



escar®

CATALOGUE 2020

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THE EXAR COMPANY

The EXAR company, located in Bielsko-Biała, Poland, was established in 1991. For 27 years, it has been providing services in the field of production of various types of slings: wire rope slings, chain slings, webbing slings, round slings and endless slings. Company also deals with the clamping, twisting, braiding and crimping of ropes. Gradually, developing and gaining experience, it constantly expanded its production and commercial offer. Currently, it is one of the main producers and suppliers of lifting equipment in Poland. It is also a general distributor of the BRANO brand, a leading manufacturer of lever blocks and chain hoists that has been operating on the global market for over 80 years. EXAR's mission is to care for quality at every stage of production and delivery of the product. Products with EXAR brand are available for the consumer market and in the B2B area. They are addressed to conscious users, professionals and people who value the quality of products. The competences of the manufacturer of precision tools belonging to the lifting accessories are constantly developed and they are the main distinguishing feature of the company among competitors.

The company's motto is:

With Exar you will safely pick up and move everything.

The philosophy of the EXAR brand are the following assumptions:

- Every person uses tools to facilitate lifting and moving,
- Every job is more secure and effective if we use the right tools
- Work well done gives satisfaction; irrelevant what work it is,
- Everyday life must enjoy,
- Everyone has his/her own mission and needs effective tools,
- The most important is the person and his safety.

EXAR takes care of the positive image of brands and provides services at the highest level. The Company builds long-term relationships with clients. It guarantees its customers:

- The highest quality of products confirmed by certificates,
- Access to a wide range of products by maintaining appropriate inventory,
- A wide range of devices and lifting and securing systems,
- Warranty and post-warranty technical care in the authorized service,
- Attractive prices,
- Fast and professional service provided by specialized sales departments and technical-commercial consultants.

In addition, EXAR conducts specialized trainings on lifting, fastening and operation systems, as well as warranty and post-warranty technical support.

The EXAR company also runs stationary and mobile services. Services provided include:

- tests, inspections and repairs of rope, chain, belt and round slings,
- testing of chain slings microcracks,
- strength tests of slings and their test loads,
- sling repairs,
- inspections, tests and repairs of hoists (inspections of the mechanism and body of dynamic loads, maintenance and repairs of hoists),
- crimping steel ropes with diameters from 1 – 64 mm (with organic, steel, black, galvanized, stainless steel terminals with aluminum, copper, stainless steel, crimping loops, rubbers, stoppers),
- braiding of various types of wire ropes,
- pouring the ends of steel ropes with resin,
- crimping the ends of wire ropes,
- cutting the ropes.





CHAIN AND WIRE ROPE HOISTS

WIRE ROPE HOIST 30XX

	STEEL	HANDLE PCV	CLASS 1Bm	NOŚNOŚĆ 0,8t 1,6t 3,2t	ROPES (m) 10,20, 30,40
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Wire rope hoist with manual lever drive for lifting and pulling in any direction.

Available in three capacities: 0.8t, 1.6t, 3.2t with a choice of rope length (10, 20, 30 or 40 m). The ropes are sold separately.

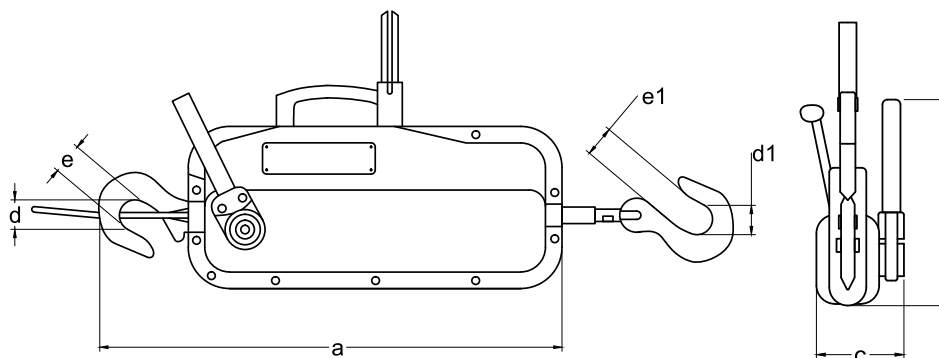
Properties:

- all parts of the lift made of steel,
- plastic handle,
- simple design, easy to carry,
- the option of manipulating loads at various distances,
- easy transport,
- easy and safe use,
- safety device against overloading,
- long service life,
- telescopic control lever,
- fulfils the requirements of standard EN 13157.



Use:

- wide range of use particularly in construction, agriculture, forestry, transport,
- for lifting and towing loads in all directions,
- for extricating items, demolishing buildings,
- for putting up posts, installing electrical wiring, tensioning returnable rope car pulleys in logging,
- for installation and manipulation work of all types,

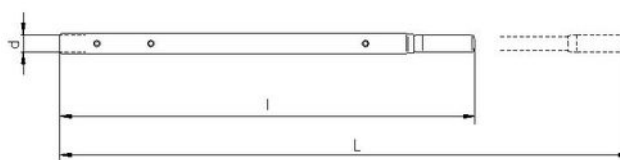


Type	Capacity	Lifting 1) speed (m/min)*	Operating force on lever (N)	Main dimensions (mm)							Weight (kg)
				a	b max	c	d	d1	e	e1	
30-10-0,8	0,8	2	250	535	300	125	36	32	23,5	23,5	11,1
30-00-1,6	1,6	2	250	630	360	125	43	46	32,5	32,5	19,2
30-11-3,2	3,2	0,45 0,84	380 (B) 750 (A)	680	410	140	28	64	47	45,5	33,5

1) Calculated on presumption 35 swings by lever per minute
2) A – higher lifting speed
B – lower lifting speed
Hoist of lifting capacity 3,2t has hinge pin instead of hook

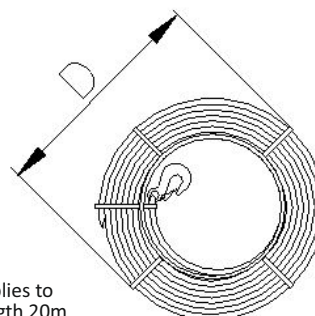
Hand lever

Capacity	Dimensions (mm)			Weight (kg)
	d	lever (folded)	L	
0,8	22	650	1100	2
1,6	29	730	1220	2,8
3,2	29	730	1220	2,8



Rope with cartridge

Capacity	∅ wire rope (mm) <small>Specification of rope according to EN 12385-4</small>	Rope length (m)	D (mm)	Weight* (kg)
0,8	∅ 8	10,20,30,40	345	5,9
1,6	∅ 11,2	10,20,30,40	420	12,0
3,2	∅ 16	10,20,30,40	520	25,0



* Weight applies to rope of length 20m

ROPE WINCH LN



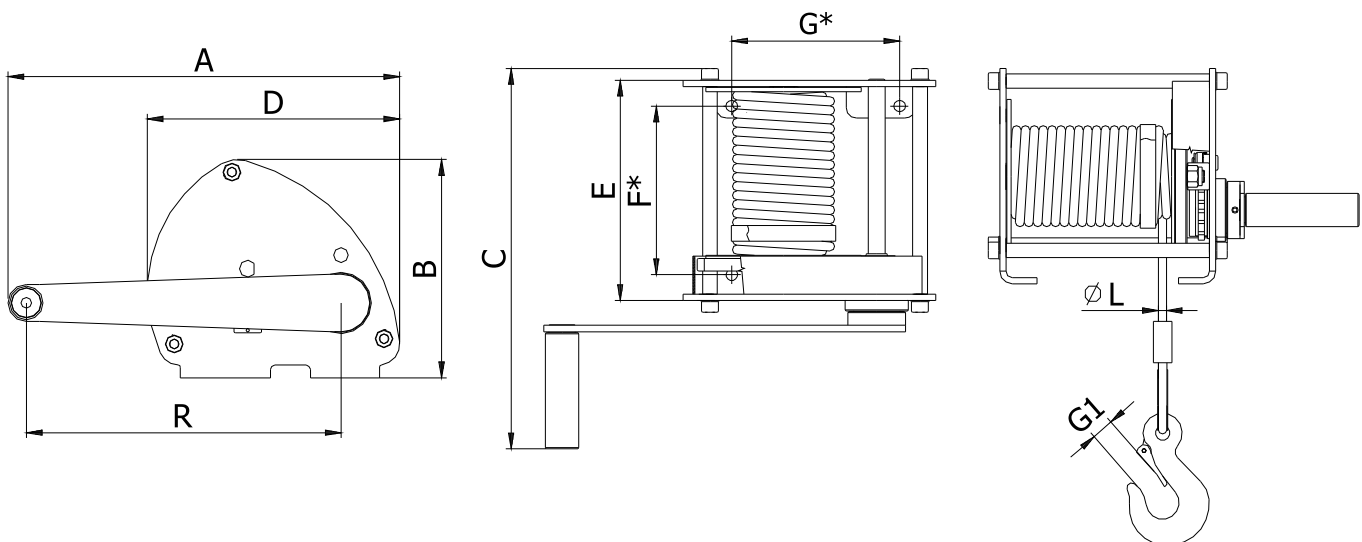
LN rope winch with a load capacity of 0.5t and 1t is intended for manual pulling, lifting and lowering loose loads.

Properties:

- the main parts of the winch are made of steel and cast iron, brake pads made of brass; surface of the handle of a PVC crank,
- surface protection of the winch is ensured by galvanic application of the zinc coating,
- simple, light construction,
- easy-to-use,
- anti-corrosion protection of the surface by galvanizing - for normal environment,
- usage a winch in an unusual or extreme environment needs consultation with the producer,
- prepared for installation to a structure,
- minimum maintenance demands,
- working temperature from -20 ° to 50 ° C,
- winch construction consistent with the requirements specified in the Directive of the European Parliament and the Council of Europe 2006/42 / ES.

Use:

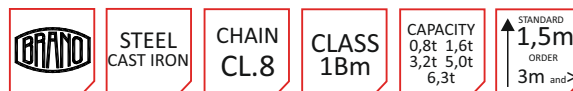
- for manual lifting and pulling weights,
- as a service hoist for installation and maintenance work in technological facilities of all types,
- for loading cars or boats for trailers,
- or manipulation activities on small boats (hoisting the sails, etc.)
- can also be used in environments with a risk of explosion (NEXP symbol)– designation of "explosiveness" of the product - I M2; II 2G T5 (group of devices I, category M2; group of devices II, category 2G, temperature class T5) (optional on request).



Type	Capacity (t)	Main dimensions (mm)										Rope (mm)	Lift (m)	Gear ratio	Operating force on crank (N)	Weight with rope (kg)
		A	B	C	D	E	F*	G*	G1	L	R					
LN-0,5	0,5	264	167	344	193	186	144	115	19	5	200	Ø5	10	1:8	250	9,5
LN-1,0	1,0	373	207	460	240	209	160	160	19	8	300	Ø8	10	1:6	320	15,2

* hole distances for anchoring of the rope winch Ø of anchorage holes – LN/0,5t – 9mm, LN/1t – 11mm

LEVER HOIST RZC



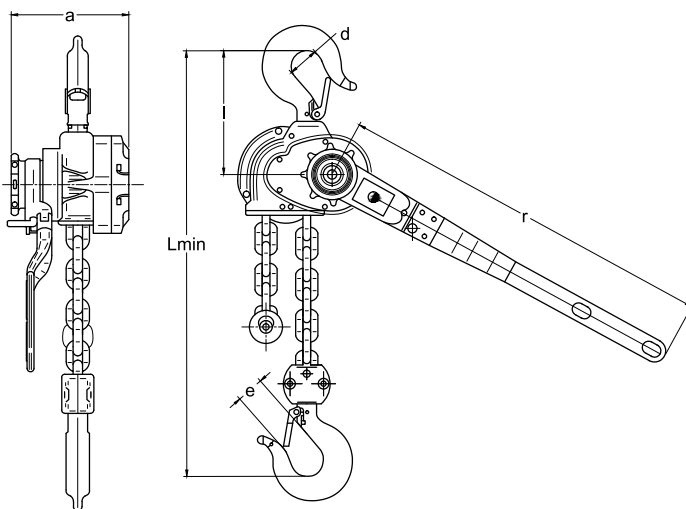
Lever hoist RZC, also called ratchet hoist, with a manual lever lifting mechanism with a capacity of 0.8t; 1,6t; 3,2 t; 5t; 6.3 t is designed only for manual lifting, lowering and pulling loose loads in any direction at the workplace. The weight of the load during lifting or the pulling force of the chain during pulling must not exceed the given permissible load capacity.

Properties:

- all parts of the hoist are made of steel and cast iron, brake pads made of brass or metal-ceramic material,
- easy and convenient service,
- simple and solid construction,
- equipped with a safety device against overloading
- thanks to a solid cast-iron cover, they are suitable for working in difficult conditions (mines, steelworks),
- rotary hooks - cargo and in the body,
- the possibility of moving the chain by a knob,
- a brake protecting against lowering of the load,
- minimum operating costs,
- the possibility of ordering a version for work in an explosive environment (NEXP),
- lifting range (t): 0.8; 1.6; 3.2; 5.0; 6.3
- standard lifting height of 1.5 m (other on request),
- construction consists with the requirements specified in the Directive of the European Parliament and the Council of Europe 2006/42 / ES.

Use:

- a wide range of use particularly in construction and in mining and anywhere loads must be manipulated,
- for lifting and towing loads,
- for tensioning fences, extricating work, pulling out posts,
- as a lifting device for suspended mine tracks,
- for installation and manipulation work of various types,
- suitable for heavy duty use – in mines, smelting works, etc.,
- can also be used in environments with a risk of explosion (NEXP symbol) optional - on request.



Type	Capacity	Number of load chain falls	Chain ČSN EN 818-7 Kl.8	Operating force (N)	Lifting speed (m/min)*	Main dimension (mm)						Weight (kg)	Weight increase per 1m of lift (kg)
						a	d	e min	l	L min	r		
RZC-0,8	0,8	1	∅ 5x15	400	1,27	145	36	23,5	145	327	560	8,4	0,55
RZC-1,6	1,6	1	∅ 9x27	370	0,52	165	43	29,5	160	380	560	16,0	1,84
RZC-3,2	3,2	1	∅ 11x31	400	0,37	173	50	35,5	223	417	560	21,0	2,73
RZC-5,0	5,0	2	∅ 11x31	300	0,18	173	56	42,0	242	630	560	34,0	5,46
RZC-6,3	6,3	2	∅ 11x31	400	0,18	173	63	48,0	265	650	560	40,0	5,46

* Calculated on presumption of 48 swings by hand lever per minute.(1 swing = movement by hand lever from one extreme position to another and back)

LEVER HOIST Z310



STEEL
CAST IRON

CHAIN
KL.8

CLASS
1Bm

CAPACITY
0,5t 1,0t
1,6t 3,2t
5t

STANDARD
ORDER
1,5m
3m and >

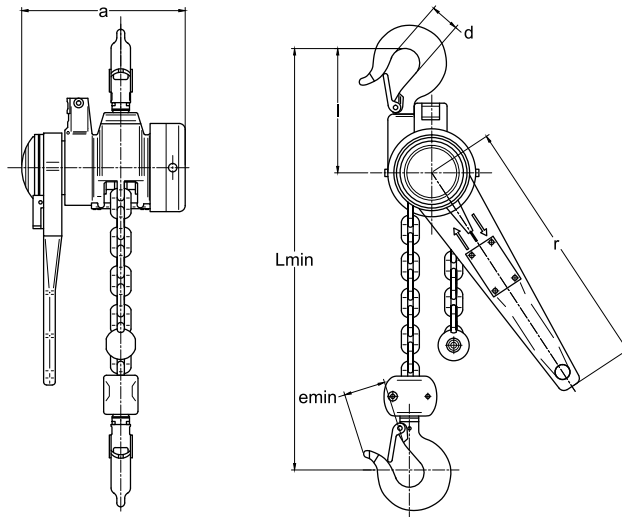
Lever hoist Z310, also called ratchet hoist, with a manual lever lifting mechanism with a capacity of 0.5t; 1.6t; 3.2t; 5t t is designed only for manual lifting, lowering and pulling loose loads in any direction at the workplace. The weight of the load during lifting or the pulling force of the chain during pulling must not exceed the given permissible load capacity.

Properties:

- all parts of the hoist are made of steel and cast iron, brake pads made of brass or metal-ceramic material,
- easy and convenient service,
- simple and solid construction,
- equipped with a safety device against overloading
- thanks to a solid cast-iron cover, they are suitable for working in difficult conditions (mines, steelworks),
- rotary hooks - cargo and in the body,
- the possibility of moving the chain by a knob,
- a brake protecting against lowering of the load,
- minimum operating costs,
- the possibility of ordering a version for work in an explosive environment (NEXP),
- lifting range (t): 0,5; 1,0; 1,6; 3,2; 5,0,
- standard lifting height of 1.5 m (other on request),
- construction consists with the requirements specified in the Directive of the European Parliament and the Council of Europe 2006/42 / ES.

Use:

- a wide range of use when lifting and manipulating loads,
- for lifting and towing loads,
- for tensioning fences, extricating work, pulling out posts,
- as a lifting device for suspended mine tracks,
- for installation and manipulation work of various types,
- suitable for heavy duty use – in mines, smelting works, etc.,
- can also be used in environments with a risk of explosion (NEXP symbol) optional - on request.



Type	Capacity	Number of load chain falls	Chain ČSN EN 818-7 Kl.8	Operating force (N)	Lifting speed (m/min)*	Dimension (mm)						Weight (kg)
						a	d	e min	l	L min	r	
Z310-0,5	0,5	1	Ø 5x15	120	0,30	166	30	18,5	120	235	290	7,6
Z310-1-1	1,0	1	Ø 7x21	180	0,33	190	36	23,5	135	300	380	10,5
Z310-1,6	1,6	1	Ø 9x27	300	0,40	187	43	29,5	175	420	380	14,4
Z310-3,2	3,2	2	Ø 9x27	350	0,20	187	50	35,5	220	500	380	22,5
Z310-5	5,0	3	Ø 9x27	400	0,13	187	56	39,5	230	700	380	33,0

* calculated on presumption of 48 swings by hand lever per minute.(1 swing = movement by hand lever from one extreme position to another and back)

LEVER HOIST RZV



STEEL
CAST IRON

GALL
CHAIN
KL.8

CLASS
1Bm

CAPACITY
0,8t 1,6t
3,2t 5,0t
6,3t

STANDARD
ORDER
1,5m
3m and >

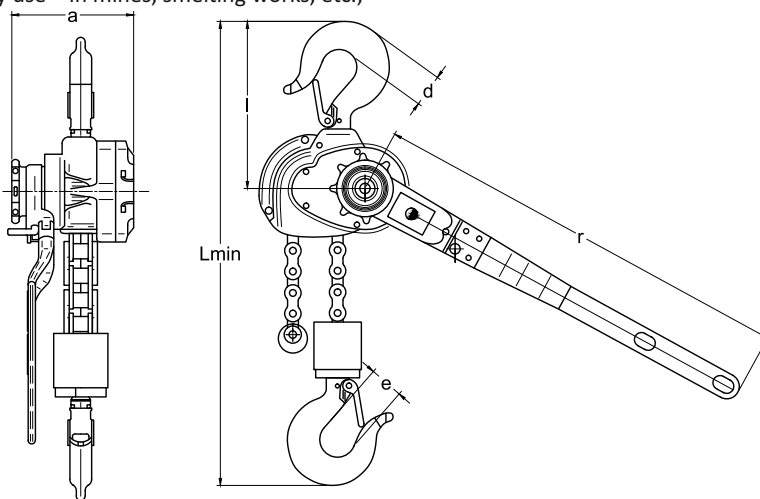
Lever hoist RZV, also called ratchet hoist, with a manual lever lifting mechanism with a capacity of 0.5t; 1,6t; 3,2 t; 5t; 6.3 t is designed only for manual lifting, lowering and pulling loose loads in any direction at the workplace. The weight of the load during lifting or the pulling force of the chain during pulling must not exceed the given permissible load capacity.

Properties:

- all parts of the hoist are made of steel and cast iron, brake inserts of brass or metal-ceramic material,
- easy and convenient service,
- simple and solid construction,
- the use of the Galla chain ensures that the chain is properly guided and prevents its jamming,
- equipped with a safety device against overloading
- thanks to a solid cast-iron cover, they are suitable for working in difficult conditions (mines, steelworks),
- rotary hooks - cargo and in the body,
- the possibility of moving the chain by a knob,
- a brake protecting against lowering of the load,
- minimum operating costs,
- the possibility of ordering a version for work in an explosive environment (NEXP),
- lifting range (t): 0,5; 1,6; 3,2; 5,0; 6,3,
- standard lifting height of 1.5 m (other on request),
- construction consists with the requirements specified in the Directive of the European Parliament and the Council of Europe 2006/42 / ES.

Use:

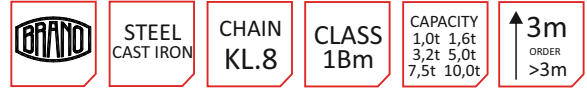
- a wide range of use particularly in construction and in mining and anywhere loads must be manipulated,
- for lifting and towing loads,
- for tensioning fences, extricating work, pulling out posts,
- as a lifting device for suspended mine tracks,
- for installation and manipulation work of various types,
- suitable for heavy duty use – in mines, smelting works, etc.,



Type	Capacity	Number of load chain falls	Operating force (N)	Lifting speed (m/min)*	Dimension (mm)						Weight (kg)
					a	d	e min	l	L min	r	
RZV-0,8	0,8	1	400	1,27	145	36	23,5	145	327	560	9,5
RZV-1,6	1,6	1	370	0,52	165	43	29,5	160	396	560	17,0
RZV-3,2	3,2	2	370	0,26	105	50	35,5	223	500	560	24,5
RZV-5,0	5,0	3	440	0,22	160	56	39,5	213	555	560	41,0
RZV-6,3	6,3	4	430	0,17	160	63	48,0	269	640	560	46,0

* Calculated on presumption of 48 swings by hand lever per minute.
(1 swing = movement by hand lever from one extreme position to another and back)

SINGLE BEAM TROLLEY Z420



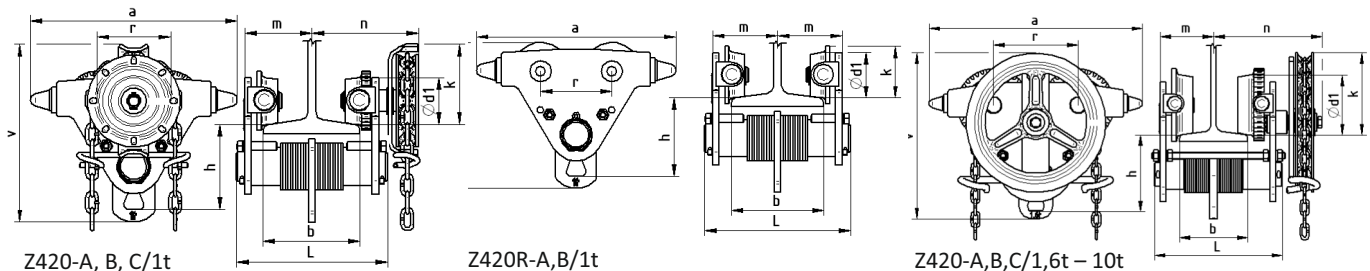
Single-beam crane trolley type Z420 with a capacity of 1t, 1.6t, 3.2t, 5t, 7.5t and 10t is intended for travelling along a horizontal crane track. It is designed primarily for hanging BRANO hand lifts of suitable load capacity as well as any stationary hoists with manual drive, provided that the lifting capacity of the trolley is adjusted to the lifting capacity of the hoist. The load must not exceed the permissible load capacity.

Properties:

- all parts of the trolley are made of steel and cast iron,
- simple construction and operation,
- the possibility of adapting to a specific width of the beam by adjusting the wheelbase,
- galvanized drive chains,
- equipped with safety shock absorbers,
- road wheels mounted on rolling bearings,
- can travel along profiles with a slanted flange (rolled "I" profiles), and also along profiles with a straight flange (profilu typu " IPE, HEA, HEB, HEM"),
- standard lifting height of 3 (other on request),
- the possibility of ordering a version for work in an explosive environment (NEXP),
- lifting range (t): 1,0; 1,6; 3,2; 5,0; 7,5; 10,0,
- construction consists with the requirements specified in the Directive of the European Parliament and the Council of Europe 2006/42 / ES.

Use:

- serves to move loads within the area of the crane track,
- as part of the service hoists for installation and maintenance work in technological facilities of all types,
- can also be used in environments with a risk of explosion (NEXP symbol).



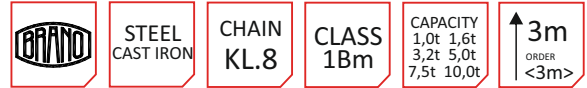
Type	Capacity	Dimension (mm)										Operating force (N)*	Travel speed (m/min)**	Weight (kg)
		l	h	L	V	d1	r	m	N	b	R			
Z420-A1	1,0	245	100,0	178	209	55	87	52-80	99-126	50-113	1000	250	4,8	8,7
Z420-B1	1,0	245	100,0	286	209	55	87	52-134	99-180	50-220	1000	250	4,8	10,4
Z420R-A1	1,0	245	100,0	178	177	55	87	52-80	-	50-113	1000	-	-	6,4
Z420R-B1	1,0	245	100,0	286	177	55	87	52-134	-	50-220	1000	-	-	7,8
Z420-A1,6	1,6	350	121,5	212	269	100	140	80-91	168-175	58-113	1700	150	2,25	21,0
Z420-B1,6	1,6	350	121,5	324	269	100	140	80-145	168-230	58-226	1700	150	2,25	22,8
Z420-A3,2	3,2	435	134,0	239	309	133	170	86-97	178-189	106-125	2500	280	2,3	35,9
Z420-B3,2	3,2	435	134,0	340	309	133	170	86-146	178-238	106-226	2500	280	2,3	37,8
Z420-A5	5,0	505	149,0	275	391	148	218	101-116	199-214	113-137	2800	350	1,8	52,9
Z420-B5	5,0	505	149,0	364	391	148	218	101-162	199-260	113-220	2800	350	1,8	54,7
Z420-7,5	7,5	685	248,0	415	432,5	196	300	150-186	294-330	125-185	5000	500	5,97	124,2
Z420-10	10,0	765	278,0	448	503,5	228	328	160-193	306-339	125-185	9000	500	7,3	179,5

b - b – range of flange width of a girder, R – minimal curvature radius of trolley track

* Calculated on presumption of unwinding 30 m of hand chain per minute

** At trolleys with lifting capacities 3,2 – 10t it is necessary when loading with loads approaching nominal lifting capacity to ensure the operation by two persons

CHAIN HOIST Z100



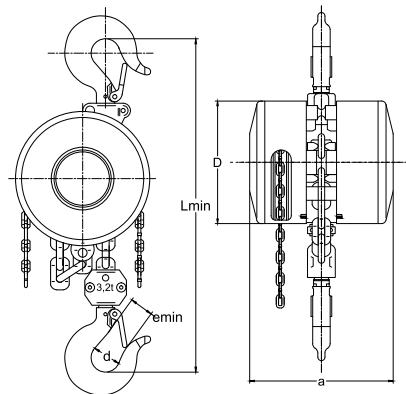
Chain hoist Z100, lifting capacity 0.25t, 0.5t, 1t, 1.6t, 3.2t, 5t, 7.5t, 10t, 15t and 20t is used for manual vertical lifting and lowering of loose loads at the workplace. The weight of the load during lifting must not exceed the permissible load capacity.

Properties:

- all parts of the hoist are made of steel and cast iron, brake inserts of brass or metal-ceramic material, ,
- simple, light construction, optional chain container,
- easy operation and installation,
- maneuvering and lifting height adjusted to the individual needs of the user,
- rotary hooks - cargo and in the body,
- galvanized chains,
- minimum operating costs,
- standard lifting height of 3 m (other on request),
- the possibility of hanging on a trolley type Z420 - then it performs the function of a mobile hoist,
- the possibility of ordering a version for work in an explosive environment (NEXP),
- lifting range (t): 0,25; 0,5; 1,0; 1,6; 3,2; 5,0; 7,5; 10,0,
- can be equipped with collecting basket for load chain,
- construction consists with the requirements specified in the Directive of the European Parliament and the Council of Europe 2006/42 / ES.

Use:

- for lifting and lowering of loads in places without any other source of energy or where the manual use is economically favourable
- as a backup for workplace where is necessary to provide the manipulation with the load when power fails
- as a service hoist for installation and maintenance work variant NEXP – for explosion hazard environment for groups I M2c; II 2GDcT85° corresponding with the Directive of European parliament and Council 94/9/EC



Type	Capacity	Number of falls	Load chain ČSN EN 818-7 Kl.8	Hand chain	Operating force (N)	Lifting speed (m/min)*	Dimension (mm)					Weight (kg)
							a	d	D	e min	L min	
Z100-0,25	0,25	1	Ø 3,1x9,3	Ø 3x14,3	270	2,0	120	30	80	18,5	255	4,40
Z100-0,5	0,50	1	Ø 5x15	Ø 4x20	300	1,1	165	30	115	18,5	250	8,50
Z100-1,0	1,00	1	Ø 7x21	Ø 4x20	350	0,7	180	36	136	23,5	330	14,10
Z100-1,6	1,60	1	Ø 9x27	Ø 4x20	320	0,36	220	43	198	29,5	410	24,00
Z100-1-3,2	3,20	1	Ø 11x31	Ø 4x20	400	0,29	254	50	220	35,5	510	37,40
Z100-5,0	5,00	2	Ø 11x31	Ø 4x20	400	0,145	254	56	220	39,5	655	52,30
Z100-7,5	7,50	2	Ø 11x31	Ø 4x20	480	0,15	254	56	220	43,0	875	70,00
Z100-10	10,00	3	Ø 11x31	Ø 4x20	400	0,10	254	63	220	47,0	1000	85,00

* * calculated on presumption of winding off 30m of the hand chain per minute

TRAVELLING PULLEY BLOCK Z220



STEEL
CAST IRON

CHAIN
KL.8

CLASS
1Bm

CAPACITY
0,5t 1,0t
1,6t 3,2t
5t 7,5t 10t

↑ 3m
ORDER
<3m>

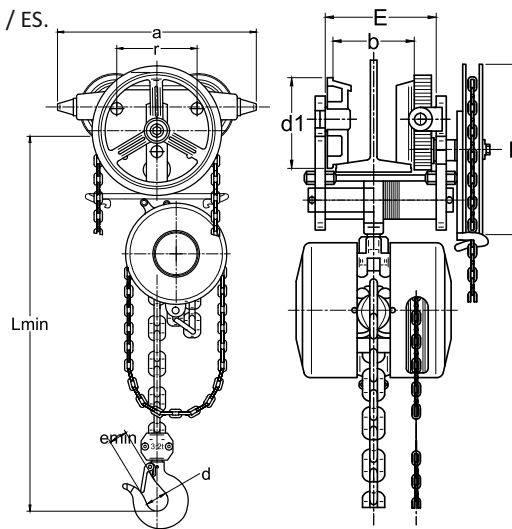
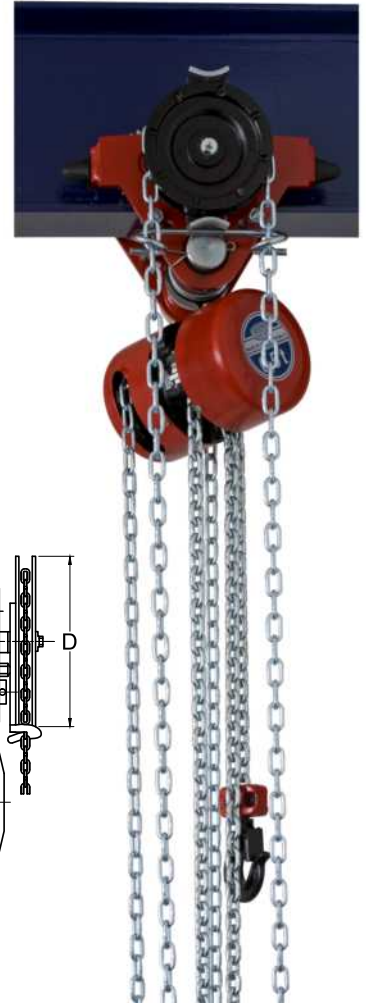
The Z220/0,5 – 10t travelling hoist is intended for travelling along a horizontal crane track. It has a capacity of 0,5t, 1t, 1,6t, 3,2t, 5t, 7,5t and 10t. The weight of the load during lifting must not exceed the permissible load capacity.

Properties:

- main parts of the chain block are manufactured from steel and cast iron, braking inserts of brake from brass or ceramic-metallic material,
- simple construction and operation,
- minimum maintenance requirements,
- the possibility of adapting to a specific width of the beam by adjusting the wheelbase,
- galvanized drive chains,
- road wheels mounted on rolling bearings,
- can travel along profiles with a slanted flange (rolled "I" profiles), and also along profiles with a straight flange (profilu typu " IPE, HEA, HEB, HEM"),
- standard lifting height of 3 m (other on request),
- the possibility of ordering a version for work in an explosive environment (NEXP),
- lifting range (t): 0.5; 1.0; 1.6; 3.2; 5.0; 7.5; 10.0,
- construction consists with the requirements specified in the Directive of the European Parliament and the Council of Europe 2006/42 / ES.

Use

- as a classic manually controlled crane for lifting and moving loads in the area of the crane track,
- particularly useful for use wherever the lifting device is not used intensively,
- for occasional use,
- as a service hoist for installation and maintenance work in technological facilities of all types,
- in areas without a power source,
- can also be used in environments with a risk of explosion (NEXP symbol).



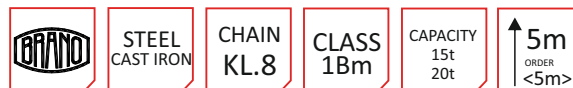
Type	Capacity	Dimension (mm)								I- beam I, IPE, HEA, HEB, HEM)		Operating force (N)*	Travel speed (m/min)**	Weight (kg)
		a	d	d1	D	e min	L min	r	E	b	R			
Z220-A0,5	0,5	245	30	55	108	18,5	290	87	89-144	58-113	1000	300	1,1 / 4,8	16,9
Z220-B0,5	0,5	245	30	55	108	18,5	290	87	89-253	58-226	1000	300	1,1 / 4,8	18,6
Z220-A1	1,0	245	36	55	108	18,5	340	87	89-144	58-113	1000	350	0,7 / 4,8	22,4
Z220-B1	1,0	245	36	55	108	18,5	340	87	89-253	58-226	1000	350	0,7 / 4,8	24,1
Z220-A1,6	1,6	350	43	100	230	18,5	457	140	148-172	58-113	1000	320	0,36 / 2,25	44,4
Z220-B1,6	1,6	350	43	100	230	18,5	457	140	148-284	58-226	1000	320	0,36 / 2,25	46,2
Z220-A3,2	3,2	435	50	133	280	18,5	515	170	168-187	82-125	1000	400	0,29 / 2,3	73,1
Z220-B3,2	3,2	435	50	133	280	18,5	515	170	168-288	82-226	1000	400	0,29 / 2,3	74,9
Z220-A5	5,0	505	56	148	345	18,5	660	218	183-214	90-137	1000	400	0,15 / 1,8	105,5
Z220-B5	5,0	505	56	148	345	18,5	660	218	183-304	90-226	1000	400	0,15 / 1,8	107,5
Z220-7,5	7,5	685	56	196	345	18,5	875	300	242-314	125-185	1000	480	0,15 / 5,97	207,2
Z220-10	10,0	765	64	228	428	18,5	920	328	259-327	125-185	1000	390	0,1 / 7,3	264,5

b – range of flange width of a girder, R – minimal curvature radius of trolley track

* Calculated on presumption of unwinding 30 m of hand chain per minute

** At trolleys with lifting capacities 3,2 – 10t it is necessary when loading with loads approaching nominal lifting capacity to ensure the operation by two persons

TRAVELLING PULLEY BLOCK (15 i 20 T)



The Z220/0,5 – 10t travelling hoist is intended for travelling along a horizontal crane track. It has a capacity of 15 and 20t . The weight of the load during lifting must not exceed the permissible load capacity.

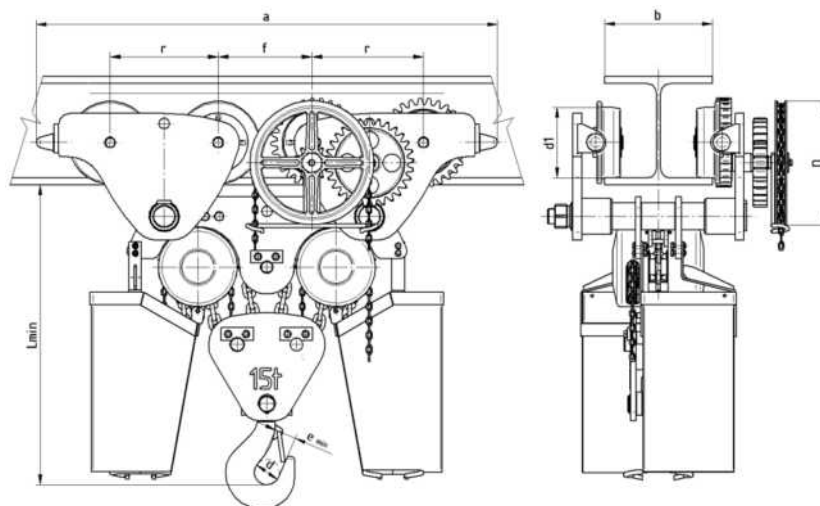
Properties:

- Main parts of the chain block are manufactured from steel and cast iron, braking inserts of brake from brass or ceramic-metallic material,
- simple construction and operation,
- minimum maintenance requirements,
- the possibility of adapting to a specific width of the beam by adjusting the wheelbase,
- galvanized drive chains,
- road wheels mounted on rolling bearings,
- can travel along profiles with a slanted flange (rolled "I" profiles), and also along profiles with a straight flange (profilu typu " IPE, HEA, HEB, HEM"),
- standard lifting height of 3 m (other on request),
- the possibility of ordering a version for work in an explosive environment (NEXP),
- lifting range (t): 15; 20,
- construction consists with the requirements specified in the Directive of the European Parliament and the Council of Europe 2006/42 / ES.



Use

- as a classic manually controlled crane for lifting and moving loads in the area of the crane track,
- particularly useful for use wherever the lifting device is not used intensively,
- for occasional use,
- as a service hoist for installation and maintenance work in technological facilities of all types,
- in areas without a power source,
- can also be used in environments with a risk of explosion (NEXP symbol).



Type	Capacity	Dimension (mm)								Number of falls	Chain ČSN EN 818-7 Kl.8	Operating force for travel (N)*	Travel speed (m/min)**	Weight (kg)
		a	d	d1	D	e min	L min	r	f					
Z220	15	1290	71	196	375	50	780	300	270	4	∅ 11x31	500/480	0,15	285
Z220	20	1500	80	237	428	62	720	328	380	6	∅ 11x31	500/400	0,10	345

* Calculated on presumption of unwinding 30 m of hand chain per minute

** At trolleys with lifting capacities 3,2 – 10t it is necessary when loading with loads approaching nominal lifting capacity to ensure the operation by two persons

LEVER HOIST ZKS

KOMSTAL	STEEL	CHAIN KL.8	CLASS 1Bm	CAPACITY 0,25t 0,75t 1t 3t 6t 9t	↑ 1,5m ORDER <1,5m>
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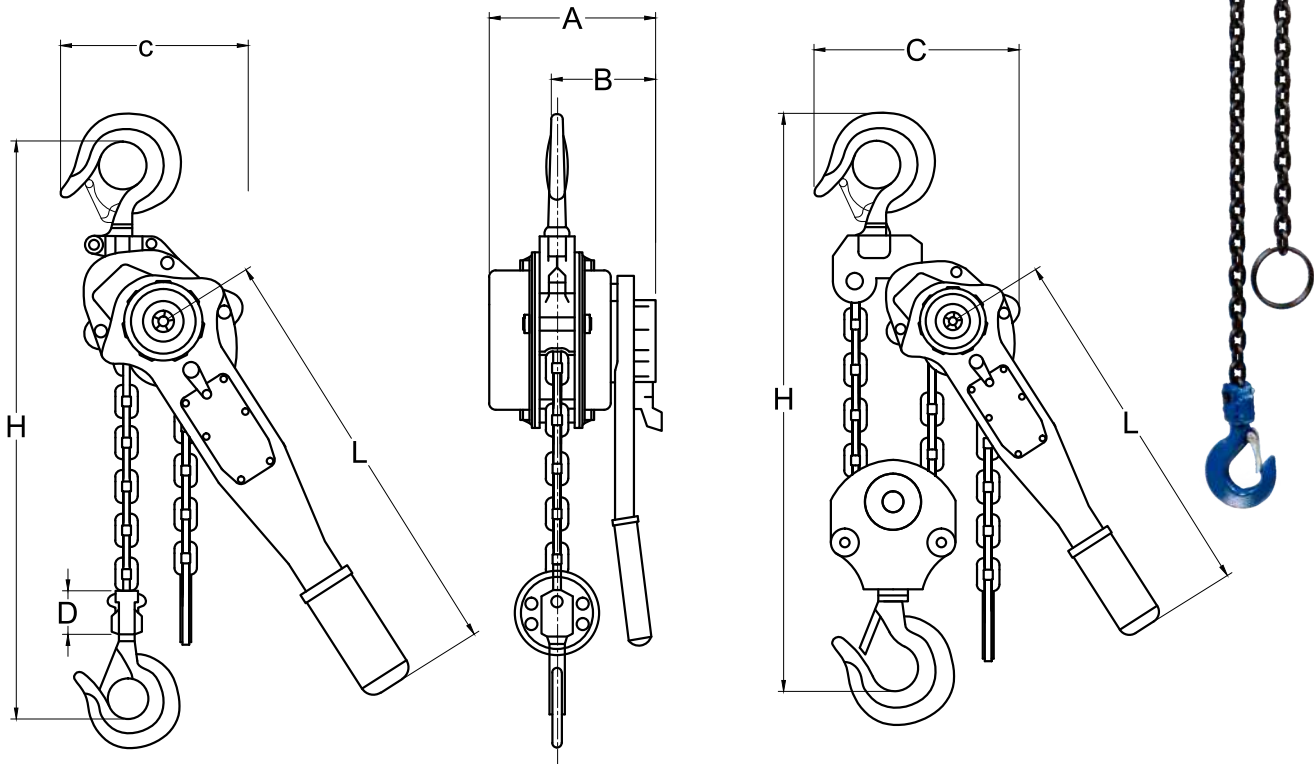
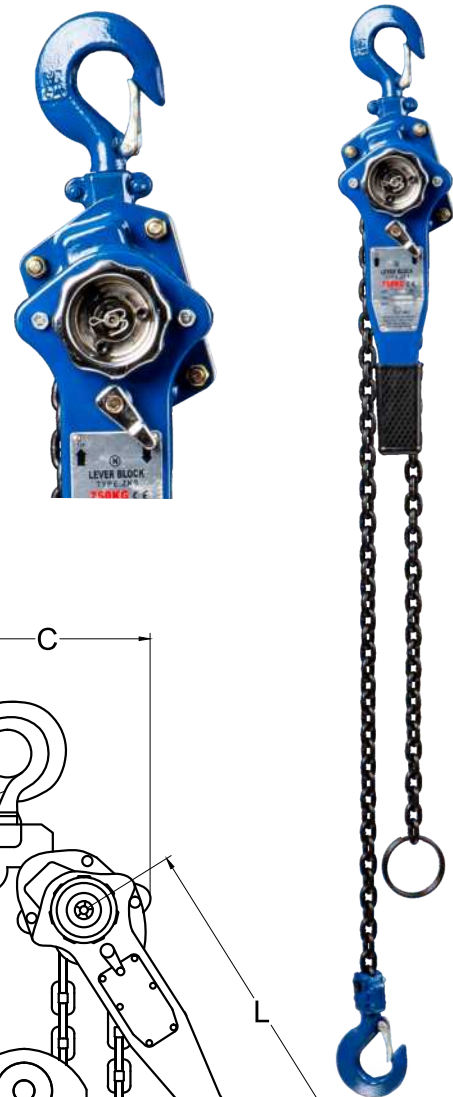
Lever hoist ZKS, also called ratchet hoist, with a manual lever lifting mechanism with a capacity of 0,25; 0,5t; 1,5t; 3t; 6t; 9t is designed only for manual lifting, lowering and pulling loose loads in any direction at the workplace. The weight of the load during lifting or the pulling force of the chain during pulling must not exceed the given permissible load capacity.

