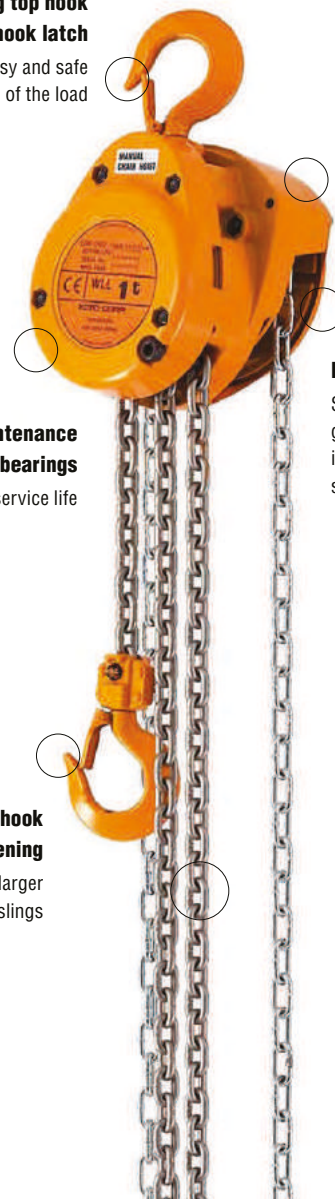
Wide hook opening

Ideal for larger slings

Nickel-plated load chain

Grade G 100 (V)
EN 818-7

Strength 1,000 N/mm²



CX hand chain hoist aluminium body

| Type | Load capacity kg | Lifting height m | Hand chain m | KITO Code | Ø Load chain mm | Ø Hand chain mm | No. of falls | Hand force, full load daN | Headroom C mm | Weight kg |
|------|---------------------|---------------------|-----------------|--------------|--------------------|--------------------|--------------|------------------------------|------------------|--------------|
| CX | 250 | 3.0 | 3.0 | CX003S030030 | 3.2 x 9.0 | 2.5 x 14.2 | 1 | 14.7 | 217 | 2.4 |
| CX | 500 | 3.0 | 3.0 | CX005S030030 | 4.3 x 12.0 | 3.5 x 20.0 | 1 | 18.6 | 260 | 4.5 |

- Extremely lightweight
- High-quality aluminium housing
- Overload limiter as standard
- Nickel-plated load chain, grade V (G 100) in accordance with standard EN 818-7

Options

- Belt pouch for CX 003
- Chain container

CX 003



CX 005



CB hand chain hoist

| Type | Load capacity kg | Lifting height m | Hand chain m | KITO Code | Ø Load chain mm | Ø Hand chain mm | No. of falls | Hand force, full load daN | Head-room C mm | Weight kg |
|------|---------------------|---------------------|-----------------|----------------|--------------------|--------------------|--------------|------------------------------|-------------------|--------------|
| CB | 500 | 3.0 | 3.0 | CB005SSH030030 | 5.0 x 15.1 | 5.0 x 25.0 | 1 | 23.5 | 285 | 11.0 |
| | | 6.0 | 6.0 | CB005SSH060060 | | | | | | 15.5 |
| CB | 1,000 | 3.0 | 3.0 | CB010SSH030030 | 6.3 x 19.1 | 5.0 x 25.0 | 1 | 28.4 | 295 | 12.5 |
| | | 6.0 | 6.0 | CB010SSH060060 | | | | | | 17.9 |
| CB | 1,500 | 3.0 | 3.0 | CB015SSH030030 | 7.1 x 21.2 | 5.0 x 25.0 | 1 | 34.3 | 350 | 15.5 |
| | | 6.0 | 6.0 | CB015SSH060060 | | | | | | 21.8 |
| CB | 2,000 | 3.0 | 3.0 | CB020SSH030030 | 8.0 x 24.2 | 5.0 x 25.0 | 1 | 35.3 | 375 | 20.0 |
| | | 6.0 | 6.0 | CB020SSH060060 | | | | | | 26.9 |
| CB | 2,500 | 3.0 | 3.0 | CB025SSH030030 | 9.0 x 27.2 | 5.0 x 25.0 | 1 | 32.3 | 420 | 27.0 |
| | | 6.0 | 6.0 | CB025SSH060060 | | | | | | 35.1 |
| CB | 3,000 | 3.0 | 3.0 | CB030SSH030030 | 7.1 x 21.2 | 5.0 x 25.0 | 2 | 35.3 | 510 | 24.0 |
| | | 6.0 | 6.0 | CB030SSH060060 | | | | | | 33.6 |
| CB | 5,000 | 3.0 | 3.5 | CB050SSH030035 | 9.0 x 27.2 | 5.0 x 25.0 | 2 | 33.3 | 600 | 41.0 |
| | | 6.0 | 6.5 | CB050SSH060065 | | | | | | 54.2 |
| CB | 7,500 | 3.5 | 4.0 | CB075SSH035040 | 9.0 x 27.2 | 5.0 x 25.0 | 3 | 34.3 | 770 | 63.0 |
| | | 6.5 | 7.0 | CB075SSH065070 | | | | | | 81.6 |
| CB | 10,000 | 3.5 | 4.0 | CB100SSH035040 | 9.0 x 27.2 | 5.0 x 25.0 | 4 | 35.3 | 760 | 83.0 |
| | | 6.5 | 7.0 | CB100SSH065070 | | | | | | 106.7 |
| CB | 15,000 | 3.5 | 4.5 | CB150SSH035045 | 9.0 x 27.2 | 5.0 x 25.0 | 6 | 36.3 | 1,020 | 155.0 |
| | | 6.5 | 7.5 | CB150SSH065075 | | | | | | 189.3 |
| CB | 20,000 | 3.5 | 4.5 | CB200SSH035045 | 9.0 x 27.2 | 5.0 x 25.0 | 8 | 2 x 35.3 | 1,180 | 235.0 |
| | | 6.5 | 7.5 | CB200SSH065075 | | | | | | 282.4 |

- Shock-resistant double gear casing
- Robust mechanical brake for increased safety
- Zero-maintenance bearings
- Double-pawl spring system as an additional safety feature
- Forged load hook with wide opening
- Nickel-plated load chain, grade V (G 100) in accordance with standard EN 818-7

Options

- TSG geared trolley
- TSP plain trolley
- Overload limiter (OLL)
- Various chain container sizes
- Stainless steel chain and hook for certain sizes

CB 050



TIGER HAND CHAIN HOISTS - SPECIAL MODELS

NEW



Corrosion resistant / nonsparking

- both models have corrosion resistant lifting chain and body, and transmission system designed for marine environments.
- nonsparking model with copper coated hook, chainwheel, chain stopper and guides.
- available with same WLL and measures as standard Tiger hand chain hoist - read the QR code.

Nonsparking model meets the following requirements:

- ATEX Directive 94/9/EC and the Machinery Directive 2006/42/EC.
- Atex marked: Ex II 2 GD c IIC T4 IIIC T135°C.
- Zone 1 & 2 (gas) ja Zone 21 & 22 (dust).

Entertainment

- painted black
- Lift heights and WLLs available as per customer's needs

ROV

- 3 / 10 / 15 / 20 t
- works with hydraulics
- fully corrosion resistant
- body stainless steel 316
- brake system designed to withstand marine conditions
- light weight and compact



Read more about Tiger hoists

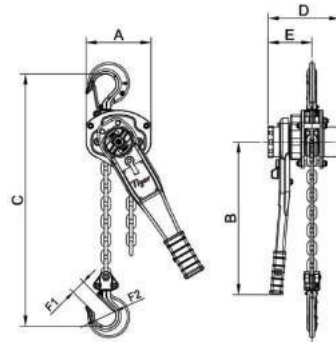


COMBINATIONS

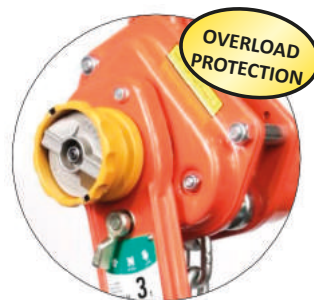
- hand chain hoists and trolleys also available as combinations
- available: standard, corrosion resistant and nonsparking models
- all models available with or without chain transfer

TIGER LEVER HOISTS

- very high quality hoist
- available with overload protection
- patented braking system
- standard lift height 3 m (20t model with 6 m lift)
- also other lift heights delivered quickly
- hooks equipped with swivel and check points
- works also as pulley hoist
- paint coated



| WLL kg | No. of chains | Chain mm | A mm | B mm | C min. mm | D mm | E mm | F1 mm | F2 mm | Weight with 3 m Lift kg | Product code | Product code with overload protection |
|-----------|------------------|-------------|---------|---------|-----------------|---------|---------|----------|----------|----------------------------------|--------------|---|
| 800 | 1 | 6,3 | 128 | 236 | 295 | 158 | 99 | 28 | 45 | 8,85 | VTT800 | VTT800Y |
| 1500 | 1 | 7,1 | 154 | 360 | 320 | 172 | 104 | 34 | 51 | 12,15 | VTT1500 | VTT1500Y |
| 3000 | 1 | 10 | 182 | 360 | 400 | 195 | 108 | 36 | 56 | 21,3 | VTT3000 | VTT3000Y |
| 6000 | 2 | 10 | 242 | 360 | 570 | 195 | 108 | 49 | 70 | 37,1 | VTT6000 | VTT6000Y |
| 10000 | 3 | 10 | 379 | 360 | 630 | 195 | 108 | 54 | 87 | 55,75 | VTT10000 | VTT10000Y |
| 15000 | 5 | 10 | 566 | 360 | 840 | 195 | 108 | 59 | 81 | 128,2 | VTT15000 | VTT15000Y |
| 20000 | 6 | 10 | 470 | 360 | 1050 | 250 | 160 | 81 | 110 | 175,7 | VTT20000 | VTT20000Y |



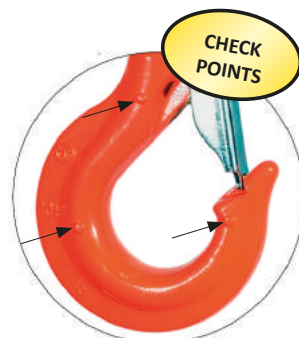
All models available also with overload protection (yellow handwheel).



Patented Quad cam brake pawl system ensures steady load in case of possible damage.



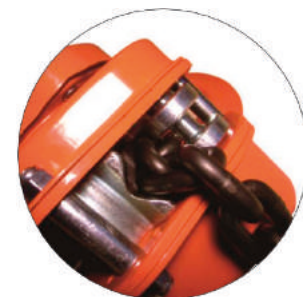
Advanced brake system improves the reaction time of the brake.



It is easy to check the hook for possible overloads or twisting using these checkpoints on the hook. When the hook is in good condition, each point has equal distance to the other. Hooks are also equipped with swivel and sturdy latch.



Transmission cogwheel is heat treated and made from one piece, which reduces the amount of wearing components.



Hoist is equipped with chain guide which eliminates, for example, chain jams, and adds to flexible and safe use of the hoist.

Read more about Tiger hoists



TIGER LEVER HOISTS



Corrosion resistant



Nonsparking



Corrosion resistant / nonsparking

- both models have corrosion resistant lifting chain and body, and transmission system designed for marine environments.
- nonsparking model with copper coated hook, chainwheel, chain stopper and guides.
- available with same WLL and measures as standard Tiger hand chain hoist (previous page)

Nonsparking model meets the following requirements:

- ATEX Directive 94/9/EC and the Machinery Directive 2006/42/EC.
- Atex marked: Ex II 2 GD c IIC T4 IIIC T135°C.
- Zone 1 & 2 (gas) ja Zone 21 & 22 (dust).

Entertainment

- painted black
- Lift heights and WLLs available as per customer's needs

250 and 500 kg

- very light, compact and durable hoists
- Lift height 1,5 m
- low maintenance costs
- 250 kg hoist equipped with storage bag with belt clip

Product code: VTT250 and VTT500

SPECIAL ENDS

Different ends available instead of upper and lower hook for all Tiger hoists.



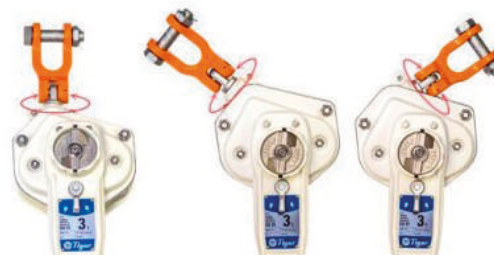
Safety hook



Lift ring



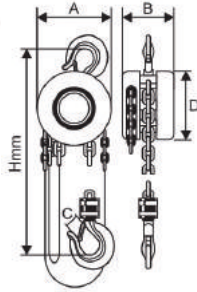
Fork end



Read more about Tiger hoists



HAND CHAIN HOISTS



- low-cost hand chain hoist
- standard lifting height 3 m, other lifting heights for individual order
- maximum workload is achieved with fairly low handpower

| WLL kg | No. of chains | Lifting height m | Chain mm | A mm | B mm | C mm | D mm | Weight kg | Product code |
|-----------|------------------|------------------------|-------------|---------|---------|---------|---------|--------------|--------------|
| 1000 | 1 | 3,0 | 6x18 | 142 | 122 | 28 | 142 | 9,5 | KTA1000 |
| 2000 | 2 | 3,0 | 6x18 | 142 | 122 | 34 | 142 | 13,5 | KTA2000 |

WIRE ROPE PULLER



RVT2000



RVT900

- low-cost, but strong pulling hoist with wire
- not to be used as lifting device

| Maximum pulling capacity t | Weight kg | Wire mm | Wire length m | Lowest set height mm | Product code |
|-------------------------------------|--------------|------------|------------------|----------------------------|--------------|
| 2 | 3,5 | 4,8 | 1,4 | 550 | RVT900 |
| 2 / 4 t | 4,5 | 5,0 | 1,5 / 3,0 | 650 | RVT2000 |



Packed in display box

POWER-PULLER



RHT900P



RHT1800

- low-cost pulling hoist with strap
- webbing width 25 mm
- not to be used as lifting device

| Maximum pulling capacity kg | Weight kg | Webbing length m | Lowest set height mm | Product code |
|-----------------------------------|--------------|---------------------|----------------------------|--------------|
| 900 | 3,5 | 7,6 | 700 | RHT900P |
| 1800 | 3,8 | 1,8 | 700 | RHT1800 |

ALUMINUM BODY WIRE ROPE HOIST

- high quality pulling/lifting hoist
- hoist does not have wiredrum, the wire passes through the hoist
- lifting and pulling speed appr. 3m/min
- body material painted cast aluminum
- 20 m wire with latch hook as standard
- other wire lengths also available
- all hoists tested with 1.25-fold maximum WLL
- maximum workload is achieved with fairly low handpower
- EN 13157



NEW

ALSO TIGER WIRE ROPE HOISTS AVAILABLE. ASK MORE FROM OUR SALES.



| Maximum load when lifting kg | Maximum load when pulling kg | Weight hoist/wire and lever kg | Wire mm | Lever length mm | Product code |
|------------------------------|------------------------------|--------------------------------|---------|-----------------|--------------|
| 800 | 1200 | 6,5/14,5 | 8,3 | 800 | LOABT800 |
| 1600 | 2400 | 12,7/27,3 | 11,0 | 1200 | LOABT1600 |
| 3200 | 4000 | 22,1/48,6 | 16,0 | 1200 | LOABT3200 |
| 5400 | 8000 | 28,7/110 | 20,0 | 1120 | LOABT5400 |

SPARE WIRES FOR WIRE ROPE HOISTS



| WLL kg | Length m | Wire mm | Product code |
|--------|----------|---------|--------------|
| 800 | 20 | 8,3 | LO80VAI20 |
| 800 | 30 | 8,3 | LO80VAI30 |
| 800 | 40 | 8,3 | LO80VAI40 |
| 1600 | 20 | 11,0 | LO16VAI20 |
| 1600 | 30 | 11,0 | LO16VAI30 |
| 1600 | 40 | 11,0 | LO16VAI40 |
| 3200 | 20 | 16,0 | LO32VAI20 |
| 3200 | 30 | 16,0 | LO32VAI30 |
| 3200 | 40 | 16,0 | LO32VAI40 |
| 3200 | 50 | 16,0 | LO32VAI50 |

Delivery 1 week

ELECTRIC WIRE HOISTS FOR LIFTING AND PULLING 230V / 50Hz

- light weight and easy-to-use electric wire hoist for lifting and pulling
- two models 250 ja 450 kg
- remote control
- equipped with a hook with latch and an overload detector



Packed in display box

| WLL kg | Voltage | Engine kW | Wire rope length m | Weight kg | Product code |
|-----------|---------|--------------|--------------------------|--------------|--------------|
| 250 | 230V | 1,2 | 8,0 | 7,0 | VANOS250 |
| 450 | 230V | 1,2 | 4,6 | 7,0 | VANOS450 |
| 450 | 240V | 0,75 | 4,6 | 7,9 | VANOS450A |

ELECTRIC WIRE HOIST 230V 50Hz



- light weight and efficient wire hoist
- equipped with upper- and lower limit switches
- hook operates 360°
- available with longer cable
- protection class IP54
- operating temperature -10 - (+)40 °C

| WLL | Lifting height | Wire rope | Speed | ED % | Engine power | Product code |
|-----|----------------|-----------|-------|------|--------------|--------------|
| kg | m | mm | m/min | | kW | |
| 230 | 30 | 5 | 19 | 35 | 1,3 | VAINOSH230 |
| 300 | 60 | 5 | 12 | 35 | 1,3 | VAINOSH300 |
| 500 | 30 | 7 | 12 | 35 | 1,8 | VAINOSH500 |

Measures

| Product code | Control cable length | Power cable length | Body width | Body depth | Body+ hook approx. height | Weight |
|--------------|----------------------|--------------------|------------|------------|---------------------------|--------|
| | m | m | mm | mm | mm | kg |
| VAINOSH230 | 7 | 5 | 240 | 180 | 660 | 21,5 |
| VAINOSH300 | 7 | 5 | 240 | 210 | 670 | 28,0 |
| VAINOSH500 | 7 | 5 | 240 | 210 | 670 | 28,0 |

SPARE WIRES AND CONTROL CABLE

| Product | Length | | Product code |
|-----------------------------|--------|---------------------|--------------|
| | m | | |
| Wire 5 mm | 30 m | Thimble + preventer | VAINOSH230VA |
| Wire 7 mm | 30 m | Thimble + preventer | VAINOSH500VA |
| Extension for control cable | 10 m | | VAINOSHKAAP |

4. Lifting clamps

Terrier lifting clamps

Other lifting clamps

Permanent magnetic lifters

Wire rope / cable pulling clamps



Vertical Clamps

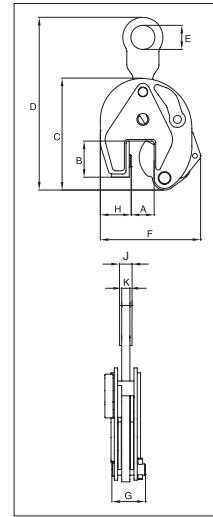


IP10

The IP10 vertical lifting clamp is used for the lifting, turning, moving or vertical transfer of sheet, plates, or fabrications from horizontal to vertical and down to horizontal (180°) as needed. Usually used as a single point pick or when used with a spreader beam with multiple vertical drop lines.

For vertical lifting, turning and transfer

- Available in capacities of .5 thru 30 metric tons (Higher Working Load Limits are available upon request).
- Wide variety of jaw openings available: 0 to 155mm.
- Welded alloy steel body for strength and smaller size. Forged alloy components, where required.
- Individually Proof Tested to 2 times the Working Load Limit with certification.
- Company name (CrosbyIP), logo, Working Load Limit and jaw opening permanently stamped on body.
- Each product is individually serialized, with the serial number and Proof Load test date stamped on body. User manual and test certificate included with each clamp.
- Available in a variety of styles:
 - IP10 - Standard clamp for materials with a surface hardness to 363HV10 (345 HB).
 - IP10J - Larger jaw opening.
 - IP10S - For use with Stainless Steel material.
 - IP10H - For use with materials with a surface hardness to 472HV10 (450 HB).
- Full 180° turning range for material transfer, turning or moving.
- Lock open, lock closed ability with latch for pretension on material and then release of material.
- Optional IP-5000 Stinger assembly available (see page 428). Allows for easy connection between the clamp and hoist hook.
- For plate surface hardness till 279HV10, only 5% min. WLL is needed.
- Maintenance and repair kits are available.
- Manufactured by an ISO 9001 facility.
- All sizes are **RFID EQUIPPED**.



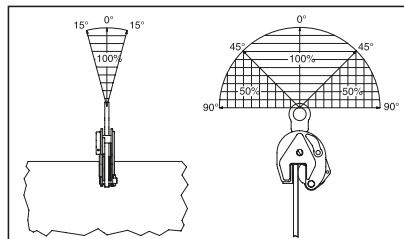
Model IP10

| Model | Working Load Limit (t)* | IP10 Stock No. | Weight Each (kg) | Dimensions (mm) | | | | | | | | | | |
|---|-------------------------|----------------|------------------|-----------------|-----|-----|-----|-----|-----|-----|-----|----|----|--|
| | | | | Jaw A | B | C | D | E | F | G | H | J | K | |
| IP10 | 0.25 | 2703958 | 1.8 | 0-16 | 44 | 130 | 203 | 40 | 115 | 42 | 28 | - | 11 | |
| IP10 | 0.5 | 2701674 | 1.8 | 0-16 | 44 | 130 | 203 | 40 | 115 | 42 | 28 | - | 11 | |
| IP10J | 0.5 | 2701646 | 1.8 | 15-30 | 45 | 128 | 209 | 40 | 128 | 41 | 32 | - | 11 | |
| IP10 | 1 | 2701662 | 2.2 | 0-20 | 45 | 139 | 212 | 40 | 127 | 42 | 38 | - | 11 | |
| IP10 | 2 | 2701676 | 7.6 | 0-35 | 78 | 201 | 330 | 70 | 188 | 64 | 55 | - | 16 | |
| IP10 | 3 | 2701664 | 13.8 | 0-40 | 100 | 253 | 434 | 75 | 222 | 78 | 60 | - | 20 | |
| IP10 | 4.5 | 2701666 | 15.0 | 0-40 | 100 | 253 | 434 | 75 | 227 | 82 | 65 | - | 20 | |
| IP10 | 6 | 2701668 | 23.5 | 0-50 | 126 | 302 | 517 | 80 | 292 | 84 | 95 | 40 | 20 | |
| IP10 | 9 | 2701670 | 27.5 | 0-50 | 126 | 325 | 445 | 80 | 310 | 94 | 104 | 44 | 25 | |
| IP10 | 12 | 2701678 | 49.0 | 0-54 | 160 | 392 | 574 | 80 | 433 | 121 | 137 | 41 | 25 | |
| IP10 | 16 | 2701682 | 68.0 | 5-64 | 180 | 463 | 686 | 88 | 492 | 121 | 153 | 49 | 25 | |
| IP10 | 12 | 2701678 | 110.0 | 0-54 | 222 | 554 | 808 | 110 | 565 | 139 | 186 | 49 | 25 | |
| IP10 | 22.5 | 2701686 | 124.0 | 5-80 | 222 | 554 | 803 | 110 | 565 | 153 | 186 | 54 | 30 | |
| IP10 | 30 | 2701690 | 124 | 5-80 | 222 | 554 | 803 | 110 | 565 | 153 | 186 | 54 | 30 | |
| IP10J | 6 | 2701705 | 24.5 | 50-100 | 126 | 302 | 506 | 80 | 336 | 84 | 95 | 40 | 20 | |
| IP10J | 9 | 2701672 | 28.5 | 50-100 | 126 | 325 | 542 | 80 | 360 | 94 | 105 | 44 | 25 | |
| IP10J | 12 | 2701680 | 58.0 | 54-108 | 178 | 438 | 620 | 80 | 491 | 121 | 136 | 41 | 25 | |
| IP10J | 16 | 2701684 | 80.0 | 64-128 | 208 | 521 | 734 | 88 | 562 | 121 | 160 | 45 | 25 | |
| IP10J | 22 | 2701688 | 131.0 | 80-155 | 255 | 628 | 883 | 110 | 660 | 139 | 196 | 49 | 25 | |
| IP10J | 30 | 2701692 | 147.0 | 50-155 | 255 | 628 | 887 | 110 | 660 | 153 | 196 | 54 | 30 | |
| For stainless steel - with fixed hoisting eye | | | | | | | | | | | | | | |
| IP10S | 0.5 | 2702274 | 1.8 | 0-16 | 44 | 130 | 203 | 40 | 115 | 42 | 28 | 11 | 11 | |
| IP10S | 1 | 2702262 | 2.2 | 0-20 | 45 | 139 | 212 | 40 | 127 | 42 | 38 | 11 | 11 | |
| IP10S | 2 | 2702276 | 7.6 | 0-35 | 78 | 201 | 330 | 70 | 188 | 64 | 55 | 16 | 16 | |
| IP10S | 3 | 2702264 | 13.8 | 0-40 | 100 | 253 | 434 | 75 | 222 | 78 | 60 | 20 | 20 | |
| IP10S | 4.5 | 2702266 | 15.0 | 0-40 | 100 | 253 | 434 | 75 | 227 | 82 | 65 | 20 | 20 | |
| IP10S | 6 | 2702268 | 23.5 | 0-50 | 126 | 302 | 517 | 80 | 292 | 84 | 95 | 20 | 20 | |
| IP10S | 9 | 2702270 | 27.5 | 0-50 | 126 | 325 | 544 | 80 | 310 | 94 | 104 | 25 | 25 | |
| IP10S | 12 | 2702278 | 49.0 | 0-54 | 160 | 392 | 574 | 80 | 433 | 121 | 137 | 25 | 25 | |
| For very hard materials - with fixed hoisting eye | | | | | | | | | | | | | | |
| IP10H | 0.5 | 2702174 | 1.8 | 0-16 | 44 | 130 | 207 | 40 | 115 | 42 | 28 | 11 | 11 | |
| IP10H | 0.75 | 2702162 | 2.2 | 0-20 | 45 | 139 | 219 | 40 | 130 | 28 | 38 | 11 | 11 | |
| IP10H | 1.0 | 2702176 | 7.6 | 0-35 | 78 | 201 | 330 | 70 | 188 | 64 | 55 | 16 | 16 | |
| IP10H | 2.0 | 2702164 | 13.8 | 0-40 | 100 | 253 | 434 | 75 | 222 | 78 | 60 | 20 | 20 | |
| IP10H | 3.0 | 2702166 | 15.0 | 0-40 | 100 | 253 | 434 | 75 | 227 | 82 | 65 | 20 | 20 | |
| IP10H | 4.5 | 2702168 | 23.5 | 0-50 | 126 | 302 | 517 | 80 | 292 | 84 | 95 | 20 | 20 | |
| IP10H | 6.0 | 2702170 | 27.5 | 0-50 | 126 | 325 | 544 | 80 | 310 | 92 | 105 | 25 | 25 | |
| IP10H | 25.0 | 2703530 | 74 | 0-60 | 169 | 40 | - | 47 | 184 | 320 | 220 | 87 | 87 | |

* Design Factor based on EN 13155 and ASME B30.20.

Model IP10 available in 40t, 55t and 100t on request.

Model IP10R (remote control opening and closing via a cable) available on request.



CROSBY® LIFTING CLAMPS

Vertical Clamps



IPU10

The IPU10 vertical lifting clamp is used for lifting, turning, moving or vertical transfer of sheet, plates, or fabrications from horizontal to vertical and down to horizontal (180°) as needed. The hinged hoisting eye allows for the clamp to place and lift the load from any direction, or with a multiple leg sling without side-loading the clamp.

Universal - for lifting in any direction

- Available in capacities of .5 thru 30 metric tons (Higher Working Load Limits are available upon request).
- Wide variety of jaw openings available: 0° to 155mm.
- Welded alloy steel body for strength and smaller size. Forged alloy components, where required.
- Individually Proof Tested to 2 times the Working Load Limit with certification.
- Company name (Crosby/IP), logo, Working Load Limit and jaw opening permanently stamped on body.
- Each product is individually serialized, with the serial number and Proof Load test date stamped on body. User manual with test certificate is included with each clamp.
- Available in a variety of styles:
 - IP10 - Standard clamp for materials with a surface hardness to 363HV10 (345 HB).
 - IP10J - Larger jaw opening.
 - IP10S - For use with Stainless Steel material.
 - IP10H - For use with materials with a surface hardness to 472HV10 (450 HB).
- Full 180° turning range for material transfer, turning or moving.
- Lock open, lock closed ability with latch for pretension on material and then release of material.
- Optional IP-5000 Stinger assembly available (see page 428). Allows for easy connection between the clamp and hoist hook.
- Minimum WLL of 10% of maximum WLL.
- For use with materials with a surface hardness to 279HV10. Only 5% minimum WLL is needed.
- Maintenance and repair kits are available.
- Manufactured by an ISO 9001 facility.
- All sizes are **RFID EQUIPPED**.



IPU10S

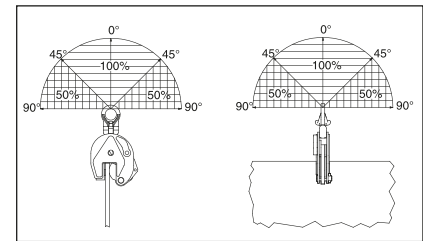
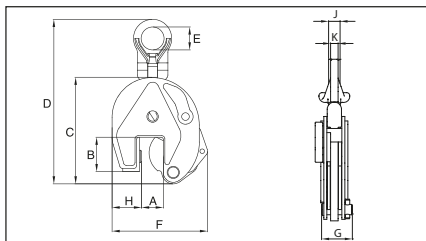
IPU10S: For use with Stainless Steel material.
IPU10H: For use with materials with a surface hardness to 47Rc (450 HB).



Load Rated

Model IPU10 / IPU10J / IPU10S/ IPU10H

| Model | Working Load Limit (t)* | IPU10 Stock No. | Weight Each (kg.) | Dimensions (mm) | | | | | | | | | |
|---|-------------------------|-----------------|-------------------|-----------------|-----|-----|-----|-----|-----|-----|-----|----|----|
| | | | | Jaw A | B | C | D | E | F | G | H | J | K |
| IPU10 | 0.25 | 2701850 | 1.9 | 0 - 16 | 44 | 130 | 216 | 40 | 115 | 42 | 28 | - | 11 |
| IPU10 | 0.5 | 2701675 | 1.9 | 0 - 16 | 44 | 130 | 216 | 40 | 115 | 42 | 28 | - | 11 |
| IPU10 | 1 | 2701663 | 2.4 | 0 - 20 | 45 | 139 | 225 | 40 | 127 | 42 | 38 | - | 11 |
| IPU10 | 2 | 2701677 | 8.5 | 0 - 35 | 78 | 201 | 368 | 70 | 188 | 64 | 55 | - | 16 |
| IPU10 | 3 | 2701665 | 14.8 | 0 - 40 | 100 | 253 | 436 | 75 | 222 | 78 | 60 | - | 20 |
| IPU10 | 4.5 | 2701667 | 16.0 | 0 - 40 | 100 | 253 | 436 | 75 | 227 | 82 | 65 | - | 20 |
| IPU10 | 6 | 2701669 | 24.0 | 0 - 50 | 126 | 302 | 525 | 80 | 292 | 84 | 95 | 44 | 20 |
| IPU10 | 9 | 2701671 | 29.5 | 0 - 50 | 126 | 325 | 552 | 80 | 310 | 94 | 104 | 44 | 20 |
| IPU10 | 12 | 2701679 | 57.0 | 0 - 54 | 160 | 392 | 616 | 80 | 433 | 121 | 137 | 41 | 25 |
| IPU10 | 16 | 2701683 | 79.0 | 5 - 64 | 180 | 463 | 736 | 88 | 492 | 121 | 153 | 45 | 25 |
| IPU10 | 22.5 | 2701687 | 126.0 | 5 - 80 | 222 | 554 | 863 | 110 | 565 | 139 | 186 | 49 | 25 |
| IPU10 | 30 | 2701691 | 141.0 | 5 - 80 | 222 | 554 | 868 | 110 | 580 | 153 | 186 | 54 | 30 |
| IPU10J | 3 | 2702465 | 17.3 | 40 - 80 | 115 | 270 | 432 | 75 | 277 | 78 | 67 | - | 20 |
| IPU10J | 6 | 2702469 | 26.5 | 50 - 100 | 126 | 302 | 515 | 80 | 336 | 84 | 95 | 44 | 20 |
| IPU10J | 9 | 2701673 | 30.5 | 50 - 100 | 126 | 325 | 550 | 80 | 360 | 94 | 105 | 44 | 20 |
| IPU10J | 12 | 2701681 | 65.0 | 54 - 108 | 178 | 438 | 662 | 80 | 491 | 121 | 136 | 41 | 25 |
| IPU10J | 16 | 2701685 | 85.0 | 64 - 128 | 208 | 521 | 784 | 88 | 562 | 121 | 160 | 45 | 25 |
| IPU10J | 22.5 | 2701689 | 149.0 | 80 - 155 | 255 | 628 | 938 | 110 | 660 | 139 | 196 | 49 | 25 |
| | | | 165.0 | 80 - 155 | 255 | 628 | 942 | 110 | 660 | 153 | 196 | 54 | 30 |
| For stainless steel - with universal hoisting eye | | | | | | | | | | | | | |
| IPU10S | 0.5 | 2702275 | 1.9 | 0 - 16 | 44 | 130 | 216 | 40 | 115 | 42 | 28 | - | 11 |
| IPU10S | 1 | 2702263 | 2.4 | 0 - 20 | 45 | 139 | 225 | 40 | 127 | 41 | 38 | - | 11 |
| IPU10S | 2 | 2702277 | 8.5 | 0 - 35 | 78 | 201 | 368 | 70 | 188 | 64 | 55 | - | 16 |
| IPU10S | 3 | 2702265 | 14.8 | 0 - 40 | 100 | 253 | 436 | 75 | 222 | 78 | 60 | - | 20 |
| IPU10S | 4.5 | 2702267 | 16.0 | 0 - 40 | 100 | 253 | 436 | 75 | 227 | 82 | 65 | - | 20 |
| IPU10S | 6 | 2702269 | 24.0 | 0 - 50 | 126 | 302 | 525 | 80 | 292 | 84 | 95 | 44 | 20 |
| IPU10S | 9 | 2702271 | 29.5 | 0 - 50 | 126 | 325 | 552 | 80 | 310 | 94 | 104 | 44 | 20 |
| IPU10S | 12 | 2702279 | 57.0 | 0 - 54 | 160 | 392 | 616 | 80 | 433 | 121 | 137 | 41 | 25 |
| For very hard materials - with universal hoisting eye | | | | | | | | | | | | | |
| IPU10H | 0.5 | 2702175 | 1.9 | 0 - 16 | 44 | 130 | 216 | 40 | 115 | 42 | 28 | - | 11 |
| IPU10H | 0.75 | 2702163 | 2.4 | 0 - 20 | 45 | 139 | 225 | 40 | 127 | 41 | 38 | - | 11 |
| IPU10H | 1 | 2702177 | 7.6 | 0 - 35 | 78 | 201 | 368 | 70 | 188 | 64 | 55 | - | 16 |
| IPU10H | 2 | 2702165 | 14.8 | 0 - 40 | 100 | 253 | 436 | 75 | 222 | 78 | 60 | - | 20 |
| IPU10H | 3 | 2702167 | 16.0 | 0 - 40 | 100 | 253 | 436 | 75 | 227 | 82 | 65 | - | 20 |
| IPU10H | 4.5 | 2702169 | 24.0 | 0 - 50 | 126 | 302 | 525 | 80 | 292 | 84 | 95 | 44 | 20 |
| IPU10H | 6 | 2702171 | 29.5 | 0 - 50 | 126 | 325 | 552 | 70 | 310 | 94 | 104 | 44 | 20 |



TERRIER CLAMPS FOR VERTICAL LIFTING

- for vertical lifting of steel plates
- paint coated
- safety factor 4: 1
- available also in other sizes
- Note! Lifting pieces weight must be minimum of 10% of maximum WLL!
(250 kg terrier has no minimum)
- special materials have dedicated terrier clamps, for more information contact our sales!

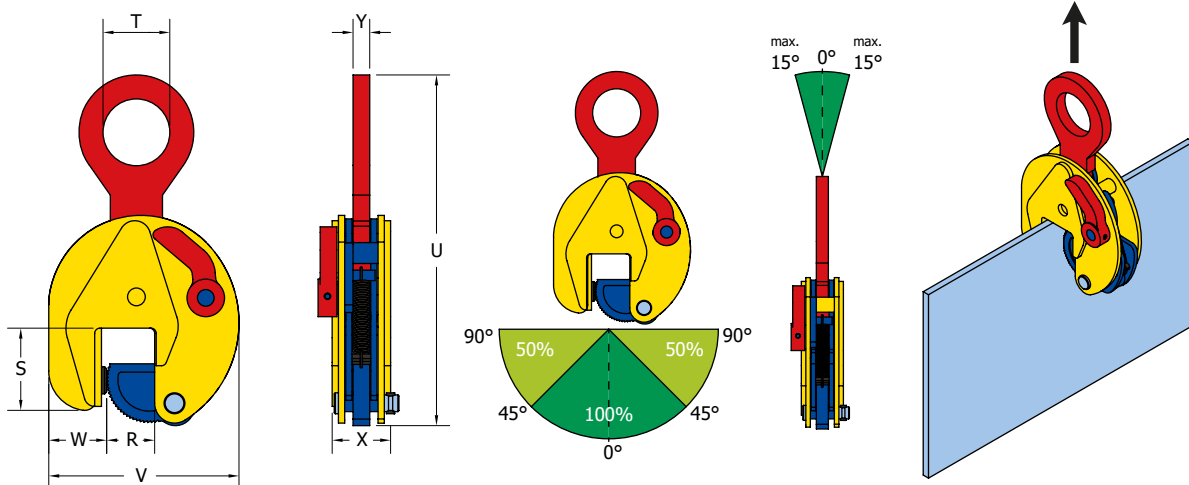


| WLL | Grip area | S | T | U | V | W | X | Y | Weight | Product code |
|-------|-----------|-----|-----|-----|-----|-----|-----|----|--------|--------------|
| kg | mm | mm | mm | mm | mm | mm | mm | mm | kg | |
| 250 | 0 – 13 | 53 | 30 | 196 | 109 | 30 | 37 | 10 | 1,9 | LTTJP025 |
| 750 | 0 – 13 | 47 | 30 | 205 | 100 | 35 | 37 | 10 | 1,7 | LTTS075 |
| 1000 | 0 – 25 | 55 | 45 | 265 | 142 | 38 | 47 | 15 | 3,5 | LTTSE1 |
| 2000 | 0 – 35 | 80 | 65 | 335 | 185 | 55 | 56 | 17 | 7,0 | LTTSE2 |
| 3000 | 0 – 35 | 80 | 65 | 335 | 185 | 55 | 56 | 17 | 7,0 | LTTSE3 |
| 4000 | 0 – 45 | 85 | 70 | 430 | 230 | 60 | 77 | 20 | 16,0 | *LTTSE45 |
| 6000 | 0 – 32 | 114 | 75 | 490 | 255 | 78 | 78 | 20 | 21,0 | *LTTS6 |
| 7500 | 0 – 55 | 112 | 75 | 530 | 267 | 70 | 86 | 20 | 26,0 | *LTTSE75 |
| 9000 | 0 – 55 | 112 | 75 | 530 | 267 | 70 | 86 | 20 | 27,0 | *LTTS9 |
| 12000 | 0 – 52 | 148 | 85 | 617 | 270 | 100 | 94 | 44 | 37,0 | *LTTS120 |
| 15000 | 0 – 76 | 209 | 86 | 760 | 373 | 135 | 105 | 50 | 70,0 | *LTTS150 |
| 25000 | 5 – 85 | 248 | 100 | 880 | 465 | 145 | 140 | 66 | 149,0 | *LTTS250 |

*Items marked with an asterisk approx. 3 weeks delivery



250 kg terrier clamp has no minimum WLL due to a fixable opposing pin



TERRIER CLAMPS FOR VERTICAL LIFTING AND TURNING

- for vertical lifting and turning of steel plates
- paint coated
- safety factor 4: 1
- available also in other sizes
- Note! Lifting pieces weight must be minimum of 10% of maximum WLL!
(250 kg terrier has no minimum)
- special materials have dedicated terrier clamps, for more information contact our sales!

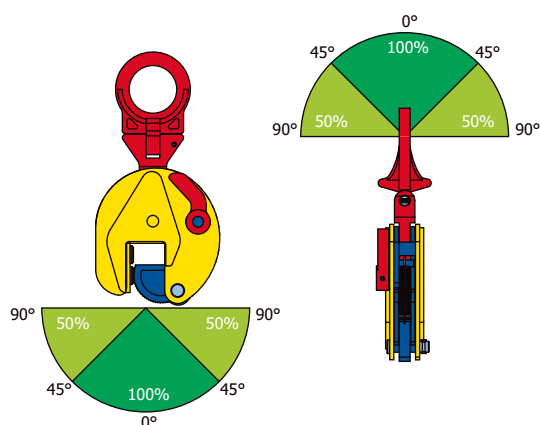
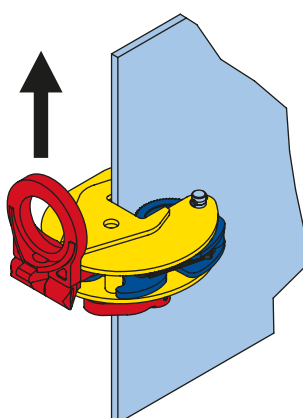
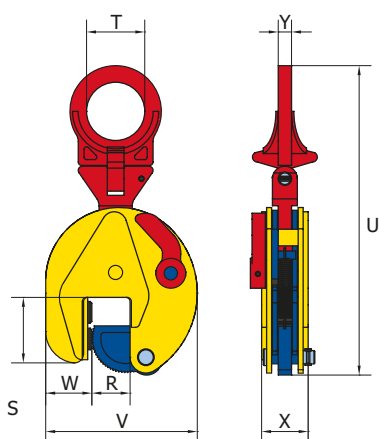


| WLL kg | Grip area mm | S mm | T mm | U mm | V mm | W mm | X mm | Y mm | Weight kg | Product code |
|-----------|-----------------|---------|---------|---------|---------|---------|---------|---------|--------------|--------------|
| 250 | 0 – 13 | 53 | 30 | 196 | 109 | 30 | 37 | 10 | 2,0 | LTTJPU025 |
| 750 | 0 – 13 | 47 | 30 | 230 | 100 | 25 | 37 | 10 | 1,8 | LTTSU075 |
| 1000 | 0 – 25 | 55 | 48 | 295 | 142 | 38 | 47 | 14 | 3,8 | LTTSEU1 |
| 2000 | 0 – 35 | 80 | 70 | 370 | 180 | 55 | 56 | 16 | 8,0 | LTTSEU2 |
| 3000 | 0 – 35 | 80 | 70 | 370 | 185 | 55 | 56 | 16 | 8,0 | LTTSEU3 |
| 4500 | 0 – 45 | 85 | 70 | 430 | 230 | 60 | 77 | 20 | 16,5 | LTTSEU45 |
| 7500 | 0 – 55 | 112 | 78 | 565 | 267 | 70 | 86 | 32 | 28,0 | *LTTSEU75 |

*Items marked with an asterisk approx. 3 weeks delivery



250 kg terrier clamp has no minimum WLL due to a fixable opposing pin

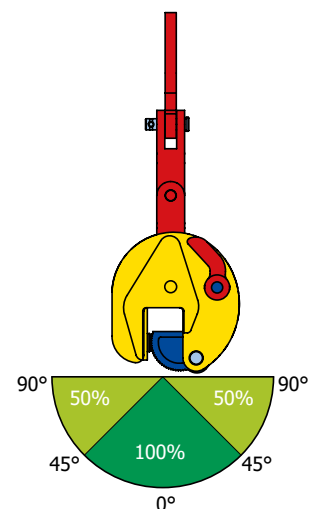
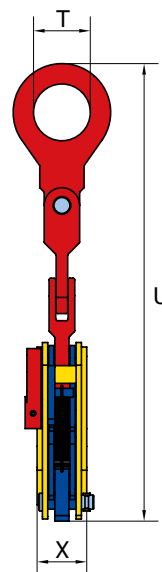
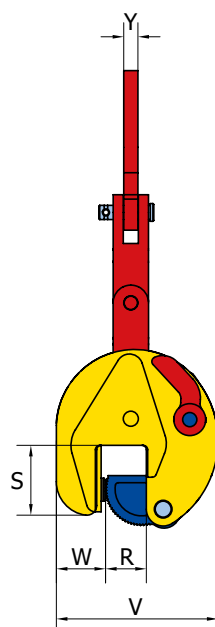


TERRIER CLAMPS FOR VERTICAL LIFTING AND TURNING OF PAIRS OF PLATES

- for vertical lifting and turning of steel plates and horizontal lifting of pairs of plates
- paint coated
- safety factor 4: 1
- available also in other sizes
- Note! Lifting pieces weight must be minimum of 10% of maximum WLL!
- special materials have dedicated terrier clamps, for more information contact our sales!

| WLL kg | Grip area mm | S mm | T mm | U mm | V mm | W mm | X mm | Y mm | Weight kg | Product code |
|-----------|-----------------|---------|---------|---------|---------|---------|---------|---------|--------------|--------------|
| 750 | 0 – 13 | 47 | 30 | 310 | 100 | 33 | 37 | 10 | 2,0 | LTTSMPO75 |
| 1000 | 0 – 25 | 55 | 45 | 405 | 142 | 38 | 47 | 15 | 4,5 | LTTSEMP1 |
| 2000 | 0 – 35 | 80 | 65 | 515 | 165 | 55 | 56 | 17 | 8,0 | LTTSEMP2 |
| 3000 | 0 – 35 | 80 | 65 | 515 | 165 | 55 | 56 | 17 | 8,0 | LTTSEMP3 |
| 4500 | 0 – 45 | 85 | 70 | 655 | 230 | 60 | 77 | 20 | 19,0 | *LTTSEMP45 |
| 6000 | 0 – 32 | 114 | 75 | 760 | 225 | 78 | 78 | 20 | 24,0 | *LTTSMPO6 |
| 7500 | 0 – 55 | 112 | 75 | 800 | 267 | 70 | 86 | 20 | 30,5 | *LTTSEMP75 |
| 9000 | 0 – 55 | 112 | 75 | 800 | 267 | 70 | 86 | 20 | 31,0 | *LTTSMPO9 |

*Items marked with an asterisk approx. 3 weeks delivery



Vertical Clamps



IPNM10N

The IPNM10N vertical lifting clamp is used for lifting, turning, moving or vertical transfer of sheet, plates, or fabrications from horizontal to vertical and down to horizontal (180°) as needed without marring the surface of the material. Materials such as aluminum, stainless steel, painted materials, aircraft skins, composite material, glass, plastic, etc., can be lifted without marring.

Will not mar, or scratch the material surface.

For use in almost all sectors of industry where during the lift or transfer, no damage to the material is permitted.

- Available in capacities of .5 , 1 and 2 metric tons.
- Wide variety of jaw openings available: 0 to 40mm.
- Welded alloy steel body for strength and smaller size. Forged alloy components, where required.
- Individually Proof Tested to 2 times the Working Load Limit with certification.
- Company name (CrosbyIP), logo, Working Load Limit and jaw opening permanently stamped on body.
- Each product is individually serialized, with the serial number and Proof Load test date stamped on body. User manual with test certificate is included with each clamp.
- Full 180° turning range for material transfer, turning or moving.
- Lock open, lock closed ability with latch for pretension on material and then release of material.
- Optional IP-5000 Stinger assembly available (see page 428). Allows for easy connection between the clamp and hoist hook.
- Material must be clean and dry.
- There is no minimum WLL required.
- Maintenance and repair kits are available.
- Manufactured by an ISO 9001 facility.
- All sizes are **RFID EQUIPPED**.
- The special IPNMN10JC is also available with curved jaws.



IPNM10P

The IPNM10P vertical lifting clamp is used for lifting, turning, moving or vertical transfer of sheet, plates, or fabrications from horizontal to vertical and down to horizontal (180°) as needed without marring the surface of the material. Materials such as aluminum, stainless steel, painted materials, aircraft skins, composite material, glass, plastic, etc., can be lifted without marring. The protective cover reduces the risk of damage to surrounding plates.

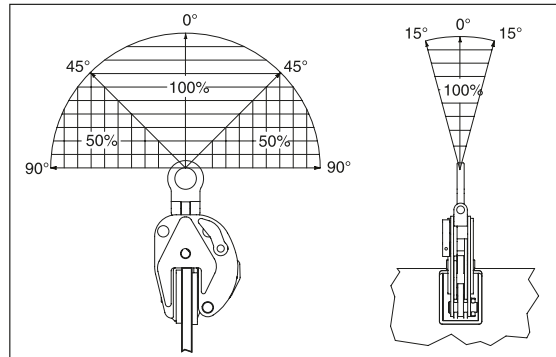
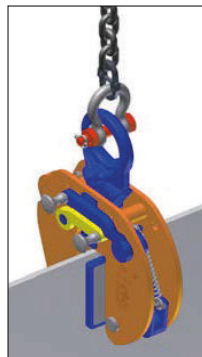
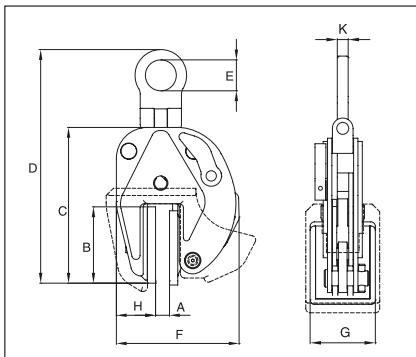
Will not mar, or scratch the material surface.



Load Rated

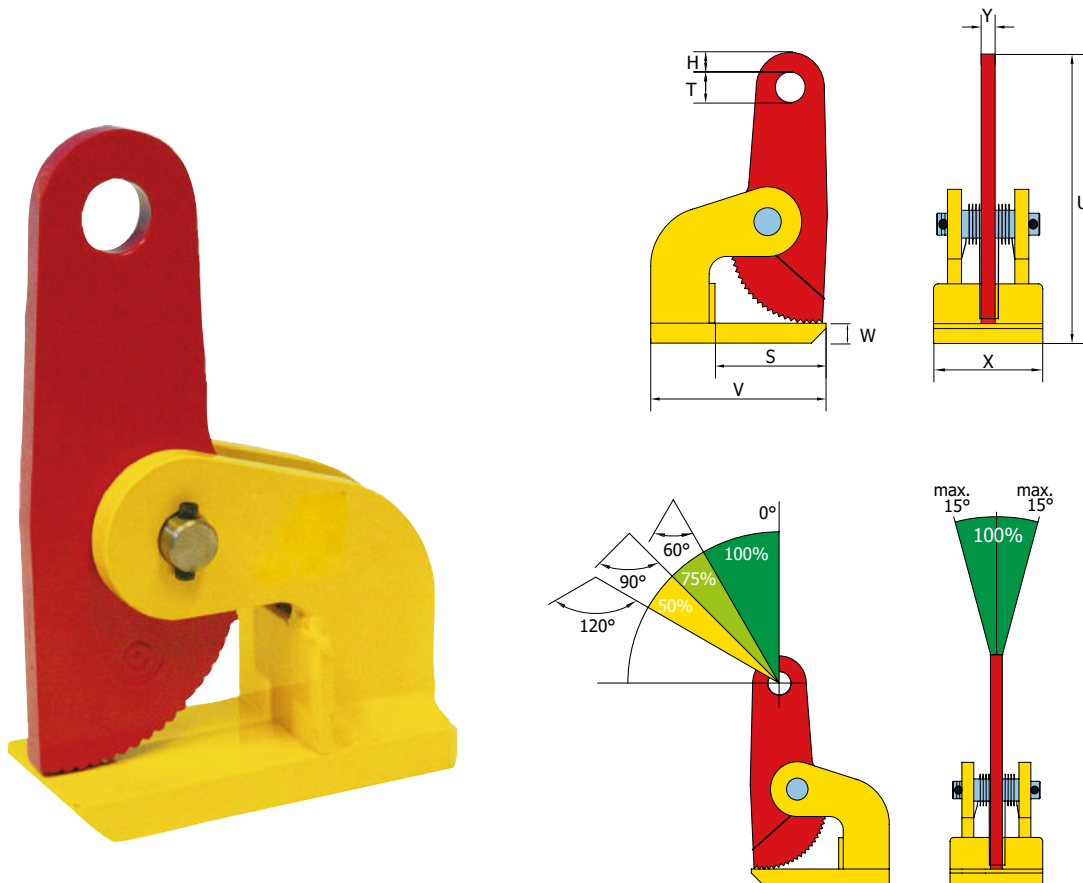
Model IPNM10

| Model | Working Load Limit (t)* | IPNM10 Stock No. | Weight Each (kg) | Dimensions (mm) | | | | | | | | |
|-------------------------|-------------------------|------------------|------------------|-----------------|-----|-----|-----|----|-----|-----|-----|----|
| | | | | Jaw A | B | C | D | E | F | G | H | K |
| IPNM10N | .5 | 2703811 | 2.7 | 0 - 10 | 84 | 159 | 23 | 40 | 128 | 60 | 41 | 11 |
| IPNM10N | 1 | 2703738 | 4.4 | 0 - 20 | 9 | 20 | 278 | 40 | 184 | 80 | 56 | 11 |
| IPNM10 | 2 | 2703442 | 14.5 | 0 - 40 | 153 | 258 | 396 | 70 | 296 | 100 | 161 | 16 |
| With protection cap | | | | | | | | | | | | |
| IPNM10P | .5 | 2703278 | 2.8 | 0 - 10 | 82 | 157 | 221 | 40 | 145 | 68 | 48 | 11 |
| IPNM10P | 1 | 2703279 | 4.5 | 0 - 20 | 97 | 195 | 276 | 40 | 205 | 82 | 66 | 11 |
| With larger jaw opening | | | | | | | | | | | | |
| IPNM10NJ | 1 | 2703814 | 4.7 | 20 - 37 | 97 | 220 | 321 | 40 | 200 | 80 | 56 | 11 |
| IPNM10NJ1 | 1 | 2703819 | 5.5 | 0 - 25 | 97 | 238 | 351 | 40 | 213 | 80 | 63 | 11 |



TERRIER CLAMPS FOR HORIZONTAL LIFTING IN PAIRS

- for horizontal lifting of steel plates (only one plate at a time)
- paint coated
- safety factor 4: 1
- available also in other sizes



| WLL kg/ pair | Grip area mm | A mm | B mm | C mm | D mm | E mm | F mm | G mm | Weight kg | Product code |
|--------------------|-----------------|---------|---------|---------|---------|---------|---------|---------|--------------|--------------|
| 1000 | 0 - 35 | 188 | 140 | 65 | 10 | 100 | 25 | 15 | 2,6 | LTFHX1 |
| 2000 | 0 - 60 | 290 | 180 | 90 | 15 | 115 | 30,5 | 16 | 7,0 | LTFHX2 |
| 4000 | 0 - 60 | 306 | 220 | 105 | 25 | 145 | 30,5 | 20 | 13,0 | LTFHX4 |
| 6000 | 0 - 60 | 306 | 220 | 110 | 25 | 145 | 30,5 | 20 | 14,0 | LTFHX6 |
| 2000 | 0 - 100 | 380 | 180 | 90 | 15 | 120 | 30,5 | 15 | 9,2 | LTFHSX2 |
| 4000 | 0 - 100 | 415 | 220 | 105 | 25 | 145 | 30,5 | 20 | 15,0 | LTFHSX4 |
| 6000 | 0 - 100 | 415 | 220 | 120 | 25 | 145 | 30,5 | 20 | 16,5 | *LTFHSX6 |
| 8000 | 0 - 100 | 430 | 225 | 120 | 35 | 135 | 30,5 | 30 | 21,0 | *LTFHSX8 |
| 10000 | 0 - 100 | 430 | 225 | 120 | 35 | 135 | 30,5 | 30 | 22,0 | *LTFHSX100 |

*Items marked with an asterisk approx. 3 weeks delivery

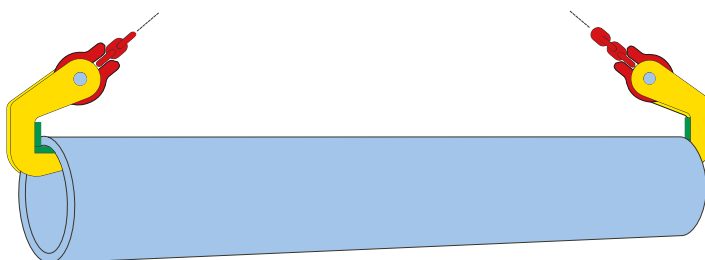
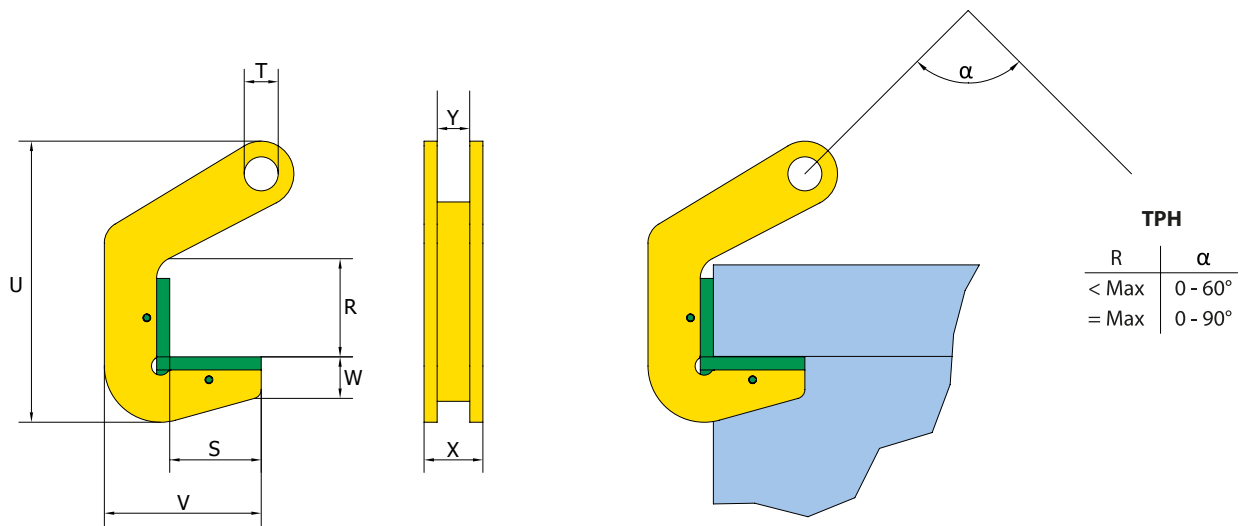
TERRIER CLAMPS FOR PIPES

- suitable for all kinds of pipes
- paint coated
- covered with polyurethane to protect the pipe heads
- safety factor 4 : 1



| WLL | Max. wall of pipe R | A | B | C | D | E | T | Weight | Product code |
|---------|---------------------|-----|----|-----|----|----|----|--------|--------------|
| kg/pair | mm | mm | mm | mm | mm | mm | mm | kg | |
| 1500 | 40 | 120 | 32 | 185 | 70 | 41 | 15 | 1,6 | PTTPH15 |
| 3000 | 40 | 120 | 32 | 185 | 70 | 41 | 15 | 1,6 | PTTPH30 |
| 4000 | 50 | 120 | 32 | 195 | 70 | 41 | 26 | 3,0 | PTTPH40 |
| 6000 | 50 | 120 | 32 | 195 | 70 | 41 | 26 | 3,3 | PTTPH60 |
| 8000 | 70 | 120 | 32 | 215 | 70 | 45 | 26 | 3,6 | PTTPH80 |
| 10000 | 70 | 120 | 32 | 215 | 70 | 85 | 26 | 5,0 | PTTPH100 |

Delivery appr. 3 weeks



TERRIER CLAMPS FOR VERTICAL/HORIZONTAL LIFTING OF STAINLESS STEEL PLATES



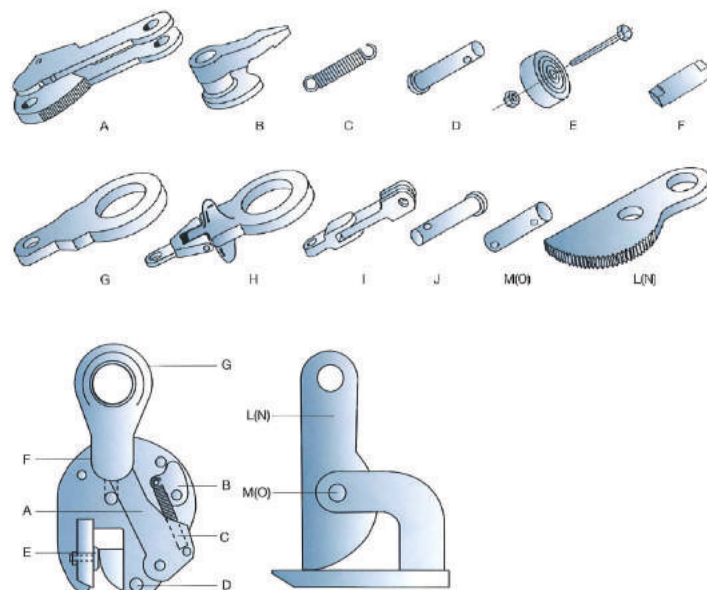
- for stainless steel plates and e.g. marble plates
- leaves no marks on the lifted plate
- automatic locking to safety position, when clamp is lowered to the side of the plate
- paint coated
- safety factor 4 : 1
- Note! Lifting pieces weight must be minimum of 10% of maximum WLL!

| WLL | Grip area | Weight | Product code |
|------|-----------|--------|--------------|
| kg | mm | kg | |
| 500 | 0 - 20 | 5,3 | LTNMK05 |
| 500 | 17 - 37 | 5,5 | LTNMKE05 |
| 1000 | 0 - 30 | 6,5 | LTNMK1 |
| 1500 | 0 - 40 | 7,2 | LTNMK15 |
| 2000 | 0 - 50 | 14,0 | LTNMK2 |
| 3000 | 0 - 60 | 15,0 | LTNMK3 |

Delivery appr. 3 weeks

TERRIER CLAMPS SPARE PARTS

- A Moving jaw
- B Locking lever
- C Spring
- D Jaw pin
- E Counter pin
- F Lifting eye pin
- G Lifting eye TS, STS, MPX
- H Lifting eye TSU, STEU
- I Pivot arm TSMP, STSMPX
- J Pin for pivot arm, type MP
- L Jaw FHX
- M Jaw pin FHX
- N Jaw FHSX
- O Jaw pin FHSX

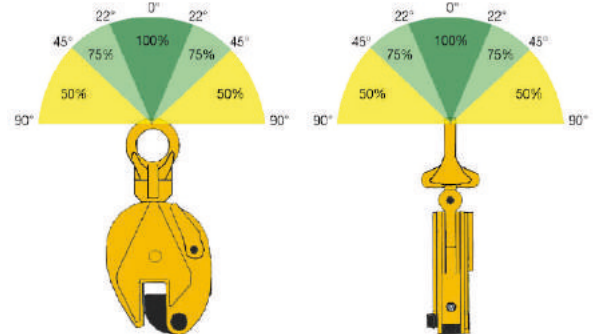
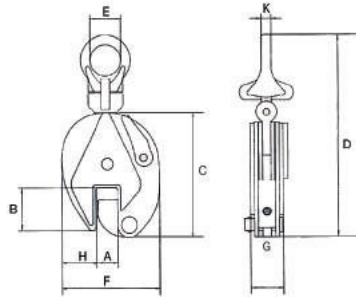


CLAMPS FOR VERTICAL LIFTING AND TURNING

- for vertical lifting and turning of steel plates
- paint coated
- safety factor 4 : 1
- Note! Lifting pieces weight must be minimum of 20% of maximum WLL!



Individual test report with each clamp



| WLL kg | Min. WLL kg | Grip area mm | A mm | B mm | C mm | D mm | E mm | F mm | G mm | H mm | K mm | Test load kN | Weight kg | Product code |
|--------|-------------|--------------|------|------|------|------|------|------|------|------|------|--------------|-----------|--------------|
| 800 | 160 | 0 - 15 | 17 | 44 | 128 | 212 | 30 | 103 | 36 | 35 | 10 | 7,35 | 1,9 | LTABT08 |
| 1000 | 200 | 0 - 20 | 22 | 63 | 167 | 295 | 48 | 138 | 50 | 51 | 12 | 14,7 | 4,5 | LTABT10 |
| 2000 | 400 | 0 - 30 | 27 | 76 | 202 | 370 | 60 | 164 | 52 | 56 | 16 | 29,4 | 7,5 | LTABT20 |
| 3000 | 600 | 0 - 30 | 32 | 85 | 237 | 418 | 65 | 193 | 78 | 59 | 20 | 44,1 | 14,8 | LTABT30 |
| 5000 | 1000 | 0 - 50 | 55 | 90 | 262 | 480 | 76 | 232 | 90 | 59 | 20 | 73,5 | 23 | LTABT45 |
| 8000 | 1600 | 0 - 45 | 45 | 112 | 330 | 600 | 85 | 263 | 100 | 77 | 22 | 117,6 | 37 | LTABT80 |

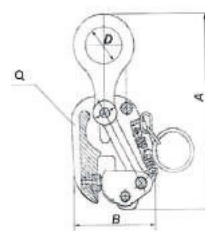
CLAMPS WITH LOCKING RING FOR VERTICAL LIFTING

- for vertical lifting of steel plates
- locking by pulling the ring
- paint coated
- safety factor 4 : 1
- Note! Lifting pieces weight must be minimum of 10% of maximum WLL!
- special materials have dedicated clamps



| WLL kg | Grip area mm | A mm | B mm | Q mm | D mm | Weight kg | Product code |
|--------|--------------|------|------|------|------|-----------|--------------|
| 1000 | 0 - 20 | 320 | 140 | 60 | 50 | 4,4 | LTABT10RE |
| 2000 | 0 - 25 | 320 | 150 | 60 | 50 | 4,7 | LTABT20RE |
| 3000 | 0 - 30 | 340 | 180 | 70 | 40 | 10,7 | LTABT30RE |

locking and opening by pulling the ring

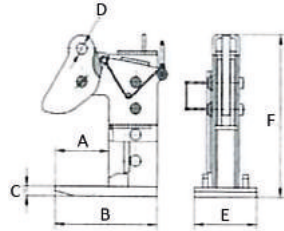


CLAMPS FOR HORIZONTAL LIFTING IN PAIRS

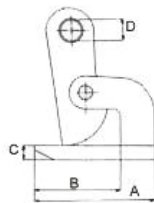


- for horizontal lifting of steel plate stacks
- adjustable grip area
- paint coated
- safety factor 4 : 1

| WLL | Grip area | A | B | C | D | E | F | Weight | Product code |
|-----------|-----------|-----|-----|----|----|-----|-----|--------|--------------|
| kg / pair | mm | mm | mm | mm | mm | mm | mm | kg | |
| 8000 | 40 – 240 | 180 | 300 | 60 | 40 | 200 | 520 | 40 | LTABT60N |



CLAMPS FOR VERTICAL LIFTING IN PAIRS



- for horizontal lifting of steel plates (only one plate at a time)
- paint coated
- safety factor 4 : 1

| WLL /pair | Grip area | A | B | C | D | Weight | Product code |
|-----------|-----------|-----|-----|----|----|--------|--------------|
| kg | mm | mm | mm | mm | mm | kg | |
| 1500 | 0 – 50 | 127 | 90 | 15 | 30 | 4,3 | LTVABT1500 |
| 2000 | 0 – 100 | 178 | 114 | 15 | 30 | 5,5 | LTVABT2000 |
| 3000 | 0 – 50 | 220 | 120 | 30 | 36 | 7,7 | LTVABT3000 |

SCREW CLAMPS FOR LIFTING IN DIFFERENT POSITIONS

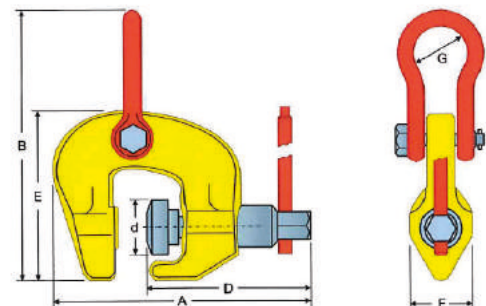


- suitable for steel plates and items of various shape
- paint coated
- safety factor 4 : 1

| WLL | Grip area | Z | U | D | d | E | F | G | Weight | Product code |
|------|-----------|-----|-----|-----|----|-----|----|----|--------|--------------|
| kg | mm | mm | mm | mm | mm | mm | mm | mm | kg | |
| 500 | 0 – 28 | 127 | 116 | 89 | 26 | 75 | 30 | 17 | 0,8 | LTTSCC05 |
| 750 | 0 – 22 | 167 | 201 | 120 | 42 | 125 | 46 | 38 | 3,0 | LTTSCC075 |
| 1500 | 0 – 32 | 187 | 226 | 135 | 42 | 142 | 46 | 45 | 4,0 | LTTSCC15 |
| 3000 | 0 – 50 | 223 | 268 | 165 | 49 | 165 | 55 | 50 | 7,0 | LTTSCC3 |
| 6000 | 0 – 75 | 285 | 364 | 215 | 63 | 210 | 70 | 80 | 18,0 | LTTSCC6 |



500 kg



ROUND PIPE CLAMPS



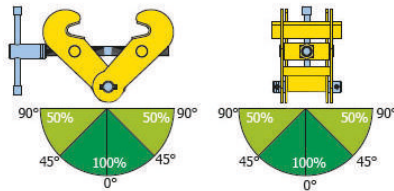
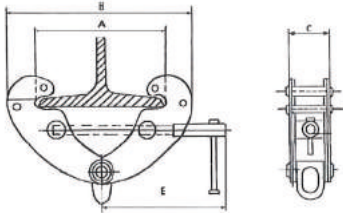
- suitable for pipes, bars, etc. that are made of different kinds of materials
- for short pieces individually, for long pieces in pairs with a lifting beam
- paint coated
- safety factor 4 : 1

| WLL | Grip area diameter | Weight | Product code |
|------|--------------------|--------|--------------|
| kg | mm | kg | |
| 2000 | 80 - 130 | 16,0 | TARPA20 |
| 3000 | 120 - 220 | 32,0 | TARPA30 |
| 5000 | 200 - 320 | 104,0 | TARPA50 |

Larger diameters also available for round pipe clamps.

BEAM CLAMPS

- the clamp can be used, for example, to attach a hoist to an I or T beam
- the clamp can also be used for lifting
- paint coated
- safety factor 4 : 1



| WLL | A | B | C | E | Weight | Product code |
|-------|--------|---------|-----|-----|--------|--------------|
| kg | mm | mm | mm | mm | kg | |
| 1000 | 75-230 | 180-375 | 85 | 220 | 4,0 | TARPAL10 |
| 2000 | 75-230 | 180-375 | 93 | 220 | 5,0 | TARPAL20 |
| 3000 | 80-320 | 220-498 | 120 | 271 | 9,5 | TARPAL30 |
| 5000 | 90-355 | 240-520 | 111 | 258 | 11,0 | TARPAL50 |
| 10000 | 80-350 | 250-520 | 120 | 280 | 16,0 | TARPAL100 |

TIGER BEAM CLAMPS



Nonsparking

- Working load 1 - 30 t
- ATEX Directive 94/9/EC and the Machinery Directive 2006/42/EC.
- Atex marked: Ex II 2 GD c IIC T4 IIIC T135°C.
- Zone 1 & 2 (gas) ja Zone 21 & 22 (dust).

Entertainment

- Working load 1 - 30 t
- painted black

Universal

- Working load 3 / 5 / 10 t
- can be used for horizontal and vertical lifting
- for lifting, pulling or as anchoring point

Adjustable

- Working load 1 / 3 t
- can be used for lifting or as anchoring point
- maximum working angle 15°

ALSO OTHER MODELS AVAILABLE, ASK MORE FROM OUR SALES.

CONCRETE PIPE CLAMPS

- clamps for concrete pipes
- 2- or 3-leg
- two models:
 - standard models I and P for pipes without rubber packing
 - model K for pipes with rubber packing, with high jaws
- paint coated
- chain leg length 1.5m
- safety factor 4 : 1

| WLL kg | Grip area mm | L size mm | Model | Number of legs | Suitable | Weight n. kg | Product code |
|-----------|-----------------|--------------|----------------|----------------|---------------------|-----------------|--------------|
| 2000 | 60-120 | 245 | normal jaw (P) | 2-leg | normal ring | 25 | KRT2P |
| 2000 | 80-170 | 235 | wide jaw (I) | 2-leg | normal ring | 35 | KRT2I |
| 2000 | 60-120 | 345 | high jaw (K) | 2-leg | rubber sealing ring | 35 | KRT2K |
| 3000 | 60-120 | 245 | normal jaw (P) | 3-leg | normal ring | 37 | KRT3P |
| 3000 | 80-170 | 235 | high jaw (I) | 3-leg | normal ring | 46 | KRT3I |
| 3000 | 60-120 | 345 | high jaw (K) | 3-leg | rubber sealing ring | 45 | KRT3K |

Other sizes available for individual order!



JAW MODELS



Normal
P-Model, 60-120mm
Product code: KRTLS



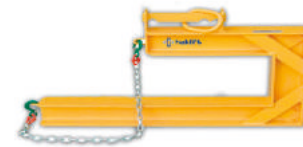
Broad
I-Model, 80-170mm
Product code: KRTLL



Tall
K-Model, 60-120mm
Product code: KRTLP

EK-PIPE LIFTER ALSO AVAILABLE

Used for e.g. lifting concrete EK-pipes. Seven different sizes between 500 - 8000 kg and lengths 1 -3 m. Ask more from our Sales.



CONCRETE PIPE CLAMP IN A CARRY-ON-BAG



| WLL kg | Grip area mm | L size mm | Model | Number of legs | Suitable | Weight n. kg | Product code |
|-----------|-----------------|--------------|---------------|----------------|-------------|-----------------|--------------|
| 2000 | 60-120 | 245 | norm. jaw (P) | 2-leg | normal ring | 25 | KRT2KVAL |

CABLE REEL CLAMPS

without swivel



with swivel



- for lifting and handling cable reels
- by using the reel hole, a clamp equipped with a ball bearing swivel can also be used for pulling a cablepaint coated
- safety factor 4:1

| WLL | Reel hole diameter min / max | Type | A | Weight | Product code |
|------|------------------------------|----------------|-----|--------|--------------|
| Kg | mm | | mm | kg | |
| 1500 | 40 / 90 | without swivel | 190 | 1,5 | VITAR15 |
| 1500 | 40 / 90 | with swivel | 190 | 2,0 | VITAR15L |
| 3000 | 50 / 130 | without swivel | 225 | 3,6 | VITAR3 |
| 3000 | 50 / 130 | with swivel | 225 | 4,7 | VITAR3L |

CABLE REEL SCISSOR CLAMPS



- for lifting and handling cable reels
- by using the reel hole, a clamp equipped with a ball bearing swivel can also be used for pulling a cablepaint coated
- safety factor 4:1

| WLL | Reel hole diameter min / max | Type | Weight | Product code |
|------|------------------------------|--------------------------|--------|--------------|
| Kg | mm | | kg | |
| 3000 | 50 / 130 | without swivel | 9,0 | SATAR3 |
| 3000 | 50 / 130 | ball bearing with swivel | 10,0 | SATAR3L |

Clamp in picture without swivel

CLAMP FOR PULLING PALLETS

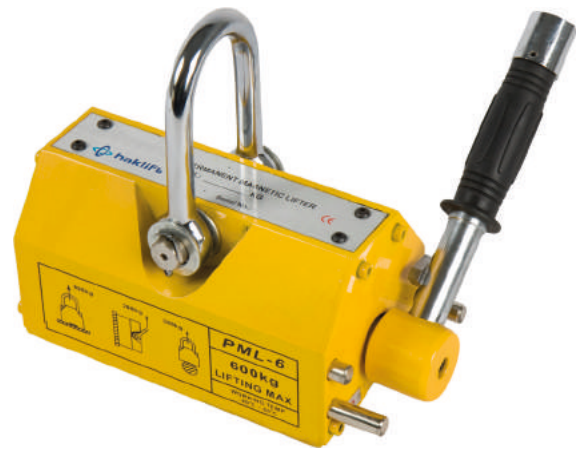
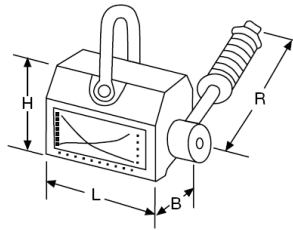


- for pulling pallets from, for example, a container
- paint coated
- not for lifting!

| WLL kg | Grip area mm | Weight approx. kg | Product code |
|--------|--------------|-------------------|--------------|
| 1000 | 30 - 100 | 8 | TARLAVA1 |

MAGNETIC LIFTING CLAMPS 100 - 2000 KG

- durable magnet clamps for lifting plates, pipes and round steel bars
- small and easy to use
- five sizes
- due to the joint lifting eye, improved durability and stability of the item to be lifted
- rubber coated handle
- comfortable to use
- operating temperature - 40 °C - (+) 80 °C
- safety factor of 100-300 kg lifters 3,5:1 and of 600-2000 kg lifters 3:1
- EN 13155



| WLL with plates kg | WLL with round objects kg | B mm | H mm | L mm | R mm | Weight kg | Product code |
|-----------------------|------------------------------|---------|---------|---------|---------|--------------|--------------|
| 100 | 30 | 62 | 67 | 92 | 126 | 3,0 | MAGPML100 |
| 300 | 90 | 92 | 88 | 158 | 150 | 10,0 | MAGPML300 |
| 600 | 180 | 122 | 113 | 228 | 186 | 24,0 | MAGPML600 |
| 1000 | 300 | 176 | 158 | 258 | 282 | 50,0 | MAGPML1000 |
| 2000 | 600 | 234 | 206 | 378 | 374 | 85,0 | MAGPML2000 |

PERMANENT MAGNETIC LIFTER WITH HANDLE



- handy permanent magnet clamp
- there is a release pin in the centre of the clamp, which is used by pressing the handle to the other direction
- perfect for carrying and transferring steel plates and pieces

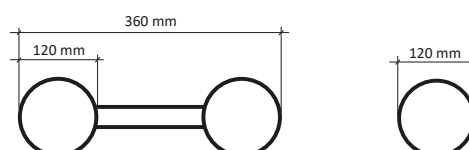
| WLL kg | Width mm | Depth mm | Height mm | Weight kg | Product code |
|-----------|-------------|-------------|--------------|--------------|--------------|
| 50 | 100 | 125 | 270 | 2,0 | MAG50 |

SUCTION LIFTERS



- two models
- the grip is dependent on the cleanliness and smoothness of the surface
- aluminium body
- suitable for glass, aluminium, plastic, acryl etc. plates

| WLL kg | Type | Product code |
|-----------|-----------|--------------|
| 40 | 1 suction | IMUTAR140 |
| 80 | 2 suction | IMUTAR280 |



WIRE ROPE / CABLE CLAMPS



- for pulling steel ropes and cables
- models - L, LY and P are suited for steel ropes, coated wires, carrying cables and uncoated copper cables
- yellow chromized

| Breaking load kg | Grip area mm | Gripping jaw length mm | Weight kg | Product code |
|------------------|--------------|------------------------|-----------|--------------|
| 750 | 1 - 10 | 20 | 0,4 | TARVAIP |
| 1500 | 3 - 15 | 35 | 0,7 | TARVAILY |
| 2000 | 4 - 22 | 60 | 1,6 | TARVAIL |

Larger sizes available for individual order!

WIRE ROPE- / CABLE PULLING SOCKS

- for pulling steel wire ropes and cables
- hot tip galvanized
- with one pulling eye

ASK FOR SIZES AND MODELS FROM OUR SALES



WIRE ROPE / CABLE SWIVELS



- prevent the cable or steel rope from twisting during pulling
- extra small
- with needle bearings

| Breaking load kg | A diameter mm | B length mm | Weight kg | Product code |
|------------------|---------------|-------------|-----------|--------------|
| 2000 | 29 | 143 | 0,53 | LEIKHGS1 |
| 4000 | 49 | 185 | 1,90 | LEIKHGS2 |

5. Packing equipments

Ecostrap® / ecolash®

Wg-straps

Plastic / steel straps

Plastic strap tools

Steel strap tools

Strapping trolleys

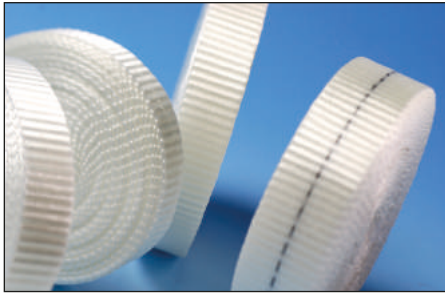
Strap locks

Packing films, tapes etc.

Scales



ECOSTRAP® AND ECOLASH® ONE WAY LASHING SYSTEM



Ecostrap ja Ecolash one way lashing and strapping systems are easy to use in demanding cargo securing operations

- One way lashing systems are suitable for cargo securing, bundling or joining them together
- Systems are used in all industrial fields and in harbors for tying down goods inside containers
- Are safe as well as easy to use
- The structure of the woven Ecostrap and Ecolash webbings guarantee durability and a tight load
- Straps are easy to dispose after use
- Are available in several different strenghts (370 - 7500kg)
- Tested metal buckles maximise the system strenght

ECOSTRAP®

ECOSTRAP® WEBBINGS

- Webbing material PES

| Product | Strap width mm | Breaking strength kg | Packing size | Product code |
|----------------|----------------|----------------------|----------------|--------------|
| Ecostrap 13 mm | 13 | 370 | 2 x 1000 m/rll | ES13 |
| Ecostrap 16 mm | 16 | 460 | 2 x 760 m/rll | ES16 |
| Ecostrap 19 mm | 19 | 725 | 2 x 480 m/rll | ES19 |
| Ecostrap 25 mm | 25 | 1000 | 2 x 350 m/rll | ES25 |



ECOSTRAP® BUCKLES

| Product | Product code |
|------------------------------------|--------------|
| Ecostrap buckle 13 mm 1000 pcs/box | ESL13 |
| Ecostrap buckle 16 mm 1000 pcs/box | ESL16 |
| Ecostrap buckle 19 mm 1000 pcs/box | ESL19 |
| Ecostrap buckle 25 mm 500 pcs/box | ESL25 |



Instructions for lock buckle on page 20-10

ECOSTRAP® TOOLS

| Product | Product code |
|--|--------------|
| Ecostrap tightener 13-25 mm webbing | MVKIR25 |
| Ecostrap strap holder 13-25 mm webbing | ESTELINE |
| Ecostrap string tool 13-25 mm webbing | ESPT |



ESPT



MVKIR25



ESTELINE

ECOLASH®

ECOLASH® ONE WAY LASHING WEBBING (SYN)

- Webbing material PES

Customized overprint, DNV Certificate or other strap width as options



Breaking strength is marked to all webbings



| Product | Strap width mm | Breaking strength kg | Package size m/bag | Product code |
|---------------|----------------|----------------------|--------------------|--------------|
| Ecolash 50 mm | 50 | 2000 | 400 | SYN2000 |
| Ecolash 50 mm | 50 | 2700 | 250 | SYN2700 |
| Ecolash 50 mm | 50 | 5000 | 150 | SYN4000 |

ECOLASH® BUCKLES

- 50 mm webbing



SYL50S



SYL50



SYL100



SYKO100



SYL40AL

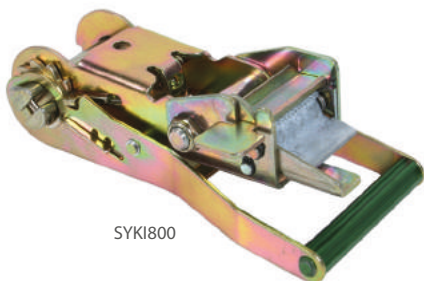
| Product | Product code |
|--------------------------------------|--------------|
| Ecolash buckle 1600kg wls 5016 | SYL50S |
| Ecolash buckle 1600kg wls 4816 black | SYL50 |
| Ecolash buckle 5000kg wls 5040 | SYL100 |
| Ecolash-lukko, fosfated, 200 pcs/box | SYL40AL |
| Glidable hook SY-100 | SYKO100 |

See SYL50S/50 instruction video



ECOLASH® TOOLS

- 50 mm webbing



SYKI800



SYKI1000

See SYKI800 instruction video



Katso SYKI1000 instruction video



| Product | Product code |
|------------------------------|--------------|
| Ecolash tightener pr 5000cbi | SYKI800 |
| Ecolash tightener strapping | SYKI1000 |

ECOLASH®

STEVEDORE BAGS

Stevedore bags are used to loading containers, trucks and ships, as well as in the luggage compartments of trains and busses, when goods have to be loaded tightly and immobile. The stevedore bag material is strong 100% recycled material. Stevedore bag is easy to empty after use and therefore each bag can be used for multiple times. Stevedore bag is a simple and quick to fill with a filling gun fitting to a compressor.



| Size (cm) | Product code |
|-----------|--------------|
| 90 x 120 | 53305 |
| 90 x 180 | 53306 |
| 90 x 210 | 53307 |

FILLING GUNS

NEW MODEL



MATGR-P6



MATGR-P6ALU



MATGR-P603ALU



MATGR-P603

| Tyyppi | Product code |
|-----------------|---------------|
| Plastic | MATGR-P6 |
| Aluminum | MATGR-P6ALU |
| Spare, aluminum | MATGR-P603ALU |
| Spare, plastic | MATGR-P603 |

KOSTEUDENPOISTAJA MERIKONTTEIHIN

Absorpole is designed for sea containers to remove moisture. The power of the dryer is based on the ability of calcium chloride to effectively remove moisture from the air. Absorpole is easy to use and is designed to work with any type of cargo on long journeys. There must be only 5 cm of empty space between the dryer and the product so that the dryer works as planned, so it is also well suited for packed containers. Absorpole's protective shell is strong impact-resistant plastic.

Free from DMF, and complies with RoHS and REACH directives.



Installed to container

NEW



| Measures activated mm | Measures packed mm | Operation temperature C° | Capacity l | Weight kg | Product code |
|-----------------------|--------------------|--------------------------|------------|-----------|--------------|
| 1180x116x35 | 640x116x35 | -20 - (+) 80 | 2 | 1,5 | ABSORPOLE |

WG STRAPS AND ACCESSORIES

WG STRAP

WG plastic strap is soft and flexible, made from PET plastic. WG plastic strap is significantly more durable and stronger than the PP plastic strap. WG plastic strap is closed and locked with steel wire locks. WG plastic strap is tightened by hand, with a trailer hitch or a plastic strap clamp.



| Strap width / Inner diam. (mm) | Breaking strength (kg) | Meters/roll | Package size | | Product code |
|--------------------------------|------------------------|-------------|--------------|------------|--------------|
| | | | rll/box | rll/pallet | |
| 13 / 76 | 375 | 1100 | 2 | 64 | WG13 |
| 16 / 76 | 450 | 900 | 2 | 64 | WG16 |
| 19 / 76 | 550 | 700 | 2 | 64 | WG19 |

| Strap width / Inner diam. (mm) | Breaking strength (kg) | Meters/roll | Package size | | Product code |
|--------------------------------|------------------------|-------------|--------------|------------|--------------|
| | | | rll/box | rll/pallet | |
| 16 / 76 | 600 | 600 | 2 | 80 | * WG55 |
| 19 / 76 | 725 | 500 | 2 | 80 | * WG65 |
| 25 / 76 | 950 | 500 | 2 | 60 | * WG85 |
| 30 / 76 | 1170 | 150 | 5 | 150 | * WG95 |
| 35 / 76 | 1350 | 150 | 4 | 120 | * WG105 |

| Strap width / Inner diam. (mm) | Breaking strength (kg) | Meters/roll | Package size | | Product code |
|--------------------------------|------------------------|-------------|--------------|------------|--------------|
| | | | rll/box | rll/pallet | |
| 19 / 76 | 925 | 400 | 2 | 80 | * WGHD65 |
| 25 / 76 | 1250 | 400 | 2 | 60 | * WGHD85 |
| 38 / 76 | 2000 | 100 | 4 | 120 | * WGHD105 |

| Strap width / no. of locks | Breaking strength (kg) | Meters/roll | Package size | | Product code |
|----------------------------|------------------------|-------------|--------------|------------|--------------|
| | | | rll/box | rll/pallet | |
| 13 / 100 lukkoa | 375 | 250 m | 1 | 128 | WG13COMBI |
| 16 / 80 lukkoa | 450 | 200 m | 1 | 128 | WG16COMBI |



* products marked with an asterisk delivery 1-2 weeks

LOCKS FOR WG STRAP

| Material | Package size (pcs/box) | Product code |
|----------|------------------------|--------------|
| Steel | 1000 | WGL13 |
| Steel | 1000 | WGL16 |
| Steel | 1000 | WGL19 |
| Steel | 500 | WGL25 |
| Steel | 250 | WGL35 |



Instructions for the lock are found on page 20-10

TOOLS FOR WG STRAP

| Product | Product code |
|------------------------------|--------------|
| Tightener for strap | SYK1000 |
| Tightener for 13-25 mm strap | MVKIR25PP |



SYK1000



MVKIR25PP

Instructions on page 20-10

TROLLEYS FOR WG STRAP

| For inner diam. (mm) | For strap widths (mm) | Product code |
|----------------------|-----------------------|--------------|
| 76/150/200/280 | 13-38 | WGKEVA |
| 76 | 13-38 | WGTELINE |



WGKEVA



WGTELINE

PET PLASTIC STRAP

PET PLASTIC STRAP, POLYESTER

| Strap size/ roll inner diam. (mm) | Breaking strength (kg) | Meters/roll | Color | Package size roll/box | roll/pallet | Product code |
|--------------------------------------|------------------------------|-------------|-------|--------------------------|-------------|--------------|
| 12,0 x 0,55 - 406 | 270 | 2500 | Green | 1 | 48 | PET1260406 |
| 15,5 x 0,60 - 406 | 400 | 2000 | Green | 1 | 48 | PET15560406 |
| 16,0 x 0,80 - 406 | 500 | 1200 | Green | 1 | 48 | PET16080406 |
| 19,0 x 0,80 - 406 | 650 | 1200 | Green | 1 | 48 | PET1980406 |



Operation temp.
-30 - (+)80°C

LOCKS FOR PET STRAP

| Roll width (mm) | Package size (pcs/box) | Product code |
|--------------------|---------------------------|--------------|
| 12/13 | 2000 | MV13LUY |
| 15/16 | 1000 | MV16LUY |



TOOLS FOR PET STRAP

| Description | Strap width (mm) | Product code |
|------------------------------------|------------------|--------------|
| Tightener for strap | 13-25 | MVKIR25PP |
| Tightens, locks and cuts the strap | 13 | MVK13 |
| Tightens, locks and cuts the strap | 16 | MVK16 |
| locks the strap with friction weld | 9-16 | PAKZAPAK |
| locks the strap with friction weld | 9-19 | PAKSTB60 |



MVKIR25PP
Instructions on page 20-10



MVK13-16



*PAKITA 20 Tightens, locks and cuts the plastic strap.
Uses friction welding as a locking method.
Tightening strength 220kg.

*PAKSTB60 with manual tightening, also locks and cuts
the plastic strap. Uses friction welding as a locking method.
Tightening strength 220kg.

ROLLEY FOR PET STRAP

| Inner diam. (mm) | For strap widths (mm) | Product code |
|------------------|-----------------------|--------------|
| 406 | 12-19 | TVKEVA |



PP PLASTIC STRAPS AND ACCESSORIES

PP PLASTIC STRAP

| Strap dimensions/ roll inner diameter (mm) | Breaking strength (kg) | Meter/ roll | Color | Package size | | Product code |
|---|------------------------------|----------------|-------|--------------|-------------|--------------|
| | | | | roll/box | roll/pallet | |
| 12 x 0,55 - 200 | 133 | 3000 | Black | 2 | 48 | PP1255200M |
| 12 x 0,55 - 406 | 135 | 3000 | Black | 1 | 40 | PP1255406M |
| 12 x 0,63 - 200 | 155 | 3000 | Black | 2 | 48 | PP1263200M |
| 12 x 0,70 - 406 | 200 | 2500 | Black | 1 | 40 | PP1270406M |
| 13 mm + 500 locks | 120 | 1000 | Black | 1 | 40 | MV13COMBI |
| 16 mm + 400 locks | 150 | 800 | Black | 1 | 40 | MV16COMBI |



LOCKS FOR PP PLASTIC STRAP

| Strap width (mm) | Package size (pcs/box) | Product code |
|------------------|------------------------|--------------|
| 12/13 | 2000 | MV13LUY |
| 15/16 | 1000 | MV16LUY |
| 12/13 | 1000 | MV13LUM |
| 15/16 | 1000 | MV16LUM |


 MV13LUY /
MV16LUY

 MV13LUM /
MV16LUM

 Lock instructions
on page 20-11

TOOLS FOR PP PLASTIC STRAP

| Description | Strap widths (mm) | Product code |
|------------------------------------|-------------------|--------------|
| Tightener for strap | 13-25 | MVKIR25PP |
| Tightens, locks and cuts the strap | 13 | MVK13 |
| Tightens, locks and cuts the strap | 16 | MVK16 |
| locks the strap with friction weld | 9-16 | PAKZAPAK |
| locks the strap with friction weld | 9-19 | PAKSTB60 |


 MVKIR25PP
Instructions on page 20-10


MVK13-16



PAKZAPAK



PAKSTB60*

*PAKITA 20 Tightens, locks and cuts the plastic strap.
Uses friction welding as a locking method.
Tightening strength 220kg.

*PAKSTB60 with manual tightening, also locks and cuts
the plastic strap. Uses friction welding as a locking method.
Tightening strength 220kg.

ROLLEY FOR PP PLASTIC STRAP

| Inner diam. (mm) | For strap widths (mm) | Product code |
|------------------|-----------------------|--------------|
| 200 | 5-15 | PPKEVA |
| 406 | 12-19 | TVKEVA |
| 76/150/200/280 | 13-38 | WGKEVA |



PPKEVA



TVKEVA



WGKEVA

STEEL STRAPS AND ACCESSORIES

STEEL STRAPS

| Roll size approx. (kg) | Spools on pallet | Pallet weight appr. (kg) | Product code |
|------------------------|------------------|--------------------------|--------------|
| 50 | 12 | 600 | TV13 |
| 50 | 12 | 600 | TV16 |
| 50 | 12 | 600 | TV19 |
| 50 | 18 | 900 | TV32 |



STEEL STRAP LOCKS

| Description | For strap widths (mm) | Package size (pcs/box) | Product code |
|---|-----------------------|------------------------|--------------|
| suitable for locking pliers and pneumatic tools | 13 | 2000 | TVLU13 |
| suitable for locking pliers and pneumatic tools | 16 | 2000 | TVLU16 |
| suitable for locking pliers and pneumatic tools | 19 | 2000 | TVLU19 |
| sopii lukituspihdeille ja paineilmatyökälulle | 32 | 1000 | TVLU32 |



STEEL STRAP TOOLS

| Description | For strap widths (mm) | Product code |
|--|-----------------------|--------------|
| Tightens, locks by piercing and cuts the strap | 13-19 | PIKE1319 |
| Tightens the strap, is suitable for round objects, requires locking pliers | 32 | *TVTK32 |
| Steel strap cutter with short handle | 13-32 | TVLEIK2 |

* Items marked with an asterisk delivery 1-2 weeks



TVTK32



TVLEIK2



PIKE1319

STEEL STRAP LOCKING TOOL

| Description | For strap widths (mm) | Product code |
|---|-----------------------|--------------|
| presses the buckle around the steel strap | 13 | TVPIH13 |
| presses the buckle around the steel strap | 16 | TVPIH16 |
| presses the buckle around the steel strap | 19 | TVPIH19 |
| presses the buckle around the steel strap | 32 | TVPIH32 |

Delivery 1-2 weeks



TROLLEYS FOR STEEL STRAPPING

| Inner diam. (mm) | For strap widths (mm) | Product code |
|------------------|-----------------------|--------------|
| 406 | 12-19 | TVKEVA |
| 406 | 32 | *TVKEVA32 |

* Items marked with an asterisk delivery 1-2 weeks



TVKEVA32

TVKEVA

MISCELLANEOUS EQUIPMENT

CORNER PROTECTORS FOR PLASTIC AND STEEL STRAPS

| Size mm | Material | Package size kpl / ltk | Product code |
|-------------------|-----------|------------------------|--------------|
| 60 x 60 x 3 x 100 | cardboard | 600 | SIKUSP100 |



HAND WRAPPING FILMS

| Film width (mm) | Film in roll (m) | Film thickness (mm) | Package size | Product code |
|-----------------|------------------|---------------------|--------------|--------------|
| 450 | 300 | 0,017 | 6 rll/box | KK45017 |
| 100 | 150 | 0,017 | 40 rll/box | KK100 |

Also other film thicknesses available!



WRAPPING TOOL FOR MANUAL STRETCH FILM

| Description | Product code |
|-------------|--------------|
| 450 mm film | KKKL450 |
| 100 mm film | KKKL100 |



PALLET COVER PLASTIC

| Product code | Sheet size (mm) | Film thickness (mm) | Sheets/roll | Product code |
|--------------|-----------------|---------------------|-------------|--------------|
| PAKMUOV12 | 1300 x 1700 | 0,035 | 200 | PAKMUOV12 |



PACKING TAPES

| Tape on roll (m) | Tape width (mm) | Package size (rll/box) | Tape color | Product code |
|------------------|-----------------|------------------------|------------|--------------|
| 66 | 50 | 36 | brown | PAKT50R |



TAPE TOOL

| Product code |
|--------------|
| PAKTEKO |



PACKING LIST POCKETS

| Size | Package size (pcs/box) | Product code |
|------|------------------------|--------------|
| C6 | 1000 | PAKTAS1 |
| C5 | 1000 | PAKTAS2 |



SCALES

SCALE TABLE MODEL



| Display accuracy | Weight categories g | Accuracy g | Weighing plane size mm | Product code |
|------------------|---------------------|------------|------------------------|--------------|
| 1/15000 | 7500/15000 | 0,5/1,0 | 290 x 220 | PAKVAAKA1 |

BENCH SCALE



- Stainless steel

| Display accuracy | Weight category kg | Accuracy g | Weighing plane size mm | Product code |
|------------------|--------------------|------------|------------------------|--------------|
| 1/3000 | 0 - 150 | 10 | 400 x 500 | PAKVAAKA3 |

DIGITAL FLOOR WEIGHING SCALE WITH RAMP

- Versatile functions in a separate display unit, such as resetting, tare, RS232 port for printer
- Four measuring sensors
- Overload protection for max. 50% overload

| Maximum load kg | Horizontal measures mm | Ramp measures mm | Maximum height mm | Accuracy kg | Weight kg | Product code |
|-----------------|------------------------|------------------|-------------------|-------------|-----------|--------------|
| 5000 | 1524 x 1524 | 1524 x 915 | 70 | 1,0 | 466 | VAAKA5LAVA |



The product includes, unlike the image, ramps for both ends of the scale

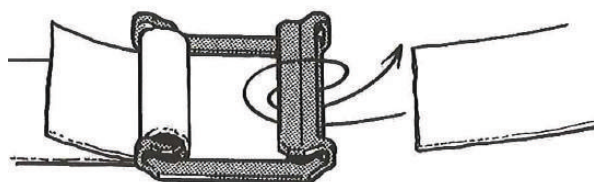
LASHING INSTRUCTIONS



Instruction videos for locks, ratchets and tools can be found also on Haklift's Youtube channel.

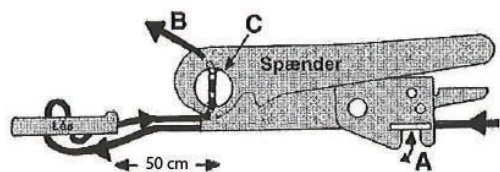


Threading buckle SYL100

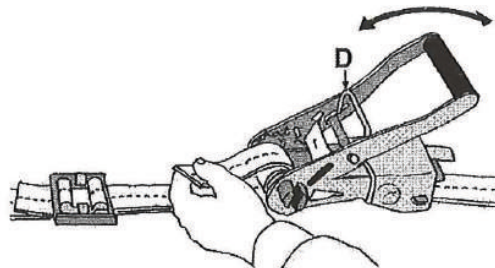


Threading buckle SYL50

See instruction video



Ratchet lashing SYKI800

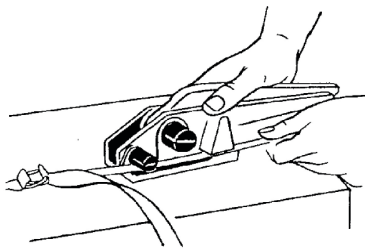


1. Slide the strap to the lock by hand
2. Set the tightener as in image, approx. 50cm from the lock by opening latch "A" and move the tightener sideways on the strap, so that the strap is between latch "A" and tightener body. Close latch "A" by pressing it upwards.
3. Place the strap to the tightener by sliding it through loop "C" and tighten it by pulling towards arrow "B"
4. Tighten the bond by moving the tightener handle back and forth
5. When the bond is tightened, release the tightener by pulling from handle "D" and move the actual handle upwards simultaneously, so that it locks in the upper position. Now you can pull the strap from the tightener drum and loop, and by opening latch "A", you can remove the tightener from the strap.

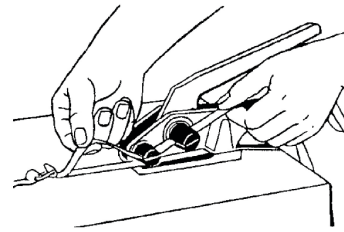
See instruction video



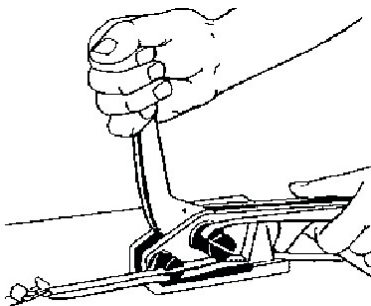
PLASTIC STRAP RATCHET INSTRUCTIONS



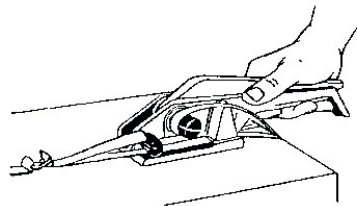
1. Press the handle and set the stretched strap on the tightener



2. Pull the strap through the cutter and the spool



3. Tighten the strap by pulling the handle back and forth

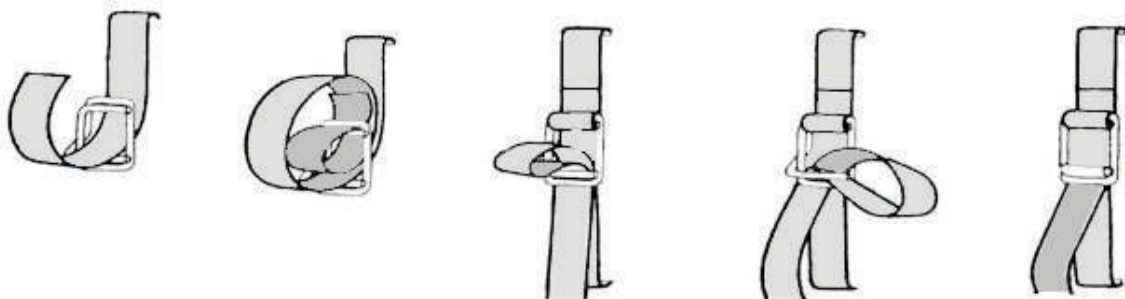


4. Press the handle down, so that the strap is cut and the tightener can be removed from the strap

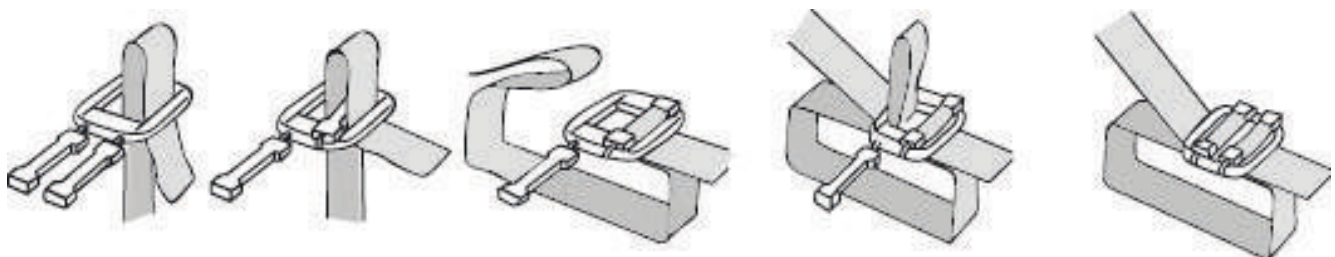
See instruction video



ECOSTRAP BUCKLE AND WG STRAP LOCK INSTRUCTIONS



PP STRAP LOCK INSTRUCTIONS



6. Jacks

Bottle jacks

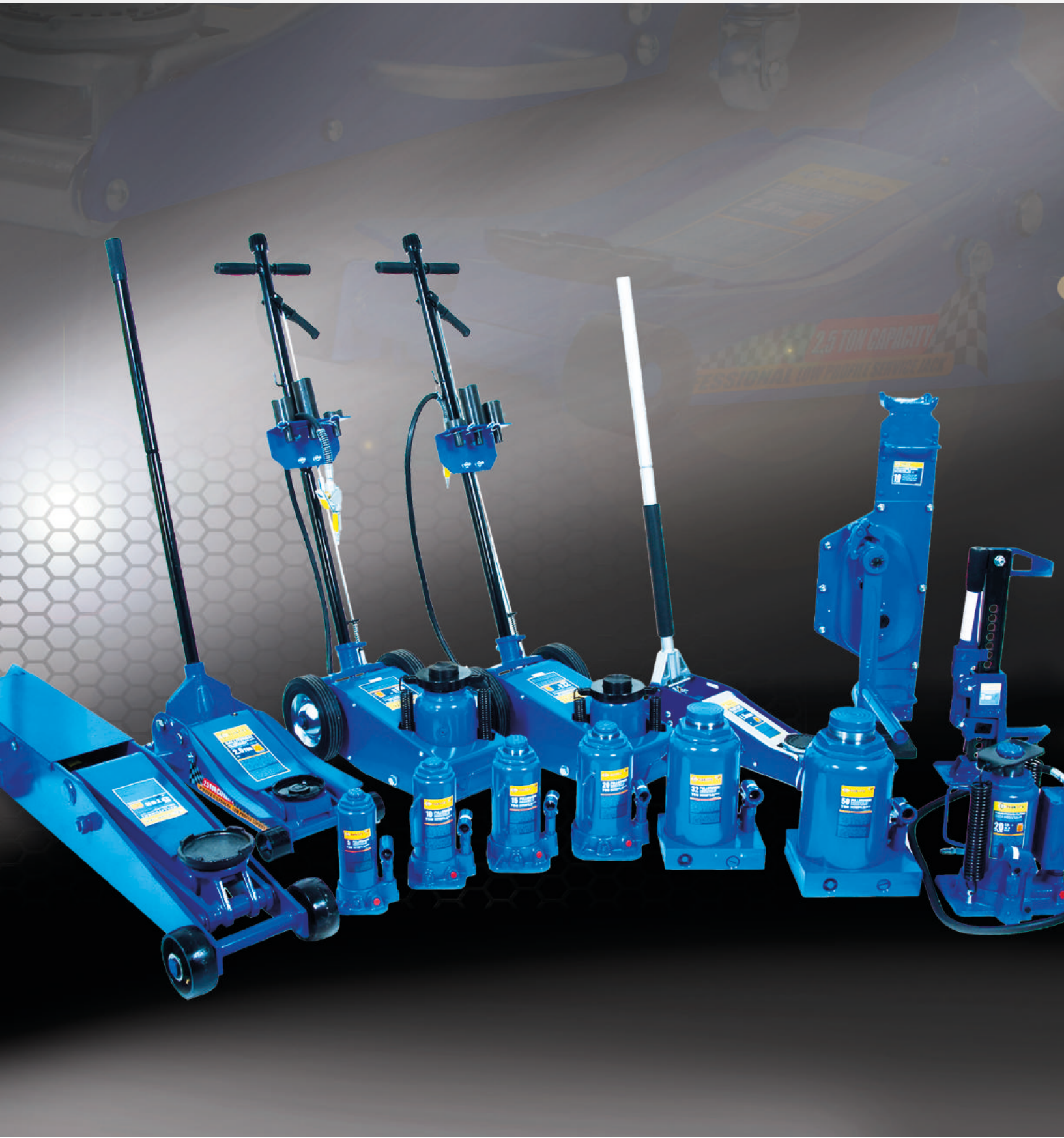
Floor jacks

Mechanical jacks

Toe jacks

Farm jacks

Low height lifting cylinders



BOTTLE JACKS

- also a low 10t model available (TUNKKI10PM)
- 5 - 20 t jacks have a rotatable adjustment piece, does not apply to the lowest model
- can also be used horizontally
- paint coated



Packed in display box



| WLL | Min height | Lifting height | Adjustable height | Max height | Weight approx. | Product code |
|------|------------|----------------|-------------------|------------|----------------|--------------|
| t | mm | mm | mm | mm | kg | |
| 2,0 | 168 | 100 | 48 | 316 | 2,35 | TUNKKI20P |
| 5,0 | 216 | 127 | 70 | 413 | 4,8 | TUNKKI50P |
| 10,0 | 230 | 150 | 80 | 460 | 6,6 | TUNKKI100P |
| 10,0 | 124 | 96 | - | 220 | 7,7 | TUNKKI10PM |
| 15,0 | 230 | 150 | 80 | 460 | 8,4 | TUNKKI160P |
| 20,0 | 242 | 150 | 60 | 452 | 10,8 | TUNKKI200P |
| 32,0 | 285 | 180 | - | 465 | 22,3 | TUNKKI300P |
| 50,0 | 300 | 180 | - | 480 | 32,2 | TUNKKI500P |

HYDRAULIC AIR BOTTLE JACK

- hydraulic jack operating with pressured air
- quick to use
- equipped with ¼ inch connector, which is changeable
- can also be operated normally with a lever
- paint coated



| WLL | Min height | Lifting height | Adjustment height | Max height | Weight | Product code |
|-----|------------|----------------|-------------------|------------|--------|--------------|
| t | mm | mm | mm | mm | kg | |
| 5 | 210 | 140 | 60 | 430 | 6,0 | TUNKKI05AIR |
| 12 | 265 | 165 | 80 | 510 | 13,5 | TUNKKI12AIR |
| 20 | 265 | 165 | 80 | 510 | 17,7 | TUNKKI20AIR |

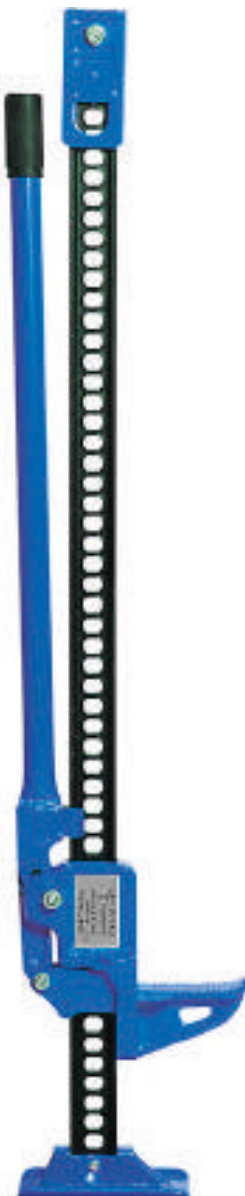
HYDRAULICAL TOE JACKS



- lifting from extremely low at the tip of the jack or from above the jack
- unbeatable tool for lifting and moving heavy machines and pieces etc.
- paint coated

| WLL | Max height from tip | Max height from top | Lowest height from tip | Lowest height from top | Weight | Product code |
|-----|---------------------|---------------------|------------------------|------------------------|--------|--------------|
| t | mm | mm | mm | mm | kg | |
| 5 | 230 | 573 | 20 | 370 | 20 | TUNKKI5H |
| 10 | 265 | 650 | 30 | 420 | 35 | TUNKKI10H |
| 25 | 273 | 720 | 58 | 505 | 109 | TUNKKI25H |

FARM JACKS



- for farms, off road equipment, garages etc.
- light and efficient
- paint coated

| WLL | Lifting point min height | Lifting point max height | Weight | Product code |
|--|--------------------------|--------------------------|--------|--------------|
| 130 - 300 mm 300 - 500 mm over 500 mm t | mm | mm | kg | |
| 3 | 125 | 318 | 11,0 | TUNKHATA3520 |
| 2 1,6 0,5 | 130 | 1060 | 13,0 | TUNKHATA3548 |
| 2 1,6 0,5 | 130 | 1325 | 14,5 | TUNKHATA3560 |



TUNKHATA3520

JACKS FOR LIFTING FROM THE SIDE OR TOP

- lifting with a fixed crank
- two different lifting points
- paint coated



| WLL | Min height | Minimum side lifting point height | Lifting height | Base size | Weight | Product code |
|-----|------------|-----------------------------------|----------------|-----------|------------|--------------|
| kg | mm | mm | mm | mm | approx. kg | |
| 3 | 730 | 75 | 350 | 130x 138 | 20 | TUNKKI03S |
| 5 | 730 | 70 | 300 | 140x170 | 28 | TUNKKI05S |
| 10 | 800 | 90 | 300 | 140x170 | 46 | TUNKKI10S |

TRUCK JACK

- two sizes 22t and 35t
- pressured air - hydraulic heavy weight jack
- required operating pressure 7,5-8,5 bar
- adjustment blocks of different size affecting the lifting height are included
- paint coated



| WLL | Min height | Max height | Lifting height | Weight | Product code |
|-----|------------|------------|----------------|--------|--------------|
| t | mm | mm | mm | kg | |
| 22 | 230 | 430 | 200 | 45,0 | TUNKKI22AIR |
| 35 | 245 | 490 | 245 | 46,0 | TUNKKI35AIR |

FLOOR JACK WITH AN ALUMINIUM BODY 1.5T

- high class light metal jack
- lifting capacity 1,5 t
- equipped with double cylinders

| WLL | Min height | Max height | Lifting height | Weight | Product code |
|-----|------------|------------|----------------|--------|--------------|
| t | mm | mm | mm | kg | |
| 1,5 | 90 | 358 | 268 | 14,3 | TUNKHA15AL |



Packed in display box

FLOOR JACK 2.5T

- low-profile floor jack
- durable steel body
- paint coated

| WLL | Min height | Max height | Lifting height | Weight | Product code |
|-----|------------|------------|----------------|--------|--------------|
| t | mm | mm | mm | kg | |
| 2,5 | 85 | 455 | 370 | 34,8 | TUNKHA25MA |



Packed in display box

FLOOR JACK 5T AND 10T

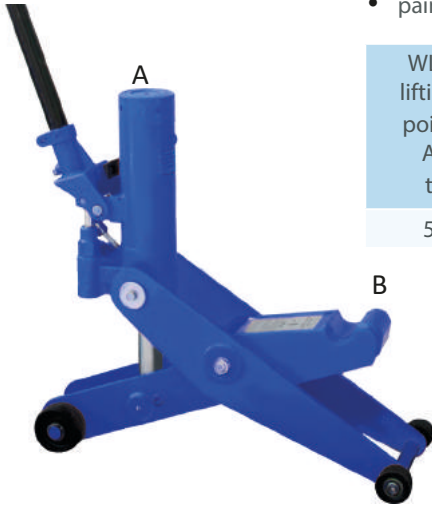
- long steel body
- lifting with either handle or with pedal
- lowering with handle
- paint coated

| WLL | Min height | Max height | Lifting height | Weight | Product code |
|-----|------------|------------|----------------|--------|--------------|
| t | mm | mm | mm | kg | |
| 5 | 150 | 560 | 410 | 87,0 | TUNKHA5PRO |
| 10 | 160 | 560 | 400 | 146,0 | TUNKHA10PRO |



FORKLIFT JACK

- designed for forklift use
- paint coated



| WLL lifting point A t | WLL lifting point B t | Max height A mm | Max height B mm | Min height A mm | Min height B mm | Weight kg | Product code |
|-----------------------|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------|--------------|
| 5 | 4 | 740 | 440 | 420 | 70 | 45,0 | TUNKTRU45 |

HYDRAULIC CYLINDERS

- lifting is performed hydraulically
- lifting cylinders always require an external pump
- WLL 5 - 150 t
- lifting heights 9 - 30 mm
- paint coated



| WLL t | Min height mm | Lifting height mm | Size mm | Operating pressure bar | Oil volume litres | Weight approx. kg | Product code |
|-------|---------------|-------------------|------------|------------------------|-------------------|-------------------|--------------|
| 5 | 40 | 9 | 63x44x40 | 500 | 0,012 | 0,75 | TUNKKI5SYL |
| 10 | 45 | 11 | 78x56x45 | 520 | 0,022 | 1,3 | TUNKKI10SYL |
| 15 | 50 | 13 | 92x68x50 | 600 | 0,04 | 2,0 | TUNKKI15SYL |
| 50 | 75 | 19 | 153x125x75 | 625 | 0,18 | 8,8 | TUNKKI50SYL |
| 75 | 85 | 21 | 186x155x85 | 600 | 0,13 | 15,3 | TUNKKI75SYL |
| 100 | 95 | 25 | 206x175x95 | 640 | 0,45 | 21,0 | TUNKKI100SYL |

HAND PUMPS FOR HYDRAULIC CYLINDERS

- hand operated hydraulic pumps for lifting cylinders
- three different sizes



| WLL bar | Oil flow rate with high pressure ml | Oil flow rate with low pressure ml | Oil volume l | Applicable to cylinders | Weight approx. kg | Product code |
|---------|-------------------------------------|------------------------------------|--------------|-------------------------|-------------------|--------------|
| 63 | 3,0 | 20,0 | 1,9 | 100-150t | 13,4 | TUNKKIPUMP3 |

7. Drum handling equipment, crane beams, crane scales and forklift accessories

Drum clamps and slings

Crane beams

Crane scales

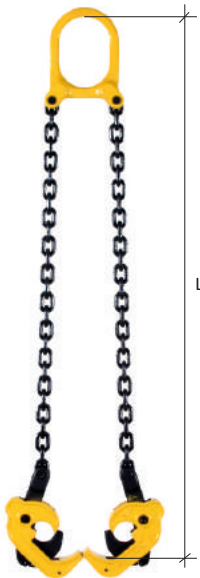
Load indicators

Forklift accessories

Snow chains



HARU DRUM VERTICAL LIFTER



- vertical lifting
- clamps are fixed firmly on a 2-leg chain sling
- suitable for barrels of various sizes
- paint coated
- safety factor 4 : 1

| WLL | Type | Length | Weight | Product code |
|------|------------|--------|------------|--------------|
| kg | | mm | approx. kg | |
| 1000 | for 1 drum | 690 | 3 | TYNRAHARU1 |

DRUM HORIZONTAL LIFTER



- lifting only horizontally
- adjusts automatically for different barrel sizes
- paint coated
- safety factor 4 : 1

| WLL | Type | Weight | Product code |
|------|-------------|------------|--------------|
| kg | | approx. kg | |
| 1000 | for 1 drum | 5 | TYRA01 |
| 2000 | for 2 drums | 10 | TYRA02 |

BARREL CLAMP FOR VERTICAL LIFTING



- lifting only vertically
- suitable for drums of various sizes
- paint coated
- safety factor 4 : 1

| WLL | Type | Weight | Product code |
|-----|------------|------------|--------------|
| kg | | approx. kg | |
| 600 | for 1 drum | 7 | TYTAR600 |

FORKLIFT DRUM CARRIER

- simple and quick attachment
- for handling steel- and plastic barrels
- paint coated



| WLL | Weight | Product code |
|-----|------------|--------------|
| kg | approx. kg | |
| 680 | 57 | TYNNTAR680 |

Delivery 2-3 weeks

MOBILE DRUM CARRIER

- for a 200 litre standard drum
- easy and quick to use
- paint coated
- with PU-wheels



| WLL | Weight | Product code |
|-----|------------|--------------|
| kg | approx. kg | |
| 250 | 45 | TYVA250 |

Drum can be moved in a vertical or horizontal position



BARREL BASE

- for storing and handling barrels
- solid steel structure



| WLL | Inner measurements | Height | Wheel diam. | Weight | Product code |
|-----|--------------------|--------|-------------|--------|--------------|
| kg | mm | mm | mm | kg | |
| 300 | 598 | 157 | 75 | 9,5 | TYSIALU |

DRUMS SPILL CONTAINMENT PALLET

- for storing 200 l barrels
- fork holes for safe transportation



| Volume | No. of barrels | Height | Width | Depth | Weight | Product code |
|--------|----------------|--------|-------|-------|--------|--------------|
| l | | mm | mm | mm | kg | |
| 200 | 1 | 435 | 865 | 865 | 60 | VALUALLAS200 |
| 400 | 2 | 435 | 1345 | 865 | 75 | VALUALLAS400 |
| 800 | 4 | 435 | 1345 | 1255 | 120 | VALUALLAS800 |

Delivery 4-5 weeks

LIFTING BEAMS

- available in multiple different types according to customers wishes
- as standard lifting beams A and B
- can be equipped with shackle and different types of hooks
- paint coated
- all beams delivered in 3-5 weeks

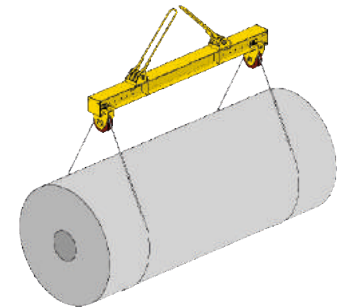
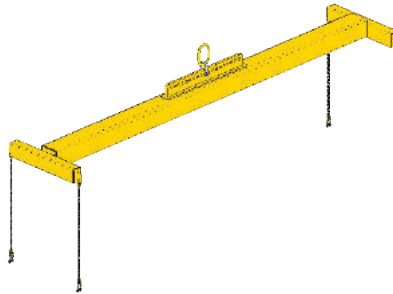
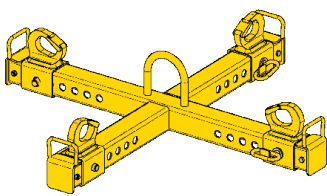
MODEL A



MODEL B



SPECIAL MAKE LIFTING BEAMS

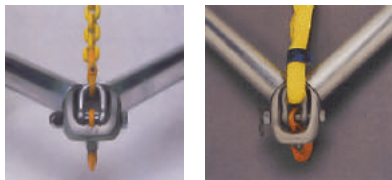


LIFTING FRAMES, ALUMINIUM

- collapsible aluminium lifting frame
- can be stored in small spaces when collapsed
- easy and quick to assemble
- perfect for, for example, lifting boats
- the beam is also available without hooks and roundsling

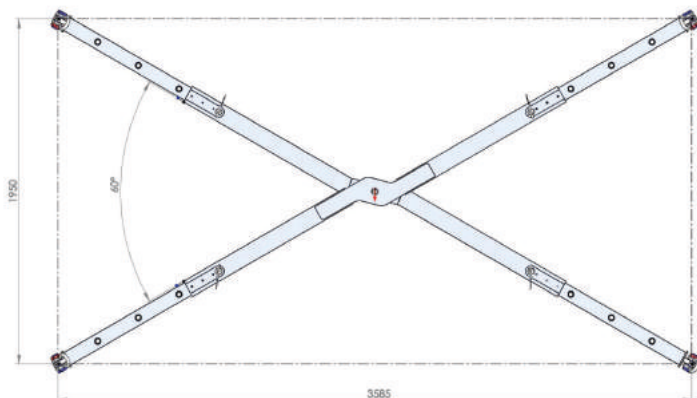
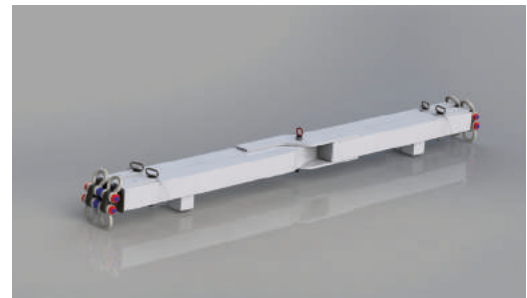
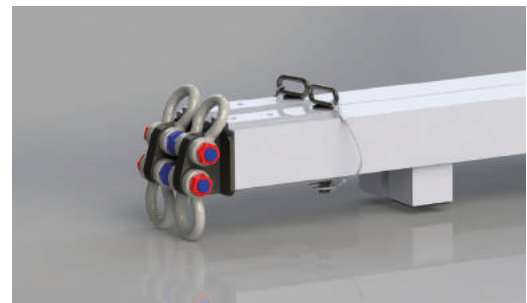
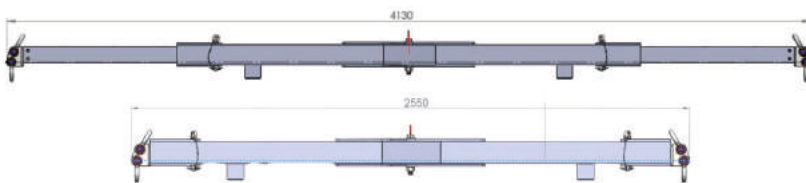
| Size | WLL | Lifting angle | Height | Sling length | Weight | Product code |
|-----------|------|---------------|--------|--------------|--------|--------------|
| m | kg | | m | m | kg | |
| 3,0 x 3,0 | 7000 | 110 | 1,5 | 2,5 | 42 | NOKE733AL |
| 3,0 x 2,4 | 7000 | 98 | 1,7 | 2,5 | 38 | NOKE7324AL |
| 2,4 x 2,4 | 7000 | 82 | 2,0 | 2,5 | 35 | NOKE72424AL |

Delivery 2-3 weeks



4-LEG TELESCOPIC LIFTING BEAM

- 4-leg foldable lifting beam
- material aluminum
- can be equipped with shackles
- equipped with base legs so beam can be extracted easily on the ground
- EN 13155

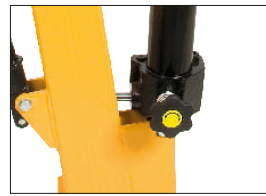



| WLL | Width min | Width max | Product code |
|-------|-----------|-----------|--------------|
| kg | m | m | |
| 10000 | 2,5 | 4,0 | NOSPXALU10 |

FOLDABLE BEAM LIFTS

- two sizes, capacities 1000 and 2000kg
- lifting bar can be adjusted longitudinally
- chrome coated cylinders
- equipped with overload protection
- foldable, so can be transported, for example, in a van
- paint coated

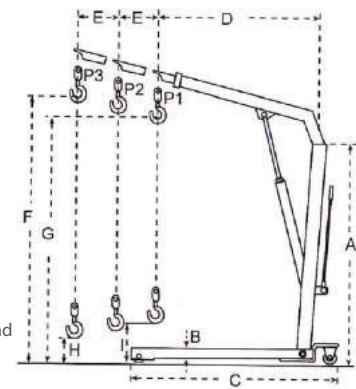
| Max loads | | | Measurements | | | | | | | | Weight | Product code |
|-----------|------|------|--------------|-----|------|------|-----|------|------|-----|--------|----------------|
| kg | | | mm | | | | | | | | kg | |
| P1 | P2 | P3 | A | B | C | D | E | F | G | I | | |
| 1000 | 800 | 700 | 1675 | 90 | 1630 | 1230 | 150 | 2445 | 2330 | 245 | 115 | PUNOS1000PROKT |
| 2000 | 1700 | 1500 | 1690 | 205 | 1900 | 1290 | 150 | 2705 | 2505 | 230 | 165 | PUNOS2000PROKT |



Lowering clutch equipped with function that automatically stops lowering if user lifts ones hand off the lowering clutch.