Properties:

- all parts of the hoist are made of steel,
- a lever made of PVC,
- comfortable, light construction,
- standard chain length of 1.5 m,
- 2 rotary hooks - cargo and in the body,
- construction consists with the requirements specified in the Directive of the European Parliament and the Council of Europe 2006/42 / ES.

Use:

- a wide range of use when lifting and manipulating loads,
- for lifting and towing loads,
- for tensioning fences, extricating work, pulling out posts,
- as a lifting device for suspended mine tracks,
- for installation and manipulation work of various types,
- suitable for heavy duty use – in mines, smelting works, etc.,



TYPE	WLL (t)	Lifting height (m.)	Number of load chain falls	Operating force (N)	Diameter of the chain (mm)	Minimum height H (mm)	A (mm)	B (mm)	C (mm)	D (mm)	L (mm)	Weight kg/szt
ZKS 0,25	0,25	1,0	1	280	4	245	92	71	70	18	158	2,3
ZKS 0,75	0,75	1,5	1	140	6	325	148	90	136	22	280	6,5
ZKS 1,50	1,50	1,5	1	220	8	380	172	98	160	31	410	11,0
ZKS 3,00	3,00	1,5	1	320	10	480	200	115	180	32	410	18,1
ZKS 6,00	6,00	1,5	2	340	10	620	200	115	235	37	410	27,7
ZKS 9,00	9,00	1,5	3	360	10	700	203	115	316	53	410	47,0

CHAIN HOIST WLK

KOMSTAL	STEEL CAST IRON	CHAIN KL.8	CLASS 1Bm	CAPACITY 0,5 t 1t 2t 3t 5t 10t 20t 50t	↑ 3m ORDER <3m>
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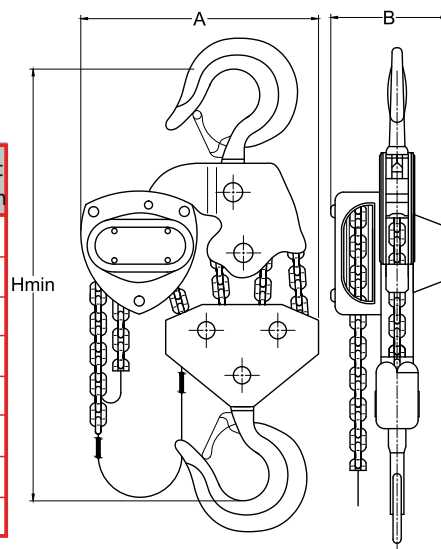
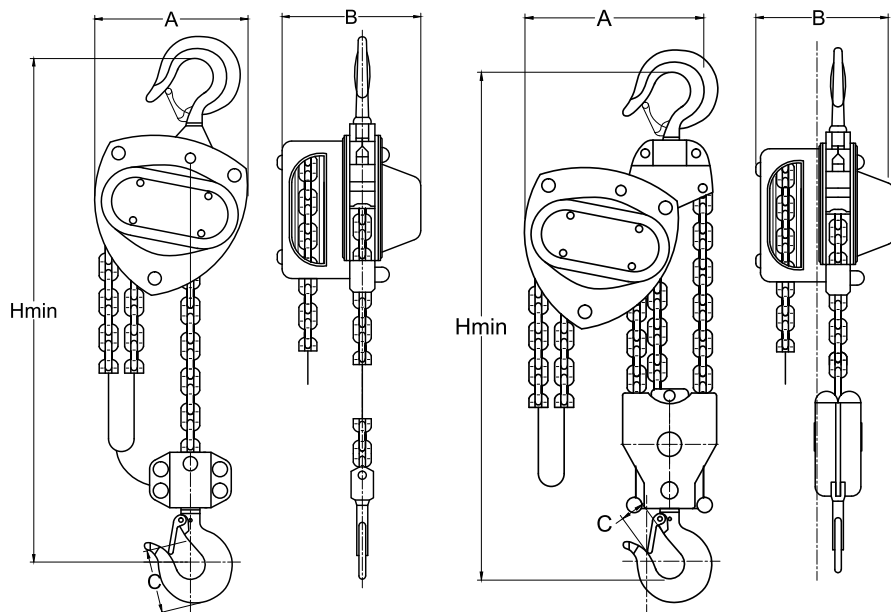
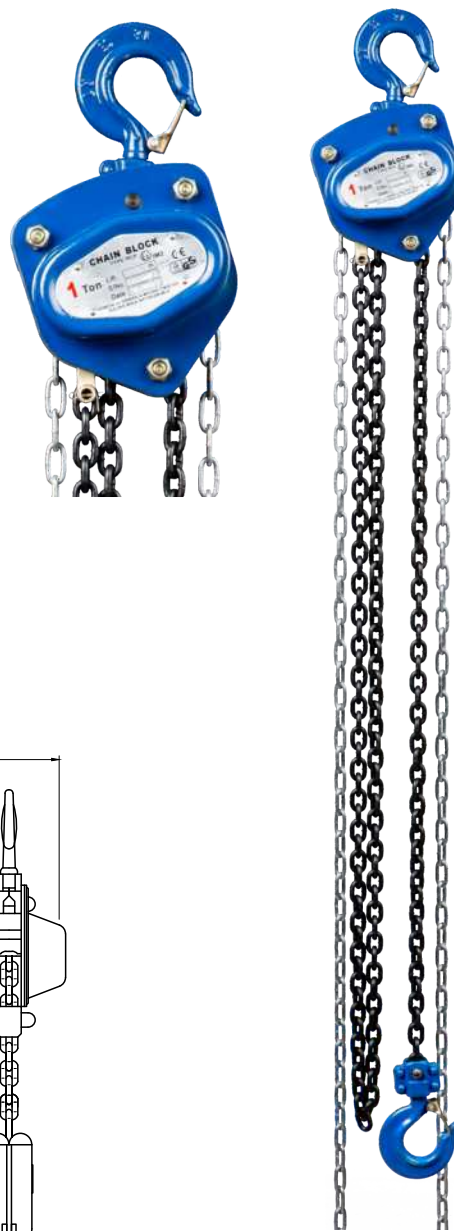
Chain hoist WLK, lifting capacity 0,5t; 1t; 2t; 3t; 5t; 10t; 20t lub 50t is used for manual vertical lifting and lowering of loose loads at the workplace. The weight of the load during lifting must not exceed the permissible load capacity.

Properties:

- all parts of the lift made of steel,
- comfortable, light construction,
- standard chain length 3 m,
- 2 hooks: load and rotary in the body,
- double ratchet brake protecting against self-lowering of the load,
- hooks equipped with a molded safety latch,
- construction consists with the requirements specified in the Directive of the European Parliament and the Council of Europe 2006/42 / ES.

Use:

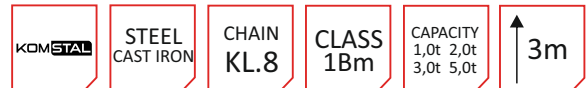
- a wide range of use when lifting and manipulating loads,
- for lifting and towing loads,
- for tensioning fences, extricating work, pulling out posts,
- as a lifting device for suspended mine tracks,
- for installation and manipulation work of various types,
- suitable for heavy duty use – in mines, smelting works, etc.,



Kod	WLL (t)	Lifting height (m)	Number of load chain falls	Operating force (N)	Diameter of the chain (mm)	Minimum height H (mm)	A (mm)	B (mm)	Weight kg/item
WLK 0,5	0,50	3,0	1	231	6	270	131	127	9,1
WLK 1	1,00	3,0	1	309	6	317	140	158	11,3
WLK 2	2,00	3,0	1	360	8	414	161	187	17,8
WLK 3	3,00	3,0	2	340	8	465	161	199	24,1
WLK 5	5,00	3,0	2	414	10	636	186	253	41,1
WLK 10	10,00	3,0	4	414	10	798	207	398	76,0
WLK 20	20,00	3,0	8	2x414	10	890	215	650	155,0
WLK 50	50,00	3,0	22	2x414	10	2578	406	962	224,0

TROLLEY WMK

The WMK trolley with 1t, 2t, 3t and 5t load capacity is intended for travelling along a horizontal crane track. It is designed for hanging hand lifts of suitable load capacity. The load must not exceed the permissible load capacity.



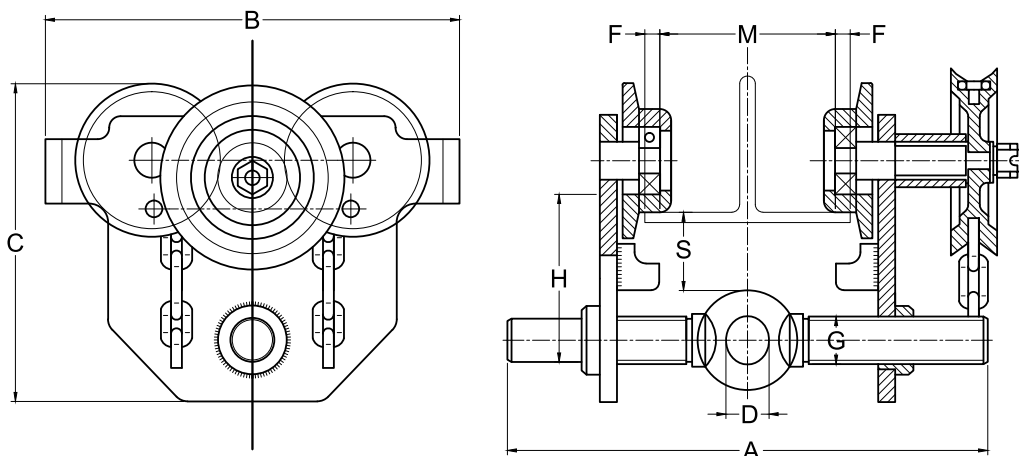
Properties:

- all parts of the trolley are made of steel and cast iron,
- simple construction and operation,
- the possibility of adapting to a specific width of the beam by adjusting the wheelbase,
- galvanized drive chains,
- equipped with safety shock absorbers,
- road wheels mounted on rolling bearings,
- can travel along profiles with a slanted flange (rolled "I" profiles), and also along profiles with a straight flange (profilu typu " IPE, HEA, HEB, HEM"),
- standard lifting height of 3,
- lifting range (t): 1,0; 2,0; 3,0; 5,0,
- construction consists with the requirements specified in the Directive of the European Parliament and the Council of Europe 2006/42 / ES.



Use:

- serves to move loads within the area of the crane track,
- as part of the service hoists for installation and maintenance work in technological facilities of all types.



Type		WMK 1,0	WMK 2,0	WMK 3,0	WMK 5,0
Capacity (kg)		1000	2000	3000	5000
Min. radius of curvature route (m)		1,0	1,2	1,3	1,4
Maneuver length of the chain (m)		3	3	3	3
Dimension (mm)	A	300	310	415	430
	B	245	275	330	375
	C	190	200	255	270
	D	30	40	45	52
	F	3	3	3	3
	G	30	36	42	48
	H	95	95	125	130
	S	43	30	43	40
Recommended profile width (mm)		50-220	66-220	74-220	90-220
Weight (kg)		12	18	30	42

TROLLEY WMK1

The WMK trolley with 10t and 20t load capacity is intended for travelling along a horizontal crane track. It is designed for hanging hand lifts of suitable load capacity. The load must not exceed the permissible load capacity.



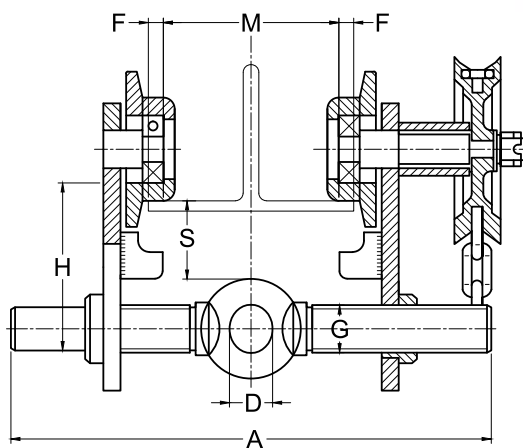
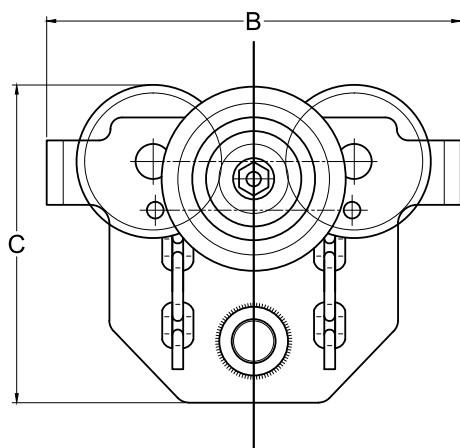
Properties:

- all parts of the trolley are made of steel and cast iron,
- simple construction and operation,
- the possibility of adapting to a specific width of the beam by adjusting the wheelbase,
- galvanized drive chains,
- equipped with safety shock absorbers,
- road wheels mounted on rolling bearings,
- can travel along profiles with a slanted flange (rolled "I" profiles), and also along profiles with a straight flange (profilu typu " IPE, HEA, HEB, HEM"),
- standard lifting height of 2,5,
- lifting range (t): 10,0; 20,0,
- construction consists with the requirements specified in the Directive of the European Parliament and the Council of Europe 2006/42 / ES.



Use:

- serves to move loads within the area of the crane track,
- as part of the service hoists for installation and maintenance work in technological facilities of all types.



Type		WMK 10,0	WMK 20,0
Capacity (kg)		10000	20000
Min. radius of curvature route (m)		2,0	3,5
Maneuver length of the chain (m)		2,5	2,5
Dimension(mm)	A (a/b)	406/508	501 / 604
	B	442	555
	C	396	498
	H	190	233
	S	45	58
	D	72	95
	G	110	135
Recommended profile width (mm)		124-203 / 124-305	136-203 / 136-305
Weight (kg) a/ b		88 / 94	165/174

BEAM CLAMPS ZZ



STEEL

CLASS
1Bm

CAPACITY
2 t 3,2 t
5 t 10 t



Beam clamps ZZ come in two types: with pin or with eye.
They serve for simple and rapid suspension of manual hoists
on beams or posts I (I, IPE, HEB, HEA) or T profile.

Properties:

- all parts of the trolley are made of steel, cap is made of plastic,
- solid and simple construction,
- simple construction and operation,
- minimum maintenance requirements,
- capacity: 2t, 3,2t; 5t i 10t,
- capacity (t): 2,0 ; 3,2 ; 5,0 ; 10,0 – version with an eye,
- capacity (t): 2,0 ; 3,2 ; 5,0 – version with a pin,
- construction consists with the requirements specified in the Directive of the European Parliament and the Council of Europe 2006/42 / ES.

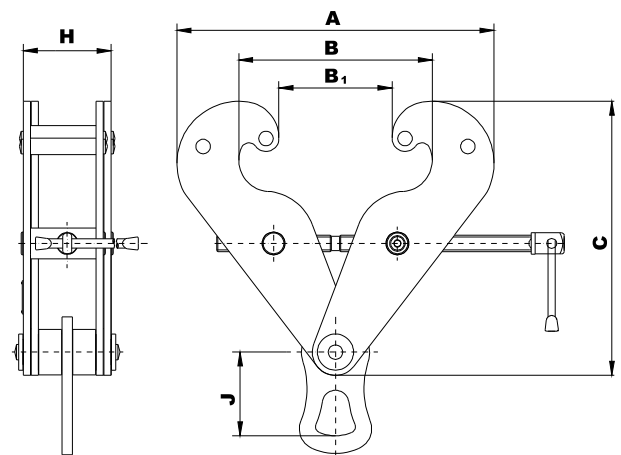
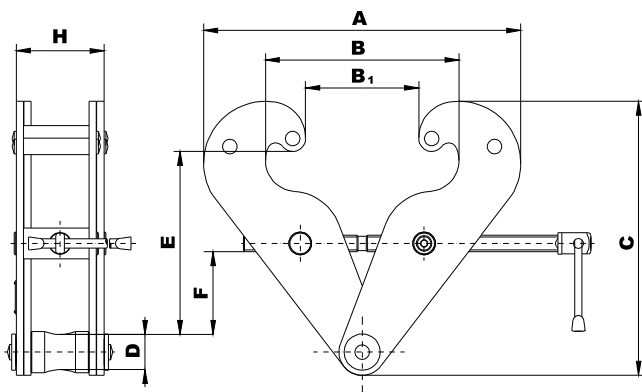
Use:

- used as an accessory for manual hoists made by the BRANO company, possibly also hoists of other brands
- suitable as portable tool during installation, repair or other work.



Beam clamp with pin

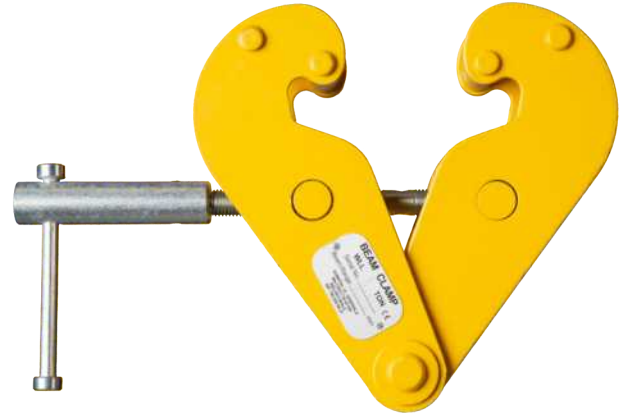
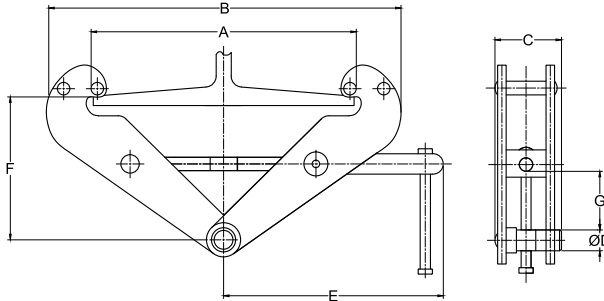
Beam clamp with eye



Type	Capacity (t)	Dimension (mm)									Weight (kg)	
		A max	B max	B1 max	C max	D	E min/max	F min	G	H max	Pin	Eye
ZZ-020	2	360	270	220	220	20	108-155	35	57,5	61	2,9	3,1
ZZ-032	3,2	415	300	235	285	34	145-190	55	81,0	85	6,5	7,0
ZZ-050	5	415	300	235	285	38	142-187	52	88,0	93	8,4	9,0
ZZ-100	10	415	300	235	285	-	-	-	120,0	109	-	15,5

BEAM CLAMPS ZZ CHS

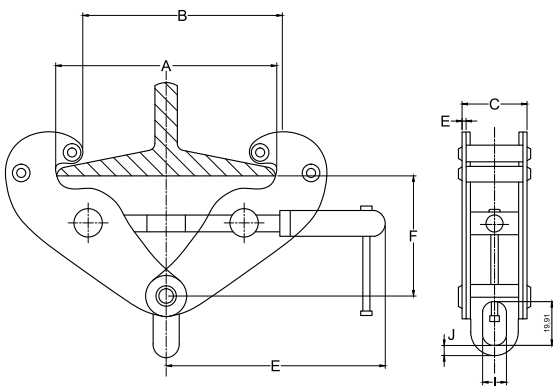
- ZZ-CHS type clamp beam with a pin is designed for cooperation with a hoisting device and mounted on a supporting structure,
- made of steel and plastic
- capacity: 1t, 2t, 3t; 5t i 10t,
- It can be used on beams of profiles - I, IPE, HEB, HEA, T.



Type	Capacity (t)	Width of the beam (mm)	Dimension(mm)									Weight (kg)
			A max	B min	B1 max	C	D	E	F min	F max	G	
ZZ-CHS 010	1	75-230	284	180	375	93	4	220	102	160	45	5
ZZ-CHS 020	2	75-230	284	180	375	101	6	220	102	160	45	6
ZZ-CHS 030	3	80-320	365	220	498	131	8	271	168	240	58	10
ZZ-CHS 050	5	80-320	365	220	498	139	10	271	168	240	58	12
ZZ-CHS 100	10	80-320	365	220	514	180	12	280	172	242	90	19

BEAM CLAMPS ZZ CHO

- ZZ-CHS type clamp beam with an eye is designed for cooperation with a hoisting device and mounted on a supporting structure,
- made of steel and plastic
- capacity: 1t, 2t, 3t; 5t i 10t,
- It can be used on beams of profiles - I, IPE, HEB, HEA, T.



Type	Capacity (t)	Width of the beam (mm)	Dimension (mm)									Weight (kg)
			A max	B min	B1 max	C	D	E	F min	F max	G	
ZZ-CHO 010	1	75-230	284	180	375	93	4	220	102	160	20	4
ZZ-CHO 020	2	75-230	284	180	375	101	6	220	102	160	22	5
ZZ-CHO 030	3	80-320	365	220	498	131	8	271	168	240	24	9
ZZ-CHO 050	5	80-320	365	220	498	139	10	271	168	240	30	11
ZZ-CHO 100	10	80-320	365	220	514	180	12	280	172	242	40	18

ELECTRIC HOIST WITH SINGLE PHASE MOTOR HHBS

Electric chain hoists are designed for vertical lifting and lowering, as well as for horizontal displacement of loads along a straight or curved beam (running tracks, cranes, gantry cranes, gate winches).



Properties:

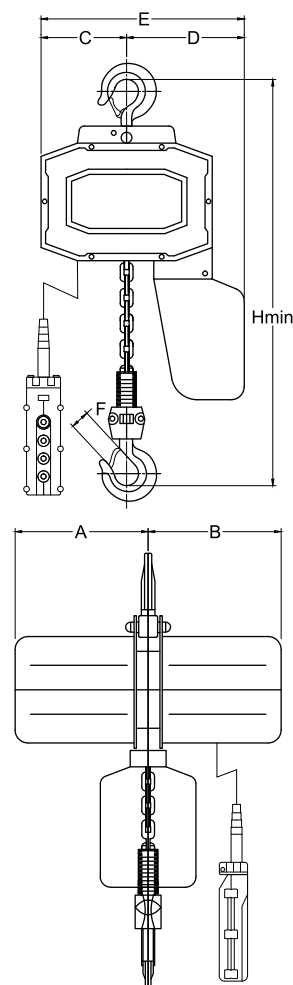
- single-phase motor, 220V voltage,
- all parts of the hoist are made of steel, light body made of die-cast aluminum,
- easy and convenient operation, simple and solid construction,
- • 2 rotary hooks - cargo and in the body, made of alloy steel, resistant to stretching,
- low voltage control,
- safety switch,
- engine equipped with a system protecting against overheating,
- electronic overload limiter, preventing excessive chain tension,
- friction clutch - adjusting the engine to idle, preventing damage,
- body protection class IP 55, motor IP-54,
- the possibility of moving the chain (no load)),
- brake safety against unintentional lowering of a load,
- chain storage container that provides protection against contamination with dirt and dust,
- working temperature -25°C - 40°C,
- capacity(t): 0,25; 0,5; 1,0; 2,0;3,0,
- standard lifting height 3 m,
- construction consists with the requirements specified in the Directive of the European Parliament and the Council of Europe 2006/42 / ES.



Use:

- hoist is used especially in construction, mining and all over there, the need to manipulate the weights,
- it is used for lifting and towing weights.

Type	HH-BS025	HH-BS05S	HH-BS05	HH-BS10	HH-BS20	HH-BS30
Nośność [t]	0,25	0,5	0,5	1	2	3
Lifting height [m]	3	3	3	3	3	3
Lifting speed [m/min]	8	4	7	6	3	2
Engine power [kW]	0,45	0,45	0,8	1,2	1,2	1,2
Power	1P/220V50Hz	1P/220V50Hz	1P/220V50Hz	1P/220V50Hz	1P/220V50Hz	1P/220V50Hz
Control voltage [V]	24V	24V	24V	24V	24V	24V
Degree of isolation	F	F	F	F	F	F
Efficiency	40%	40%	40%	40%	40%	40%
Load chain	5x15	5x15	7x21	7x21	7x21	7x21
Number of load chains	1	2	1	1	2	3
Work intensity group	M3	M3	M3	M3	M3	M3
Test load [t]	0,31	0,625	0,625	1,25	2,5	3,75
Chain length [m]	2,5	2,5	2,5	2,5	2,5	2,5
Weight netto [kg]	22	25	55	60	65	70
Weight gain per 1 meter lifting [kg]	0,5	1,1	1,1	1,1	2,2	3,3
Min distance between hooks [mm]	430	450	500	520	630	710
Dimension						
A mm	210	210	245	245	245	245
B mm	210	210	245	245	245	245
C mm	116	92	158	158	124	124
D mm	104	128	142	142	176	176
E mm	262	262	350	350	350	350
F mm	24	24	34	34	40	45



ELECTRIC HOIST WITH THREE PHASE WITH A DOUBLE SPEED HHBT

Electric chain hoists are designed for vertical lifting and lowering, as well as for horizontal displacement of loads along a straight or curved beam (running tracks, cranes, gantry cranes, gate winches).



Properties:

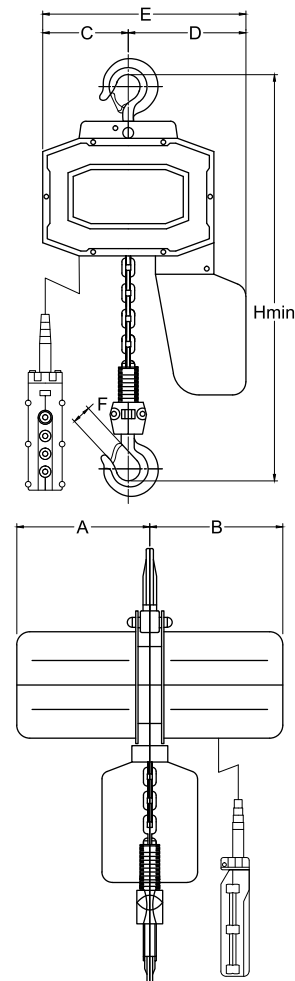
- three-phase motor, voltage, 380V,
- all parts of the hoist are made of steel, light body made of die-cast aluminum,
- easy and convenient operation, simple and solid construction,
- • 2 rotary hooks - cargo and in the body, made of alloy steel, resistant to stretching,
- low voltage control,
- safety switch,
- engine equipped with a system protecting against overheating,
- electronic overload limiter, preventing excessive chain tension,
- friction clutch - adjusting the engine to idle, preventing damage,
- body protection class IP 55, motor IP-54,
- the possibility of moving the chain (no load)),
- brake safety against unintentional lowering of a load,
- chain storage container that provides protection against contamination with dirt and dust,
- working temperature -25°C - 40°C,
- capacity(t): 0,25; 0,5; 1,0; 2,0;3,0,
- standard lifting height 3 m,
- construction consists with the requirements specified in the Directive of the European Parliament and the Council of Europe 2006/42 / ES.



Use:

- hoist is used especially in construction, mining and all over there, the need to manipulate the weights,
- it is used for lifting and towing weights.

TYPE	HH-BT05	HH-BT10	HH-BT20	HH-BT30
Nośność [t]	0,5	1	2	3
Lifting height [m]	3	3	3	3
Lifting speed [m/min]	7 / 2,3	6 / 2	3 / 1	2 / 0,7
Engine power [kW]	0,8 / 0,27	1,2 / 0,4	1,2 / 0,4	1,2 / 0,4
Power	3P/380V50Hz	3P/380V50Hz	3P/380V50Hz	3P/380V50Hz
Control voltage [V]	24V	24V	24V	24V
Degree of isolation	F	F	F	F
Efficiency	40%	40%	40%	40%
Load chain	7x21	7x21	7x21	7x21
Number of load chains	1	1	2	3
Work intensity group	M4	M5	M4	M4
Test load [t]	0,625	1,25	2,5	3,75
Chain length [m]	2,5	2,5	2,5	2,5
Weight netto [kg]	53	58	63	68
Weight gain per 1 meter lifting [kg]	1,1	1,1	2,2	3,3
Min distance between hooks [mm]	500	520	630	710
Dimension				
A mm	245	245	245	245
B mm	245	245	245	245
C mm	158	158	124	124
D mm	142	142	178	178
E mm	350	350	350	350
F mm	34	34	40	45



ELECTRIC HOIST WITH SINGLE SPEED HHB

Electric chain hoists are designed for vertical lifting and lowering, as well as for horizontal displacement of loads along a straight or curved beam (running tracks, cranes, gantry cranes, gate winches).



Properties:

- single speed, voltage 230 or 380V,
- all parts of the hoist are made of steel, light body made of die-cast aluminum,
- easy and convenient operation, simple and solid construction,
- 2 rotary hooks - cargo and in the body, made of alloy steel, resistant to stretching,
- low voltage control,
- safety switch,
- engine equipped with a system protecting against overheating,
- electronic overload limiter, preventing excessive chain tension,
- friction clutch - adjusting the engine to idle, preventing damage,
- body protection class IP 55, motor IP-54,
- the possibility of moving the chain (no load),
- brake safety against unintentional lowering of a load,
- chain storage container that provides protection against contamination with dirt and dust,
- working temperature -25°C - 40°C,
- capacity(t): 0,25; 0,5; 1,0; 2,0; 3,0;5,0,
- standard lifting height 3 m,
- construction consists with the requirements specified in the Directive of the European Parliament and the Council of Europe 2006/42 / ES.

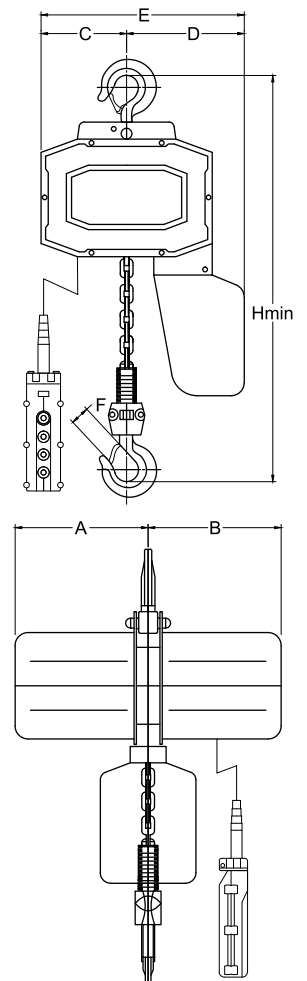


(opcjonalnie)

Use:

- hoist is used especially in construction, mining and all over there, the need to manipulate the weights,
- it is used for lifting and towing weights.

TYPE	HH-B025	HH-B05	HH-B10	HH-B20	HH-B30	HH-B30S	HH-B50
Nośność [t]	0,25	0,5	1	2	3	3	5
Lifting height [m]	3	3	3	3	3	3	3
Lifting speed [m/min]	8	7	7	3,5	2,3	4	2,6
Engine power [kW]	0,45	0,8	1,6	1,6	1,6	3,0	3,0
Power	3P/230V50Hz	3P/230V50Hz	3P/230V50Hz	3P/380V50Hz	3P/380V50Hz	3P/380V50Hz	3P/380V50Hz
Control voltage [V]	24V	24V	24V	24V	24V	24V	24V
Degree of isolation	F	F	F	F	F	F	F
Efficiency	40%	40%	40%	40%	40%	40%	40%
Load chain	5x15	7x21	7x21	7x21	7x21	9x27	9x27
Number of load chains	1	1	1	2	3	2	3
Work intensity group	M4	M4	M4	M4	M4	M4	M4
Test load [t]	0,31	0,625	1,25	2,5	3,75	3,75	6,25
Chain length [m]	2,5	2,5	2,5	2,5	2,5	2,5	2,5
Weight netto [kg]	25	50	55	60	65	78	100
Weight gain per 1 m lifting [kg]	0,55	1,1	1,1	2,2	3,3	3,5	5,3
Min distance between hooks [mm]	430	500	520	630	710	800	850
Dimension							
A mm	210	245	245	245	245	265	265
B mm	210	245	245	245	245	265	265
C mm	116	158	158	124	124	127	127
D mm	104	142	142	176	176	203	203
E mm	262	450	350	350	350	393	393
F mm	50	60	60	61	62	73,8	73,8



ELECTRIC TROLLEY DC-A

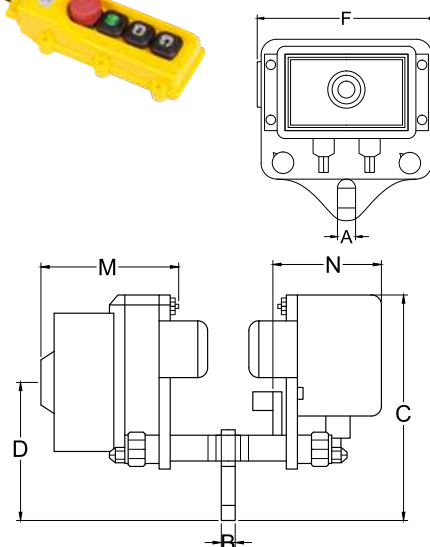
The electric trolley for hoists is used for accurate positioning and easy movement of suspended loads along the runner beam. The trolley moves over the beam by pushing the suspended weight.

Properties:

- minimum maintenance requirements,
- quick and easy assembly of the trolley,
- the possibility of adapting to a specific width of the beam,
- the trolley is adapted for mounting on straight profiles of IPE, HEB, HEA, HEM type and on INP slant profiles,
- it is adapted for driving on a straight track and with a slight turn,
- maximum protected against corrosion,
- precise positioning of the load.

Type	DC-A-1,0	DC-A-2,0	DC-A-3,0	DC-A-4,0
Capacity [t]	1	2	3	4
The speed of the trolley [m/min]	20	20	15	15
Engine power [w]	200	300	400	400
The width between the rollers[mm]	74 - 124	74 - 124	102 - 152	102 - 152
Control voltage [V]	380	380	380	380
Full load current [A]	1,1	1,3	1,8	1,8
Control power voltage [V]	24	24	24	24
A mm	396	396	442	442
B mm	266	270	330	334
C mm	264	264	340	342
D mm	145	145	180	182
Weight netto	34	354	68	70

KOMSTAL	STEEL	V 15 / 20 m/min	CAPACITY 1t 2t 3t 4t
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ELECTRIC TROLLEY DOUBLE SPEED DC-A2

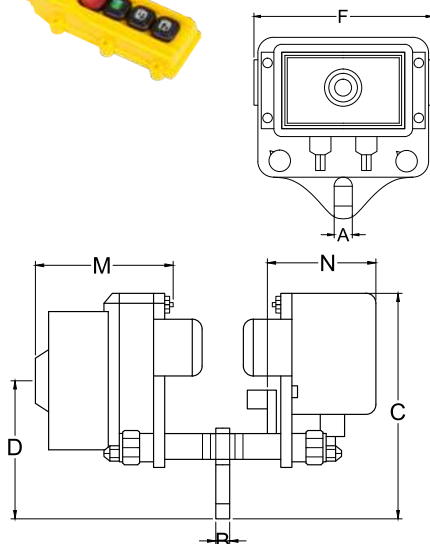
The electric trolley for hoists is used for accurate positioning and easy movement of suspended loads along the runner beam. The trolley moves over the beam by pushing the suspended weight.

Properties:

- minimum maintenance requirements,
- quick and easy assembly of the trolley,
- the possibility of adapting to a specific width of the beam,
- the trolley is adapted for mounting on straight profiles of IPE, HEB, HEA, HEM type and on INP slant profiles,
- it is adapted for driving on a straight track and with a slight turn,
- maximum protected against corrosion,
- precise positioning of the load.

Type	DC-A2-1,0	DC-A2-2,0	DC-A2-3,0	DC-A2-4,0
Capacity [t]	1	2	3	4
The speed of the trolley [m/min]	20 / 6,7	20 / 6,7	15 / 5	15 / 5
Engine power [w]	0,3 / 0,1	0,3 / 0,1	0,4 / 0,13	0,4 / 0,13
The width between the rollers[mm]	74 - 124	74 - 124	102 - 152	102 - 152
Control voltage [V]	380	380	380	380
Full load current [A]	1,1	1,3	1,8	1,8
Control power voltage [V]	24	24	24	24
Power	3P/380V50Hz	3P/380V50Hz	3P/380V50Hz	3P/380V50Hz
Dimension	A mm	496	542	542
	B mm	266	330	334
	C mm	264	340	342
	D mm	145	180	182
Weight netto	36	38	68	73

KOMSTAL	STEEL	V 15 / 20 m/min	CAPACITY 1t 2t 3t 4t
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HOIST ELECTRIC CHAIN INTEGRATED WITH A TROLLEY SHH

Electric chain hoists are designed for vertical lifting and lowering, as well as for horizontal displacement of loads along a straight or curved beam (running tracks, cranes, gantry cranes, gate winches).



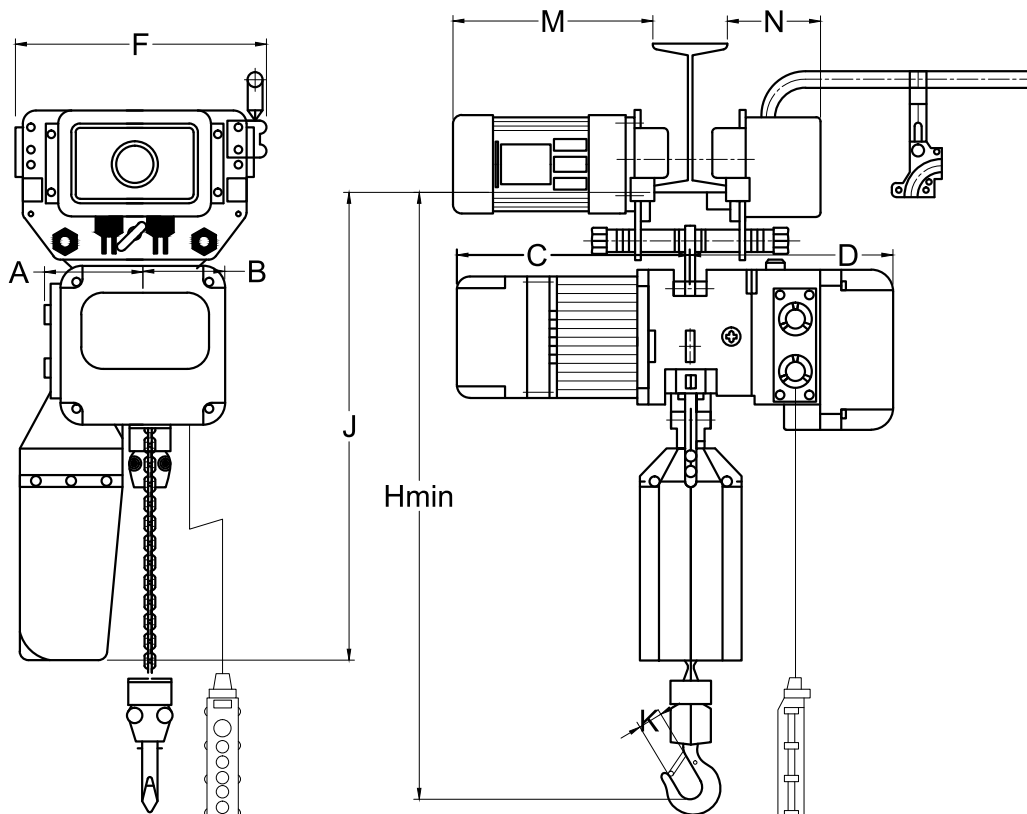
Properties:

- single-phase motor (voltage 230V) or three-phase motor (voltage 380V),
- all parts of the hoist are made of steel, light body made of die-cast aluminum,
- easy and convenient operation, simple and solid construction,
- 2 rotary hooks - cargo and in the body, made of alloy steel, resistant to stretching,
- low voltage control,
- safety switch,
- the hoist has an overload monitoring mechanism to prevent the negative effects caused by overloading,
- the hook has an automatic locking mechanism that prevents slipping of the suspended load,
- the electric motor has thermal protection in the event of excessive temperature rise due to prolonged use; this mechanism cuts off the power supply of the motor, thus protecting it against damage,
- the hoist is equipped with a limiter of the lower and upper position as well as an emergency stop, which allows the operator to cut off the power supply in case of danger,,
- friction clutch - adjusting the engine to idle, preventing damage,
- body protection class IP 55, motor IP-54,
- the possibility of moving the chain (no load)),
- brake safety against unintentional lowering of a load,
- chain storage container that provides protection against contamination with dirt and dust,
- working temperature -25°C - 40°C,
- capacity(t): 0,25; 0,5; 1,0; 2,0; 3,0;5,0,
- standard lifting height 3 m,
- construction consists with the requirements specified in the Directive of the European Parliament and the Council of Europe 2006/42 / ES.