Lifting bar can be adjusted longitudinally



Fork's Height from the ground 85 mm

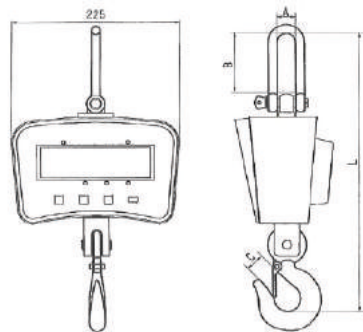


SMALL CRANE SCALES

- in-built rechargeable batteries with an operation time of appr. 100 hours at one charge
- equipped with wireless remote control with reset, hold, tare, unit change and switch off
- clear LCD screen
- precision class OIML III and protection class IP54
- delivery does not contain an individual calibration certificate



| Max load | Display accuracy | A | B | C | L | Weight | Product code |
|----------|------------------|----|----|----|-----|------------|--------------|
| kg | kg | mm | mm | mm | mm | approx. kg | |
| 1000 | 0,50 | 25 | 75 | 20 | 335 | 4,2 | KV1ABT |

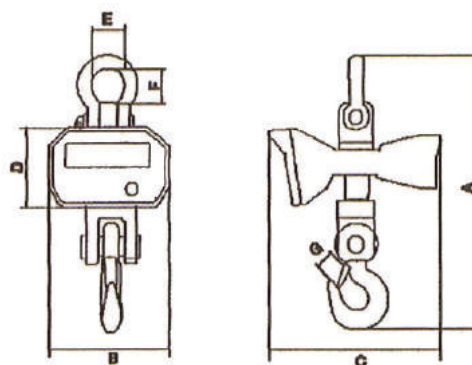


CRANE SCALES

- also available for bigger loads
- battery charger is included
- operating time at one charge is appr. 100 hours
- equipped with wireless remote control with reset, hold, tare, unit change and switch off
- precision class OIML III and protection class IP54
- delivery does not contain an individual calibration certificate



| Max load | Display accuracy | A | B | C | D | E | F | G | Weight | Product code |
|----------|------------------|------|-----|-----|-----|-----|-----|----|------------|--------------|
| kg | kg | mm | mm | mm | mm | mm | mm | mm | approx. kg | |
| 3000 | 1,00 | 550 | 230 | 340 | 150 | 60 | 80 | 40 | 17,0 | KV3ABT |
| 5000 | 2,00 | 690 | 230 | 340 | 150 | 100 | 120 | 50 | 25,0 | KV5ABT |
| 10000 | 5,00 | 820 | 230 | 340 | 150 | 100 | 120 | 55 | 34,0 | KV10ABT |
| 20000 | 10,00 | 1120 | 230 | 360 | 155 | 140 | 220 | 90 | 67,0 | KV20ABT |

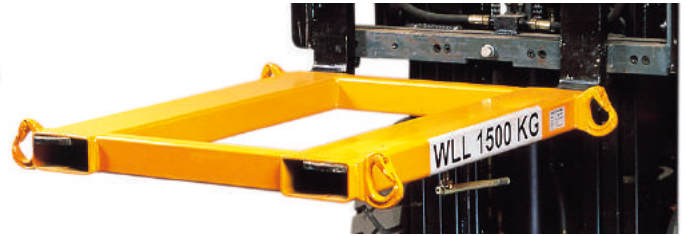


LIFTING ADAPTERS

The lifting adapters enable the use of a forklift as a crane. All models can be rapidly attached to the forklift's forks.



TRUNP2 / TRUNP2.52 / TRUNP5
Rotating latch hook as a standard



TRUNP15SS

| WLL kg | Forklift's fork max. width x height mm | Weight kg | Product code |
|-----------|--|--------------|--------------|
| 1000 | 145 x 55 | 20 | TRUNP2 |
| 2500 | 145 x 55 | 28 | TRUNP2.52 |
| 5000 | 190 x 90 | 49 | TRUNP5 |
| 1500 | 100 x 50 | | TRUNP15SS |

DIGITAL LOAD INDICATOR



- can be used normally as a crane scale or for example to measure pulling power
- LCD screen
- uses AA batteries, operating time at one charge is over 200 h
- functions: reset, taring, hold, automatic power off, battery life display, overload warning, switching measurement unit
- can be equipped with shackle, hook etc.
- delivery does not contain an individual calibration certificate
- safety factor 4 : 1

| Max load kg | Accuracy kg | Material | Width mm | Height mm | Depth mm | Reikien halk. mm | Weight kg | Product code |
|----------------|----------------|-----------------|-------------|--------------|-------------|------------------------|--------------|-----------------|
| 3000 | 1,00 | Aluminum | 90 | 230 | 30 | 27 | 1,7 | KV3KI |
| 5000 | 2,00 | Stainless steel | 90 | 230 | 30 | 32 | 3,4 | KV5KI |
| 10000 | 5,00 | Stainless steel | 90 | 280 | 48 | 32 | 6,7 | KV10KI |
| 20000 | 10,00 | Alloy steel | 90 | 350 | 60 | 50 | 9,0 | KV20KI |

Can be equipped with shackles and different types of hooks
(Ordered separately)



ADJUSTABLE CRANE

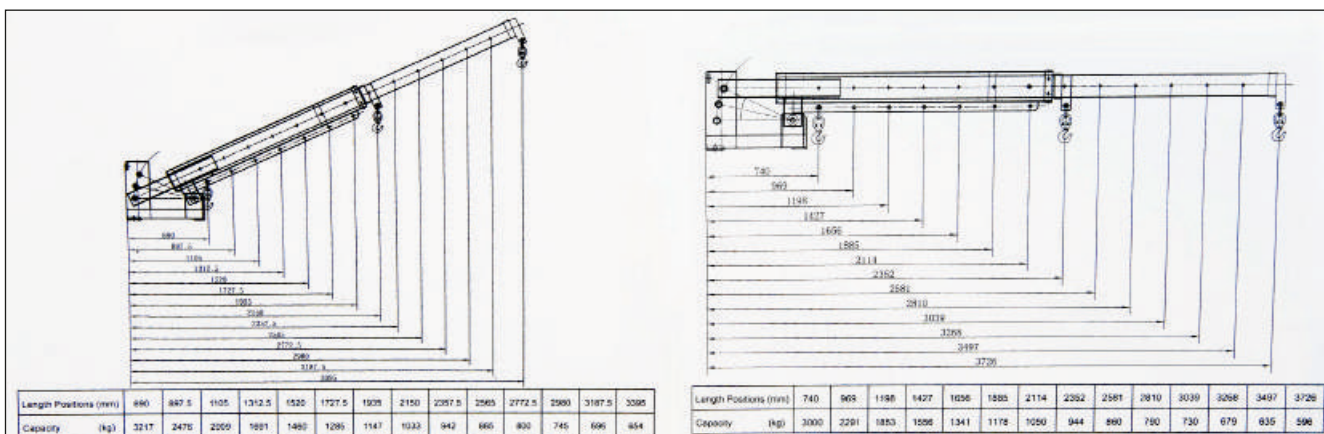
- enables the use of a forklift as a crane
- three different lift angles and rapid attachment to forklift's forks
- the location of the hook is adjustable between 980 – 3700 mm
- two rotating latch hooks as a standard



| WLL | Forklift's fork max. size mm | Product code |
|------------|------------------------------|--------------|
| kg | | |
| 596-3000kg | 80 x 160 | TRUKPU3000 |

When using the crane, note the max WLL of the forklift!

WLLt



EXTENDED FORKS



- easy and rapid way to increase the length of the forklift's forks
- extremely strong, solid structure
- structure prevents the extended forks from moving

| Length mm | Forklift's fork max. size mm | Product code (1 pcs) |
|--------------|------------------------------------|-------------------------|
| 1800 | 40x100 | TRUJA401001800 |
| 1800 | 45X120 | TRUJA451201800 |
| 1800 | 50X150 | TRUJA501501800 |
| 2000 | 40X100 | TRUJA401002000 |
| 2000 | 45X120 | TRUJA451202000 |
| 2000 | 50X150 | TRUJA501502000 |
| 2200 | 40X100 | TRUJA401002200 |
| 2200 | 50X125 | TRUJA501252200 |
| 2200 | 60X150 | TRUJA601502200 |
| 2400 | 50X125 | TRUJA501252400 |

Note!
The original forks of the forklift have to be at least 60 % of the length of the extended forks!

Delivery 3-5 days

SNOW CHAINS FOR FORKLIFTS

- due to the compactness of the chain, driving is smooth
- the chain is easy and quick to assemble
- the chains on the tract are square-shaped without spikes, thus making it possible to drive also indoors



ASK ALSO ABOUT OTHER SIZES AND SNOW CHAINS FOR TRUCKS, TRACTORS AND AGRICULTURAL MACHINES!

MODEL 1

| Tire size | Material strength mm | Weight kg/pair | Product code (1 kpl) |
|---|-------------------------|-------------------|-------------------------|
| 12.00-20 | 7,0 | 56,0 | EOTRUCK1200207 |
| 250-15 | 5,7 | 23,0 | EOTRUCK25015 |
| 250/70 -12, 27x10 -12, 28x9 -15, 8.15 -15 | 5,7 | 20,0 | EOTRUCK28915 |
| 250/70 -12, 27x10 -12, 28x9 -15, 8.15 -15 | 7,0 | 26,0 | EOTRUCK289157 |
| 300-15,32X12.1-15,12-16.5, 33/12.5-16 | 5,7 | 26,0 | EOTRUCK30015 |
| 300-15,32X12.1-15,12-16.5 | 7,0 | 38,0 | EOTRUCK300157 |
| 6.50-10 | 5,7 | 15,0 | EOTRUCK65010 |
| 7.00-12 | 5,7 | 17,0 | EOTRUCK70012 |
| 7.00-12 | 7,0 | 23,0 | EOTRUCK700127 |
| 7.00-15,205-16,215/80-16 | 5,7 | 20,0 | EOTRUCK70016 |
| 8.25-15 | 5,7 | 20,0 | EOTRUCK82515 |
| 8.25-15, 245/70-19.5 | 7,0 | 35,0 | EOTRUCK825157 |

Delivery 3-5 days

MODEL 2

| Width | Rim | Weight kg/pair | Product code (1 pcs) |
|-----------|-------|-------------------|-------------------------|
| 7.00- | 12" | 28,0 | OL93587011 |
| 8.25- | 15" | 39,0 | OL93588216 |
| 28X9- | 15" | 32,0 | OL93582890 |
| 27x10- | 12" | 31,0 | OL93580271 |
| 7.00- | 15" | 33,0 | OL93580516 |
| 235/75- | 17,5" | 39,0 | OL93582317 |
| 10- | 16,5" | 37,0 | OL93581015 |
| 23x9 | 10" | 24,0 | OL93580231 |
| 28x12.5- | 15" | 37,0 | OL93582815 |
| 31x15.50- | 15" | 44,0 | OL93580316 |
| 23x10.5- | 12" | 25,0 | OL93580222 |

Delivery 3-5 days

8. Winches

Electric winches 230V / 380V

Direct current winches 12V / 24V

Electric wire winches

Trailer winches

Wire rope winches



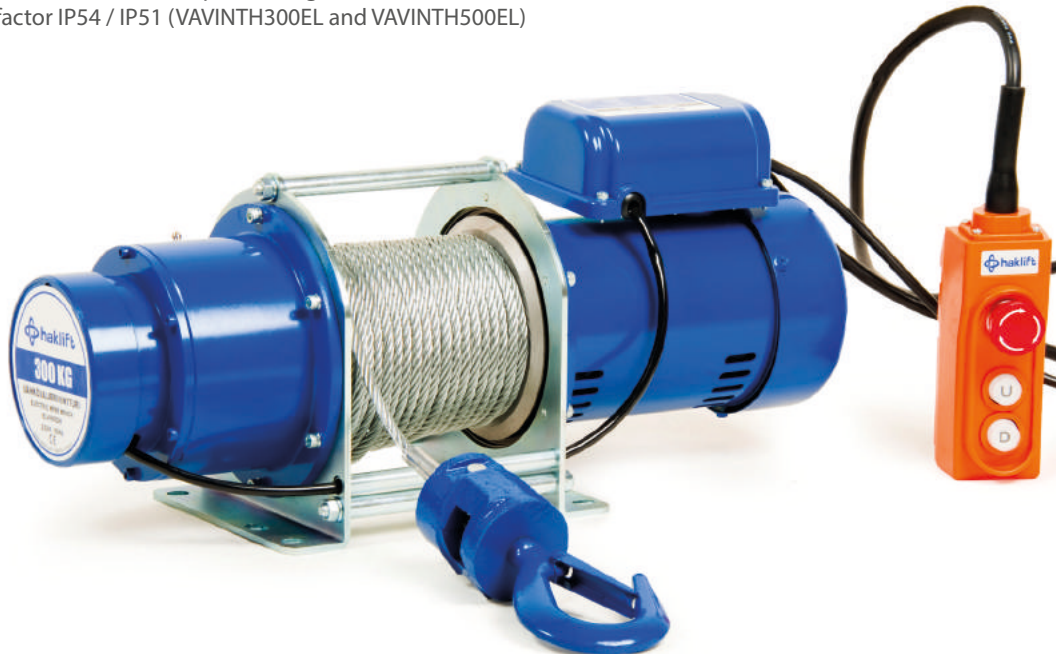
ELECTRIC WINCHES 230V AND 380V / 50 Hz

- extremely light, but powerful winch with an attachment hook
- equipped with overload protector
- carbon brush motor



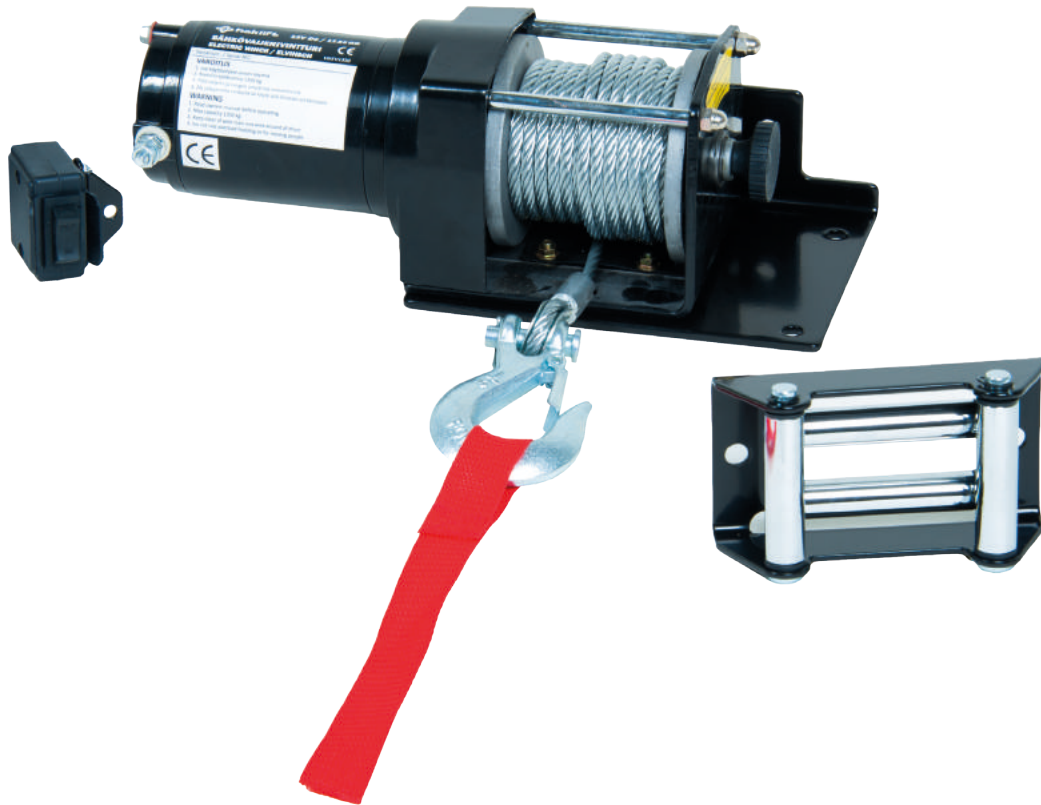
| Max lifting and pulling capacity kg | Voltage | Steel wire diam. (mm) x length (m) | Engine kW | Speed m/min | Remote control cable m | Power cable m | ED% | Measures W x L x H mm | Weight kg | Product code |
|-------------------------------------|---------|------------------------------------|-----------|-------------|------------------------|---------------|-----|-----------------------|-----------|--------------|
| 500 | 230V | 6 x 30 | 1,30 | 7 | 2 | 0,5 | 40 | 500x250x330 | 21 | VAVIN500MINI |

- quality winches for professional use
- equipped with steel wire rope, rotating latch hook and automatic brake
- safety factor IP54 / IP51 (VAVINTH300EL and VAVINTH500EL)



| Max lifting and pulling capacity kg | Voltage | Steel wire diam. (mm) x length (m) | Engine kW | Speed m/min | Remote control cable m | Power cable m | ED% | Measures W x L x H mm | Weight kg | Product code |
|-------------------------------------|---------|------------------------------------|-----------|-------------|------------------------|---------------|-----|-----------------------|-----------|---------------|
| 300 | 230V | 7 x 30 | 0,74 | 15 | 2 | 0,5 | 40 | 250x201x233 | 39 | VAVINTH300EL |
| 500 | 380V | 8 x 45 | 1,47 | 21 | 2 | 0,5 | 40 | 710x310x285 | 76 | VAVINTH500EL |
| 1000 | 380V | 10 x 45 | 2,20 | 12 | 2 | 0,5 | 40 | 1120x385x340 | 145 | VAVINTH1000EL |
| 2000 | 380V | 12 x 70 | 3,67 | 12 | 10 | 1,5 | 40 | 1290x590x520 | 392 | VAVINTH2000EL |

ELECTRIC WINCH FOR VEHICLES DC 12V



- permanent magnetic motor
- equipped with steel rope and latch hook
- with roll guide for steel rope and separate attachment plate
- to be used with removable cable remote control
- wire free pull

| Maximum pulling capacity kg | Voltage | Steel wire diam. (mm) x Length (m) | Engine power kW | Pulling speed 0kg-max m/min | Measures W x L x H mm | Remote control cable length m | Weight kg | Product code |
|-----------------------------|---------|------------------------------------|-----------------|-----------------------------|-----------------------|-------------------------------|-----------|--------------|
| 1133 | 12V | 4,8 x 12,0 | 0,75 | 3,2-1,0 | 283 x 99 x 105 | 2,8 | 6,5 | VIATV1133 |

ELECTRIC WIRE HOIST FOR LIFTING AND PULLING 230V / 50Hz



Packed in display box

- light and easy to use electric wire hoist for lifting and pulling
- two models 250 ja 450 kg
- remote control
- equipped with swivel hook and overload detector

| WLL | Voltage | Engine | Wire length | Weight | Product code |
|-----|---------|--------|-------------|--------|--------------|
| kg | | kW | m | kg | |
| 250 | 230V | 1,2 | 8,0 | 7,0 | VANOS250 |
| 450 | 230V | 1,2 | 4,6 | 7,0 | VANOS450 |

BATTERY OPERATED ELECTRIC WIRE HOIST FOR LIFTING AND PULLING 24V



Packed in display box

- light and easy to use electric wire hoist for lifting and pulling
- stepless power control
- 2 powerful 24V NiMh batteries and AC power charger
- equipped with swivel hook and overload detector

| WLL | Voltage | Engine | Wire length | Weight | Product code |
|-----|---------|--------|-------------|--------|--------------|
| kg | | kW | m | kg | |
| 450 | 24V | 0,75 | 4,6 | 9,7 | VANOS450A |

TRAILER WINCHES



VINT600AT



VINT900AT



VINT800H
Packed in display box

- high quality pulling winches for boat and car trailers
- 800kg winch with two traction gears and mechanical lever brake
- 600kg and 900kg painted steel winches, and stainless steel models with encased automatic brake

| Material | Maximum pulling capacity | Strap width | Strap length | Weight | Product code |
|-------------------|--------------------------|-------------|--------------|--------|--------------|
| | kg | mm | m | kg | |
| steel, painted | 600 | 50 | 8.0 | 4,4 | VINT600AT |
| steel, painted | 825 | 50 | 8.0 | 8,0 | VINT900AT |
| steel, galvanized | 800 | 50 | 8.0 | 4,9 | VINT800H |

SPARE STRAP TO WINCHES



- equipped with a hook
- strap width 50 mm
- material polyester
- packed in a plastic bag with a barcode

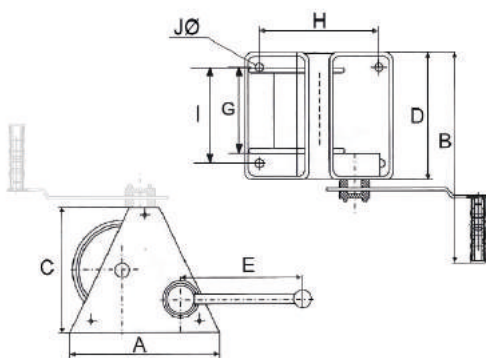
| Length | Product code |
|--------|--------------|
| m | |
| 8,0 | VV20008 |

STEEL WIRE ROPE WINCHES

- high class pulling/lifting winches for professional use
- two models, one with handle on the side of the winch and other with handle on the top
- equipped with automatic friction brake that operates in both directions
- can be mounted in various ways, for example on floor or wall
- delivered without wire, which has to be ordered separately



| Model | WLL | Max. wire diameter | Max. wire length with drum | Weight (without wire) | Product code |
|-------------|------|--------------------|----------------------------|-----------------------|--------------|
| | kg | mm | m | kg | |
| side handle | 150 | 4 | 22 | 5,5 | VAVIN150 |
| side handle | 300 | 4/5 | 40 | 16,9 | VAVIN250 |
| side handle | 500 | 6/8 | 20 | 18,8 | VAVIN500 |
| side handle | 1000 | 10 | 30 | 38,0 | VAVIN1000 |
| top handle | 250 | 4/5 | 20 | 10,0 | VAVIN250Y |
| top handle | 500 | 6/8 | 25 | 17,0 | VAVIN500Y |
| top handle | 1000 | 10 | 30 | 35,0 | VAVIN1000Y |



Measures

| Product code | A mm | B mm | C mm | D mm | E mm | G mm | H mm | I mm | JØ mm |
|--------------|------|------|---------|------|------|------|---------|-------|-------|
| VAVIN150 | 180 | 325 | 150 | 150 | 350 | 102 | 152 | 112.5 | 8.5 |
| VAVIN250 | 240 | 385 | 200 | 200 | 250 | 122 | 196 | 143 | 12 |
| VAVIN500 | 240 | 385 | 200 | 200 | 250 | 122 | 200 | 145 | 12 |
| VAVIN1000 | 412 | 485 | 300 | 300 | 350 | 195 | 367 | 235 | 17 |
| VAVIN250Y | 150 | - | 150+170 | 200 | 240 | 128 | 136/100 | 114 | 10.5 |
| VAVIN500Y | 180 | - | 180+180 | 260 | 240 | 182 | 183/130 | 141 | 12 |
| VAVIN1000Y | 300 | - | 300+190 | 300 | 340 | 198 | 247 | 186 | 17 |

WIRE ROPES FOR WINCHES WITH LATCH HOOK WITH SWIVEL



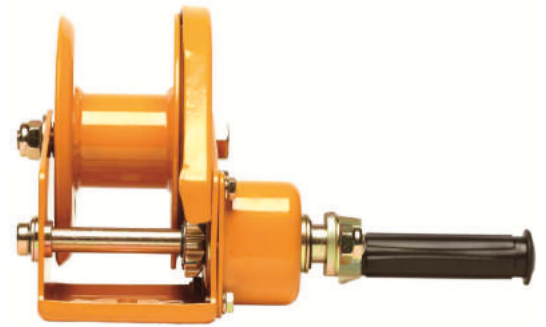
| Fits to winch kg | Length m | Rope size mm | Product code |
|------------------|----------|--------------|----------------|
| 150/250/300 | 12 | 4 | VAVIN250VA412 |
| 500 | 14 | 6 | VAVIN500VA614 |
| 1000 | 30 | 10 | VAVIN100VA1030 |

Tiger winches are manufactured with over 50 years experience and high standards for different industries. Products are durable, reliable, safe to use and meet industry standards. All winches can be used for lifting purposes.

Here we are introducing few available winch models. Contact our sales, and we will find solution for your needs.



Entertainment 909 kg / 12 m
Available with one or two reels and with or without handle. (two reel model in the picture). Can be used for lifting.



Silent model 360 / 550 / 800 / 1180 kg
Equipped with patented automatic braking system, which guarantees the silent use. Suitable for using in schools, hospitals and theaters. Can be used for lifting.



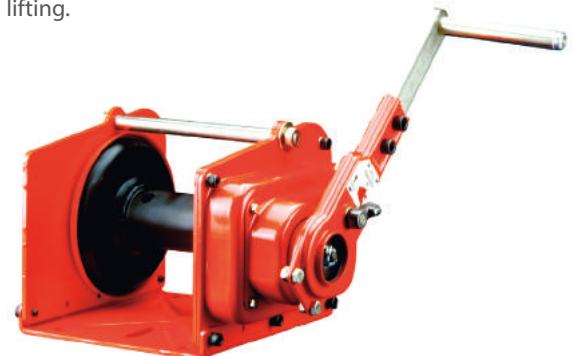
Corrosion resistant 360 / 550 / 800 / 1180 kg, 9 - 10 m
Winch is treated with OCP (Organic Compound Protection) coating, which guarantees very good protection, for example, against salt water. Equipped with automatic brake, which keeps the load in place. The brake and gears are protected from dust and rain. Suitable for wire or strap. Can be used for lifting.



Standard model with brake 360 / 550 / 800 / 1180 kg, 9 - 10 m
High quality winch, which is equipped with automatic brake. The brake and gears are protected from dust and rain. Suitable for wire or strap. Can be used for lifting.



Ceiling mountable 2270 kg / 11 m
With shared reel, which makes reeling possible from opposite directions with two wires. Equipped with brake, which keeps the load in place. The brake and gears are protected from dust and rain. Can be used for lifting.



1000 kg / 25m
Equipped with automatic brake, which keeps the load in place. The brake and gears are protected from dust and rain. Can be used for lifting.

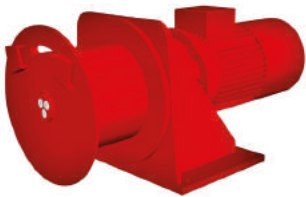
RED ROOSTER AIR COMPRESSED WINCHES



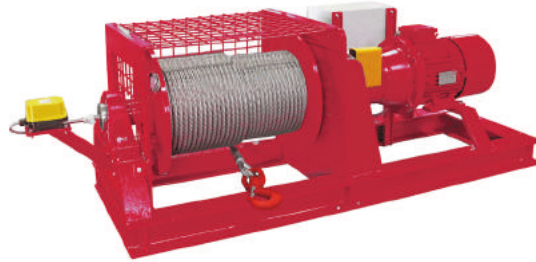
RED ROOSTER compressed air hoists and winches offer wide selection for industrial and maritime use. All Red Rooster winches and hoists are according to ATEX 94/9/EC directive and may be used in areas and surroundings with danger of fire or explosion due to gases, chemicals or dust. Red Rooster winches and hoists operate mechanically with compressed air hence causing no sparks unlike electric winches and hoists.

Red Rooster winches and hoists have been used and developed for 25 years and they are safe, easy to use and they function reliably even in difficult circumstances.

Note! In order to operate properly the winches need high quality air compression net equipped with moisture remover and lubrication system. Components required can be delivered with the product.



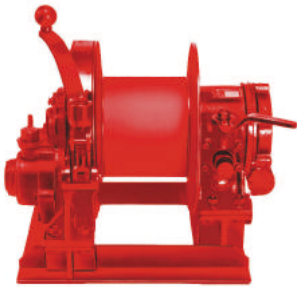
FD-series, 8 models
Max. WLL
800 - 5250 kg



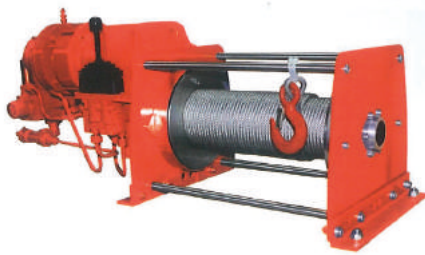
SB-series for lifting, 14 models
Max. WLL
1200 - 20000 kg



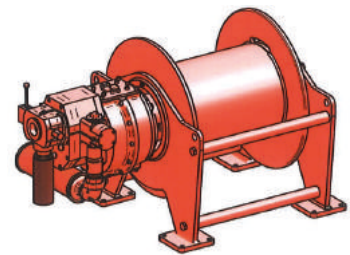
LV-series, 6 models
Max. WLL
250 - 2000 kg



RRI-series, 4 models
Max. WLL
500 - 2000 kg



PFW-L-series for lifting, 6 models
Max. WLL
500 - 3000 kg



OAW offshore-series, 14 models
Max. WLL
1955 - 14980 kg

Ask more about winches
from our sales!
Every product is tailored for
the customer's needs.

9. Lifting points

Grade 8

Stainless steel

Grade 10

Containers lifting lugs

With ball bearings

With bolt / weld-on



Instructions for using lifting points

In multiple leg lifting, the angles are side angles, the angles between slings are correspondingly 0 – 90° (0-45°) and 90 – 120° (45-60°).

Lifting eyes with thread must always be tightened with a tool onto the piece to be lifted. Avoid making it too tight, however.

If the lifter hook is attached directly to the lifting eye, it must fit in a way that the load is directed towards the hook bottom, not the tip.

If a lifting eye with a long thread is used in a hole with not thread and on the other end, a nut, you must ensure that the hole diameter is max. 10% bigger than that of the lifting eye and that the nut is tightened carefully and min. strength category 8.8. The screw must be so long that the entire length of the nut can be screwed to it.

DIN 580 and DIN 582 lifting points the operating temperature is -20 - (+)200°C

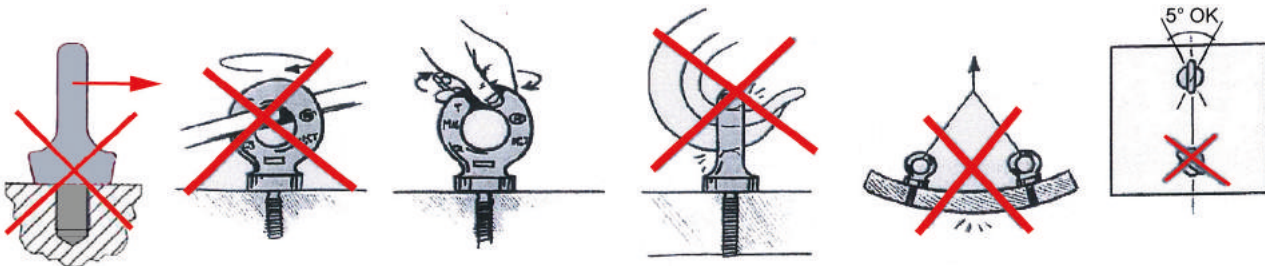
Minimum thread lengths for different materials when using screw eyes,
d = lifting eye thread diameter

| Steel | Cast iron | Aluminum | Aluminum-magnesium alloy |
|-------|-----------|----------|--------------------------|
| 1 x d | 1,25 x d | 2 x d | 2,5 x d |

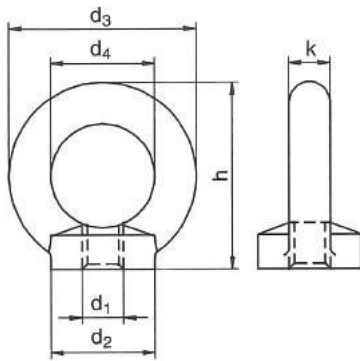
Grade 8 lifting eyes

Lifting eye must be attached by twisting with hand or using a tool suitable for the work so that leg piece of the eye touches the surface of the item being lifted with its whole plane. Do not exceed the tightening torque given.

Secure lifting eyes arc pointing towards lifting direction. In multi legged lifts eye arc must also be towards the direction of the lift. DIN 580 / DIN 582 type lifting eyes must not be loaded horizontally.



LIFTING EYE NUT FOR VERTICAL LIFTING DIN 582



| Size | d2 | d3 | d4 | h | k | Pack size | Weight | Product code |
|------|-----|-----|-----|------|----|-----------|--------|--------------|
| d1 | mm | mm | mm | mm | mm | pcs | kg | |
| M 6 | 20 | 36 | 20 | 36 | 8 | 50 | 0,048 | NSM06 |
| M 8 | 20 | 36 | 20 | 36 | 8 | 50 | 0,05 | NSM08 |
| M10 | 25 | 45 | 25 | 45 | 10 | 50 | 0,09 | NSM10 |
| M12 | 30 | 54 | 30 | 53 | 12 | 25 | 0,16 | NSM12 |
| M14 | 35 | 63 | 35 | 62 | 14 | 25 | 0,24 | NSM14 |
| M16 | 35 | 63 | 35 | 62 | 14 | 10 | 0,24 | NSM16 |
| M18 | 40 | 72 | 40 | 71 | 16 | 10 | 0,36 | NSM18 |
| M20 | 40 | 72 | 40 | 71 | 16 | 10 | 0,36 | NSM20 |
| M22 | 45 | 81 | 45 | 80,5 | 18 | 1 | 0,58 | NSM22 |
| M24 | 50 | 90 | 50 | 90 | 20 | 1 | 0,72 | NSM24 |
| M27 | 55 | 96 | 53 | 97 | 22 | 1 | 0,7 | NSM27 |
| M30 | 65 | 108 | 60 | 109 | 24 | 1 | 1,32 | NSM30 |
| M33 | 65 | 108 | 60 | 109 | 24 | 1 | 1,3 | NSM33 |
| M36 | 75 | 126 | 70 | 128 | 28 | 1 | 2,08 | NSM36 |
| M39 | 85 | 144 | 80 | 147 | 32 | 1 | 2,02 | NSM39 |
| M42 | 85 | 144 | 80 | 147 | 32 | 1 | 3,11 | NSM42 |
| M45 | 100 | 166 | 90 | 168 | 38 | 1 | 3,04 | NSM45 |
| M48 | 100 | 166 | 90 | 168 | 38 | 1 | 5,02 | NSM48 |
| M52 | 110 | 184 | 100 | 187 | 42 | 1 | 4,95 | NSM52 |
| M56 | 110 | 184 | 100 | 187 | 42 | 1 | 6,69 | NSM56 |
| M64 | 120 | 206 | 110 | 208 | 48 | 1 | 9,3 | NSM64 |

Larger sizes and inch sizes also available

IP-PACKED

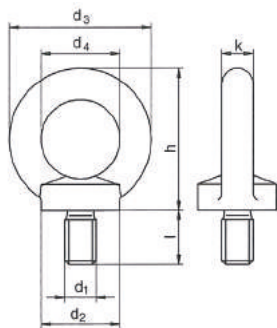


| IP pack pcs | Pack size pcs | Product code |
|-------------|---------------|--------------|
| 4 | 15 | NSM06IP4 |
| 2 | 15 | NSM08IP2 |
| 2 | 15 | NSM10IP2 |
| 1 | 15 | NSM12IP1 |

WLL

| Size | WLL t | WLL t | WLL t | WLL t | WLL t 0 - 45° | WLL t 45 - 60° | WLL t 0 - 45° | WLL t 45 - 60° |
|------|-------|-------------|-------|-------------|---------------|----------------|---------------|----------------|
| M6 | 0,08 | not allowed | 0,16 | not allowed | 0,05 | not allowed | 0,08 | not allowed |
| M8 | 0,14 | not allowed | 0,28 | not allowed | 0,10 | not allowed | 0,14 | not allowed |
| M10 | 0,23 | not allowed | 0,46 | not allowed | 0,17 | not allowed | 0,23 | not allowed |
| M12 | 0,34 | not allowed | 0,68 | not allowed | 0,24 | not allowed | 0,34 | not allowed |
| M14 | 0,34 | not allowed | 0,68 | not allowed | 0,24 | not allowed | 0,34 | not allowed |
| M16 | 0,70 | not allowed | 1,40 | not allowed | 0,50 | not allowed | 0,70 | not allowed |
| M18 | 0,70 | not allowed | 1,40 | not allowed | 0,50 | not allowed | 0,70 | not allowed |
| M20 | 1,20 | not allowed | 2,40 | not allowed | 0,83 | not allowed | 1,20 | not allowed |
| M22 | 1,20 | not allowed | 2,40 | not allowed | 0,83 | not allowed | 1,20 | not allowed |
| M24 | 1,80 | not allowed | 3,60 | not allowed | 1,27 | not allowed | 1,80 | not allowed |
| M27 | 2,50 | not allowed | 5,00 | not allowed | 1,78 | not allowed | 2,50 | not allowed |
| M30 | 3,20 | not allowed | 6,40 | not allowed | 2,28 | not allowed | 3,20 | not allowed |
| M33 | 3,20 | not allowed | 6,40 | not allowed | 2,28 | not allowed | 3,20 | not allowed |
| M36 | 4,60 | not allowed | 9,20 | not allowed | 3,28 | not allowed | 4,60 | not allowed |
| M39 | 4,60 | not allowed | 9,20 | not allowed | 3,28 | not allowed | 4,60 | not allowed |
| M42 | 6,30 | not allowed | 12,60 | not allowed | 4,50 | not allowed | 6,30 | not allowed |
| M45 | 6,30 | not allowed | 12,60 | not allowed | 4,50 | not allowed | 6,30 | not allowed |
| M48 | 8,60 | not allowed | 17,20 | not allowed | 6,10 | not allowed | 8,60 | not allowed |
| M52 | 8,60 | not allowed | 17,20 | not allowed | 6,10 | not allowed | 8,60 | not allowed |
| M56 | 11,50 | not allowed | 23,00 | not allowed | 8,30 | not allowed | 11,50 | not allowed |
| M64 | 16,00 | not allowed | 32,00 | not allowed | 11,00 | not allowed | 16,00 | not allowed |
| M72 | 20,00 | not allowed | 40,00 | not allowed | 14,28 | not allowed | 20,00 | not allowed |
| M80 | 28,00 | not allowed | 56,00 | not allowed | 20,00 | not allowed | 28,00 | not allowed |
| M100 | 40,00 | not allowed | 80,00 | not allowed | 28,57 | not allowed | 40,00 | not allowed |

LIFTING EYE SCREW FOR VERTICAL LIFTING DIN 580



| Size | d1 | d2 | d3 | d4 | h | k | l | Pack size pcs | Weight kg | Product code |
|------|-----|-----|-----|------|----|------|----|---------------|-----------|--------------|
| M 6 | 20 | 36 | 20 | 36 | 8 | 13 | 50 | 0,05 | NSR06 | |
| M 8 | 20 | 36 | 20 | 36 | 8 | 13 | 50 | 0,06 | NSR08 | |
| M10 | 25 | 45 | 25 | 45 | 10 | 17 | 50 | 0,11 | NSR10 | |
| M12 | 30 | 54 | 30 | 53 | 12 | 20,5 | 25 | 0,18 | NSR12 | |
| M14 | 35 | 63 | 35 | 62 | 14 | 27 | 25 | 0,28 | NSR14 | |
| M16 | 35 | 63 | 35 | 62 | 14 | 27 | 10 | 0,28 | NSR16 | |
| M18 | 40 | 72 | 40 | 71 | 16 | 30 | 10 | 0,45 | NSR18 | |
| M20 | 40 | 72 | 40 | 71 | 16 | 30 | 10 | 0,45 | NSR20 | |
| M22 | 45 | 81 | 45 | 80,5 | 18 | 35 | 1 | 0,67 | NSR22 | |
| M24 | 50 | 90 | 50 | 90 | 20 | 36 | 1 | 0,87 | NSR24 | |
| M27 | 55 | 96 | 53 | 97 | 22 | 39 | 1 | 0,88 | NSR27 | |
| M30 | 65 | 108 | 60 | 109 | 24 | 45 | 1 | 1,66 | NSR30 | |
| M33 | 65 | 108 | 60 | 109 | 24 | 45 | 1 | 1,66 | NSR33 | |
| M36 | 75 | 126 | 70 | 128 | 28 | 54 | 1 | 2,65 | NSR36 | |
| M39 | 85 | 144 | 80 | 147 | 32 | 63 | 1 | 4,03 | NSR39 | |
| M42 | 85 | 144 | 80 | 147 | 32 | 63 | 1 | 4,03 | NSR42 | |
| M45 | 100 | 166 | 90 | 168 | 38 | 68 | 1 | 6,38 | NSR45 | |
| M48 | 100 | 166 | 90 | 168 | 38 | 68 | 1 | 6,38 | NSR48 | |
| M52 | 110 | 184 | 100 | 187 | 42 | 78 | 1 | 8,8 | NSR52 | |
| M56 | 110 | 184 | 100 | 187 | 42 | 78 | 1 | 8,8 | NSR56 | |
| M64 | 120 | 206 | 110 | 208 | 48 | 90 | 1 | 12,4 | NSR64 | |

Larger sizes and inch sizes also available

IP-PACKED



| IP pack pcs | Pack size pcs | Product code |
|-------------|---------------|--------------|
| 4 | 15 | NSR06IP4 |
| 2 | 15 | NSR08IP2 |
| 2 | 15 | NSR10IP2 |
| 1 | 15 | NSR12IP1 |

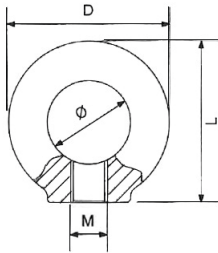
WLL

| Size | WLL t | WLL t | WLL t | WLL t | WLL t 0 - 45° | WLL t 45 - 60° | WLL t 0 - 45° | WLL t 45 - 60° |
|------|-------|-------------|-------|-------------|------------------|-------------------|------------------|-------------------|
| M6 | 0,08 | not allowed | 0,16 | not allowed | 0,05 | not allowed | 0,08 | not allowed |
| M8 | 0,14 | not allowed | 0,28 | not allowed | 0,10 | not allowed | 0,14 | not allowed |
| M10 | 0,23 | not allowed | 0,46 | not allowed | 0,17 | not allowed | 0,23 | not allowed |
| M12 | 0,34 | not allowed | 0,68 | not allowed | 0,24 | not allowed | 0,34 | not allowed |
| M14 | 0,34 | not allowed | 0,68 | not allowed | 0,24 | not allowed | 0,34 | not allowed |
| M16 | 0,70 | not allowed | 1,40 | not allowed | 0,50 | not allowed | 0,70 | not allowed |
| M18 | 0,70 | not allowed | 1,40 | not allowed | 0,50 | not allowed | 0,70 | not allowed |
| M20 | 1,20 | not allowed | 2,40 | not allowed | 0,83 | not allowed | 1,20 | not allowed |
| M22 | 1,20 | not allowed | 2,40 | not allowed | 0,83 | not allowed | 1,20 | not allowed |
| M24 | 1,80 | not allowed | 3,60 | not allowed | 1,27 | not allowed | 1,80 | not allowed |
| M27 | 2,50 | not allowed | 5,00 | not allowed | 1,78 | not allowed | 2,50 | not allowed |
| M30 | 3,20 | not allowed | 6,40 | not allowed | 2,28 | not allowed | 3,20 | not allowed |
| M33 | 3,20 | not allowed | 6,40 | not allowed | 2,28 | not allowed | 3,20 | not allowed |
| M36 | 4,60 | not allowed | 9,20 | not allowed | 3,28 | not allowed | 4,60 | not allowed |
| M39 | 4,60 | not allowed | 9,20 | not allowed | 3,28 | not allowed | 4,60 | not allowed |
| M42 | 6,30 | not allowed | 12,60 | not allowed | 4,50 | not allowed | 6,30 | not allowed |
| M45 | 6,30 | not allowed | 12,60 | not allowed | 4,50 | not allowed | 6,30 | not allowed |
| M48 | 8,60 | not allowed | 17,20 | not allowed | 6,10 | not allowed | 8,60 | not allowed |
| M52 | 8,60 | not allowed | 17,20 | not allowed | 6,10 | not allowed | 8,60 | not allowed |
| M56 | 11,50 | not allowed | 23,00 | not allowed | 8,30 | not allowed | 11,50 | not allowed |
| M64 | 16,00 | not allowed | 32,00 | not allowed | 11,00 | not allowed | 16,00 | not allowed |
| M72 | 20,00 | not allowed | 40,00 | not allowed | 14,28 | not allowed | 20,00 | not allowed |
| M80 | 28,00 | not allowed | 56,00 | not allowed | 20,00 | not allowed | 28,00 | not allowed |
| M100 | 40,00 | not allowed | 80,00 | not allowed | 28,57 | not allowed | 40,00 | not allowed |

LIFTING EYES FOR ALL LIFTING DIRECTIONS, GRADE 8

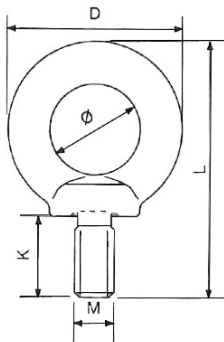
Lifting eye nut

- grade 8
- the WLL for vertical lifting is marked on the eye
- in lateral lifting, the load is 25% of the vertical lifting WLL
- powder coated surface
- safety factor 4 : 1



| Size | D | Ø | L | Weight | Product code |
|------|-----|----|-----|--------|--------------|
| M | mm | mm | mm | kg | |
| M6 | 36 | 20 | 36 | 0,05 | NS8M06 |
| M8 | 36 | 20 | 36 | 0,05 | NS8M08 |
| M10 | 45 | 25 | 45 | 0,09 | NS8M10 |
| M12 | 54 | 30 | 53 | 0,16 | NS8M12 |
| M14 | 63 | 35 | 62 | 0,24 | NS8M14 |
| M16 | 63 | 35 | 62 | 0,24 | NS8M16 |
| M20 | 72 | 40 | 71 | 0,36 | NS8M20 |
| M24 | 90 | 50 | 90 | 0,72 | NS8M24 |
| M30 | 108 | 60 | 109 | 1,32 | NS8M30 |
| M36 | 126 | 70 | 128 | 2,08 | NS8M36 |
| M42 | 144 | 80 | 147 | 3,11 | NS8M42 |
| M48 | 166 | 90 | 168 | 5,02 | NS8M48 |

Lifting eye screw



| Size | D | K | Ø | L | Weight | Product code |
|------|-----|----|----|-----|--------|--------------|
| M | mm | mm | mm | mm | kg | |
| M6 | 28 | 13 | 16 | 42 | 0,05 | NS8R06 |
| M8 | 39 | 15 | 20 | 51 | 0,06 | NS8R08 |
| M10 | 45 | 18 | 25 | 63 | 0,11 | NS8R10 |
| M12 | 54 | 22 | 30 | 75 | 0,18 | NS8R12 |
| M14 | 63 | 28 | 35 | 88 | 0,28 | NS8R14 |
| M16 | 63 | 28 | 35 | 88 | 0,28 | NS8R16 |
| M20 | 72 | 30 | 40 | 101 | 0,45 | NS8R20 |
| M24 | 90 | 38 | 50 | 128 | 0,87 | NS8R24 |
| M30 | 108 | 45 | 60 | 154 | 1,66 | NS8R30 |
| M36 | 126 | 55 | 70 | 183 | 2,65 | NS8R36 |
| M42 | 144 | 65 | 80 | 212 | 4,03 | NS8R42 |
| M48 | 166 | 70 | 90 | 238 | 6,38 | NS8R48 |

WLL

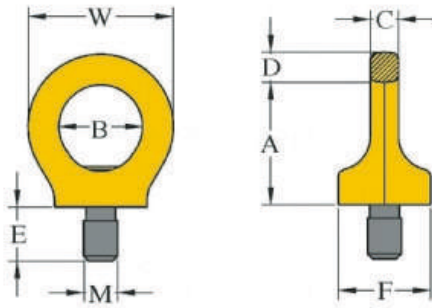
| Size | Torque | | | | | | | | Nm |
|------|----------|----------|----------|----------|---------------------|----------------------|---------------------|----------------------|--------|
| | WLL t | WLL t | WLL t | WLL t | WLL t 0 - 45° | WLL t 45 - 60° | WLL t 0 - 45° | WLL t 45 - 60° | |
| M6 | 0,40 | 0,15 | 0,80 | 0,30 | 0,21 | 0,15 | 0,32 | 0,23 | 3,5 |
| M8 | 1,00 | 0,40 | 2,00 | 0,80 | 0,56 | 0,40 | 0,84 | 0,60 | 8,0 |
| M10 | 1,00 | 0,40 | 2,00 | 0,80 | 0,56 | 0,40 | 0,84 | 0,60 | 16,0 |
| M12 | 2,00 | 0,75 | 4,00 | 1,50 | 1,05 | 0,75 | 1,58 | 1,13 | 28,0 |
| M14 | 4,00 | 1,50 | 8,00 | 3,00 | 2,10 | 1,50 | 3,15 | 2,25 | 70,0 |
| M16 | 4,00 | 1,50 | 8,00 | 3,00 | 2,10 | 1,50 | 3,15 | 2,25 | 70,0 |
| M20 | 6,00 | 2,30 | 12,00 | 4,60 | 3,22 | 2,30 | 4,83 | 3,45 | 135,0 |
| M24 | 8,00 | 3,20 | 16,00 | 6,40 | 4,48 | 3,20 | 6,72 | 4,80 | 230,0 |
| M30 | 12,00 | 4,50 | 24,00 | 9,00 | 6,30 | 4,50 | 9,45 | 6,75 | 465,0 |
| M36 | 16,00 | 7,00 | 32,00 | 14,00 | 9,80 | 7,00 | 14,70 | 10,50 | 814,0 |
| M42 | 24,00 | 9,00 | 48,00 | 18,00 | 12,60 | 9,00 | 18,90 | 13,50 | 1304,0 |
| M48 | 32,00 | 12,00 | 64,00 | 24,00 | 16,80 | 12,00 | 25,20 | 18,00 | 1981,0 |

BOLTABLE LIFTING EYE SCREW FOR ALL LIFTING DIRECTIONS, GRADE 100

- grade 100
- lifting in all positions
- can be turned according to direction of the lift
- bolt key integrated
- paint coated
- safety factor 4 : 1









NEW

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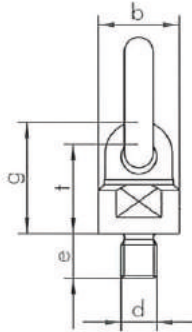
| Size | A | B | C | D | E | F | S | W | Weight | Product code |
|------|-----|-----|----|----|----|-----|----|-----|--------|--------------|
| | mm | mm | mm | mm | mm | mm | mm | mm | kg | |
| M10 | 36 | 25 | 8 | 11 | 15 | 25 | 6 | 44 | 0.1 | NS8R10LY |
| M12 | 42 | 30 | 10 | 13 | 18 | 33 | 8 | 52 | 0.2 | NS8R12LY |
| M16 | 51 | 35 | 14 | 13 | 24 | 35 | 10 | 61 | 0.3 | NS8R16LY |
| M20 | 57 | 40 | 16 | 17 | 30 | 44 | 12 | 70 | 0.6 | NS8R20LY |
| M24 | 70 | 48 | 19 | 21 | 36 | 52 | 14 | 84 | 1.0 | NS8R24LY |
| M30 | 86 | 60 | 24 | 26 | 45 | 62 | 17 | 108 | 1.8 | NS8R30LY |
| M36 | 103 | 72 | 29 | 32 | 54 | 78 | 22 | 130 | 3.2 | NS8R36LY |
| M42 | 132 | 82 | 34 | 32 | 63 | 88 | 24 | 147 | 5.0 | NS8R42LY |
| M48 | 144 | 94 | 38 | 37 | 72 | 104 | 27 | 168 | 7.6 | NS8R48LY |
| M56 | 147 | 102 | 40 | 43 | 84 | 124 | 27 | 178 | 9.2 | NS8R56LY |
| M64 | 147 | 102 | 40 | 43 | 95 | 124 | 27 | 178 | 10.0 | NS8R64LY |

WLL

| Size |  |  |  |  |  |  |  |  |
|------|---|---|---|---|--|---|---|---|
| | WLL t | WLL t | WLL t | WLL t | WLL t 0 - 45° | WLL t 45 - 60° | WLL t 0 - 45° | WLL t 45 - 60° |
| M10 | 1,00 | 0,40 | 2,00 | 0,80 | 0,56 | 0,40 | 0,84 | 0,60 |
| M12 | 2,00 | 0,75 | 4,00 | 1,50 | 1,05 | 0,75 | 1,58 | 1,13 |
| M16 | 4,00 | 1,50 | 8,00 | 3,00 | 2,10 | 1,50 | 3,15 | 2,25 |
| M20 | 6,00 | 2,30 | 12,00 | 4,60 | 3,22 | 2,30 | 4,83 | 3,45 |
| M24 | 8,00 | 3,20 | 16,00 | 6,40 | 4,48 | 3,20 | 6,72 | 4,80 |
| M30 | 12,00 | 4,50 | 24,00 | 9,00 | 6,30 | 4,50 | 9,45 | 6,75 |
| M36 | 16,00 | 7,00 | 32,00 | 14,00 | 9,80 | 7,00 | 14,70 | 10,50 |