Use:

- hoist is used especially in construction, mining and all over there, the need to manipulate the weights,
- it is used for lifting and towing weights.



Type	Capacity (t)	Classification FEM/ISI	Classification FEM/ISI	Lifting speed (m/min)	Engine hoist (Kw)	Travel speed (m/min)	Trolley engine (Kw)	Beam flange	Dimensions of the load chain(mm)	Lifting links	Weigh netto with load chain lenght 3m (kg)
SHH-AM-003-1S	0,25	3m/M6	50%	7,0	0,9	13,5	0,2	135	5x15	1	71
SHH-AM-003-1D	0,25	3m/M6	33,4%/16,6%	7,0 / 2,3	0,9 / 0,3	20 / 6,7	0,2 / 0,067	135	5x15	1	95
SHH-AM-005-1S	0,50	2m/M5	40%	7,6	0,9	13,5	0,2	135	6,3x19	1	72
SHH-AM-005-1D	0,50	2m/M5	26,6%/13,4%	7,6 / 2,5	0,9 / 0,3	20 / 6,7	0,2 / 0,067	135	6,3x19	1	96
SHH-AM-010-1S	1,00	2m/M5	40%	5,0	1,1	13,5	0,2	135	8x24	1	76
SHH-AM-010-1D	1,00	2m/M5	26,6%/13,4%	5,0 / 1,7	1,1 / 0,37	20 / 6,7	0,2 / 0,067	135	8x24	1	100
SHH-AM-020-1S	2,00	2m/M5	40%	2,5	1,1	13,5	0,4	135	8x24	2	97
SHH-AM-020-1D	2,00	2m/M5	26,6%/13,4%	2,5 / 0,85	1,1 / 0,37	20 / 6,7	0,4 / 0,13	135	8x24	2	111
SHH-AM-030-1S	3,00	2m/M5	40%	6,0	3,0	13,5	0,4	140	11,2x34	1	154
SHH-AM-030-1D	3,00	2m/M5	26,6%/13,4%	6,0 / 2,0	3,0 / 1,0	18 / 6	0,4 / 0,13	140	11,2x34	1	180
SHH-AM-050-1S	5,00	2m/M5	40%	3,0	3,0	13,5	0,75	142	11,2x34	2	192
SHH-AM-050-1D	5,00	2m/M5	26,6%/13,4%	3,0 / 1,0	3,0 / 1,0	18 / 6	0,75 / 0,25	142	11,2x34	2	222

Type	Capacity (t)	H min	A	B	C	D	F	J	K	M	N
SHH-AM-003-1S	0,25	398	142	102	319	273	340	650	31	310	135
SHH-AM-003-1D	0,25	398	142	102	329	273	340	650	31	336	135
SHH-AM-005-1S	0,50	398	142	102	319	273	340	650	31	310	135
SHH-AM-005-1D	0,50	398	142	102	319	273	340	650	31	336	135
SHH-AM-010-1S	1,00	460	142	102	319	273	340	650	38	310	135
SHH-AM-010-1D	1,00	460	142	102	349	273	340	650	38	336	135
SHH-AM-020-1S	2,00	650	185	59	319	273	340	650	45	312	135
SHH-AM-020-1D	2,00	650	185	59	349	273	340	650	45	338	135
SHH-AM-030-1S	3,00	525	185	165	358	336	370	810	45	314	140
SHH-AM-030-1D	3,00	525	185	165	471	336	370	810	45	340	140
SHH-AM-050-1S	5,00	860	240	110	358	336	410	850	61	360	142
SHH-AM-050-1D	5,00	860	240	110	471	336	410	850	61	410	142



WIRE ROPE HOIST ZLD



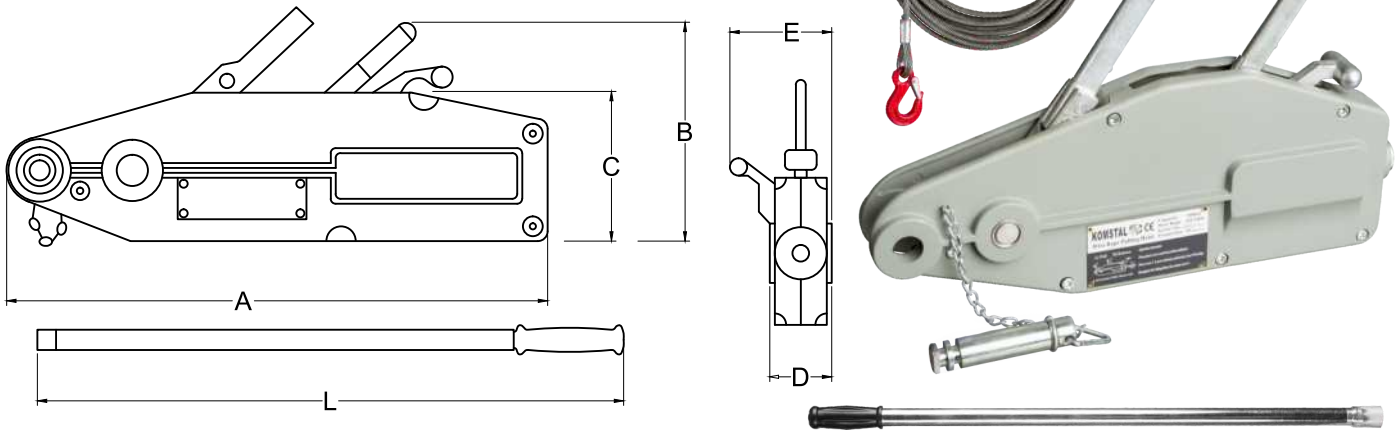
Wire rope hoist with manual lever drive for lifting and pulling in any direction. Available in three capacities: 0.8t, 1.6t, 3.2t and 5.4t standard with 20 m rope.

Properties:

- capacity from 800 kg to 5400 kg,
- light manual pulling device - simple and safe to use,
- high strength,
- cover made of corrosion-resistant aluminum alloy,
- steel clamping jaws,
- for use in horizontal, vertical and angled positions,
- standard 20-meter steel wire with a hook,
- lever enabling trouble-free assembly of the steel wire,
- anchor providing numerous connection possibilities,
- overload protection in the front lever,
- parallel fastening system ensures an evenly distributed grip at a lower force, resulting in less rope wear,
- fulfils the requirements of standard 2006/42/WE.

Use:

- wide range of use particularly in construction, agriculture, forestry, transport,
- for lifting and towing loads in all directions,
- for extricating items, demolishing buildings,
- for putting up posts, installing electrical wiring, tensioning returnable rope car pulleys in logging,
- for installation and manipulation work of all types,



Type	ZLD 800	ZLD 1600	ZLD 3200	ZLD 5400
Capacity (kg)	800	1600	3200	5400
Rated power forward (N)	341	400	438	850
Rated forward travel (forward and reverse travel)	> 52	> 55	> 28	> 25
The diameter of the rope (mm)	8,3	11	16	20
Rope safety factor Capacity	5	5	5	5
Security factor and static lifting capacity	4	4	4	4
Maximum load (kg)	1200	2400	4000	8100
Weight (kg)	6,1	12	23	58
Maximum dimension altogether	a	426	545	660
	b	238	284	325
	c	64	97	116
L1 (cm)	-	692	692	692
L2 (cm)	-	1200	1200	1200
L3 (cm)	800	-	-	-

ROPE WINCH RRZ

KOMETAL	ROPE 10m	STEEL CAST IRON	HANDLE PVC	CLASS 1Bm	CAPACITY 0,545 t 0,825 t 1,2t
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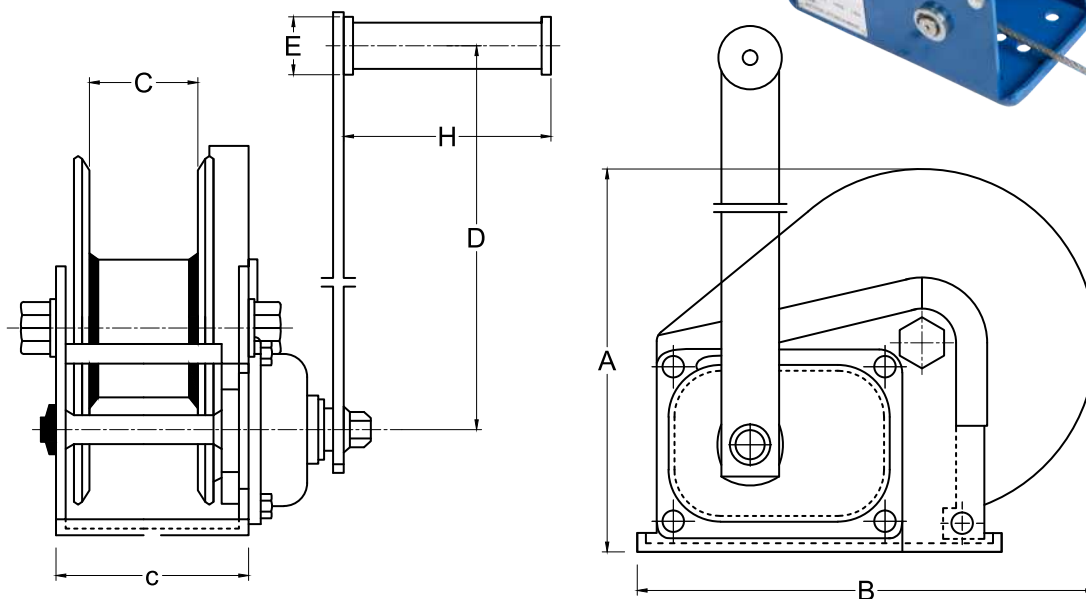
RRZ rope hoist load capacity 545, 825 and 1200 kg is intended only for operations of pulling cargo moving on wheels or rollers.

Properties:

- the main parts of the winch are made of steel and cast iron, surface of the handle of a PVC crank,
- simple, light construction,,
- easy-to-use,
- anti-corrosion protection of the surface by galvanizing,
- prepared for assembly on the structure,
- minimum maintenance demands,
- tworking temperature from -10° to 50°C,
- winch construction consistent with the requirements specified in the Directive of the European Parliament and the Council of Europe 2006/42 / ES.

Use:

- for manual lifting and pulling weights,
- as a service hoist for installation and maintenance work in technological facilities of all types,
- for loading cars or boats for trailers,
- for manipulation activities on small boats (hoisting the sails, etc.).



Typ		RRZ 0,545	RRZ 0,825	RRZ 1,2
Uciąg (kg)		545	825	1200
Średnica liny (mm)		4,0	4,5	5,0
Długość liny (m)		10	10	10
Wymiary	A	156	203	216
	B	184	256	293
	C	88	107	127
	D	210	319	319
	F	272	283	305
	G	51	60	63
	H	109	109	109
Masa (kg)		4,6	9,0	11,4



PVC PLATFORM CABLES
10*1 200M
NO.1-1
1807-0672

WARNING
Do not use for lifting
overweight
overheight
overwidth
overlength

SWL 5000 KG
Mechanical Jack

RACK JACKS, HYDRAULIC CYLINDERS

RACK JACK 15-00



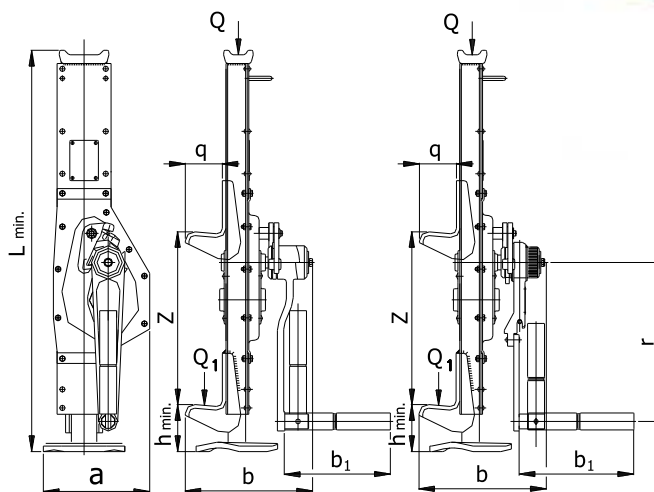
The rack jack 15-00 is designed for lifting or moving loads in any direction. It is used as a universal tool for all kinds of construction, renovation and assembly works.

Properties:

- All parts of the jack are manufactured from steel and cast iron, the brake liners from hardened woven fabric.
- easy and convenient service,
- simple and solid construction,
- lifting (stretching) through the head or side foot,
- reliably holds the load in any position using the lock built into the crank,
- increased operating comfort in the version with the ratchet handle ("RK" symbol) and ratchet-crank lever ("RKP" symbol)
- low maintenance requirements,
- casing of the transmission (for lifting capacity from 2,5t – 10t) has lubrication plug allowing transmission lubrication without removal of casing,
- foot has an opening – simplifies use of rack jack in horizontal position when pushing apart object above head,
- the lifter's foot can be easily attached in the required position by using a screw without need to use a helper,
- construction consists with the requirements specified in the Directive of the European Parliament and the Council of Europe 2006/42 / ES.

Use:

- for lifting and manipulation with load,
- for assembly work of all kind.



Type	Capacity (t)		Operating force on crank (N)	Dimensions (mm)								Weight (kg)
	Q1	Q2		a	b	b1	q	h min.	l min.	r	Z	
15-00 -2,5	2,5	1,75	380	175	200	200	60	75	735	250	345	15
15-00-RK-2,5	2,5	1,75	380	175	200	200	60	75	735	250	345	16
15-00-RKP-2,5	2,5	1,75	380 ¹ 230 ²⁾	175	230	200	60	75	735	250	345	27
15-00 -5,0	5	3,5	550	200	235	200	80	85	765	300	360	22
15-00-RK-5,0	5	3,5	550	200	210	200	80	85	765	300	360	23
15-00-RKP-5,0	5	3,5	550 ¹⁾ 330 ²⁾	200	250	200	80	85	765	300	360	24
15-01-10	10	7	540	245	290	200	95	90	770	300	320	38
15-01-RK-10	10	7	540	245	280	200	95	90	770	300	320	39
15-01-RKP-10	10	7	540 ¹⁾ 320 ²⁾	245	305	200	95	90	770	300	320	40
15-01-16	16	11	730	280	315	280	92	160	900	400	320	65
Z23-20	20	14	800	325	330	280	85	150	960	400	300	90

1) – Handle in position "crank" 2) – Handle in position "lever"

RACK JACK 15-00-VK



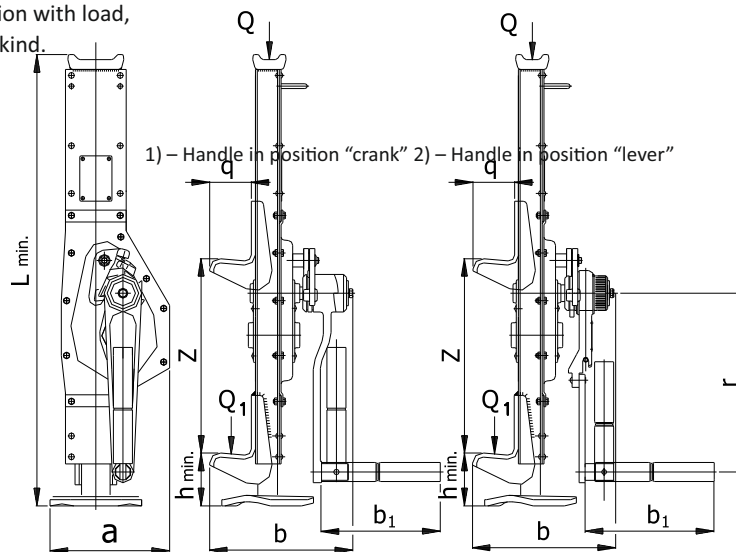
The rack jack 15-00 is designed for lifting or moving loads in any direction. It is used as a universal tool for all kinds of construction, renovation and assembly works.

Properties:

- all parts of the jack are manufactured from steel and cast iron, the brake liners from hardened woven fabric.
- the possibility of adjusting the height of the side foot,
- easy and convenient service,
- simple and solid construction,
- lifting (stretching) through the head or side foot,
- reliably holds the load in any position using the lock built into the crank,
- increased operating comfort in the version with the ratchet handle ("RK" symbol) and ratchet-crank lever ("RKP" symbol)
- low maintenance requirements,
- possibility of setting 7 positions of the side foot,
- casing of the transmission (for lifting capacity from 2,5t – 10t) has lubrication plug allowing transmission lubrication without removal of casing,
- foot has an opening – simplifies use of rack jack in horizontal position when pushing apart object above head,
- the lifter's foot can be easily attached in the required position by using a screw without need to use a helper,
- construction consists with the requirements specified in the Directive of the European Parliament and the Council of Europe 2006/42 / ES.

Use:

- for lifting and manipulation with load,
- for assembly work of all kind.



Type	Capacity (t)		Operating force on crank (N)	Dimensions (mm)								Weight (kg)
	Q1	Q2		a	b	b1	q	h min.	l min.	r	Z	
15-00-VK-2,5	2,5	1,75	380	175	210	200	60	75	735	250	345	16,4
15-00-VK-RK-2,5	2,5	1,75	380	175	250	200	60	75	735	250	345	17,2
15-00-VK-RKP-2,5	2,5	1,75	380 230	175	265	200	60	75	735	250	345	16,3
15-00-VK-5,0	5,0	3,5	550	200	240	200	70	85	765	300	360	24,4
15-00-VK-RK-5,0	5,0	3,5	550	200	250	200	70	85	765	300	360	24,9
15-00-VK-RKP-5,0	5,0	3,5	550 330	200	285	200	70	85	765	300	360	25,5
15-01-VK-10	10,00	7,00	540	245	315	200	80	140	795	300	345	41,1
15-01-VK-RK-10	10,00	7,00	540	245	305	200	80	140	795	300	345	41,7
15-01-VK-RKP-10	10,00	7,00	540 320	245	335	200	80	140	795	300	345	42,3
15-01-VK-16	16,00	11,00	730	280	315	280	77	160	900	400	320	65
Z23 VK-20	20,00	14,00	800	325	330	280	77	150	960	400	300	90

1) – Handle in position "crank" 2) – Handle in position "lever"

CONTAINER RACK JACK 15-00-CON-W



Modified rack jack for containers - 2 types and three lengths of rack. It is intended for installation in structures for manual lifting and start-up of moving structures dies (eg flaps or container covers, locks of water tanks, sewage treatment plant grates, etc.).

Properties:

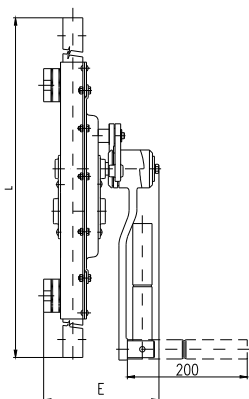
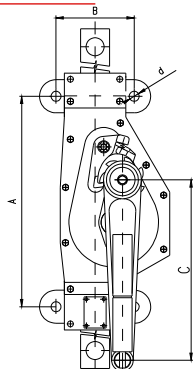
- all parts of the jack are manufactured from steel and cast iron,
- simple and solid construction,
- standard 2 types, 3 lengths of the toothed rack,
- standard version („CON”) allows flexible adjustment and attachment of the rack jack to the structure,,
- wall version of rack jack („CON-W”) it is adapted to the assembly using built-in holders and openings at the end of the toothed bar, adjusted to the human capacity of the control force on the hand crank,
- capacity (t): 2,5; 5,0; 10,0t,
- construction consistent with the requirements specified in the Directive of the European Parliament and the Council of Europe 2006/42 / ES.

Use:

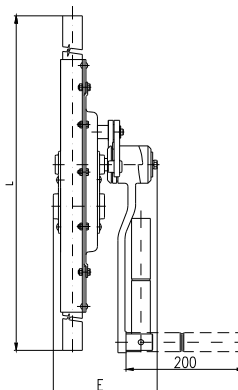
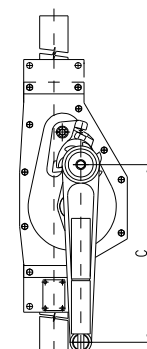
- for installation into machine systems for the purpose of lifting mobile structure components
- examples of use – for lifting container lids and roofs, manipulating water tank sluice-gates, lifting screens or stop-logs in waste water treatment plants, cable car tension stations
- many other uses for manual lifting and lowering



Rack Jack CON-W



Rack Jack CON



Type	Capacity (t)	Operating force on crank (N)	Dimensions (mm)									Height	Weight (kg)
			L	A	a	b	b1	c	d	d1	r		
15-00-CON-W-2,5	2,5	380	660	360	320	180	200	80	25	13	250	345	12,8
15-00-CON-W-2,5	2,5	380	970	360	320	180	200	80	25	13	250	580	15,2
15-00-CON-W-2,5	2,5	380	1200	360	320	180	200	80	25	13	250	850	17,0
15-00-CON-W-5	5	550	690	427	350	190	200	80	30	13	300	360	22,1
15-00-CON-W-5	5	550	970	427	350	190	200	80	30	13	300	605	25,6
15-00-CON-W-5	5	550	1200	427	350	190	200	80	30	13	300	850	28,5
15-00-CON-W-10	10	540	690	580	350	225	200	80	30	13	300	320	35,0
15-00-CON-W-10	10	540	970	580	350	225	200	80	30	13	300	615	40,0
15-00-CON-W-10	10	540	1200	580	350	225	200	80	30	13	300	850	45,0
15-00-CON-2,5	2,5	380	660	655	-	-	200	-	-	-	250	345	11,4
15-00-CON-2,5	2,5	380	970	655	-	-	200	-	-	-	250	580	13,8
15-00-CON-2,5	2,5	380	1200	655	-	-	200	-	-	-	250	850	15,6
15-00-CON-5	5	550	690	662	-	-	200	-	-	-	300	360	19,0
15-00-CON-5	5	550	970	662	-	-	200	-	-	-	300	605	22,5
15-00-CON-5	5	550	1200	662	-	-	200	-	-	-	300	850	25,4
15-00-CON-10	10	540	690	670	-	-	200	-	-	-	300	320	33,0
15-00-CON-10	10	540	970	670	-	-	200	-	-	-	300	615	38,0
15-00-CON-10	10	540	1200	670	-	-	200	-	-	-	300	850	43,0

RACK JACK (RAILWAY - TRACK) CH-GHW



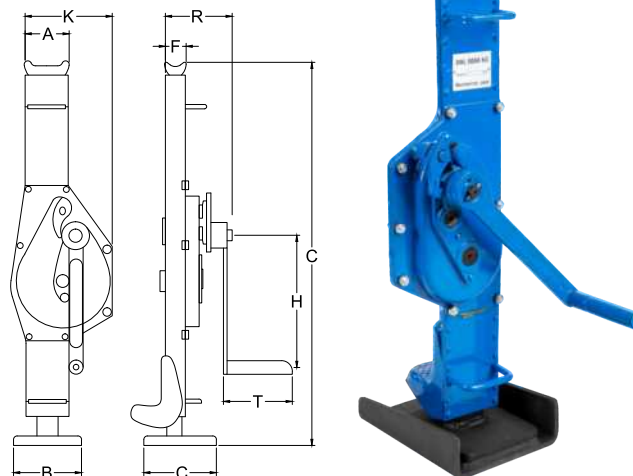
The rack jack CH-GHW is designed for lifting or moving loads in any direction. It is used as a universal tool for all kinds of construction, renovation and assembly works.

Properties:

- all parts of the jack are manufactured from steel,
- the possibility of adjusting the height of the side foot,
- easy and convenient operation, simple, durable and solid construction,
- in case of oil leakage no loss of speed and lift height,
- compact design and folding crank - convenient for maintenance,
- increasing the comfort of work in the version of the crank handle with the ratchet symbol "RK" (optional),
- two adjustable levels of the claw and increased lifting range,
- capacity (t): 5t; 10t,
- construction consists with the requirements specified in the Directive of the European Parliament and the Council of Europe 2006/42 / ES.

Use:

- for lifting and manipulation with load,
- for assembly work of all kind.



Type	Capacity (t)	Rotation of the crank when lifting a full load (N)	Dimensions (mm)												Weight (kg)
			A	B	C	D	E	F	G	H	K	R	S	T	
CH-GHW 1,5	1,5	150	81	100	600-900	60-360	55	46	110	225	163	119	175	113	13,5
CH-GHW 3,0	3,0	280	83	130	730-1090	70-425	60	45	140	249	197	140	235	127	21,2
CH-GHW 5,0	5,0	280	108	140	730-1075	80-425	71	68	170	275	189	155	217	127	28,5
CH-GHW 10	10,0	560	124	140	800-1210	85-495	86	76	170	300	250	185	187	248	46,8
CH-GHW 16	16,0	640	135	150	800-1120	95-415	78	85	180	300	275	210	210	250	65,0
CH-GHW 20	20,0	640	135	150	860-1180	100-420	78	85	180	380	275	220	210	250	75,0

MECHANICAL WEDGE MK4

Mechanical wedge MK4 is a device designed to work on the felling of trees, especially of large dimensions. Mechanical wedge consists of steel casing, where the geared transmission is placed. Outlet pinion of transmission moves cog rack with stretching wedge. This wedge during forward movement spreads flexible tongues screwed to casing. Operating is provided by handle lever with reverse mechanism. During forward movement the ratchet gear is operating, during reverse movement it is necessary the ratchet pawl put out of operation.

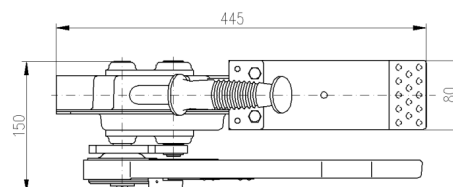
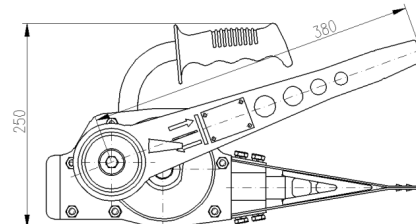
Properties:

- mechanical wedge MK4 is made of steel and cast iron, grip of handle is made of plastic,
- solid, massive construction,
- simple control of the hand lever,
- minimum maintenance demands,
- construction consists with the requirements specified in the Directive of the European Parliament and the Council of Europe 2006/42 / ES.

Use:

- simplifies cutting during logging,
- regulates the fall of the tree,
- enables round timber to be hewed.

The power of control	350N
Maximum perpendicular operating force	60kN
Weight	8,5 kg
Working temperature	from -20° to 50°C



HYDRAULIC CYLINDERS

Hydraulic cylinders are devices that allow effective load transfer. They meet the standards contained in the Machinery Directive and have the CE certification mark. The materials from which they were made are resistant to both external factors and all kinds of mechanical damage. They are also characterized by solidity and extremely durable construction. They can be used effectively for many years.

Thanks to hydraulic lifts, you can lift a variety of heavy objects. This is possible due to the presence of a liquid which, when pushed out, lifts one part of the lift so that the object can be raised.

Hydraulic jacks in the offer are characterized by a simple, massive construction and functional interface that allows them to be controlled in a simple way. They are also characterized by extraordinary durability - they allow you to move and maneuver with all kinds of loads. They find their application in heavy industry and construction.

LOW HEIGHT HYDRAULIC CYLINDERS

- flat cylinders with mechanical interlock,
- cylinder body and piston made of heat-hardened alloy steel,
- convenient for use in limited spaces,
- backstop to mechanically support the load,
- one-sided action, return under load,
- synthetic coatings that increase corrosion resistance and reduce friction, which ensure even operation of the actuator, allowing lateral loads to be transferred to 3% of the nominal lifting capacity of the actuator without seizing.

Type	Capacity [t]	Stroke [mm]	Oil capacity [cm ³]	Minimum height [mm]	Weight [kg]
SHD 10P	10	10	16	48	1,5
SHD 20P	20	11	34	56	2,6
SHD 30P	30	13	55	60	3,9
SHD 50P	50	16	101	68	6,3
SHD 100P	100	16	200	88	14,5
SHD 150P	150	16	342	100	27,0



LOW HEIGHT HYDRAULIC CYLINDERS WITH A LARGER LIFTING HEIGHT

- flat cylinders with a mechanical lock with a higher lifting height,,
- cylinder body and piston made of heat-hardened alloy steel,
- convenient for use in limited spaces,
- backstop to mechanically support the load,
- one-sided action, return under load,
- synthetic coatings that increase corrosion resistance and reduce friction, which ensure even operation of the actuator, allowing lateral loads to be transferred to 3% of the nominal lifting capacity of the actuator without seizing.

Type	Capacity [t]	Stroke [mm]	Oil capacity [cm ³]	Minimum height [mm]	Weight [kg]
SHD 10W	10	26	24	48	1,4
SHD 30W	30	56	112	62	4,1



HYDRAULIC CYLINDER WITH A HOLE PISTON

- additional valves protect against damage in case of excessive pressure,
- increased corrosion resistance due to oven enamel coating,
- threaded flanges,
- return spring, allowing quick return of the piston,
- better durability due to the nickel-plated inner shell of the slide sleeve,
- construction of a hollow piston allows the use of both forces pulling and pushing.

Type	Capacity [t]	Stroke [mm]	Oil capacity [cm ³]	Minimum height [mm]	Weight [kg]
SHD 20100T	20	100	27	212	9,5
SHD 30100T	30	100	32	228	13,0
SHD 60100T	60	100	53	297	38,0

KOMSTAL	ONE-SIDED ACTION	CAPACITY 20-60 TONS	STROKE 100 mm	HOLE PISTON
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STANDARD HYDRAULIC CYLINDER

- threaded: cylinder flanges, piston tip and mounting holes in the base, which makes it easy to mount,
- adapted for use in any position,
- alloy steel, high-strength providing durability,
- return springs suitable for heavy loads,
- increased corrosion resistance due to oven enamel coating.

Type	Capacity [t]	Stroke [mm]	Oil capacity [cm ³]	Minimum height [mm]	Weight [kg]
SHD 1050	10	50	72	97	2,5
SHD 10100	10	100	145	147	4,5
SHD 10150	10	150	217	226	5,8
SHD 2050	20	50	141	105	5,0
SHD 20100	20	100	282	165	7,5
SHD 20150	20	150	423	230	9,8
SHD 3050	30	50	210	108	5,5
SHD 30100	30	100	418	167	9,0
SHD 30150	30	150	627	233	11,7
SHD 5050	50	50	318	113	9,0
SHD 50100	50	100	635	173	13,0
SHD 50150	50	150	953	243	18,0
SHD 10050	100	50	623	136	19,0
SHD 100100	100	100	1246	232	34,0
SHD 100150	100	150	1869	282	40,5
SHD 20050	200	50	1280	182	55,0
SHD 20100	200	100	2543	232	67,0

KOMSTAL	ONE-SIDED ACTION	DURABLE ALLOY STEEL	CAPACITY 10-200 TONS	STROKE 50-150 mm
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DOUBLE- ACTING HYDRAULIC CYLINDER

- it has properties similar to one -sided action standard hydraulic cylinder,
- two-way.

Type	Capacity [t]	Stroke [mm]	Oil capacity [cm ³]	Minimum height [mm]	Weight [kg]
SHD 30200D	30	200	885	364	17,0
SHD 50200D	50	200	1418	374	29,0
SHD 100200D	100	100	2863	389	60,0
SHD 200150D	200	150	4253	317	84,0

KOMSTAL	TWO-WAY ACTION	DURABLE ALLOY STEEL	CAPACITY 20-200 TON	STROKE 50-150 mm
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HAND HYDRAULIC PUMP

- working pressure 700 bar,
- pressure drain valve, adjustable from the outside,
- precisely set drain valve (knob),
- made entirely of structural steel,
- 4-way check valve and carefully set drain valve,
- filled with oil,
- optional manometer.

KOMSTAL	MANOMETER	STRUCTURAL STEEL	CAPACITY 700 2700 3000 cm ³	MAX WORKING PRESSURE 700 bar
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Type	Working pressure	Flow rate [cm ³]		Oil capacity [cm ³]	Weight [kg]
		low	high		
PRS 700	700 bar	13	2,2	700	12,0
PRS 700A	700 bar	13	2,3	2700	14,0
PRS 700A*	700 bar	13	2,2	700	13,0
PRS 700C	700 bar	13	2,3	3000	16,0

* z manometrem



ELECTRIC HYDRAULIC PUMP

- electromagnetic valve,
- aluminum cover with copper core,
- large fuel tank capacity,
- one or two-way,
- manometer.

Type	Working pressure	Efficiency [L/min]	Tension [V]	Engine power [Kw]	Oil capacity [cm ³]	Weight [kg]
PEL 630A*	630 bar	0,6	220	0,75	8	29,0
PEL 630B**	630 bar	0,6	220	0,75	8	30,0
PEL 630C*	630 bar	2,5	220	0,75	8	30,0

* one-way
**two-way

KOMSTAL	MANOMETER	Cu CORE	Al COVER	MAX WORKING PRESSURE 630 bar
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HYDRAULIC DISTRIBUTOR RH-4

- output for 4 cylinders,
- distributes the oil flow in the system,
- at the same time allows you to connect 4 cylinders to one power tool,
- thread 3/8".

KOMSTAL	3/8"	max 4 CYLINDERS
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CABLES P-03 i P-05

- high-pressure hydraulic hoses,
- made of polyester braided steel,
- outer polyurethane sheath,
- burst pressure 2.800 bar,
- available lengths 3m i 5m.

KOMSTAL	POLYESTER	PRESSURE MAX 2800 BAR	5m	3m
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SLING ACCESSORIES

SLING ACCESSORIES CL. 8

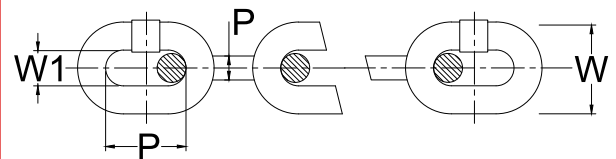
The sling accessories make it possible to use all types of slings and determine the convenient suspension of the load. To protect the ends of the rope from damage or chafing, use shackles - metal fittings inserted inside the terminating sling of the loop attached to the hook. In turn, to hang a load, slings are equipped with hooks or closed slings can be used. The suspension accessories include: chains for slings, main links, link sets, connectors, hooks (shortening, fork, safe, container, swivel), tensioners, hooks, wrenches and shackles.

LINK CHAIN CL.8

- compatible with the requirements of the Machinery Directive, in accordance with PN-EN 818-2,
- safety ratio: 4,
- made of steel in class 8,
- tensile strength 800 N / mm²,
- powder coated components,
- protected against corrosion.



diameter of the link (mm)	WLL (t)	d (mm)	P. (mm)	W1 min (mm)	W1 max (mm)	Weight kg/m.
6	1,12	6	18	7,5	21	0,79
7	1,5	7	21	9	24,5	1,07
8	2	8	24	10	28	1,38
10	3,15	10	30	12,5	35	2,20
13	5,3	13	39	16,3	46	3,80
16	8	16	48	20	56	5,63
20	12,5	20	60	25	70	8,60
22	15	22	66	28	77	10,20
26	21,2	26	78	35	91	14,87
32	31,5	32	96	40	106	22,29

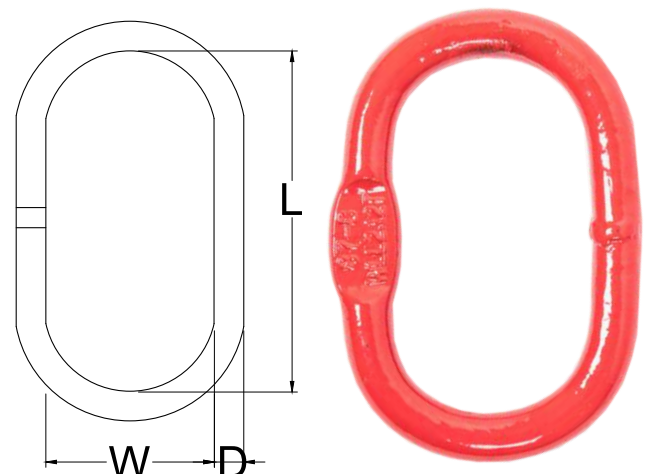


MASTER LINK KLO CL.8

- compatible with the requirements of the Machinery Directive, in accordance with PN-EN 1677-4,
- safety ratio: 4,
- made of steel in class 8,
- tensile strength 800 N / mm²,
- powder coated components.



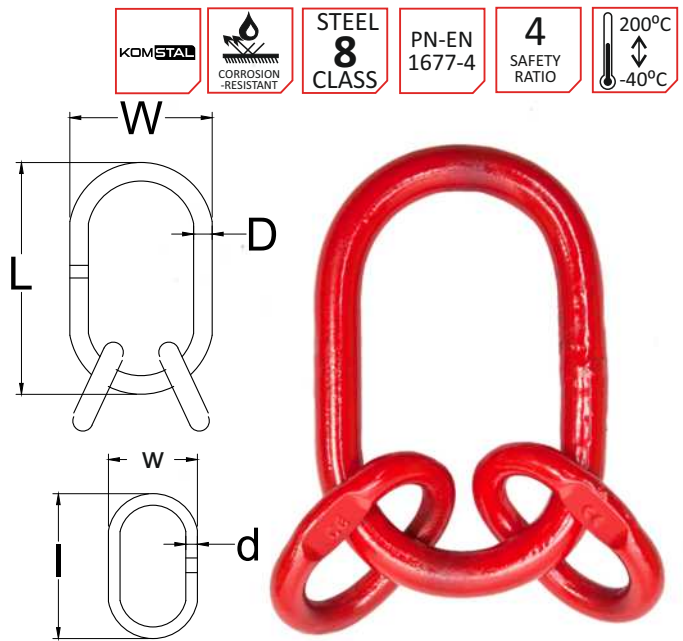
Type	WLL [t]	D mm	W mm	L mm	kg/piece
KLO160	1,6	14	60	110	0,34
KLO212	2,12	16	60	110	0,53
KLO315	3,15	18	75	135	0,83
KLO530	5,3	22	90	160	1,5
KLO800	8,0	26	100	180	2,32
KLO1120	11,2	32	110	200	3,95
KLO1400	14,0	36	140	260	6,34
KLO1700	17,0	40	160	300	8,96
KLO2120	21,2	45	180	340	12,8
KLO3150	31,5	50	190	350	16,55
KLO4500	45,0	56	200	400	23,28
KLO5600	56,0	63	220	430	32



MASTER LINK ASSEMBLY (FOR CHAIN SLINGS) KLOZ CL.8

- made according to the harmonized standard: PN-EN 1677-4,
- safety ratio: 4, • made of steel in class 8,
- tensile strength 800 N / mm², • powder coated components,
- protected against corrosion.

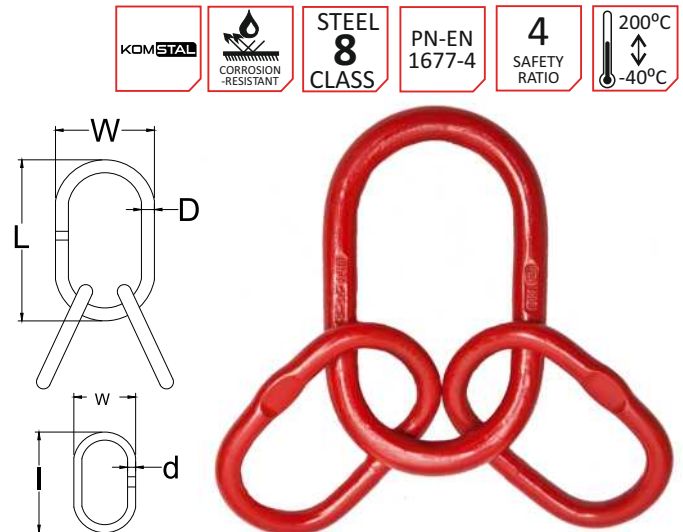
TYPE	Size	WLL (t)	W (mm)	D (mm)	L (mm)	w (mm)	d (mm)	l (mm)	Weight kg/pcs
KLOZ236	6	2,36	75	18	135	25	13	54	1,18
KLOZ315	7	3,15	75	18	135	38	13	60	1,24
KLOZ425	8	4,25	90	22	160	34	16	70	2,20
KLOZ670	10	6,70	100	26	180	40	18	85	3,40
KLOZ1120	13	11,20	110	32	200	50	22	115	6,10
KLOZ1700	16	17,00	140	36	260	65	26	140	9,98
KLOZ2120	18	21,20	180	45	340	100	32	180	18,90
KLOZ2650	20	26,50	190	50	350	100	36	180	22,60
KLOZ3150	22	31,50	190	50	350	100	36	180	25,20
KLOZ4500	26	45,00	200	56	400	110	40	200	34,26
KLOZ6300	32	63,00	250	72	460	110	50	200	66,46



MASTER LINK ASSEMBLY (FOR WEBBING AND WIRE ROPE SLINGS) KLOL CL.8

- made according to the harmonized standard: PN-EN 1677-4,
- safety ratio: 4, • made of steel in class 8,
- tensile strength 800 N / mm², • powder coated components,
- protected against corrosion.