LIFTING EYE SCREW WITH BALL BEARING SWIVEL FOR ALL LIFTING DIRECTIONS, GRADE 8

- grade 8
- can be turned according to direction of the lift
- paint coated
- safety factor 4 : 1
- also available with longer 20 mm thread



Long threads

| Size | b | e | g | t | Lifting eye dimensions eye diam. x height x width mm | Weight kg | Product code | Product code with 120mm thread |
|------|-----|----|-----|------|--|--------------|--------------|--------------------------------------|
| d | mm | mm | mm | mm | | | | |
| M10 | 36 | 18 | 51 | 41 | 14x55x30 | 0,43 | NS8KL1003 | - |
| M12 | 36 | 18 | 51 | 41 | 14x55x30 | 0,44 | NS8KL1205 | - |
| M16 | 36 | 20 | 52 | 42 | 14x55x30 | 0,46 | NS8KL161 | NS8KL161120 |
| M20 | 50 | 30 | 68 | 56 | 16x70x34 | 0,96 | NS8KL202 | NS8KL202120 |
| M24 | 57 | 40 | 78 | 65,5 | 18x85x37 | 1,45 | NS8KL2432 | NS8KL243120 |
| M30 | 66 | 35 | 97 | 80,5 | 20x85x37 | 2,17 | NS8KL3053 | NS8KL305120 |
| M30 | 80 | 35 | 112 | 92 | 22x115x50 | 3,57 | NS8KL308 | NS8KL308120 |
| M36 | 80 | 50 | 109 | 89,5 | 22x115x50 | 4,17 | NS8KL368 | NS8KL368120 |
| M42 | 80 | 50 | 109 | 89,5 | 25x115x50 | 3,67 | NS8KL4210 | - |
| M45 | 80 | 60 | 109 | 89,5 | 25x115x50 | 4,17 | NS8KL4510 | - |
| M48 | 80 | 50 | 109 | 89,5 | 25x115x50 | 4,02 | NS8KL4810 | - |
| M56 | 117 | 84 | 310 | 280 | 32x152x70 | 11,6 | NS8KL5615 | - |
| M64 | 117 | 95 | 310 | 280 | 32x152x70 | 12,6 | NS8KL6415 | - |

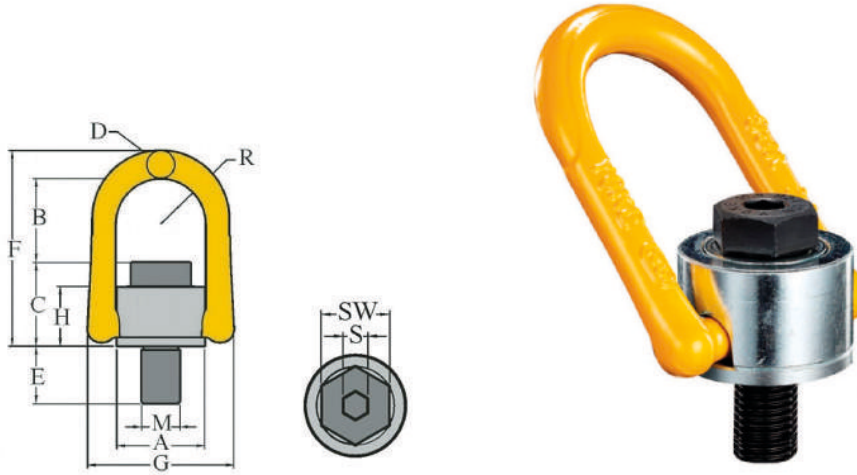
WLL

| Size | | | | | | | | | Torque Nm |
|------|----------|----------|----------|----------|---------------------|----------------------|---------------------|----------------------|--------------|
| | WLL t | WLL t | WLL t | WLL t | WLL t 0 - 45° | WLL t 45 - 60° | WLL t 0 - 45° | WLL t 45 - 60° | |
| M10 | 0,90 | 0,45 | 1,80 | 0,90 | 0,63 | 0,45 | 0,95 | 0,68 | 10-16 |
| M12 | 1,00 | 0,5 | 2,00 | 1,00 | 0,70 | 0,50 | 1,05 | 0,75 | 15-28 |
| M16 | 2,00 | 1,10 | 4,00 | 2,20 | 1,54 | 1,10 | 2,31 | 1,65 | 45-70 |
| M20 | 4,00 | 2,00 | 8,00 | 4,00 | 2,80 | 2,00 | 4,20 | 3,00 | 75-130 |
| M24 | 6,30 | 3,20 | 12,60 | 6,40 | 4,48 | 3,20 | 6,72 | 4,80 | 90-130 |
| M30 | 10,60 | 5,30 | 21,20 | 10,60 | 7,42 | 5,30 | 11,13 | 7,95 | 230-400 |
| M30 | 11,80 | 8,00 | 23,60 | 16,00 | 11,20 | 8,00 | 16,80 | 12,00 | 230-400 |
| M36 | 11,80 | 8,00 | 23,60 | 16,00 | 11,20 | 8,00 | 16,80 | 12,00 | 270-600 |
| M42 | 15,00 | 10,00 | 30,00 | 20,00 | 14,00 | 10,00 | 21,00 | 15,00 | 270-700 |
| M45 | 15,00 | 10,00 | 30,00 | 20,00 | 14,00 | 10,00 | 21,00 | 15,00 | 350-800 |
| M48 | 15,00 | 10,00 | 30,00 | 20,00 | 14,00 | 10,00 | 21,00 | 15,00 | 350-800 |
| M56 | 25,00 | 15,00 | 50,00 | 30,00 | 21,00 | 15,00 | 31,50 | 22,50 | 350-900 |
| M64 | 25,00 | 15,00 | 50,00 | 30,00 | 21,00 | 15,00 | 31,50 | 22,50 | 350-900 |









BOLTABLE LIFTING EYE SCREW FOR ALL LIFTING DIRECTIONS, GRADE 100

- grade 100
- for all lifting directions
- can be turned according to direction of the lift
- paint coated
- safety factor 4 : 1

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| Size | A | B | C | D | E | F | G | H | R | S | SW | Product code |
|------|-----|-----|----|----|----|-----|-----|----|----|----|----|--------------|
| | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | |
| M12 | 33 | 40 | 31 | 11 | 18 | 80 | 58 | 23 | 17 | 8 | 19 | NS8PKL10 |
| M14 | 51 | 56 | 45 | 17 | 21 | 117 | 90 | 36 | 27 | 10 | 22 | NS8PKL15 |
| M16 | 51 | 54 | 46 | 17 | 24 | 117 | 90 | 36 | 27 | 10 | 24 | NS8PKL20 |
| M18 | 65 | 78 | 57 | 20 | 27 | 153 | 108 | 44 | 34 | 12 | 30 | NS8PKL25 |
| M20 | 50 | 52 | 49 | 17 | 30 | 117 | 90 | 36 | 27 | 12 | 30 | NS8PKL30 |
| M24 | 72 | 81 | 59 | 22 | 36 | 162 | 125 | 44 | 37 | 14 | 36 | NS8PKL50 |
| M27 | 87 | 96 | 79 | 30 | 38 | 205 | 148 | 62 | 46 | 17 | 41 | NS8PKL56 |
| M30 | 87 | 94 | 81 | 30 | 48 | 205 | 148 | 62 | 46 | 17 | 46 | NS8PKL78 |
| M36 | 110 | 112 | 98 | 38 | 54 | 246 | 188 | 75 | 57 | 22 | 55 | NS8PKL125 |

| Size |  |  |  |  |  |  |  |  |
|------|---|---|---|---|--|---|---|---|
| | WLL t | WLL t | WLL t | WLL t | WLL t 0 - 45° | WLL t 45 - 60° | WLL t 0 - 45° | WLL t 45 - 60° |
| M12 | 1,00 | 1,00 | 2,00 | 2,00 | 1,40 | 1,00 | 2,10 | 1,50 |
| M14 | 1,50 | 1,50 | 3,00 | 3,00 | 2,10 | 1,50 | 3,15 | 2,25 |
| M16 | 2,00 | 2,00 | 4,00 | 4,00 | 2,80 | 2,00 | 4,20 | 3,00 |
| M18 | 2,50 | 2,50 | 5,00 | 5,00 | 3,50 | 2,50 | 5,25 | 3,75 |
| M20 | 3,00 | 3,00 | 6,00 | 6,00 | 4,20 | 3,00 | 6,30 | 4,50 |
| M24 | 5,00 | 5,00 | 10,00 | 10,00 | 7,00 | 5,00 | 10,50 | 7,50 |
| M27 | 5,60 | 5,60 | 11,20 | 11,20 | 7,84 | 5,60 | 11,76 | 8,40 |
| M30 | 7,80 | 7,80 | 15,60 | 15,60 | 10,92 | 7,80 | 16,38 | 11,70 |
| M36 | 12,50 | 12,50 | 25,00 | 25,00 | 17,50 | 12,50 | 26,25 | 18,75 |

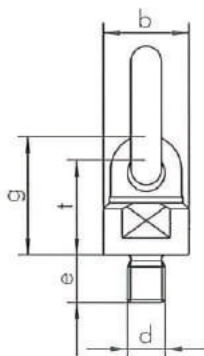


LIFTING EYE SCREW WITH BALL BEARING SWIVEL FOR ALL LIFTING DIRECTIONS, GRADE 10

- grade 10
- eye turns to the direction of the load
- paint coated/yellow chromated
- safety factor 4 : 1

| Size | WLL 90° liftings | b | g | t | Lifting eye dimensions eye diam.x height x width | Weight | Product code |
|-------------|---------------------|------|-----|-----|---|--------|--------------|
| d x e | t | mm | mm | mm | mm | kg | |
| M 10 x 18 | 0,5 | 36,5 | 48 | 41 | 13x55x32 | 0,42 | NS10KL10005 |
| M 12 x 18 | 0,7 | 36,5 | 48 | 41 | 13x55x32 | 0,43 | NS10KL12007 |
| M 14 x 20 | 1,0 | 36,5 | 48 | 41 | 13x55x32 | 0,42 | NS10KL14010 |
| M 16 x 30 | 1,4 | 36,5 | 48 | 41 | 13x55x32 | 0,44 | NS10KL16014 |
| M 20 x 30 | 1,7 | 36,5 | 48 | 41 | 13x55x32 | 0,46 | NS10KL20017 |
| M 20 x 40 | 2,5 | 52 | 68 | 57 | 16x70x34 | 0,97 | NS10KL20025 |
| M 24 x 30 | 1,7 | 36,5 | 48 | 41 | 13x55x32 | 0,49 | NS10KL24017 |
| M 24 x 45 | 4,0 | 57 | 75 | 63 | 18x85x45 | 1,48 | NS10KL2404 |
| M 30 x 35 | 4,0 | 57 | 75 | 63 | 18x85x45 | 1,50 | NS10KL3004 |
| M 30 x 45 | 6,7 | 70 | 95 | 78 | 20x85x45 | 2,37 | NS10KL30067 |
| M 30 x 45 | 8,0 | 81 | 106 | 86 | 23x115x60 | 3,64 | NS10KL3008 |
| M 36 x 50 | 10,0 | 81 | 106 | 86 | 23x115x60 | 3,72 | NS10KL3610 |
| M 42 x 50 | 12,5 | 81 | 106 | 86 | 23x115x60 | 3,82 | NS10KL4212 |
| M 45 x 60 | 17,0 | 104 | 127 | 106 | 30x140x70 | 7,50 | NS10KL4517 |
| M 48 x 72 | 12,0 | 81 | 106 | 86 | 23x115x60 | 4,33 | NS10KL4812 |
| M 48 x 60 | 17,0 | 104 | 127 | 106 | 30x140x70 | 7,57 | NS10KL4817 |
| M 56 x 78 | 18,0 | 104 | 127 | 106 | 30x140x70 | 8,00 | NS10KL5618 |
| M 64 x 96 | 20,0 | 104 | 127 | 106 | 30x140x70 | 8,85 | NS10KL6420 |
| M 64 x 96 | 28,0 | 129 | 174 | 135 | 35x170x80 | 16,30 | NS10KL6428 |
| M 72 x 120 | 28,0 | 129 | 174 | 135 | 35x170x80 | 17,60 | NS10KL7228 |
| M 80 x 150 | 28,0 | 129 | 174 | 135 | 35x170x80 | 19,50 | NS10KL8028 |
| M 90 x 115 | 40,0 | 170 | 233 | 182 | 46x240x110 | 36,50 | NS10KL9040 |
| M 100 x 150 | 40,0 | 170 | 233 | 182 | 46x240x110 | 39,80 | NS10KL10040 |

Delivery 2-3 weeks



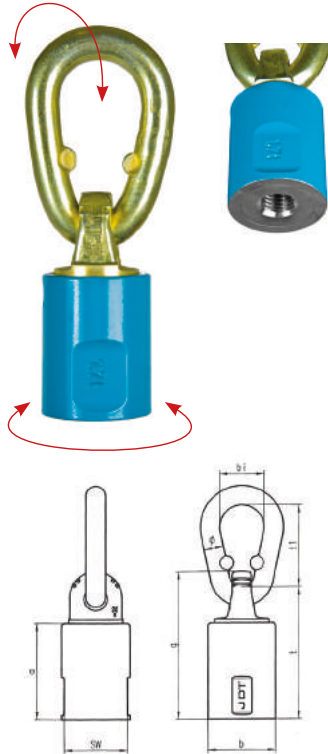
Many sizes available, also for shorter and longer threads. Ask for more!

WLL

| Size | WLL t | | | | | | | | Torque Nm | |
|-------------|-------|-------|--------|-------|------------------|-------------------|------------------|-------------------|------------|--|
| | WLL t | WLL t | WLL t | WLL t | WLL t 0 - 45° | WLL t 45 - 60° | WLL t 0 - 45° | WLL t 45 - 60° | | |
| M 10 x 18 | 1,00 | 0,50 | 2,00 | 1,00 | 0,70 | 0,50 | 1,05 | 0,75 | 10 - 40 | |
| M 12 x 18 | 1,40 | 0,70 | 2,80 | 1,40 | 0,98 | 0,70 | 1,47 | 1,05 | 15 - 40 | |
| M 14 x 20 | 2,00 | 1,00 | 4,00 | 2,00 | 1,40 | 1,00 | 2,10 | 1,50 | 30 - 40 | |
| M 16 x 30 | 2,80 | 1,40 | 5,60 | 2,80 | 1,96 | 1,40 | 2,94 | 2,10 | 45 - 130 | |
| M 20 x 30 | 3,40 | 1,70 | 6,80 | 3,40 | 2,38 | 1,70 | 3,57 | 2,55 | 75 - 130 | |
| M 20 x 40 | 5,00 | 2,50 | 10,00 | 5,00 | 3,50 | 2,50 | 5,25 | 3,75 | 100 - 170 | |
| M 24 x 30 | 3,40 | 1,70 | 6,80 | 3,40 | 2,38 | 1,70 | 3,57 | 2,55 | 90 - 130 | |
| M 24 x 45 | 8,00 | 4,00 | 16,00 | 8,00 | 5,60 | 4,00 | 8,40 | 6,00 | 190 - 280 | |
| M 30 x 35 | 8,00 | 4,00 | 16,00 | 8,00 | 5,60 | 4,00 | 8,40 | 6,00 | 190 - 280 | |
| M 30 x 45 | 12,00 | 6,70 | 24,00 | 13,40 | 9,38 | 6,70 | 14,07 | 10,05 | 230 - 400 | |
| M 30 x 45 | 12,00 | 8,00 | 24,00 | 16,00 | 11,20 | 8,00 | 16,80 | 12,00 | 270 - 600 | |
| M 36 x 50 | 15,00 | 10,00 | 30,00 | 20,00 | 14,00 | 10,00 | 21,00 | 15,00 | 270 - 600 | |
| M 42 x 50 | 15,00 | 12,50 | 30,00 | 25,00 | 17,50 | 12,50 | 26,25 | 18,75 | 270 - 700 | |
| M 45 x 60 | 25,00 | 17,00 | 50,00 | 34,00 | 23,80 | 17,00 | 35,70 | 25,50 | 350 - 800 | |
| M 48 x 72 | 15,00 | 12,50 | 30,00 | 25,00 | 17,50 | 12,50 | 26,25 | 18,75 | 270 - 700 | |
| M 48 x 60 | 25,00 | 17,00 | 50,00 | 34,00 | 23,80 | 17,00 | 35,70 | 25,50 | 350 - 800 | |
| M 56 x 78 | 25,00 | 18,00 | 50,00 | 36,00 | 25,20 | 18,00 | 37,80 | 27,00 | 350 - 900 | |
| M 64 x 96 | 25,00 | 20,00 | 50,00 | 40,00 | 28,00 | 20,00 | 42,00 | 30,00 | 350 - 900 | |
| M 64 x 96 | 32,50 | 28,00 | 65,00 | 56,00 | 39,20 | 28,00 | 58,80 | 42,00 | 500 - 1000 | |
| M 72 x 120 | 32,50 | 28,00 | 65,00 | 56,00 | 39,20 | 28,00 | 58,80 | 42,00 | 500 - 1200 | |
| M 80 x 150 | 32,50 | 28,00 | 65,00 | 56,00 | 39,20 | 28,00 | 58,80 | 42,00 | 500 - 1200 | |
| M 90 x 115 | 50,00 | 40,00 | 100,00 | 80,00 | 56,00 | 40,00 | 84,00 | 60,00 | 500 - 1500 | |
| M 100 x 150 | 50,00 | 40,00 | 100,00 | 80,00 | 56,00 | 40,00 | 84,00 | 60,00 | 500 - 1700 | |

BOLTABLE LIFTING EYE NUT WITH BALL BEARING SWIVEL FOR ALL LIFTING DIRECTIONS, GRADE 10

- grade 10
- eye turns to the direction of the load
- paint coated/yellow chromated
- safety factor 4 : 1



| Size | a | Ø b | g | SW | T | Lifting eye dimensions Ø x t1 x b1 mm | Weight kg | Product code |
|----------|-----|------|-----|----|-----|---|--------------|--------------|
| M12 x 15 | 45 | 36,5 | 73 | 34 | 66 | 13 x 55 x 32 | 0,61 | NS10KL1205P |
| M16 x 20 | 52 | 36,5 | 80 | 34 | 73 | 13 x 55 x 32 | 0,65 | NS10KL1610P |
| M20 x 25 | 66 | 52 | 106 | 46 | 95 | 16 x 70 x 34 | 1,50 | NS10KL2017P |
| M24 x 30 | 80 | 57 | 120 | 50 | 108 | 18 x 85 x 45 | 2,12 | NS10KL242P |
| M30 x 40 | 94 | 70 | 148 | 65 | 131 | 20 x 85 x 45 | 3,70 | NS10KL3032P |
| M36 x 45 | 107 | 80 | 164 | 75 | 145 | 23 x 115 x 60 | 5,75 | NS10KL365P |

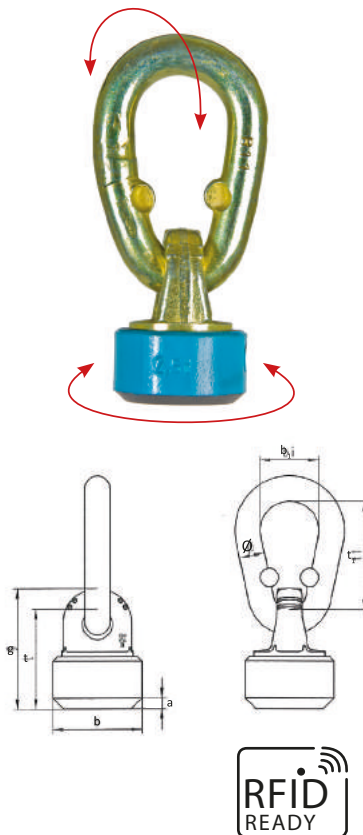
Delivery 2-3 weeks

WLL

| Size | | | | | | | | | Torque Nm |
|----------|-------|------|-------|-------|------|------|-------|------|--------------|
| M12 x 15 | 1,40 | 0,50 | 2,80 | 1,00 | 0,70 | 0,50 | 1,05 | 0,75 | 15-40 |
| M16 x 20 | 2,80 | 1,00 | 5,60 | 2,00 | 1,40 | 1,00 | 2,10 | 1,50 | 45-130 |
| M20 x 25 | 5,00 | 1,70 | 10,00 | 3,40 | 2,38 | 1,70 | 3,57 | 2,55 | 100-170 |
| M24 x 30 | 8,00 | 2,10 | 16,00 | 4,20 | 2,94 | 2,10 | 4,41 | 3,15 | 190-280 |
| M30 x 40 | 12,00 | 3,20 | 24,00 | 6,40 | 4,48 | 3,20 | 6,72 | 4,80 | 230-400 |
| M36 x 45 | 15,00 | 5,00 | 30,00 | 10,00 | 6,70 | 5,00 | 10,00 | 7,50 | 270-600 |



WELD-ON LIFTING EYE WITH BALL BEARING SWIVEL FOR ALL LIFTING DIRECTIONS, GRADE 10



| a | b | g | t | Lifting eye dimensions Ø x t1 x b1 mm | Weight kg | Product code |
|------------|-----|-----|-----|---|--------------|--------------|
| 5,5 x 45° | 52 | 68 | 57 | 16 x 70 x 34 | 0,95 | NS10KL2HI |
| 7,0 x 45° | 57 | 74 | 62 | 18 x 85 x 45 | 1,30 | NS10KL4HI |
| 8,5 x 45° | 70 | 95 | 78 | 20 x 85 x 45 | 2,20 | NS10KL6HI |
| 10,0 x 45° | 80 | 102 | 83 | 23 x 115 x 60 | 3,80 | NS10KL10HI |
| 12,0 x 45° | 100 | 129 | 106 | 30 x 140 x 70 | 6,66 | NS10KL17HI |

Delivery 2-3 weeks

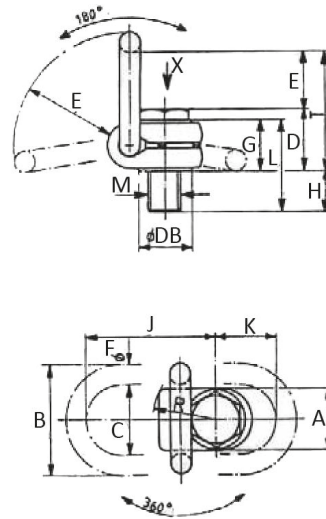
WLL

| Product code | | | | | | | | |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|
| NS10KL2HI | 5,00 | 2,50 | 10,00 | 5,00 | 3,50 | 2,50 | 5,25 | 3,75 |
| NS10KL4HI | 8,00 | 4,00 | 16,00 | 8,00 | 5,60 | 4,00 | 8,40 | 6,00 |
| NS10KL6HI | 12,00 | 6,70 | 24,00 | 13,40 | 9,38 | 6,70 | 14,07 | 10,05 |
| NS10KL10HI | 15,00 | 10,00 | 30,00 | 20,00 | 14,00 | 10,00 | 21,00 | 15,00 |
| NS10KL17HI | 25,00 | 17,00 | 50,00 | 34,00 | 23,80 | 17,00 | 35,70 | 25,50 |



TURNABLE LIFTING POINT FOR ALL LIFTING DIRECTIONS, GRADE 8

- grade 8
- the eye is equipped with a separate replaceable screw
- min. screw strength category 8.8
- eye turns to the direction of the load
- paint coated
- safety factor 4 : 1



| Size | A | B | C | D | E | E' | F | H | J | K | L | R | Weight | Product code |
|------|----|-----|-----|-----|------|----|------|----|-----|----|-----|----|--------|--------------|
| M | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | kg | |
| M8 | 30 | 55 | 35 | 35 | 40 | - | 10 | 12 | - | - | - | - | 0,2 | NS8P03 |
| M10 | 32 | 65 | 36 | 42 | 56 | 30 | 14 | 15 | 74 | 35 | 50 | 35 | 0,4 | NS8P05 |
| M12 | 32 | 65 | 36 | 43 | 56 | 29 | 14 | 20 | 74 | 35 | 55 | 35 | 0,4 | NS8P07 |
| M16 | 46 | 85 | 50 | 50 | 72 | 41 | 16 | 25 | 95 | 45 | 65 | 46 | 1,0 | NS8P15 |
| M20 | 46 | 85 | 50 | 53 | 72 | 38 | 16 | 30 | 95 | 45 | 70 | 46 | 1,1 | NS8P25 |
| M24 | 46 | 85 | 50 | 55 | 72 | 36 | 16 | 40 | 95 | 45 | 80 | 46 | 1,2 | NS8P30 |
| M30 | 60 | 114 | 65 | 75 | 100 | 53 | 22 | 50 | 136 | 67 | 110 | 66 | 3,3 | NS8P50 |
| M36 | 77 | 124 | 85 | 101 | 97,5 | - | 26,5 | 62 | - | - | - | - | 5,8 | NS8P80 |
| M42 | 95 | 158 | 104 | 112 | 108 | - | 36 | 60 | - | - | - | - | 10,9 | NS8P150 |
| M48 | 95 | 158 | 104 | 120 | 103 | - | 36 | 69 | - | - | - | - | 11,6 | NS8P200 |

WLL

| Size | | | | | | | | | Torque max. Nm |
|------|-----------------------------------|----------|----------|----------|---------------------|----------------------|---------------------|----------------------|----------------------|
| | WLL t leimaus silmutassa | WLL t | WLL t | WLL t | WLL t 0 - 45° | WLL t 45 - 60° | WLL t 0 - 45° | WLL t 45 - 60° | |
| M8 | 0,30 | 0,30 | 0,60 | 0,60 | 0,42 | 0,30 | 0,63 | 0,45 | 30,0 |
| M10 | 0,50 | 0,50 | 1,00 | 1,00 | 0,70 | 0,50 | 1,05 | 0,75 | 40,0 |
| M12 | 0,75 | 0,75 | 1,50 | 1,50 | 1,05 | 0,75 | 1,58 | 1,13 | 65,0 |
| M16 | 1,50 | 1,50 | 3,00 | 3,00 | 2,10 | 1,50 | 3,15 | 2,25 | 150,0 |
| M20 | 2,50 | 2,50 | 5,00 | 5,00 | 3,50 | 2,50 | 5,25 | 3,75 | 250,0 |
| M24 | 3,00 | 3,00 | 6,00 | 6,00 | 4,20 | 3,00 | 6,30 | 4,50 | 300,0 |
| M30 | 5,00 | 5,00 | 10,00 | 10,00 | 7,00 | 5,00 | 10,50 | 7,50 | 500,0 |
| M36 | 8,00 | 8,00 | 16,00 | 16,00 | 11,20 | 8,00 | 16,80 | 12,00 | 800,0 |
| M42 | 15,00 | 15,00 | 30,00 | 30,00 | 21,00 | 15,00 | 31,50 | 22,50 | 1500,0 |
| M48 | 20,00 | 20,00 | 40,00 | 40,00 | 28,00 | 20,00 | 42,00 | 30,00 | 2000,0 |

Min. screw strength category 8.8

LIFTING EYE WITH SWIVEL FOR ALL LIFTING DIRECTIONS, GRADE 8


- grade 8
- eye turns to the direction of the load
- safety factor 5 : 1



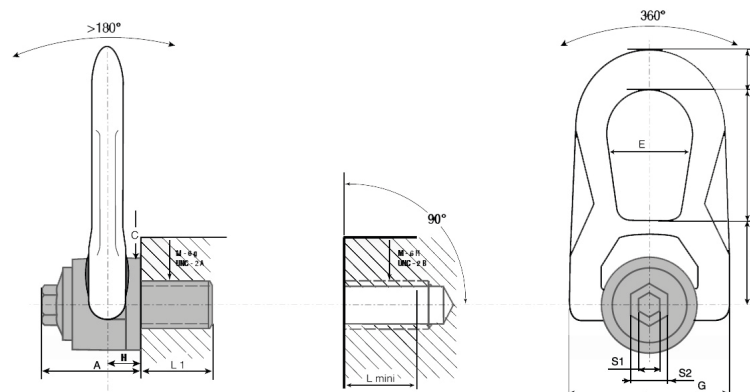
| Size | L1 | S1 | S2 | A | B | C | D | E | F | G | H | Product code |
|------|----|----|----|----|----|----|----|----|----|-----|-----|--------------|
| M | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | |
| M4 | 15 | 3 | - | 33 | 30 | 30 | 38 | 27 | 14 | 53 | 9,5 | *NS8KL04M |
| M5 | 15 | 4 | - | 33 | 30 | 30 | 38 | 27 | 14 | 53 | 9,5 | *NS8KL05M |
| M6 | 15 | 5 | - | 33 | 30 | 30 | 38 | 27 | 14 | 53 | 9,5 | NS8KL06M |
| M8 | 14 | 8 | 16 | 33 | 30 | 30 | 38 | 27 | 14 | 53 | 9,5 | NS8KL08M |
| M10 | 17 | 8 | 16 | 33 | 30 | 30 | 38 | 27 | 14 | 53 | 9,5 | NS8KL10M |
| M12 | 21 | 8 | 16 | 33 | 30 | 30 | 38 | 27 | 14 | 53 | 9,5 | NS8KL12M |
| M14 | 23 | 8 | 20 | 45 | 42 | 45 | 54 | 38 | 17 | 76 | 13 | NS8KL14M |
| M16 | 27 | 8 | 20 | 45 | 42 | 45 | 54 | 38 | 17 | 76 | 13 | NS8KL16M |
| M18 | 27 | 8 | 20 | 45 | 42 | 45 | 54 | 38 | 17 | 76 | 13 | NS8KL18M |
| M20 | 30 | 8 | 20 | 45 | 42 | 45 | 54 | 38 | 17 | 76 | 13 | NS8KL20M |
| M22 | 33 | 14 | 24 | 62 | 55 | 60 | 83 | 55 | 25 | 117 | 19 | NS8KL22M |
| M24 | 36 | 14 | 24 | 62 | 55 | 60 | 83 | 55 | 25 | 117 | 19 | NS8KL24M |
| M27 | 40 | 14 | 24 | 62 | 55 | 60 | 83 | 55 | 25 | 117 | 19 | NS8KL27M |
| M30 | 45 | 14 | 24 | 62 | 55 | 60 | 83 | 55 | 25 | 117 | 19 | NS8KL30M |

*Items marked with asterisk delivery 1-2 weeks

WLL

| Size |  | | | | | | | | Torque Nm |
|------|--|----------|----------|----------|---------------------|----------------------|---------------------|----------------------|--------------|
| | WLL t | WLL t | WLL t | WLL t | WLL t 0 - 45° | WLL t 45 - 60° | WLL t 0 - 45° | WLL t 45 - 60° | |
| M4 | 0,05 | 0,05 | 0,10 | 0,10 | 0,07 | 0,05 | 0,11 | 0,08 | 2 |
| M5 | 0,075 | 0,075 | 0,150 | 0,150 | 0,105 | 0,075 | 0,158 | 0,113 | 3 |
| M6 | 0,10 | 0,10 | 0,20 | 0,20 | 0,14 | 0,10 | 0,21 | 0,15 | 4 |
| M8 | 0,30 | 0,30 | 0,60 | 0,60 | 0,42 | 0,30 | 0,63 | 0,45 | 5 |
| M10 | 0,60 | 0,60 | 1,20 | 1,20 | 0,84 | 0,60 | 1,26 | 0,90 | 10 |
| M12 | 1,00 | 1,00 | 2,00 | 2,00 | 1,40 | 1,00 | 2,10 | 1,50 | 15 |
| M14 | 1,30 | 1,30 | 2,60 | 2,60 | 1,82 | 1,30 | 2,73 | 1,95 | 30 |
| M16 | 1,60 | 1,60 | 3,20 | 3,20 | 2,24 | 1,60 | 3,36 | 2,40 | 50 |
| M18 | 2,00 | 2,00 | 4,00 | 4,00 | 2,80 | 2,00 | 4,20 | 3,00 | 70 |
| M20 | 2,50 | 2,50 | 5,00 | 5,00 | 3,50 | 2,50 | 5,25 | 3,75 | 100 |
| M22 | 3,00 | 3,00 | 6,00 | 6,00 | 4,20 | 3,00 | 6,30 | 4,50 | 120 |
| M24 | 4,00 | 4,00 | 8,00 | 8,00 | 5,60 | 4,00 | 8,40 | 6,00 | 160 |
| M27 | 5,00 | 5,00 | 10,00 | 10,00 | 7,00 | 5,00 | 10,50 | 7,50 | 200 |
| M30 | 6,30 | 6,30 | 12,60 | 12,60 | 8,82 | 6,30 | 13,23 | 9,45 | 250 |

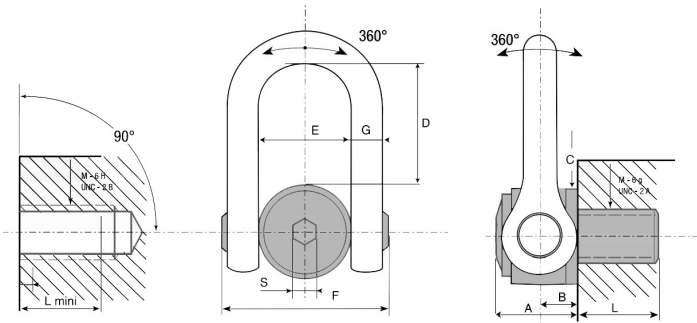
Ask for bigger sizes, inch-threaded and stainless steel models!



LIFTING EYE WITH SWIVEL FOR ALL LIFTING DIRECTIONS, GRADE 8

- grade 8
- eye turns to the direction of the load
- safety factor 5 : 1

NEW



| Size | L1 | S | A | B | C | D | E | F | G | Weight | Product code |
|------|----|----|----|----|----|-----|----|-----|----|--------|--------------|
| M | mm | mm | mm | mm | mm | mm | mm | mm | mm | kg | |
| M24 | 36 | 19 | 61 | 31 | 70 | 104 | 73 | 145 | 29 | 5,4 | NS8KL24DSS |
| M30 | 45 | 19 | 61 | 31 | 70 | 104 | 73 | 145 | 29 | 5,5 | NS8KL30DSS |
| M33 | 50 | 19 | 61 | 31 | 70 | 104 | 73 | 145 | 29 | 5,5 | NS8KL33DSS |
| M36 | 54 | 19 | 61 | 31 | 70 | 104 | 73 | 145 | 29 | 5,5 | NS8KL36DSS |
| M39 | 58 | 19 | 61 | 31 | 70 | 104 | 73 | 145 | 29 | 5,7 | NS8KL39DSS |
| M42 | 63 | 19 | 61 | 31 | 70 | 104 | 73 | 145 | 29 | 5,8 | NS8KL42DSS |
| M45 | 63 | 19 | 61 | 31 | 70 | 104 | 73 | 145 | 29 | 5,9 | NS8KL45DSS |
| M48 | 68 | 19 | 79 | 38 | 90 | 125 | 91 | 184 | 36 | 11,0 | NS8KL48DSS |
| M52 | 68 | 19 | 79 | 38 | 90 | 125 | 91 | 184 | 36 | 11,2 | NS8KL52DSS |
| M56 | 78 | 19 | 79 | 38 | 90 | 125 | 91 | 184 | 36 | 11,3 | NS8KL56DSS |
| M64 | 90 | 19 | 79 | 38 | 90 | 125 | 91 | 184 | 36 | 12,2 | NS8KL64DSS |

Delivery 1-2 weeks

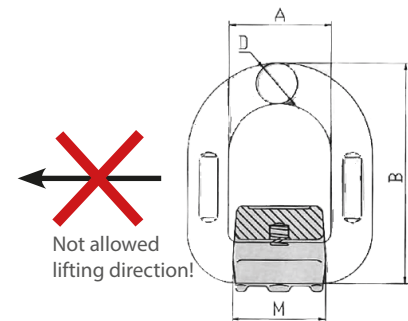
WLL

| Size | | | | | | | | | Torque |
|------|----------|----------|----------|----------|---------------------|----------------------|---------------------|----------------------|--------|
| | WLL t | WLL t | WLL t | WLL t | WLL t 0 - 45° | WLL t 45 - 60° | WLL t 0 - 45° | WLL t 45 - 60° | Nm |
| M24 | 4,50 | 4,50 | 9,00 | 9,00 | 6,30 | 4,50 | 9,45 | 6,75 | 160 |
| M30 | 7,30 | 7,30 | 14,60 | 14,60 | 10,22 | 7,30 | 15,33 | 10,95 | 250 |
| M33 | 8,00 | 8,00 | 16,00 | 16,00 | 11,20 | 8,00 | 16,80 | 12,00 | 250 |
| M36 | 10,00 | 10,00 | 20,00 | 20,00 | 14,00 | 10,00 | 21,00 | 15,00 | 320 |
| M39 | 10,00 | 10,00 | 20,00 | 20,00 | 14,00 | 10,00 | 21,00 | 15,00 | 320 |
| M42 | 12,50 | 12,50 | 25,00 | 25,00 | 17,50 | 12,50 | 26,25 | 18,75 | 400 |
| M45 | 15,00 | 15,00 | 30,00 | 30,00 | 21,00 | 15,00 | 31,50 | 22,50 | 400 |
| M48 | 20,00 | 20,00 | 40,00 | 40,00 | 28,00 | 20,00 | 42,00 | 30,00 | 600 |
| M52 | 20,00 | 20,00 | 40,00 | 40,00 | 28,00 | 20,00 | 42,00 | 30,00 | 600 |
| M56 | 25,00 | 25,00 | 50,00 | 50,00 | 35,00 | 25,00 | 52,50 | 37,50 | 600 |
| M64 | 32,10 | 32,10 | 64,20 | 64,20 | 44,94 | 32,10 | 67,41 | 48,15 | 600 |

Ask for bigger sizes, inch-threaded and stainless steel models!








WELD-ON LIFTING POINT, GRADE 8

- grade 8
- paint coated
- equipped with a spring, so the eye stays in desired position
- safety factor 4 : 1



| A | B | D | M | Weight | Product code |
|------|-------|------|------|--------|--------------|
| mm | mm | mm | mm | kg | |
| 41,0 | 78,5 | 13,0 | 37,0 | 0,40 | NS8HI1 |
| 42,0 | 88,0 | 14,0 | 40,0 | 0,47 | NS8HI2 |
| 45,0 | 94,0 | 17,0 | 42,5 | 0,69 | NS8HI3 |
| 55,0 | 118,0 | 22,0 | 50,0 | 1,46 | NS8HI5 |
| 70,0 | 141,0 | 26,5 | 66,5 | 2,50 | NS8HI8 |
| 97,0 | 188,0 | 34,0 | 90,0 | 5,79 | NS8HI15 |

WLL

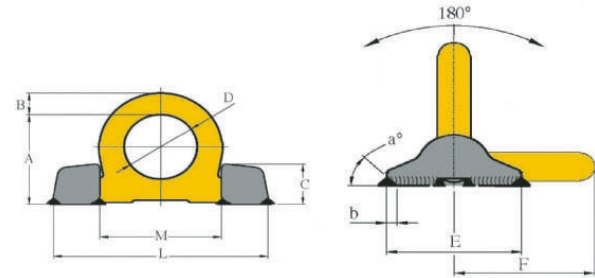
| Product code |  |  |  |  |  |  |  |  |
|--------------|---|---|---|---|--|---|---|---|
| | WLL t | WLL t | WLL t | WLL t | WLL t 0 - 45° | WLL t 45 - 60° | WLL t 0 - 45° | WLL t 45 - 60° |
| NS8HI1 | 1,12 | 1,12 | 2,24 | 2,24 | 1,57 | 1,12 | 2,35 | 1,68 |
| NS8HI2 | 2,00 | 2,00 | 4,00 | 4,00 | 2,80 | 2,00 | 4,20 | 3,00 |
| NS8HI3 | 3,15 | 3,15 | 6,30 | 6,30 | 4,41 | 3,15 | 6,62 | 4,73 |
| NS8HI5 | 5,30 | 5,30 | 10,60 | 10,60 | 7,42 | 5,30 | 11,13 | 7,95 |
| NS8HI8 | 8,00 | 8,00 | 16,00 | 16,00 | 11,20 | 8,00 | 16,80 | 12,00 |
| NS8HI15 | 15,00 | 15,00 | 30,00 | 30,00 | 21,00 | 15,00 | 31,50 | 22,50 |

WELD-ON LIFTING POINT, GRADE 100

- grade 100
- with two welding points
- paint coated
- safety factor 4 : 1

NEW MODEL

YOKE
Safety is our first priority™



| A | B | C | D | E | F | G | H | Weight | Product code |
|----|-----|-----|----|-----|------|-----|-----|--------|--------------|
| mm | mm | mm | mm | mm | mm | mm | mm | kg | |
| 14 | 65 | 48 | 29 | 134 | 14 | 60 | 79 | 0,73 | NS8J04Y |
| 20 | 83 | 60 | 39 | 169 | 16 | 88 | 103 | 1,80 | NS8J06Y |
| 22 | 96 | 65 | 48 | 196 | 19,5 | 98 | 118 | 3,00 | NS8J10Y |
| 31 | 126 | 90 | 55 | 264 | 29 | 127 | 155 | 5,75 | NS8J16Y |
| 42 | 175 | 130 | 79 | 371 | 45 | 157 | 217 | 16,00 | NS8J30Y |

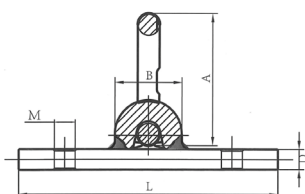
WLL

| Product code | | | | | | | | |
|--------------|----------|----------|----------|----------|---------------------|----------------------|---------------------|----------------------|
| | WLL t | WLL t | WLL t | WLL t | WLL t 0 - 45° | WLL t 45 - 60° | WLL t 0 - 45° | WLL t 45 - 60° |
| NS8J04 | 4,00 | 4,00 | 8,00 | 8,00 | 5,60 | 4,00 | 8,40 | 6,00 |
| NS8J06 | 6,70 | 6,70 | 13,40 | 13,40 | 9,38 | 6,70 | 14,07 | 10,05 |
| NS8J10 | 10,00 | 10,00 | 20,00 | 20,00 | 14,00 | 10,00 | 21,00 | 15,00 |
| NS8J16 | 16,00 | 16,00 | 32,00 | 32,00 | 22,40 | 16,00 | 33,60 | 24,00 |
| NS8J30 | 30,00 | 30,00 | 60,00 | 60,00 | 42,00 | 30,00 | 63,00 | 45,00 |

BOLTABLE LIFTING EYE, GRADE 8



- grade 8
- lifting in all positions
- delivered without bolts
- bolt grade must be min. 8.8
- paint coated
- safety factor 4 : 1



| WLL | A | B | D | M | L | Weight | Product code |
|------|-------|------|------|------|-------|--------|--------------|
| t | mm | mm | mm | mm | mm | kg | |
| 1,00 | 78,0 | 40,0 | 12,0 | 12,5 | 155 | 1,10 | NS8PUL1 |
| 2,00 | 80,5 | 40,0 | 14,0 | 14,5 | 155,0 | 1,20 | NS8PUL2 |
| 3,00 | 94,0 | 46,5 | 16,0 | 16,5 | 155,0 | 1,50 | NS8PUL3 |
| 5,00 | 118,0 | 60,0 | 20,0 | 22,5 | 180,0 | 2,60 | NS8PUL5 |
| 8,00 | 141,0 | 63,0 | 26,0 | 26,5 | 220,0 | 4,90 | NS8PUL8 |

bolt grade must be min. 8.8

CONTAINER MULTIPLE LIFTING LUGS

- grade 8
- multiple lifting lugs for lifting from the upper or lower corners from the sides
- multiple lifting lugs do not lock like the other models!
- delivery includes 4 lifting eyes (for all corners) without shackles
- paint coated
- safety factor 4 : 1

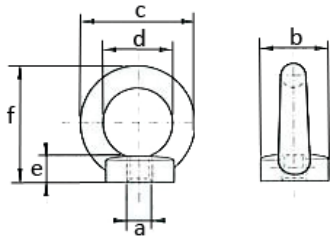


| TYPE | WLL vertical lift t | WLL 36° chain angle t | WLL 50° chain angle t | Weight / set 4 pcs kg | Product code |
|---------------|---------------------------|-----------------------------|-----------------------------|-----------------------------|--------------|
| Multiple lugs | 50 | 50 | - | 16,2 | KONNOSETTI |

STAINLESS STEEL LIFTING EYES FOR VERTICAL LIFTING

LIFTING EYE NUT DIN 582

- polished surface
- material AISI 316

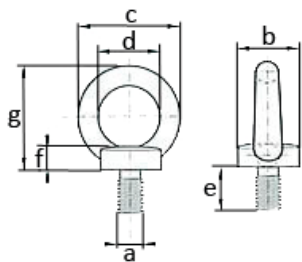


| Size | b | c | d | e | f | Weight kg/ 100 pcs | Product code |
|------|------|------|------|------|------|--------------------------|--------------|
| a | mm | mm | mm | mm | mm | | |
| M6 | 20,0 | 36,0 | 20,0 | 8,5 | 36,0 | 5,0 | NSMH06L |
| M8 | 20,0 | 36,0 | 20,0 | 8,5 | 36,0 | 5,0 | NSMH08L |
| M10 | 25,0 | 45,0 | 25,0 | 10,0 | 45,0 | 9,0 | NSMH10L |
| M12 | 30,0 | 54,0 | 30,0 | 11,0 | 53,0 | 16,0 | NSMH12L |
| M16 | 35,0 | 63,0 | 35,0 | 13,0 | 62,0 | 24,0 | NSMH16L |
| M20 | 39,0 | 71,0 | 39,0 | 14,0 | 70,0 | 36,0 | NSMH20L |

Also other sizes available

LIFTING EYE SCREW DIN 580

- polished surface
- material AISI 316



| Size | b | c | d | e | f | g | Weight kg/ 100 pcs | Product code |
|------|------|------|------|------|------|------|--------------------------|--------------|
| a | mm | mm | mm | mm | mm | mm | | |
| M6 | 20,0 | 36,0 | 20,0 | 13,0 | 6,0 | 36,0 | 6,0 | NSRH06L |
| M8 | 20,0 | 36,0 | 20,0 | 13,0 | 6,0 | 36,0 | 6,0 | NSRH08L |
| M10 | 25,0 | 45,0 | 25,0 | 17,0 | 8,0 | 45,0 | 11,0 | NSRH10L |
| M12 | 30,0 | 54,0 | 30,0 | 20,5 | 10,0 | 53,0 | 18,0 | NSRH12L |
| M16 | 35,0 | 63,0 | 35,0 | 27,0 | 12,0 | 62,0 | 28,0 | NSRH16L |
| M20 | 39,0 | 71,0 | 39,0 | 30,0 | 14,0 | 70,0 | 45,0 | NSRH20L |

Also other sizes available

WLL

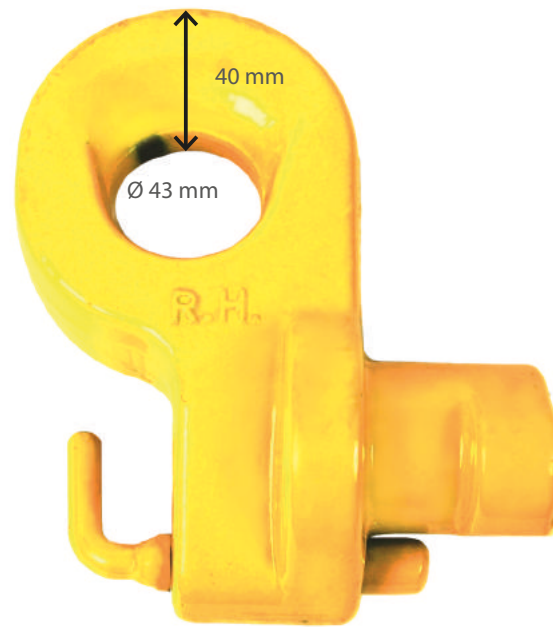
| Thread | WLL t | WLL t | WLL t | WLL t | WLL t 0 - 45° | WLL t 45 - 60° | WLL t 0 - 45° | WLL t 45 - 60° |
|--------|----------|-------------|----------|-------------|---------------------|----------------------|---------------------|----------------------|
| M6 | 0,08 | not allowed | 0,16 | not allowed | - | not allowed | - | not allowed |
| M8 | 0,14 | not allowed | 0,28 | not allowed | 0,10 | not allowed | 0,14 | not allowed |
| M10 | 0,23 | not allowed | 0,46 | not allowed | 0,17 | not allowed | 0,23 | not allowed |
| M12 | 0,34 | not allowed | 0,68 | not allowed | 0,24 | not allowed | 0,34 | not allowed |
| M16 | 0,70 | not allowed | 1,40 | not allowed | 0,50 | not allowed | 0,70 | not allowed |
| M20 | 1,20 | not allowed | 2,40 | not allowed | 0,86 | not allowed | 1,20 | not allowed |

CONTAINER LIFTING LUG

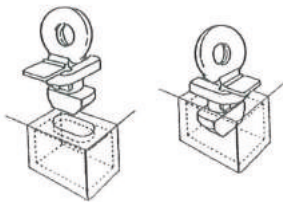
- grade 8
- top lifting lugs for lifting vertically from the upper part of the container with a lifting frame
- side lifting lugs for lifting from the lower corners of the container with max. 50 ° chain angle
- multiple lifting lugs for lifting from the upper or lower corners from the sides (multiple lifting lugs do not lock like the other models!)
- delivery includes 4 lifting eyes (for all corners) without shackles



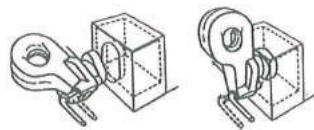
Top lifting lug



Side lifting lug



KONMKIIA
Top lug



KONMKVA
Side lug

| Type | WLL vertical lift t | WLL 36° chain angle t | WLL 50° chain angle t | Weight / set 4 pcs kg | Product code |
|------------|---------------------------|-----------------------------|-----------------------------|-----------------------------|--------------|
| Top lug | 56 | - | - | 19,2 | KONMKIIA |
| Bottom set | 40 | 40 | 32 | 19,2 | KONMKVA |

10. Shackles, Swivels and Snatch Blocks

SAE / Green pin shackles

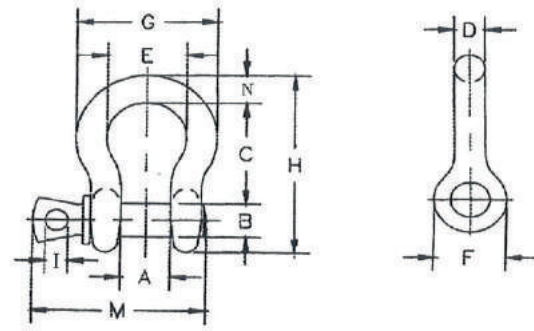
DIN 82101, stainless steel and chain shackles

Snatch blocks / Pulley wheels



SHACKLE, SAE - BOW MODEL

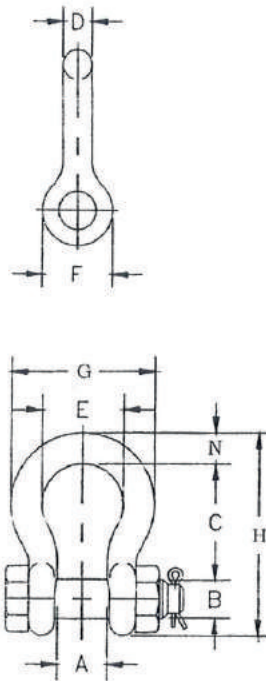
- shackles approved for lifting
- hot dip galvanized coating
- safety factor 6 : 1



| WLL | A | B | C | D | E | F | G | H | I | M | N | Weight/ pcs | Product code |
|-------|-----|----|-----|----|-----|-----|-----|-----|----|-----|-----|----------------|--------------|
| t | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | kg | |
| 0,33 | 10 | 7 | 22 | 5 | 15 | 14 | 25 | 38 | 4 | 29 | 5 | 0,03 | SAK03PBP |
| 0,50 | 12 | 8 | 29 | 7 | 20 | 16 | 33 | 47 | 5 | 35 | 5 | 0,05 | SAK05PBP |
| 0,75 | 14 | 10 | 31 | 8 | 22 | 19 | 38 | 53 | 6 | 42 | 8 | 0,09 | SAK07PBP |
| 1,00 | 17 | 11 | 37 | 10 | 26 | 23 | 45 | 63 | 7 | 52 | 10 | 0,14 | SAK10PBP |
| 1,50 | 19 | 13 | 43 | 11 | 30 | 27 | 52 | 74 | 8 | 61 | 11 | 0,17 | SAK15PBP |
| 2,00 | 21 | 16 | 48 | 13 | 34 | 30 | 59 | 84 | 10 | 69 | 13 | 0,33 | SAK20PBP |
| 3,25 | 27 | 19 | 61 | 16 | 43 | 38 | 75 | 106 | 11 | 85 | 18 | 0,62 | SAK32PBP |
| 4,75 | 32 | 23 | 72 | 19 | 51 | 46 | 89 | 126 | 13 | 101 | 21 | 1,07 | SAK47PBP |
| 6,50 | 37 | 26 | 84 | 23 | 58 | 53 | 102 | 148 | 13 | 114 | 25 | 1,64 | SAK65PBP |
| 8,50 | 43 | 29 | 96 | 26 | 69 | 61 | 119 | 167 | 14 | 129 | 27 | 2,28 | SAK85PBP |
| 9,50 | 46 | 32 | 108 | 30 | 74 | 69 | 131 | 190 | 16 | 142 | 32 | 3,36 | SAK95PBP |
| 12,00 | 52 | 35 | 119 | 33 | 93 | 76 | 146 | 210 | 18 | 156 | 35 | 4,31 | SAK120PBP |
| 13,50 | 57 | 38 | 133 | 36 | 92 | 84 | 162 | 233 | 19 | 174 | 38 | 6,14 | SAK135PBP |
| 17,00 | 61 | 42 | 146 | 39 | 99 | 92 | 175 | 254 | 21 | 187 | 41 | 7,80 | SAK170PBP |
| 25,00 | 73 | 51 | 178 | 47 | 127 | 106 | 225 | 313 | 26 | 231 | 57 | 12,60 | SAK250PBP |
| 35,00 | 83 | 57 | 197 | 53 | 146 | 122 | 253 | 348 | 31 | 263 | 61 | 20,40 | SAK350PBP |
| 55,00 | 105 | 70 | 267 | 69 | 184 | 145 | 327 | 453 | 35 | 330 | 80 | 38,90 | SAK550PBP |
| 85,00 | 127 | 82 | 330 | 76 | 200 | 165 | 367 | 546 | 38 | 490 | 105 | 70,00 | SAK850PBP |

SHACKLE, SAE - BOW MODEL WITH LOCKING

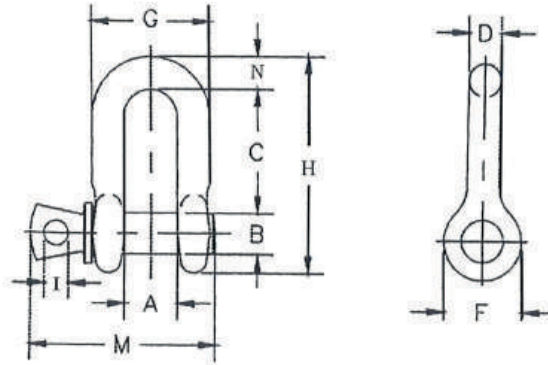
- shackles approved for lifting
- hot dip galvanized coating
- safety factor 6 : 1



| WLL | A | B | C | D | E | F | G | H | N | Weight/ pcs | Product code |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|--------------|
| t | mm | mm | mm | mm | mm | mm | mm | mm | mm | kg | |
| 0,50 | 12 | 8 | 29 | 7 | 20 | 16 | 33 | 47 | 7 | 0,05 | SAK05PLBP |
| 0,75 | 14 | 10 | 31 | 8 | 22 | 19 | 38 | 53 | 8 | 0,10 | SAK07PLBP |
| 1,00 | 17 | 11 | 37 | 10 | 26 | 23 | 45 | 63 | 10 | 0,15 | SAK10PLBP |
| 1,50 | 19 | 13 | 43 | 11 | 30 | 27 | 52 | 74 | 11 | 0,22 | SAK15PLBP |
| 2,00 | 21 | 16 | 48 | 13 | 34 | 30 | 59 | 84 | 13 | 0,36 | SAK20PLBP |
| 3,25 | 27 | 19 | 61 | 16 | 43 | 38 | 75 | 106 | 18 | 0,76 | SAK32PLBP |
| 4,75 | 32 | 23 | 72 | 19 | 51 | 46 | 89 | 126 | 21 | 1,23 | SAK47PLBP |
| 6,50 | 37 | 26 | 84 | 23 | 58 | 53 | 102 | 148 | 25 | 1,79 | SAK65PLBP |
| 8,50 | 43 | 29 | 96 | 26 | 69 | 61 | 119 | 167 | 27 | 2,57 | SAK85PLBP |
| 9,50 | 46 | 32 | 108 | 29 | 74 | 69 | 131 | 190 | 32 | 3,75 | SAK95PLBP |
| 12,00 | 52 | 35 | 119 | 32 | 83 | 76 | 146 | 210 | 35 | 5,31 | SAK120PLBP |
| 13,50 | 57 | 38 | 133 | 35 | 92 | 84 | 162 | 233 | 38 | 7,18 | SAK135PLBP |
| 17,00 | 61 | 42 | 146 | 38 | 99 | 92 | 175 | 254 | 41 | 9,43 | SAK170PLBP |
| 25,00 | 73 | 51 | 178 | 45 | 127 | 106 | 225 | 313 | 57 | 15,40 | SAK250PLBP |
| 35,00 | 83 | 57 | 197 | 51 | 146 | 122 | 256 | 348 | 61 | 23,70 | SAK350PLBP |
| 55,00 | 105 | 70 | 267 | 67 | 184 | 145 | 327 | 453 | 80 | 44,61 | SAK550PLBP |
| 85,00 | 127 | 83 | 330 | 76 | 200 | 165 | 365 | 546 | 92 | 70,00 | SAK850PLBP |
| 120,00 | 133 | 96 | 372 | 92 | 229 | 203 | 419 | 626 | 105 | 120,0 | SAK1200PLBP |
| 150,00 | 140 | 108 | 368 | 104 | 254 | 229 | 468 | 653 | 116 | 153 | SAK1500PLBP |

SHACKLE, SAE - DEE MODEL

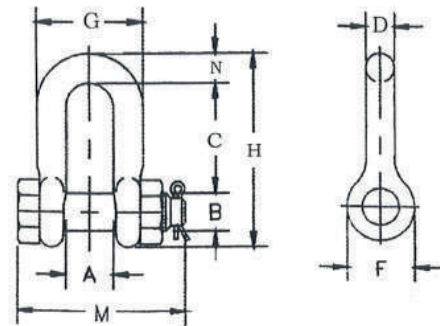
- shackles approved for lifting
- hot dip galvanized coating
- safety factor 6 : 1



| WLL | A | B | C | D | F | G | H | I | M | Weight/ pcs | Product code |
|-------|-----|----|-----|----|-----|-----|-----|----|-----|----------------|--------------|
| t | mm | mm | mm | mm | mm | mm | mm | mm | mm | kg | |
| 0,33 | 10 | 7 | 16 | 5 | 14 | 20 | 31 | 4 | 29 | 0,02 | SAK03SBP |
| 0,50 | 12 | 8 | 23 | 7 | 16 | 25 | 41 | 5 | 35 | 0,05 | SAK05SBP |
| 0,75 | 14 | 10 | 26 | 8 | 19 | 30 | 49 | 6 | 42 | 0,08 | SAK07SBP |
| 1,00 | 17 | 11 | 32 | 10 | 23 | 36 | 59 | 7 | 52 | 0,13 | SAK10SBP |
| 1,50 | 19 | 13 | 37 | 11 | 27 | 42 | 68 | 8 | 61 | 0,20 | SAK15SBP |
| 2,00 | 21 | 16 | 42 | 13 | 30 | 46 | 77 | 10 | 69 | 0,27 | SAK20SBP |
| 3,25 | 27 | 19 | 51 | 16 | 37 | 59 | 96 | 11 | 85 | 0,57 | SAK32SBP |
| 4,75 | 32 | 23 | 61 | 19 | 46 | 70 | 115 | 13 | 101 | 1,20 | SAK47SBP |
| 6,50 | 37 | 26 | 72 | 23 | 53 | 81 | 135 | 13 | 114 | 1,43 | SAK65SBP |
| 8,50 | 43 | 29 | 81 | 25 | 61 | 94 | 151 | 14 | 129 | 2,15 | SAK85SBP |
| 9,50 | 46 | 32 | 91 | 29 | 69 | 103 | 172 | 16 | 142 | 3,06 | SAK95SBP |
| 12,00 | 52 | 35 | 100 | 32 | 76 | 115 | 191 | 18 | 156 | 4,11 | SAK120SBP |
| 13,50 | 57 | 38 | 111 | 35 | 84 | 127 | 210 | 19 | 174 | 5,28 | SAK135SBP |
| 17,00 | 61 | 42 | 122 | 38 | 92 | 137 | 230 | 21 | 187 | 7,23 | SAK170SBP |
| 25,00 | 73 | 51 | 146 | 45 | 106 | 162 | 279 | 26 | 231 | 12,10 | SAK250SBP |
| 35,00 | 83 | 57 | 172 | 51 | 122 | 184 | 312 | 31 | 263 | 19,20 | SAK350SBP |
| 55,00 | 105 | 70 | 203 | 67 | 145 | 238 | 377 | 35 | 330 | 32,50 | SAK550SBP |

SHACKLE, SAE - DEE MODEL WITH LOCKING

- shackles approved for lifting
- hot dip galvanized coating
- safety factor 6 : 1



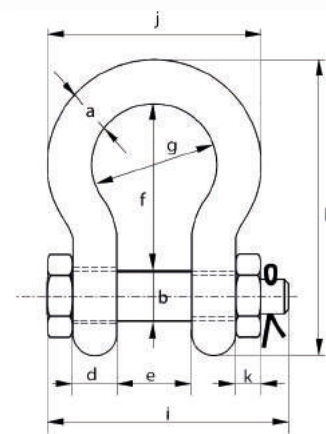
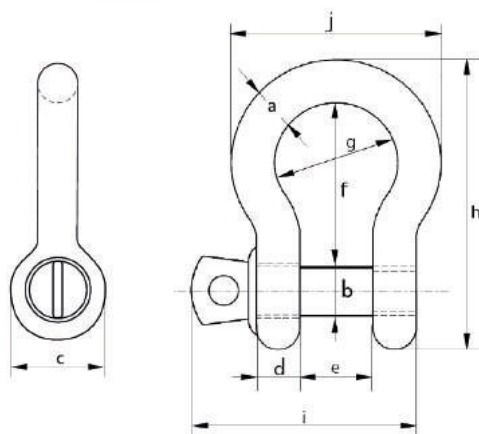
| WLL | A | B | C | D | F | G | H | M | N | Weight/ pcs | Product code |
|--------|-----|----|-----|----|-----|-----|-----|-----|-----|----------------|--------------|
| t | mm | mm | mm | mm | mm | mm | mm | mm | mm | kg | |
| 0,50 | 12 | 8 | 19 | 7 | 16 | 25 | 41 | 40 | 7 | 0,06 | SAK05SLBP |
| 0,75 | 14 | 10 | 26 | 8 | 19 | 30 | 49 | 46 | 8 | 0,10 | SAK07SLBP |
| 1,00 | 17 | 11 | 31 | 10 | 23 | 36 | 59 | 55 | 10 | 0,15 | SAK10SLBP |
| 1,50 | 19 | 13 | 36 | 11 | 27 | 41 | 68 | 64 | 11 | 0,22 | SAK15SLBP |
| 2,00 | 21 | 16 | 42 | 13 | 30 | 46 | 77 | 71 | 13 | 0,34 | SAK20SLBP |
| 3,25 | 27 | 19 | 51 | 16 | 38 | 59 | 96 | 90 | 16 | 0,67 | SAK32SLBP |
| 4,75 | 32 | 23 | 61 | 19 | 46 | 70 | 115 | 103 | 21 | 1,14 | SAK47SLBP |
| 6,50 | 37 | 26 | 72 | 23 | 53 | 81 | 135 | 120 | 25 | 1,74 | SAK65SLBP |
| 8,50 | 43 | 29 | 81 | 26 | 61 | 94 | 151 | 135 | 26 | 2,52 | SAK85SLBP |
| 9,50 | 46 | 32 | 91 | 29 | 69 | 103 | 172 | 150 | 32 | 3,45 | SAK95SLBP |
| 12,00 | 52 | 35 | 100 | 32 | 76 | 115 | 191 | 165 | 35 | 4,90 | SAK120SLBP |
| 13,50 | 57 | 38 | 111 | 35 | 84 | 127 | 210 | 183 | 38 | 6,24 | SAK135SLBP |
| 17,00 | 61 | 42 | 122 | 38 | 92 | 137 | 230 | 196 | 42 | 8,39 | SAK170SLBP |
| 25,00 | 73 | 51 | 146 | 45 | 106 | 162 | 279 | 230 | 54 | 14,20 | SAK250SLBP |
| 35,00 | 82 | 57 | 172 | 51 | 122 | 184 | 312 | 264 | 51 | 21,20 | SAK350SLBP |
| 55,00 | 105 | 70 | 203 | 67 | 145 | 238 | 377 | 344 | 67 | 38,60 | SAK550SLBP |
| 85,00 | 127 | 83 | 216 | 76 | 165 | 279 | 429 | 419 | 89 | 56,00 | SAK850SLBP |
| 120,00 | 133 | 96 | 240 | 92 | 203 | 320 | 500 | 510 | 102 | 95,00 | SAK1200SLBP |

SHACKLE GREEN PIN® BOW MODEL

- shackles approved for lifting
- hot dip galvanized coating
- safety factor 6 : 1



with locking



Bigger sizes and special measures also available.
Ask more from our sales!