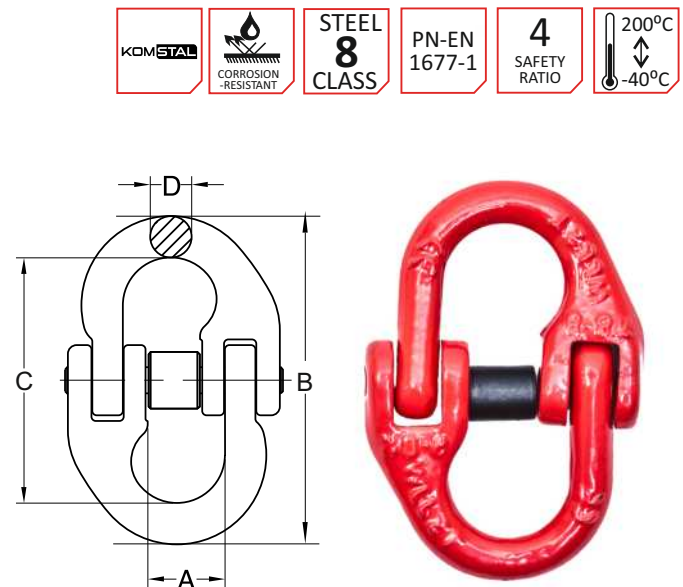
Type	Size	WLL (t) 4:1	WLL (t) 5:1	D (mm)	W (mm)	L (mm)	d (mm)	l (mm)	w (mm)	Weight kg/pcs
KLOL240	14	2,40	2,00	14	60	100	12	85	40	0,82
KLOL320	17	3,20	2,50	18	90	160	14	100	60	1,61
KLOL5000	20	5,00	4,00	20	90	160	16	100	60	1,95
KLOL8000	22	8,00	6,40	22	100	180	18	150	70	3,16
KLOL1200	28	12,00	9,60	28	140	270	22	160	90	6,75
KLOL1740	32	17,40	13,90	32	140	270	25	180	100	9,31
KLOL2100	38	21,00	-	40	160	300	31	270	140	18,40
KLOL3000	44	30,00	-	45	180	340	36	185	155	26,40



CONNECTING LINK KZL CL.8

- made according to the harmonized standard: PN-EN 1677-1,
- safety ratio: 4, • made of steel in class 8,
- tensile strength 800 N / mm², • powder coated components,
- protected against corrosion.

Type	Size	WLL (t)	A (mm)	B (mm)	C (mm)	D (mm)	Weight kg/pcs
KZL112	6	1,12	16,20	56,0	42,0	7,0	0,08
KZL200	7/8	2,00	20,50	75,0	58,0	8,5	0,16
KZL315	10	3,15	28,00	89,6	68,0	10,8	0,30
KZL530	13	5,30	30,00	120,0	90,0	15,0	0,60
KZL800	16	8,00	36,30	141,5	101,9	19,8	1,10
KZL1250	18/20	12,50	44,00	169,0	121,0	24,0	2,00
KZL1500	22	15,00	51,00	193,5	141,5	26,0	3,20
KZL2120	26	21,20	58,00	221,0	161,0	30,0	4,80
KZL3150	32	31,50	67,50	271,0	197,0	37,0	9,00

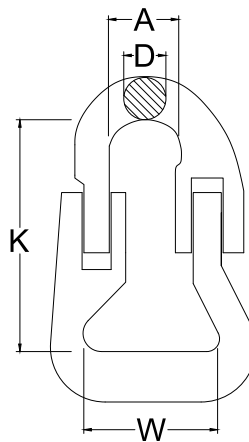


CONNECTING LINK (FOR WEBBING AND WIRE ROPE SLINGS) KZP CL.8

- made according to the harmonized standard: PN-EN 1677-1,
- safety ratio: 4,
- made of steel in class 8,
- tensile strength 800 N / mm²,
- powder coated components,
- protected against corrosion.



Type	Size	WLL (t)	D (mm)	A (mm)	K (mm)	W (mm)	Weight kg/pcs
KZP 112	6	1,12	7,0	15,0	56,0	40,0	0,20
KZP 200	7/8	2,00	9,5	20,0	63,7	40,0	0,30
KZP 315	10	3,15	11,0	24,0	83,0	39,0	0,68
KZP 530	13	5,30	16,5	28,0	93,7	55,0	1,47
KZP 800	16	8,00	19,8	34,5	120,0	65,5	2,30
KZP 1250	18/20	12,50	23,0	41,0	138,0	80,0	2,30

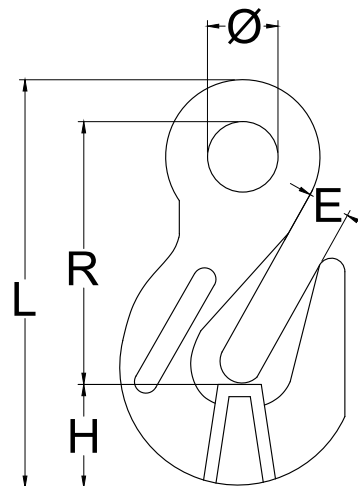


EYE GRAB HOOK WITH WING KKO CL.8

- made according to the harmonized standard: PN-EN 1677-1,
- safety ratio: 4,
- made of steel in class 8,
- tensile strength 800 N / mm²,
- powder coated components,
- protected against corrosion.



Type	Size	WLL (t)	E (mm)	Φ (mm)	H (mm)	R (mm)	L (mm)	Weight kg/pcs
KKO 112	6	1,12	8,0	13,5	16,0	51,0	75,2	0,14
KKO 200	7/8	2,00	10,8	17,0	18,5	60,5	88,5	0,245
KKO 315	10	3,15	13,0	20,0	29,0	79,5	121,5	0,65
KKO 530	13	5,30	16,5	26,0	42,8	99,7	158,0	1,39
KKO 800	16	8,00	19,2	30,0	45,7	104,0	169,0	2,20
KKO 1250	18/20	12,50	24,0	37,0	56,0	140,0	219,0	4,60
KKO 1500	22	15,00	28,0	44,0	68,0	165,0	259,0	8,20
KKO 2120	26	21,20	30,0	44,0	77,0	188,5	298,0	9,80
KKO3150	32	31,50	38,0	57,0	95,0	228,0	361,0	19,40

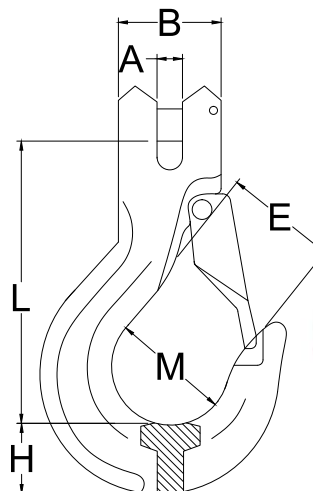


CLEVIS SLING HOOK WITH LATCH KLOH CL.8

- made according to the harmonized standard: PN-EN 1677-1,
- safety ratio: 4,
- made of steel in class 8,
- tensile strength 800 N / mm²,
- powder coated components,
- protected against corrosion.



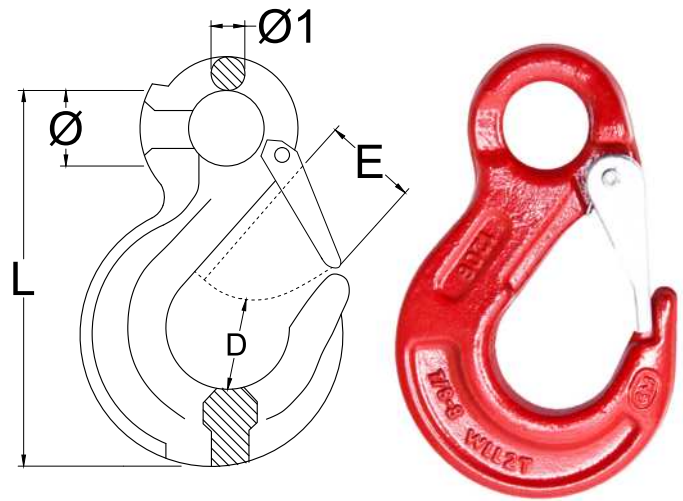
Type	Size	WLL (t)	A (mm)	B (mm)	M (mm)	H (mm)	L (mm)	E (mm)	Weight kg/pcs
KLOH 112	6	1,12	8,0	32,0	35,0	23,0	76,0	26,0	0,32
KLOH 200	7/8	2,00	9,5	37,0	37,0	32,5	85,5	29,0	0,52
KLOH 315	10	3,15	13,0	49,0	46,0	35,0	104,0	39,0	1,05
KLOH 530	13	5,30	16,5	56,5	56,0	42,5	128,0	47,0	2,00
KLOH 800	16	8,00	21,5	70,5	60,0	54,0	150,0	55,0	3,70
KLOH 1250	20	12,50	24,0	77,0	79,0	58,0	180,0	61,0	6,00
KLOH 1500	22	15,00	27,0	91,0	101,0	62,0	213,0	72,0	10,40
KLOH 2120	26	21,20	30,0	117,0	115,0	75,0	250,0	85,0	14,50
KLOH 3150	32	31,50	35,0	150,0	140,0	88,0	317,0	106,0	27,00



EYE SLING HOOK WITH LATCH KHO CL.8

- made according to the harmonized standard: PN-EN 1677-1,
- safety ratio: 4, • made of steel in class 8,
- tensile strength 800 N / mm²,
- powder coated components,
- protected against corrosion.

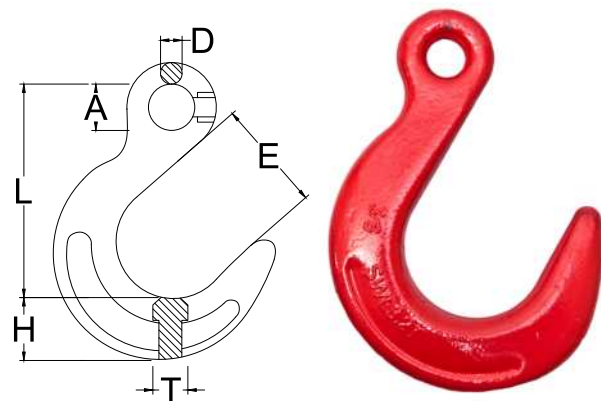
Type	Size	WLL (t)	Φ1 (mm)	E (mm)	D (mm)	Φ (mm)	L (mm)	Weight kg/pcs
KHO 112	6	1,12	9,0	24,0	21,0	20,0	108,0	0,30
KHO 200	7/8	2,00	11,0	30,0	26,0	25,0	133,0	0,40
KHO 315	10	3,15	15,0	34,0	39,0	38,0	167,0	0,90
KHO 530	13	5,30	19,0	39,0	54,0	43,0	213,0	1,70
KHO 800	16	8,00	23,0	46,0	64,0	50,0	255,0	3,20
KHO 1250	20	12,50	24,0	40,0	80,0	62,0	305,0	5,80
KHO 1500	22	15,00	32,0	71,0	80,0	62,0	348,0	8,50
KHO 2120	26	21,20	35,0	81,0	82,0	64,0	394,0	13,00
KHO 3150	32	31,50	37,0	102,0	112,0	88,0	480,0	17,00



EYE FOUNDRY HOOK KHK CL.8

- made according to the harmonized standard: PN-EN 1677-1,
- safety ratio: 4, • made of steel in class 8,
- tensile strength 800 N / mm², • powder coated components,
- protected against corrosion.

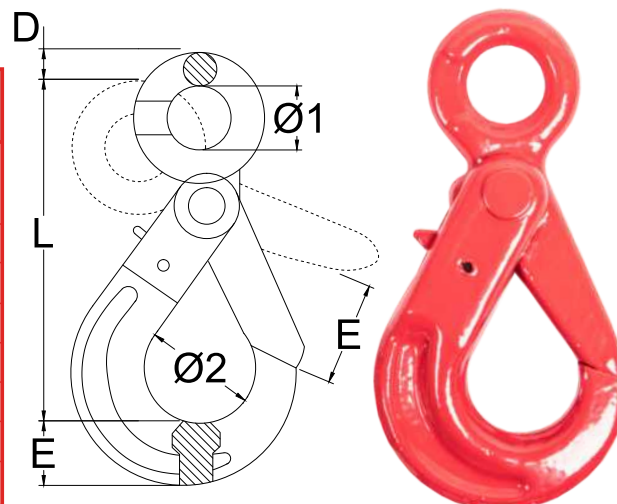
Type	Size	WLL (t)	A (mm)	D (mm)	E (mm)	L (mm)	H (mm)	T (mm)	Weight kg/pcs
KHK 200	7/8	2,00	18,0	12,0	63,5	120	31,0	25,0	1,09
KHK 315	10	3,15	22,0	16,0	76,0	146	33,0	32,0	1,95
KHK 530	13	5,30	27,0	19,0	89,0	175	44,5	38,0	3,22
KHK 800	16	8,00	32,0	20,5	101,0	205	51,5	46,0	5,26
KHK 1250	20	12,50	38,0	25,0	114,0	235	65,0	56,0	9,07
KHK 1500	22	15,00	45,0	45,0	127,0	264	68,5	57,0	11,79
KHK 2120	26	21,20	67,5	45,0	140,0	283	77,0	66,0	16,80
KHK 3150	32	31,50	81,5	45,0	153,5	327	97,5	80,0	26,60



EYE SELF-LOCKING HOOK KHOB CL.8

- made according to the harmonized standard: PN-EN 1677-1,
- safety ratio: 4, • made of steel in class 8,
- tensile strength 800 N / mm²,
- powder coated components,
- protected against corrosion.

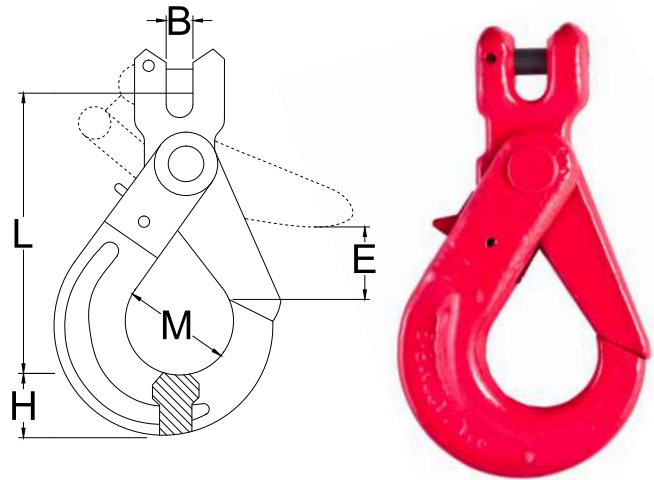
Type	Size	WLL (t)	Φ1 (mm)	L (mm)	D (mm)	Φ2 (mm)	H (mm)	E (mm)	Weight kg/pcs
KHOB 112	6	1,12	22,0	110,5	10,0	34,0	19,5	28,0	0,50
KHOB 200	7/8	2,00	25,0	136,0	12,0	46,0	24,0	34,0	0,80
KHOB 315	10	3,15	32,0	171,0	15,0	56,0	28,5	44,0	1,55
KHOB 530	13	5,30	40,5	208,5	19,5	69,0	40,0	52,0	3,20
KHOB 800	16	8,00	56,0	257,5	22,0	86,0	50,5	60,0	5,74
KHOB1250	20	12,50	64,5	275,0	27,0	100,0	55,0	81,0	8,50
KHOB1500	22	15,00	70,0	320,0	30,0	98,0	67,0	82,0	13,00
KHOB2120	26	21,20	80,0	363,0	34,0	110,0	75,0	110,0	18,00
KHOB3150	32	31,50	105,0	472,0	45,0	166,0	97,0	168,0	44,50



CLEVIS SELF-LOCKIG HOOK KHB CL.8

- made according to the harmonized standard: PN-EN 1677-1,
- safety ratio: 4, • made of steel in class 8,
- tensile strength 800 N / mm²,
- powder coated components,
- protected against corrosion.

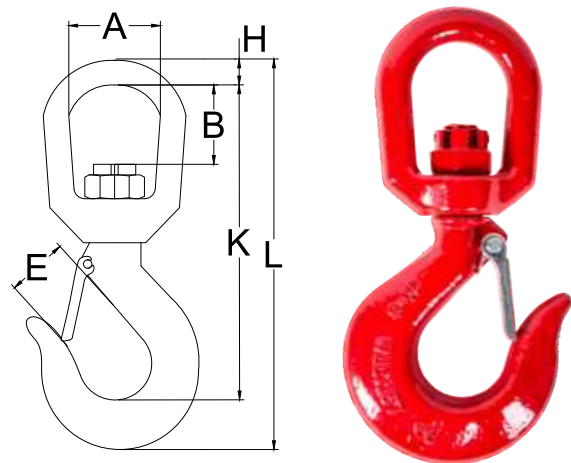
Type	Size	WLL (t)	E (mm)	B (mm)	H (mm)	M. (mm)	L (mm)	Weight kg/pcs
KHB 112	6	1,12	29,0	8,5	19,5	34,0	95,5	0,50
KHB 200	7/8	2,00	34,0	9,5	24,0	46,0	121,0	0,80
KHB 315	10	3,15	44,0	12,0	28,5	56,0	146,0	1,50
KHB 530	13	5,30	52,0	15,0	40,0	69,0	182,0	2,80
KHB 800	16	8,00	60,0	18,0	50,5	86,0	218,0	5,60
KHB 1250	20	12,50	83,0	25,0	55,0	100,0	240,0	7,50
KHB 1500	22	15,00	88,0	25,5	67,0	98,0	276,5	11,50
KHB 2120	26	21,20	95,5	30,0	75,0	110,0	310,5	18,50



SWIVEL HOOK WITH LATCH KHL CL.8

- made according to the harmonized standard: PN-EN 1677-1,
- safety ratio: 4, • made of steel in class 8,
- tensile strength 800 N / mm², • powder coated components,
- protected against corrosion, • the hook doesn't rotate under load.

Type	Size	WLL (t)	A (mm)	E (mm)	B (mm)	H (mm)	K (mm)	L (mm)	Weight kg/pcs
KHL 112	6	1,12	32,0	22,0	22,5	9,0	112	140	0,34
KHL 200	7/8	2,00	44,0	26,0	35,0	15,8	150	190	1,02
KHL 315	10	3,15	44,0	28,0	35,0	15,8	162	206	1,24
KHL 530	13	5,30	50,0	35,0	39,0	18,0	190	242	2,25
KHL 800	16	8,00	64,0	43,0	53,0	25,0	246	316	4,66
KHL 1250	20	12,50	70,0	55,0	51,0	28,0	282	369	7,40
KHL 1500	22	15,00	79,0	61,0	58,0	32,0	332	431	10,60
KHL 2120	26	21,20	105,0	81,0	100,0	40,0	431	547	21,40
KHL 3150	32	31,50	105,0	82,5	90,0	40,0	472	603	32,00

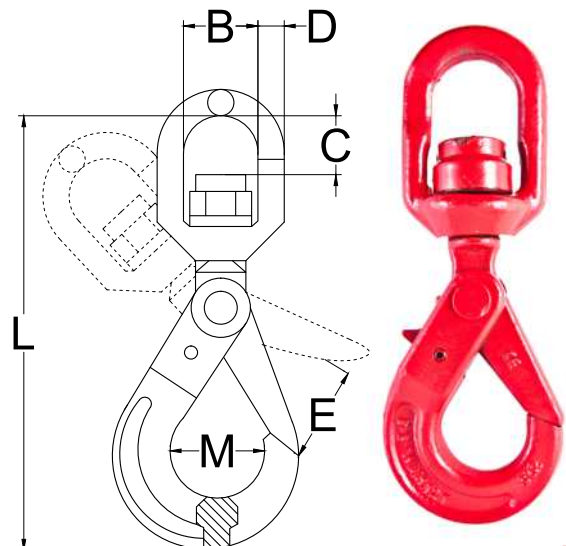


SWIVEL SELF-LOCKING HOOK KHOL CL.8

BALL BEARING

- made according to the harmonized standard: PN-EN 1677-1,
- safety ratio: 4, • made of steel in class 8,
- tensile strength 800 N / mm², • powder coated components,
- protected against corrosion, • the hook rotates under load.

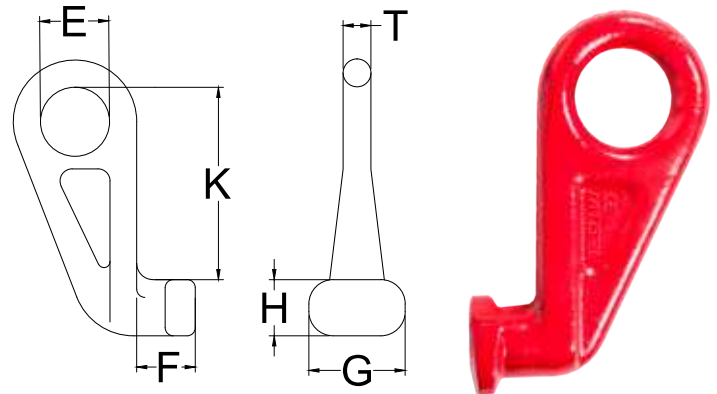
Type	Size	WLL (t)	B (mm)	C (mm)	D (mm)	L (mm)	M (mm)	E (mm)	Weight kg/pcs
KHOL 112	6	1,12	32,5	22,0	11,25	170	34	29,0	0,71
KHOL 200	7/8	2,00	35,5	26,0	12,50	210	46	34,0	1,10
KHOL 315	10	3,15	42,0	34,0	15,00	247	56	44,0	2,00
KHOL 530	13	5,30	50,0	38,5	16,00	302	69	52,0	4,00
KHOL 800	16	8,00	61,0	55,0	21,50	383	86	60,0	7,30
KHOL1250	20	12,50	72,0	61,0	26,00	418	100	83,0	11,60
KHOL1500	22	15,00	95,0	95,0	33,30	527	98	88,0	16,00
KHOL2120	26	21,20	122,0	115,0	42,00	610	110	95,5	21,50
KHOL3150	32	31,50	140,0	146,0	52,00	777	166	150,0	79,00



CONTAINER HOOK RIGHT - KHP AND LEFT- KHL CL.8

- made according to the harmonized standard: PN-EN 1677-1,
- safety ratio: 4,
- made of steel in class 8,
- tensile strength 800 N / mm²,
- powder coated components,
- protected against corrosion.

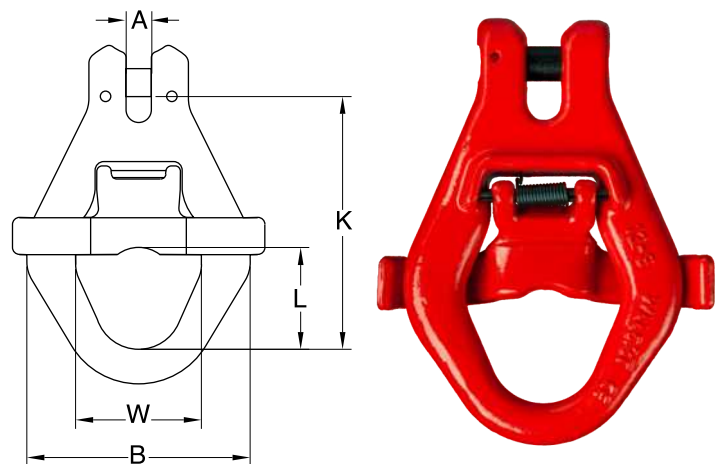
Type	WLL (t)	K (mm)	E (mm)	F (mm)	T (mm)	G (mm)	H (mm)	Weight kg/pcs
KHL	12,50	192	70	46	25	75	48	4,00
KHP	12,50	192	70	46	25	75	48	4,00



CLEVIS CONTAINER LINK OKW CL.8

- made according to the harmonized standard: PN-EN 1677-1,
- safety ratio: 4,
- made of steel in class 8,
- tensile strength 800 N / mm²,
- powder coated components,
- protected against corrosion.

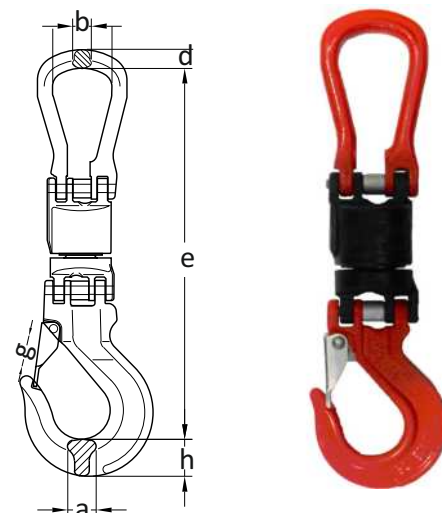
Type	WLL (t)	A (mm)	B (mm)	K (mm)	L (mm)	W (mm)	Weight kg/pcs
OKW	5,30	14	125	141	57	65	1,80



ISOLATED SWIVEL BSI CL.8

- made according to the harmonized standard: PN-EN 1677-1,
- safety ratio: 4,
- made of steel in class 8,
- tensile strength 800 N / mm²,
- powder coated components,
- protected against corrosion.
- it has an electrically insulated, greased and sealed bearing.

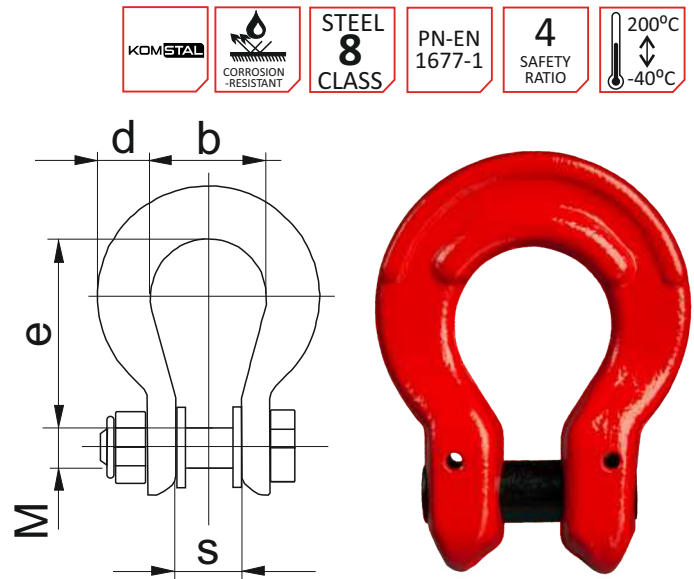
Type	WLL (t)	e (mm)	d (mm)	b (mm)	h (mm)	a (mm)	Weight kg/pcs
BSI 8	2,00	310	15	50	24	20	2,10
BSI 10	3,15	374	19	65	30	26	3,60
BSI 13	5,30	471	23	72	39	30	6,80
BSI 16	8,00	560	25	80	49	36	12,30
BSI 20	12,50	624	31	104	62	48	18,90



U CONNECTING LINK CL.8

- made according to the harmonized standard: PN-EN 1677-1,
- safety ratio: 4,
- made of steel in class 8,
- tensile strength 800 N / mm²,
- powder coated components,
- protected against corrosion.

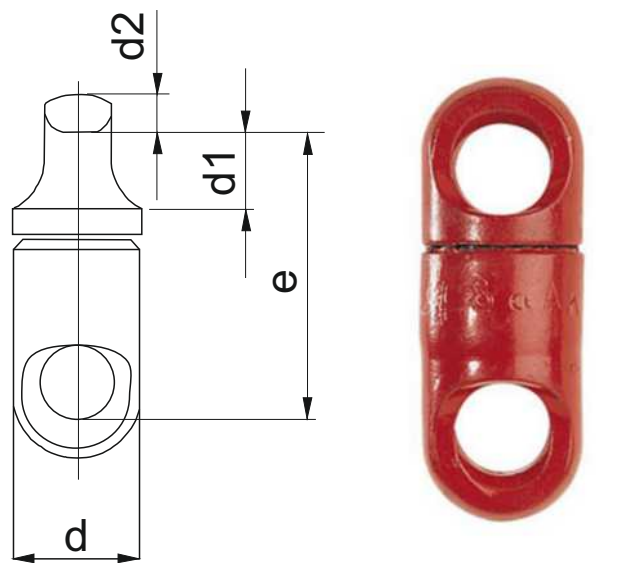
Type	WLL (t)	e (mm)	b (mm)	d (mm)	s (mm)	a (mm)	M (mm)	Weight kg/pcs
U 5-6	1,12	33,5	21	9,3	11	16,0	7	0,07
U 7	1,50	48,5	28	13,0	16	22,0	8	0,20
U 8	2,00	48,0	28	13,0	16	22,0	10	0,22
U 10	3,15	60,0	35	16,0	20	26,5	12	0,38
U 13	5,30	72,0	39	18,0	24	34,0	16	0,67
U 16	8,00	80,0	47	23,0	32	44,0	20	1,21
U 19	11,20	96,0	56	26,0	36	52,0	24	1,97
U 26	21,20	132,0	77	33,0	49	66,0	30	4,06



SWIVEL DF CL.8

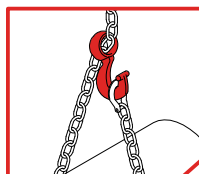
- made according to the harmonized standard: PN-EN 1677-1,
- safety ratio: 4,
- made of steel in class 8,
- tensile strength 800 N / mm²,
- powder coated components,
- protected against corrosion.

Type	WLL (t)	e (mm)	d (mm)	d1 (mm)	d2 (mm)	Weight kg/pcs
DF 5-6	1,12	43,5	22	12	7,0	0,10
DF 7-8	2,00	60,0	27	16	8,0	0,20
DF 10	3,15	73,5	32	20	9,5	0,30
DF 13	5,30	92,0	40	25	12,5	0,60

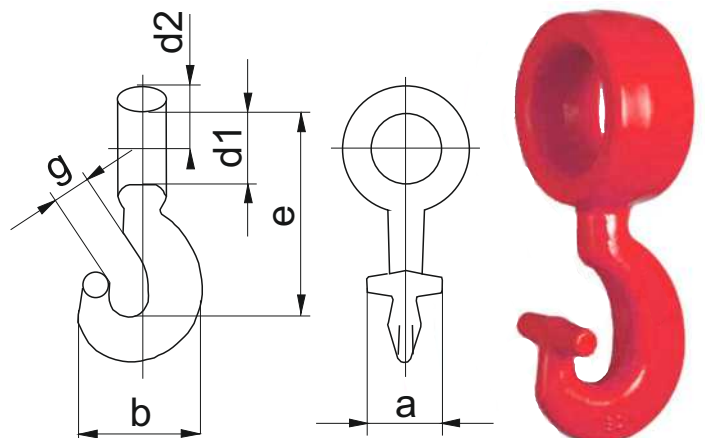


SLIDING HOOK SH CL.8

- made according to the harmonized standard: PN-EN 1677-1,
- safety ratio: 4,
- made of steel in class 8,
- tensile strength 800 N / mm²,
- powder coated components,
- protected against corrosion.



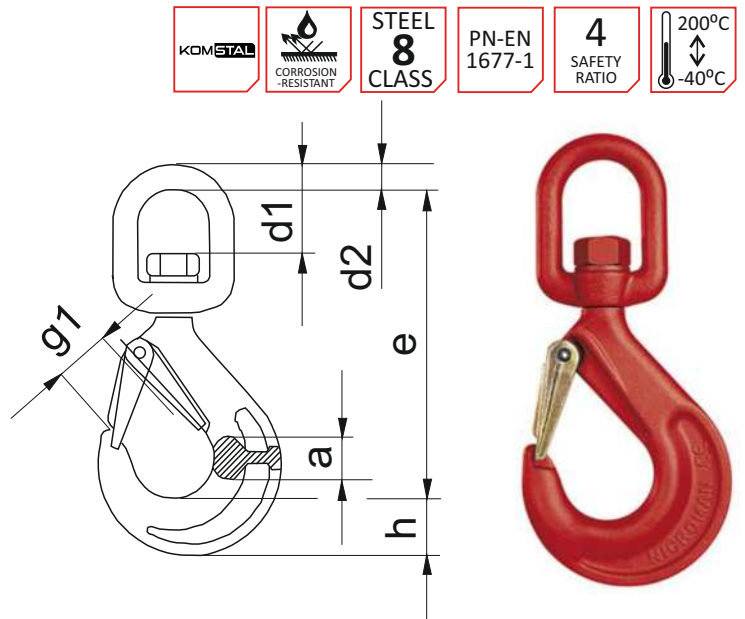
Type	WLL (t)	e (mm)	d1 (mm)	d2 (mm)	g (mm)	b (mm)	a (mm)	Weight kg/pcs
SH 7-8	2,00	91	31	12	17	51	28	0,40
SH 10	3,15	118	39	15	24	62	40	0,75
SH 13	5,30	146	52	17	27	82	48	1,43
SH 16	8,00	180	64	22	30	99	47	3,15



SWIVEL HOOK WS CL.8

- made according to the harmonized standard: PN-EN 1677-1,
- safety ratio: 4,
- made of steel in class 8,
- tensile strength 800 N / mm²,
- powder coated components,
- protected against corrosion.

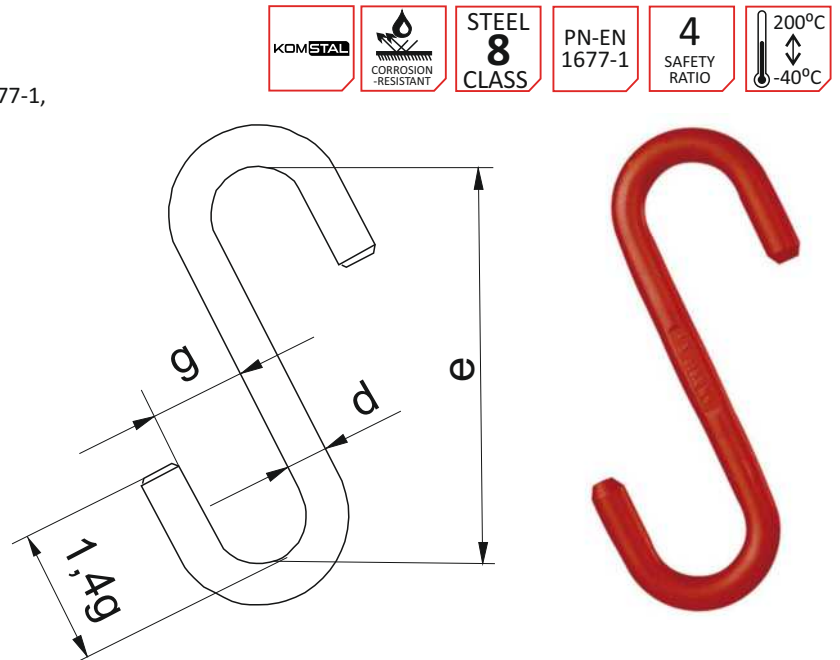
Type	WLL (t)	e (mm)	h (mm)	a (mm)	d2 (mm)	g (mm)	Weight kg/pcs
WS 7-8	2,00	149,5	28	19	12	26,0	0,80
WS 10	3,15	185,5	33	25	15	30,0	1,50
WS 13	5,30	223,0	40	30	16	38,0	2,50
WS 16	8,00	253,0	50	41	24	44,0	5,30
WS 19	11,20	300,0	63	46	30	57,0	9,70



HOOK SM CL.8

- made according to the harmonized standard: PN-EN 1677-1,
- safety ratio: 4,
- made of steel in class 8,
- tensile strength 800 N / mm²,
- powder coated components,
- protected against corrosion.

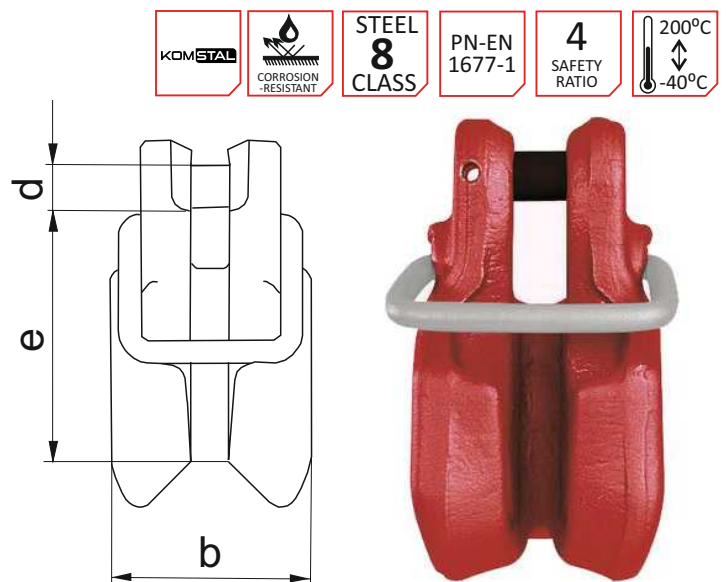
Type	WLL (t)	e (mm)	g (mm)	d (mm)	Weight kg/pcs
SM 5	0,80	180	42	16	0,6
SM 7-8	2,00	220	53	23	1,5
SM 10	3,15	280	63	27	2,6
SM 13	5,30	400	90	40	8,2
SM 16	8,00	500	120	50	16,0
SM 19	11,20	550	130	60	26,0
SM 22	15,00	750	175	80	64,5



CLEVIS CONNECTOR KVS CL.8

- made according to the harmonized standard: PN-EN 1677-1,
- safety ratio: 4,
- made of steel in class 8,
- tensile strength 800 N / mm²,
- powder coated components,
- protected against corrosion.

Type	WLL (t)	e (mm)	b (mm)	d (mm)	Weight kg/pcs
KVS 6	1,12	45	36	7,4	0,27
KVS 7	1,50	58	44	9,0	0,50
KVS 8	2,00	58	44	10,0	0,50
KVS 10	3,15	70	55	12,5	0,80
KVS 13	5,30	90	70	16,0	1,53

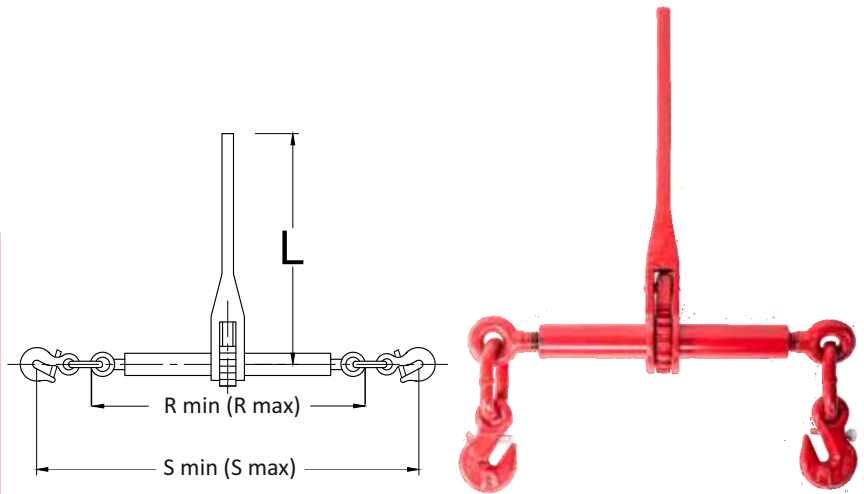


RATCHET TYPE LOAD BINDER WITH GRAB HOOK AND PINS NG



- made according to the harmonized standard: PN-EN 12195-3,
- safety ratio: 4,
- made of steel in class 8,
- ensile strength 800 N / mm²,
- all elements of the alloy steel,
- composite element without using of bolts and nuts,
- powder coated components,
- protected against corrosion,
- it is used to secure heavy loads during transport.

Type	For chain size (mm)	S (mm)		R (mm)		Handle length (mm)	Weight kg/pcs
		min	max	min	max		
NG 6	6	442	560	488	606	182	1,60
NG 8	8	605	808	665	868	354	4,77
NG 10	10	606	809	685	888	354	5,55
NG 13	13	659	862	752	879	354	6,54
NG 16	16	735	895	783	941	354	10,50

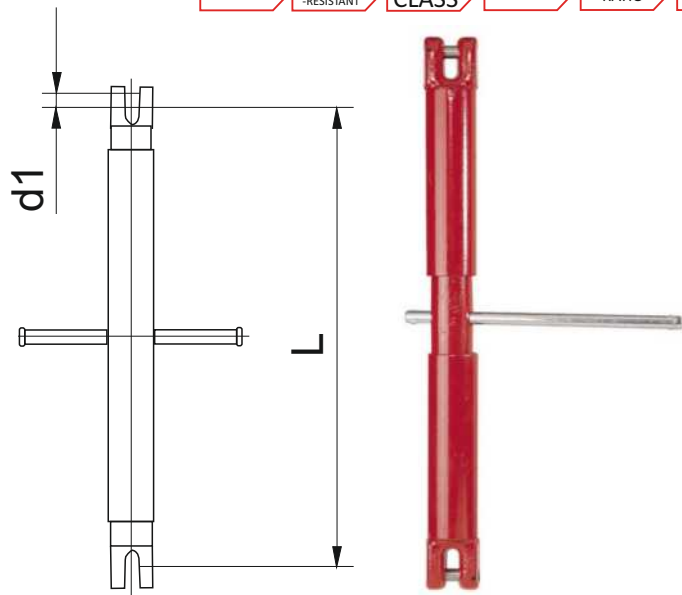


CHAIN FORK TENSIONER KSS CL.8



- made according to the harmonized standard: PN-EN 12195-3,
- safety ratio: 4,
- made of steel in class 8,
- tensile strength 800 N / mm²,
- powder coated components,
- protected against corrosion.

Type	WLL (t)	Chain size	Lenght min (mm)	Lenght max (mm)	Weight kg/pcs
KSS 7	1,50	7 - 8	420	620	2,90
KSS 8	2,00	8 - 8	420	620	3,20
KSS 10	3,15	10 - 8	436	676	3,90
KSS 13	5,30	13 - 8	430	640	6,50

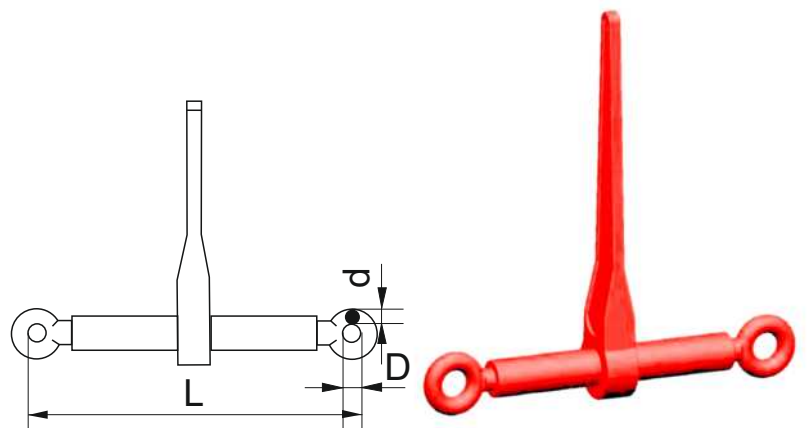


RATCHET TYPE LOAD BINDER RLS KL.8



- made according to the harmonized standard: PN-EN 12195-3,
- safety ratio: 4,
- made of steel in class 8,
- tensile strength 800 N / mm²,
- powder coated components,
- protected against corrosion.