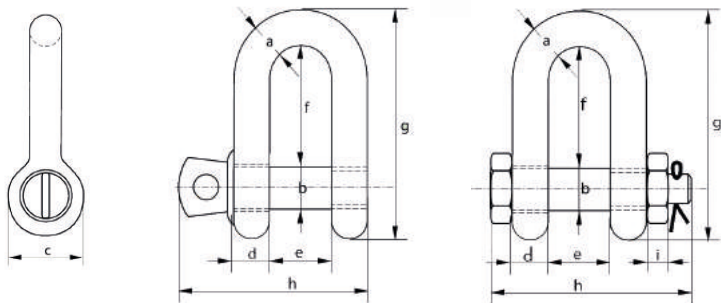
| WLL | a | b | c | d | e | f | g | h | i | i lock | j | k | Weight pcs | Weight pcs lock. | Product code | Product code with locking |
|-------|------|----|------|----|------|------|-----|------|------|--------|-----|----|------------|------------------|--------------|---------------------------|
| t | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | kg | kg | | |
| 0,33 | 5 | 6 | 12 | 5 | 9,5 | 22 | 16 | 36 | 29,5 | - | 26 | - | 0,02 | - | *SAK03P | - |
| 0,50 | 7 | 8 | 16,5 | 7 | 12 | 29 | 20 | 48,5 | 38 | 42 | 34 | 4 | 0,05 | 0,06 | SAK05P | SAK05PL |
| 0,75 | 9 | 10 | 20 | 9 | 13,5 | 32 | 22 | 56 | 46,5 | 50 | 40 | 5 | 0,10 | 0,11 | SAK07P | SAK07PL |
| 1,00 | 10 | 11 | 22,5 | 10 | 17 | 36,5 | 26 | 63,5 | 54 | 60 | 46 | 8 | 0,14 | 0,16 | SAK10P | SAK10PL |
| 1,50 | 11 | 13 | 26,5 | 11 | 19 | 43 | 29 | 74 | 59,5 | 67 | 51 | 11 | 0,19 | 0,22 | SAK15P | SAK15PL |
| 2,00 | 13,5 | 16 | 34 | 13 | 22 | 51 | 32 | 89 | 73 | 82 | 58 | 13 | 0,36 | 0,42 | SAK20P | SAK20PL |
| 3,25 | 16 | 19 | 40 | 16 | 27 | 64 | 43 | 110 | 89 | 98 | 75 | 17 | 0,63 | 0,74 | SAK32P | SAK32PL |
| 4,75 | 19 | 22 | 46 | 19 | 31 | 76 | 51 | 129 | 103 | 114 | 89 | 19 | 1,01 | 1,18 | SAK47P | SAK47PL |
| 6,50 | 22 | 25 | 52 | 22 | 36 | 83 | 58 | 144 | 119 | 130 | 102 | 22 | 1,50 | 1,77 | SAK65P | SAK65PL |
| 8,50 | 25 | 28 | 59 | 25 | 43 | 95 | 68 | 164 | 137 | 150 | 118 | 25 | 2,21 | 2,58 | SAK85P | *SAK85PL |
| 9,50 | 28 | 32 | 66 | 28 | 47 | 108 | 75 | 185 | 153 | 166 | 131 | 27 | 3,16 | 3,66 | SAK95P | *SAK95PL |
| 12,00 | 32 | 35 | 72 | 32 | 51 | 115 | 83 | 201 | 170 | 178 | 147 | 30 | 4,31 | 4,91 | SAK120P | *SAK120PL |
| 13,50 | 35 | 38 | 80 | 35 | 57 | 133 | 92 | 227 | 186 | 197 | 162 | 33 | 5,55 | 6,54 | *SAK135P | *SAK135PL |
| 17,00 | 38 | 42 | 88 | 38 | 60 | 146 | 99 | 249 | 203 | 202 | 175 | 19 | 7,43 | 8,19 | *SAK170P | *SAK170PL |
| 25,00 | 45 | 50 | 103 | 45 | 74 | 178 | 126 | 300 | 243 | 249 | 216 | 23 | 12,84 | 14,22 | *SAK250P | *SAK250PL |
| 35,00 | 50 | 57 | 111 | 50 | 83 | 197 | 138 | 331 | 272 | 269 | 238 | 26 | 18,15 | 19,85 | *SAK350P | *SAK350PL |
| 42,50 | 57 | 65 | 130 | 57 | 95 | 222 | 160 | 377 | 310 | 301 | 274 | 29 | 26,29 | 28,33 | *SAK425P | *SAK425PL |
| 55,00 | 65 | 70 | 145 | 65 | 105 | 260 | 180 | 433 | 344 | 330 | 310 | 32 | 37,60 | 39,59 | *SAK550P | *SAK550PL |
| 85,00 | 75 | 83 | 162 | 73 | 127 | 329 | 190 | 527 | - | 380 | 340 | 39 | - | 62,00 | - | *SAK850PL |

*Items marked with an asterisk delivery 1-2 weeks

SHACKLE GREEN PIN® DEE MODEL

- shackles approved for lifting
- hot dip galvanized coating
- safety factor 6 : 1

with locking



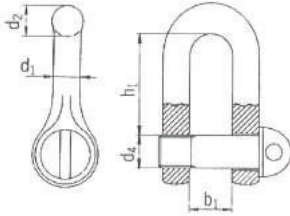
Bigger sizes and special measures also available.
Ask more from our sales!

| WLL | a | b | c | d | e | f | g | h | h lock | i lock | Weight pcs | Weight pcs lock. | Product code | Product code with locking |
|-------|------|----|------|----|------|-----|------|------|--------|--------|------------|------------------|--------------|---------------------------|
| t | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | kg | kg | | |
| 0,33 | 5 | 6 | 12 | 5 | 9,5 | 19 | 33 | 29,5 | - | - | 0,02 | - | SAK03S | - |
| 0,50 | 7 | 8 | 16,5 | 7 | 12 | 22 | 41,5 | 38 | - | - | 0,05 | - | SAK05S | - |
| 0,75 | 9 | 10 | 20 | 9 | 13,5 | 26 | 50 | 46,5 | - | - | 0,09 | - | SAK07S | - |
| 1,00 | 10 | 11 | 22,5 | 10 | 17 | 32 | 59 | 54 | - | - | 0,14 | - | SAK10S | - |
| 1,50 | 11 | 13 | 26,5 | 11 | 19 | 37 | 68 | 59,5 | - | - | 0,19 | - | SAK15S | - |
| 2,00 | 13,5 | 16 | 34 | 13 | 22 | 43 | 81 | 73 | 82 | 13 | 0,32 | 0,39 | SAK20S | *SAK20SL |
| 3,25 | 16 | 19 | 40 | 16 | 27 | 51 | 97 | 89 | 98 | 17 | 0,54 | 0,67 | SAK32S | *SAK32SL |
| 4,75 | 19 | 22 | 46 | 19 | 31 | 59 | 112 | 103 | 114 | 19 | 0,87 | 1,08 | SAK47S | *SAK47SL |
| 6,50 | 22 | 25 | 52 | 22 | 36 | 73 | 134 | 119 | 130 | 22 | 1,34 | 1,66 | SAK65S | *SAK65SL |
| 8,50 | 25 | 28 | 59 | 25 | 43 | 85 | 154 | 137 | 150 | 25 | 2,08 | 2,46 | *SAK85S | *SAK85SL |
| 9,50 | 28 | 32 | 66 | 28 | 47 | 90 | 167 | 153 | 166 | 27 | 2,77 | 3,40 | *SAK95S | *SAK95SL |
| 12,00 | 32 | 35 | 72 | 32 | 51 | 94 | 180 | 170 | 178 | 30 | 3,72 | 4,51 | *SAK120S | *SAK120SL |
| 13,50 | 35 | 38 | 80 | 35 | 57 | 115 | 209 | 186 | 197 | 33 | 5,14 | 6,10 | *SAK135S | *SAK135SL |
| 17,00 | 38 | 42 | 88 | 38 | 60 | 127 | 230 | 203 | 202 | 19 | 6,85 | 7,63 | *SAK170S | *SAK170SL |
| 25,00 | 45 | 50 | 103 | 45 | 74 | 149 | 271 | 243 | 249 | 23 | 11,45 | 12,88 | *SAK250S | *SAK250SL |
| 35,00 | 50 | 57 | 111 | 50 | 83 | 171 | 305 | 272 | 269 | 26 | 16,86 | 17,35 | *SAK350S | *SAK350SL |
| 42,50 | 57 | 65 | 130 | 57 | 95 | 190 | 345 | 310 | 301 | 29 | 24,61 | 25,94 | *SAK425S | *SAK425SL |
| 55,00 | 65 | 70 | 145 | 65 | 105 | 203 | 376 | 344 | 330 | 32 | 32,65 | 35,33 | *SAK550S | *SAK550SL |
| 85,00 | 75 | 83 | 162 | 73 | 127 | 229 | 427 | 380 | 380 | 39 | - | 52,97 | - | *SAK850SL |

*Items marked with an asterisk delivery 1-2 weeks

SHACKLES DIN 82101

- shackles approved for lifting
- electro galvanized
- safety factor 5 : 1

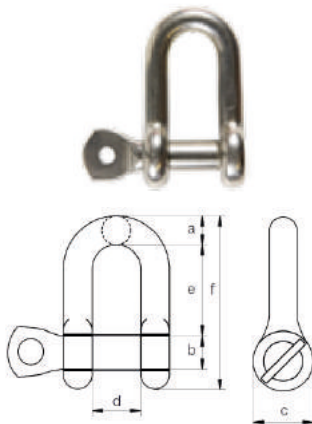


Also available as hot dip galvanized (0,4 - 50t).

| Size d4 mm | WLL t | b1 mm | d1 mm | d2 mm | h1 mm | Package size pcs | Weight/ 100pcs kg | Product code | Product code with locking |
|------------------|----------|----------|----------|----------|----------|------------------------|-------------------------|--------------|------------------------------|
| 5 | 0,10 | 7 | 4 | 5 | 15 | 50 | 1,7 | SAKD0100 | SAKD0100L |
| 6 | 0,16 | 8 | 5 | 6 | 18 | 50 | 2,4 | SAKD0160 | SAKD0160L |
| 8 | 0,25 | 11 | 7 | 8 | 24 | 50 | 5,4 | SAKD0250 | SAKD0250L |
| 10 | 0,40 | 14 | 8 | 10 | 30 | 25 | 9,7 | SAKD0400 | SAKD0400L |
| 12 | 0,63 | 17 | 10 | 12 | 36 | 25 | 18,0 | SAKD0630 | SAKD0630L |
| 16 | 1,00 | 21 | 13 | 15 | 49 | 25 | 30,0 | SAKD1000 | SAKD1000L |
| 20 | 1,60 | 27 | 17 | 19 | 61 | 25 | 57,0 | SAKD1600 | SAKD1600L |
| 22 | 2,00 | 30 | 19 | 21 | 67 | 1 | 98,0 | SAKD2000 | SAKD2000L |
| 24 | 2,50 | 33 | 21 | 23 | 73 | 1 | 130,0 | SAKD2500 | SAKD2500L |
| 27 | 3,15 | 38 | 24 | 26 | 84 | 1 | 185,0 | SAKD3150 | SAKD3150L |
| 30 | 4,00 | 42 | 27 | 29 | 91 | 1 | 253,0 | SAKD4000 | SAKD4000L |
| 36 | 5,00 | 47 | 30 | 33 | 111 | 1 | 400,0 | SAKD5000 | SAKD5000L |
| 39 | 6,30 | 53 | 34 | 37 | 120 | 1 | 530,0 | SAKD6300 | SAKD6300L |
| 45 | 8,00 | 60 | 38 | 41 | 140 | 1 | 790,0 | SAKD8000 | SAKD8000L |
| 48 | 10,00 | 66 | 42 | 45 | 147 | 1 | 1000,0 | SAKD10000 | SAKD10000L |
| 60 | 16,00 | 81 | 52 | 55 | 185 | 1 | 1920,0 | SAKD16000 | SAKD16000L |
| 68 | 20,00 | 90 | 58 | 60 | 211 | 1 | 2800,0 | SAKD20000 | SAKD20000L |
| 72 | 25,00 | 100 | 63 | 65 | 221 | 1 | 3400,0 | | SAKD25000L |
| 80 | 32,00 | 110 | 70 | 75 | 246 | 1 | 4900,0 | | SAKD32000L |
| 90 | 40,00 | 125 | 80 | 80 | 276 | 1 | 7500,0 | | SAKD40000L |

STAINLESS STEEL SHACKLES

- D-shackles approved for lifting
- material AISI 316
- safety factor 5 : 1

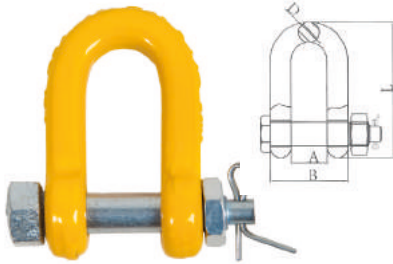


| WLL t | a mm | b mm | c mm | d mm | e mm | f mm | Weight kg | Product code |
|----------|---------|---------|---------|---------|---------|---------|--------------|--------------|
| 0,40 | 8 | 8 | 16 | 16 | 32 | 52 | 0,06 | SAKDH0400 |
| 0,60 | 10 | 10 | 19 | 20 | 40 | 64 | 0,12 | SAKDH0600 |
| 0,90 | 12 | 12 | 24 | 25 | 48 | 78 | 0,21 | SAKDH0900 |
| 1,50 | 13 | 16 | 31 | 24 | 52 | 90 | 0,34 | SAKDH1500 |
| 2,50 | 16 | 20 | 38 | 28 | 64 | 110 | 0,61 | SAKDH2500 |
| 3,00 | 19 | 22 | 44 | 32 | 72 | 124 | 0,90 | SAKDH3000 |
| 4,00 | 22 | 25 | 50 | 37 | 74 | 134 | 1,08 | SAKDH4000 |
| 6,00 | 25 | 30 | 57 | 40 | 94 | 162 | 2,25 | SAKDH6000 |

Delivery 1-2 weeks

CHAIN SHACKLES

- can be added directly to a lifting chain without a connection link
- paint coated
- safety factor 4 : 1



| For chain | WLL | A | B | D | L | Weight | Product code |
|-----------|------|----|----|------|-----|--------|--------------|
| mm | t | mm | mm | mm | mm | kg | |
| 7/8 | 2,00 | 15 | 32 | 9 | 56 | 0,14 | SAKSA78 |
| 10 | 3,15 | 21 | 43 | 11,5 | 71 | 0,27 | SAKSA10 |
| 13 | 5,30 | 25 | 51 | 14,5 | 91 | 0,50 | SAKSA13 |
| 16 | 8,00 | 30 | 63 | 17,5 | 111 | 0,89 | SAKSA16 |

SNATCH BLOCKS 0.5 - 5.0T



- one- or two-wheel side opening snatch block for wire rope
- with hook ends
- with slide bearings, with grease nipple or aperture
- powder paint coated
- safety factor 4:1

| WLL | Max wire diam. | Wheel diam. | L | Weight | Product code | Product code |
|-----|----------------|-------------|-----|--------|--------------|--------------|
| t | mm | mm | mm | kg | 1-wheel | 2-wheel |
| 0,5 | 8 | 75 | 225 | 1,7 | VAP050075 | - |
| 1,0 | 10 | 100 | 260 | 3,2 | VAP1000100 | - |
| 1,5 | 13 | 125 | 310 | 5,0 | VAP1500125 | - |
| 2,0 | 16 | 150 | 380 | 8,3 | VAP2000150 | - |
| 3,0 | 19 | 180 | 415 | 12,0 | VAP3000180 | VAP30180K2 |
| 4,0 | 22 | 200 | 480 | 18,0 | VAP4000200 | VAP40200K2 |
| 5,0 | 25 | 250 | 585 | 27,0 | VAP5000250 | VAP50250K2 |

Also other sizes available for 3-4 weeks delivery.

SNATCH BLOCKS 4.0 - 22.0T



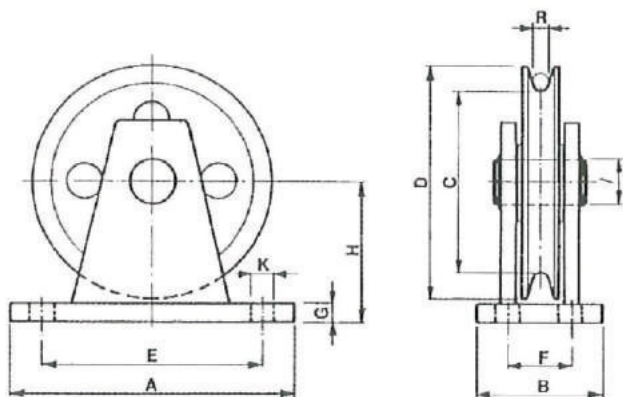
- 1-wheel side opening heavy duty steel block for wire rope
- ball bearing, with grease nipple (4t model with slide bearing)
- safety factor 4:1

| WLL | Max wire diam. | Wheel diam. | L | Weight | Product code |
|-----|----------------|-------------|-----|--------|--------------|
| t | mm | mm | mm | kg | sakkelilla |
| 4 | 16 - 18 | 150 | 390 | 6 | VAP4150S |
| 8 | 20 - 22 | 200 | 505 | 16 | VAP8200S |
| 12 | 24 - 26 | 300 | 730 | 32 | VAP12300S |
| 22 | 28 - 32 | 360 | 910 | 89 | VAP22360S |

Also other sizes available for 3-4 weeks delivery.

PULLEY WHEEL WITH BASE

- one-wheel pulley block with base attachment
- slide bearings
- electro galvanized / ground coating
- safety factor 4:1



| WLL | Max rope diam. | A | B | C | D | E | F | G | H | I | K | Weight | Product code |
|-----|----------------|-----|-----|-----|-----|-----|----|----|-----|----|----|--------|--------------|
| t | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | kg | |
| 0,5 | 8 | 120 | 60 | 78 | 100 | 90 | 30 | 8 | 60 | 20 | 10 | 1,5 | VAP05JAL |
| 1,0 | 10 | 140 | 60 | 98 | 125 | 110 | 35 | 10 | 77 | 25 | 12 | 2,4 | VAP10JAL |
| 2,0 | 12 | 180 | 80 | 118 | 150 | 140 | 40 | 12 | 92 | 30 | 14 | 4,5 | VAP20JAL |
| 3,0 | 16 | 230 | 100 | 160 | 200 | 180 | 50 | 15 | 120 | 35 | 18 | 8,2 | VAP30JAL |
| 5,0 | 20 | 320 | 120 | 225 | 275 | 260 | 60 | 20 | 165 | 40 | 23 | 18,0 | VAP50JAL |

PULLEY WHEEL

- one-wheel pulley with slide bearings
- ground coating
- safety factor 4 : 1



| WLL | Max rope diameter | Wheel diameter | Axel diameter | Weight | Product code |
|-----|-------------------|----------------|---------------|--------|--------------|
| t | mm | mm | mm | kg | |
| 0,5 | 8 | 100 | 20 | 0,8 | VAPY05 |
| 1,0 | 10 | 125 | 25 | 1,5 | VAPY10 |
| 2,0 | 12 | 150 | 30 | 3,0 | VAPY20 |
| 3,0 | 16 | 200 | 35 | 6,0 | VAPY30 |
| 5,0 | 20 | 275 | 40 | 13,0 | VAPY50 |

11. Lashing systems. Truck body building equipment and accessories

Lashing systems and accessories

Webbings and ratchets

Winches

Anti-slip mats

Cargo and rope nets

Towing slings

Load supporting / binders

Loading beams & connectors

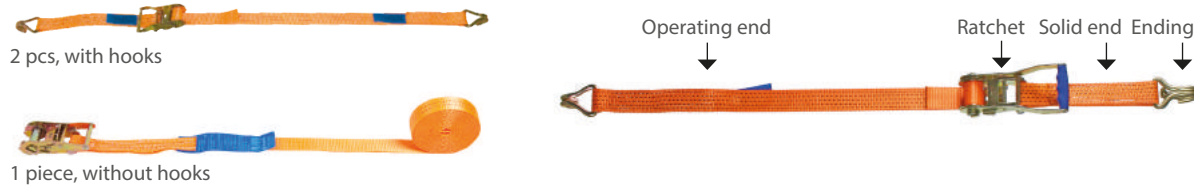
Truck body building

Crane lifting bases



All lashing system available as 1- and 2 part models, also in dimensions of customer choice and in accordance with end fitting (page 11-5). Manufactured in our own sewing shop in Finland. All Haklift lashing systems are in accordance with EU standard EN 12195-1 with their LC values!

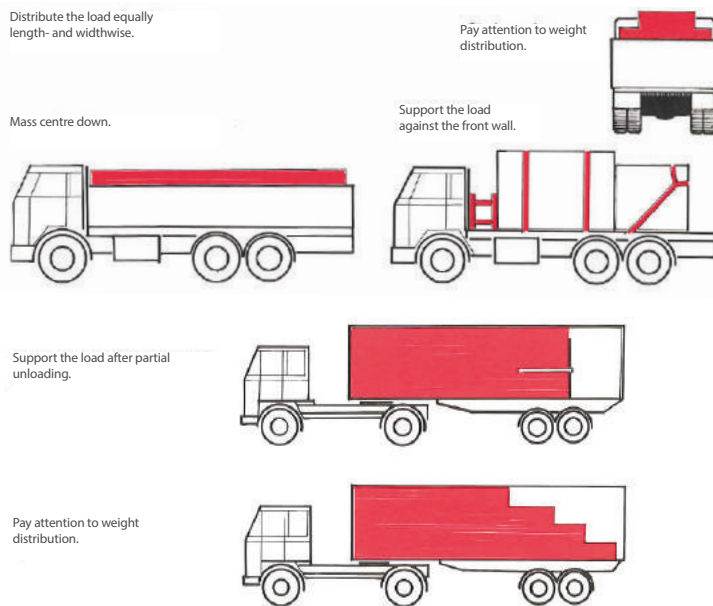
STRUCTURE OF RATCHET TIE DOWNS AND LASHING CAPACITY (LC)



The regulations regarding the lashing of cargo in road transport in Finland differ from those in the rest of the EU region. In Finland, the regulation is decision 940/82 of the Finnish Transport Agency.

On other parts of the EU region, a so-called LASHING CAPACITY is in effect.

PLACING THE LOAD

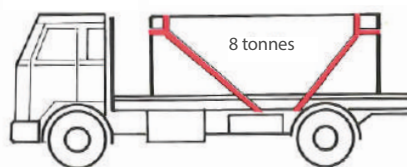


FRICITION / LASHING CAPACITY

The amount of friction force depends on the roughness of contact surfaces and the weight of the load. It is weakened significantly by ice, impurities and dampness. The size of contact surface areas do not affect the friction force.

| pallet | friction coefficient |
|--------|----------------------|
| dry | 0,3 |
| damp | 0,2 |
| snowy | 0,1 |

Example:
 Vehicle load weight = 8t
 Friction between load and pallet = 0.2
 Friction force (0.2x8t) ≈ 1.6t (16kN)
 In addition to friction, the following securing requirements should be met:
 — forward 8t — 1.6t = 6.4t (64kN)
 — sideways 4t — 1.6t = 2.4t (24kN)
 — backward 4t — 1.6t = 2.4t (24kN)



LASHING CAPACITY

| Direction | Sling t | Friction coefficient = 0.2 0.2 x 16t ≈ 3t | Total t | Requirement t (kN) |
|---------------------------------|---------|--|---------|--------------------|
| Forward ≤ 60° x 3.5t | 14 | 3 | 17 | 16 tn (160 kN) |
| Sideways=90° 0.25 x 6 x 3.5t | 5,3 | 3 | 8,3 | 8 tn (80 kN) |
| Backward ≤ 60° 2 x 3,5t | 7 | 3 | 10 | 8 tn (80 kN) |

SECURING THE LOAD

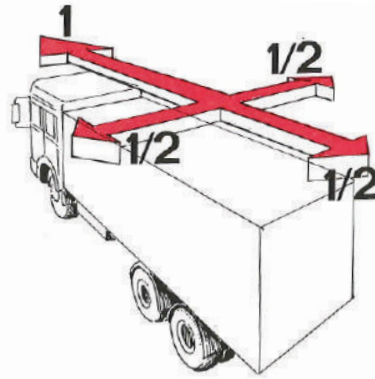
Decision 940/82 of the Finnish Transport Agency FTA

APPLIES TO

- trucks
- truck trailers, when the total weight is over 3.5t

The load must be secured in a way that it will endure

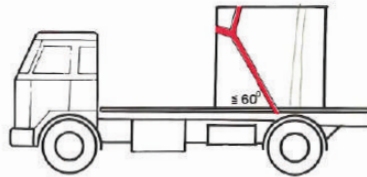
- the forward weight of the entire load
- half of the load weight sideways and backwards



LASHING ANGLE

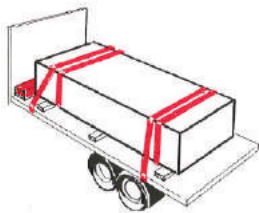
Greatest lashing force is achieved when the lashing device is in a horizontal position. The lashing force can be calculated according to the below table.

| Angle of the lashing device | Lashing force % from the nominal strength |
|-----------------------------|---|
| 0–60° | 100 |
| 70° | 70 |
| 80° | 35 |
| 90° | 25 |



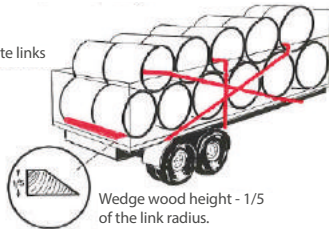
EXAMPLES OF CARGO LASHINGS

Heavy plate stacks



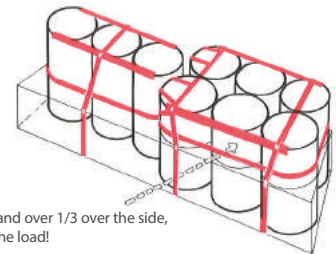
Tempered chain \varnothing 10mm (3/8").
If lashing webbings are used, corner protectors must also be used.

Concrete links



Wedge wood height - 1/5 of the link radius.

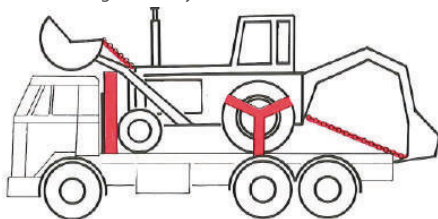
Paper rolls



If roll stacks stand over 1/3 over the side, always cover the load!

TRANSPORTATION OF CONSTRUCTION MACHINES

1. Switch to the parking brake and to a small gear.
2. No machine part should rely merely on hydraulics. Dislocation during the journey must be prevented with a cylinder lock or other appropriate mechanic device.
3. Bind to a rigid or heavy axle.

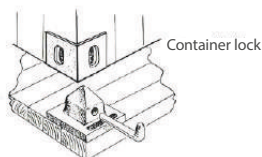


Prevent the device from moving sideways!

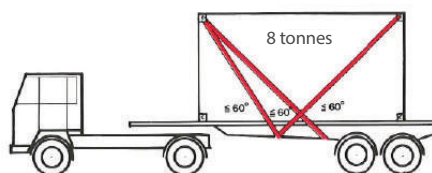


TRANSPORTATION OF CONTAINERS

In the transportation of containers, a vehicle equipped with container locks must primarily be used.



If a container cannot be locked with container locks, it must be bound with at least four separate bindings.



LASHING SYSTEMS - WIDTH 25 MM



LC 400 KG, 5 M

| Package | LC kg | Breaking strength kg | Length m | Band width mm | Packing size pcs / box | Product code |
|---------|----------|----------------------------|-------------|---------------------|---------------------------|--------------|
| bag | 400 | 800 | 0,4 + 4,6 | 25 | 50 | SV100052EC |

- for light lashing in trailers, roof racks etc.
- webbing material 100 % polyester



LC 500 KG, 5 M

| Package | LC kg | Breaking strength kg | Length m | Band width mm | Packing-size pcs / box | Product code |
|-----------|----------|----------------------------|-------------|---------------------|---------------------------|--------------|
| bulk | 500 | 1000 | 0,4 + 4,6 | 25 | 45 | SV100052I |
| cardboard | 500 | 1000 | 0,4 + 4,6 | 25 | 40 | SV100052 |



LC 500 KG, 5 M STAINLESS

| Package | LC kg | Breaking strength kg | Length m | Band width mm | Packing size pcs | Product code |
|---------|----------|----------------------------|-------------|---------------------|---------------------|--------------|
| bulk | 500 | 1000 | 0,4 + 4,6 | 25 | 1 | SV100052R |

LASHING SYSTEMS - WIDTH 25 MM

- for light lashing in trailers, roof racks etc.
- webbing material 100 % polyester



LC 400 KG, 5 M

| Package | LC kg | Breaking strength kg | Length m | Band width mm | Packing size pcs / box | Product code |
|---------|----------|----------------------------|-------------|---------------------|---------------------------|--------------|
| bulk | 400 | 800 | 0,3 + 4,7 | 25 | 50 | SV100052SS |



PREMIUM LC 750 KG, 5 M

| Package | LC kg | Breaking strength kg | Length m | Band width mm | Packing- size pcs / box | Product code |
|---------|----------|----------------------------|-------------|---------------------|-------------------------------|--------------|
| box | 750 | 1500 | 0,3 + 4,7 | 25 | 2 | SV100052PRE |

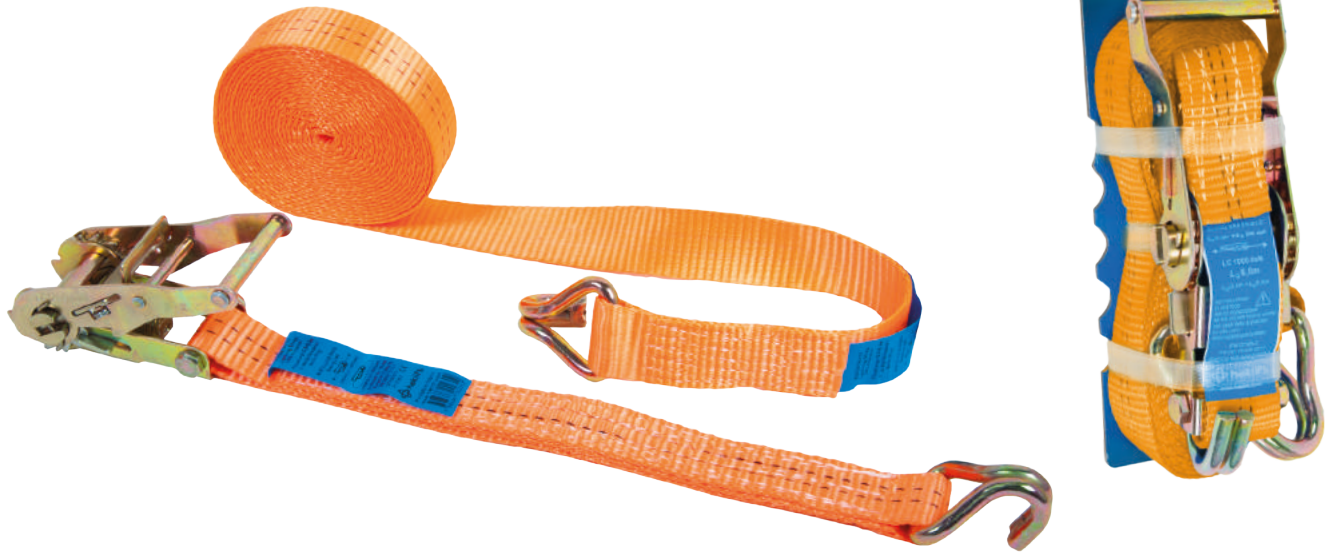


LC 500 KG, 5 M 1 PART

| Package | LC kg | Breaking strength kg | Length m | Band width mm | Packing- size pcs | Product code |
|---------|----------|----------------------------|-------------|---------------------|-------------------------|--------------|
| bulk | 500 | 1000 | 5 | 25 | 60 | SV100051 |

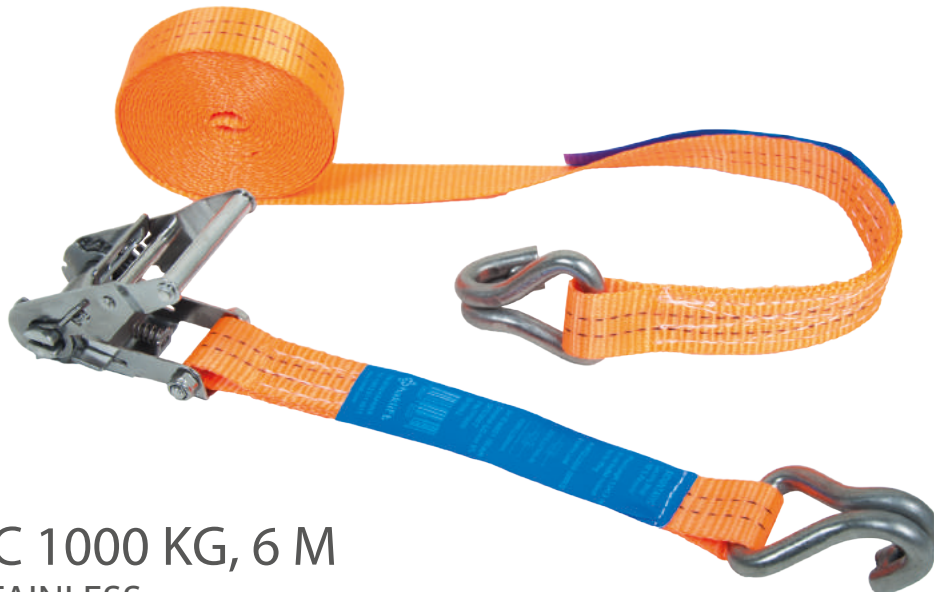
LASHING SYSTEMS - WIDTH 35 MM

- for light lashing in vans, trailers etc.
- standard end fitting steel double J-hooks
- webbing material 100 % polyester



LC 1000 KG, 6 M

| Package | LC kg | Breaking strength kg | Length m | Band width mm | Packing size pcs / box | Product code |
|-----------|----------|----------------------------|-------------|---------------------|---------------------------|--------------|
| bulk | 1000 | 2500 | 0,5 + 5,5 | 35 | 25 | SV150062I |
| cardboard | 1000 | 2500 | 0,5 + 5,5 | 35 | 18 | SV150062 |



LC 1000 KG, 6 M STAINLESS

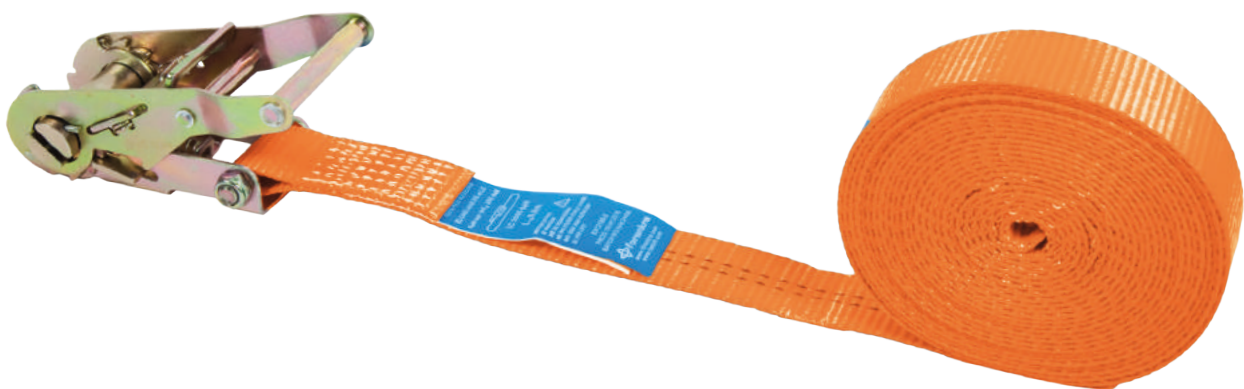
| Package | LC kg | Breaking strength kg | Length m | Band width mm | Packing size pcs | Product code |
|---------|----------|----------------------------|-------------|---------------------|---------------------|--------------|
| bulk | 1000 | 2500 | 0,5 + 5,5 | 35 | 1 | SV150062R |

LASHING SYSTEMS - WIDTH 35 MM



PREMIUM 
LC 1000 KG, 6 M

| Package | LC kg | Breaking strength kg | Length m | Band width mm | Packing size pcs | Product code |
|---------|----------|----------------------------|-------------|---------------------|---------------------|--------------|
| box | 1000 | 2500 | 0,4 + 5,6 | 35 | 1 / box | SV150062PRE |



LC 1000 KG, 6 M
1 PART

| Package | LC kg | Breaking strength kg | Length m | Band width mm | Packing size pcs / box | Product code |
|---------|----------|----------------------------|-------------|---------------------|---------------------------|--------------|
| bulk | 1000 | 2500 | 6 | 35 | 18 | SV150061 |

LASHING SYSTEMS - WIDTH 50 MM

- for demanding lashing in trucks
- standard end fitting steel double J-hooks
- webbing material 100 % polyester



LC 1700 KG, 10 M

| Package | LC kg | Breaking strength kg | Length m | Band width mm | Packing size pcs / box | Product code |
|-----------|----------|----------------------------|-------------|---------------------|---------------------------|--------------|
| bulk | 1700 | 4000 | 0,5 + 9,5 | 50 | 10 | SV2000102H |
| cardboard | 1700 | 4000 | 0,5 + 9,5 | 50 | 10 | SV2000102P |



LC 1500 KG, 10 M STAINLESS AISI 304

| Package | LC kg | Breaking strength kg | Length m | Band width mm | Packing size pcs | Product code |
|---------|----------|----------------------------|-------------|---------------------|---------------------|--------------|
| bulk | 1500 | 3000 | 0,5 + 9,5 | 50 | 1 | SV2000102R |

LASHING SYSTEMS - WIDTH 50 MM

NEW



PREMIUM
LC 2000 KG, 10 M



| Package | LC kg | Breaking strength kg | Length m | Band width mm | Packing size pcs | Product code |
|---------|----------|-------------------------|-------------|------------------|---------------------|--------------|
| box | 2000 | 4000 | 0,4 + 9,6 | 50 | 1 / box | SV2000102PRE |



LC 1700 KG, 10 M
1 PART

| Package | LC kg | Breaking strength kg | Length m | Band width mm | Packing size pcs | Product code |
|---------|----------|-------------------------|-------------|------------------|---------------------|--------------|
| bulk | 1700 | 4000 | 10 | 50 | 1 | SV2000101 |

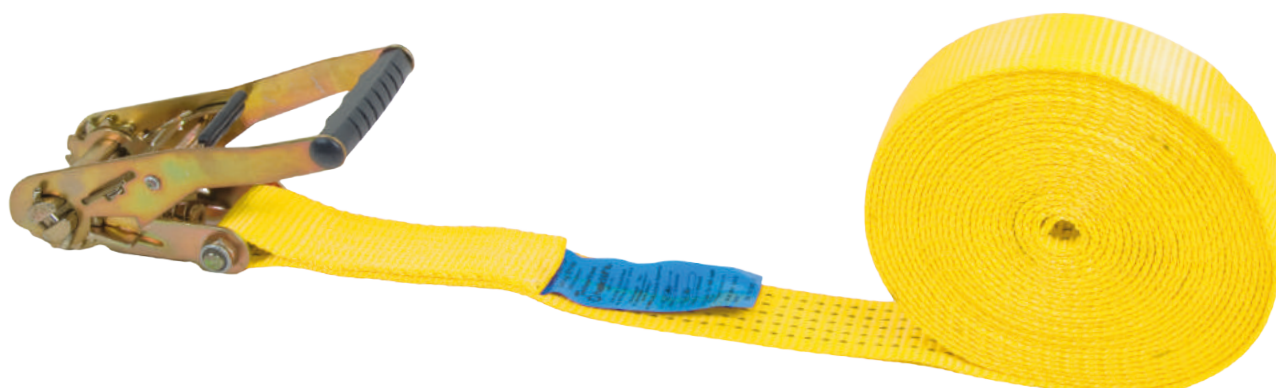
LASHING SYSTEMS - WIDTH 50 MM

- for demanding lashing in trucks
- standard end fitting steel double J-hooks
- webbing material 100 % polyester



LC 2000 KG, 10 M

| Package | LC kg | Breaking strength kg | Length m | Band width mm | Packing size pcs / box | Product code |
|---------|----------|----------------------------|-------------|---------------------|---------------------------|--------------|
| bulk | 2000 | 5000 | 0,5 + 9,5 | 50 | 10 | SV2500102 |



LC 2000 KG, 10 M 1 PART

| Package | LC kg | Breaking strength kg | Length m | Band width mm | Packing size pcs | Product code |
|---------|----------|----------------------------|-------------|---------------------|---------------------|--------------|
| bulk | 2000 | 5000 | 10 | 50 | 1 | SV2500101 |

LASHING SYSTEMS - WIDTH 50 MM



LC 2000 KG, 10 M
DOWNWARD TIGHTENING ERGO-RATCHET

| Package | LC kg | Breaking strength kg | Length m | Band width mm | Packing size pcs | Product code |
|---------|----------|----------------------------|-------------|---------------------|---------------------|--------------|
| bulk | 2000 | 5000 | 0,5 + 9,5 | 50 | 8 | SV2500102E |



Available also with
NATO color

LC 2500 KG, 10 M

| Package | LC kg | Breaking strength kg | Length m | Band width mm | Packing size pcs / box | Product code |
|---------|----------|----------------------------|-------------|---------------------|---------------------------|-----------------|
| bulk | 2500 | 5000 | 0,5 + 9,5 | 50 | 10 | SV3500102 |
| bulk | 2500 | 5000 | 0,5 + 9,5 | 50 | 10 | SV3500102N NATO |

LASHING SYSTEMS - WIDTH 50 MM

- for demanding lashing in trucks
- standard end fitting steel double J-hooks
- webbing material 100 % polyester



LC 2500 KG, 10 M 1 PART

| Package | LC kg | Breaking strength kg | Length m | Band width mm | Packing size pcs | Product code |
|---------|----------|----------------------------|-------------|---------------------|---------------------|--------------|
| bulk | 2500 | 5000 | 10 | 50 | 1 | SV3500101 |



LC 2500 KG, 10 M DOWNWARD TIGHTENING ERGO-RATCHET

| Package | LC kg | Breaking strength kg | Length m | Band width mm | Packing size pcs | Product code |
|---------|----------|----------------------------|-------------|---------------------|---------------------|--------------|
| bulk | 2500 | 5000 | 0,5 + 9,5 | 50 | 1 | SV3500102E |

LASHING SYSTEMS - WIDTH 50 MM

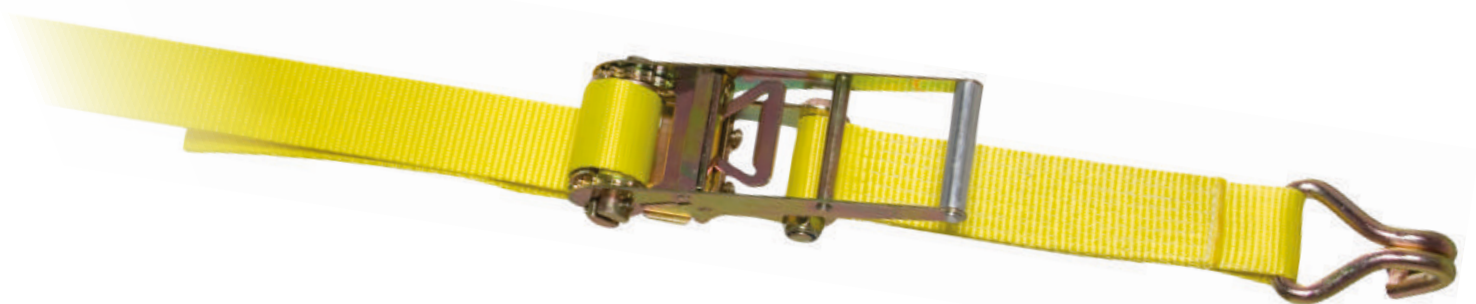


LC 3000 KG, 10 M

| Package | LC kg | Breaking strength kg | Length m | Band width mm | Packing size pcs | Product code |
|---------|----------|----------------------------|-------------|---------------------|---------------------|--------------|
| bulk | 3000 | 6000 | 0,5 + 9,5 | 50 | 1 | SV4300102 |

LASHING SYSTEMS - WIDTH 75 MM

- for lashing extremely heavy items on boats and carriages etc.
- standard end fittings steel double J-hooks
- webbing material 100 % polyester



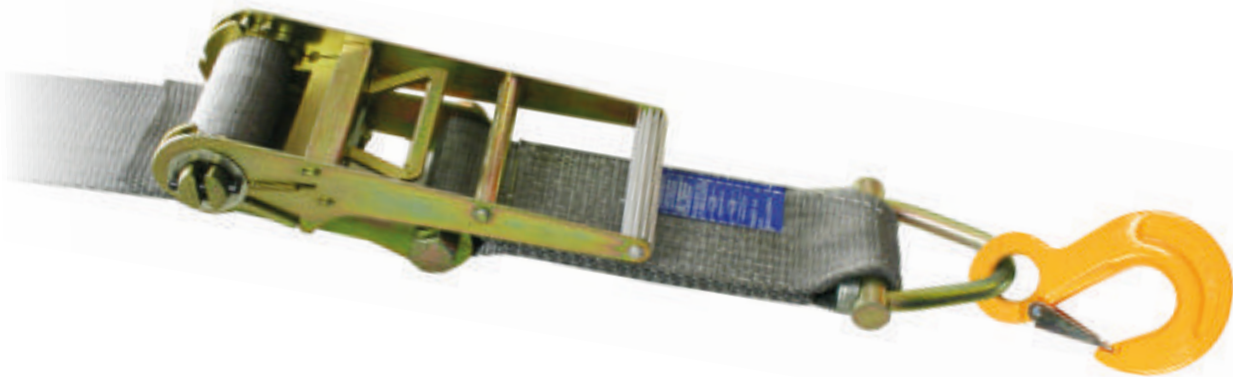
LC 5000 KG

FOR LASHING EXTREMELY HEAVY ITEMS ON BOATS AND CARRIAGES

| Package | LC kg | Breaking strength kg | Length m | Band width mm | Packing size pcs | Product code |
|---------|----------|----------------------------|-------------|---------------------|---------------------|--------------|
| bulk | 5000 | 10000 | 0,5 + 5,5 | 75 | 1 | SV700062 |

LASHING SYSTEMS - WIDTH 100 MM

- for lashing super heavy items on boats and carriages etc.
- forged hooks as standard end fittings
- webbing material 100% polyester



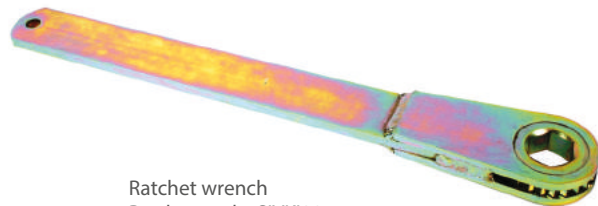
LC 6000 KG / MBL 12000 KG, 6 M

FOR LASHING SUPER HEAVY ITEMS ON BOATS AND CARRIAGES

| Package | LC kg | Breaking strength kg | Length m | Band width mm | Packing size pcs | Product code |
|---------|----------|----------------------------|-------------|---------------------|---------------------|--------------|
| bulk | 6000 | 12000 | 0,5 + 5,5 | 100 | 1 | SV900062 |

LASHING SYSTEMS - WIDTH 60 MM

- for lashing super heavy items on boats and carriages etc.
- forged hooks as standard end fittings
- webbing material 100% polyester



Ratchet wrench
Product code: SIVKI28



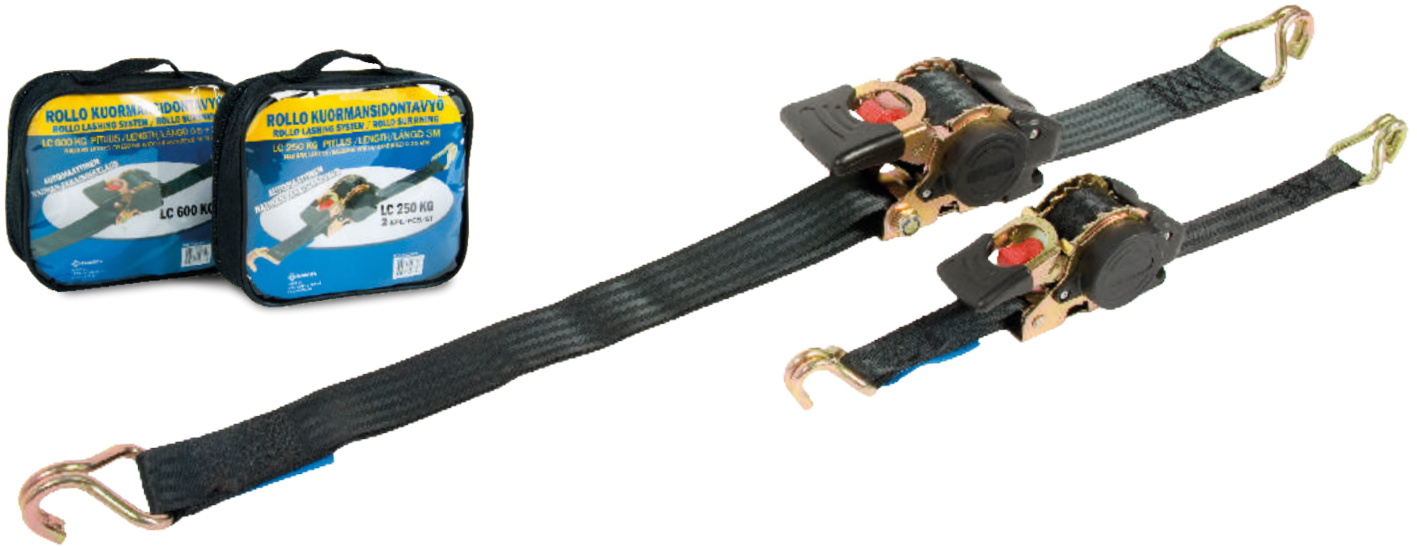
LC 5800 KG / MBL 15000 KG, 2,5 M

FOR LASHING SUPER HEAVY ITEMS ON BOATS AND CARRIAGES

| Package | LC kg | Breaking strength kg | Length m | Band width mm | Packing size pcs | Product code |
|---------|----------|----------------------------|-------------|---------------------|---------------------|--------------|
| bulk | 5800 | 15000 | 0,5 + 2,0 | 60 | 1 | SV150252 |

ROLLO - LASHING SYSTEM

- Lashing system with ratchet. Easy operation especially due to automatical rewinding mechanism. Thanks to the mechanism, webbings do not get tangled.
- Suitable for lashing in transporters, trailers, boat trailers, vans or any equivalent.
- Clamp can be bolted on the floor



| Package | LC kg | Breaking strength kg | Length m | Band width mm | IP-Packing size pcs / bag | Packing size pcs / box | Weight kg | Product code |
|---------|----------|----------------------------|-------------|---------------------|---------------------------------|------------------------------|--------------|--------------|
| bulk | 250 | 500 | 3,0 | 25 | - | 24 | 0,75 | ROLLO253 |
| bulk | 600 | 1200 | 0,5 + 2,7 | 50 | - | 12 | 1,45 | ROLLO503 |
| bag | 250 | 500 | 3,0 | 25 | 2 | 12 | 0,95 | ROLLO253IP2 |
| bag | 600 | 1200 | 0,5 + 2,7 | 50 | 1 | 10 | 1,65 | ROLLO503IP1 |

PREMIUM

- Cr⁶⁺ free metal parts
- packed in retail box
- webbing material 100% polyester



| Package | LC kg | Breaking strength kg | Length m | Band width mm | IP-Packing size pcs / box | Packing size pcs / box | Weight kg | Product code |
|---------|----------|----------------------------|-------------|---------------------|---------------------------------|------------------------------|--------------|--------------|
| box | 250 | 500 | 3,0 | 25 | 1 | 24 | 0,75 | ROLLO253PRE |
| box | 600 | 1200 | 3,26 | 50 | 1 | 12 | 1,45 | ROLLO503PRE |

STRAPULLI PULLING AND LIFTING WINCH

- the webbing goes through ratchet so that it can be used for lashing and as pulling/lifting winch
- steel double wire hooks with latch as standard end fittings
- webbing material 100% polyester
- handy pulling winch for motor sledges, vehicles etc.