Type	Fastening capacity LC (kN)	Lenght min (mm)	Lenght max (mm)	Weight kg/pcs
RLS 8-8	40	570	730	4,40
RLS 10-8	63	600	760	5,35
RLS 13-8	106	700	850	8,10

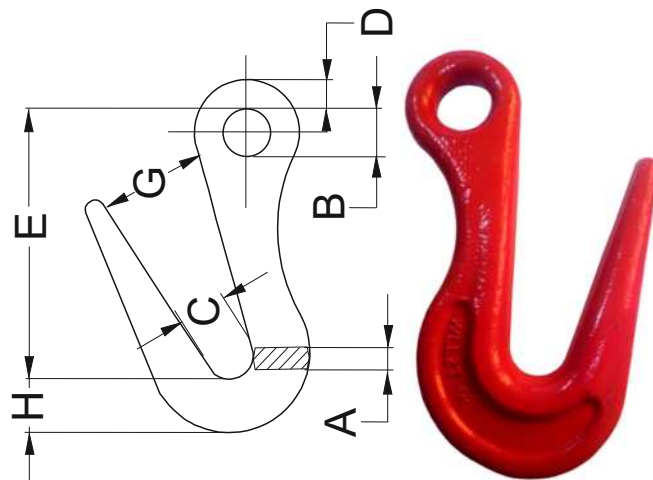


SORTING HOOK HS-2 CL.8



- made according to the harmonized standard: PN-EN 1677-1,
- safety ratio: 4,
- made of steel in class 8,
- tensile strength 800 N / mm²,
- powder coated components,
- protected against corrosion.

Kod	WLL (t)		E (mm)	G (mm)	C (mm)	H (mm)	A (mm)	B (mm)	D (mm)	Waga kg/szt
	Na szpicu	Na dnie								
HS-2	2	7,5	167	74	30	57	32	35	20	2,65

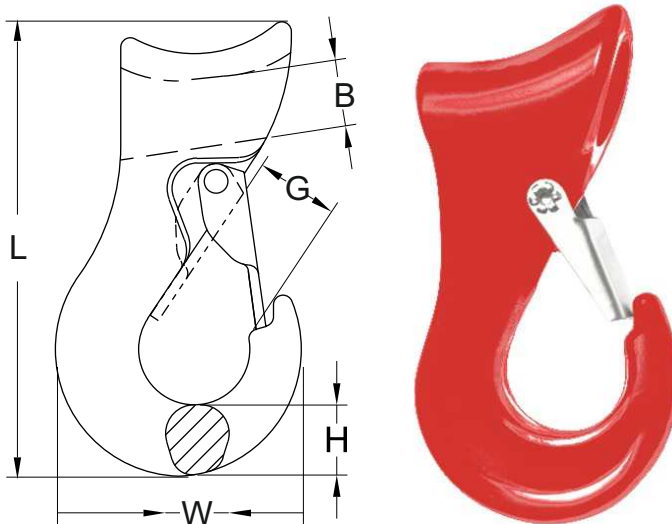
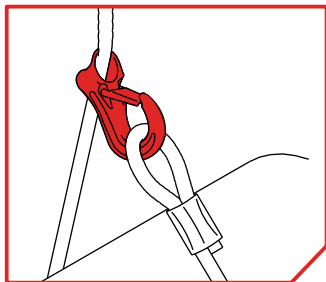


WIRE ROPE SLIDING HOOK CL.8



- sliding hook with loop sliding,
- made according to the harmonized standard: PN-EN 1677-1,
- safety ratio: 4,
- made of steel in class 8,
- tensile strength 800 N / mm²,
- powder coated components,
- protected against corrosion.

Type	WLL (t)	Rope diameter	L (mm)	H (mm)	B (mm)	G (mm)	W (mm)	Weight kg/pcs
SL 0,8	0,8	8 - 11	112	19	14	16	63	0,4
SL 1,6	1,6	10 - 13	143	26	17	19	82	0,8
SL 2,5	2,5	14 - 16	170	30	19	25	98	1,2
SL 3,2	3,2	16 - 20	196	36	22	28	115	1,9
SL 5,4	5,4	22 - 26	260	46	36	35	142	4,3



SLING ACCESSORIES KOMSTAL CL.10

The sling accessories KOMSTAL in CLAS 10 make it possible to use all types of slings and determine the convenient suspension of the load.

To protect the ends of the rope from damage or chafing, use shackles - metal fittings inserted inside the terminating sling of the loop attached to the hook.

In turn, to hang a load, slings are equipped with hooks or closed slings can be used.

The suspension accessories include: chains for slings, main links, link sets, connectors, hooks (shortening, fork, safe, container, swivel), tensioners, hooks, wrenches and shackles.

ADVANTAGES OF KOMSTAL CLASS 10 SLINGING ACCESSORIES

- 25% higher allowable working load,
- the possibility of using chains with a smaller diameter,
- excellent service life due to high abrasion resistance.

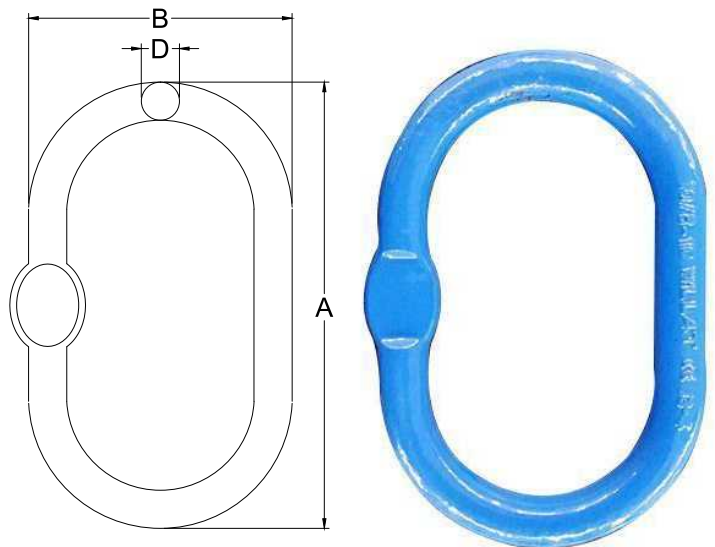


MASTER LINK KLO10 CL.10



- made according to the harmonized standard: EN 1677 with increased strength,
- safety ratio: 4,
- made of alloy steel grade 10,
- tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components,
- protected against corrosion.

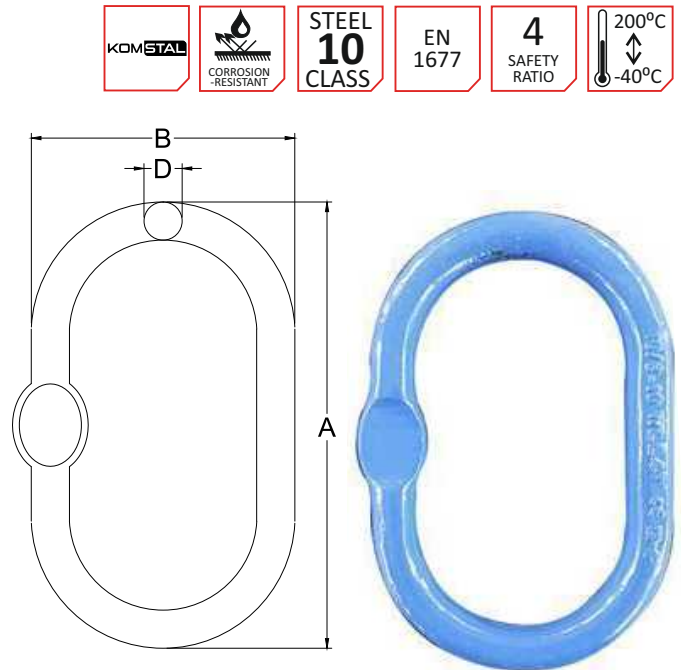
TYPE	Φ chain sling		WLL (t)	D (mm)	A (mm)	B (mm)	Weight kg/pcs
	1 leg	2 legs					
KLO10-13	6,7	6	2,3	13	110	60	0,34
KLO10-16	8	7	3,5	16	110	60	0,53
KLO10-18	10	8	5,0	18	135	75	0,86
KLO10-23	13	10	7,6	23	160	90	1,60
KLO10-27	16	13	10,0	27	180	100	2,46
KLO10-33	19	16	14,0	33	200	110	4,14
KLO10-36	22	19	25,1	36	260	140	6,22
KLO10-45	26	22	30,8	45	340	180	12,85
KLO10-50	32	26	40,0	50	350	190	16,22



OVERSIZED MASTER LINK KLOP10 CL.10

- made according to the harmonized standard: EN 1677 with increased strength,
- safety ratio: 4,
- made of alloy steel grade 10,
- tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components,
- protected against corrosion.

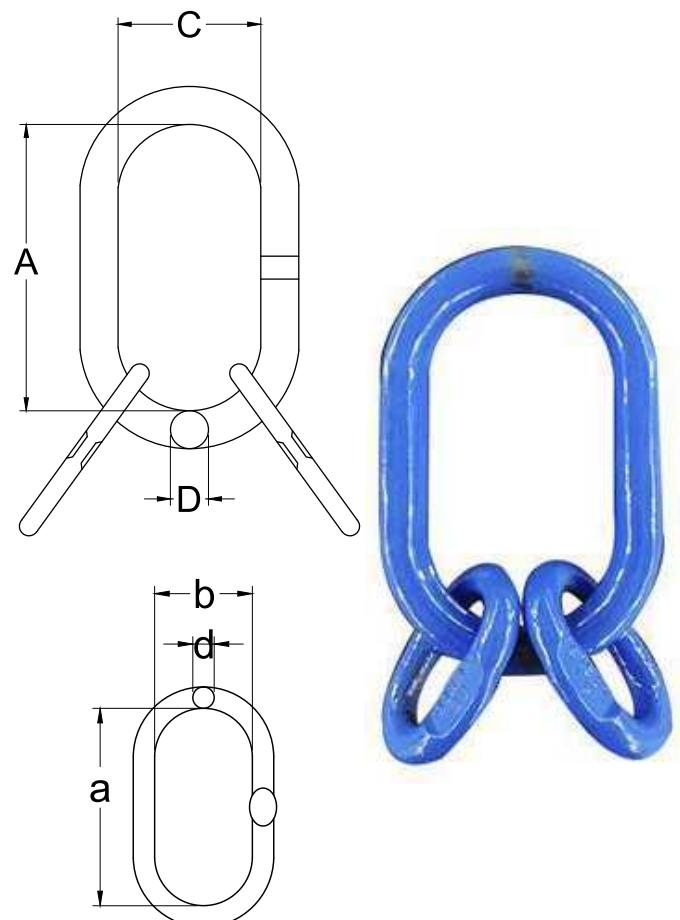
Type	φ chain sling		WLL (t)	D (mm)	A (mm)	B (mm)	Weight kg/pcs
	1 leg	2 legs					
KLOP10-108	8/10	8	4,0	25	340	180	3,70
KLOP10-1310	13	10	6,7	28	340	180	4,70
KLOP10-1613	10	13	10,0	34	340	180	7,10
KLOP10-2016	13	16	16,0	42	340	180	8,90



MASTER LINK ASSEMBLY (FOR CHAIN SLINGS) KLOZ10 CL.10

- made according to the harmonized standard: EN 1677 with increased strength,
- safety ratio: 4,
- made of alloy steel grade 10,
- tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components,
- protected against corrosion.

Kod	φ chain sling 3 and 4 legs	WLL (t)	D (mm)	A (mm)	B (mm)	d (mm)	a (mm)	b (mm)	Weight kg/pcs
KLOZ10-6	6	3,0	19	135	75	13	84	25	1,30
KLOZ10-8	8	5,3	23	160	90	16,5	70	35	2,33
KLOZ10-10	10	8,0	27	180	100	19	85	40	3,70
KLOZ10-13	13	14,0	33	200	110	23	115	50	6,50
KLOZ10-16	16	21,2	36	260	140	27	140	65	10,10
KLOZ10-20	19/20	33,6	50	350	190	33	150	70	22,80
KLOZ10-22	22	39,9	50	350	190	36	180	100	26,00

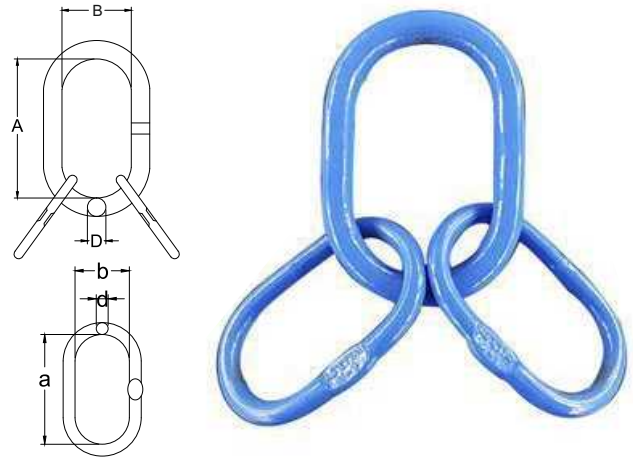


MASTER LINK ASSEMBLY (FOR WEBBING AND WIRE ROPE SLINGS) KLOL10 CL.10

- made according to the harmonized standard: EN 1677 with increased strength,
- safety ratio: 4,
- made of alloy steel grade 10,
- tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components,
- protected against corrosion.



Type	breaking load	WLL (t)	D (mm)	A (mm)	B (mm)	d (mm)	a (mm)	b (mm)	Weight kg/pcs
KLOL10-6	14	3,5	19	150	90	14	120	70	1,80
KLOL10-8	20	5,0	22	160	95	17	140	80	3,00
KLOL10-10	46	11,5	30	200	120	22	160	95	6,50
KLOL10-13	68	17,0	40	250	150	30	200	120	15,00
KLOL10-16	112	28,0	50	300	200	32	200	120	23,10

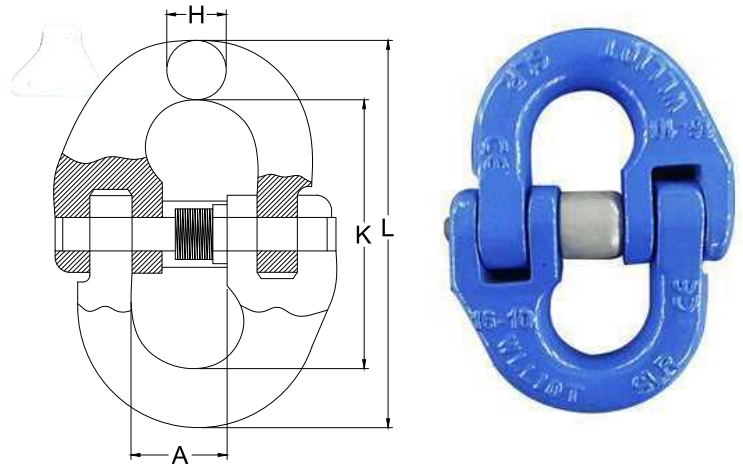


CONNECTING LINK KZLP10 CL.10

- made according to the harmonized standard: EN 1677 with increased strength,
- safety ratio: 4,
- made of alloy steel grade 10,
- tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components,
- protected against corrosion.



Type	Size	WLL (t)	H (mm)	A (mm)	K (mm)	L (mm)	Weight kg/pcs
KZLP10-06	6	1,40	7,60	14,0	44,5	60,0	0,08
KZLP10-08	7/8	2,50	10,00	18,5	61,5	84,5	0,18
KZLP10-10	10	4,00	12,60	23,0	72,0	97,2	0,34
KZLP10-13	13	6,70	16,80	27,5	89,0	127,0	0,68
KZLP10-16	16	10,00	21,30	33,5	103,0	145,0	1,22
KZLP10-20	18/20	16,00	24,50	42,0	116,0	175,0	2,13
KZLP10-22	22	19,00	27,00	48,0	135,0	193,0	3,00
KZLP10-26	26	26,50	32,00	61,0	164,0	228,0	5,15
KZLP10-32	32	39,30	40,00	80,0	194,0	274,0	9,50

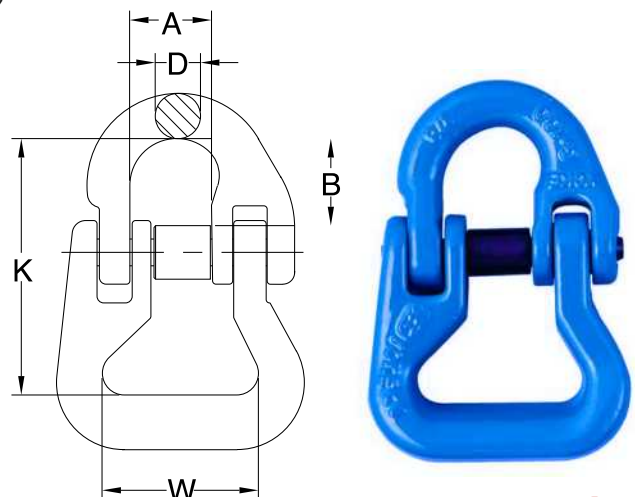


CONNECTING LINK (FOR WEBBING AND WIRE ROPE SLINGS) KZP10 CL.10

- made according to the harmonized standard: EN 1677 with increased strength,
- safety ratio: 4,
- made of alloy steel grade 10,
- tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components,
- protected against corrosion.



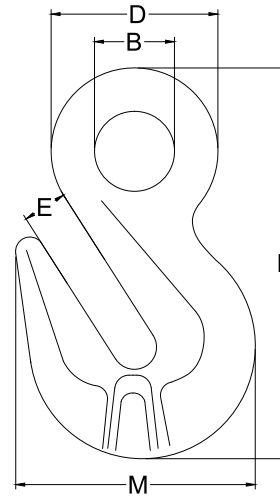
Type	Size	WLL (t)	A (mm)	B (mm)	D (mm)	K (mm)	W (mm)	Weight kg/pcs
KZP10-06	6	1,4	15	17	7	55	38	0,20
KZP10-07	7,8	2,5	18	22	9	62	40	0,30
KZP10-10	10	4,0	25	26	11	78	47	0,60
KZP10-13	13	6,7	30	35	16	95	53	1,10
KZP10-16	16	10,0	36	38	19	115	67	2,00
KZP10-20	20	16,0	42	46	22	132	80	3,20
KZP10-22	22	19,0	49	59	24	187	125	7,70



EYE GRAB HOOK WITH WING KKO10 CL.10

- made according to the harmonized standard: EN 1677 with increased strength, • safety ratio: 4, • made of alloy steel grade 10,
- tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components, • protected against corrosion.

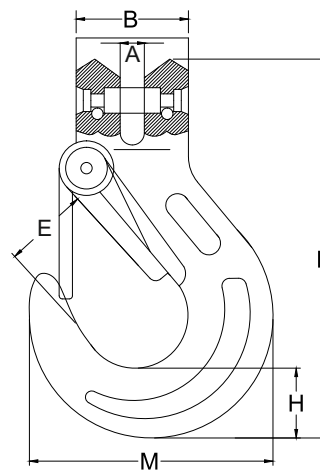
Type	Size	WLL (t)	E (mm)	B (mm)	D (mm)	M. (mm)	L (mm)	Weight kg/pcs
KKO10-06	6	1,40	8,0	14,5	30,5	43,5	71,0	0,20
KKO10-08	8	2,50	10,8	18,0	37,0	53,0	91,5	0,28
KKO10-10	10	4,00	13,5	22,5	48,5	72,0	127,5	0,72
KKO10-13	13	6,70	16,5	28,0	59,0	96,0	163,0	1,60
KKO10-16	16	10,00	19,2	36,0	74,0	112,5	183,0	2,45
KKO10-20	20	16,00	24,0	43,5	89,5	143,0	227,0	4,72
KKO10-22	22	19,00	27,0	48,5	100,5	160,5	260,5	8,20



CLEVIS SLING HOOK WITH LATCH KLOH10 CL.10

- made according to the harmonized standard: EN 1677 with increased strength, • safety ratio: 4, • made of alloy steel grade 10,
- tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components, • protected against corrosion.

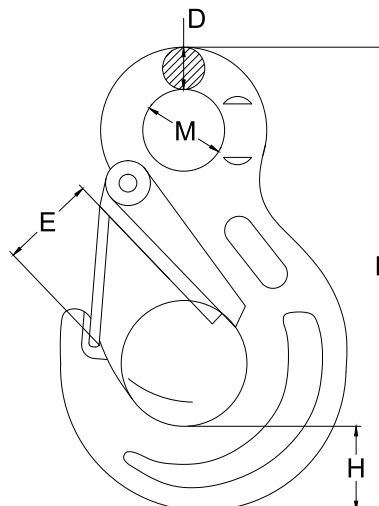
Type	Size	WLL (t)	A (mm)	B (mm)	M (mm)	H (mm)	L (mm)	E (mm)	Weight kg/pcs
KLOH10-06	6	1,40	7,5	32,0	68,5	21,0	109,0	18,5	0,33
KLOH10-08	8	2,50	9,5	37,0	88,0	27,5	134,0	25,0	0,70
KLOH10-10	10	4,00	12,0	48,0	105,5	33,5	161,5	28,0	1,30
KLOH10-13	13	6,70	15,0	59,0	134,0	42,0	203,0	38,0	2,30
KLOH10-16	16	10,00	17,5	70,0	160,5	50,0	248,0	44,0	3,60
KLOH10-20	20	16,00	25,0	85,0	190,5	56,0	297,0	52,0	7,30
KLOH10-22	22	19,00	27,0	100,0	214,5	62,0	326,0	66,0	12,10



EYE SLING HOOK WITH LATCH KHO10 CL.10

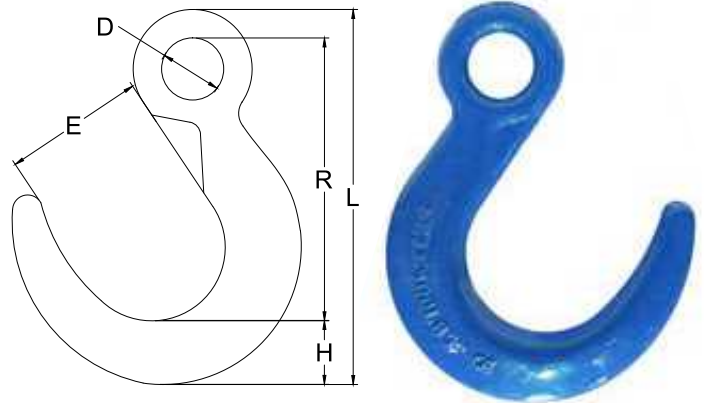
- made according to the harmonized standard: EN 1677 with increased strength, • safety ratio: 4, • made of alloy steel grade 10,
- tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components, • protected against corrosion.

Type	Size	WLL (t)	D (mm)	E (mm)	H (mm)	M. (mm)	L (mm)	Weight kg/pcs
KHO10-06	6	1,40	10,0	18,5	21,0	20,5	111,0	0,32
KHO10-08	8	2,50	11,0	25,0	27,5	25,0	137,5	0,60
KHO10-10	10	4,00	16,0	28,0	33,0	34,0	171,5	1,20
KHO10-13	13	6,70	19,0	38,0	43,5	43,0	219,0	2,20
KHO10-16	16	10,00	24,5	44,0	50,0	50,0	260,0	3,50
KHO10-20	20	16,00	27,0	52,0	56,0	55,0	298,0	7,15
KHO10-22	22	19,00	29,0	66,0	62,0	60,0	330,0	11,50
KHO10-26	26	26,50	35,0	73,0	75,0	70,0	376,0	12,20
KHO10-32	32	39,30	39,0	87,0	89,0	81,5	458,0	17,50



EYE FOUNDRY HOOK KHK10 CL.10

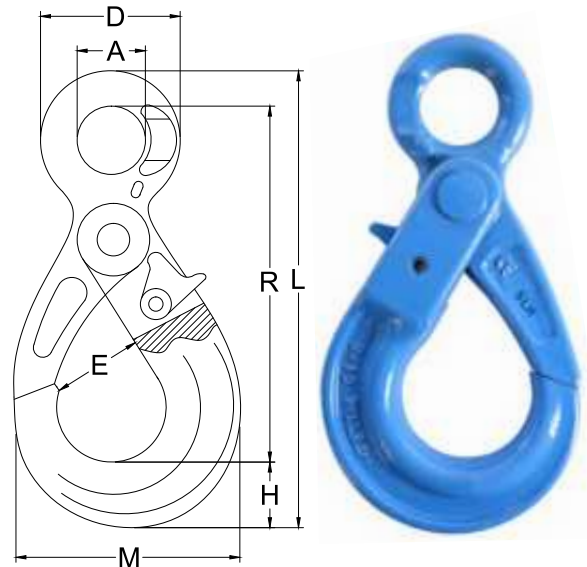
- made according to the harmonized standard: EN 1677 with increased strength,
- safety ratio: 4,
- made of alloy steel grade 10,
- tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components,
- protected against corrosion.



Type	Size	WLL (t)	D (mm)	E (mm)	H (mm)	R (mm)	L (mm)	Weight kg/pcs
KHK10-44	44	3,0	20,5	46	21,5	95	126	0,42

EYE SELF-LOCKING HOOK KHOB KHOB10 CL.10

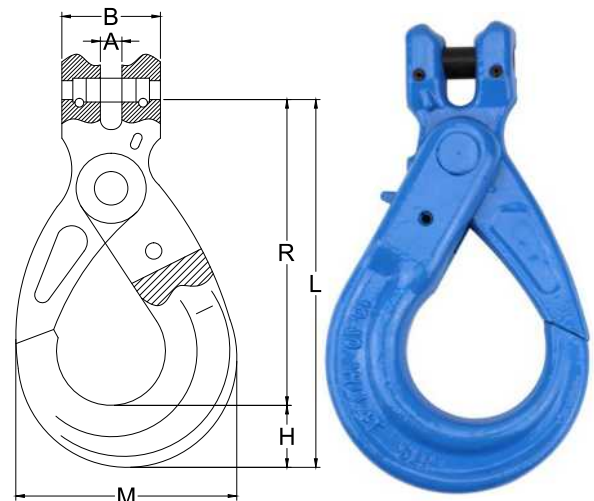
- made according to the harmonized standard: EN 1677 with increased strength,
- safety ratio: 4,
- made of alloy steel grade 10,
- tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components,
- protected against corrosion.



Type	Size	WLL (t)	A (mm)	D (mm)	E (mm)	H (mm)	R (mm)	M (mm)	L (mm)	Weight kg/pcs
KHOB10-06	6	1,40	21,0	43,0	28,0	20,0	110,0	70,0	141,0	0,50
KHOB10-08	8	2,50	27,0	51,0	35,5	26,0	137,0	90,0	175,0	0,90
KHOB10-10	10	4,00	34,5	64,3	45,0	30,0	169,0	108,0	212,5	1,50
KHOB10-13	13	6,70	40,0	80,0	53,5	40,5	209,0	138,5	270,0	1,70
KHOB10-16	16	10,00	50,0	104,0	62,0	50,5	254,0	170,5	331,0	5,70
KHOB10-20	20	16,00	60,0	120,0	76,5	62,0	277,0	192,5	369,0	7,90
KHOB10-22	22	19,00	70,0	134,0	80,0	66,0	319,5	205,0	417,0	11,20

CLEVIS SELF-LOCKING HOOK KHB10 CL.10

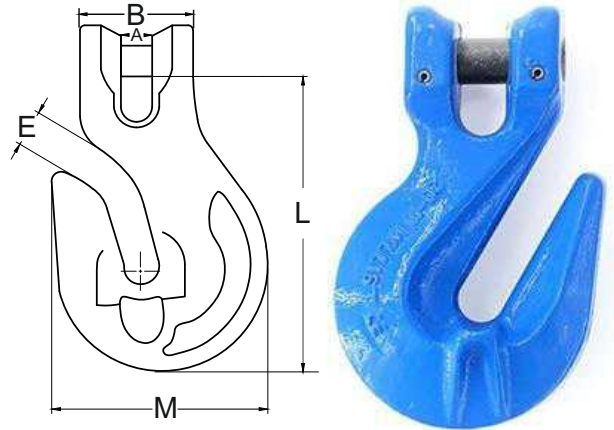
- made according to the harmonized standard: EN 1677 with increased strength,
- safety ratio: 4,
- made of alloy steel grade 10,
- tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components,
- protected against corrosion.



Type	Size	WLL (t)	A (mm)	B (mm)	E (mm)	H (mm)	R (mm)	M (mm)	L (mm)	Weight kg/pcs
KHB10-06	6	1,40	7,5	32,0	28,0	20,0	96,0	70,0	131,0	0,50
KHB10-08	8	2,50	9,5	36,0	35,5	26,0	123,0	90,0	166,0	0,90
KHB10-10	10	4,00	12,0	46,0	45,0	30,0	144,0	109,0	196,5	1,60
KHB10-13	13	6,70	15,0	59,0	53,5	40,5	182,0	138,5	251,0	2,90
KHB10-16	16	10,00	17,5	70,0	62,0	50,5	217,0	170,5	303,0	5,80
KHB10-20	20	16,00	25,0	85,0	76,5	62,0	235,0	192,5	337,5	8,60
KHB10-22	22	19,00	25,5	98,0	80,0	66,0	276,5	205,0	391,0	12,10

CLEVIS SHORTENING GRAB HOOK KPW10 CL.10

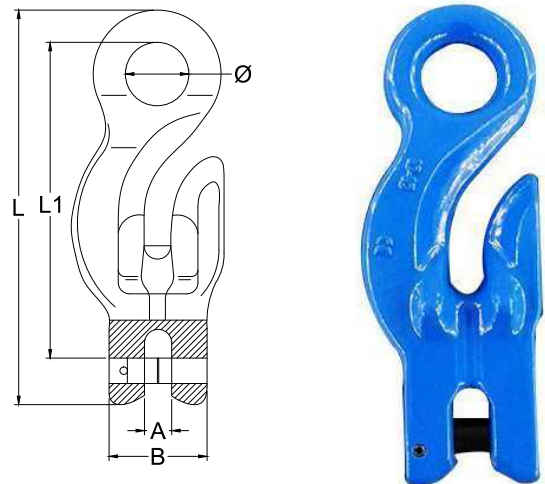
- made according to the harmonized standard: EN 1677 with increased strength,
- safety ratio: 4,
- made of alloy steel grade 10,
- tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components,
- protected against corrosion.



Type	Size	WLL (t)	A (mm)	B (mm)	E (mm)	M (mm)	L (mm)	Weight kg/pcs
KPW10-06	6	1,40	7,5	32,0	8,0	43,5	75,0	0,22
KPW10-08	8	2,50	9,5	36,0	10,8	53,0	91,5	0,34
KPW10-10	10	4,00	12,0	46,0	13,5	72,0	126,0	0,82
KPW10-13	13	6,70	15,0	59,0	16,5	96,0	163,5	1,75
KPW10-16	16	10,00	17,5	70,0	19,2	112,5	183,5	2,88
KPW10-20	20	16,00	24,0	85,0	24,0	143,0	224,0	4,84
KPW10-22	22	19,00	27,0	100,0	27,0	160,5	262,0	8,30

CLEVIS SHORTENING GRAB HOOK XKPW10 CL.10

- made according to the harmonized standard: EN 1677 with increased strength,
- safety ratio: 4,
- made of alloy steel grade 10,
- tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components,
- protected against corrosion.

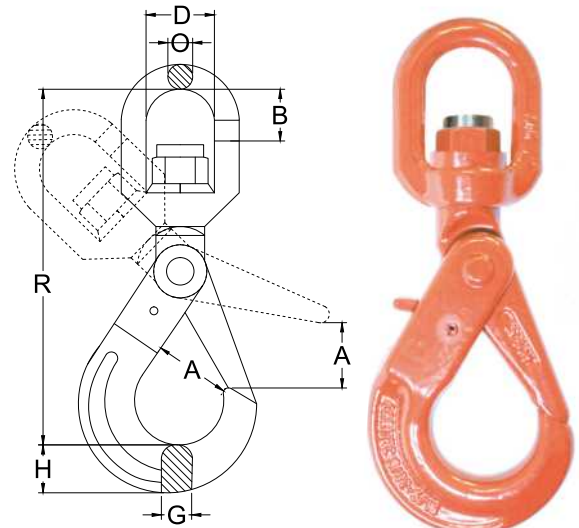


Type	Size	WLL (t)	A (mm)	B (mm)	C (mm)	L (mm)	L1 (mm)	Weight kg/pcs
XKPW10-06	6	1,4	8,0	32,0	20,0	88,0	112,0	0,30
XKPW10-08	8	2,5	10,0	36,0	10,0	116,0	145,0	0,69
XKPW10-10	10	4,0	12,5	48,0	12,5	145,0	184,0	1,33
XKPW10-13	13	6,7	15,5	59,5	15,5	178,0	223,0	2,36
XKPW10-16	16	10,0	19,0	70,0	19,0	216,0	273,0	4,50
XKPW10-20	20	16,0	24,5	85,0	24,5	278,0	351,0	9,00

SWIVEL SELF-LOCKING HOOK KHOL10 KL.10

BALL BEARING

- made according to the harmonized standard: EN 1677 with increased strength,
- safety ratio: 4,
- made of alloy steel grade 10,
- tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components,
- protected against corrosion.



Type	Size	WLL (t)	R (mm)	A (mm)	B (mm)	O (mm)	D (mm)	G (mm)	H (mm)	Weight kg/pcs
KHOL10-06	6	1,40	158	28	23	36	13	16	21	0,60
KHOL10-08	7/8	2,50	182	34	27	36	13	20	26	1,10
KHOL10-10	10	4,00	217	45	35	42	16	25	30	2,00
KHOL10-13	13	6,70	271	54	43	50	21	35	40	4,00
KHOL10-16	16	10,00	320	62	58	62	24	38	50	6,80

SLING ACCESSORIES CL. 10 PEWAG

The sling accessories KOMSTAL in CLAS 10 make it possible to use all types of slings and determine the convenient suspension of the load. To protect the ends of the rope from damage or chafing, use shackles - metal fittings inserted inside the terminating sling of the loop attached to the hook. In turn, to hang a load, slings are equipped with hooks or closed slings can be used. The suspension accessories include: chains for slings, main links, link sets, connectors, hooks (shortening, fork, safe, container, swivel), tensioners, hooks, wrenches and shackles.

ADVANTAGES OF PEWAG CLASS 10 SLINGING ACCESSORIES

- 25% higher allowable working load,
- the possibility of using chains with a smaller diameter,
- excellent service life due to high abrasion resistance.

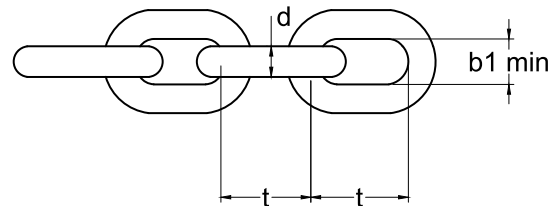


CHAIN WIN CL.10

- made according to the harmonized standard: PN-EN 818-2, with increased strength, • safety ratio: 4,
- made of alloy steel grade 10, • tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components, • protected against corrosion.



Type	Diameter D (mm)	Scale T (mm)	Width b1 min (mm)	WLL (kg)	Breaking force (kN)	Weight kg/m
WIN 5	5	16	7,50	1000	39,3	0,6
WIN 6	6	18	8,70	1400	56,5	0,9
WIN 7	7	21	9,50	1900	77,0	1,2
WIN 8	8	24	10,90	2500	100,0	1,6
WIN 10	10	30	13,50	4000	157,0	2,5
WIN 13	13	39	17,50	6700	266,0	4,2
WIN 16	16	48	21,50	10000	402,0	6,3
WIN 19	19	57	26,60	14000	567,0	8,9
WIN 22	22	66	29,50	19000	760,0	11,9
WIN 26	26	78	35,00	26500	1062,0	16,2
WIN 32	32	96	43,00	40000	1610,0	24,1

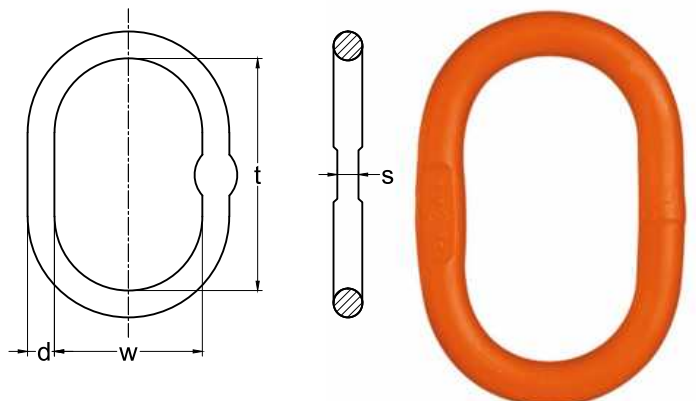


MASTER LINK AW CL.10

- made according to the harmonized standard: PN-EN 1677-4 with increased strength,
- safety ratio: 4, • made of alloy steel grade 10, • tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components, • protected against corrosion.



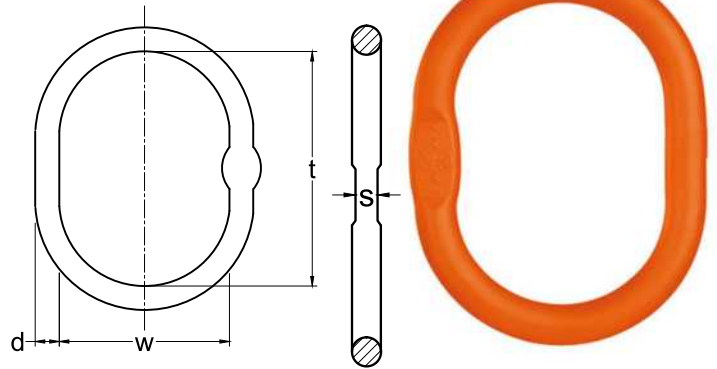
Type	Φ chain sling		WLL (t)	D (mm)	T (mm)	W (mm)	S (mm)	Weight kg/pcs
	1 leg	2 legs						
AW 10	5	5	1,4	10	80	50	10	0,14
AW 13	6/7	6	2,3	13	110	60	10	0,34
AW 16	8	7	3,5	16	110	60	14	0,53
AW 18	10	8	5,0	18	135	75	14	0,86
AW 22	13	10	7,6	23	160	90	17	1,60
AW 26	16	13	10,0	27	180	100	20	2,46
AW 32	19	16	14,0	33	200	110	26	4,14
AW 26	22	19	25,1	36	260	140	-	6,22
AW 45	26	22	30,8	45	340	180	-	12,82
AW 50	32	26	40,0	50	350	190	-	16,55
AW 56	-	32	60,0	60	400	200	-	27,01
AW 72	-	-	81,5	70	460	250	-	45,00



ENLARGED MASTER LINK MW CL.10

- made according to the harmonized standard: PN-EN 1677-4 with increased strength,
- safety ratio: 4, • made of alloy steel grade 10, • tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components, • protected against corrosion.

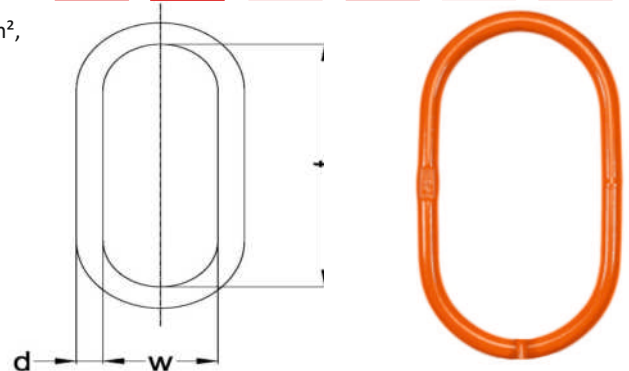
Type	Φ chain sling		WLL (t)	D (mm)	T (mm)	W (mm)	S (mm)	Weight kg/pcs
	1 leg	2 legs						
MW 10	5	5	1,4	11	90	65	10	0,22
MW 13	6/7	6	2,3	14	120	70	10	0,44
MW 16	8	7	3,2	16	140	80	13	0,67
MW 18	10	8	4,2	19	160	95	14	1,09
MW 22	13	10	6,7	23	160	110	17	1,69
MW 26	16	13	10,1	27	190	110	20	2,65
MW 32	19	16	16,0	33	230	130	26	4,78
MW 36	22	19	21,2	38	275	150	29	7,48
MW 56	32	26	40,0	56	350	250	-	21,98



MASTER LINK ASSEMBLY VLW CL.10

- made according to the harmonized standard: PN-EN 1677-4 with increased strength,
- safety ratio: 4, • made of alloy steel grade 10, • tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components, • protected against corrosion.

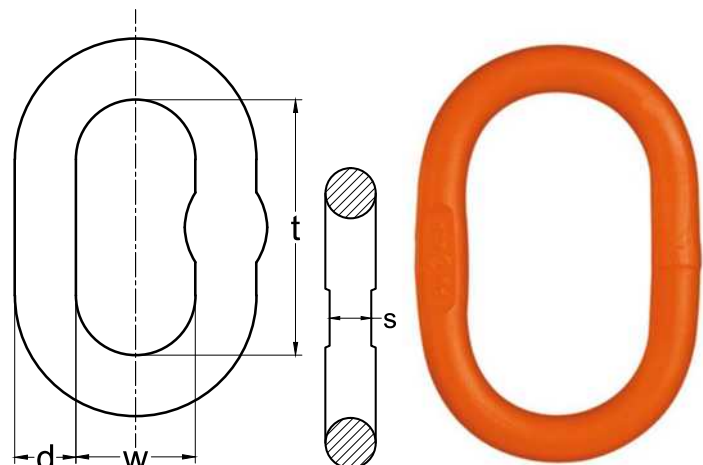
Type	Φ chain sling		WLL (t)	D (mm)	T (mm)	W (mm)	Weight kg/pcs
	1 leg	2 legs					
VLW 16	8	-	2,5	22	340	180	3,4
VLW 22	13	-	6,7	27	340	180	4,4
VLW 26	16	-	10,0	33	340	180	6,7
VLW 32	19	-	21,2	40	340	180	10,0



TRANSITION LINK BW CL.10

- made according to the harmonized standard: PN-EN 1677-4 with increased strength,
- safety ratio: 4, • made of alloy steel grade 10, • tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components, • protected against corrosion.

Type	Φ chain sling		WLL (t)	D (mm)	T (mm)	W (mm)	S (mm)	Weight kg/pcs
	1 leg	2 legs						
BW 10	8	5	2,5	10,0	44	20	-	0,09
BW 13	10	6	4,0	13,0	54	25	10	0,17
BW 16	13	8	6,7	16,5	70	34	14	0,36
BW 18	16	10	10,0	19,5	85	40	-	0,68
BW 22	-	13	12,5	23,0	115	50	17	1,16
BW 26	19	16	16,2	27,0	140	65	20	1,92
BW 32	22/26	19	26,5	33,0	150	70	26	3,16
BW 26	-	22	31,0	36,0	170	75	-	4,12
BW 45	32	-	40,4	40,0	170	80	-	5,37
BW 50	-	26	42,4	45,0	170	80	-	7,15
BW 56	-	32	58,0	50,0	200	100	-	10,80

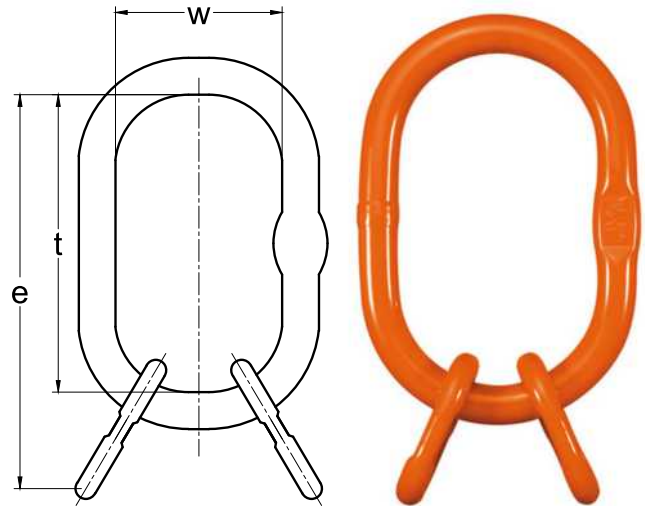


IV-LEG MASTER LINK ASSEMBLY VW CL.10

- made according to the harmonized standard: PN-EN 1677-4 with increased strength,
- safety ratio: 4, • made of alloy steel grade 10, • tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components, • protected against corrosion.



Type	Φ chain sling 3 i 4 legs	WLL (t)	E (mm)	D (mm)	T (mm)	W (mm)	Consisting of	Weight kg/pcs
VW 5	5	2,3	154	13	110	60	AW13+2xBW10	0,52
VW 6	6	4,2	189	18	135	75	AW18+2xBW13	1,26
VW 7/8	7/8	7,6	230	23	160	90	AW22+2xBW16	2,32
VW 10	10	9,6	265	27	180	100	AW26+2xBW20	3,68
VW 13	13	14,0	315	33	200	110	AW32+2xBW22	6,46
VW 16	16	21,2	400	36	260	140	AW36+2xBW26	10,06
VW 19	19	34,1	500	50	350	190	AW50+2xBW32	22,87
VW 22	22	40,0	520	50	350	190	AW50+2xBW36	24,79
VW 26	26	56,0	570	60	400	200	AW56+2xBW45	37,75
VW 32	32	76,0	660	70	460	250	A72+2xB50	66,60

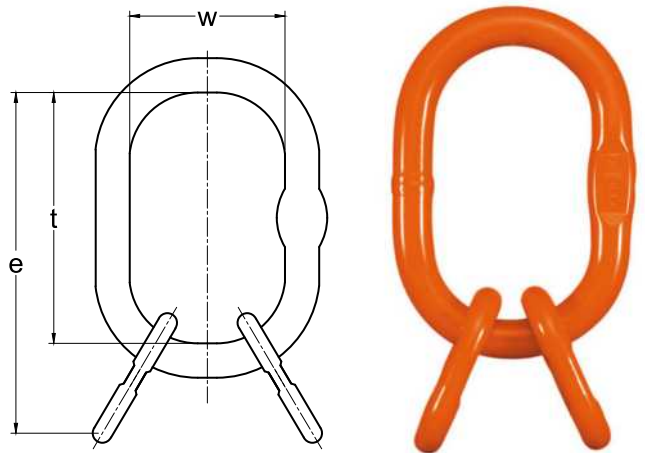


ENLARGED IV-LEG MASTER LINK ASSEMBLY VMW CL.10

- made according to the harmonized standard: PN-EN 1677-4 with increased strength,
- safety ratio: 4,
- made of alloy steel grade 10,
- tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components, • protected against corrosion.



Type	Φ chain sling 3 i 4 legs	WLL (t)	E (mm)	D (mm)	T (mm)	W (mm)	Consisting of	Weight kg/pcs
VMW 6	6	4,2	214	19	160	95	MW18+2xBW13	1,43
VMW 7/8	7/8	6,6	230	23	160	110	MW22+2xBW16	2,41
VMW 10	10	10,1	275	27	190	110	MW26+2xBW20	4,01
VMW 13	13	15,7	345	33	230	130	MW32+2xBW22	6,90
VMW 16	16	21,2	415	38	275	150	MW36+2xBW26	11,12

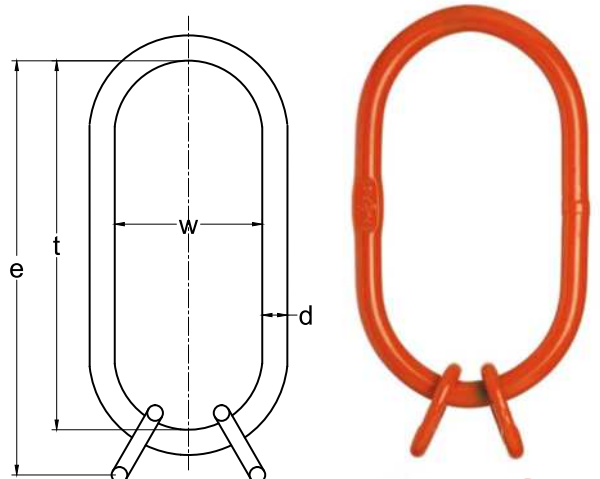


2/4 MASTER LINK ASSEMBLY VLW CL.10

- made according to the harmonized standard: PN-EN 1677-4 with increased strength,
- safety ratio: 4,
- made of alloy steel grade 10,
- tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components, • protected against corrosion.



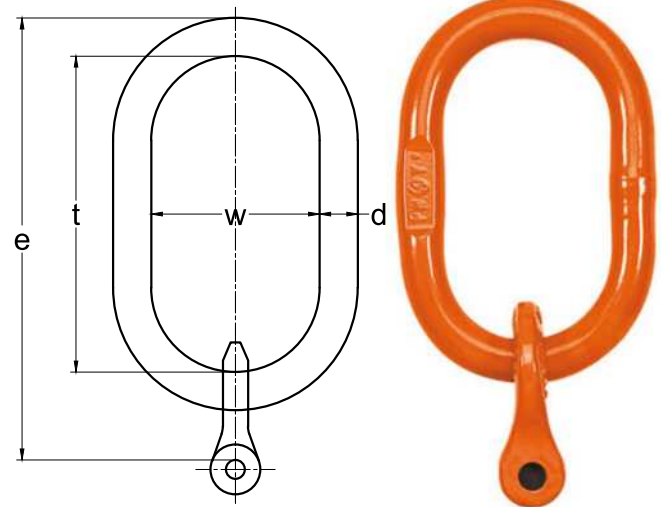
Type	Φ chain sling 2 3 i 4 legs	WLL (t)	e (mm)	d (mm)	t (mm)	w (mm)	Consisting of	Weight kg/pcs
VLW 2-6/7/8/4-6	6/7/8	6	3,55	394	22	340	22+2xBW13	3,50
VLW 2-10/4-7/8	10	7/8	5,60	410	27	340	LW27+2xBW16	5,10
VLW 2-13/4-10	13	10	9,50	425	33	340	LW32+2xBW20	8,00



CLEVIS MASTER SET KAGW-1 CL.10

- made according to the harmonized standard: PN-EN 1677-4 with increased strength,
- safety ratio: 4, • made of alloy steel grade 10, • tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components, • protected against corrosion.

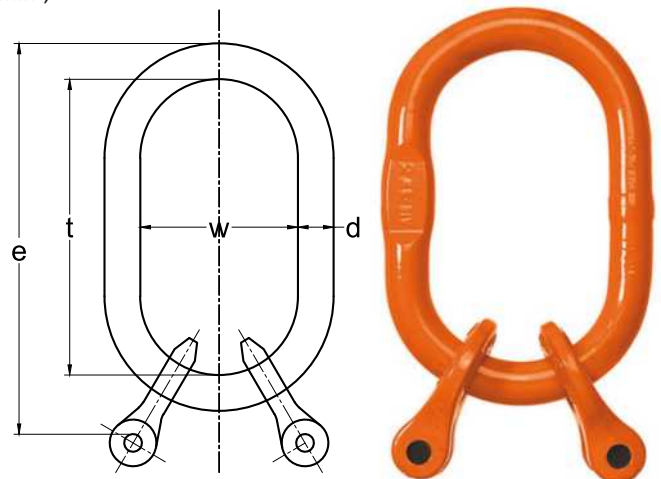
Type	φ chain	WLL (t)	e (mm)	d (mm)	t (mm)	w (mm)	Weight kg/pcs
KAGW 1-6	6	1,4	141	13	110	60	0,42
KAGW 1-7	7	1,9	153	13	110	60	0,54
KAGW 1-8	8	2,5	153	16	110	60	0,73
KAGW 1-10	10	4,0	186	18	135	75	1,44
KAGW 1-13	13	6,7	223	23	160	90	2,30
KAGW 1-16	16	10,0	254	27	180	100	3,63
KAGW 1-19	19	14,0	290	33	200	110	6,20
KAGW 1-22	22	19,0	357	36	260	140	8,90



CLEVIS MASTER SET KAGW-2 CL.10

- made according to the harmonized standard: PN-EN 1677-4 with increased strength,
- safety ratio: 4, • made of alloy steel grade 10, • tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components, • protected against corrosion.

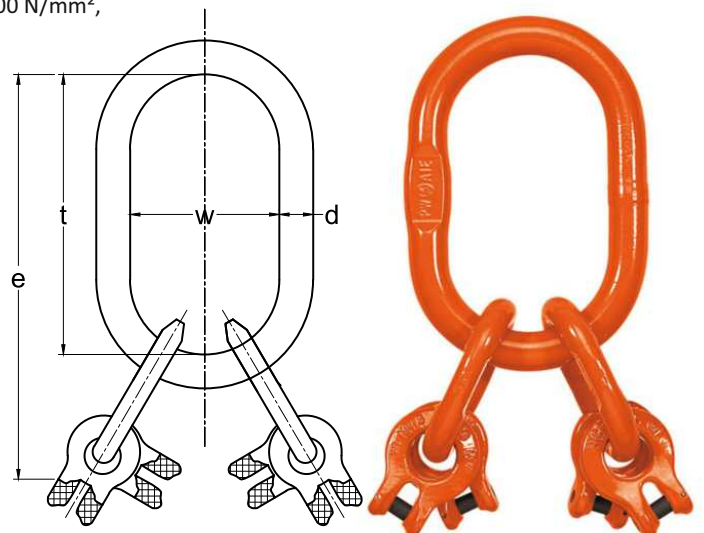
Type	φ chain	WLL (t)	e (mm)	d (mm)	t (mm)	w (mm)	Weight kg/pcs
KAGW 2-6	6	2,00	141	13	110	60	0,50
KAGW 2-7	7	2,65	153	16	110	60	0,93
KAGW 2-8	8	3,55	178	18	135	75	1,26
KAGW 2-10	10	5,60	211	23	160	90	2,66
KAGW 2-13	13	9,50	243	27	180	100	3,86
KAGW 2-16	16	14,00	274	33	200	110	6,48
KAGW 2-19	19	20,00	350	36	260	140	10,10
KAGW 2-22	22	26,50	437	45	340	180	17,90



CLEVIS MASTER SET KAGW-4 CL.10

- made according to the harmonized standard: PN-EN 1677-4 with increased strength,
- safety ratio: 4, • made of alloy steel grade 10, • tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components, • protected against corrosion.

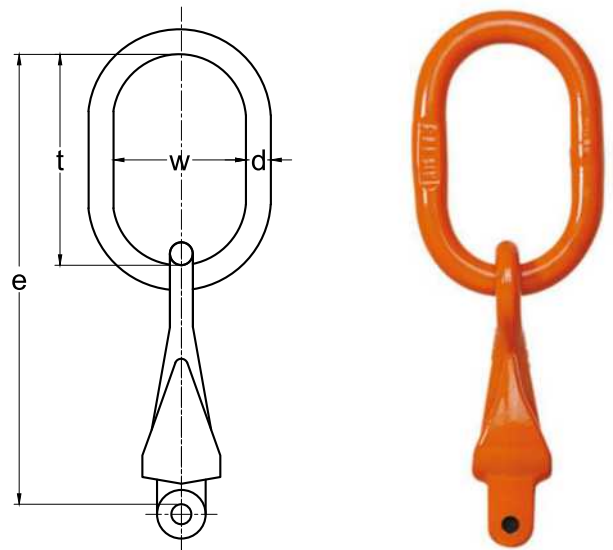
Type	φ chain	WLL (t)	e (mm)	d (mm)	t (mm)	w (mm)	Weight kg/pcs
KAGW 4-6	6	3,00	220	18	135	75	1,52
KAGW 4-7	7	4,00	273	23	160	90	3,12
KAGW 4-8	8	5,30	273	23	160	90	3,12
KAGW 4-10	10	8,00	316	27	180	100	6,14
KAGW 4-13	13	14,00	378	33	200	110	9,26
KAGW 4-16	16	21,20	474	36	260	140	14,70
KAGW 4-19	19	30,00	590	50	350	190	30,50
KAGW 4-22	22	40,00	617	50	350	190	35,00



CLEVIS MASTER SET VXXKW-1 CL.10

- made according to the harmonized standard: PN-EN 1677-4 with increased strength,
- safety ratio: 4,
- made of alloy steel grade 10, • tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components, • protected against corrosion.

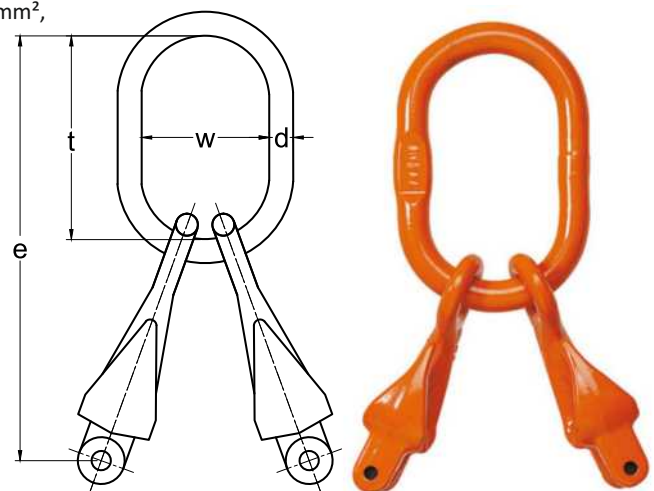
Type	φ chain	WLL (t)	e (mm)	d (mm)	t (mm)	w (mm)	Weight kg/pcs
VXXKW 1-5	5	1,0	164	10	80	50	0,44
VXXKW 1-6	6	1,4	194	13	110	60	0,64
VXXKW 1-7	7	1,9	232	13	110	60	0,96
VXXKW 1-8	8	2,5	232	16	110	60	1,16
VXXKW 1-10	10	4,0	294	18	135	75	2,11
VXXKW 1-13	13	6,7	363	23	160	90	4,30
VXXKW 1-16	16	10,0	413	27	180	100	7,30



CLEVIS MASTER SET VXXKW-2 CL.10

- made according to the harmonized standard: PN-EN 1677-4 with increased strength,
- safety ratio: 4, • made of alloy steel grade 10, • tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components, • protected against corrosion.

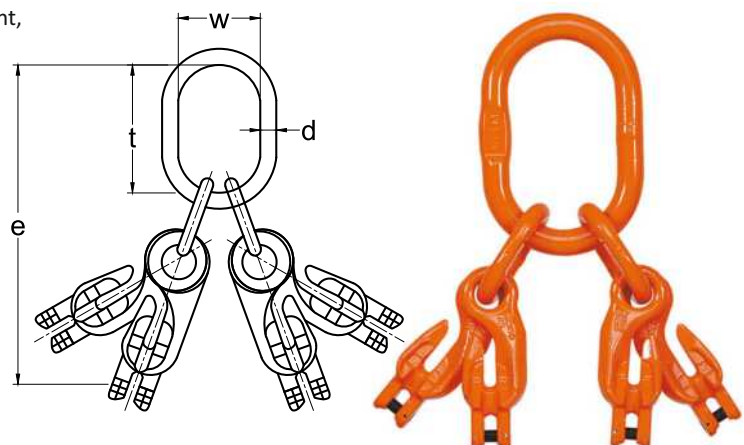
Type	φ chain	WLL (t)	e (mm)	d (mm)	t (mm)	w (mm)	Weight kg/pcs
VXXKW 2-5	5	1,40	164	10	80	50	0,70
VXXKW 2-6	6	2,00	194	13	110	60	0,90
VXXKW 2-7	7	2,65	232	16	110	60	1,80
VXXKW 2-8	8	3,55	257	18	135	75	2,10
VXXKW 2-10	10	5,60	319	23	160	90	4,10
VXXKW 2-13	13	9,50	383	27	180	100	7,90
VXXKW 2-16	16	14,00	433	33	200	110	13,80



CLEVIS MASTER SET VXXKW-4 CL.10

- made according to the harmonized standard: PN-EN 1677-4 with increased strength,
- safety ratio: 4,
- made of alloy steel grade 10, • tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components, • protected against corrosion.

Type	φ chain	WLL (t)	e (mm)	d (mm)	t (mm)	w (mm)	Weight kg/pcs
VXXKW 4-5	5	2,0	238	13	110	60	1,70
VXXKW 4-6	6	3,0	273	18	135	75	2,40
VXXKW 4-7	7	4,0	352	23	160	90	4,80
VXXKW 4-8	8	5,3	352	23	160	90	4,80
VXXKW 4-10	10	8,0	424	27	180	100	8,80
VXXKW 4-13	13	14,0	518	33	200	110	17,30
VXXKW 4-16	16	21,2	623	36	260	140	29,30

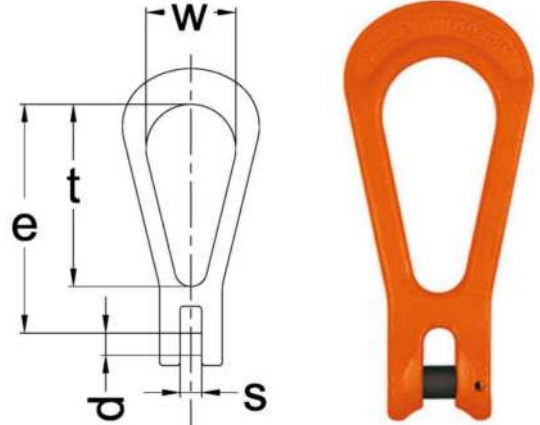


CLEVIS REEVING LINK KOW CL.10

- made according to the harmonized standard: PN-EN 1677-4 with increased strength,
- safety ratio: 4, • made of alloy steel grade 10, • tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components, • protected against corrosion.



Type	WLL (t)	e (mm)	t (mm)	w (mm)	d (mm)	s (mm)	Weight kg/pcs
KOW 7	1,9	91,5	70	34	9,0	9,0	0,28
KOW 8	2,5	91,0	70	34	10,0	9,0	0,30
KOW 10	4,0	128,0	102	50	12,5	12,0	0,70
KOW 13	6,7	169,0	136	66	16,0	15,0	1,40
KOW 16	10,0	214,0	172	83	20,0	17,5	2,74

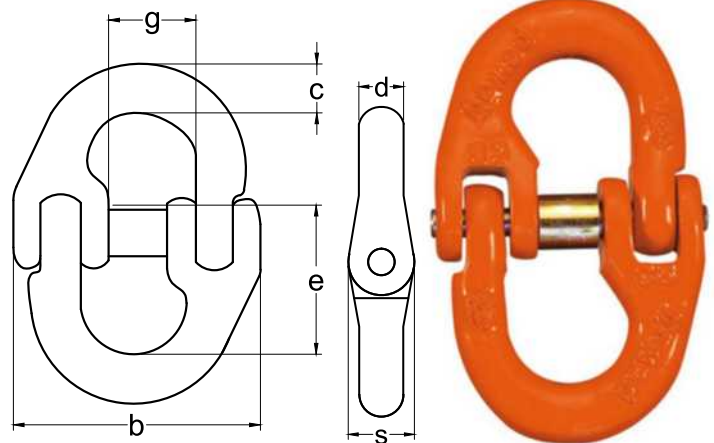


CONNEX CONNECTING LINK CW KL.10

- made according to the harmonized standard: PN-EN 1677-1 with increased strength,
- safety ratio: 4, • made of alloy steel grade 10, • tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components, • protected against corrosion.



Type	WLL (t)	e (mm)	c (mm)	s (mm)	d (mm)	b (mm)	g (mm)	Weight kg/pcs
CW 5	1,0	36,0	7,0	9,2	7,0	34,5	12,7	0,05
CW 6	1,4	44,0	7,8	11,0	7,6	39,0	14,1	0,06
CW 7	1,9	51,0	10,0	12,9	9,0	46,5	16,3	0,12
CW 8	2,5	61,5	11,5	15,0	10,0	53,0	18,3	0,18
CW 10	4,0	72,0	12,6	17,8	12,6	63,0	23,0	0,33
CW 13	6,7	88,0	19,0	22,0	16,7	79,0	27,6	0,70
CW 16	10,0	103,0	21,0	29,0	21,0	106,0	33,0	1,14
CW 19	16,0	115,0	24,5	34,8	24,5	118,0	42,7	2,14
CW 22	19,0	135,0	29,0	38,0	27,0	147,0	48,0	3,21
CW 26	21,2	164,0	32,0	44,0	30,0	159,0	61,0	5,10
CW 32	31,5	194,0	40,0	50,0	32,6	195,0	80,0	8,46

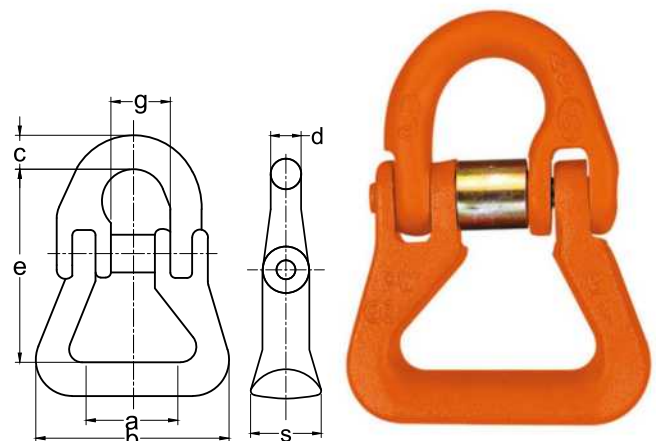


ROUND SLING CONNECTING LINK CARW KL.10

- made according to the harmonized standard: PN-EN 1677-1 with increased strength,
- safety ratio: 4,
- made of alloy steel grade 10,
- tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components,
- protected against corrosion.



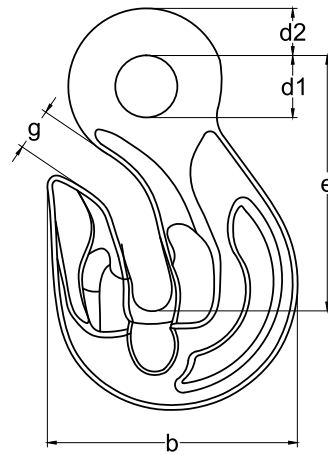
Type	WLL (t)	e (mm)	c (mm)	a (mm)	d (mm)	b (mm)	g (mm)	Weight kg/pcs
CARW 8	2,5	66,0	12,0	29,0	10,0	65,0	18,0	0,30
CARW 10	4,0	81,0	13,0	40,0	13,0	82,0	23,0	0,50
CARW 13	6,7	104,0	19,0	50,0	17,0	100,0	28,0	1,10
CARW 16	10,0	113,0	21,0	47,0	21,0	110,0	33,0	2,00



GRAB HOOK PW CL.10

- made according to the harmonized standard: PN-EN 1677-1 with increased strength,
- safety ratio: 4, • made of alloy steel grade 10, • tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components, • protected against corrosion.

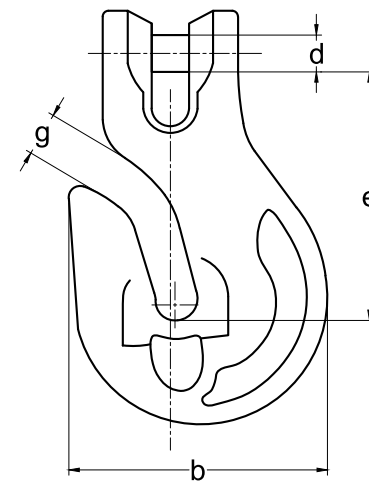
Type	WLL (t)	e (mm)	b (mm)	d1 (mm)	d2 (mm)	g (mm)	Weight kg/pcs
PW 5-6	1,4	51,0	47	12	8,5	8,0	0,18
PW 7-8	2,5	70,5	58	20	11,0	10,5	0,40
PW 10	4,0	88,0	76	22	15,0	13,0	0,90
PW 13	6,7	113,0	101	26	18,0	17,0	1,80
PW 16	10,0	129,0	118	32	23,0	19,0	3,60
PW 19	16,0	151,7	150	36	27,0	23,6	6,15
PW 22	19,0	170,0	165	42	31,0	27,0	8,27
PW 26	26,5	201,0	195	50	37,0	32,0	13,80
PW 32	40,0	243,0	242	60	43,0	38,0	25,00



CLEVIS GRAB HOOK KPW CL.10

- made according to the harmonized standard: PN-EN 1677-1 with increased strength,
- safety ratio: 4, • made of alloy steel grade 10, • tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components, • protected against corrosion.

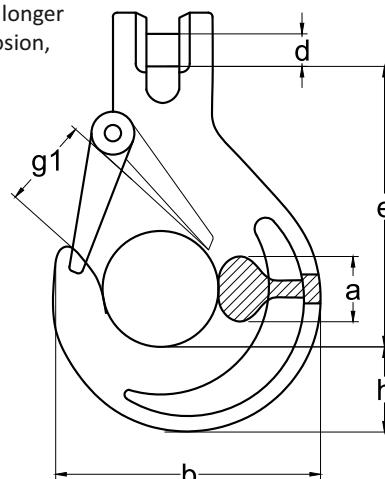
Type	WLL (t)	e (mm)	b (mm)	d (mm)	G (mm)	Weight kg/pcs
KPW 5-6	1,4	45,0	47,4	7,4	8,0	0,19
KPW 7	1,9	61,0	58,0	9,0	10,5	0,38
KPW 8	2,5	60,5	58,0	10,0	10,5	0,38
KPW 10	4,0	76,0	76,0	12,5	13,0	0,85
KPW 13	6,7	104,0	101,0	16,0	17,0	1,90
KPW 16	10,0	107,0	122,0	20,0	19,0	3,60
KPW 19	16,0	141,0	150,0	24,0	23,6	6,15
KPW 22	19,0	158,0	165,0	27,0	26,0	9,00



CLEVIS SLING HOOK KHSW KL.10

- made according to the harmonized standard: PN-EN 1677-1 with increased strength, • safety ratio: 4, • made of alloy steel grade 10,
- tensile strength 1000 N/mm², • at least 25% more load capacity than class 8, with the same weight, • increased abrasion resistance and therefore longer service life, • powder coated components, • protected against corrosion,
- the safety catch locks into the tip of the hook.

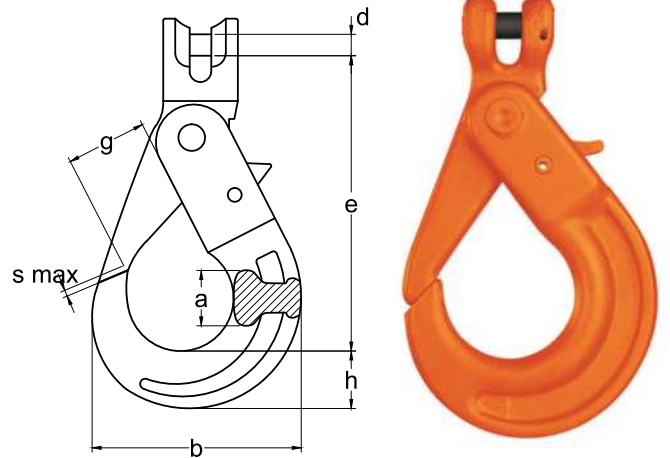
Type	WLL (t)	e (mm)	h (mm)	a (mm)	b (mm)	d (mm)	g1 (mm)	Weight kg/pcs
KHSW 6	1,4	69,0	20	15	66	7,4	19	0,20
KHSW 7	1,9	95,0	28	19	90	9,0	26	0,60
KHSW 8	2,5	94,5	28	19	90	10,0	26	0,60
KHSW 10	4,0	109,0	33	25	108	12,5	31	1,10
KHSW 13	6,7	136,0	40	34	131	16,0	39	2,00
KHSW 16	10,0	155,0	49	37	153	20,0	45	3,50
KHSW 19	16,0	183,5	53	46	177	24,0	53	5,00
KHSW 22	19,0	213,5	62	50	196	27,0	62	12,10



CLEVIS SAFETY HOOK KLHW CL.10

- made according to the harmonized standard: PN-EN 1677-3 with increased strength,
- safety ratio: 4, • made of alloy steel grade 10,
- tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components, • protected against corrosion.

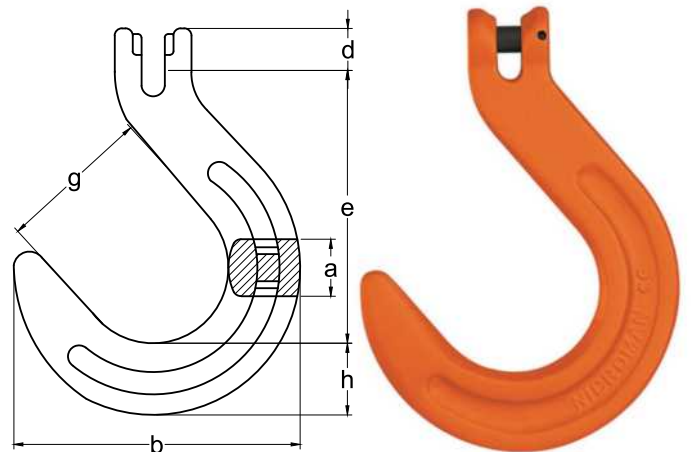
Type	WLL (t)	e (mm)	h (mm)	a (mm)	b (mm)	D (mm)	g (mm)	Weight kg/pcs
KLHW 6	1,4	94,0	20	16	71	7,5	28	0,50
KLHW 7	1,9	123,0	26	20	88	9,0	34	0,90
KLHW 8	2,5	123,0	26	20	88	10,0	34	0,90
KLHW 10	4,0	144,0	30	25	107	13,0	45	1,60
KLHW 13	6,7	180,0	40	34	138	16,0	52	2,90
KLHW 16	10,0	217,0	50	35	168	21,0	60	5,80



CLEVIS FOUNDRY HOOK KFW CL.10

- made according to the harmonized standard: PN-EN 1677-1 with increased strength,
- safety ratio: 4,
- made of alloy steel grade 10,
- tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components,
- protected against corrosion.

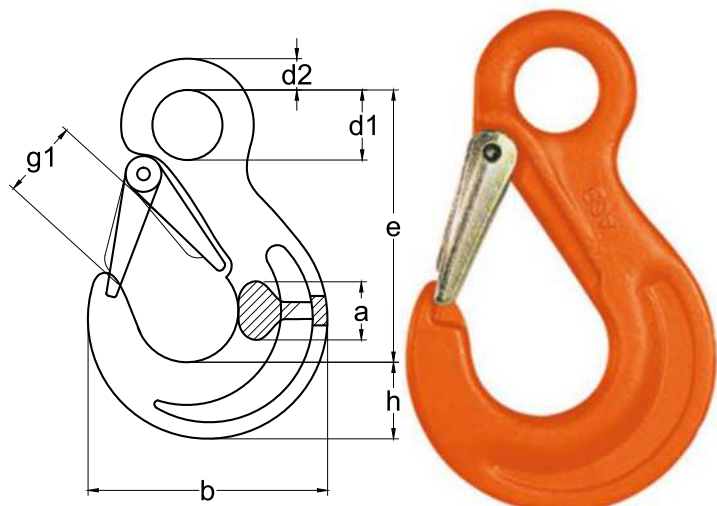
Kod	WLL (t)	e (mm)	h (mm)	a (mm)	g (mm)	d (mm)	b (mm)	Waga kg/szt
KFW 7	1,9	120,5	29	25	64	9,0	118	1,00
KFW 8	2,5	120,0	29	25	64	10,0	118	1,00
KFW 10	4,0	140,0	35	32	76	12,5	143	1,80
KFW 13	6,7	169,5	42	40	89	16,0	170	3,00



EYE SLING HOOK HSW CL.10

- made according to the harmonized standard: PN-EN 1677-2 with increased strength,
- safety ratio: 4, • made of alloy steel grade 10, • tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components,
- protected against corrosion.

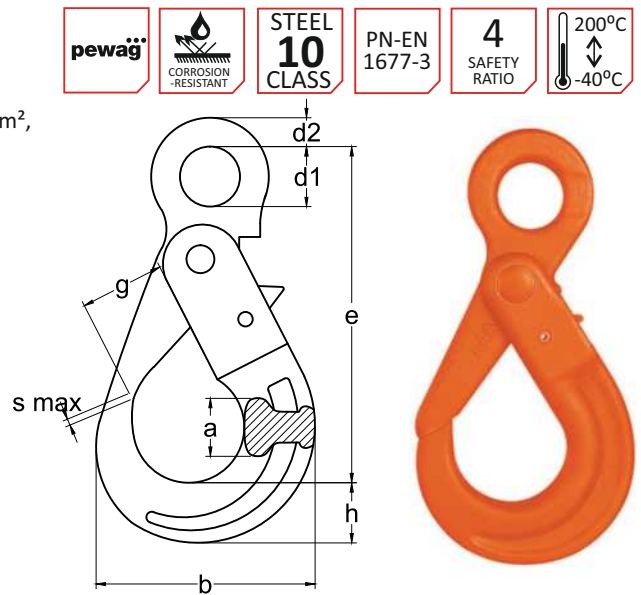
Type	WLL (t)	e (mm)	h (mm)	a (mm)	d1 (mm)	d2 (mm)	g1 (mm)	b (mm)	Weight kg/pcs
HSW 5-6	1,4	84,5	21,0	16,5	20	10,0	19	68,0	0,20
HSW 7-8	2,5	106,0	27,0	19,0	25	11,0	26	88,0	0,50
HSW 10	4,0	131,0	33,0	26,0	34	16,0	31	108,5	1,10
HSW 13	6,7	164,0	43,5	33,0	43	19,0	39	133,7	2,00
HSW 16	10,0	182,5	50,0	40,0	50	24,5	45	154,6	3,50
HSW 19	16,0	205,0	55,0	48,0	55	27,0	53	177,5	4,70
HSW 22	19,0	225,0	62,0	50,0	60	29,0	62	196,0	7,30
HSW 26	26,5	259,0	75,0	70,0	70	37,0	73	235,0	13,40
HSW 32	40,0	299,0	97,0	82,0	66	45,0	87	291,0	27,50



SAFETY HOOK LHW CL.10

- made according to the harmonized standard: PN-EN 1677-3 with increased strength,
- safety ratio: 4, • made of alloy steel grade 10, • tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components, • protected against corrosion.

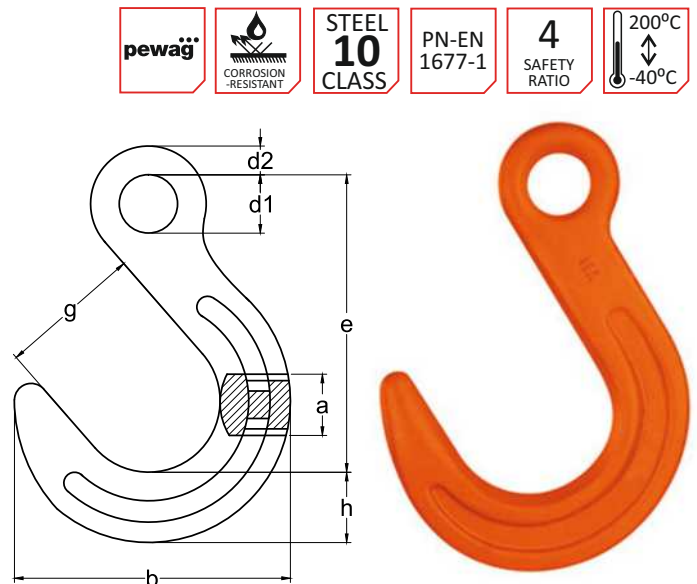
Type	WLL (t)	e (mm)	h (mm)	a (mm)	d1 (mm)	d2 (mm)	g (mm)	b (mm)	Weight kg/pcs
LHW 5-6	1,4	110,0	20,0	16,0	21,0	11,0	28	71,0	0,50
LHW 7-8	2,5	136,0	26,0	20,0	27,0	12,0	34	87,0	0,90
LHW 10	4,0	169,0	30,0	25,0	34,5	15,0	45	107,0	1,50
LHW 13	6,7	205,0	40,5	34,0	40,0	20,0	52	138,0	2,70
LHW 16	10,0	251,0	50,0	35,0	50,0	27,0	60	168,0	5,70
LHW 19	16,0	290,0	62,0	50,0	60,0	30,0	70	194,0	7,90
LHW 22	19,0	322,0	65,0	52,0	70,0	32,0	81	211,0	11,00



FOUNDRY HOOK FW CL.10

- made according to the harmonized standard: PN-EN 1677-1 with increased strength,
- safety ratio: 4,
- made of alloy steel grade 10,
- tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components,
- protected against corrosion.

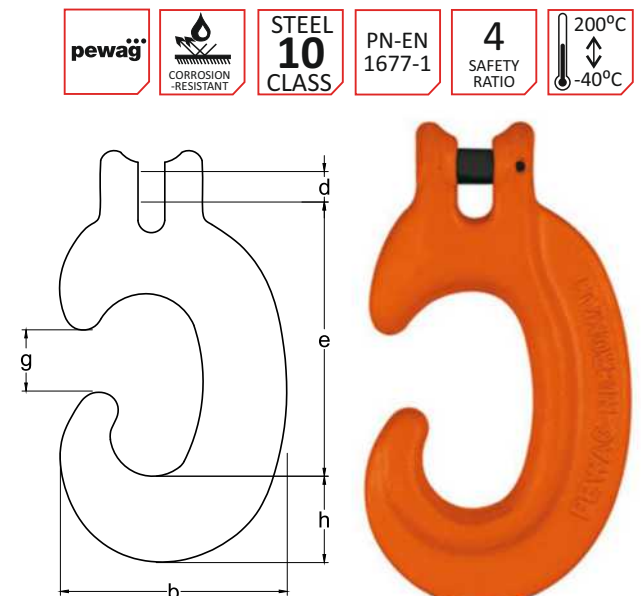
Type	WLL (t)	e (mm)	h (mm)	a (mm)	d1 (mm)	d2 (mm)	g (mm)	b (mm)	Weight kg/pcs
FW 7-8	2,5	131,0	29,0	25,0	24	11,0	64	118,0	0,90
FW 10	4,0	158,0	35,0	32,0	31	14,0	76	143,0	1,80
FW 13	6,7	190,0	42,0	40,0	39	17,0	89	170,0	2,80
FW 16	10,0	224,0	50,0	46,0	47	22,0	102	200,0	5,00
FW 19	16,0	260,0	61,0	54,0	56	28,0	114	231,0	7,60



CLEVIS C-HOOK KCHW CL.10

- made according to the harmonized standard: PN-EN 1677-1 with increased strength,
- safety ratio: 4,
- made of alloy steel grade 10,
- tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components,
- protected against corrosion.

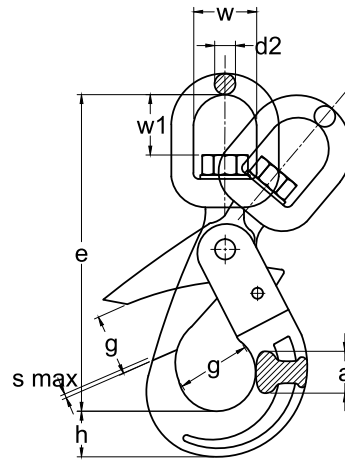
Type	WLL (t)	e (mm)	h (mm)	d (mm)	b (mm)	g (mm)	Weight kg/pcs
KCHW 7	1,9	90,5	27,5	9,0	73,5	20,0	0,50
KCHW 8	2,5	90,0	27,5	10,0	73,5	20,0	0,50
KCHW 10	4,0	129,0	38,5	12,5	107,0	28,0	1,40
KCHW 13	6,7	166,0	51,0	16,0	137,0	41,0	3,00
KCHW 16	10,0	205,0	60,0	20,0	166,0	45,0	5,30



SWIVEL SAFETY HOOK WLHW CL.10

- made according to the harmonized standard: PN-EN 1677-1 with increased strength,
- safety ratio: 4,
- made of alloy steel grade 10,
- tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components,
- protected against corrosion.

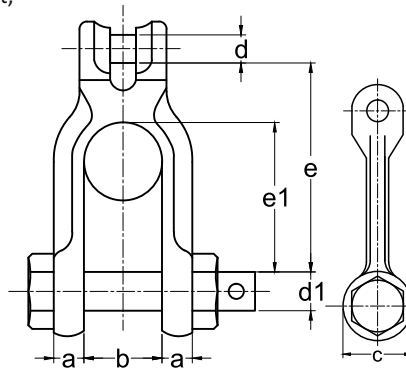
Type	WLL (t)	e (mm)	h (mm)	a (mm)	w (mm)	d2 (mm)	g (mm)	Weight kg/pcs
WLHW 5-6	1,4	160	20	16	35	13	28	0,60
WLHW 7-8	2,5	181	26	20	35	13	34	1,10
WLHW 10	4,0	218	30	25	42	16	45	2,00
WLHW 13	6,7	269	40	34	49	20	52	4,00
WLHW 16	10,0	319	50	35	60	24	60	6,80



CLEVIS SHACKLE KSCHW CL.10

- made according to the harmonized standard: PN-EN 1677-1 with increased strength,
- safety ratio: 4,
- made of alloy steel grade 10,
- tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components,
- protected against corrosion.