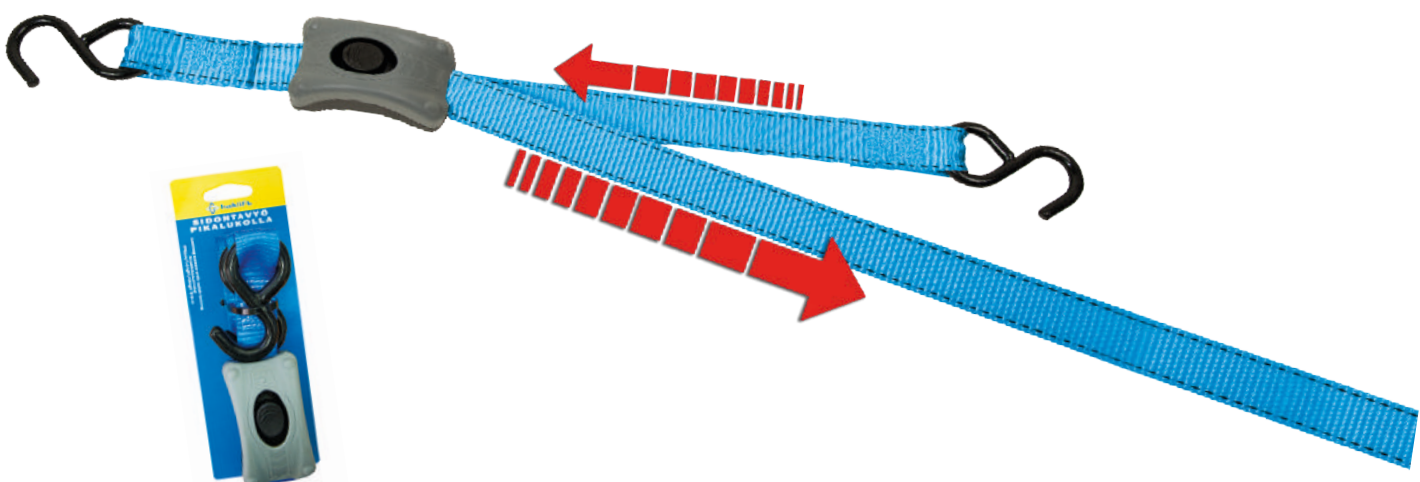


LC 1000 KG, 5 AND 10 M

| Type | Package | LC | WLL when lifting | Breaking strength | Length | Band width | Product code |
|--------|---------|------|---------------------|----------------------|--------|---------------|--------------|
| | | kg | kg | kg | m | mm | |
| 2 part | bag | 1000 | 200 | 2500 | 5,0 | 35 | STRAP1500 |
| 2 part | bulk | 1000 | 200 | 2500 | 10,0 | 35 | STRAP150010 |

LASHING SYSTEMS WITH A QUICK LOCK

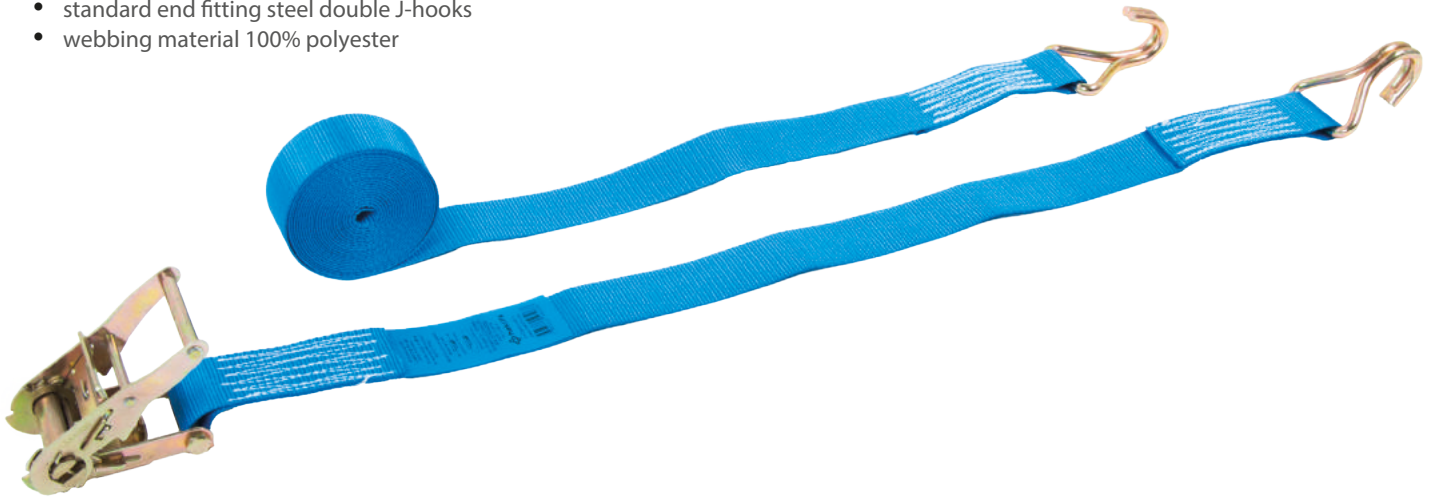
- easy and quick to use lashing system with a snap lock function
- tightening by pulling the strap and release by pressing a button on the snap lock
- packed in IP-package as in picture



| Breaking strength | Band width | Length | Packing size | Product code |
|-------------------|---------------|--------|-----------------|--------------|
| kg | mm | m | pcs / box | |
| 500 | 25 | 2,5 | 16 | SVPLU525 |

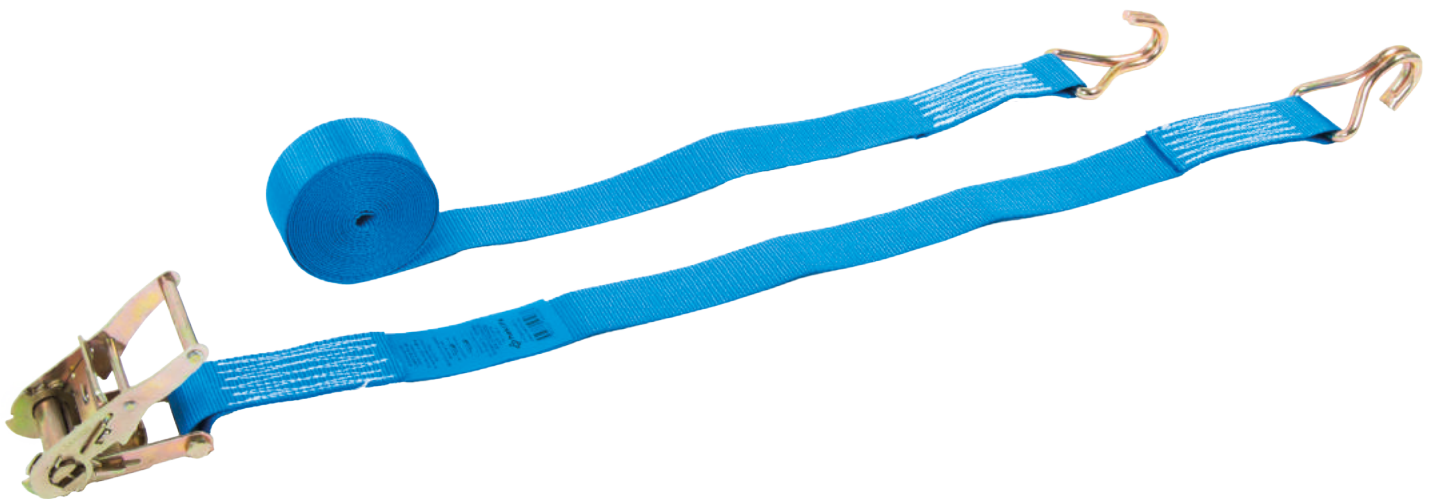
TRACK LASHING SYSTEMS - WIDTH 45 MM

- for lashing from tracks of enclosed body trucks
- gear lock clamp
- standard end fitting steel double J-hooks
- webbing material 100% polyester



LC 1000 KG

| Package | LC kg | Breaking strength kg | Length m | Band width mm | Packing size pcs / box | Product code |
|---------|----------|----------------------------|-------------|---------------------|---------------------------|--------------|
| bulk | 1000 | 2000 | 1 + 3 | 45 | 25 | SVR11004 |
| bulk | 1000 | 2000 | 1 + 5 | 45 | 20 | SVR11006 |



LC 500 KG

| Package | LC kg | Breaking strength kg | Length m | Band width mm | Packing size pcs / box | Product code |
|---------|----------|----------------------------|-------------|---------------------|---------------------------|--------------|
| bulk | 500 | 1000 | 1 + 3 | 45 | 20 | SVR11004KI |
| bulk | 500 | 1000 | 1 + 5 | 45 | 1 | SVR11006KI |

TRACK LASHING SYSTEMS - WIDTH 45 MM

- combi ends
- for lashing from tracks of enclosed body trucks
- gear lock clamp
- webbing material 100% polyester



LC 1000 KG

| Package | LC kg | Breaking strength kg | Length m | Band width mm | Packing size pcs | Product code |
|---------|----------|----------------------------|-------------|---------------------|---------------------|--------------|
| bulk | 1000 | 2000 | 1 + 3 | 45 | 20 | SVR11004CO |
| bulk | 1000 | 2000 | 1 + 5 | 45 | 1 | SVR11006CO |

TRACK LASHING SYSTEMS - WIDTH 50 MM

- for lashing from tracks of enclosed body trucks
- Cr⁶⁺ free metal parts
- equipped with combi ends and webbing print
- webbing material 100% polyester



PREMIUM LC 1000 KG, 4 M



| Package | LC kg | Breaking strength kg | Length m | Band width mm | Packing size pcs / box | Product code |
|---------|----------|----------------------------|-------------|---------------------|---------------------------|---------------|
| box | 1000 | 2000 | 1 + 3 | 50 | 1 | SVR11004COPRE |

TRACK LASHING SYSTEMS - WIDTH 45 MM

- for lashing from tracks of enclosed body trucks
- over-centre buckle "TENDEX"
- standard end fitting steel double J-hooks
- webbing material 100% polyester



LC 1000 KG

| Package | LC kg | Breaking strength kg | Length m | Band width mm | Packing size pcs | Product code |
|---------|----------|----------------------------|-------------|---------------------|---------------------|--------------|
| bulk | 1000 | 3000 | 1 + 3 | 45 | 20 | SV1100T4 |
| bulk | 1000 | 3000 | 1 + 5 | 45 | 1 | SV1100T6 |

CAR LASHING SYSTEMS - WIDTH 35 MM

- for lashing a car on a car trailer
- lashing over wheels
- webbing material 100% polyester



LC 1000 KG, 2,2 M

| Package | LC kg | Breaking strength kg | Length m | Band width mm | Packing size pcs | Product code |
|---------|----------|----------------------------|---------------|---------------------|---------------------|--------------|
| bulk | 1000 | 3000 | ratchet + 2,0 | 35 | 1 | SVAU150032 |

CAR LASHING SYSTEMS - WIDTH 50 MM

- for lashing a car on a car trailer
- hooks can be fitted directly to holes on the trailer
- lashing over wheel in the same direction
- webbing material 100% polyester

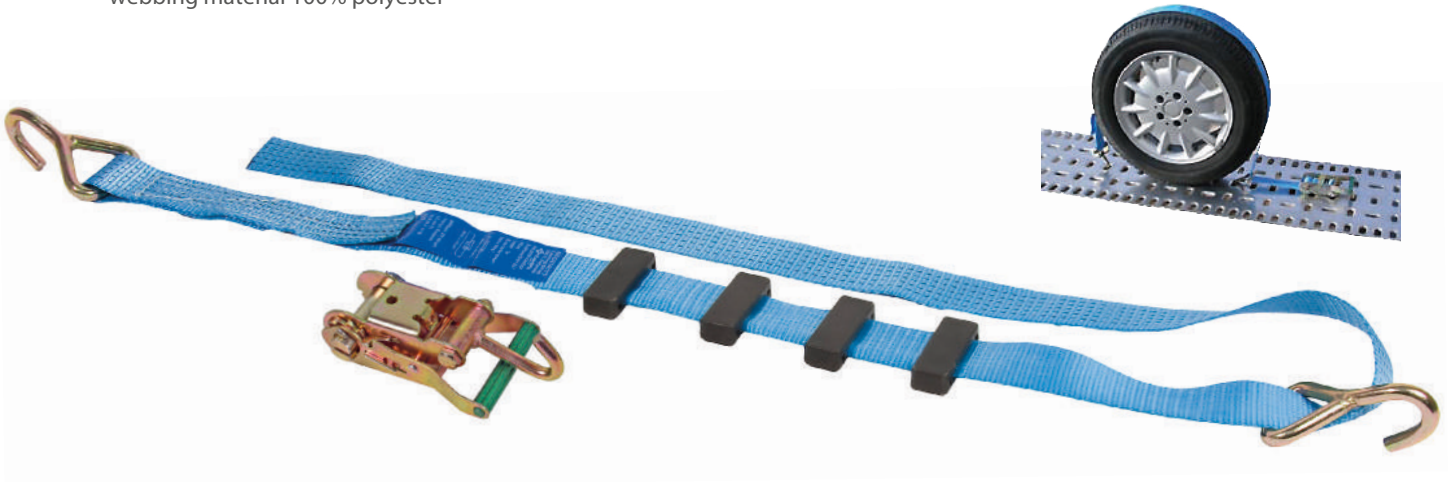


LC 1500 KG, 1,8 M

| Package | LC kg | Breaking strength kg | Length m | Band width mm | Packing size pcs | Product code |
|---------|----------|----------------------------|-------------|---------------------|---------------------|--------------|
| bulk | 1500 | 4000 | 0,3 + 1,5 | 50 | 1 | SVAU2000 |

CAR LASHING SYSTEMS - WIDTH 50 MM

- for lashing a car on a car trailer
- hooks can be fitted directly to holes on the trailer
- hook is directly attached to the ratchet
- rubber stop plates attached to the webbing
- webbing material 100% polyester



LC 1500 KG, 1,7 M

| Package | LC kg | Breaking strength kg | Length m | Band width mm | Packing size pcs | Product code |
|---------|----------|----------------------------|---------------|---------------------|---------------------|--------------|
| bulk | 1500 | 4000 | ratchet + 1,5 | 50 | 1 | SVAU2000K |

LASHING SYSTEMS FOR TRAILERS - WIDTH 50 MM

- for lashing trailers on boats
- standard end fittings forged hook / elephant hook
- webbing material 100 % polyester

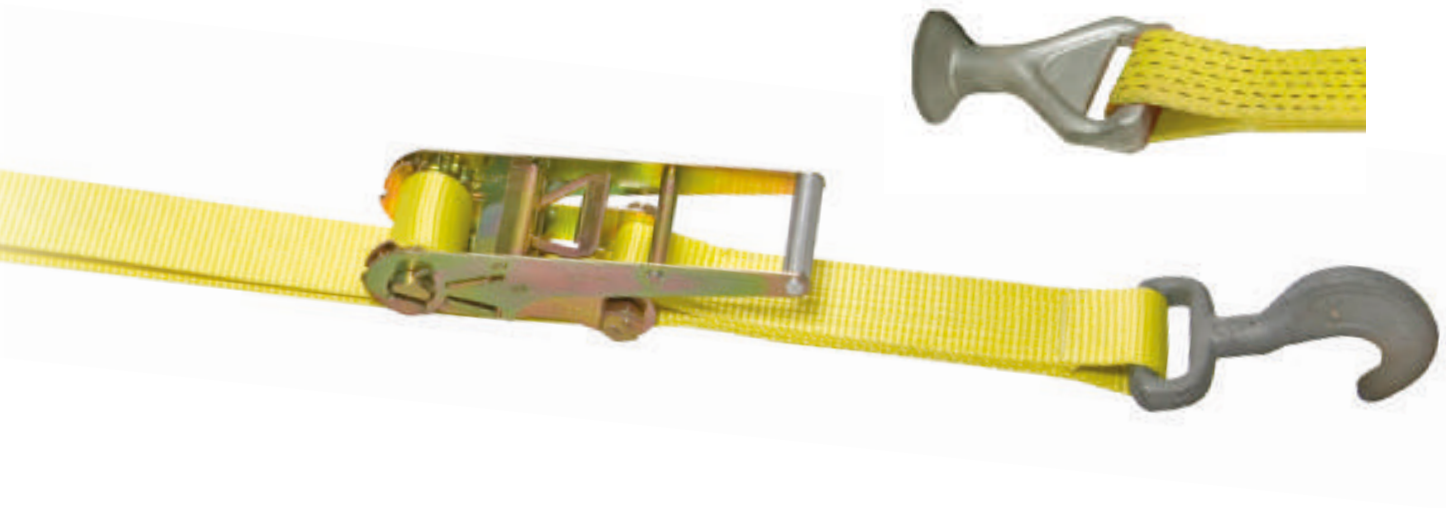


MBL 10000 KG, 3 M

| Package | Breaking strength straight kg | Length m | Band width mm | Packing size pcs | Product code |
|---------|-------------------------------------|-------------|---------------------|---------------------|--------------|
| bulk | 10000 | 0,5 + 2,5 | 50 | 1 | SV10032 |

LASHING SYSTEMS FOR TRAILERS - WIDTH 75 MM

- for lashing trailers on boats
- standard end fittings forged hook / elephant hook
- webbing material 100 % polyester



MBL 20000 KG, 2,5 M

| Package | Breaking strength straight kg | Length m | Band width mm | Packing size pcs | Product code |
|---------|-------------------------------|-----------|---------------|------------------|--------------|
| bulk | 20000 | 0,5 + 2,0 | 75 | 1 | SV200252L |

WEBBING WITH A TRIANGULAR END

- equipped with triangular end



LC 2500 KG, 12 M

| LC kg | Length m | Band width mm | Product code |
|-------|----------|---------------|--------------|
| 2500 | 12,0 | 50 | SVTP350012PK |

Also other lengths and sizes available!

A ROLLER FOR WEBBING

- a handy tool for rolling lashing webbings
- due to gliding rolls no hand guiding is needed
- saves a lot of work time
- weight 0,8 kg

Product code: RULLARIMT



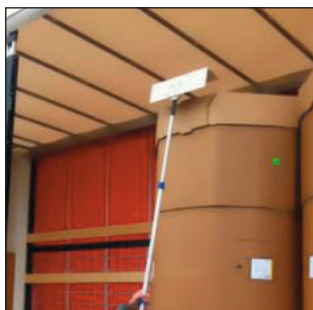
BATTERY OPERATED ROLLER FOR WEBBING

- a handy tool for rolling lashing webbings
- equipped with 12V Li-ion 2,0 Ah battery and charger
- due to gliding rolls no hand guiding is needed
- saves a lot of work time

Product code: RULLARIA



MULTI-STICK



BENEFIT

SAFETY - the driver remains on the ground to carry out all operations and lashing.

ERGONOMIC - light, easy to handle, limits risk to the driver from working at height issues.

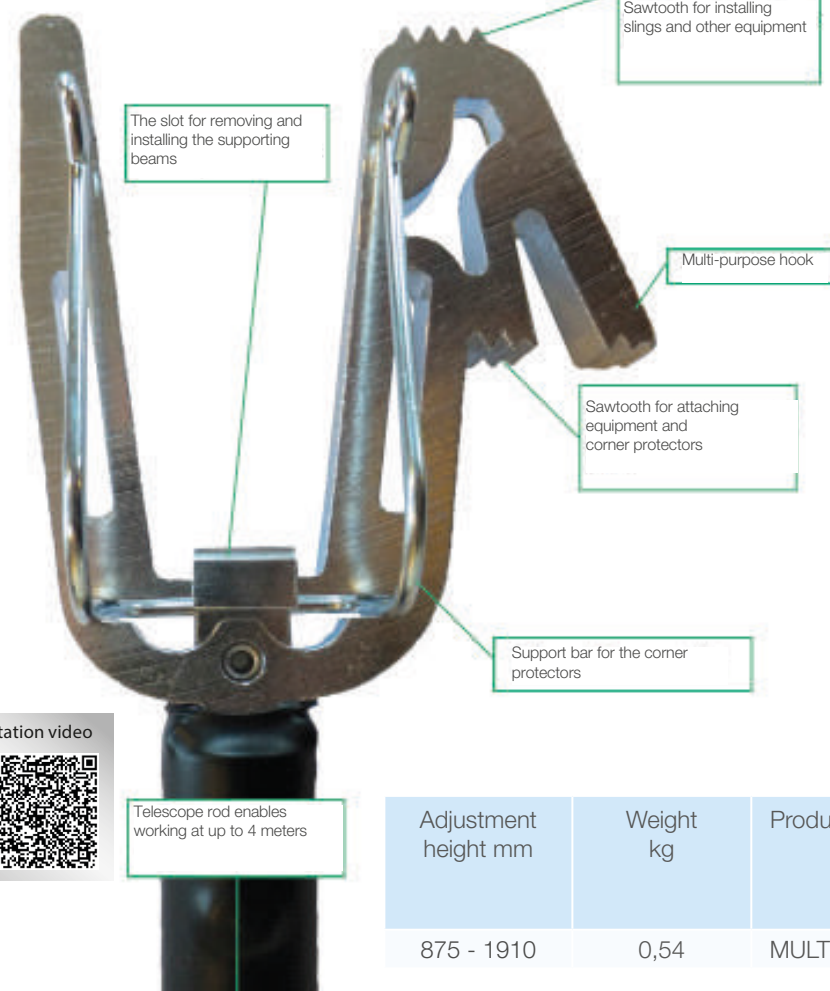
3 in 1 PRODUCT - interchangeable head units to use with a single handle pole safely.

ECONOMICAL - saves loading and lashing time for the driver and loaders in all operations.



See presentation video

Telescope rod enables working at up to 4 meters



The MULTI-STICK is a multifunctional pole that improves lashing operations, thanks to its 3 interchangeable heads. Its innovation lies in its ability to offer three functions in one unit. Whilst ensuring the safety of the driver operating from ground level.

Composition

1. MULTI-STICK function - the driver places and dismantles the drop sides in height up to 3.5m, without effort, whilst remaining at ground level. The driver can also set up corner and angle protection products (max 1.2m width)

2. STRAP-GO function - whilst ensuring the driver remains safe, the strap is launched to cover the load from the ground. It limits the risk to the driver from injury and have to work at height.

3. CORNER-STICK function - allows the driver to easily place angle and corner protection product from 1.2m to 2.4m in width. With an anti-slip coating on the clamps and allowing safe placement from ground level.

4. The telescopic aluminium handled MULTI-STICK has a robust foam covered lower section for greater comfort and 3 adjustable clamp locks. This allows adjustment of the full length up to 2.5m. Each of the three separate heads are easily interchangeable.

| Adjustment height mm | Weight kg | Product code |
|----------------------|-----------|--------------|
| 875 - 1910 | 0,54 | MULTI-STICK |

LASHING STRAPS

- For bundling and lashing for different purposes from industry to hobbies
- webbing width 25 mm
- webbing material 100% polyester
- also available in other lengths and end fittings eg. 35 and 50 mm webbing



| Color | Length m | Packing size pcs / box | Product code |
|----------------|-------------|---------------------------|-----------------------|
| black | 0,5 | 10 | SVPL25005M |
| red / black | 1,0 | 10 | SVPL2501P / SVPL2501M |
| black | 1,5 | 10 | SVPL25015M |
| orange / black | 2,0 | 10 | SVPL2502O / SVPL2502M |
| blue / black | 3,0 | 10 | SVPL2503S / SVPL2503M |
| black | 4,0 | 10 | SVPL2504M |
| black | 5,0 | 10 | SVPL2505M |

IP-PACKED LASHING STRAPS



| Color | Length m | Packing size pcs / bag | Product code |
|--------|-------------|---------------------------|--------------|
| black | 0,5 | 2 | SVPL25005IPV |
| red | 1,0 | 2 | SVPL2501IPV |
| orange | 2,0 | 2 | SVPL2502IPV |
| blue | 3,0 | 2 | SVPL2503IPV |
| black | 5,0 | 2 | SVPL2505IPV |

LASHING STRAP ASSORTMENT

Contents:

- 8 pcs / 1,0 m red
- 8 pcs / 2,0 m orange
- 8 pcs / 3,0 m blue
- 8 pcs / 5,0 m black

Product code: SVPL250LABT



RETAIL SHOWCASE

Handy retail showcase for IP-packed lashing straps and small lashing straps. Great on the shop counter etc. Ask more from our sales.

Product code: SIVTELIN (only the rack)



7 PART LASHING SYSTEM SET

Lashing system set packed in plastic box with a handle.

- | | |
|-------------------------------------|-------|
| Lashing system 6 m LC 1000 daN | 2 pcs |
| Lashing system 5 m LC 400 daN | 2 pcs |
| Lashing strap 3 m | 2 pcs |
| Warning flag for extra length loads | 1 pcs |

Product code: SV7SETTI



ANTI-SLIP MATS

- available in rolls or pieces
- for transportations to e.g. under a pallet to reduce the gliding of the transported goods and to reduce the need to lash the cargo, so that fewer and less strong lashing systems can be used
- suitable for almost all materials, does not stick
- rubber granulate made from recycled materials
- coefficient of friction approx. min. 0.81 - wooden pallet and truck floor (VDI 2700 Sheet 14 - Draft)
- operating temperature -30 °C - +100 °C
- sold in full rolls



| Type | Mat thickness mm | Roll width / size mm | Roll length m | Loading strength t/m ² | Tensile strength N/mm ² | Packing size pcs | Weight kg/m ² | Product code |
|-------|---------------------|-------------------------|------------------|--------------------------------------|---------------------------------------|---------------------|-----------------------------|--------------|
| Roll | 3 | 1250 | 20 | 125 | 0,6 | - | 2,7 | KITMA3R |
| Roll | 3 | 300 | 20 | 125 | 0,6 | - | 2,7 | KITMA3R300 |
| Roll | 5 | 1250 | 12 | 170 | 0,6 | - | 4,5 | KITMA5R |
| Roll | 6 | 1250 | 10 | 170 | 0,6 | - | 5,4 | KITMA6R |
| Roll | 8 | 1250 | 8 | 200 | 0,6 | - | 7,2 | KITMA8R |
| Roll | 10 | 1250 | 6 | 200 | 0,6 | - | 9,0 | KITMA10R |
| Piece | 5 | 250 x 250 | - | 170,0 | 0,6 | 20 / stack | | KITMA5250 |

Also custom size mats available. Ask for more!

LASHING STRAP END FITTINGS

| Double J hooks | | |
|-----------------------|------------|---------|
| LC code | Band width | Product |
| 800 kg | 25 mm | KO25016 |
| 1500 kg | 35 mm | KO3503 |
| 2500 kg | 50 mm | KO5005 |
| 3000 kg | 50 mm | KO5006 |
| 5000 kg | 75 mm | KO7510 |

| Double J hooks, big opening | | |
|------------------------------------|------------|---------------------|
| LC | Band width | Product code |
| 5000 kg | 50 mm | KO5005ISO20 (16 mm) |
| 5000 kg | 50 mm | KO5005ISO20 (20 mm) |

| Coated S-hook | | |
|----------------------|------------|---------|
| LC code | Band width | Product |
| 800 kg | 25 mm | KOS2508 |

| Stainless Double J hooks | | |
|---------------------------------|------------|--------------|
| LC | Band width | Product code |
| 400 kg | 25 mm | KO25008RT |
| 1000 kg | 35 mm | KO3503RT |
| 1500 kg | 50 mm | KO5004RT |

| Triangle hooks | | |
|-----------------------|------------|--------------|
| LC | Band width | Product code |
| 1250 kg | 35 mm | KOK35025 |
| 1500 kg | 50 mm | KOK503 |
| 2500 kg | 50 mm | KOK505 |

| Track hooks | | |
|--------------------|------------|--------------|
| LC | Band width | Product code |
| 500 kg | 50 mm | KOKI5016 |
| 1000 kg | 50 mm | KOKI5020 |
| 800 kg | 50 mm | KIKL5002 |

| Snap hooks | | |
|-------------------|------------|--------------|
| LC | Band width | Product code |
| 2500 kg | 50 mm | KOKS505S |
| 2500 kg | 50 mm | KOKS505K |

| Combi track end | | |
|------------------------|------------|--------------|
| LC | Band width | Product code |
| 750 kg | 50 mm | COM5002 |

| Double J hooks with safety latch | | |
|---|------------|--------------|
| LC | Band width | Product code |
| 1500 kg | 35 mm | KOSA353IXI |
| 2500 kg | 50 mm | KOSA505IXI |

| Close rave-, claw-, flat hooks | | |
|---------------------------------------|------------|---------|
| LC code | Band width | Product |
| 2500 kg | 50 mm | KOPAL50 |
| 1250 kg | 50 mm | KOPAL25 |

| Winch hooks | |
|--------------------|--------------|
| LC | Product code |
| 1750 kg | VINKOU35 |

| Latch hooks | | |
|--------------------|------------|--------------|
| LC | Band width | Product code |
| 2500 kg | 50 mm | KOSA5005 |

| Strap hooks | | |
|---------------------------|------------|---------|
| LC code | Band width | Product |
| 6500 kg | 65 mm | KO6512 |
| 7500 kg | 65 mm | KO6515 |
| 10000 kg - with swivel | 65 mm | KO6520 |


| Triangle and ring ends | | |
|-------------------------------|------------|--------------|
| LC | Band width | Product code |
| 400 kg | 25 mm | KOL2501 |
| 750 kg | 35 mm | KOL3503 |
| 2500 kg | 50 mm | KOL5005 |
| 3000 kg | 50 mm | KOL5006 |
| 2500 kg - flat modell | 50 mm | KOL5005L |
| 2000 kg - round modell | 50 mm | KOL5005R |
| 3000 kg | 50 mm | KOL5006LH |
| 10000 kg | 60/75 mm | KOL7515 |
| 6000 kg | 60/75 mm | KOL7512 |
| 2250 kg | 50 mm | RESVAU |
| | 50 mm | RESV1100 |

LASHING STRAP END FITTINGS

Special ends to airplane and vertical track

| | | |
|---|--------------------|------------------------------------|
|  | LC 900 kg | Product code EP18 + KIP1800 |
|  | 1250 kg | EP25 (no ring) |
|  | 1150 kg | EP25E (round ring) |
|  | 1150 kg 2500 kg | EP26 (oval ring) EP50 (no ring) |

Double J hook with tube

| | | | |
|---|---------|------------|--------------|
|  | LC | Band width | Product code |
| | 1500 kg | 35 mm | KOS3503 |
| | 2500 kg | 50 mm | KOS5005 |
| | 1500 kg | 35 mm | KO35031 |
| | 2500 kg | 50 mm | KOS50031 |

Double J hook with a swivel to ratchet and strap

| | | | |
|---|-------------------------------------|--------------|--|
|  | Attached directly to ratchet | | |
| LC | Band width | Product code | |
| 1500 kg | 35 mm | KOSL35 | |
| 1500 kg | 35 mm (50mm ratchet) | KOSL5550 | |
| 1500 kg | 50 mm | KOSL50 | |
|  | Attached directly to strap | | |
| | | KOSLTAPPI | |

RATCHETS



Product code: SVKI800
LC 400, 25 mm webbing



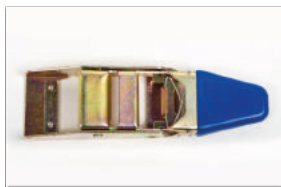
Product code: SVKI800R
RST, LC 400 kg, 25 mm webbing



Product code: SVKI1600
LC 750 kg, 25 mm webbing



Product code: SVRK1100
LC 1000 kg, 50 mm webbing



Product code: SVKI1100T
LC 1000 kg, 45 mm webbing



Product code: SVKI1100
LC 1000 kg, 45 mm webbing



Product code: SVKI1500R
RST, LC 1000 kg, 35 mm webbing



Product code: SVKI1500
LC 1250 kg, 35 mm webbing



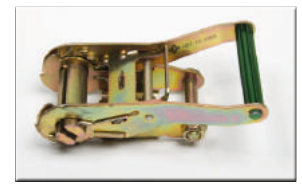
Product code: SVKI1500A
LC 1500 kg, 35 mm webbing



Product code: SVKI2000RL
RST, LC 1500 kg, 50 mm webbing



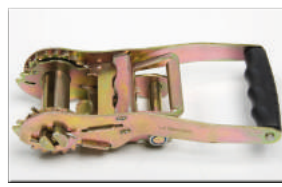
Product code: SVKI2000R
RST, LC 1500 kg, 50 mm webbing



Product code: SVKI2000L
LC 2500 kg, 50 mm webbing



Product code: SVKI2035
LC 2500 kg, 50 mm webbing



Product code: SVKI2035TR
LC 2500 kg, 50 mm webbing



Product code: SVKI3000
LC 3000 kg, 50 mm webbing



Product code: SVKI2235P
LC 2500 kg, 50 mm webbing



Product code: SVKI2035ERGO
LC 2500 kg, 50 mm webbing



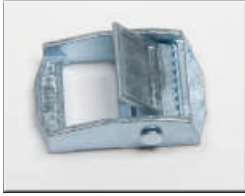
Product code: SVKI7000
LC 5000 kg, 75 mm webbing



Product code: SVKI9000
LC 5000 kg, 100 mm webbing

SNAP LOCK ENDS

Also available: RST AISI 304 quick lock LC 125 kg: SVPL250R



Product code: SVPL250LU
breaking strength: 250kg
25 mm strap



Product code: SVPL400LU
breaking strength: 450kg
25 mm strap



Product code: SVPL600LU
breaking strength: 600kg
25 mm strap



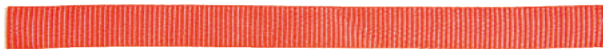
Product code: SVP1100LU
breaking strength: 600kg
35 mm strap



Product code: SVPL1500LU
breaking strength: 1000kg
50 mm strap

POLYESTER WEBBINGS 25 - 45 mm

- Webbings are sold in full 100m rolls



Red
Product code: PEH2514PUN
Breaking strength: 1200 kg
Width: 25 mm



Nato-green
Product code: PEH2514NATO
Breaking strength: 1200 kg
Width: 25 mm



Black
Product code: PEH25014MU
Breaking strength: 1200 kg
Width: 25 mm



White
Product code: PEH251400V
Breaking strength: 1200 kg
Width: 25 mm



Orange
Product code: PEH25130
Breaking strength: 1200 kg
Width: 25 mm



Grey
Product code: PEH25140HA
Breaking strength: 1200 kg
Width: 25 mm



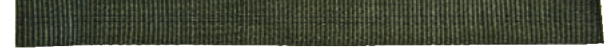
Sand brown
Product code: PEH2514NATO
Breaking strength: 1200 kg
Width: 25 mm



Blue
Product code: PEH25130SI
Breaking strength: 1200 kg
Width: 25 mm



Black
Product code: PEH25200M
Breaking strength: 2200 kg
Width: 25 mm



Nato-green
Product code: PEH3530NATO
Breaking strength: 3000 kg
Width: 35 mm



Grey
Product code: PEH303
Breaking strength: 3000 kg
Width: 35 mm



Orange
Product code: PEH35300RU
Breaking strength: 3000 kg
Width: 35 mm



White
Product code: PEH3530V
Breaking strength: 3000 kg
Width: 35 mm



White
Product code: PEH3540V
Breaking strength: 4000 kg
Width: 35 mm



Orange
Product code: PEH45300RU
Breaking strength: 3000 kg
Width: 45 mm



Blue
Product code: PEH45KELA
Breaking strength: 3000 kg
Width: 45 mm

POLYESTER WEBBINGS 50 - 300 mm

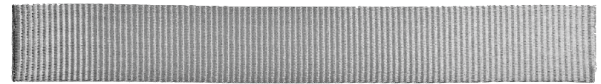
- Webbings are sold in full 100m rolls



Product codes
Blue: PEH50500RU
NATO: PEH5047NATO



Breaking strength: 5000 kg
Width: 50 mm



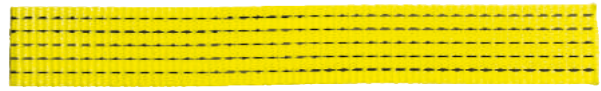
Grey
Product code: PEH5060

Breaking strength: 6000 kg
Width: 50 mm



Violet
Product code: PEH50430K

Breaking strength: 4000 kg
Width: 50 mm



Yellow
Product code: PEH5063V

Breaking strength: 6300 kg
Width: 50 mm



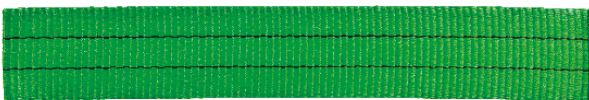
White
Product code: PEH506370V

Breaking strength: 7500 kg
Width: 50 mm



Orange
Product code: PEH50750R

Breaking strength: 7500 kg
Width: 50 mm



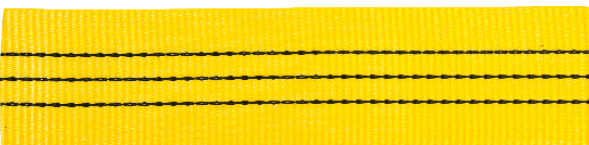
Green
Product code: PEH60860RA

Breaking strength: 8600 kg
Width: 60 mm



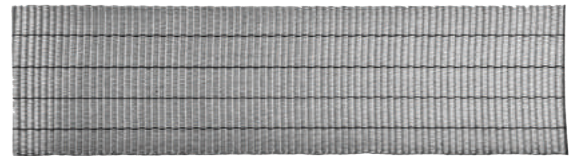
Yellow
Product code: PEH75131

Breaking strength: 13000 kg
Width: 75 mm



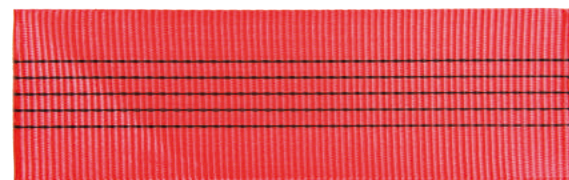
Yellow
Product code: PEH9010

Breaking strength: 13000 kg
Width: 90 mm



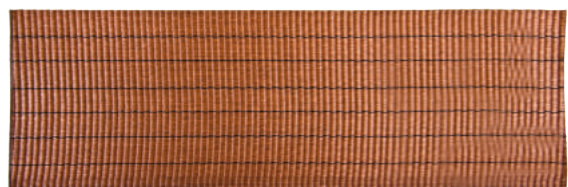
Grey
Product code:
PEH100180R
Product code: PEH12018R

Breaking strength: 18000 kg
Width: 100 mm
Width: 120 mm



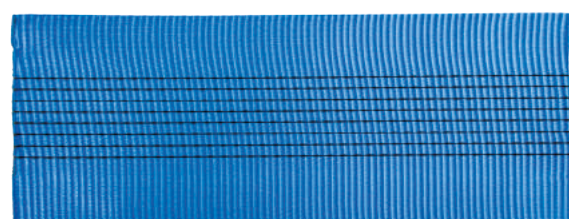
Red
Product code: PEH15022PUN

Breaking strength: 22000 kg
Width: 150 mm



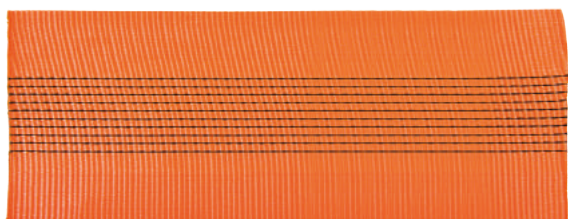
Brown
Product code: PEH180RURU

Breaking strength: 26000 kg
Width: 180 mm



Blue
Product code: PEH24036

Breaking strength: 36000 kg
Width: 240 mm



Orange
Product code: PEH300540R

Breaking strength: 54000 kg
Width: 300 mm

LASHING CHAINS FOR LOAD BINDERS

- for lashing extremely heavy items on boats and carriages etc.
- safety latch hooks as standard end fittings
- short link chain, black or shiny electro galvanized chain
- also available with grade 10 components, ask more from our sales!



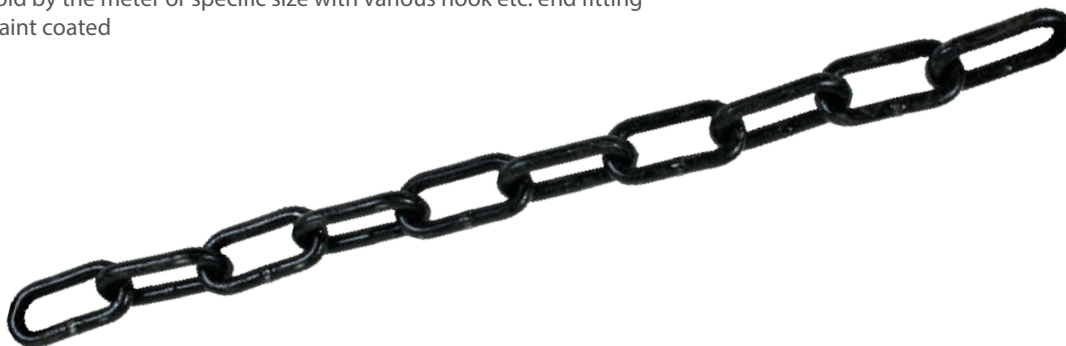
Chains are packed in retail bags



| Chain size | LC | Breaking strength | Standard length | Weight | Product code | Product code |
|------------|-------|-------------------|-----------------|--------|--------------------|--------------|
| mm | kg | kg | m | kg | electro galvanized | black |
| 6 | 2250 | 4500 | 5 | 4,6 | SIK0605K | SIK0605 |
| 8 | 4000 | 8000 | 5 | 8,4 | SIK0805K | SIK0805 |
| 10 | 6300 | 12600 | 5 | 12,7 | SIK1005K | SIK1005 |
| 13 | 10600 | 21200 | 5 | 21,9 | SIK1305K | SIK1305 |
| 16 | 16000 | 32000 | 5 | 34,6 | - | SIK1605 |

HEAVY CARGO LASHING CHAINS, GRADE 8

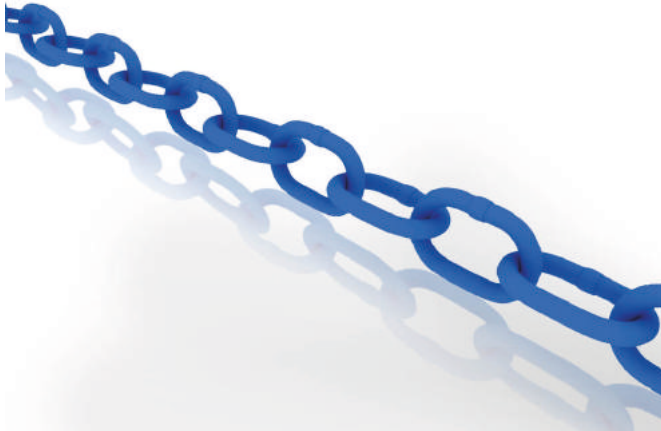
- lashing for extremely heavy cargo on boats and timber trucks in automatic lashing devices
- sold by the meter or specific size with various hook etc. end fitting
- paint coated



| Chain size (inner width x inner length) mm | LC | Breaking strength | Weight | Product code |
|---|-------|-------------------|--------|--------------|
| | kg | kg | kg / m | |
| 6 (10x35) | 2250 | 4500 | 0,65 | SIK06P |
| 9 (16x57) | 5000 | 10000 | 1,50 | SIK09P |
| 11 (18x66) | 7500 | 15000 | 2,10 | SIK11P |
| 13 (25x81) | 10500 | 21000 | 2,90 | SIK13P |

HEAVY CARGO LASHING CHAINS, GRADE 10

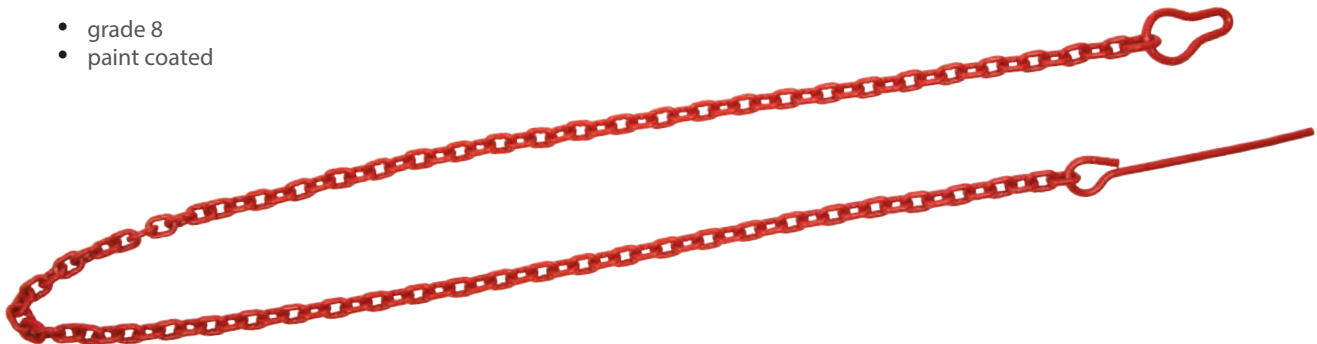
For lashing extremely heavy cargo on boats and timber trucks in automatic lashing devices. Sold by the meter or specific size with various hook etc. end fittings. Paint coated.



| Chain size (inner width x inner length) mm | LC kg | Breaking strength kg | Weight kg /m | Product code |
|---|----------|-------------------------|-----------------|--------------|
| 6 (10x35) | 2800 | 5600 | 0,65 | SIK1006P |

CHOKER CHAIN

- grade 8
- paint coated



| Chain mm | Breaking strength kg | Chain length m | Spike length mm | Weight kg | Product code |
|-------------|-------------------------|----------------------|-----------------------|--------------|--------------|
| 7 | 6800 | 2,3 | 250 | 2,85 | JKE23 |

LASHING WIRE

- operates with a similarity to an iron wire

| Size mm | No. of threads | Length on a wheel m | Product code |
|------------|----------------|---------------------------|--------------|
| 3 | 19 | 3000 | SIVAI0319 |

LOAD BINDER - RATCHET TYPE

- for short link lashing chains
- binders with direction switch and grab hook ends
- paint coated



EN-load binder hooks have locks

| Chain size mm | Breaking strength kg | LC kg | Tensile length approx. mm | Weight kg | Product code |
|------------------|-------------------------|----------|---------------------------------|--------------|--------------|
| 6 | 4000 | 2000 | 150 | 1,6 | VA6 |
| 8 - 10 | 8600 | 4300 | 150 | 4,8 | VA8 |
| 10 - 13 | 15000 | 7500 | 150 | 5,8 | VA1013 |
| 13 - 16 | 21000 | 10500 | 150 | 6,5 | VA16 |

EN 12195-3 - standard load binders

| | | | | | |
|----|-------|-------|-----|------|--------|
| 10 | 12600 | 6300 | 145 | 5,6 | VA10EN |
| 13 | 20000 | 10000 | 145 | 6,6 | VA13EN |
| 16 | 32000 | 16000 | 300 | 10,5 | VA16EN |

LOAD BINDER - LEVER TYPE

- for short link lashing chains
- tensioning with an eccentric handle
- tension length approx. 120 mm
- paint coated.



| Chain size mm | Breaking strength kg | LC kg | Tensile length approx. mm | Weight kg | Product code |
|------------------|-------------------------|----------|---------------------------------|--------------|--------------|
| 8 | 8600 | 4300 | 120 | 3,8 | PK810 |
| 10 - 13 | 15000 | 7500 | 120 | 5,5 | PK1013 |

LASHING LEVER

- for long link lashing chains
- for lashing cargo on ships (not approved for road transport)
- paint coated.



| Chain size | Breaking strength | Weight | Product code |
|------------|-------------------|--------|--------------|
| mm | kg | kg | |
| 9 | 10000 | 3,5 | KAR9 |
| 11 | 15000 | 3,9 | KAR11 |
| 13 | 20000 | 6,0 | KAR13 |

MARINE HAMBURGER TURNBUCKLES

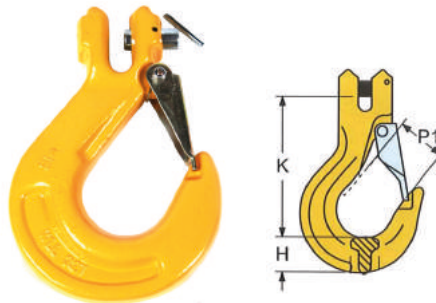
- for tightening a steel rope in cargo lashing on ships
- tension length appr. n. 240 mm
- non-coated



| Steel wire size | Breaking strength | Thread size | Weight | Product code |
|-----------------|-------------------|-------------|--------|--------------|
| mm | kg | | kg | |
| 12 - 14 | 13000 | M24 | 1,9 | HAV13 |
| 16 - 18 | 20000 | M27 | 3,0 | HAV20 |

CLEVIS SLING HOOK WITH LATCH

- the hook is attached directly to the chain without a connection link
- grade 8



| For chain mm | LC t | Breaking strength t | K mm | H mm | P1 mm | Weight kg | Product code |
|-----------------|---------|---------------------------|---------|---------|----------|--------------|--------------|
| 6 | 2,25 | 4,5 | 75 | 20 | 18 | 0,35 | SALKH6 |
| 8 | 4,0 | 8,0 | 83 | 26 | 22 | 0,60 | SALKH78 |
| 10 | 6,3 | 12,6 | 105 | 37 | 30 | 1,06 | SALKH10 |
| 13 | 10,6 | 21,2 | 127 | 48 | 40 | 1,80 | SALKH13 |
| 16 | 16,0 | 32,0 | 150 | 60 | 54 | 3,40 | SALKH16 |

CLEVIS CRAB HOOK

- for shortening of short link lashing chains
- the hook is attached directly to the chain without a connection link



| For chain mm | LC t | Breaking strength t | Weight kg | Product code |
|-----------------|---------|------------------------|--------------|--------------|
| 10/13 | 6,3 | 12,6 | 0,3 | AKOH1/2 |

CLEVIS HOOK FOR LASHING CHAIN

- the hook is attached directly to the chain
- for long link chains



| For chain mm | Breaking strength t | Weight kg | Product code |
|-----------------|------------------------|--------------|--------------|
| 9 | 10 | 0,5 | AKOHS09 |
| 11 | 15 | 0,9 | AKOHS11 |
| 13 | 21 | 1,1 | AKOHS13 |

CLEVIS ELEPHANT HOOK

- the foot is attached directly to the chain
- for long link chain



| For chain mm | Breaking strength t | Weight kg | Product code |
|-----------------|------------------------|--------------|--------------|
| 9/11/13 | 20 | 0,8 | ELH20 |

Delivery 1-2 weeks

PELICAN HOOK

- hook opens quickly by hitting / trigger
- for chain or steel rope



| Breaking strength t | Weight kg | Product code |
|------------------------|--------------|--------------|
| 17 | 1,6 | PELISH16 |

PALLET HOOKS



| Breaking strength t | Attached | Weight kg | Product code |
|------------------------|----------|--------------|--------------|
| 20 | bolting | 2,6 | SILVKOU |

Pallet chains can be found on page 13-3

TRAILER WHEEL CHOCK

- full rubber wedge that you can equip with spikes



| Dim. (l x w x d) | Color | Weight kg | Product code |
|------------------|-------|-----------|--------------------|
| 105 x 75 x 75 | black | 0,33 | PYKMATALA (2 pcs) |
| 170 x 100 x 95 | red | 0,60 | PYKMINI |
| 243 x 230 x 127 | black | 3,80 | PYKPIENI |
| 290 x 190 x 150 | black | 5,30 | PYKISO |
| 240 x 190 x 165 | black | 6,10 | PYKSUURI |

PVC CARGO TARPAULIN

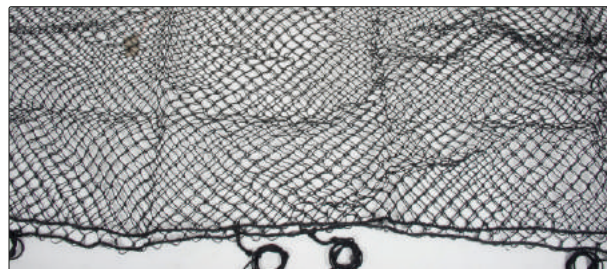
- holes reinforced with metal approx every 1 metre on the edges
- approx 1,5m lashing ropes are included in the delivery (detached)
- lashing rubbers can also be used with the tarpaulin
- other sizes also available



| Net size m | Eye size approx. mm | Weight kg | Product code |
|------------|---------------------|-----------|--------------|
| 3,5 x 6 | 2 | 7,4 | KUV356PVC |
| 3,5 x 7 | 2 | 8,6 | KUV357PVC |

CARGO NETS

- for lashing trash, construction waste loads etc.
- appr. 1.0 m lashing ropes
- other sizes also available



| Net size m | Net rope mm | Eye size mm | Weight kg | Product code |
|------------|-------------|-------------|-----------|--------------|
| 3,5 x 5 | 3,0 | 40 | 2,4 | KUV35540 |
| 3,5 x 6 | 3,0 | 40 | 2,8 | KUV35640 |
| 3,5 x 7 | 3,0 | 40 | 3,3 | KUV35740 |

PULLING AND TOWING WEBBINGS / SLINGS

- durable for all kinds of pulling and towing
- material 100 % polyester
- 2000 – 28000 kg sizes of a strap
- 35000 – 70000 kg sizes of a round sling
- with eye / eye ends
- 2000 kg model with eye / hook ends
- available with different hook, sackle, etc. ends and different lengths



VER350



Warning flag for over-long loads, 30 x 30 cm

Product code: VARLIP



VEH280



VEH240



VEH070

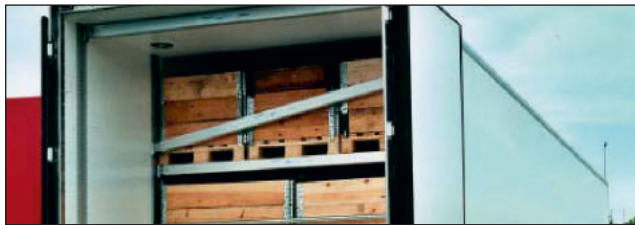


VEH050



VEH025

| Type | Breaking strength t | Width or diameter mm | Length m | Weight kg | Product code |
|--------------------|------------------------|-------------------------------|-------------|--------------|--------------|
| Polyester strap | 2,0 | 25 | 5 | 0,35 | VEH025 |
| Polyester strap | 5,0 | 50 | 6 | 0,90 | VEH050 |
| Polyester strap | 7,0 | 50 | 6 | 1,10 | VEH070 |
| Polyester strap | 14,0 | 60 | 6 | 2,00 | VEH140 |
| Polyester strap | 21,0 | 75 | 6 | 3,30 | VEH240 |
| Polyester strap | 28,0 | 100 | 6 | 4,40 | VEH280 |
| Fiber bundle sling | 35,0 | 60 | 6 | 6,80 | VER3506 |
| Fiber bundle sling | 56,0 | 80 | 6 | 12,00 | VER5606 |
| Fiber bundle sling | 70,0 | 100 | 6 | 15,60 | VER7006 |



Double decking systems

Page 11-40



Lashing tracks, support bars and accessories

Page 11-46



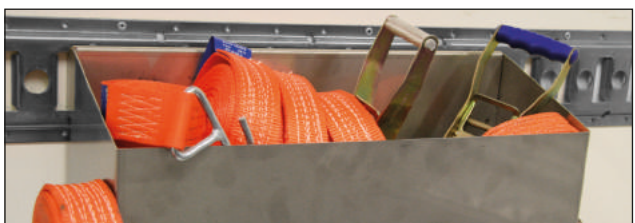
Cargo securing winches, connect points and accessories

Page 11-57



Thermo walls

Page 11-61



Accessories

Page 11-65

TD-system is based on unique flight cargo securing system parts.
The system has been developed based on the user experience for several decades.

- Available when needed
TD-double deck floor beam can be stored near the ceiling, where it locks on the tracks, and is easily accessible.
- Easy to use
If the double deck floor beam is out of the reach, the beam locking mechanism can be opened using a bar made for it.
- Optimal loading space
The track is only 12 mm thick, so it leaves the vehicle's load space effectively available.
- Large height adjustability
A major advantage is a dense height adjustment, the double deck floor beam anchor intervals are only 25 mm.
- Rational design
Mid track slots are very effectively protected from damage, due to carefully thought shape.
- Insulation benefits
Due to the ultra thin design of tracks, they do not need to be embedded to the wall, so the wall insulation capacity does not change.
- Retrofitting
TD-double deck floor system can also be retrofitted.
- Easy to clean
Due to its design, its easy to keep clean.
- Gentle for the goods
The finished design of the tracks minimizes the risk of damage to the goods during the unloading and loading the cargo.



Example:

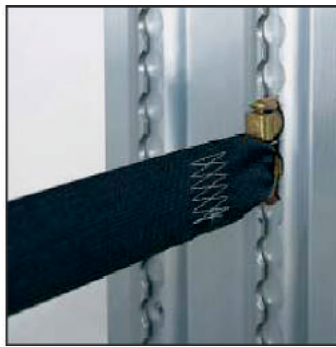
A trailer with the TD-double deck floor system

| | |
|-------------------------------|--------|
| Length..... | 13,6 m |
| Height..... | 2,5 m |
| Pallet slots..... | 66 pcs |
| Double deck floor beam..... | 22 pcs |
| Double row vertical beam | 20 pcs |
| Single row vertical beam..... | 4 pcs |
| Release rod..... | 1 pcs |

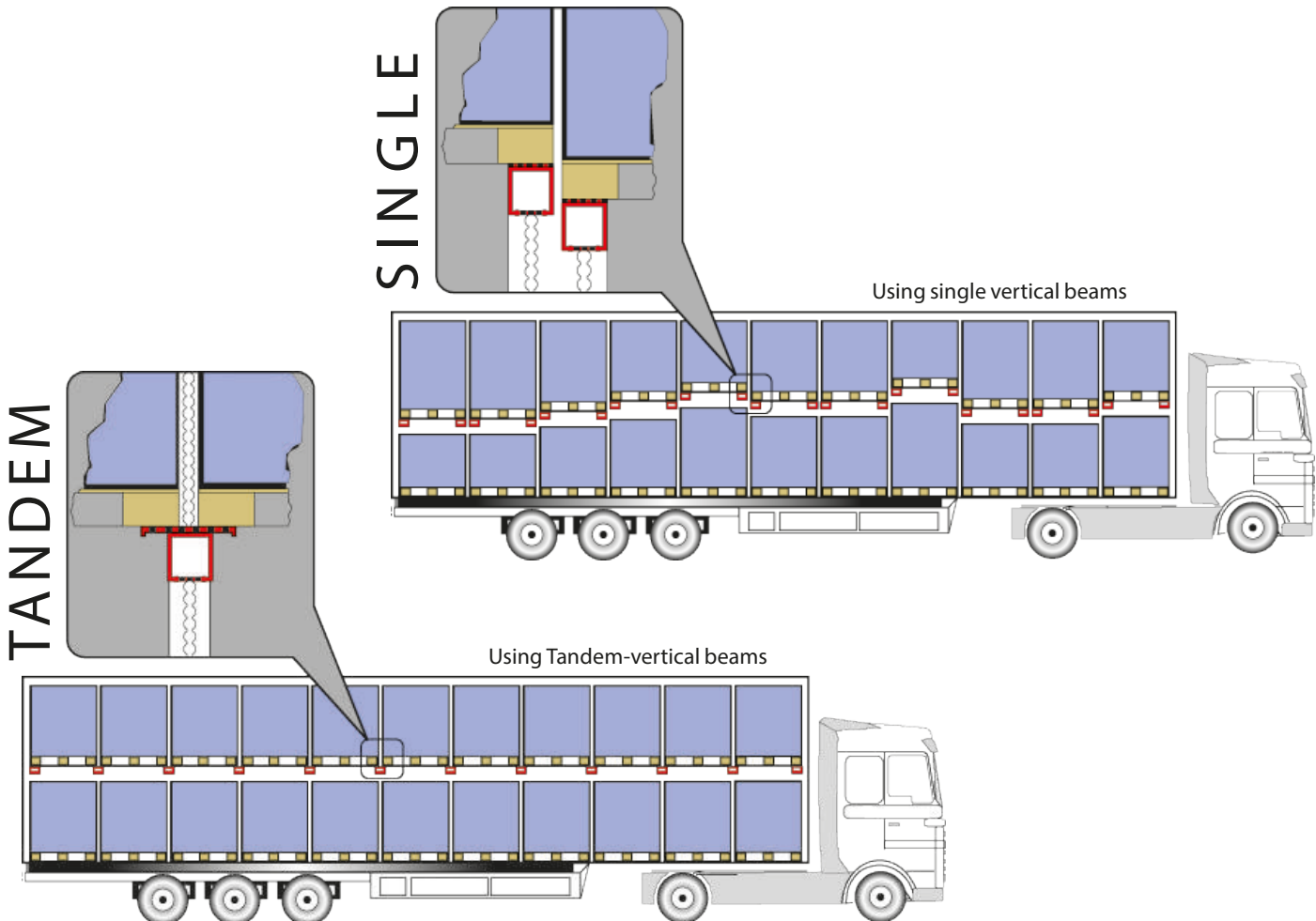


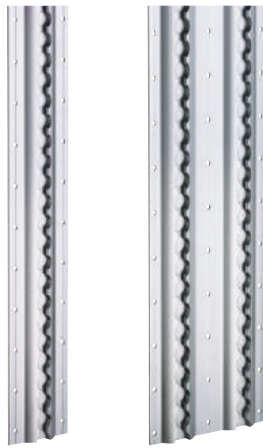
TD- vertical beams fit to be used also in diagonal position for loading and load separation

The vertical beams for the decking system are available as surface-mounted and imbedded models. Attachment depends on the specific type of model, with screws, rivets or by glueing.



TD- vertical beams fit perfectly for vertical controlling of the load.



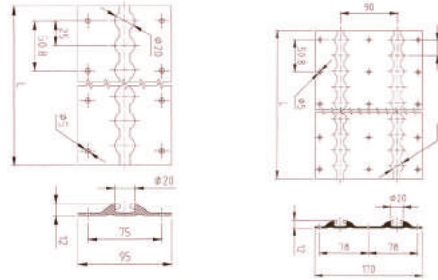


TDKISO1

TDKISO2

TD surface-mounted vertical beam

| Material | Product code | Length, mm | Weight, kg |
|----------|--------------|------------|------------|
| Aluminum | TDKISO1 | 1960 | 2,2 |
| | TDKISO2 | 1960 | 4,1 |



Attachment with screws or pop rivets



TD-double decking beam

| Material | Product code | Length, mm | WLL, daN | Weight, kg |
|----------|--------------|------------|----------|------------|
| Aluminum | TDPALKKIX | 2385-2750 | 1000 | 6,70 |

Winner of the innovation price of the year.