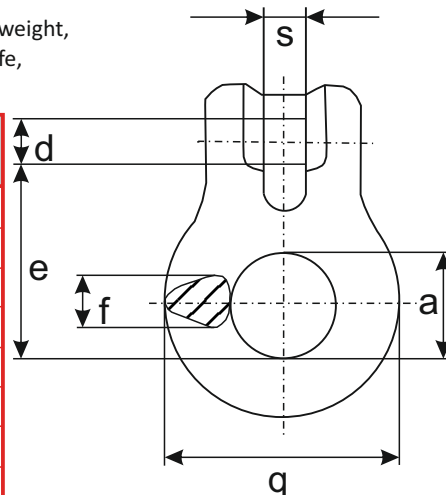
Type	WLL (t)	e (mm)	e1 (mm)	b (mm)	a (mm)	d (mm)	d (mm)	c (mm)	Weight kg/pcs
KSCHW 7	1,9	76	54	26	12	9,0	31	16	0,49
KSCHW 8	2,5	76	54	26	12	10,0	31	16	0,49
KSCHW 10	4,0	105	76	32	16	12,5	39	20	0,95
KSCHW 13	6,7	113	77	42	21	16,0	50	24	1,89



COUPLING RING KRW CL.10

- made according to the harmonized standard: PN-EN 1677-1 with increased strength,
- safety ratio: 4,
- made of alloy steel grade 10,
- tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components, • protected against corrosion.

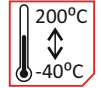
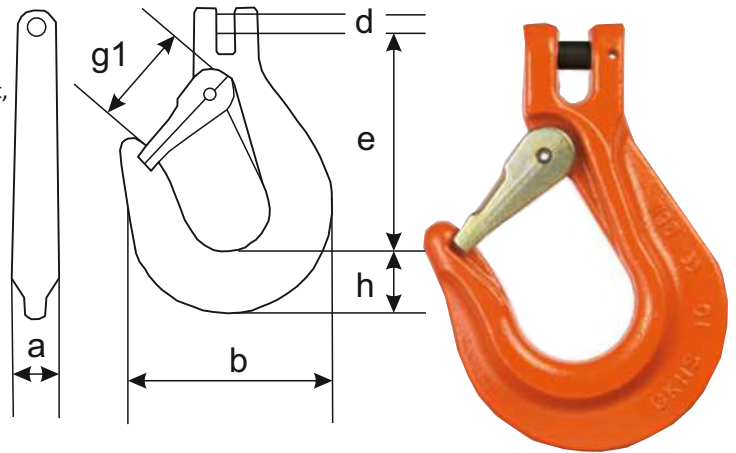
Type	WLL (t)	e (mm)	s (mm)	a (mm)	b (mm)	f (mm)	d (mm)	Weight kg/pcs
KRW 6	1,4	31,0	7,2	17,5	38,0	8	7,4	0,08
KRW 7	2,5	43,0	9,5	23,5	54,0	11	9,0	0,20
KRW 8	2,5	42,5	9,5	23,5	54,0	11	10,0	0,20
KRW 10	4,0	51,0	12,0	28,0	63,0	14	12,5	0,58
KRW 13	6,7	63,0	15,0	33,0	76,0	17	16,0	0,70
KRW 16	10,0	74,0	18,0	40,0	88,0	20	20,0	1,17
KRW 19	16,0	94,0	23,0	50,0	114,0	24	24,0	2,00
KRW 22	19,0	101,5	24,5	50,0	122,0	27	27,0	2,60



OVERSIZE CLEVIS SLING HOOK BKHSW CL.10

- made according to the harmonized standard: PN-EN 1677-1 with increased strength,
- safety ratio: 4,
- made of alloy steel grade 10,
- tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components,
- protected against corrosion.

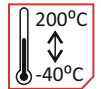
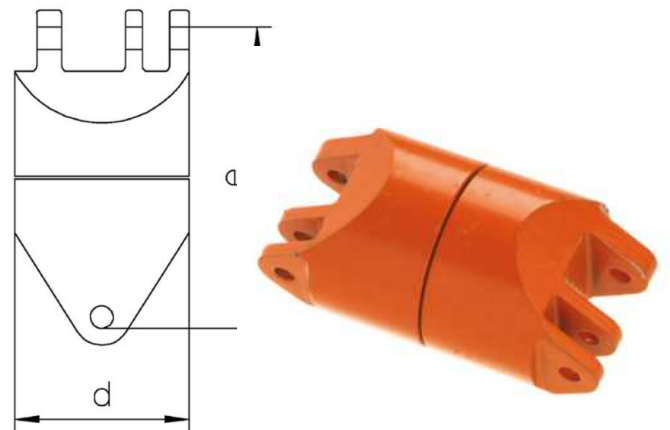
Type	WLL (t)	e (mm)	h (mm)	a (mm)	d (mm)	g1 (mm)	b (mm)	Weight kg/pcs
BKHSW 8	2,5	116,0	33	25	10,0	31,5	113	1,10
BKHSW 10	4,0	126,1	40	30	12,5	35,4	132	1,70



SWIVEL DFW CL.10

- made according to the harmonized standard: PN-EN 1677-1 with increased strength,
- safety ratio: 4,
- made of alloy steel grade 10,
- tensile strength 1000 N/mm²,
- at least 25% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components,
- protected against corrosion.

Type	WLL (t)	e (mm)	d (mm)	Weight kg/pcs
DFW 7	1,9	90,8	53	1,12
DFW 8	2,5	91,2	53	1,12
DFW 10	4,0	110,7	63	2,00



SLING ACCESSORIES CL. 12

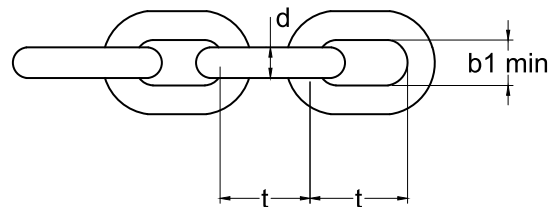
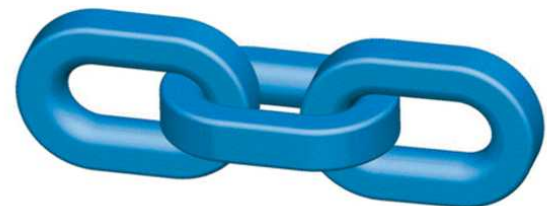
The sling accessories KOMSTAL in CLAS 10 make it possible to use all types of slings and determine the convenient suspension of the load. To protect the ends of the rope from damage or chafing, use shackles - metal fittings inserted inside the terminating sling of the loop attached to the hook. In turn, to hang a load, slings are equipped with hooks or closed slings can be used. The suspension accessories include: chains for slings, main links, link sets, connectors, hooks (shortening, fork, safe, container, swivel), tensioners, hooks, wrenches and shackles.

Use of the material with 50% increased strength (compared to class 8) allows you to reduce weight of model and increases usability of class 12 chain sling. Chemical composition of the steel, changed compared to standard slings, heat treatment and the optimal load-bearing cross section of the material guarantee very high properties of class 12 products.



CHAIN WINPRO CL.12

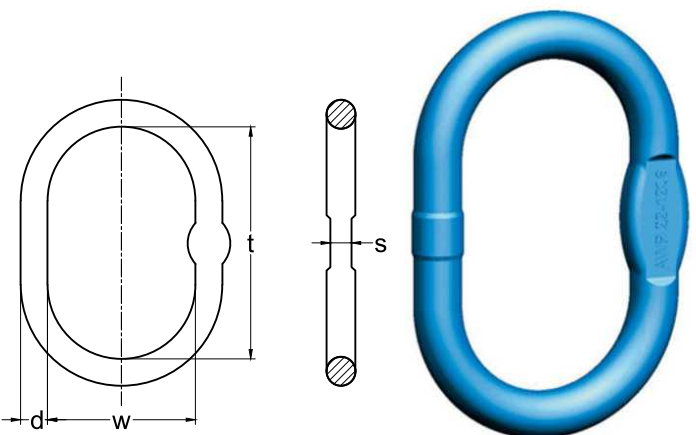
- made according to the harmonized standard: PN-EN 818-2 with increased strength,
- safety ratio: 4,
- operating temperature: $-60^{\circ}\text{C} \div 300^{\circ}\text{C}$,
- made of alloy steel grade 12,
- tensile strength 1200 N/mm^2 ,
- 50% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components,
- protected against corrosion.



Type	diameter d (mm)	scale t (mm)	width b1 min (mm)	width b2 min (mm)	WLL (t)	breaking force (kN)	Weight kg/m.
WINPRO 5	7	22	10	26	2,36	92,6	1,28
WINPRO 6	8	25	11	29	3,00	118,0	1,64
WINPRO 7	10	33	14	37	5,00	196,0	2,66
WINPRO 8	13	41	19	50	8,00	314,0	4,59

MASTER LINK AWP CL.12

- made according to the harmonized standard: PN-EN 1677-4 with increased strength,
- safety ratio: 4,
- operating temperature: $-60^{\circ}\text{C} \div 300^{\circ}\text{C}$,
- made of alloy steel grade 12,
- tensile strength 1200 N/mm^2 ,
- 50% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components,
- protected against corrosion.

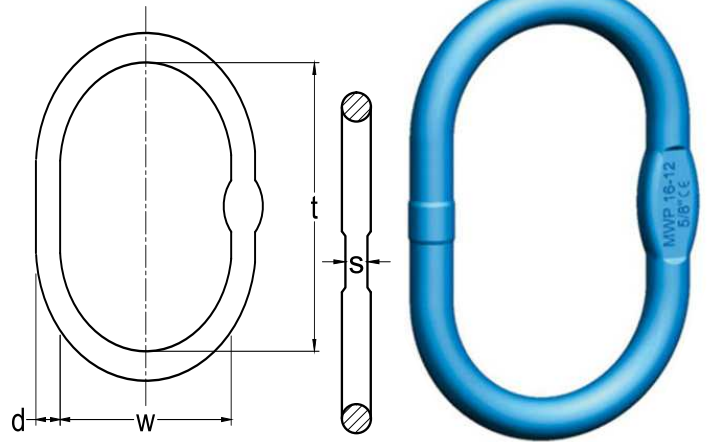


Type	Φ chain sling		WLL (t)	d (mm)	t (mm)	w (mm)	s (mm)	Weight kg/pcs
	1 leg	2 legs						
AWP 13	7	-	2,36	13	110	60	10	0,34
AWP 16	10	8	3,50	17	110	60	14	0,53
AWP 18	10	8	5,30	19	135	75	14	0,92
AWP 22	13	10	8,00	23	160	90	17	1,60
AWP 27	-	13	11,20	28	200	110	21	2,85

ENLARGED MASTER LINK MWP CL.12

- made according to the harmonized standard: PN-EN 1677-4 with increased strength,
- safety ratio: 4,
- operating temperature: $-60^{\circ}\text{C} \div 300^{\circ}\text{C}$,
- made of alloy steel grade 12,
- tensile strength 1200 N/mm^2 ,
- 50% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components,
- protected against corrosion.

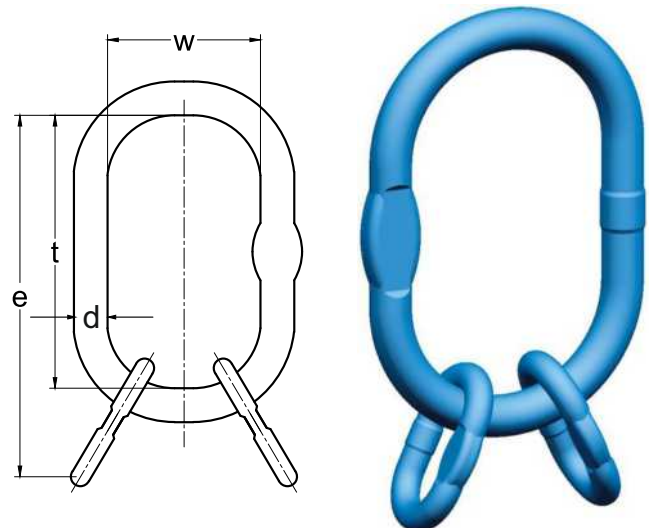
Type	Φ chain sling 1 leg	WLL (t)	D (mm)	T (mm)	W (mm)	S (mm)	Weight kg/pcs
MWP 13	7	2,36	14	120	70	10	0,44
MWP 16	10	3,20	17	140	80	13	0,67
MWP 18	10	5,00	19	160	95	14	1,21
MWP 26	13	10,10	27	190	110	20	2,65



ENLARGED MASTER LINK ASSEMBLY VMWP CL.12

- made according to the harmonized standard: PN-EN 1677-4 with increased strength,
- safety ratio: 4,
- operating temperature: $-60^{\circ}\text{C} \div 300^{\circ}\text{C}$,
- made of alloy steel grade 12,
- tensile strength 1200 N/mm^2 ,
- 50% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components,
- protected against corrosion.

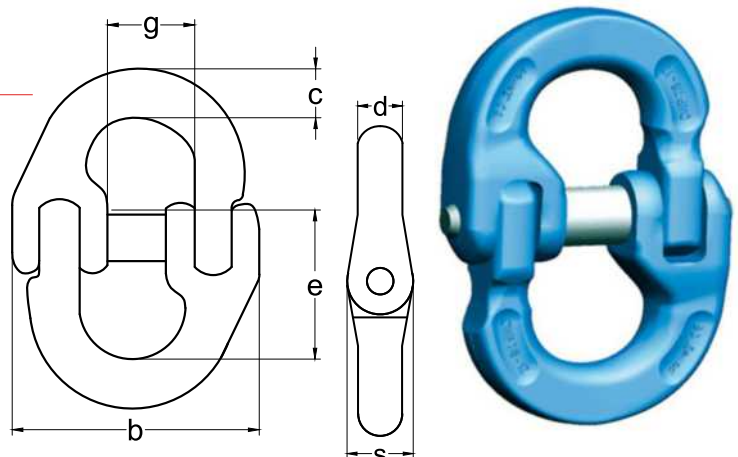
Type	Φ chain sling 2 legs	Φ chain sling 3 i 4 legs	WLL (t)	E (mm)	D (mm)	T (mm)	W (mm)	Consisting of	Weight kg/pcs
VMWP 7/8	7/8	-	4,25	214	19	160	95	MWP18+2xBWP13	1,55
VMWP 10	10	7/8	8,80	260	27	190	110	MWP26+2xBWP16	3,37
VMWP 13	13	10	12,30	315	33	230	130	MWP32+2xBWP20	6,00
VMWP 16	-	13	21,20	415	38	275	150	MWP36+2xBWP26	11,10



CONNEX CONNECTING LINK CWP C.12

- made according to the harmonized standard: PN-EN 1677-1 with increased strength,
- safety ratio: 4,
- operating temperature: $-60^{\circ}\text{C} \div 300^{\circ}\text{C}$,
- made of alloy steel grade 12,
- tensile strength 1200 N/mm^2 ,
- 50% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components,
- protected against corrosion.

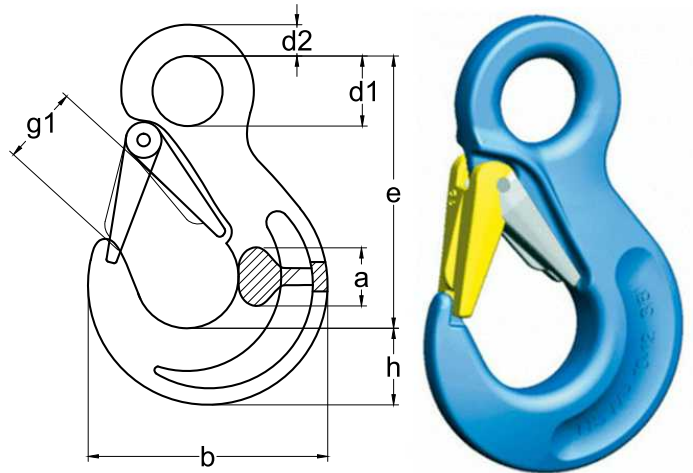
Type	WLL (t)	e (mm)	c (mm)	s (mm)	d (mm)	b (mm)	g (mm)	Weight kg/pcs
CWP 7	2,36	63,0	11,5	13,0	9,0	51,0	17,0	0,24
CWP 8	3,00	62,0	14,0	15,0	10,0	58,0	20,0	0,27
CWP 10	5,00	78,0	18,0	21,0	13,0	66,0	22,0	0,57
CWP 13	8,00	107,0	22,0	25,0	17,0	84,0	23,0	1,43
CWP 16	12,50	128,0	27,0	31,0	21,0	120,0	48,0	2,26



EYE SLING HOOK HSWP CL.12

- made according to the harmonized standard: PN-EN 1677-1 with increased strength,
- safety ratio: 4,
- operating temperature: $-60^{\circ}\text{C} \div 300^{\circ}\text{C}$,
- made of alloy steel grade 12,
- tensile strength 1200 N/mm^2 ,
- 50% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components,
- protected against corrosion.

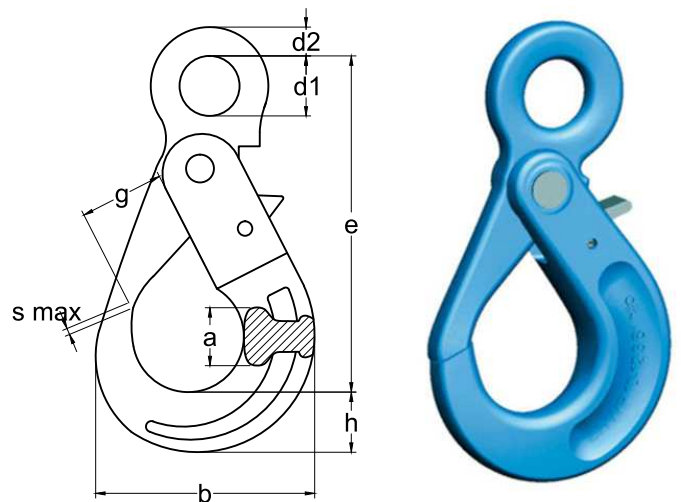
Type	WLL (t)	e (mm)	h (mm)	a (mm)	d1 (mm)	d2 (mm)	g1 (mm)	b (mm)	Weight kg/pcs
HSPW 7-8	3,00	106	27,0	19,0	25,0	11,0	26	88,0	0,50
HSPW 10	5,00	131	33,0	26,0	34,0	16,0	31	108,0	1,10
HSPW 13	8,00	164	43,0	33,0	43,0	19,0	39	132,0	2,20



SAFETY HOOK LHWP CL.12

- made according to the harmonized standard: PN-EN 1677-3 with increased strength,
- safety ratio: 4,
- operating temperature: $-60^{\circ}\text{C} \div 300^{\circ}\text{C}$,
- made of alloy steel grade 12,
- tensile strength 1200 N/mm^2 ,
- 50% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components,
- protected against corrosion.

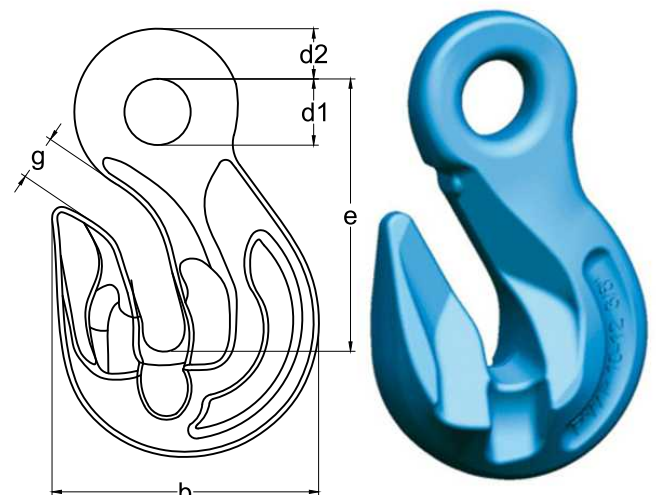
Type	WLL (t)	e (mm)	h (mm)	a (mm)	d1 (mm)	d2 (mm)	g (mm)	b (mm)	Weight kg/pcs
LHWP 7-8	3,0	126,0	25,0	24,0	25,0	14,0	34	88,0	0,90
LHWP 10	5,0	158,0	31,0	28,0	31,0	17,0	45	112,0	1,60
LHWP 13	8,0	205,0	41,0	34,0	40,0	22,0	54	145,0	3,30

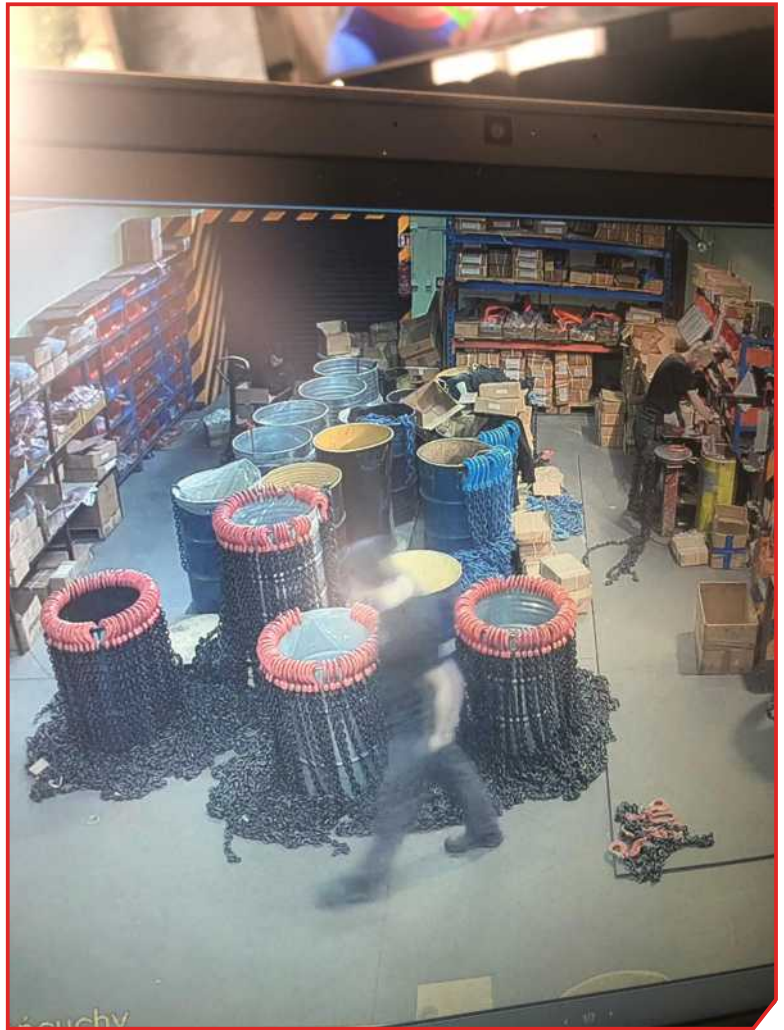


GRAB HOOK PWP CL.12

- made according to the harmonized standard: PN-EN 1677-1 with increased strength,
- safety ratio: 4,
- operating temperature: $-60^{\circ}\text{C} \div 300^{\circ}\text{C}$,
- made of alloy steel grade 12,
- tensile strength 1200 N/mm^2 ,
- 50% more load capacity than class 8, with the same weight,
- increased abrasion resistance and therefore longer service life,
- powder coated components,
- protected against corrosion.

Type	WLL (t)	e (mm)	b (mm)	d1 (mm)	d2 (mm)	G (mm)	Weight kg/pcs
PWP 8	3,0	68,5	63,0	18,0	11,0	10,0	0,48
PWP 10	5,0	88,0	81,0	22,0	14,0	13,0	1,03
PWP 13	8,0	110,0	103,0	26,0	18,0	17,0	2,10







WEBBING SLINGS

WEBBING SLINGS

Webbing slings are soft and flexible slings, which are used especially in situations where the lifted load has no attachment points and also for lifting and close transport of heavy general purpose loads. They are made of polyester (PES).

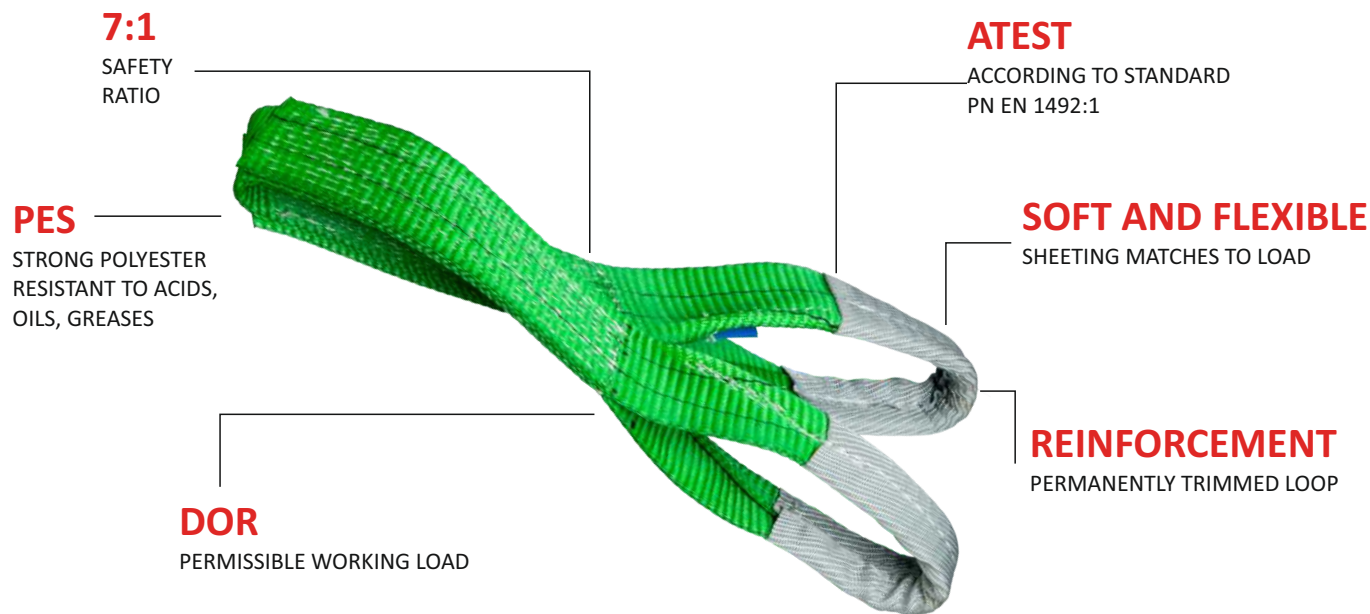
Among belt slings there are B- type slings ended with loops, C-type slings ended with ED links, closed-loop A-type slings and one-leg, two-leg, three-leg and four-leg slings.

Features:

- they are made of one, two or four layers of tape,
- materials used: polyester tape, polyester protection tape on loops, very strong polyester threads,
- high ratio of the sling's own weight to its lifting capacity,
- strong and durable,
- lightweight - convenient use and storage,
- soft and flexible - do not damage sensitive surfaces,
- high friction resistance,
- approved - made in accordance with PN-EN 1492-1,
- safety ratio: 7,
- resistant to moisture, mineral acids, oils and greases,
- operating temperature from -40°C to 100°C,
- color marking makes it easy to determine the load capacity,
- used for lifting loads that do not have lifting eyes.

Use:

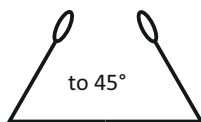
- in situations where the load being lifted has no attachment points,
- in crane companies,
- in shipyards,
- in construction companies,
- in warehouses,
- in production halls.



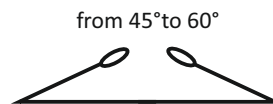
Fastening method: in a straight line loop dual system U



deviation to 45°



deviation from 45° to 60°



example types of loops

STANDARD	FULL	WIDE

examples of covers

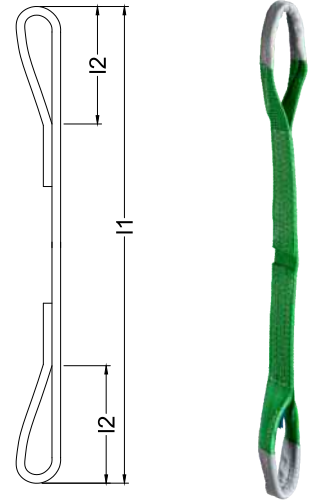
A - TYPE POLIURETHANE	P-PU OR PES TYPE	K - TYPE - POLIURETHANE (with or without magnets)

B1- TYPE WEBBING SLINGS

- single-layer,
- loop endings.



Type	Sling colour	Working load limit WLL [kg]					Sling width (mm)
		100%	80%	200%	45° 140%	60° 100%	
B1-1	Violet	500	400	1000	700	500	30
B1-2	Green	1000	800	2000	1400	1000	60
B1-3	Yellow	1500	1200	3000	2100	1500	90
B1-4	Grey	2000	1600	4000	2800	2000	120
B1-5	Red	2500	2000	5000	3500	2500	150
B1-6	Brown	3000	2400	6000	4200	3000	180
B1-8	Blue	4000	3200	8000	5600	4000	240
B1-10	Orange	5000	4000	10000	7000	5000	300

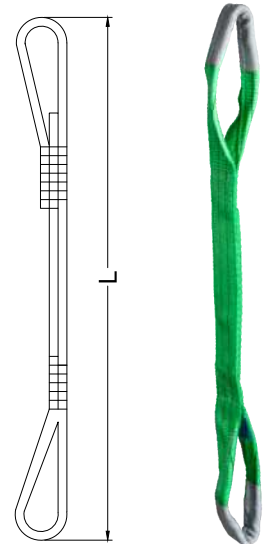


B2- TYPE WEBBING SLINGS

- double-layer,
- loop endings.



Type	Sling colour	Working load limit WLL [kg]					Sling width (mm)
		100%	80%	200%	45° 140%	60° 100%	
B2-1	Violet	1000	800	2000	1400	1000	30
B2-2	Green	2000	1600	4000	2800	2000	60
B2-3	Yellow	3000	2400	6000	4200	3000	90
B2-4	Grey	4000	3200	8000	5600	4000	120
B2-5	Red	5000	4000	10000	7000	5000	150
B2-6	Brown	6000	4800	12000	8400	6000	180
B2-8	Blue	8000	6400	16000	11200	8000	240
B2-10	Orange	10000	8000	20000	14000	10000	300

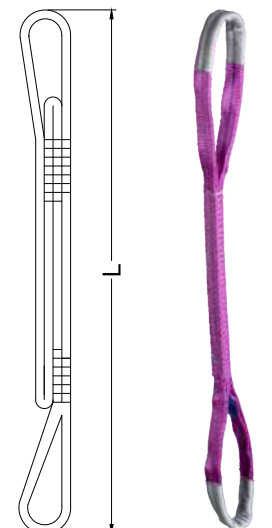


B4- TYPE WEBBING SLINGS

- four-layer,
- loop endings,
- it has twice the load capacity than the standard B2 sling with the same width of belt.



Type	Sling colour	Working load limit WLL [kg]					Sling width (mm)
		100%	80%	200%	45° 140%	60° 100%	
B4-2	Violet	2000	1600	4000	2800	2000	30
B4-4	Green	4000	3200	8000	5600	4000	60
B4-6	Yellow	6000	4800	12000	8400	6000	90
B4-8	Grey	8000	6400	16000	11200	8000	120
B4-10	Red	10000	8000	20000	14000	10000	150
B4-12	Brown	12000	9600	24000	16800	12000	180
B4-16	Blue	16000	12800	32000	22400	16000	240
B4-20	Orange	20000	16000	40000	28000	20000	300

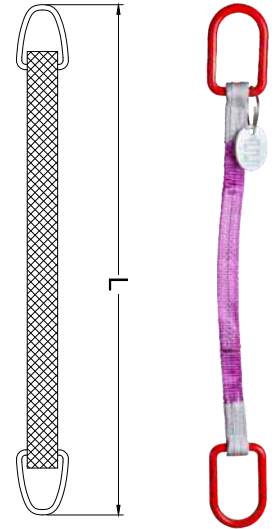


C2- TYPE WEBBING SLINGS



- sling sewn from two layers of tape (from 12 tons -four layers of tape),
- on both sides of the sling steel links in class 8 with a flat base,
- safety ratio of steel links - 4.

Type	Sling colour	Working load limit WLL [kg]					Sling width (mm)
		100%	80%	200%	45° 140%	60° 100%	
C2-1	Violet	1000	800	2000	1400	1000	30
C2-2	Green	2000	1600	4000	2800	2000	60
C2-3	Yellow	3000	2400	6000	4200	3000	90
C2-4	Grey	4000	3200	8000	5600	4000	120
C2-5	Red	5000	4000	10000	7000	5000	150
C2-6	Brown	6000	4800	12000	8400	6000	180
C2-8	Blue	8000	6400	16000	11200	8000	240

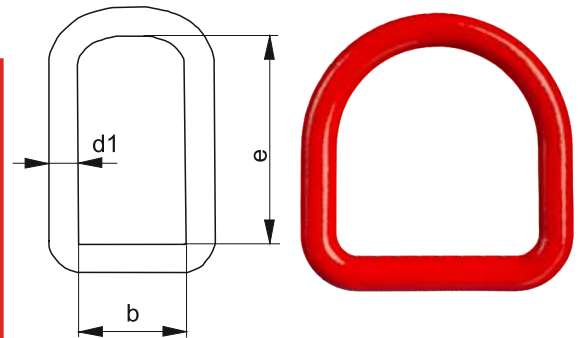


LINK ED CLASS 8



- link in class 8 steel with a flat base,
- safety ratio 4.

Type	Sling width (mm)	WLL (t)	e (mm)	b (mm)	d1 (mm)	kg/pcs
ED 40	30	1,0	80	40	13	0,3
ED 75	60	2,0	125	75	16	0,7
ED 105	90	3,0	165	105	20	1,5
ED 135	120	4,0	210	135	23	2,5
ED 165	150	5,0	245	165	26	3,8
ED 195	180	6,0	300	195	30	6,1
ED 265	240	8,0	395	265	36	11,7

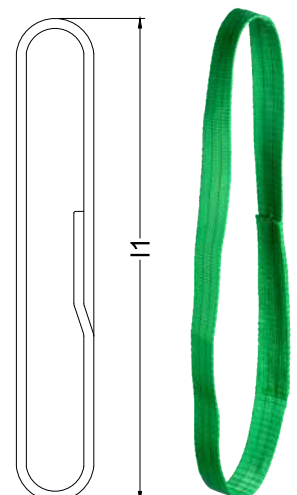


A2- TYPE WEBBING SLINGS



- endless webbing sling,
- the load is carried by two layers of tape.

Type	Sling colour	Working load limit WLL [kg]					Sling width (mm)
		100%	80%	200%	45° 140%	60° 100%	
A2-1	Violet	1000	800	2000	1400	1000	30
A2-2	Green	2000	1600	4000	2800	2000	60
A2-3	Yellow	3000	2400	6000	4200	3000	90
A2-4	Grey	4000	3200	8000	5600	4000	120
A2-5	Red	5000	4000	10000	7000	5000	150
A2-6	Brown	6000	4800	12000	8400	6000	180
A2-8	Blue	8000	6400	16000	11200	8000	240
A2-10	Orange	10000	8000	20000	14000	10000	300






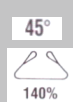

A4- TYPE WEBBING SLINGS

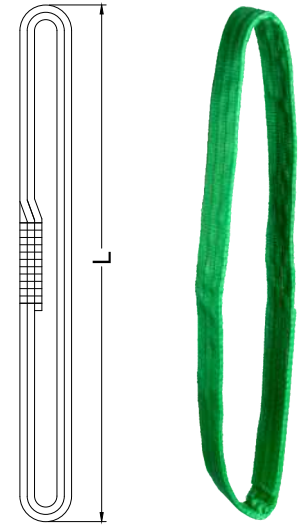
- endless webbing sling,
- the load is carried by four layers of tape.








Type	Sling colour	Working load limit WLL [kg]					Sling width (mm)
		 100%	 80%	 200%	 45° 140%	 60° 100%	
A4-2	Violet	2000	1600	4000	2800	2000	30
A4-4	Green	4000	3200	8000	5600	4000	60
A4-6	Yellow	6000	4800	12000	8400	6000	90
A4-8	Grey	8000	6400	16000	11200	8000	120
A4-10	Red	10000	8000	20000	14000	10000	150
A4-12	Brown	12000	9600	24000	16800	12000	180
A4-16	Blue	16000	12800	32000	22400	16000	240
A4-20	Orange	20000	16000	40000	28000	20000	300



A-TYPE WEBBING SLING– FOR SINGLE LOAD SHIPMENT

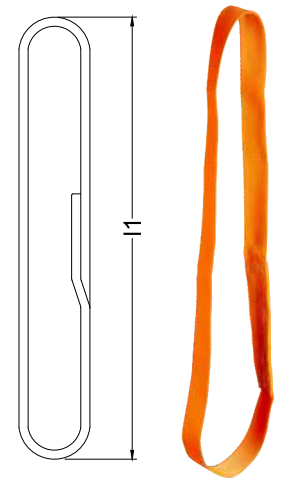
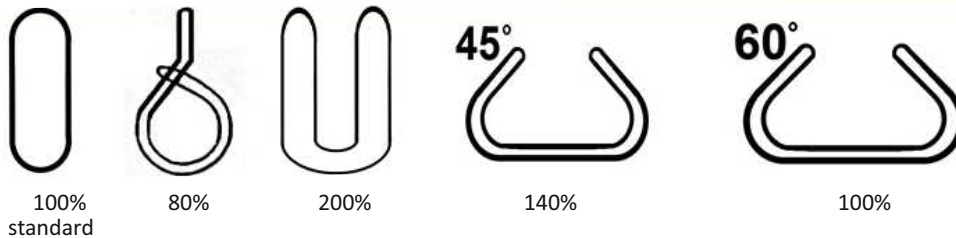
- endless webbing sling for single load shipment,
- the load is carried by two layers of tape,
- are intended for one-time loading, transporting and unloading goods.








lifting capacity of the sling depending on the work system



WEBBING SLING 1- LEG





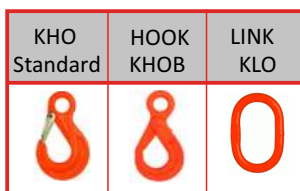




master link










examples of sling ends



Type	Sling width (mm)	WLL (kg)
W1 - 1	30	1000
W1 - 2	60	2000
W1 - 3	90	3000



WEBBING SLING 2- LEG

master link










examples of sling ends



Type	Sling width (mm)	WLL (kg)	
		0° - 45°	45° - 60°
W2 - 1,4	30	1400	1000
W2 - 2,8	60	2800	2000
W2 - 4,2	90	4200	3000



WEBBING SLING 3- LEG

master link










examples of sling ends



Type	Sling width (mm)	WLL (kg)	
		0° - 45°	45° - 60°
W3 - 2,1	30	2100	1500
W3 - 4,2	60	4200	3000
W3 - 6,3	90	6300	4500



WEBBING SLING 4- LEG

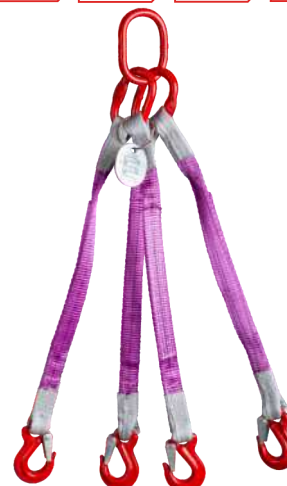
master link



examples of sling ends



Type	Sling width (mm)	WLL (kg)	
		0° - 45°	45° - 60°
W4 - 2,1	30	2100	1500
W4 - 4,2	60	4200	3000
W4 - 6,3	90	6300	4500





WEBBING PROTECTIVE SHEATH

PES PROTECTION SLEEVES FOR SLINGS AND FASTENING BELTS

- used for belt slings with one, two and four-layer,
- for webbing slings from 0,5 to 20 tone,
- enables longer lifetime of the sling, protects it against chafing on the load,
- made of thick, very durable, densely woven PES tape (polyester),
- tape thickness 3 mm,
- can be used for strap fastening belts from 25 to 75 mm.



DOUBLE-SIDED POLYURETHANE COVER

- double-sided polyurethane cover,
- used for webbing slings with one, two and four-layer,
- for webbing slings from 0,5 to 20 ton with width from 20 to 300 mm,
- enables a longer lifetime of the sling, protecting it from being cut on sharp edges (lifting coils of sheets, sheets, sharp-edged sections, stone slabs, etc.),
- made of polyurethane resistant to cuts and ensuring adequate flexibility (adjusts the shape to the shape of the load being lifted).



MAGNETIC CORNER PROTECTORS

- for webbing slings from 0,5 to 25 ton with width from 30 to 300 mm,
- used for webbing slings from 0,5 to 50 tone,
- enables a longer lifetime of the sling, protecting it from being cut on sharp edges,
- made of cut-resistant polyurethane,
- equipped with magnets that hold it in the designated place.



STEEL ANGLE COVER

- steel angle cover for webbing slings,
- used for webbing slings from 0,5 to 50 tone,
- enables a longer lifetime of the sling, protecting it from being cut on sharp edges.





ROUND SLINGS

ROUND SLINGS

Round slings (their other name - wheeled) are soft and flexible slings used for lifting and close transport of heavy loads of general purpose. The slings are made of polyester (PES). Inside the protective sleeve are polyester fibers gathered in strands, which are responsible for the load capacity of the entire sling. Seamless polyester sleeve protects the fibers and gives shape. Among the hose slings there are closed-loop slings and single-leg, two-leg, three-leg and four-leg slings.

Features:

- made of a core in the form of a polyester coil and a protective jacket,
- materials used: polyester yarn, high quality polyester protection, very strong polyester threads,
- large ratio of the sling's own weight to its lifting capacity,
- lightweight - easy and convenient to use and store,
- soft - they do not damage sensitive surfaces,
- flexible + "slippery" surface - ideal for loop fastening,
- approved - made in accordance with PN-EN 1492-2,
- safety ratio: 7,
- resistant to moisture, mineral acids, oils and greases,
- operating temperature from -40°C to 100°C,
- color marking makes it easy to determine the load capacity,
- used for lifting loads that do not have lifting eyes.