Extremely silent, fast and easy to use.

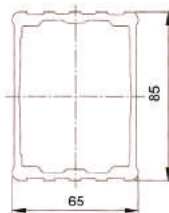


For a surface-mounted vertical beam

Check the usage on page 11-40.

The attachment poles can be found on page 11-44

See presentation video



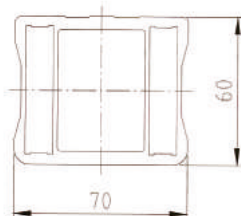
TD decking beam single

| Material | Product code | Length, mm | WLL, daN | Weight, kg |
|----------|--------------|------------|----------|------------|
| Aluminum | TDPALKKIS | 2285-2800 | 1000 | 7,50 |

For a surface-mounted vertical beam

Check the usage on page 11-40.

The attachment poles can be found on page 11-44.



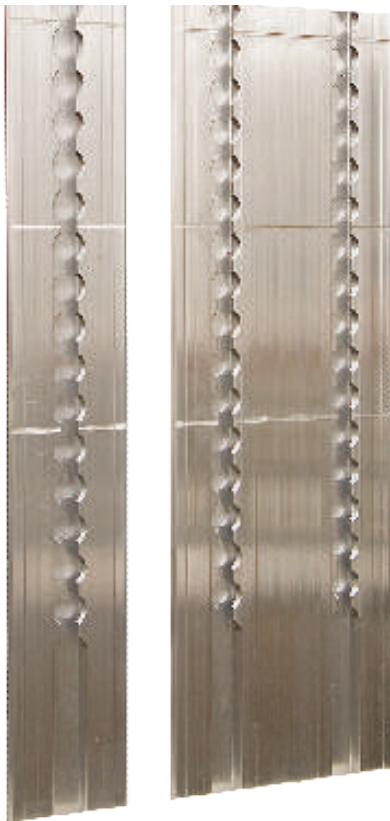
TD decking beam low profile

| Material | Product code | Length, mm | WLL, daN | Weight, kg |
|----------|--------------|------------|----------|------------|
| Aluminum | TDPALKKIM | 2420-2550 | 1000 | 9,08 |

For a surface-mounted vertical beam

Check the usage on page 11-40.

The attachment poles can be found on page 11-44.

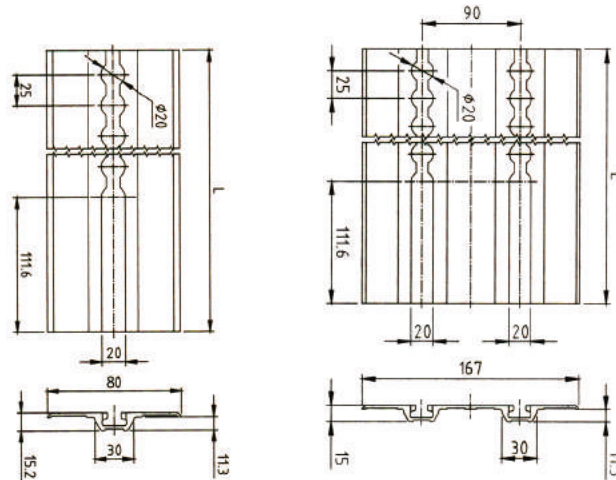
TDF19601,
TDF21501TDF19602,
TDF21502

TDF decking beam, embedded

Focusing signs, 6 pcs

| Material | Product code | Length, mm | Model | Weight, kg |
|----------|--------------|------------|--------|------------|
| Aluminum | TDF19601 | 1960 | 1 row | 1,72 |
| | TDF19602 | 1960 | 2 rows | 3,59 |
| | TDF21501 | 2150 | 1 row | 1,90 |
| | TDF21502 | 2150 | 2 rows | 3,90 |

Attachment by glueing

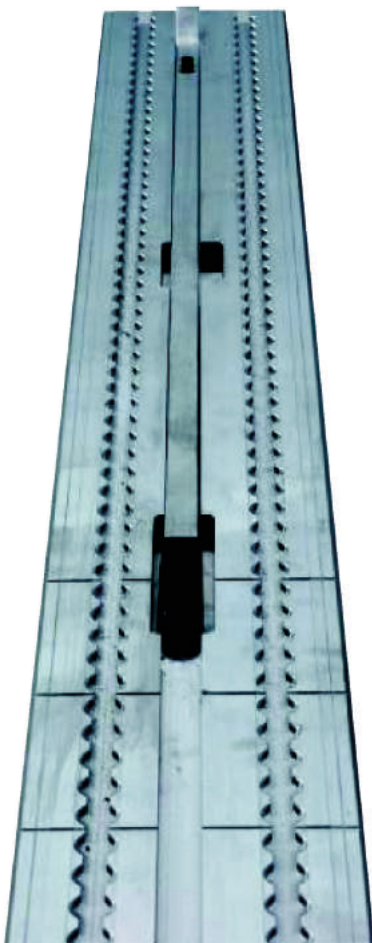
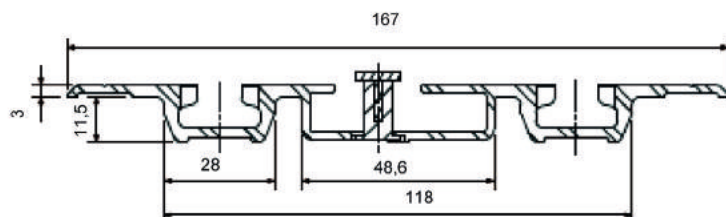


TDF-embedded vertical beam with trail

The adjustment pole TANKO1250 storing possibility

| Material | Product code | Length, mm | Weight, kg |
|----------|--------------|------------|------------|
| Aluminum | TDF1960S | 1960 | 3,58 |
| | TDF2150S | 2150 | 3,90 |

Attachment by glueing





TDF decking beam

| Material | Product code | Length, mm | WLL, daN | Weight, kg |
|----------|--------------|------------|----------|------------|
| Aluminum | TDFPALKKIX | 2385-2750 | 1000 | 6,70 |

Winner of the innovation price of the year.
Extremely silent, fast and easy to use.



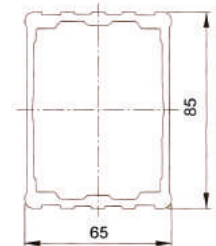
For a embedded vertical beam.
Check the usage on page 11-40
The adjustment poles can be found on page 11-44.



TDF decking beam single

| Material | Product code | Length, mm | WLL, daN | Weight, kg |
|----------|--------------|------------|----------|------------|
| Aluminum | TDFPALKKIS | 2285-2800 | 1000 | 7,50 |

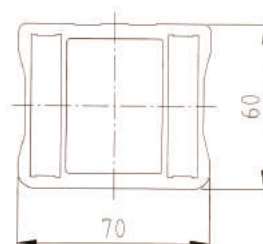
For an embedded vertical beam.
Check the usage on page 11-40
The adjustment poles can be found on page 11-44.

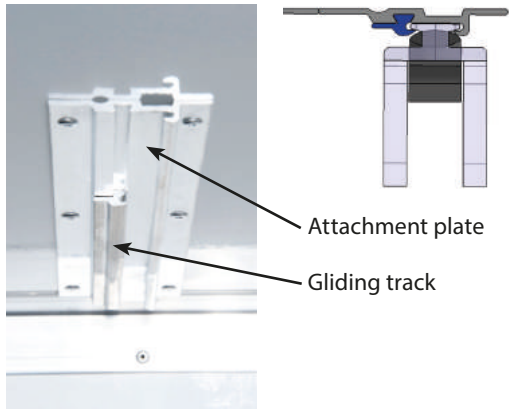


TDF decking beam low profile

| Material | Product code | Length, mm | WLL, daN | Weight, kg |
|----------|--------------|------------|----------|------------|
| Aluminum | TDFPALKKIM | 2420-2550 | 1000 | 9,08 |

For an embedded vertical beam.
Check the usage on page 11-40





Roof suspension

| Product code | Part |
|--------------|------------------|
| RLEVYKI | Attachment plate |
| RLEVYLI | Gliding track |

Fits to TDF double deck beam

Roof suspension



| Product code | Measures, mm |
|--------------|--------------|
| RLEVY2 | 115×89×54/27 |

Fits to TDF and TD double deck beam



Double deck beam release rod

| Product code | Measures, mm |
|--------------|--------------|
| TANKO1300 | L 1300 |
| TANKO900 | L 900 |

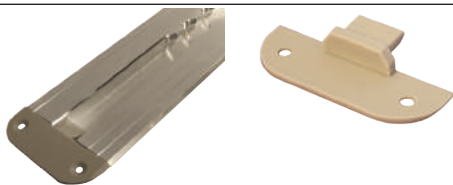
TANKO900 fits to beams TDPALKKIX and TDFPALKKIX
pages 11-41 ja 11-43



Double deck beam release rod

| Product code | Measures, mm |
|--------------|--------------|
| TANKO1250 | L 1250 |

Fits to reessed TDF vertical beam TDF1960S and TDF2150S,
page 11-42

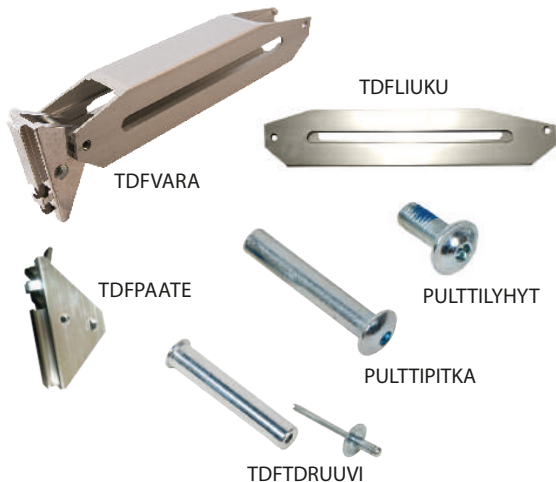


Stopper for TDF track

Fit to TDF bars TDF19601, TDF19602, TDF21501 and TDF21502,
page 11-42

| Product code | Measures, mm |
|--------------|--------------|
| TDFPAATY | 80×25×H13 |

Spare parts for TDF double deck beams

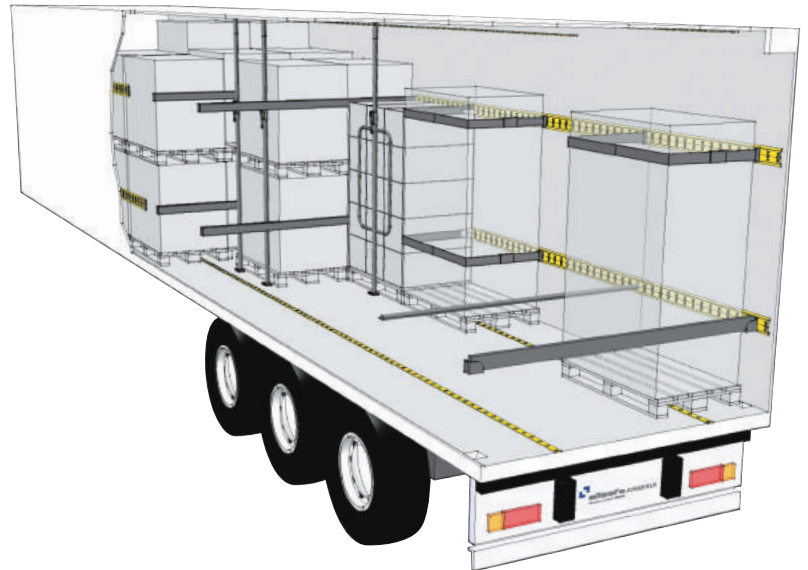
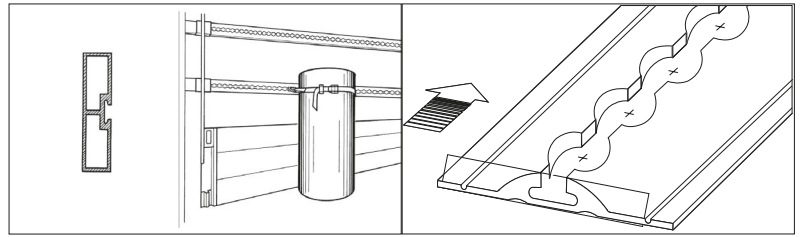


| Product | Product code |
|---------------------|--------------|
| Whole stopper | TDFVARA |
| TDF stopper | TDFPAATE |
| TDF gliding stopper | TDFLIUKU |
| Bolt, short | PULTTILYHYT |
| Bolt, long | PULTTIPITKA |
| TDF/TD screw set | TDFTRUUUVI |

Spare part also available for TD double deck beams, ask for more.

Lashing system with many uses

Aircraft tracks ensure greater binder strength and they can be fully integrated to the transport space. For example, lashing system with four attachment ends (EP50), allows the bonding of up to 2000 daN, when attached to the floor beams. All tracks and fittings are compatible with all the systems under EN 12640 standard. Since the mounting points in the tracks are with 25 mm intervals, the transported cargo can be tied down precisely to the desired location. Aircraft bars, due to their design, easy to keep clean, and, therefore, they are also highly suitable to be flat-mounted to the vehicle floor.



Benefits

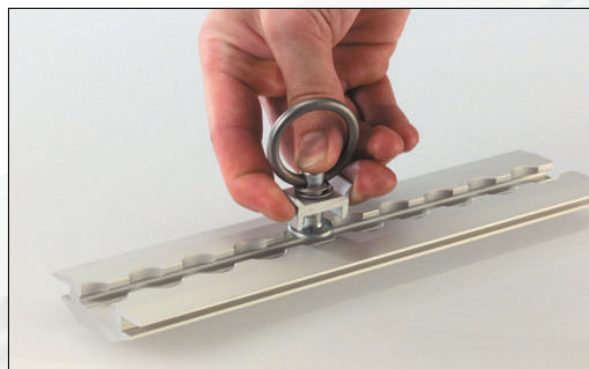
The tracks are lightweight, but still provide excellent binder strength. Tracks and accessories are made along the universal standards.

The tracks are easy to mount with pop rivets, screws or glue.



Using the system

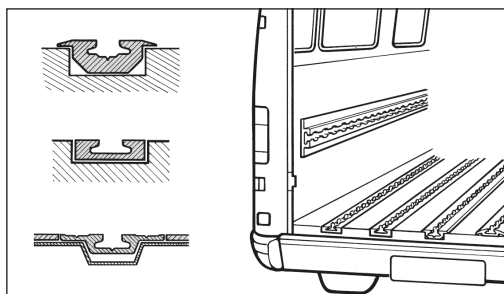
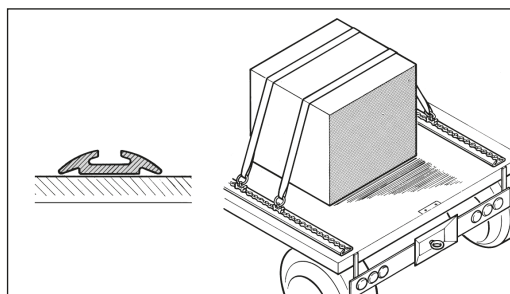
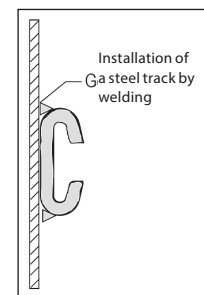
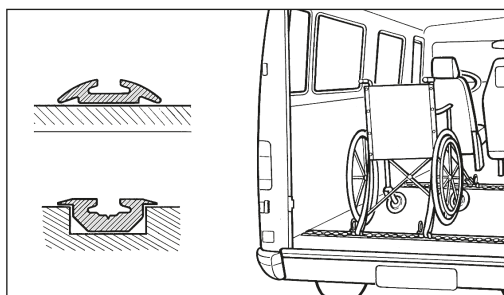
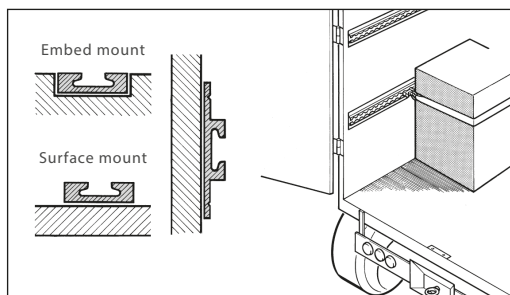
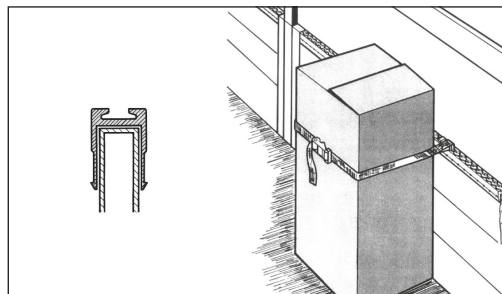
Straps terminals, anchors and other accessories can be used, either separately or together, as part of the cargo securing. All fittings and mounting points can be mounted on 25 mm intervals throughout the length of the track.



Aircraft tracks

Aircraft tracks are designed specifically for vans and trucks and they can be mounted both on the wall and the floor. High grade aluminum alloy has been used as a building material, which guarantees the light weight and strong structure of the product. Aircraft tracks may be installed to the floor or wall of the transport space, either surface or flat mounted. Tracks have an open structure, making them easier to keep clean.

The tracks are also available as steel-structured, which are less expensive compared to aluminum tracks and steel tracks can be attached to the transport space by welding. Steel tracks have the same 25 mm pitch as the aluminum tracks.



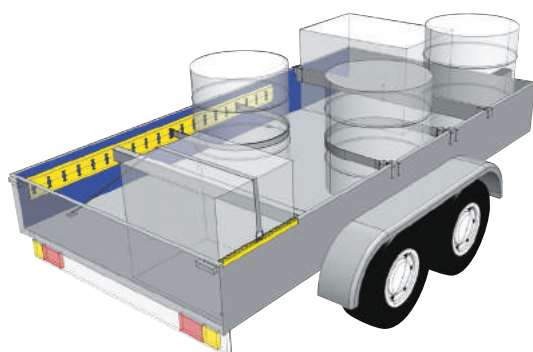
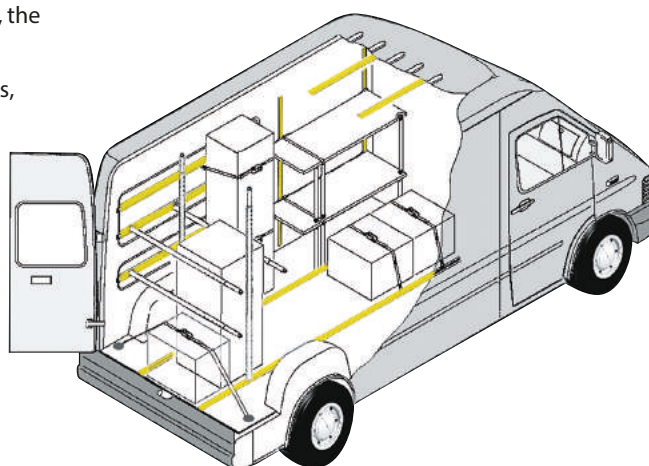
When using the aircraft tracks and lashing strap end fitting (page 5), the requirements of ISO 27955/27956 and DIN 75410 are fulfilled. By using the LASHING SYSTEM with four-point lashing end fitting, the requirements of EN 12640 are fulfilled.

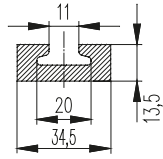
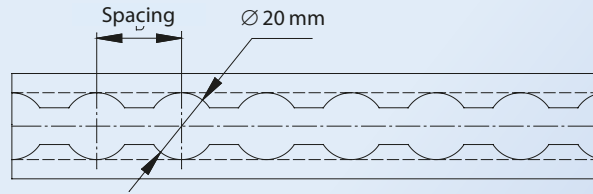
If the track is attached with M5 10.9 screws with 75mm intervals, following working loads are achieved:

| | |
|-------------------|---------|
| Single attachment | 400 daN |
| Double attachment | 500 daN |
| Quadro attachment | 800 daN |

If the track is attached with M6 10.9 screws with 75mm intervals, following working loads are achieved:

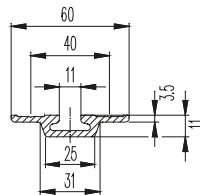
| | |
|-------------------|----------|
| Single attachment | 500 daN |
| Double attachment | 1000 daN |
| Quadro attachment | 2000 daN |





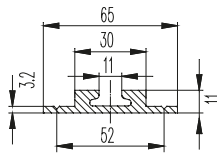
| Material | Product code | Length, mm | Spacing, mm | Weight, kg |
|----------|--------------|------------|-------------|------------|
| Aluminum | EPKI-SKO34.5 | 2998 | 25 | 2,70 |

Attachment with screws or pop rivets.



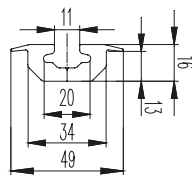
| Material | Product code | Length, mm | Spacing, mm | Weight, kg |
|----------|--------------|------------|-------------|------------|
| Aluminum | EPKISKO31 | 2998 | 25 | 2,10 |

Attachment with screws or pop rivets.



| Material | Product code | Length, mm | Spacing, mm | Weight, kg |
|----------|--------------|------------|-------------|------------|
| Aluminum | EPKISKO52 | 2998 | 25 | 2,40 |

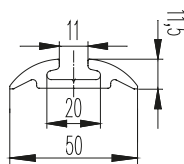
Attachment with screws or pop rivets.



| Material | Product code | Length, mm | Spacing, mm | Weight, kg |
|------------------------|--------------|------------|-------------|------------|
| Aluminum alloy 6082 T6 | EPKISKO49 | 2998 | 25 | 2,94 |

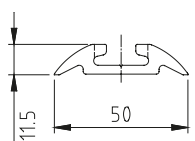
Tested according to DIN 75078-2 standard wheelchair securing.

Attachment with screws



| Material | Product code | Length, mm | Spacing, mm | Weight, kg |
|------------------------|--------------|------------|-------------|------------|
| Aluminum alloy 6082 T6 | EPKISKO5011 | 2998 | 25 | 2,13 |

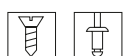
Attachment with screws or pop rivets.

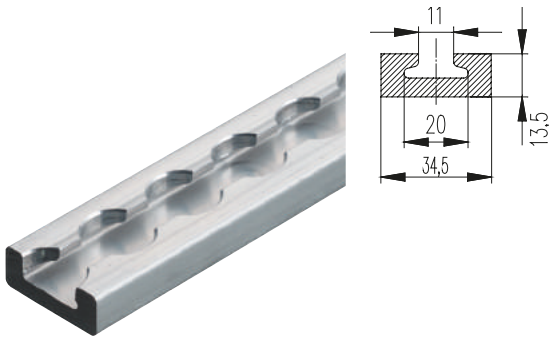


| Material | Product code | Length, mm | Spacing, mm | Weight, kg |
|------------------------|--------------|------------|-------------|------------|
| Aluminum alloy 6082 T6 | EPKISKO50 | 2998 | 25 | 2,28 |

Tested according to DIN 75078-2 standard wheelchair securing.

Attachment with screws or pop rivets.

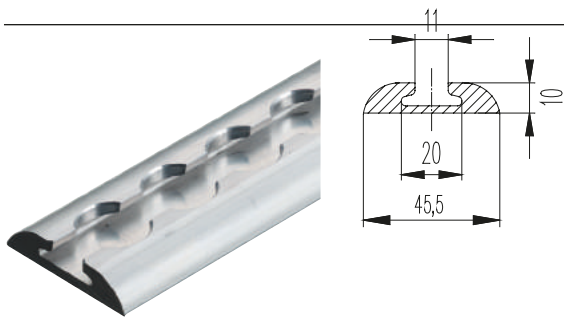




Spacing 25,4 mm

| Material | Product code | Length, mm | Spacing, mm | Weight, kg |
|------------------------|--------------|------------|-------------|------------|
| Aluminum alloy 6082 T6 | EPKISKO3000 | 3000 | 25,4 | 2,70 |

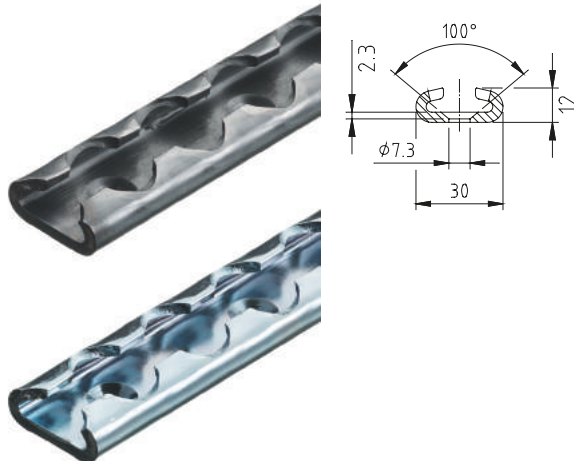
Developed for aircraft industry.
Attachment with screws.



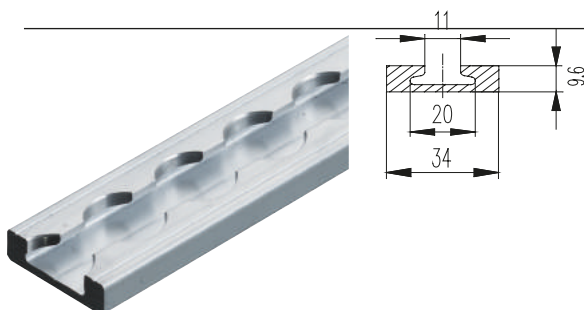
Spacing 25,4 mm

| Material | Product code | Length, mm | Spacing, mm | Weight, kg |
|------------------------|--------------|------------|-------------|------------|
| Aluminum alloy 6082 T6 | EPKISKO45.5 | 3000 | 25,4 | 2,40 |

Developed for aircraft industry.
Attachment with screws.



| Material | Product code | Length, mm | Spacing, mm | Weight, kg |
|----------------------------------|--------------|------------|-------------|------------|
| Non-treated steel QSTE 420 | EPK2400 | 2400 | 25 | 2,91 |
| | EPK3000 | 3000 | 25 | 3,63 |
| Galvanized steel, Blue chromated | EPS1445 | 1445 | 25 | 1,75 |
| | EPS2400 | 2400 | 25 | 2,91 |
| | EPS3000 | 3000 | 25 | 3,63 |



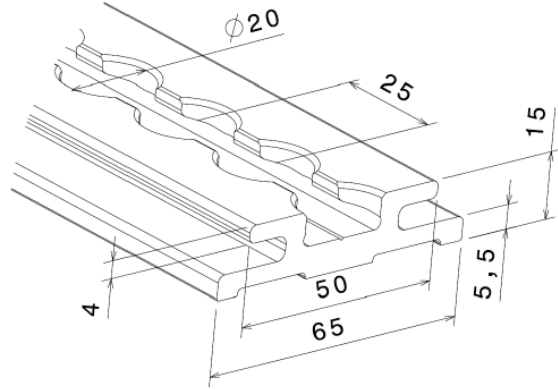
Spacing 25 mm

| Material | Product code | Length, mm | Spacing, mm | Weight, kg |
|----------|--------------|------------|-------------|------------|
| Aluminum | EPKISKO34 | 2998 | 25 | 1,65 |

Like EPKISKO34.5 but with thin bottom.
Attachment with screws or pop rivets.



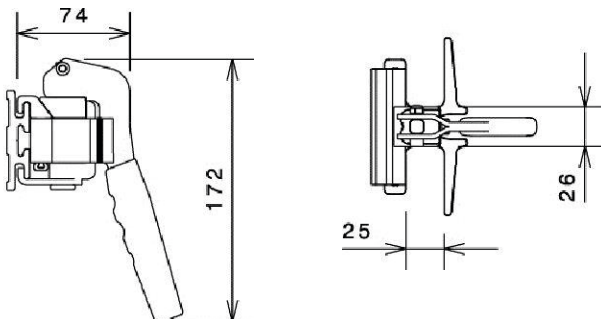
| Material | Product code | Length, mm | Weight, kg |
|----------|--------------|------------|------------|
| Aluminum | EPR2000 | 2000 | 3,40 |



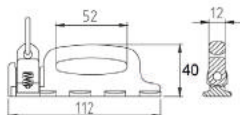
Roll trolley locking handle

| Material | Product code | Measures, mm | Weight, kg |
|-------------------------------------|--------------|-------------------------|------------|
| Galvanized steel, Blue chromated | LKAHVA25 | X: 25 Y: 24 Z: 22 | 0,65 |

| Material | Product code | Measures, mm | Weight, kg |
|-------------------------------------|--------------|-------------------------|------------|
| Galvanized steel, Blue chromated | LKAHVA35 | X: 35 Y: 24 Z: 22 | 0,68 |



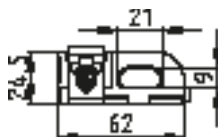
Sidontaljuus (Lashing Capacity – LC) daN, EN 12195-2 =

$$\frac{\text{Breaking strength daN}}{2}$$


Quadro attachment

| Material | Product code | LC daN | Weight, kg |
|------------------|--------------|--------|------------|
| Galvanized steel | EP50 | 2500 | 0,34 |

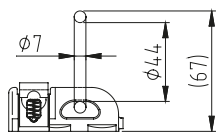
Breaking strength 5000 kg



Double attachment

| Material | Product code | LC daN | Weight, kg |
|------------------|--------------|--------|------------|
| Galvanized steel | EP25 | 1100 | 0,11 |

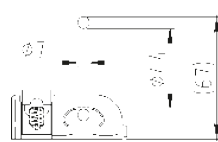
Breaking strength 2200 kg



Double attachment

| Material | Product code | LC daN | Weight, kg |
|------------------|--------------|--------|------------|
| Galvanized steel | EP26 | 1100 | 0,16 |

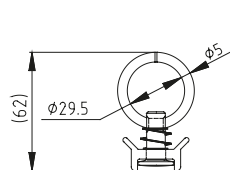
Breaking strength 2200 kg



Double attachment

| Material | Product code | LC daN | Weight, kg |
|------------------|--------------|--------|------------|
| Galvanized steel | EP25E | 1100 | 0,16 |

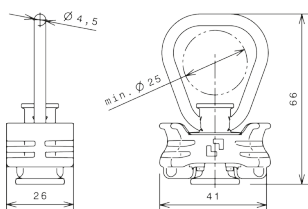
Breaking strength 2200 kg



Single attachment

| Material | Product code | LC daN | Weight, kg |
|------------------------------------|--------------|--------|------------|
| Galvanized steel, alum. attachment | EP18 | 875 | 0,05 |

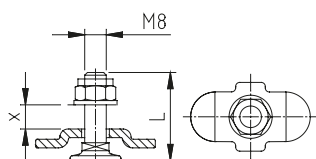
Breaking strength 1750 kg



Single attachment

| Material | Product code | LC daN | Weight, kg |
|------------------------------------|--------------|--------|------------|
| Galvanized steel, alum. attachment | EP18M | 500 | 0,06 |

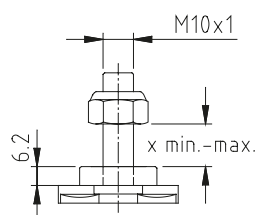
Breaking strength 1000 kg



Screw Fitting with a M8 nut

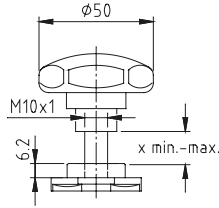
| Material | Product code | LC daN | Bolt Length, mm | Weight, kg |
|------------------|--------------|--------|-----------------|------------|
| Galvanized steel | ANKKURI807 | 500 | 0–7 | 0,04 |
| | ANKKURI817 | 500 | 0–17 | 0,04 |

Screw Fitting with a M10 nut



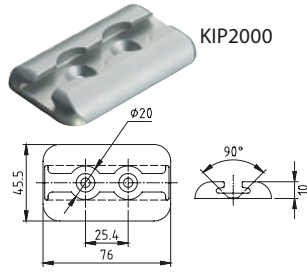
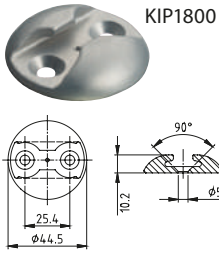
| Material | Product code | LC daN | Bolt Length, mm | Weight, kg |
|------------------|--------------|--------|-----------------|------------|
| Galvanized steel | ANKKURI1007 | 2000 | 0–7 | 0,06 |
| | ANKKURI1014 | 2000 | 0–14 | 0,07 |
| | ANKKURI1024 | 2000 | 0–24 | 0,07 |
| | ANKKURI1034 | 2000 | 0–34 | 0,08 |

Screw fitting with plastic knob



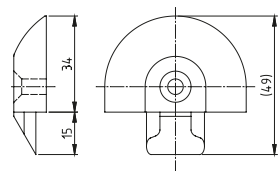
| Material | Product code | LC daN | Bolt Length x, mm | Weight, kg |
|------------------|--------------|--------|-------------------|------------|
| Galvanized steel | ANKKURIM14 | 2000 | 7-14 | 0,12 |
| | ANKKURIM24 | 2000 | 14-24 | 0,12 |
| | ANKKURIM34 | 2000 | 24-34 | 0,13 |

Anchor points



| Material | Product code | LC daN | Weight, kg |
|-------------------|--------------|--------|------------|
| Anodised aluminum | KIP1800 | 400 | 0,02 |
| | KIP2000 | 1000 | 0,06 |

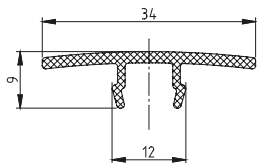
Aircraft track ending



| Material | Product code | Weight, kg |
|----------|--------------|------------|
| Plastic | EPPAATEP | 0,02 |

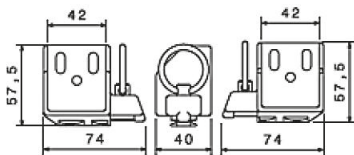
Fits to EPKISKO5011 and EPKISKO350 tracks

Cover for aircraft track



| Material | Product code | Length, mm | Weight, kg |
|----------|--------------|------------|------------|
| Plastic | EPSUOJA | 3000 | 0,32 |

Support bar holder set



| Material | Product code | Weight, kg |
|------------------|--------------|------------|
| Galvanized steel | KANNATIN | 0,54 |

Support bar holder set includes both parts

Support bar for aircraft track Ø 44 mm

To support the cargo in vans and pick-ups, in both horizontal and vertical positions

For combi- and hole tracks

| Material | Bolt size | Product code | Length, mm | Weight, kg |
|----------|---------------|--------------|------------|------------|
| Aluminum | 24 mm tapilla | KTU3219 | 2000-2500 | 3,20 |

Also other sizes available.

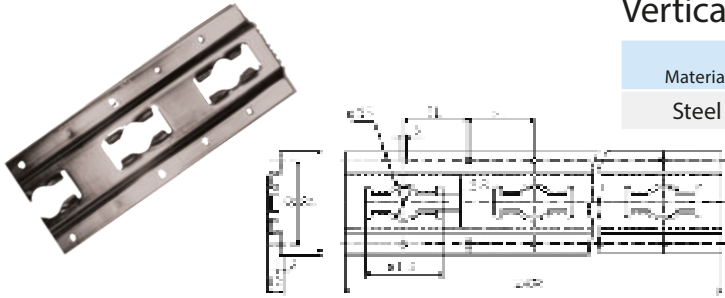
For Hole track
SICOPAA84



For Universal-/Combi track
SICOPAA130

Lashing track end fitting

| Material | Product code | Length, mm |
|----------|--------------|------------|
| Plastic | SICOPAA84 | 84 |
| | SICOPAA130 | 130 |



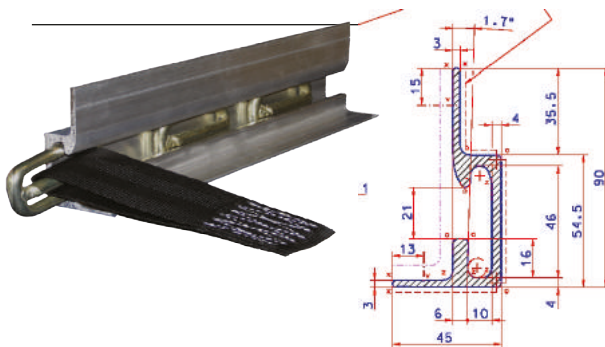
Vertical track

| Material | Product code | Material thickness, mm | Length, mm | Weight, kg |
|----------|--------------|------------------------|------------|------------|
| Steel | VERTIKISKO | 3,0 | 2438 | 3,3 |

Omega track for a winch

| Material | Product code | Material thickness, mm | Length, mm | Weight, kg |
|----------|--------------|------------------------|------------|------------|
| Steel | OMEGAKISKO | 6 | 6000 | 39 |

Track's inner width

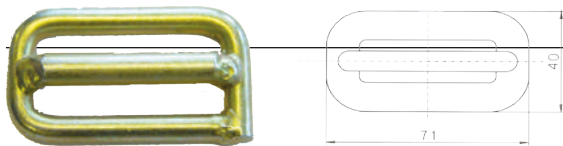


Space track

| Material | Product code | Material thickness, mm | Length, mm | Weight, kg |
|----------|--------------|------------------------|------------|------------|
| Aluminum | SPACEKISKO | 3-4 | 5000 | 8,81 |

Lashing strap for a Space track

| Material | Product code | Breaking strength, kg |
|----------|--------------|-----------------------|
| Steel | SPACELENKKI | 3500 |



Omega winch (SIV25000, p.11-42) forms a very versatile strap tightening system together with Omega track.



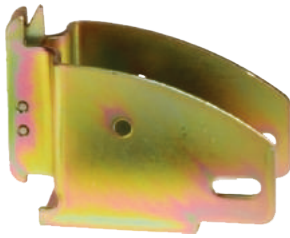
Lashing strap (SPACELENKKI) moves in the Space track groove and does not need any extra space.



Loading Beam/Shoring Beam

For Combi and universal track

| Material | Product code | Length, mm | Weight, kg |
|----------------|--------------|------------|------------|
| Aluminum/steel | TUKIPUOMISK | 2340-2630 | 8,5 |



Support beam socket

For Combi and universal track

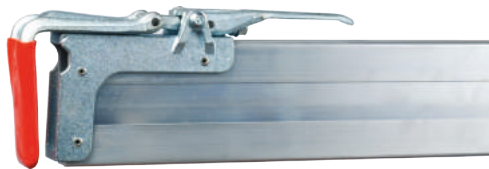
| Material | Product code | Weight, kg |
|----------|--------------|------------|
| Steel | VTKA300 | 0,39 |



Round Shoring Pole Ø 42 mm

For Combi and hole track

| Material | Bolt size, mm | Product code | Length, mm | Weight, kg |
|----------|---------------|--------------|------------|------------|
| Steel | 24 | KTU400PT | 2200-2650 | 8,0 |



Adjustable safety beam to pick-ups

Adjustment in the middle

| Material | Product code | Length, mm | Weight, kg |
|----------|--------------|------------|------------|
| Aluminum | TUKIPUOMISA | 2400-2700 | 11,5 |



Low-profile adjustable safety beam to pick-ups

Other end adjustable, other fixed

| Material | Product code | Length, mm | Weight, kg |
|----------|--------------|------------|------------|
| Aluminum | TUKIPUOMIMA | 2290-2520 | 7,2 |

Ergobar support bar with rubber pads and automatic lock

Ergonomic light support bar. For supporting the load in vans. The bar is locked automatically when lower pad is placed on the floor.

See presentation video



Easy operation also with one hand.



| Product code | Type | Material | Adjustment, m | Shape | Max. load, kg | Weight, kg |
|--------------|------------|----------|---------------|--------|---------------|------------|
| KTTU300EE | Mechanical | Aluminum | 2,65 - 3,45 | square | 150 | 5,0 |
| KTTU300E | Mechanical | Aluminum | 2,40 - 2,80 | square | 150 | 4,7 |

Support bars with rubber pads

For supporting a load in a van or pick-up car, both in horizontal or vertical position. Mechanical or gas spring-operated. Spare parts also available.

KTTU300PGAS / KTTU300LGAS



KTTU300



KTTU300P



| Product code | Type | Material | Adjustment, m | Shape | Max. load, kg | Weight, kg |
|--------------|------------|----------------|---------------|--------|---------------|------------|
| KTTU300LGAS | Gas spring | Steel/aluminum | 1.90 - 2.55 | square | 300 | 7,0 |
| KTTU300PGAS | Gas spring | Steel/aluminum | 2.35 - 3.35 | square | 300 | 8,0 |
| KTTU300 | Mechanical | Steel | 2.35 - 3.10 | square | 300 | 7,0 |
| KTTU300P | Mechanical | Aluminum | 2.35 - 3.20 | round | 300 | 6,0 |

Gas spring-operated models can also be supplied with a 90kg spring (normal 120kg), ask for more from our sales!

SPARE PARTS FOR SUPPORT BARS WITH RUBBER PADS

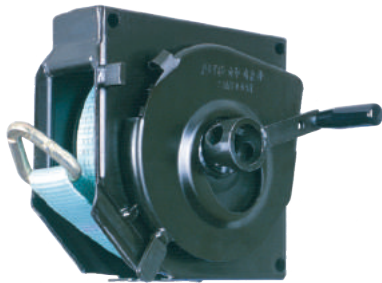
| For | Spare part | Product code |
|---------------------------|-----------------|---------------|
| ERGOBAR | Pad | KTTU300EJAL |
| KTTU300PGAS / KTTU300LGAS | Handle | KTTU300GVI001 |
| KTTU300PGAS / KTTU300LGAS | Pad | KTTU300GVI002 |
| KTTU300PGAS / KTTU300LGAS | Spring (120 kg) | KTTU300GVI018 |
| KTTU300PGAS / KTTU300LGAS | Arm | KTTU300GVI028 |
| KTTU300 | Pad, down | KTTU05F |
| KTTU300 | Pad, up | KTTU06F |



Lashing winch

The most commonly used lashing winch. The winch is only intended for belt tightening and the unused band can not be stored in the winch. Used with ratchet spanner SIVKI28M. Winch is mounted by bolting.

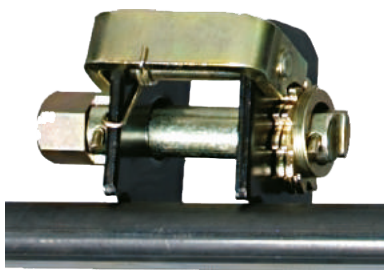
| Product code | Band WIDTH, mm | Breaking strength, daN | LC, daN |
|--------------|----------------|------------------------|---------|
| SIV2000P | 50 | 5000 | 2500 |



Combi-lashing winch

A robust combination of winch is used to tighten the straps and storing an extra tape. Loose strap winding with a crank, which can be mounted on either side of the winch.

| Product code | Band WIDTH, mm | Breaking strength, kg | LC, daN |
|--------------|----------------|-----------------------|---------|
| SIV30004 | 50 | 6000 | 3000 |



Lashing winch Omega- track

A structure similar to winch SIV2000P, but with Omega track with a suitable attachment. Use with ratchet spanner SIVKI28M.

| Product code | Band WIDTH, mm | Breaking strength, daN | LC, daN |
|--------------|----------------|------------------------|---------|
| SIV25000 | 50 | 5000 | 2500 |



Lashing winch e.g. timber transports

Used, for example in timber trucks to tighten the load and storing the excess webbing. Winch has a crank for fast retraction of the loose strap. Winch fastening by e.g. welding. For tightening use SIVKI28M.

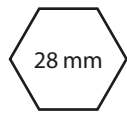
| Model | Product code | Band WIDTH, mm | Breaking strength, daN | LC, daN |
|-------------------------|--------------|----------------|------------------------|---------|
| K-model, winch only | SIV2035K | 50 | 5000 | 2500 |
| K-model 10m strap | SIV2000K10 | 50 | 3200 | 1600 |
| K-model 10m strap | SIV3500K10 | 50 | 5000 | 2500 |
| Winch strap, length 10m | VV350010 | 50 | 5000 | 2500 |
| Winch strap, length 10m | VV200010 | 50 | 3200 | 1600 |



Lashing winch 50-100 mm strap

Robust, storing winch can use up to 100 mm width strap. Winch fastening by e.g. welding.

| Product code | Band WIDTH, mm | Breaking strength, kg | LC, daN |
|--------------|----------------|-----------------------|---------|
| SIV4000 | 50 - 100 | 8000 | 4000 |

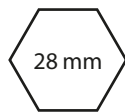
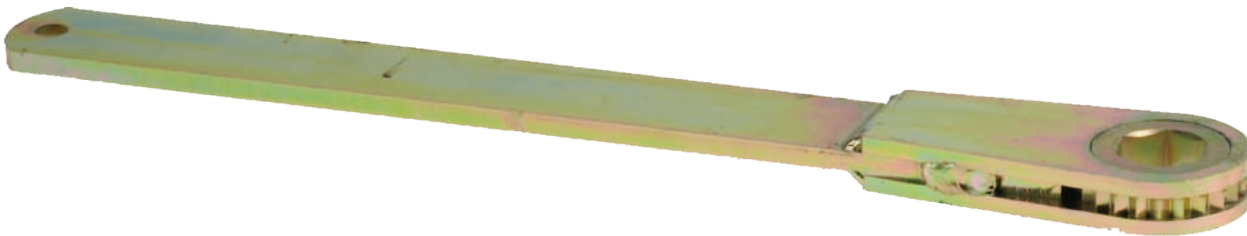


Winch Ratchet, 28 mm

To be used with winches SIV2000P, SIV2500O, SIV2500K28. Robust structure and 28 mm nut fitting socket.

Product code

SIVKI28M



Winch Ratchet, 28 mm

Low-cost ratchet to be used with winches SIV2000P, SIV2500O, SIV2500K28. Robust structure and 28 mm nut fitting socket.

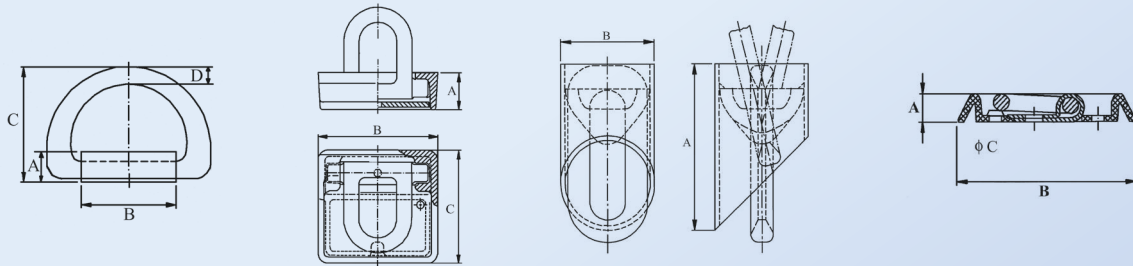
Product code

SIVKI28

Lashing Capacity – LC daN, EN 12195-2 =

Breaking strength
daN

2



Load lashing point with a body

| Product code | A | B | C | D | LC, daN | Weight, g |
|--------------|----|-----|-----|---|---------|-----------|
| KIP6000R | 67 | 100 | 100 | – | 3000 | 1000 |



Load lashing point

| Product code | A | B | C | D | LC, daN | Weight, g |
|--------------|----|----|----|----|---------|-----------|
| KIP6000 | 67 | 87 | 67 | 12 | 3000 | 350 |



Weldable lashing point

| Product code | s | l | d | LC, daN | Weight, g |
|--------------|-----|----|----|---------|-----------|
| KIPH10 | 95 | 80 | 18 | 5000 | 800 |
| KIPH20 | 110 | 85 | 25 | 10000 | 1200 |
| KIPH36 | 130 | 80 | 25 | 18000 | 2900 |
| KIPH67 | 155 | 95 | 35 | 33500 | 5300 |

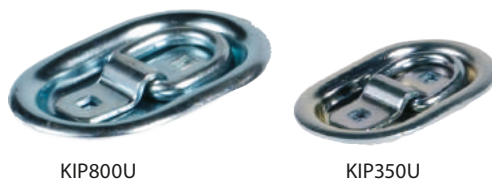
Shoulder stops
the link from reaching
the floor

KIPH15T

KIPH10T

Weldable lashing points

| Product code | A | B | C | D | LC, daN | Weight, g |
|--------------|----|----|-----|------|---------|-----------|
| KIPH10T | 24 | 60 | 91 | 12,5 | 5000 | 300 |
| KIPH15T | 25 | 90 | 136 | 22 | 7500 | 1900 |



KIP800U

KIP350U

Flat load lashing points

| Product code | A | B | C | D | LC, daN | Weight, g |
|--------------|----|-----|-----|----|---------|-----------|
| KIP800U | 15 | 100 | 145 | 10 | 400 | 410 |
| KIP350U | 12 | 70 | 104 | 6 | 175 | 180 |



Flat load lashing point

| Product code | A | B | C | D | LC, daN | Weight, g |
|--------------|----|----|-----|---|---------|-----------|
| KIP20U | 23 | 82 | 102 | – | 1000 | 360 |



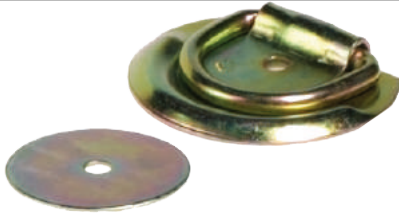
Load lashing point

| Product code | A | B | C | D | LC, daN | Weight, g |
|--------------|-----|----|----|---|---------|-----------|
| KIP50 | 8,5 | 45 | 43 | – | 250 | 42 |



Flat load lashing point

| Product code | A | B | C | D | LC, daN | Weight, g |
|--------------|------|-----|----|----|---------|-----------|
| KIP1000 | 16,5 | 104 | 92 | 10 | 1000 | 370 |
| KIP4000 | 19 | 82 | – | – | 2000 | 150 |
| KIP4000U | – | 92Ø | – | – | 2000 | 445 |



Load lashing point

| Product code | A | B | C | D | LC, daN | Weight, g |
|--------------|----|----|----|---|---------|-----------|
| KIP1500 | 15 | 90 | 90 | 8 | 750 | 190 |



Anchor plate

| Product code | A | B | C | D | LC, daN | Weight, g |
|--------------|------|------|------|---|---------|-----------|
| KIP1800 | 10,2 | 44,5 | 44,5 | – | 400 | 20 |



Double anchor plate

| Product code | A | B | C | D | LC, daN | Weight, g |
|--------------|----|----|------|---|---------|-----------|
| KIP2000 | 10 | 76 | 45,5 | – | 1000 | 60 |



Weldable lashing point

| Product code | A | B | C | D | LC, daN | Weight, g |
|--------------|-----|-----|----|---|---------|-----------|
| KIP8000N | 114 | 123 | 66 | – | 4000 | 990 |



KIP8000P



KIP4000N

Weldable lashing point

| Product code | A | B | C | D | LC, daN | Weight, g |
|--------------|-----|------|----|---|---------|-----------|
| KIP4000N | 45 | 80 | 40 | – | 2000 | 300 |
| KIP8000P | 110 | Ø 64 | – | – | 2000 | 960 |



Weldable lashing point

| Product code | A | B | C | D | LC, daN | Weight, g |
|--------------|----|----|----|---|---------|-----------|
| KIP7500 | 29 | 95 | 90 | – | 3500 | 900 |

With a solid loop

SafeCold-double deck wall



Product code: KAHVASAFE

WALLS CAN BE USED TO SEPARATE COLD AND WARM SPACES



- Made out of hard material, the lightweight wall is easy and fast to attach and move
- Using different width walls, different size areas can be isolated
- Material is easy to clean
- The wall thickness is 40 mm
- The gas spring mechanism enables very fast moving and handling
- Removable handle
- Prepared in accordance with the customer dimensions as 2- or 3-piece

SafeCold-corridor system

SafeCold partition walls can also be used to build a cold aisle.

The structure is similar to that of the normal partition wall, but the opening mechanism is integrated to the double deck wall. The wall is easy to set up, and it does not require any additional tracks or fasteners to the freight transport space floor or ceiling.

- The strength of the structure is only 33 mm
- The walls are joined together with a tongue and groove attachment
- End passage opening is closed with normal SafeCold partition wall
- Prepared in accordance to the client's measurements



Gliding door wall

Gliding door wall is specially designed for distribution of food and other temperature-sensitive products in mind. Opening and closing will take place very rapidly, which helps to maintain the temperature as desired.

- Durable isolating wall with a gliding door
- Installation possible to opening either to right or left
- Supported against the roof with an aluminum profile and rubber pads
- Easy to move
- Material: plastic coated polyester fabric 700 g / m²
- Prepared in accordance to the customer's dimensions



Rollable insulating wall

- Insulating wall made out of soft and durable material
- Easy to keep clean, which is important in terms of hygiene
- Supported against the roof with an aluminum profile and rubber pads
- Easy to move
- Color silver
- Prepared in accordance with the customer's dimensions



Model 1



Model 2



Model 3

Foldable insulating wall

- Durable, easy to clean and hygienic insulating wall
- Glossy blue finish
- Good insulation properties
- Supported and attached with rubber pad support bars on both sides
- Easy to move
- Color white, grey, blue
- plastic coated polyester fabric 700 g / m²
- Prepared in accordance with the customer's dimensions



Thermo hood

- Effective thermal insulation hood to protect pallets and roll cages
- Isolates effectively and keep products in the right temperature, up to tens of hours
- Lightweight and easy to install
- Available in various sizes
- Silver color
- Can be prepared in accordance to the customer's dimensions

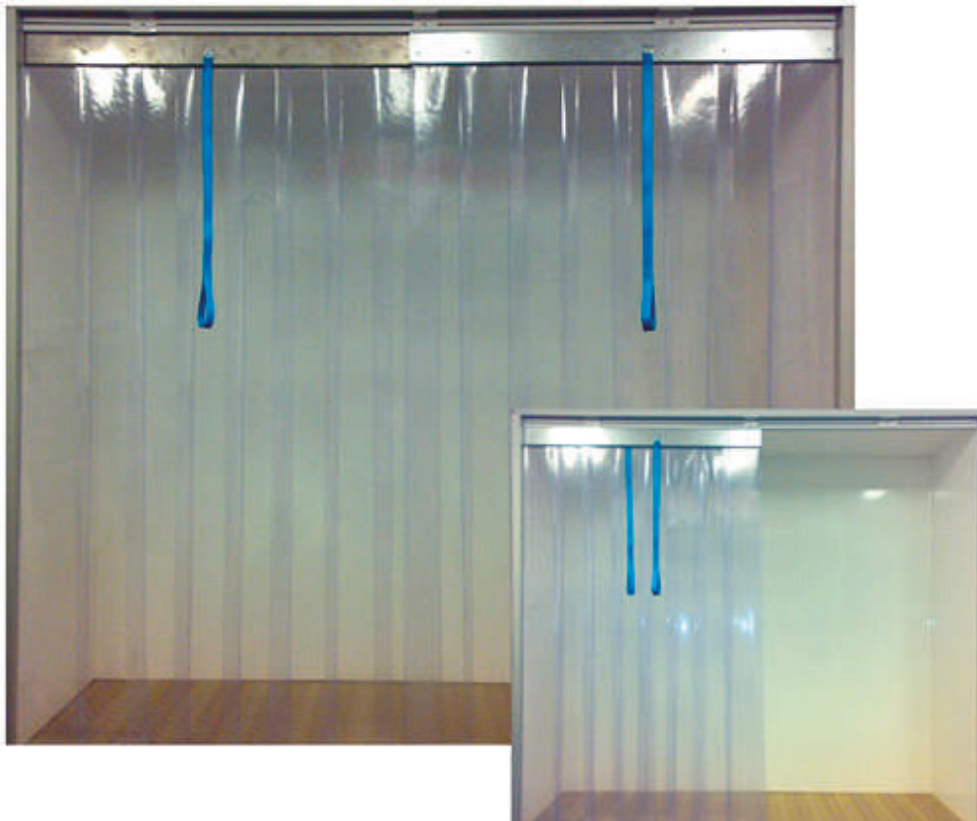


| Product code | Product | Measures LxSxK, m |
|--------------|---|-------------------|
| EHUPPU120815 | Thermal insulation hood for Euro-pallet | 1,2 x 0,8 x 1,5 |
| EHUPPU080715 | Thermal insulation hood for roll cages | 0,8 x 0,7 x 1,5 |
| | Thermo hood | custom |

Energy curtain

- Mounted directly on the ceiling
- The system has few moving parts, making it reliable, giving still a good insulation
- PVC plastic insulation slabs withstand down to -30 ° C temperatures
- The curtain can easily be pushed aside during the loading
- Ceiling profile adheres firmly against the ceiling
- Prepared in accordance to the customer's dimensions

| Product code | Product | Measures LxK, m |
|--------------|------------|-----------------|
| EVERHO125XX | Single | 2,5 x XX |
| EVERHO225XX | Double | 2,5 x XX |
| EVERHO325XX | Three part | 2,5 x XX |





Storage box for e.g. lashing straps

| | |
|--------------|---------------------|
| Product code | |
| SVBox | Fits to combi track |



Roller for lashing straps

| | |
|--------------|---------------------------------------|
| Product code | |
| RULLARIMT | Handy tool for reeling lashing straps |



Battery operated roller for lashing straps

| | |
|--------------|---------------------------------------|
| Product code | |
| RULLARIA | Handy tool for reeling lashing straps |



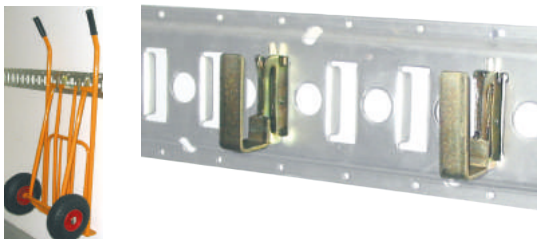
Rack for lashing systems

| | |
|--------------|----------------------------|
| Product code | |
| SVTELINE | Attachment with pop rivets |



Holder for a brush, shovel etc.

| | |
|--------------|---------------------|
| Product code | |
| PIDIKE | Fits to combi track |



Hanging hook

| | |
|--------------|---------------------|
| Product code | |
| RKOUKKU | Fits to combi track |



Beam ferrule

| | |
|--------------|--------------------------------------|
| Product code | |
| PHOLKKIA | Beam ferrule with an aluminium cover |
| PHOLKKIS | Cover for a beam ferrule |

CRANE LIFTING BASES

- Super strong lifting bases to be used under truck crane and car crane support legs
- Special material endures all conditions
- In winter conditions, skidding can be prevented by installing overlong bolts through the lifting base

| Size cm | Carrying capacity t | Weight kg | Product code |
|-------------|------------------------|--------------|--------------|
| 40 x 40 x 4 | 10 | 6,0 | TALLA404 |
| 60 x 60 x 4 | 15 | 13,6 | TALLA604 |
| 50 x 50 x 6 | 25 | 14,0 | TALLA506 |
| 60 x 60 x 6 | 30 | 20,0 | TALLA606 |



CONTAINER HOOKS

| Breaking strength t | Mounting method | Weight kg | Product code |
|------------------------|-----------------|--------------|--------------|
| 20 | boltable | 2,6 | SILVKOU |

Steel wire ropes for interchangeable platforms can be found on page 13-4



TIR CABLE – DIA 6 AND 8 MM



Description:

Steel cable-brassConstruction
12x2x0,30 mmPVC transparent
colorHardness 75 ShA

01-0103-0599 TIR Cable dia 6 mm a 100 m
01-0103-0600 TIR Cable dia 6 mm a 250 m
01-0103-0600-5 TIR Cable dia 6 mm a 500 m
01-0103-0601 TIR Cable dia 6 mm a 1000 m

01-0103-0810 TIR Cable dia 8 mm a 150 m
01-0103-0811 TIR Cable dia 8 mm a 250 m



01-0103-0622 TIR Cable dia.6 mm - 22 m with endfittings
01-0103-0634 TIR Cable dia 6 mm - 34 m with endfittings
01-0103-0636 TIR Cable dia 6 mm - 36 m with endfittings
01-0103-0642 TIR Cable dia 6 mm - 42 m with endfittings

01-0103-0834 TIR Cable dia 8 mm - 34 m with endfittings
01-0103-0836 TIR Cable dia 8 mm - 36 m with endfittings
01-0103-0842 TIR Cable dia 8 mm - 42 m with endfittings

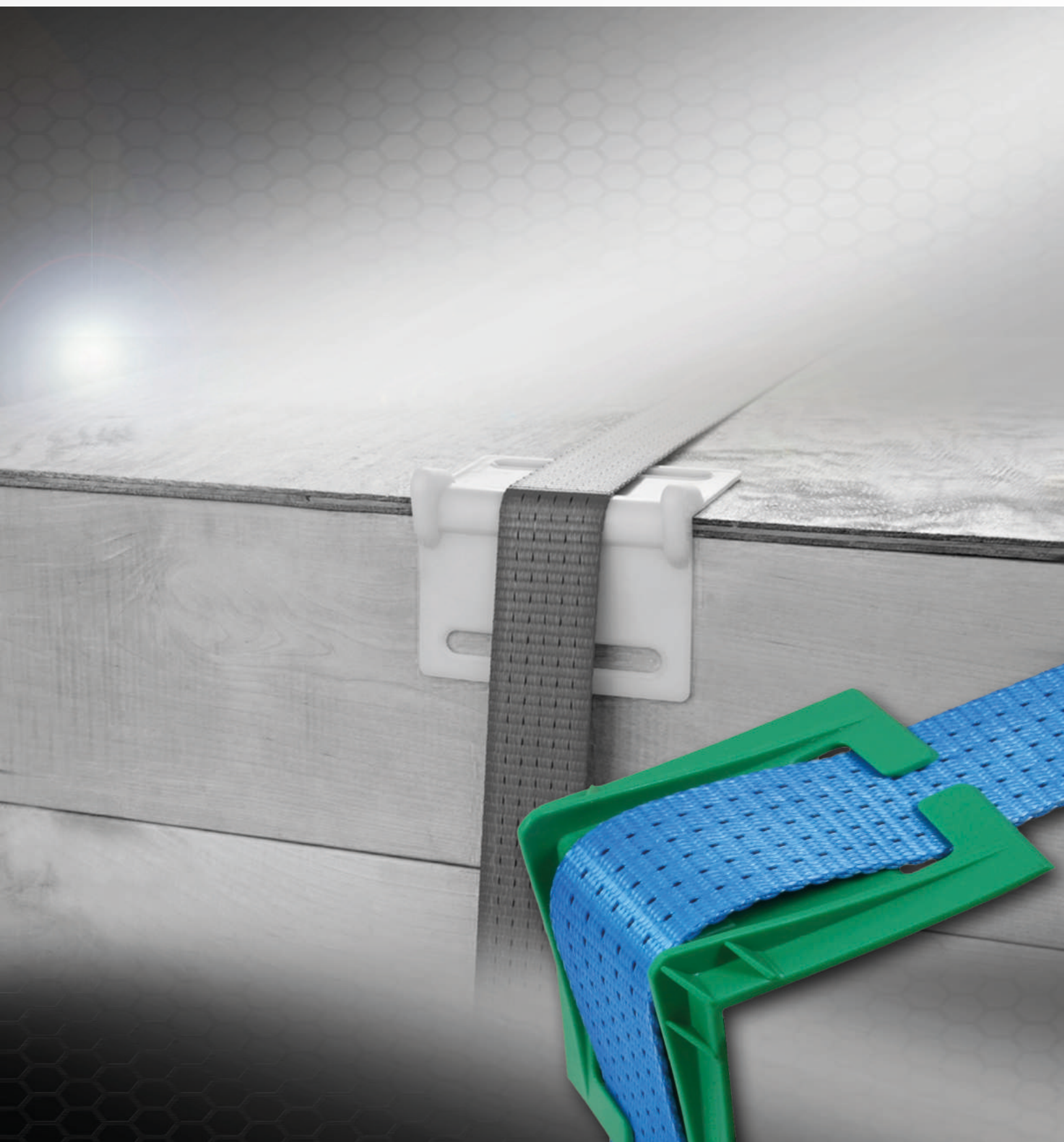
*other line lengths on request

12. Corner protectors

For webbing slings and lashing systems

For roundslings

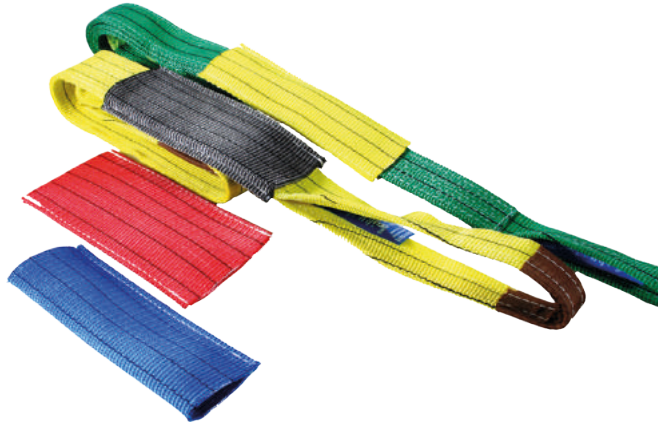
For lifting chains and wire ropes



WEBBING CORNER PROTECTORS FOR WEBBING SLINGS

- strong 100% polyester webbing
- either sewn on the roundsling or sealed by velcro tape to make it easier to remove the cover when needed

Also different corner protectors tailored for customer's needs.



| For webbing sling kg | Webbing max. width mm | Product code length 0,3 m | Product code length 0,5 m |
|-------------------------|-----------------------------|------------------------------|------------------------------|
| 500 | 25 | NVKS0503 | NVKS0505 |
| 1000 | 50 | NVKS103 | NVKS105 |
| 2000 | 60 | NVKS203 | NVKS205 |
| 3000 | 90 | NVKS303 | NVKS305 |
| 4000 | 120 | NVKS403 | NVKS405 |
| 6000 | 150 | NVKS603 | NVKS605 |
| 8000 | 240 | NVKS803 | NVKS805 |
| 10000 | 300 | NVKS1003 | NVKS1005 |

CORNER PROTECTORS FOR ROUNDINGS

- either sewn on the roundsling or sealed by velcro tape to make it easier to remove the cover when needed



| For webbing sling kg | Webbing max. width mm | Product code length 0,3 m sewn | Product code length 0,3 m velcro |
|-------------------------|-----------------------------|--------------------------------------|--|
| 1000 | 50 | KSP103 | KSPA103 |
| 2000 | 60 | KSP203 | KSPA203 |
| 3000 | 90 | KSP303 | KSPA303 |
| 4000 | 120 | KSP403 | KSPA403 |
| 6000 | 150 | KSP603 | KSPA603 |
| 8000 | 240 | KSP803 | KSPA803 |
| 10000 | 300 | KSP1003 | KSPA1003 |

SECUTEX POLYURETHANE CORNER PROTECTOR

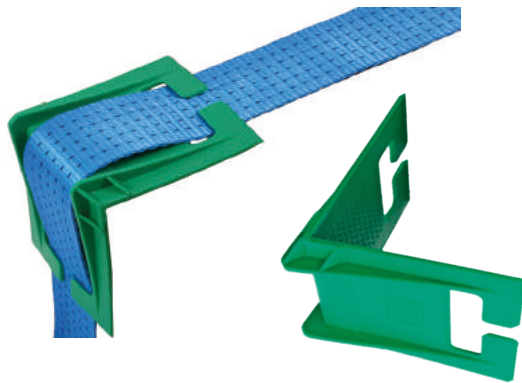
- special material corner protectors with protection against cutting for webbing slings and roundings
- maximum length 4 m



| For webbing sling kg | Webbing max. width mm | Product code 1 -side length 1,0 m | Product code 2 -side length 1,0 m |
|-------------------------|-----------------------------|---|---|
| 1000 | 50 | KSSE501 | KSSE50 |
| 2000 | 60 | KSSE651 | KSSE65 |
| 3000 | 75 | KSSE751 | KSSE75 |
| 3000 | 90 | KSSE901 | KSSE90 |
| 4000 | 120 | KSSE1001 | KSSE100 |
| 5000 | 150 | KSSE1501 | KSSE150 |
| 6000 | 180 | KSSE1801 | KSSE180 |
| 8000 | 240 | KSSE2501 | KSSE250 |
| 10000 | 300 | KSSE3001 | KSSE300 |

Delivery time approx. 2-4 weeks
Also other lengths available

LIGHT PLASTIC CORNER PROTECTORS FOR LASHING SYSTEMS, 90° ANGLE



SIKUS90

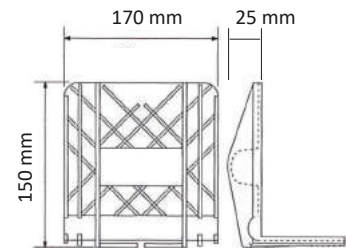


SIKUS90100

| Color | Size | For webbing mm | Material | Package size pcs / box | Product code |
|-------|--------------|-------------------|----------|---------------------------|--------------|
| green | 100 x 90 x 2 | 40 - 50 | plastic | 390 (3120 pallet) | SIKUS90 |
| white | 100 x 55 x 2 | 50 - 75 | plastic | 200 | SIKUS90100 |

EXTRA HEAVY CORNER PROTECTORS FOR LASHING SYSTEMS

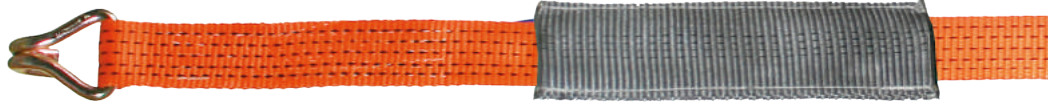
- 90° angle
- extra strong corner protector



| Color | For webbing mm | Material | Package size pcs / box | Product code |
|-------|-------------------|----------|---------------------------|--------------|
| black | 50 - 75 | plastic | 80 (640 pallet) | SIKUS90MUSTA |

POLYESTER CORNER PROTECTORS FOR LASHING SYSTEMS

- threaded to the long part of the lashing webbing



| Webbing width mm | Material | Standard length mm | Product code |
|------------------|-------------------|--------------------|--------------|
| 50 | Polyester webbing | 250 | SIKUS50 |
| 60 | Polyester webbing | 250 | SIKUS60 |
| 75 | Polyester webbing | 250 | SIKUS75 |
| 100 | Polyesternauha | 250 | SIKUS100 |

MAGNET CORNER PROTECTORS 90° ANGLE

- 90° angle
- magnets keep it in place
- made of extra strong special plastic
- for lifting and lashing



| Webbing sling width mm | Roundsling size | Weight kg | Product code |
|------------------------|-----------------|-----------|--------------|
| 0 - 25 | 1 - 2T | 0,7 | KSMAG025 |
| 0 - 45 | 1 - 4T | 0,8 | KSMAG040 |
| 0 - 65 | 1 - 5T | 1,0 | KSMAG065 |
| 0 - 75 | 1 - 8T | 1,2 | KSMAG075 |
| 0 - 100 | 1 - 10T | 1,5 | KSMAG100 |
| 0 - 125 | 1 - 15T | 1,6 | KSMAG125 |
| 0 - 150 | 1 - 25T | 1,9 | KSMAG150 |
| 0 - 200 | 1 - 35T | 2,6 | KSMAG200 |
| 0 - 300 | 1 - 40T | 3,5 | KSMAG300 |

Delivery approx. 2-4 weeks

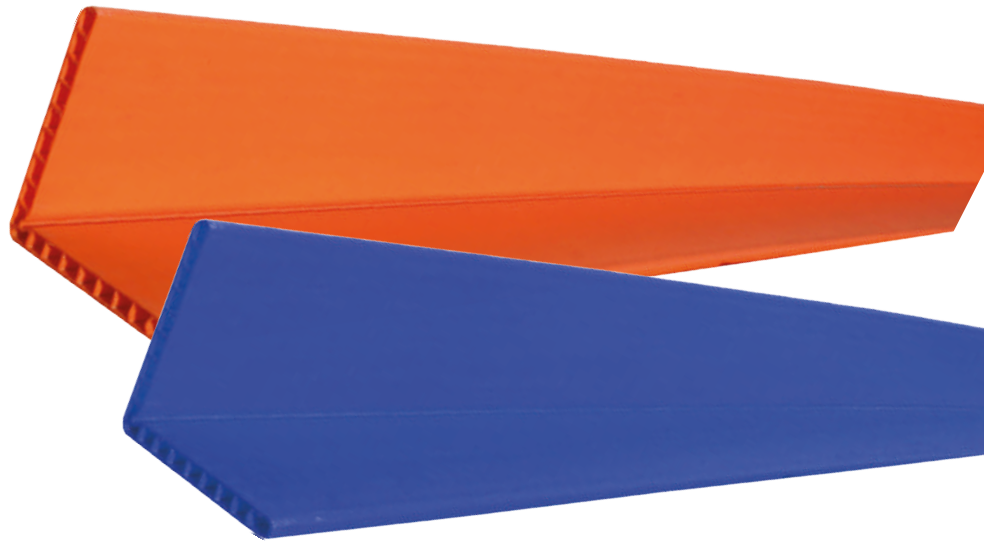
CORNER PROTECTORS FOR PLASTIC AND STEEL RIMS



| Size mm | Material | Package size pcs / box | Product code |
|-------------------|-----------|---------------------------|--------------|
| 60 x 60 x 3 x 100 | cardboard | 600 | SIKUSP100 |

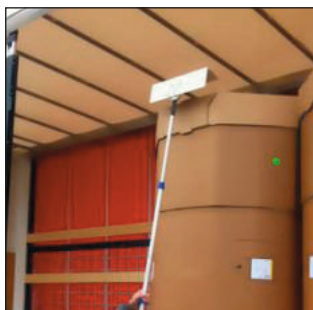
CELL PLASTIC CORNER PROTECTORS

- 3 sizes
- also available for custom sizes



| Length mm | Thickness mm | Side length mm | Color | Product code |
|--------------|-----------------|-------------------|--------|--------------|
| 5970 | 20 | 190 x 190 | orange | SIKUS5500 |
| 6000 | 20 | 190 x 190 | blue | SIKUS5500S |
| 6000 | 20 | 115 x 115 | blue | SIKUS6115 |

MULTI-STICK



BENEFIT

SAFETY - the driver remains on the ground to carry out all operations and lashing.

ERGONOMIC - light, easy to handle, limits risk to the driver from working at height issues.

3 in 1 PRODUCT - interchangeable head units to use with a single handle pole safely.

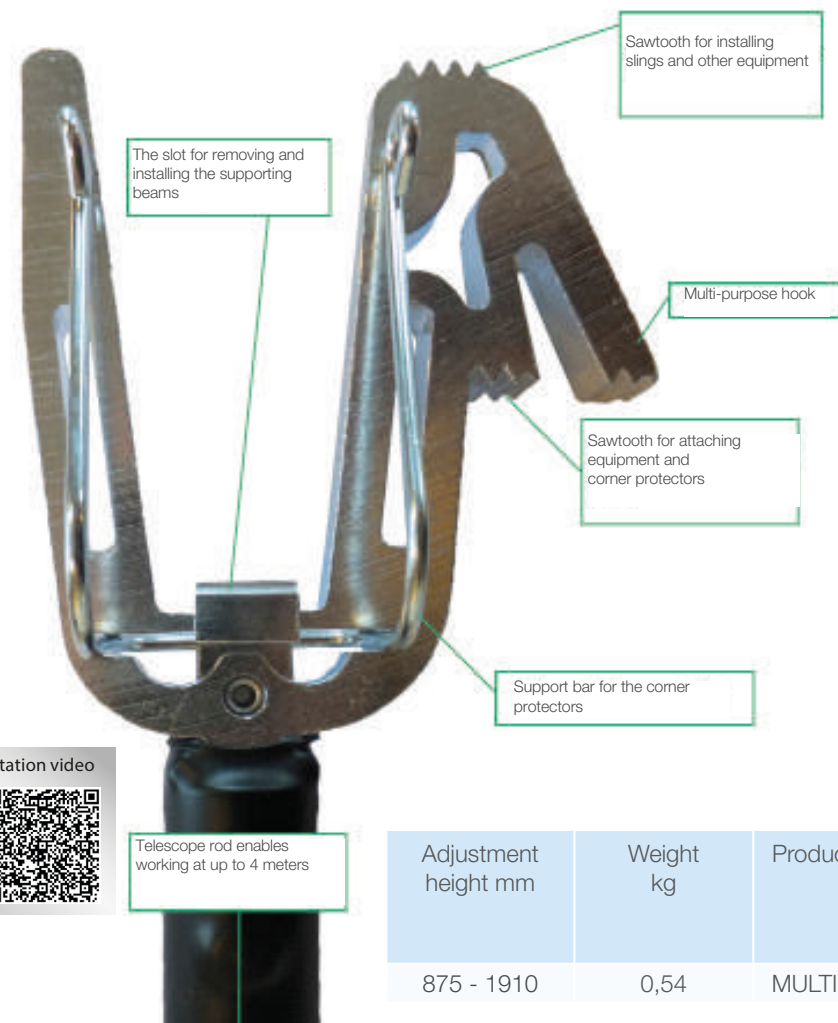
ECONOMICAL - saves loading and lashing time for the driver and loaders in all operations.



See presentation video



Telescope rod enables working at up to 4 meters



The MULTI-STICK is a multifunctional pole that improves lashing operations, thanks to its 3 interchangeable heads. Its innovation lies in its ability to offer three functions in one unit. Whilst ensuring the safety of the driver operating from ground level.

Composition

1. MULTI-STICK function - the driver places and dismantles the drop sides in height up to 3.5m, without effort, whilst remaining at ground level. The driver can also set up corner and angle protection products (max 1.2m width)

2. STRAP-GO function - whilst ensuring the driver remains safe, the strap is launched to cover the load from the ground. It limits the risk to the driver from injury and have to work at height.

3. CORNER-STICK function - allows the driver to easily place angle and corner protection product from 1.2m to 2.4m in width. With an anti-slip coating on the clamps and allowing safe placement from ground level.

4. The telescopic aluminium handled MULTI-STICK has a robust foam covered lower section for greater comfort and 3 adjustable clamp locks. This allows adjustment of the full length up to 2.5m. Each of the three separate heads are easily interchangeable.

| Adjustment height mm | Weight kg | Product code |
|----------------------|-----------|--------------|
| 875 - 1910 | 0,54 | MULTI-STICK |

13. Steel wire ropes, Components, Shackles, Swivels, Pulleys etc.

Steel wire ropes

Commercial shackles

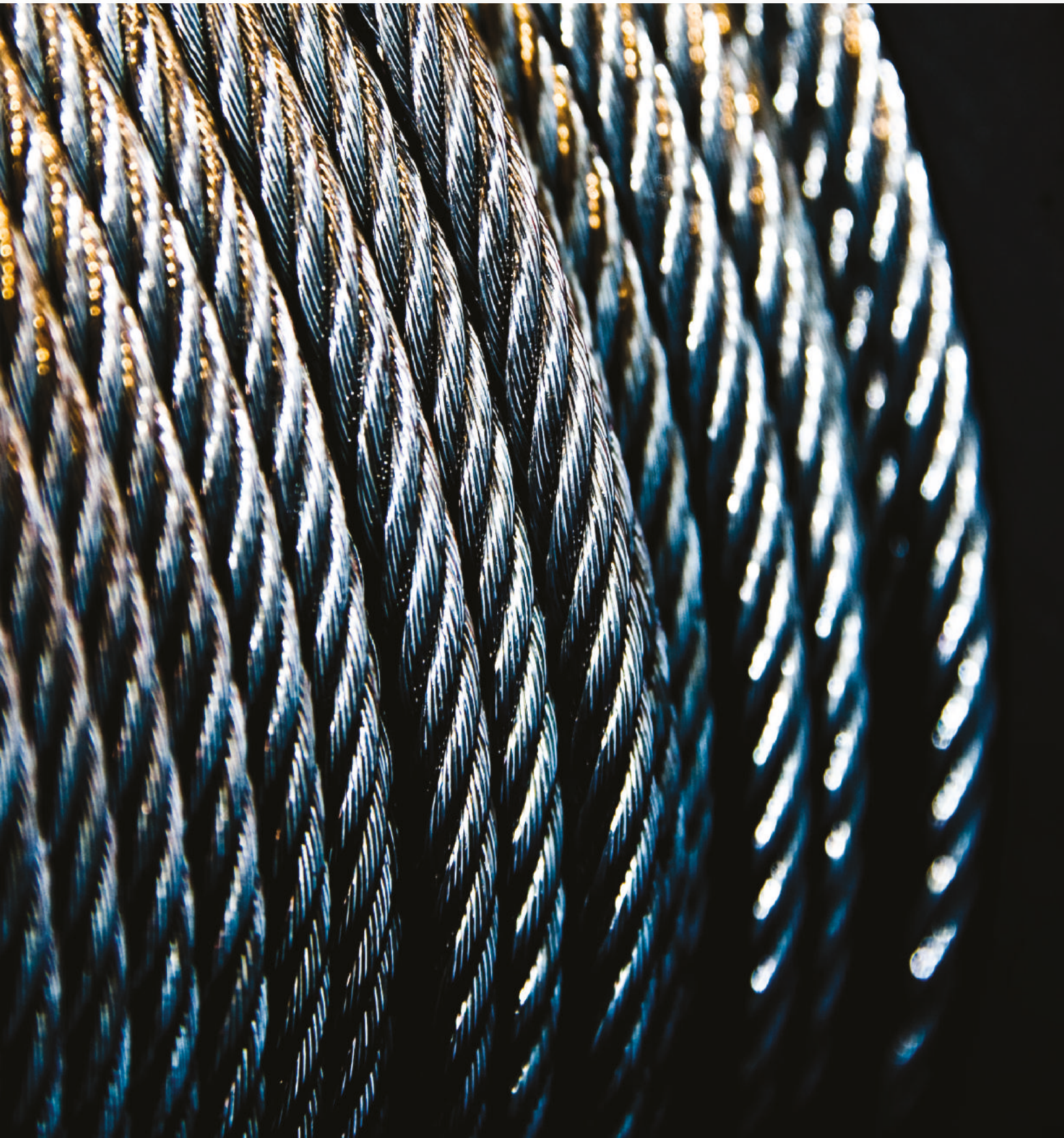
Steel wire rope locks

Pulleys

Wedge sockets

Cutters and pliers

Thimbles





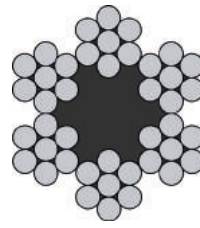
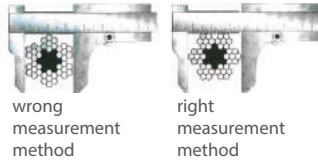
verope

rely on

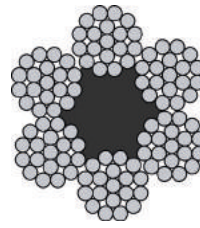
**For the verope offer,
contact sales department.**

STEEL WIRE ROPES WITH FIBER CORE - STANDARD QUALITY

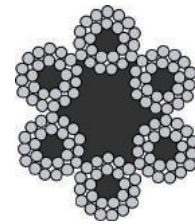
- available on plastic spools as custom lengths or on wooden spools as factory lengths
- galvanized



6x7+FC



6x19+FC



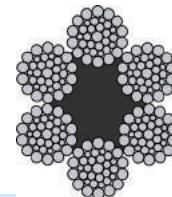
6x24+FC

| Wire diam. mm | Minimum tensile breaking strength kg | Structure | No. of wires | Weight kg/100 m | Product codes |
|------------------|---|-----------|--------------|--------------------|---------------------------------|
| 1,0 | 95 | - | 12 | 0,7 | TEK01100 (110m) / TEK01 (250m) |
| 1,5 | 120 | - | 42 | 1,1 | TEK015100 (110m) / TEK15 (250m) |
| 2,0 | 240 | - | 42 | 1,4 | TEK02100 (110m) / TEK02 (250m) |
| 3,0 | 540 | 6x7+FC | 42 | 3,1 | TEK03100 (110m) / TEK03 (220m) |
| 4,0 | 950 | 6x7+FC | 42 | 5,6 | TEK04100 (110m) / TEK04 (250m) |
| 5,0 | 1380 | 6x19+FC | 114 | 8,5 | TEK05100 (110m) / TEK05 (250m) |
| 6,0 | 2000 | 6x19+FC | 114 | 12,2 | TEK06100 (110m) / TEK06 (250m) |
| 8,0 | 3550 | 6x24+FC | 144 | 23,3 | TEK0850 (50m) / TEK08 (110m) |
| 10,0 | 5060 | 6x24+FC | 144 | 32,2 | TEK1050 (50m) / TEK10 (110m) |
| 12,0 | 7280 | 6x24+FC | 144 | 46,4 | TEK1250 (50m) / TEK12 (1000m) |
| 14,0 | 9910 | 6x24+FC | 144 | 63,1 | TEK1450 (50m) / TEK14 (1000m) |
| 16,0 | 13000 | 6x24+FC | 144 | 82,4 | *TEK16 (1000m) |
| 18,0 | 16400 | 6x24+FC | 144 | 104,0 | *TEK18 (1000m) |
| 20,0 | 22200 | 6x24+FC | 144 | 145,0 | *TEK20 (1000m) |
| 22,0 | 26800 | 6x24+FC | 144 | 176,0 | *TEK22 (1000m) |

*Products marked with an asterisk delivery 5-7 days

STEEL WIRE ROPES WITH FIBER CORE - 216 WIRES

- available on plastic spools as custom lengths or on wooden spools as factory lengths
- galvanized
- used, for example in slings, bridge cranes, ship cranes, life boats etc.
- also other sizes available

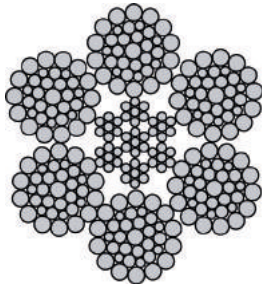


| Wire diam. mm | Minimum tensile breaking strength kg | Structure | No. of wires | Weight kg / 100 m | Product code |
|------------------|---|-----------|--------------|----------------------|--------------|
| 8 | 3710 | 6x36+FC | 216 | 23,7 | TEK21608 |
| 10 | 5950 | " | " | 37,1 | TEK21610 |
| 12 | 8570 | " | " | 53,4 | TEK21612 |
| 14 | 11600 | " | " | 72,7 | TEK21614 |
| 16 | 15200 | " | " | 94,9 | TEK21616 |
| 18 | 19200 | " | " | 120,0 | TEK21618 |
| 20 | 23800 | " | " | 148,0 | TEK21620 |
| 22 | 28800 | " | " | 179,0 | TEK21622 |
| 24 | 34300 | " | " | 214,0 | TEK21624 |
| 26 | 40200 | " | " | 251,0 | TEK21626 |
| 28 | 46700 | " | " | 291,0 | TEK21628 |
| 30 | 53600 | " | " | 334,0 | TEK21630 |
| 32 | 61000 | " | " | 380,0 | TEK21632 |

Delivery 5-7 days

STEEL WIRE ROPES WITH FIBRE CORE - 265 WIRES

- available on plastic spools as custom lengths or on wooden spools as factory lengths
- galvanized
- used, for example, in winches, cranes, transfer table ropes etc.

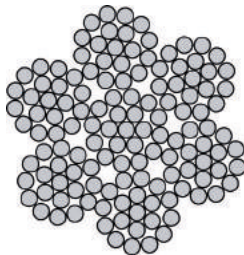


| Wire diam. mm | Minimum tensile breaking strength kg | Structure | No. of wires | Weight kg / 100 m | Product code |
|------------------|---|-----------|--------------|----------------------|--------------|
| 8 | 4100 | 6x36+IWR | 265 | 26,0 | TEK26508 |
| 10 | 6400 | " | " | 41,0 | TEK26510 |
| 12 | 9300 | " | " | 59,0 | TEK26512 |
| 13 | 10900 | " | " | 68,0 | TEK26513 |
| 14 | 12600 | " | " | 81,8 | TEK26514 |
| 16 | 16400 | " | " | 107,0 | TEK26516 |
| 18 | 20800 | " | " | 136,0 | TEK26518 |
| 20 | 25700 | " | " | 167,0 | TEK26520 |
| 22 | 31100 | " | " | 202,0 | TEK26522 |
| 26 | 43400 | " | " | 283,0 | TEK26526 |
| 28 | 50300 | " | " | 328,0 | TEK26528 |
| 30 | 57800 | " | " | 376,0 | TEK26530 |
| 32 | 65800 | " | " | 428,0 | TEK26532 |

Delivery 5-7 days

STEEL WIRE ROPES WITH STEEL CORE - 133 WIRES

- available on plastic spools as custom lengths or on wooden spools as factory lengths
- galvanized
- used, for example, in capstanses, ratchet wire rope hoists, winches etc.

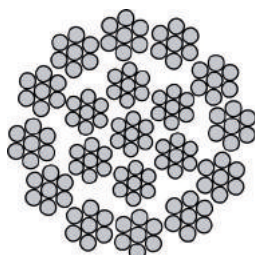


| Wire diam. mm | Minimum tensile breaking strength kg | Structure | No. of wires | Weight kg / 100 m | Product code |
|------------------|---|-----------|--------------|----------------------|--------------|
| 4 | 956 | 6x19+IWS | 133 | 6,0 | TEK13304 |
| 5 | 1500 | " | " | 9,5 | TEK13305 |
| 6 | 2160 | " | " | 13,8 | TEK13306 |
| 8 | 3820 | " | " | 23,4 | TEK13308 |
| 10 | 5970 | " | " | 38,1 | TEK13310 |
| 12 | 8610 | " | " | 54,8 | TEK13312 |

Delivery 5-7 days

LOW ROTATION STEEL WIRE ROPES WITH STEEL CORE 133 WIRES

- available on plastic spools as custom lengths or on wooden spools as factory lengths
- galvanized
- used, for example, in truck cranes, winches, tower cranes, etc.

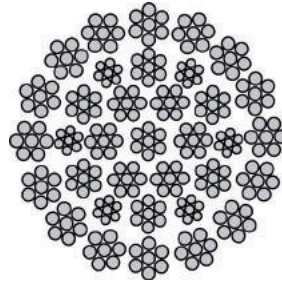


| Wire diam. mm | Minimum tensile breaking strength kg | Structure | No. of wires | Weight kg / 100 m | Product code |
|------------------|---|-----------|--------------|----------------------|--------------|
| 4 | 1050 | 18x7+IWR | 133 | 6,4 | TEKK04 |
| 5 | 1640 | " | " | 9,4 | TEKK05 |
| 6 | 2360 | " | " | 13,6 | TEKK06 |
| 8 | 4190 | " | " | 24,2 | TEKK08 |
| 10 | 6560 | " | " | 37,8 | TEKK10 |
| 11 | | " | " | | TEKK11 |
| 12 | 9440 | " | " | 54,4 | TEKK12 |
| 13 | | " | " | | TEKK13 |
| 14 | 12800 | " | " | 74,1 | TEKK14 |

Delivery 5-7 days

TORSION FREE STEEL WIRE ROPES WITH STEEL CORE - 245 WIRES

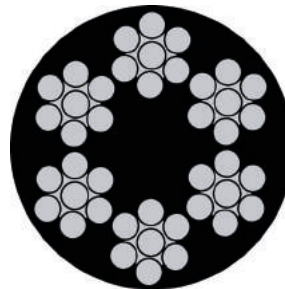
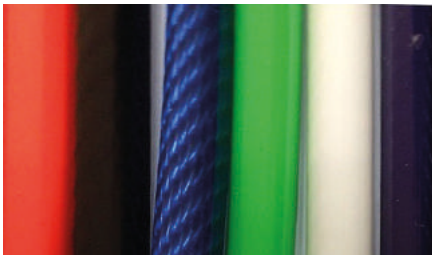
- available on plastic spools as custom lengths or on wooden spools as factory lengths
- galvanized
- used in car cranes, other cranes and winches



| Wire diam. mm | Minimum tensile breaking strength kg | Structure | No. of wires | Weight kg / 100 m | Product code |
|------------------|---|-----------|--------------|----------------------|--------------|
| 8 | 5500 | 35x7 | 245 | 31 | ANKO08 |
| 10 | 7600 | " | " | 45 | ANKO10 |
| 12 | 10800 | " | " | 64 | ANKO12 |
| 14 | 14900 | " | " | 89 | ANKO14 |
| 16 | 19600 | " | " | 116 | ANKO16 |
| 18 | 24500 | " | " | 145 | ANKO18 |
| 19 | 28000 | " | " | 165 | ANKO19 |
| 20 | 30400 | " | " | 180 | ANKO20 |
| 22 | 37500 | " | " | 222 | ANKO22 |

PLASTIC COATED STEEL WIRE ROPES

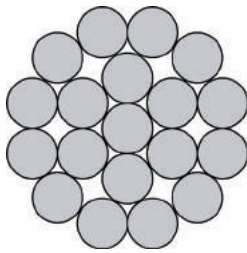
- also as factory lengths
- galvanized
- standard colour is colourless clear
- also available in red, white and black



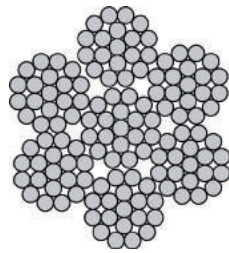
| Wire diam. mm | Minimum tensile breaking strength kg | Structure | No. of wires | Weight kg / 100 m | Product code spool size 110 m | Product code spool size 250 m |
|------------------|---|-----------|--------------|----------------------|-------------------------------------|-------------------------------------|
| 2 / 3 | 240 | 6x7+FC | 42 | 1,5 | TKP23100 | TKP23 |
| 3 / 4 | 540 | " | " | 3,1 | TKP34100 | TKP34 |
| 3 / 5 | 540 | " | " | 3,5 | TKP35100 | TKP35 |
| 4 / 6 | 960 | " | " | 6,2 | TKP46100 | TKP46 |
| 5 / 7 | 1380 | 6x19+FC | 114 | 9,5 | TKP57 | - |
| 6 / 8 | 2160 | " | " | 13,8 | TKP68100 | - |

STAINLESS STEEL WIRE ROPES

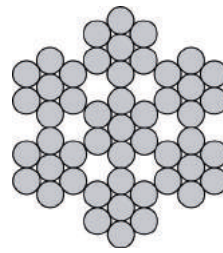
- material AISI 316



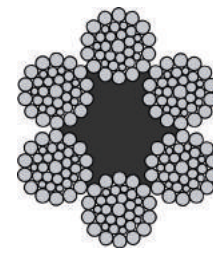
1x19



6x19+IWS



6x7+IWS



6x36+FC

| Wire diam. mm | Minimum tensile breaking strength kg | Structure | No. of wires | Weight kg / 100m | Spool sizes m | Product code | |
|------------------|---|-----------|--------------|------------------------|------------------|---------------------|--------------------|
| | | | | | | spool size 100 m | spool size 50 m |
| 1 | 95 | 1x19 | 19 | 0,7 | 100/50 | TEK01HK | TEK01HK50 |
| 2 | 260 | 6x7+IWS | 49 | 1,4 | 100/50 | TEK02HK | TEK02HK50 |
| 3 | 580 | 6x7+IWS | 49 | 3,4 | 100/50 | TEK03HK | TEK03HK50 |
| 4 | 1040 | 6x19+IWS | 133 | 5,6 | 100/50 | TEK04HK | TEK04HK50 |
| 5 | 1320 | 6x19+IWS | 133 | 8,5 | 100/50 | TEK05HK | TEK05HK50 |
| 6 | 1910 | 6x19+IWS | 133 | 12,2 | 100/50 | TEK06HK | TEK06HK50 |
| 8 | 3390 | 6x19+IWS | 133 | 23,3 | 100/50 | TEK08HK | TEK08HK50 |
| 10 | 5310 | 6x19+IWS | 133 | 32,2 | custom | *TEK10HK | - |
| 12 | 7590 | 6x19+IWS | 133 | 46,4 | custom | *TEK12HK | - |
| 14 | 10300 | 6x19+IWS | 133 | 68,0 | custom | *TEK14HK | - |
| 16 | 13600 | 6x19+IWS | 133 | 86,0 | custom | *TEK16HK | - |
| 20 | 20700 | 6x36+FC | 216 | 148,0 | määrämit. | *TEK20HK | - |

* Products marked with an asterisk delivery 1-2 weeks

CONTAINER WIRE ROPE

- high quality wire ropes with color coding
- structure 6 x 36 + IWR (265-wires)
- with a steel core
- other lengths also available



Container hooks can be found on page 11-66

| WLL t | Wire diam. mm | Length m | Color code | Weight kg | Product code |
|----------|------------------|-------------|------------|--------------|--------------|
| 12 | 13 | 7,6 | green | 5,9 | SILV1276 |
| 12 | 13 | 9,0 | yellow | 6,9 | SILV1290 |
| 16 | 14 | 9,0 | no color | 7,9 | SILV1690 |
| 16 | 14 | 9,8 | blue | 8,6 | SILV1698 |
| 20 | 16 | 9,0 | black | 10,3 | SILV2090 |
| 20 | 16 | 9,8 | red | 11,0 | SILV2098 |
| 20 | 16 | 11,0 | orange | 12,2 | SILV2011 |
| 20 | 16 | 12,0 | white | 13,4 | SILV2012 |

WIRE ROPE CLIPS DIN 741

- general lock
- electro galvanized



Installation direction of wire rope clips
 Recommendation: At least 3 locks per connection



| Wire diam. mm | Package-size pcs | Weight kg / 100pcs | Product code |
|---------------|------------------|--------------------|--------------|
| 3 | 50 | 1,4 | VL03 |
| 5 | 250 | 1,5 | VL05 |
| 6 | 50 | 2,1 | VL06 |
| 8 | 100 | 4,1 | VL08 |
| 10 | 50 | 6,8 | VL10 |
| 13 | 50 | 13,0 | VL13 |
| 16 | 20 | 21,0 | VL16 |
| 19 | 10 | 28,0 | VL19 |
| 22 | 10 | 40,0 | VL22 |
| 26 | 10 | 44,0 | VL26 |
| 30 | 50 | 66,0 | VL30 |
| 34 | 25 | 85,0 | VL34 |

DUBLEX WIRE ROPE CLIPS

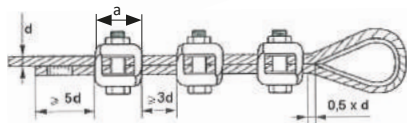
- small general purpose clips
- electro galvanized



| Wire dimension mm | Package-size pcs | Weight kg / 100pcs | Product code |
|-------------------|------------------|--------------------|--------------|
| 2 | 2000 | 0,9 | VLDU2 |
| 3 | 1000 | 1,3 | VLDU3 |
| 4 | - | 2,2 | VLDU4 |
| 5 | 200 | 3,1 | VLDU5 |
| 6 | 100 | 5,9 | VLDU6 |
| 7 | - | 7,0 | VLDU7 |
| 8 | 100 | 10,0 | VLDU8 |
| 10 | 100 | 18,0 | VLDU10 |

DEKA WIRE ROPE CLIPS

- for demanding conditions
- body hot dip- and bolts electro galvanized



| Wire diam. d mm | Minimum no. of grips per install | a mm | Package-size pcs | Weight kg / 100pcs | Product code |
|-----------------|----------------------------------|------|------------------|--------------------|--------------|
| 5 - 6 | 5 | 27 | 25 | 10 | VLDE06 |
| 7 - 8 | 6 | 32 | 200 | 16 | VLDE08 |
| 9 - 10 | 6 | 37 | 150 | 24 | VLDE10 |
| 10 - 12 | 6 | 41 | 100 | 33 | VLDE12 |
| 13 - 16 | 6 | 48 | 25 | 58 | VLDE16 |
| 18 - 20 | 6 | 56 | 30 | 95 | VLDE20 |
| 21 - 25 | 7 | 62 | 20 | 160 | VLDE25 |
| 26 - 35 | 8 | 106 | - | 410 | VLDE35 |

EUREKA-LOCKS

- electric galvanized
- recommended min. 3 locks per connection



| Wire dimension mm | Package-size pcs | Weight kg | Product code |
|-------------------|------------------|-----------|--------------|
| 4 - 5 | 50 | 0,06 | EUREKA05 |
| 5 - 6 | 25 | 0,14 | EUREKA06 |
| 7 - 8 | 20 | 0,24 | EUREKA08 |
| 9 - 10 | 10 | 0,52 | EUREKA0910 |
| 11 | 10 | 0,52 | EUREKA11 |
| 12 - 13 | 1 | 1,10 | EUREKA12 |
| 14 | 1 | 1,15 | EUREKA14 |
| 15 - 16 | 1 | 1,70 | EUREKA16 |

STEEL ROPE LOCKS FOR LIFTING

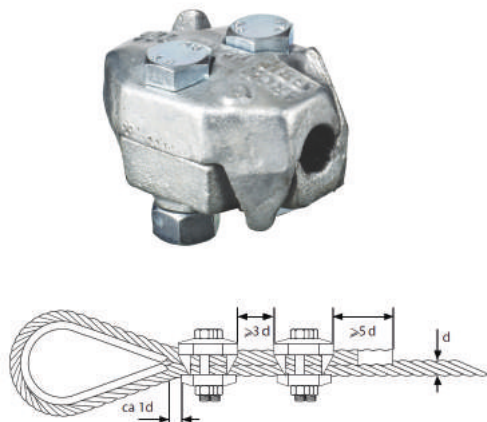
IRONGRIP-LOCKS



- locks approved for lifting
- strength grade 8
- operating temperature -50 - (+) 100 °C
- KTL-coating
- min. amount of locks when installed 2 pcs

| Wire diam. mm | Package size pcs | Weight kg / 100 pcs | Product code |
|------------------|---------------------|---------------------------|--------------|
| 2 | 100 | 1,20 | VLBG02 |
| 3 | 100 | 1,60 | VLBG03 |
| 4 | 100 | 2,20 | VLBG04 |
| 5 | 50 | 4,10 | VLBG05 |

IRONGRIP-DUAL STOPPER LOCKS



- locks approved for lifting
- hot dip galvanized

| Wire diam. d mm | Torque Nm | Package-size pcs | Weight kg / 100 pcs | Product-code |
|-----------------------|--------------|---------------------|---------------------------|--------------|
| 5-6 | 9,5 | 200 | 9,0 | VLBG06 |
| 7-8 | 9,5 | 50 | 12,0 | VLBG08 |
| 9-10 | 22 | 70 | 20,0 | VLBG10 |
| 11-12,5 | 44 | 40 | 39,0 | VLBG12 |
| 13-16 | 75 | 20 | 72,0 | VLBG16 |
| 17-20 | 120 | 16 | 120,0 | VLBG20 |
| 21-25 | 260 | 6 | 280,0 | VLBG25 |
| 26-34 | 350 | 2 | 770,0 | VLBG34 |

min. amount of locks when installed 2 pcs

"FERRULES" PRESS LOCKS FOR STEEL WIRES

- ferrules (1mm - 5mm) to be pressed with pliers or a presser
- aluminium ferrules for normal steel wire ropes, copper ferrules for acid resistant steel wire ropes



Aluminum

| For rope mm | Product code |
|----------------|--------------|
| 1 | TALU01 |
| 1,5 | TALU015 |
| 2 | TALU02 |
| 3 | TALU03 |
| 4 | TALU04 |
| 5 | TALU05 |
| 6 | TALU06 |
| 8 | TALU08 |
| 10 | TALU10 |
| 12 | TALU12 |

Copper

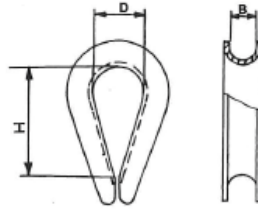
| For rope mm | Product code |
|----------------|--------------|
| 1 | TALUK01 |
| 2 | TALUK02 |
| 3 | TALUK03 |
| 4 | TALUK04 |
| 5 | TALUK05 |
| 6 | TALUK06 |
| 8 | TALUK08 |
| 10 | TALUK10 |

Other types also available within delivery time

You can find pressing tools from page 13-10

THIMBLES FOR STEEL ROPES DIN 6899B

- pressed profile steel
- electro galvanized

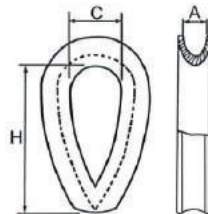


| Wire diam. mm | B mm | H mm | Weight kg / 100pcs | Package- size pcs | Product code |
|------------------|---------|---------|--------------------------|-------------------------|--------------|
| 2 – 3 | 4 | 21 | 0,8 | 100 | KO03 |
| 3,5 | 5 | 23 | 1,1 | 100 | KO04 |
| 4 – 5 | 6 | 25 | 1,6 | 100 | KO05 |
| 6 | 7 | 28 | 1,9 | 1000 / ltk | KO06 |
| 7 | 8 | 32 | 3,3 | 50 | KO08 |
| 8 – 9 | 10 | 38 | 4,7 | 50 | KO09 |
| 10 – 11 | 12 | 45 | 6,8 | 50 | KO11 |
| 12 – 13 | 14 | 51 | 10,0 | 100 | KO13 |
| 14 – 16 | 17 | 61 | 18,0 | - | KO16 |
| 17 – 18 | 20 | 72 | 29,0 | 100 | KO18 |
| 19 – 20 | 22 | 80 | 32,0 | 100 | KO20 |
| 21 – 22 | 24 | 90 | 47,0 | 50 | KO22 |
| 23 – 24 | 26 | 99 | 59,0 | 50 | KO24 |
| 26 | 28 | 112 | 84,0 | 20 | KO26 |
| 28 | 30 | 120 | 110,0 | 25 | KO28 |
| 29 – 30 | 32 | 128 | 123,0 | 10 | KO30 |
| 31 – 32 | 34 | 152 | 156,0 | - | *KO32 |
| 33 – 34 | 36 | 160 | 176,0 | - | *KO34 |
| 36 | 38 | 176 | 180,0 | 15 | *KO36 |
| 38 | 40 | 186 | 195,0 | - | *KO38 |
| 40 | 42 | 192 | 320,0 | - | *KO40 |

*Products marked with an asterisk delivery 1-2 weeks

THIMBLES FOR STEEL ROPES DIN 3090

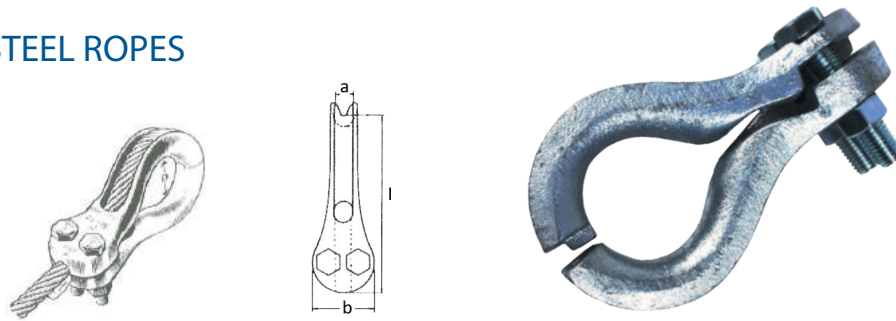
- forged steel
- hot dip galvanized
- Also bigger sizes available within delivery time



| Wire diam. mm | a mm | c mm | h mm | Package- size pcs | Weight kg / 100pcs | Product- code |
|------------------|---------|---------|---------|-------------------------|--------------------------|------------------|
| 5 – 6 | 7 | 15 | 42 | 100 | 2,8 | KOD06 |
| 7 – 8 | 9 | 20 | 56 | 50 | 5,7 | KOD08 |
| 9 – 10 | 11 | 25 | 70 | 50 | 15,2 | KOD10 |
| 11 – 12 | 13 | 30 | 85 | 50 | 24,0 | KOD12 |
| 13 – 14 | 15 | 35 | 102 | 75 | 38,0 | KOD14 |
| 15 – 16 | 18 | 40 | 113 | 50 | 52,0 | KOD16 |
| 17 – 18 | 20 | 45 | 127 | 50 | 66,0 | KOD18 |
| 19 – 20 | 22 | 50 | 141 | - | 88,0 | KOD20 |
| 21 – 22 | 24 | 55 | 153 | 10 | 104,0 | KOD22 |
| 23 – 24 | 26 | 60 | 165 | - | 129,0 | KOD24 |
| 25 – 26 | 29 | 65 | 181 | - | 260,0 | KOD26 |
| 27 – 28 | 31 | 70 | 193 | - | 277,0 | KOD28 |

Delivery 1-2 weeks

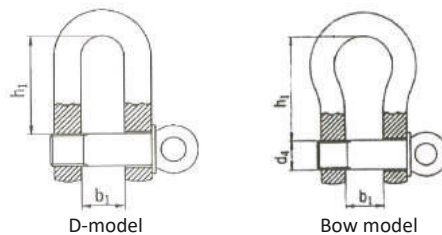
LOCK THIMBLES FOR STEEL ROPES



| Wire diam. mm | a mm | b mm | l mm | Weight kg | Product code |
|------------------|---------|---------|---------|--------------|--------------|
| 5 – 6 | 6 | 26 | 67 | 0,1 | LUKO6 |
| 7 – 9 | 12 | 37 | 100 | 0,5 | LUKO9 |
| 10 – 12 | 15 | 48 | 152 | 1,0 | LUKO12 |
| 13 – 16 | 19 | 61 | 186 | 2,0 | LUKO16 |
| 17 – 20 | 25 | 76 | 241 | 3,8 | LUKO20 |

COMMERCIAL QUALITY D- AND BOW SHACKLES

- two models: D-model and bow model



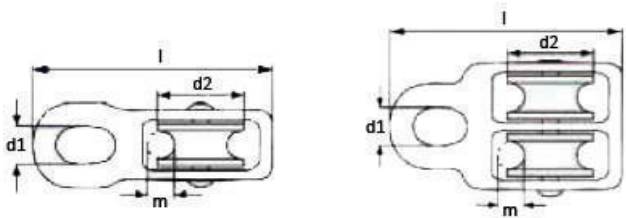
| Tap size d4 mm | Breaking strength t | b1 mm | h1 mm | Package-size D-model pcs | Weight/ 100pcs approx. kg | Product code D-model | Product code Bow model |
|----------------------|------------------------|----------|----------|--------------------------------|------------------------------------|-------------------------|---------------------------|
| 5 | 0,4 | 10 | 20 | 100 | 1,6 | SAKY05 | - |
| 6 | 0,5 | 12 | 24 | 100 | 3,2 | SAKY06 | - |
| 8 | 1,0 | 16 | 32 | 50 | 7,0 | SAKY08 | SAKY08P |
| 10 | 1,5 | 20 | 40 | 25 | 13,4 | SAKY10 | SAKY10P |
| 12 | 2,5 | 25 | 48 | 200 | 25,0 | SAKY12 | SAKY12P |
| 14 | 3,0 | 28 | 53 | 100 | 34,0 | SAKY14 | SAKY14P |
| 16 | 4,0 | 32 | 60 | 10 | 53,0 | SAKY16 | SAKY16P |
| 20 | 5,5 | 38 | 74 | 50 | 92,0 | SAKY20 | SAKY20P |
| 22 | 7,5 | 44 | 85 | 20 | 140,0 | SAKY22 | SAKY22P |
| 25 | 10,0 | 51 | 97 | 10 | 215,0 | SAKY25 | SAKY25P |
| 28 | 15,0 | 56 | 107 | 10 | 340,0 | SAKY28 | SAKY28P |
| 32 | 17,5 | 64 | 122 | 10 | 590,0 | SAKY32 | SAKY32P |
| 38 | 25,0 | 76 | 146 | 8 | 760,0 | SAKY38 | - |

HOT DIP GALVANIZED D-MODEL

| Tap size d4 mm | Breaking strength t | b1 mm | h1 mm | Weight/ 100pcs approx. kg | Product code |
|----------------------|------------------------|----------|----------|------------------------------------|--------------|
| 16 | 4,0 | 32 | 60 | 53,0 | SAKY16KS |
| 20 | 5,5 | 38 | 74 | 92,0 | SAKY20KS |

1- AND 2-WHEELED PULLEYS

- body electro galvanized steel, nylon wheel
- for synthetic fibre ropes



| For rope mm | Breaking strength t | d1 mm | d2 mm | l mm | Weight/ 100pcs approx. kg | Product code 1-wheeled | Product code 2-wheeled |
|----------------|---------------------------|----------|----------|---------|------------------------------------|---------------------------|---------------------------|
| 5 | 0,55 | 10 | 15 | 50 | 2,4 | PYL05 | *PYL205 |
| 6 | 0,60 | 11 | 20 | 60 | 4,1 | PYL06 | *PYL206 |
| 8 | 0,90 | 13 | 30 | 80 | 8,3 | PYL08 | *PYL208 |
| 9 | 1,10 | 14 | 40 | 93 | 12,7 | PYL09 | *PYL209 |
| 12 | 1,20 | 16 | 50 | 113 | 19,7 | PYL12 | *PYL212 |
| 16 | 1,30 | 20 | 65 | 135 | 38,5 | PYL16 | *PYL216 |

*Products marked with an asterisk delivery 1-2 weeks

WIRE ROPE / CABLE SWIVEL

- prevents twisting when pulling steel
- wire ropes or cables
- very small
- with needle bearing



| Breaking- strength kg | A diam. mm | B length mm | Weight kg | Product code |
|-----------------------------|------------------|-------------------|--------------|--------------|
| 2000 | 29 | 143 | 0,53 | LEIKHGS1 |
| 4000 | 49 | 185 | 1,90 | LEIKHGS2 |

STEEL WIRE ROPE / CABLE GRIP

- for pulling steel ropes and cables
- hot dip galvanized
- one pulling loop



| Breaking- strength kg | Adherence gap mm | Length mm | Weight kg | Product code |
|-----------------------------|---------------------|--------------|--------------|--------------|
| 1200 | 7 – 12 | 415 | 0,12 | VESUK12 |
| 1600 | 13 – 18 | 415 | 0,17 | VESUK18 |
| 4400 | 19 - 35 | 810 | 0,37 | VESUK35 |
| 8000 | 25 - 50 | 960 | 0,90 | VESUK50 |

See steel wire rope clamps on page 4-13

PRESS TOOLS FOR WIRE ROPE FERRULE LOCKS

- suitable for 1 - 1,5 and 1 - 5 mm ropes
- either hand models or a table mounted model
- paint coated
- Also electronically operatable models available. Ask more from our sales!



TALUPI3



TALUPI6



TALUPI6P

| Wire dimension mm | Typi | Weight kg | Product code |
|-------------------|--------|-----------|--------------|
| 1 - 1,5 | Pihdit | 0,3 | TALUPI3 |
| 1 - 5 | Pihdit | 2,7 | TALUPI6 |
| 1 - 5 | Pöytä | 7,5 | TALUPI6P |

CUTTERS FOR STEEL WIRE ROPES AND CABLES

- special steel cutters for steel wire ropes and cables
- KAAPL30 cable cutters with voltage isolated (1000V) handles
- listed values are for fibre core ropes
- three sizes and table-mounted model for steel wire ropes and cables, as well as one model only for copper and aluminium cables (KAAPL30)
- paint coated



TEKLEI05



TEKLEI14P



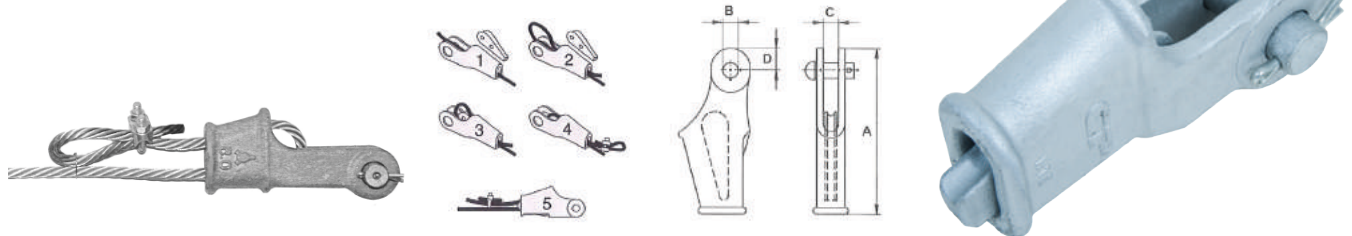
TEKLEI18-22

| Wire diam. mm | Type | Weight kg | Product code |
|---------------|----------|-----------|--------------|
| 1 - 5 | Pihti TK | 0,3 | TEKLEI05 |
| 1 - 14 | Pihti TK | 6,0 | TEKLEI18 |
| 1 - 20 | Pihti TK | 9,8 | TEKLEI22 |
| 1 - 14 | Pöytä TK | 7,0 | TEKLEI14P |

GREEN PIN® WEDGE SOCKETS FOR STEEL ROPES, FOR LIFTING



- fast way to make a fork ending to a steel rope
- approved for lifting
- hot dip galvanized

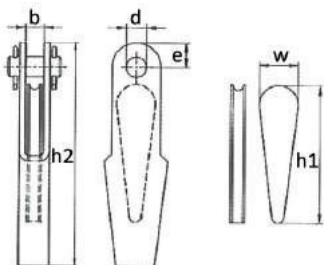


| Wire diam. mm | Breaking strength t | A mm | B mm | C mm | D mm | Weight kg | Product code |
|------------------|------------------------|---------|---------|---------|---------|--------------|--------------|
| 7 - 8 | 8 | 128 | 16 | 18 | 18 | 0,8 | *KII010 |
| 9 - 10 | 12 | 165 | 20 | 20 | 20 | 1,5 | KII015 |
| 11 - 13 | 20 | 170 | 25 | 24 | 24 | 2,4 | KII025 |
| 14 - 16 | 25 | 210 | 30 | 31 | 32 | 4,0 | KII040 |
| 18 - 19 | 40 | 255 | 35 | 38 | 40 | 7,4 | KII050 |
| 20 - 22 | 55 | 286 | 41 | 44 | 46 | 11,0 | KII070 |
| 24 - 26 | 75 | 330 | 50 | 52 | 54 | 16,0 | KII100 |
| 27 - 29 | 90 | 375 | 57 | 60 | 62 | 22,0 | *KII120 |
| 30 - 32 | 110 | 423 | 64 | 63 | 73 | 31,0 | *KII160 |
| 34 - 36 | 125 | 474 | 64 | 69 | 74 | 39,0 | *KII180 |

*Products marked with an asterisk delivery 1-2 weeks

WEDGE SOCKETS FOR STEEL ROPES

- fast way to make a fork ending to a steel rope
- electro galvanized



| Wire diam. mm | b mm | e mm | h2 mm | d mm | h1 mm | w mm | Weight kg | Product code |
|------------------|---------|---------|----------|---------|----------|---------|--------------|--------------|
| 4 - 5 | 12 | 14 | 110 | 10 | 68 | 19 | 0,17 | KII05 |
| 6 - 8 | 14 | 20 | 150 | 12 | 92 | 25 | 0,50 | KII08 |
| 9 - 11 | 17 | 26 | 190 | 16 | 117 | 32 | 1,04 | KII11 |
| 12 - 14 | 22 | 32 | 230 | 18 | 141 | 38 | 2,07 | KII14 |
| 15 - 17 | 25 | 36 | 260 | 22 | 162 | 46 | 3,66 | KII17 |
| 18 - 20 | 27 | 40 | 300 | 25 | 186 | 52 | 5,35 | KII20 |

Forankra is the leading European supplier of products, solutions and services for cargo securing, cargo optimization and whole sale lifting. We provide the full range of lashing and lifting products, regardless of your need; standardized off the shelf products or customized solutions tailored to fit your specific needs. With over 30 years in the load securing business, we are confident to call ourselves cargo securing experts.

The Forankra Division has eleven service centers spread over Europe and an efficient production unit in Poland based on lean philosophy. We can also make low volume customization in all our companies. Local presence and own manufacturing allows us to cut lead times and always be ready to serve you with fast delivery on short notice.



Product testing

Forankra ensures the safety and quality of all equipment by testing products from each set of incoming delivery.

Of Lifting and Lashing equipment, the breaking strength and stretch, as well as surface finishing and measures, are tested. The report of each test pull is recorded in the company database. By doing this we ensure the traceability of each set of delivered products.

Customized solutions

We provide customized cargo securing solutions and cargo optimizations for all kinds of cargo carriers, manufacturing industries, logistic companies and OEM/Truck Body Builders.

Availability

With our wide and quality assured product range, comprehensive warehousing and net of resellers we provide reliable service and distribution.

Expertise

With more than 30 years in the business you can be sure we recommend solutions based on best practice, quality tests and accurate regulations.

FORANKRA COMPANIES

Cargo securing - Road

Forankra Sweden • Forankra France • Forankra Spain • Forankra Poland • L-EX France
• L-EX Spain

Cargo securing - Lifting

Haklift Finland • Haklift Baltic

Cargo securing - Sea

Ro-Ro International

Cargo securing - Air

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