Use:

- suitable for lifting loads such as shafts, pillars, pipes, columns and loads with painted surfaces,
- mostly used for tying around loads,
- they are used in construction companies - where building materials, finishing materials and heavy industrial machinery are often transported,
- they are used in workshops, warehouses and production halls,
- they are also used to move materials, products and finished raw materials.



7:1

SAFETY RATIO

ATEST

ACCORDING TO STANDARD PN EN 1492:2

PES

STRONG POLYESTER RESISTANT TO ACIDS, OILS, GREASES



SOFT AND FLEXIBLE

SHEETING MATCHES TO LOAD

DOR

PERMISSIBLE WORKING LOAD

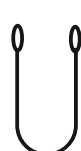
Fastening method: in a straight line



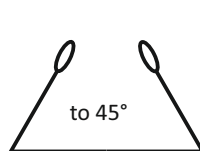
loop



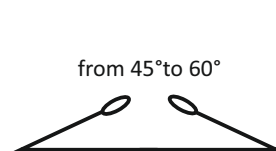
dual system U



deviation to 45°

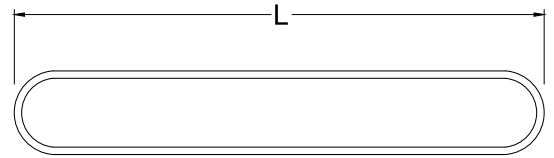


deviation from 45° to 60°



CLOSED-LOOP ROUND SLING

- single protective sleeve (double on special order),
- marking color (each color corresponds to the specified safe working load WLL)
- bar system - the number of lines means load capacity.



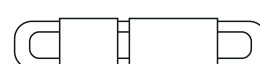
Type	Sling colour	Working load limit WLL [kg]					
		100%	80%	200%	140%	100%	asymmetrical 100%
ZW 1	Violet	1 000	800	2 000	1 400	1000	1 000
ZW 2	Green	2 000	1 600	4 000	2 800	2000	2 000
ZW 3	Yellow	3 000	2 400	6 000	4 200	3 000	3 000
ZW 4	Grey	4 000	3 200	8 000	5 600	4 000	4 000
ZW 5	Red	5 000	4 000	10 000	7 000	5 000	5 000
ZW 6	Brown	6 000	4 800	12 000	8 400	6 000	6 000
ZW 8	Blue	8 000	6 400	16 000	11 200	8 000	8 000
ZW 10	Orange	10 000	8 000	20 000	14 000	10 000	10 000
ZW 12	Orange	12 000	9 600	24 000	16 800	12 000	12 000
ZW 15	Orange	15 000	12 000	30 000	21 000	15 000	15 000
ZW 20	Orange	20 000	16 000	40 000	28 000	20 000	20 000
ZW 25	Orange	25 000	20 000	50 000	35 000	25 000	25 000
ZW 30	Orange	30 000	24 000	60 000	42 000	30 000	30 000
ZW 40	Orange	40 000	32 000	80 000	56 000	40 000	40 000
ZW 50	Orange	50 000	40 000	100 000	70 000	50 000	50 000
ZW 60	Orange	60 000	48 000	120 000	84 000	60 000	60 000
ZW 80	Orange	80 000	64 000	160 000	112 000	80 000	80 000
ZW 100	Orange	100 000	80 000	200 000	140 000	100 000	100 000
ZW 120	Orange	120 000	96 000	240 000	168 000	120 000	120 000
ZW 150	Orange	150 000	120 000	300 000	210 000	150 000	150 000

Protective covers are ordered to extend the life of round slings.

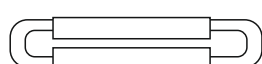
Type A



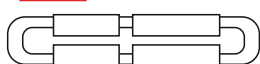
Type B



Type C



Type D



1 LEG ROUND SLING



master link



examples of sling ends



Working load limit WLL

WLL [t]	Type	ZW-1	ZW-2	ZW-3	ZW-4	ZW-5	ZW-6	ZW-8	ZW-10	ZW-12	ZW-15	ZW 20	ZW-25	ZW-30	ZW-40	ZW-50	ZW-60
	Przy kącie 0°	1,0	2,0	3,0	4,0	5,0	6,0	8,0	10,0	12,0	15,0	20,0	25,0	30,0	40,0	50,0	60,0
	Przy obwiązaniu	0,8	1,6	2,4	3,2	4,0	4,8	6,4	8,0	9,6	12,0	16,0	20,0	24,0	32,0	40,0	48,0



2 LEG ROUND SLING



master link



examples of sling ends



Working load limit WLL

WLL [t]	Type	ZW-1	ZW-2	ZW-3	ZW-4	ZW-5	ZW-6	ZW-8	ZW-10	ZW-12	ZW-15	ZW 20	ZW-25	ZW-30	ZW-40	ZW-50	ZW-60
	do 45°	1,4	2,8	4,2	5,6	7,0	8,4	11,2	14,0	16,8	21,0	28,0	35,0	42,0	56,0	70,0	84,0
	45° - 60°	1,0	2,0	3,0	4,0	5,0	6,0	8,0	10,0	12,0	15,0	20,0	25,0	30,0	40,0	50,0	60,0



3 AND 4 LEG ROUND SLING



master link



examples of sling ends



Working load limit WLL

WLL [t]	Type	ZW-1	ZW-2	ZW-3	ZW-4	ZW-5	ZW-6	ZW-8	ZW-10	ZW-12	ZW-15	ZW 20	ZW-25	ZW-30	ZW-40	ZW-50	ZW-60
	do 45°	2,1	4,2	6,3	8,4	10,5	12,6	16,8	21,0	25,2	31,5	42,0	52,5	63,0	84,0	105,0	126,0
	45° - 60°	1,5	3,0	4,5	6,0	7,5	9,0	12,0	15,0	18,0	22,5	30,0	37,5	45,0	60,0	75,0	90,0





WIRE ROPE SLINGS

WIRE ROPE SLINGS

Rope slings - their base is a steel rope of varying length, from which the slings are then formed - individual sections, connected by means of a collecting link, which is used to attach slings to the crane hook. They can have a different number of legs - from one to four. There are also closed rope slings in which the tie chain forms a closed loop. We distinguish among them: one-leg rope slings crimped with sleeves, 1, 2, 3 and 4 leg slings, 1 and 2 loop slings, closed wire rope slings - Grommet. Rope slings are made of classic ropes 6x37, 6x19, WS6 x 36 (capacity tables for WS6x36).

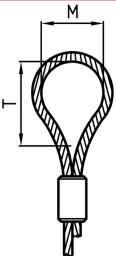



Features:



- made of galvanized steel ropes,
- high resistance to mechanical damage,
- resistance to external factors,
- durability,
- the possibility of long-term use,
- operating temperature from -40°C to 100°C.

Use:

- are used in heavy industry (mining, metallurgy),
- also used in the automotive industry and in production halls,
- supporting equipment for transport and loading operations,
- they are also used to move materials, products and finished raw materials.

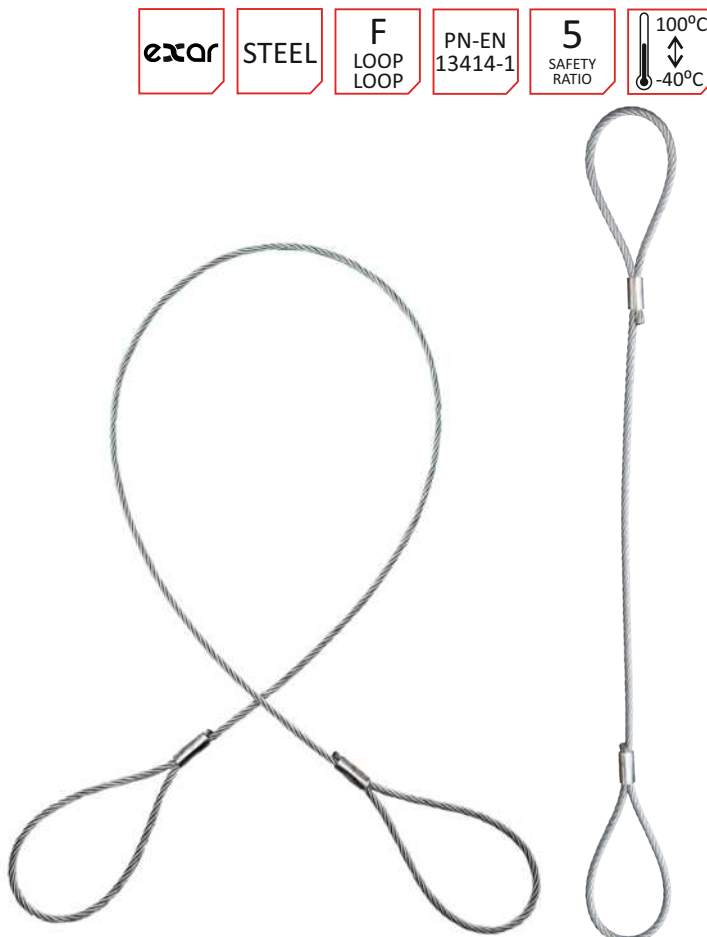
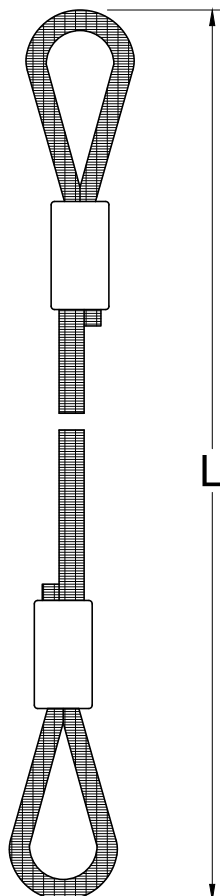
ONE-LEG SLEEVE CLAMP WIRE ROPE SLINGS

Loop dimensions			Thimble types		
	T (mm)	15 x rope diameter	Standard	Full	Round
	M. (mm)	7,5 x rope diameter			

Rope socket types	
F Standard	FV
	
Clamped with a cylinder sleeve	Clamped with a conic cylinder sleeve

F Slings (loop / loop)

Rope diameter (mm)	Working load limit (t)	
	angle 0°	while strapped
8	700	560
10	1050	840
11	1300	1040
12	1550	1240
13	1800	1440
14	2120	1700
16	2700	2160
18	3400	2720
20	4350	3480
22	5200	4160
24	6300	5000
26	7200	5760
28	8400	6700
32	11000	8800
36	14000	11200
40	17000	13600
44	21000	16800
48	25000	20000
52	29000	23200
56	33500	26800
60	39000	31200

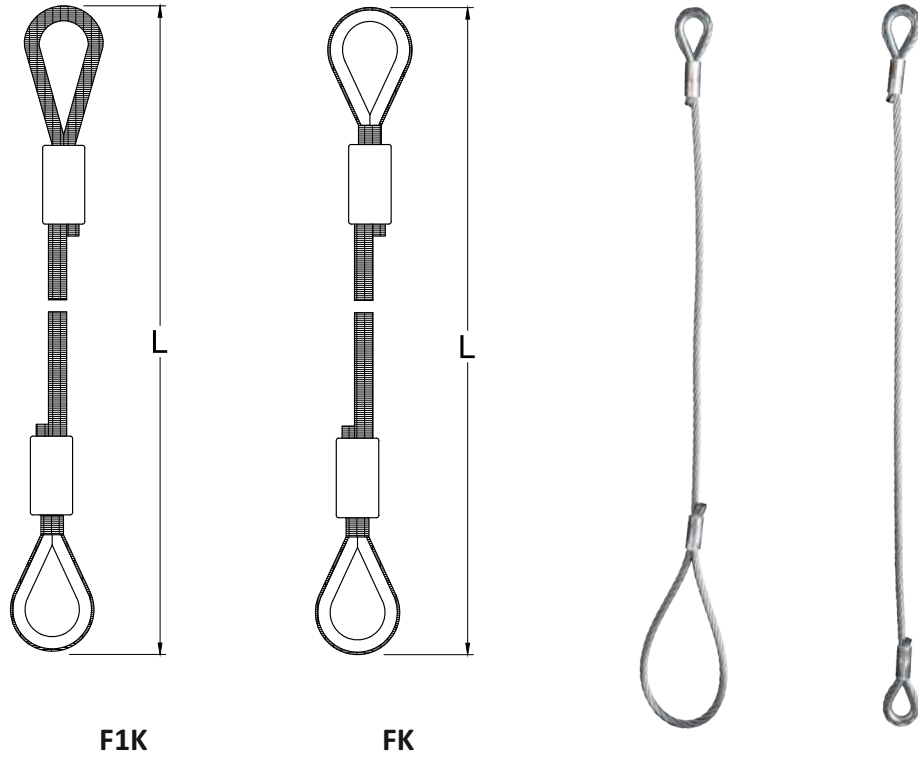


	STEEL	F LOOP LOOP	PN-EN 13414-1	5 SAFETY RATIO	100°C ↕ -40°C
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Slings F1K, (loop / thimble), FK (thimble / thimble)

Rope diameter (mm)	Working load limit (t)	
	angle 0°	
	F1K	FK
8	700	700
10	1050	1050
11	1300	1300
12	1550	1550
13	1800	1800
14	2120	2120
16	2700	2700
18	3400	3400
20	4350	4350
22	5200	5200
24	6300	6300
26	7200	7200
28	8400	8400
32	11000	11000
36	14000	14000
40	17000	17000
44	21000	21000
48	25000	25000
52	29000	29000
56	33500	33500
60	39000	39000

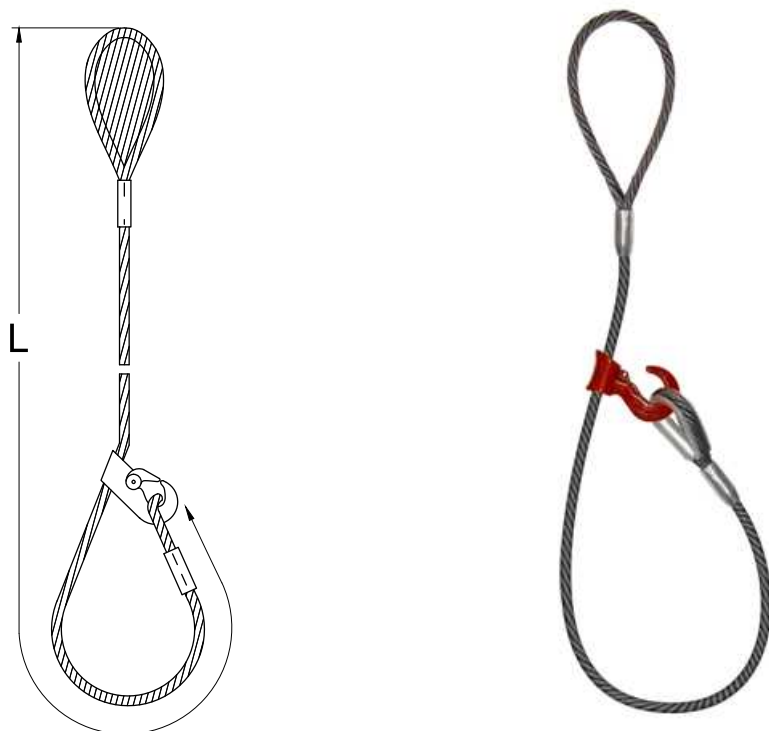
exar
STEEL
F1K LOOP THIMBLE
FK THIMBLE THIMBLE
PN-EN 13414-1
5 SAFETY RATIO
100°C / -40°C



Slings Fpp (adjustable loop)

Rope diameter (mm)	Working load limit (t)
	angle 0°
8	560
10	840
11	1040
12	1240
13	1440
14	1700
16	2160
18	2720
20	3480
22	4160
24	5000

exar
STEEL
Fpp ADJUSTABLE LOOP
PN-EN 13414-1
5 SAFETY RATIO
100°C / -40°C



S-type plaited wire rope sling

Rope diameter (mm)	Working load limit (t)	
	angle 0°	
8	630	
10	950	
11	1150	
12	1350	
13	1600	
14	1850	
16	2400	
18	3000	
20	3800	
22	4600	
24	5400	
26	6400	
28	7400	
32	9700	
36	13700	
40	17000	
44	21000	
48	24300	
52	28500	
56	33100	
60	38000	

Features:

- particularly useful when lifting with limited space,
- narrow loop braid enabling easy pulling of the sling under a lifted load,
- the braid can be bent under load.



exar

STEEL

S
PLAITED

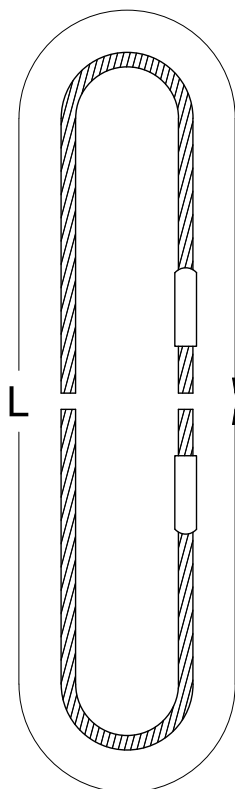
PN-EN
13414-2

5
SAFETY
RATIO

100°C
↕
-40°C

FO slings (endless)

Rope diameter (mm)	Working load limit (t)	
	angle 0°	while strapped
8	1400	1100
10	2100	1700
11	2600	2120
12	3100	2500
13	3600	2900
14	4240	3300
16	5400	4350
18	6800	5650
20	8700	6900
22	10400	8400
24	12600	10000
26	14400	11800
28	16800	13500
32	22000	18000
36	28000	22500
40	34000	28000
44	42000	33500
48	50000	40000
52	58000	47000
56	67000	54000
60	78000	63000



exar

STEEL

FO
ENDLESS

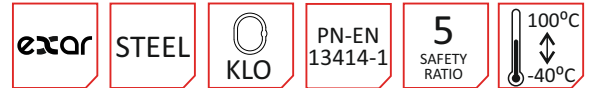
PN-EN
13414-1

5
SAFETY
RATIO

100°C
↕
-40°C

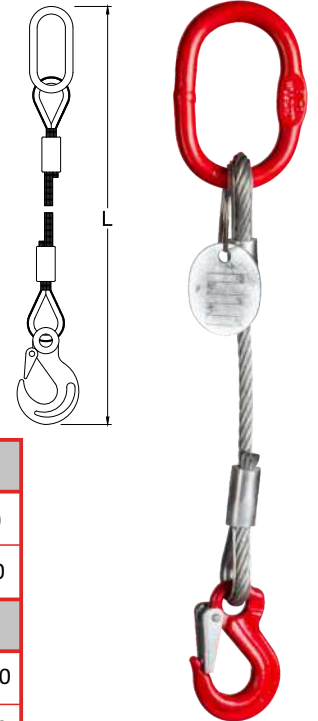
ONE LEG WIRE ROPE SLINGS

master link



sling code and sample endings

1 Fkh (KHO)	1 Fksh (KHO)	1 Fkh (KHK)	1 Fkh - KHOB	1 Fkh - KHL	1 Fko KLO	1 Fks BX	1 Fk	1 Fk - P	1 F

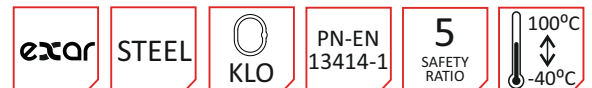


working load limit

WLL [kg]	rope diameter in mm	8	10	12	13	14	16	18	20	22	24
		angle 0°	700	1050	1550	1800	2120	2700	3400	4350	5200
while strapped		560	840	1240	1440	1696	2160	2720	3480	4160	5040
WLL [kg]	rope diameter in mm	26	28	32	36	40	44	48	52	56	60
	angle 0°	7200	8400	11000	14000	17000	21000	25000	29000	33500	39000
	while strapped	5760	6720	8800	11200	13600	16800	20000	23200	26800	31200

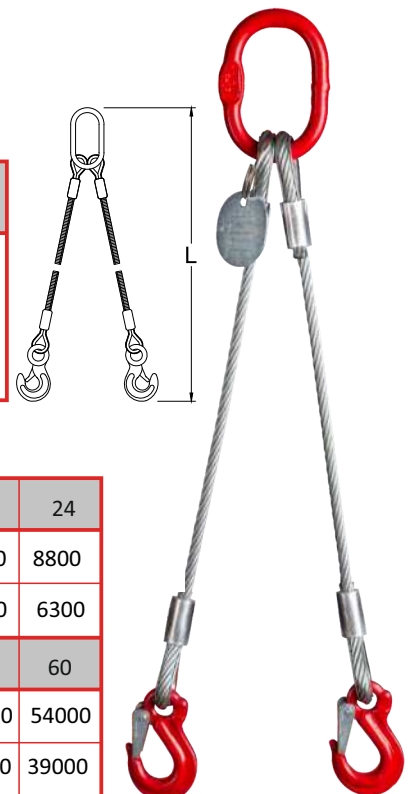
TWO LEG WIRE ROPE SLINGS

master link



sling code and sample endings







1 Fkh (KHO)	1 Fksh (KHO)	1 Fkh (KHK)	1 Fkh - KHOB	1 Fkh - KHL	1 Fko KLO	1 Fks BX	1 Fk	1 Fk - P	1 F



working load limit

WLL [kg]	rope diameter in mm	8	10	12	13	14	16	18	20	22	24
		to 45°	950	1500	2120	2500	3000	3850	4800	6000	7200
45° - 60°		700	1050	1550	1800	2120	2700	3400	4350	5200	6300
WLL [kg]	rope diameter in mm	26	28	32	36	40	44	48	52	56	60
	to 45°	10000	11800	15000	19000	23500	29000	35000	40000	47000	54000
	45° - 60°	7200	8400	11000	14000	17000	21000	25000	29000	33500	39000

THREE LEG WIRE ROPE SLINGS

master link



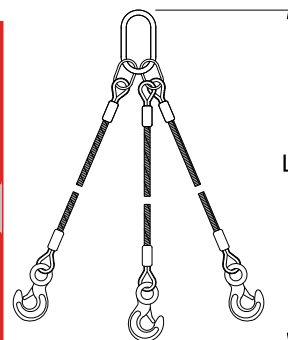
sling code and sample endings

1 Fkh (KHO)	1 Fksh (KHO)	1 Fkh (KHK)	1 Fkh - KHOB	1 Fkh - KHL	1 Fko KLO	1 Fks BX	1 Fk	1 Fk - P	1 F
									









working load limit

WLL [kg]	rope diameter in mm	8	10	12	13	14	16	18	20	22	24
	to 45°		1500	2250	3300	3850	4350	5650	7200	9000	11000
45° - 60°		1050	1600	2300	2700	3150	4200	5200	6500	7800	9400
WLL [kg]	rope diameter in mm	26	28	32	36	40	44	48	52	56	60
	to 45°	15000	18000	23500	29000	36000	44000	52000	62000	71000	81000
45° - 60°		11000	12500	16500	21000	26000	31500	37000	44000	50000	58000



FOUR LEG WIRE ROPE SLINGS

master link

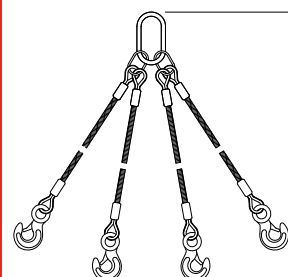


sling code and sample endings

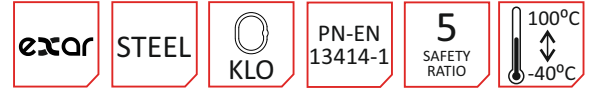
1 Fkh (KHO)	1 Fksh (KHO)	1 Fkh (KHK)	1 Fkh - KHOB	1 Fkh - KHL	1 Fko KLO	1 Fks BX	1 Fk	1 Fk - P	1 F
									

working load limit

WLL [kg]	rope diameter in mm	8	10	12	13	14	16	18	20	22	24
	to 45°		1500	2250	3300	3850	4350	5650	7200	9000	11000
45° - 60°		1050	1600	2300	2700	3150	4200	5200	6500	7800	9400
WLL [kg]	rope diameter in mm	26	28	32	36	40	44	48	52	56	60
	to 45°	15000	18000	23500	29000	36000	44000	52000	62000	71000	81000
45° - 60°		11000	12500	16500	21000	26000	31500	37000	44000	50000	58000



ONE LOOP WIRE ROPE SLINGS



Features:

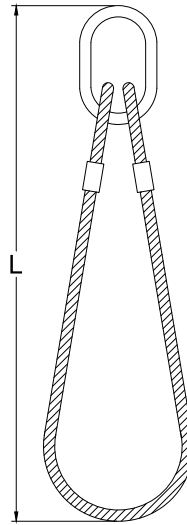
- slings made of steel ropes with wire strength of 1770 or 1960 N/mm² clamped with aluminum cylindrical sleeves according to PN-EN 13411-3.

master link

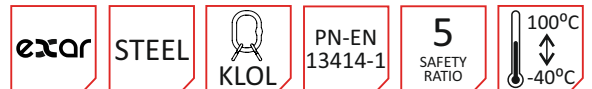


working load limit

WLL [kg]	rope diameter in mm	8	10	12	13	14	16	18	20	22	24
	to 45°		950	1500	2120	2500	3000	3850	4800	6000	7200
WLL [kg]	rope diameter in mm	26	28	32	36	40	44	48	52	56	60
	to 45°	10000	11800	15000	19000	23500	29000	35000	40000	47000	54000



TWO LOOP WIRE ROPE SLINGS



Features:

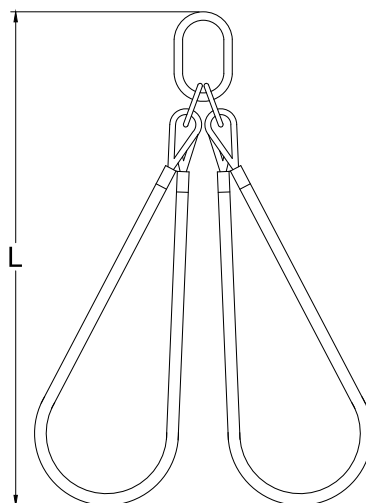
- slings made of steel ropes with wire strength of 1770 or 1960 N/mm² clamped with aluminum cylindrical sleeves according to PN-EN 13411-3.

master link



working load limit

WLL [kg]	rope diameter in mm	8	10	12	13	14	16	18	20	22	24
	to 45°		1500	2250	3300	3850	4350	5650	7200	9000	11000
WLL [kg]	rope diameter in mm	26	28	32	36	40	44	48	52	56	60
	to 45°	11000	12500	16500	21000	26000	31500	37000	44000	50000	58000



WIRE ROPE SLINGS - GROMMET



GROMMET endless slings are made of 6 strand steel cables with an organic or steel core. Around the core rope, a coiled rope is placed in 6 turns. GROMMET slings are very flexible due to the large amount of wires in the cross section (from at least $7 \times 6 \times 19 = 798$ to $7 \times 6 \times 37 = 1554$).

Features:

- closed wire rope slings,
- high strength and resistance to mechanical damage and caused by weather conditions,
- they are made of the highest quality components that guarantee many years of use,
- in accordance with the provisions of the Machinery Directive 2006/42/WE and standards of PN-EN 13414-4.

Use:

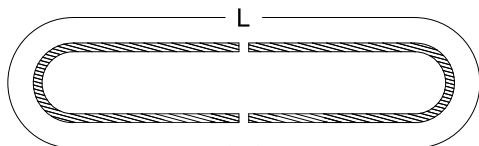
- useful for lifting particularly heavy loads,
- adapted for lifting devices.

When you use GROMMET slings, remember that:

- they should be used only in pairs,
- it is necessary to pay attention to the minimum dimensions of suspension pins, whose diameter must be at least 4 times more than the diameter of the rope,
- the strings must not cross,
- the contact point (marked in color) should never be positioned at the load suspension points (on the crane hook or on the load hook) but always at free length.



splice structure : 6x36+IWRC

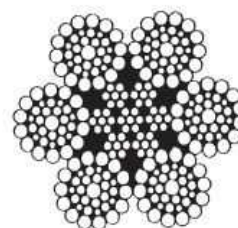


rope diameter (mm)	working load limit (t)	
	angle 0°	while strapped
24	9,8	7,8
27	12,5	10,0
30	15,4	12,3
33	18,6	14,9
36	22,1	17,7
39	26,0	20,8
42	30,1	24,1
48	39,3	31,4
54	49,8	39,8
60	61,5	49,2
66	76,3	61,0
72	93,3	74,6
78	112,6	90,1
84	134,4	107,5
90	159	127
96	186,5	149
102	217	174

rope diameter (mm)	working load limit (t)	
	angle 0°	while strapped
108	252	201
114	290	232
120	333	267
126	381	304
132	434	347
144	560	448
156	693	555
162	750	-
168	800	-
174	850	-
180	900	-
192	1000	-
216	1250	-
240	1500	-
258	1750	-
282	2000	-
300	2250	-

rope diameter (mm)	working load limit (t)	
	angle 0°	while strapped
318	2500	-
354	3000	-
384	3500	-
414	4000	-
444	4500	-
474	5000	-
504	5500	-
528	6000	-
552	6500	-
576	7000	-
600	7500	-
624	8000	-
648	8500	-
672	9000	-
696	9500	-

IWRC – steel core,
Independent Wire
Rope Core





CHAIN SLINGS

CHAIN SLINGS

Chain slings are equipment used to work in the most demanding conditions. They have high values of permissible load and are the most durable of all types of slings. They have tie rods made of the highest quality steel and can be used for many years. They allow you to work on sharp edges and arches of lifted loads.

There are 1, 2, 3 and 4 chain slings, chain and closed-loop slings as well as single and double loop slings, which can be found in classes 8, 10, 12 and 6 (stainless).

Features:

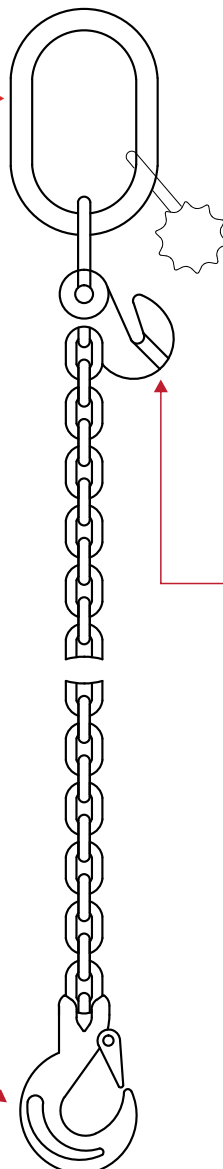
- materials used: chain in steel class 12, 10, 8 or 6, components in steel class 12, 10, 8 or 6,
- strong and durable,
- higher abrasion resistance and thus longer lifetime of the sling,
- corrosion protected chain, powder coated components,
- connections made on connectors allow for repair, regeneration,
- certified - execution in accordance with the standard PN-EN 818-4
- safety ratio: 4,
- resistant to moisture, mineral acids, oils and greases,
- operating temperature from -40°C to 200°C.

Use:

- for transporting heavy, bulky loads,
- in crane companies,
- in production halls,
- in workshops,
- in all kinds of storage facilities,
- in shipyards.

types of master links

KLO Standard	KLOP	KLOZ	KLOL



shortening hooks available

KKO Standard	KPW	use examples

examples of sling endings

KLOH Standard	KHO	KLO	KHK	KHOB	KSCHW

CHAIN SLINGS CL. 8

- chains are made in quality class 8 - thermally improved,
- tensile strength 800 N/mm²,
- large range of WLL values,
- class 8 chains should not be used under acid conditions. Hydrogen penetrates the steel structure, which makes them brittle and can break unexpectedly.



CHAIN SLINGS CL. 8 (1,2,3 OR 4 - LEG)



Chain slings cl. 8 1-leg

Φ of chain (mm)		5	6	7	8	10	13	16	19	22	26	32	36	40	45
WLL (kg)		800	1120	1500	2000	3150	5300	8000	11200	15000	21200	31500	40000	50000	63000
		640	900	1200	1600	2500	4250	6300	8950	12000	16950	25200	32000	40000	50000



Chain slings cl.8 2-leg

Φ of chain (mm)		5	6	7	8	10	13	16	19	22	26	32	36	40	45	
WLL (kg)		0° - 45°	1120	1600	2120	2800	4250	7500	11200	16000	21200	30000	45000	56000	71000	90000
		45° - 60°	800	1120	1500	2000	3150	5300	8000	11200	15000	21200	31500	40000	50000	63000



Chain slings cl.8 3-leg

Φ of chain (mm)		5	6	7	8	10	13	16	19	22	26	32	36	40	45	
WLL (kg)		0° - 45°	1600	2360	3150	4250	6700	11200	17000	23600	31500	45000	67000	85000	106000	132000
		45° - 60°	1180	1700	2240	3000	4750	8000	11800	17000	22400	31500	47500	60000	75000	95000

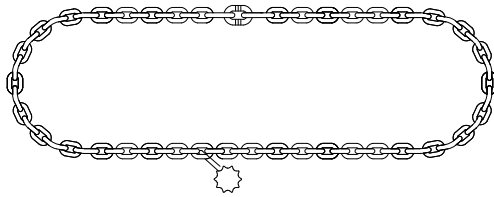


Chain slings cl.8 4-leg

Φ of chain (mm)		5	6	7	8	10	13	16	19	22	26	32	36	40	45	
WLL (kg)		0° - 45°	1600	2360	3150	4250	6700	11200	17000	23600	31500	45000	67000	85000	106000	132000
		45° - 60°	1180	1700	2240	3000	4750	8000	11800	17000	22400	31500	47500	60000	75000	95000



ENDLESS CHAIN SLINGS CL. 8



STEEL 8 CLASS
 PN-EN 818-4
 4 SAFETY RATIO



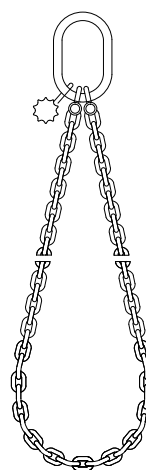
Φ of chain (mm)		5	6	7	8	10	13	16	19	22	26	32	36	40	45
WLL (kg)	S	1250	1800	2500	3150	5000	8500	12500	18000	23600	33500	50000	63000	80000	100000

SINGLE LOOP CHAIN SLINGS CL. 8

STEEL 8 CLASS
 PN-EN 818-4
 4 SAFETY RATIO

Φ of chain (mm)		6	8	10	13	16	19
WLL (kg)	0° - 45°	1600	2800	4250	7500	11200	16100
	45° - 60°	1120	2000	3150	5300	8000	11200

Φ of chain (mm)		22	26	32	36	40	45
WLL (kg)	0° - 45°	21200	30000	45000	56000	71000	90000
	45° - 60°	15000	21200	31500	40000	50000	63000

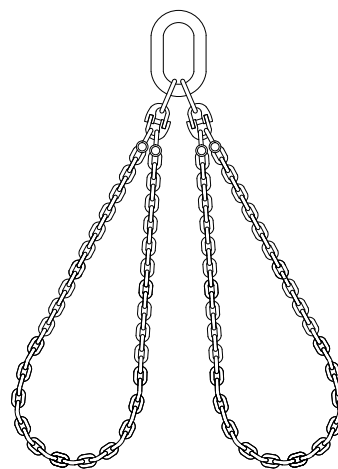


DOUBLE LOOP CHAIN SLINGS CL. 8

STEEL 8 CLASS
 PN-EN 818-4
 4 SAFETY RATIO

Φ of chain (mm)		6	8	10	13	16	19
WLL (kg)	0° - 45°	2360	4250	6700	11200	17000	23600
	45° - 60°	1700	3000	4750	8000	11800	17000

Φ of chain (mm)		22	26	32	36	40	45
WLL (kg)	0° - 45°	31500	45000	67000	85000	106000	132000
	45° - 60°	22400	31500	47500	60000	75000	95000



special cases of WLL reducing factors

Sling class	Temperature		
	-40° to 200°C	200° to 300°C	300° to 400°C
8	100%	90%	75%

Sharp edged load		
R greater than 2 x D of chain	R greater than D of chain	sharp edged load
100%	70%	50%

CHAIN SLINGS CL.10

- chains are made in quality class 10,
- tensile strength 1000 N/mm²,
- large range of WLL values,
- material with 25% increased strength (compared to class 8),
- 25% higher load capacity compared to class 8 slings while maintaining the same weight.



CHAIN SLINGS CL. 10 (1,2,3 OR 4 - LEG)



Chain slings cl. 10 1-leg

Φ łańcucha (mm)		5	6	7	8	10	13	16	19	22	26	32
WLL (kg)		1000	1400	1900	2500	4000	6700	10000	14000	19000	26250	36000
		800	1120	1500	2000	3100	5300	8000	10000	15000	21200	31500



Chain slings cl. 10 2-leg

Φ of chain (mm)		5	6	7	8	10	13	16	19	22	26	32
WLL (kg)		1400	2000	2650	3550	5600	9500	14000	20000	26500	37500	56000
		1000	1400	1900	2500	4000	6700	10000	14000	19000	26500	41000



Chain slings cl. 10 3-leg

Φ of chain (mm)		5	6	7	8	10	13	16	19	22	26	32
WLL (kg)		2000	3000	4000	5300	8000	14000	21200	30000	40000	56000	85000
		1500	2120	2800	3750	6000	10000	15000	21200	28000	40000	60000



Chain slings cl. 10 4-leg

Φ of chain (mm)		5	6	7	8	10	13	16	19	22	26	32
WLL (kg)		2000	3000	4000	5300	8000	14000	21200	30000	40000	56000	85000
		1500	2120	2800	3750	6000	10000	15000	21200	28000	40000	60000



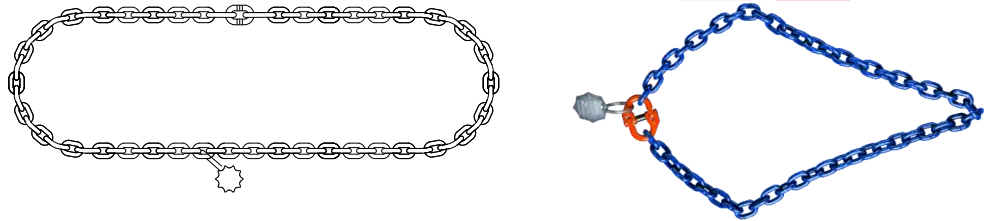
ENDLESS CHAIN SLINGS CL. 10











Φ of chain (mm)		5	6	7	8	10	13	16	19	22	26	32
WLL (kg)	S	1600	2240	3000	4000	6300	10600	16000	22400	30000	42500	63000

SINGLE LOOP CHAIN SLINGS CL. 10









Φ of chain (mm)		5	6	7	8	10	13
WLL (kg)	0° - 45°	1400	2000	2650	3550	5600	9500
	45° - 60°	1000	1400	1900	2500	4000	6700

Φ of chain (mm)		16	19	22	26	32
WLL (kg)	0° - 45°	14000	20000	26500	37500	56000
	45° - 60°	10000	14000	19000	26500	40000



DOUBLE LOOP CHAIN SLINGS CL.10



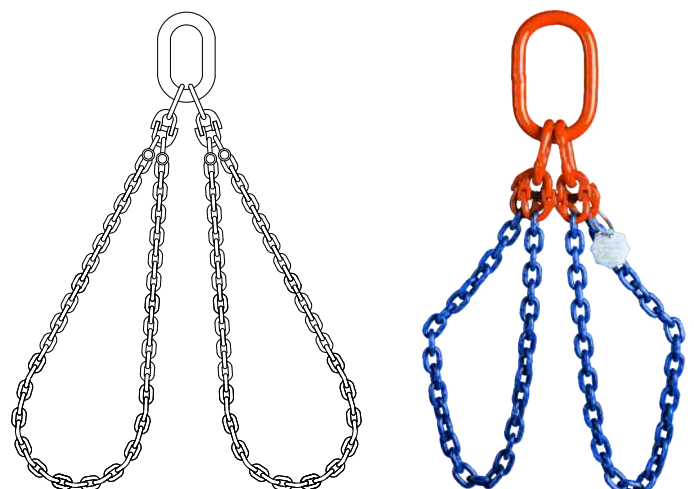






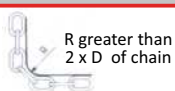
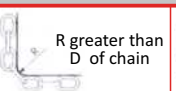
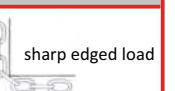
Φ of chain (mm)		5	6	7	8	10	13
WLL (kg)	0° - 45°	2000	3000	4000	5300	8000	14000
	45° - 60°	1500	1120	2800	3750	6000	10000

Φ of chain (mm)		16	19	22	26	32
WLL (kg)	0° - 45°	21200	30000	40000	56000	95000
	45° - 60°	15000	21200	28000	40000	60000



special cases of WLL reducing factors

Sling class	Temperature		
	-40° to 200°C	200° to 300°C	300° to 400°C
10	100%	forbidden	

Sharp edged load		
 R greater than 2 x D of chain	 R greater than D of chain	 sharp edged load
100%	70%	50%

CHAIN SLINGS CL. 12

- chains are made in quality class 12,
- tensile strength 1200 N/mm²,
- large range of WLL values,
- material with 25% increased strength (compared to class 10),
- material with 50% increased strength (compared to class 8),
- significant reduction of lifting capacity (40% compared to class 8) enables comfortable use of the sling.



CHAIN SLINGS CL. 12 (1,2,3 OR 4 - LEG)



Chain slings cl. 12 1-leg

Φ of chain (mm)		7	8	10	13	16
WLL (kg)		2360	3000	5000	8000	12500
		1900	2260	4000	6300	10000

Chain slings cl. 12 2-leg

Φ of chain (mm)		7	8	10	13	16
WLL (kg)		3350	4250	7100	11200	17500
		2360	3000	5000	8000	12500

Chain slings cl. 12 3-leg

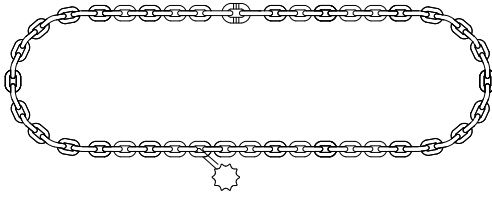
Φ of chain (mm)		7	8	10	13	16
WLL (kg)		5000	6300	10600	17000	26500
		3550	4500	7500	11800	19000


Chain slings cl. 12 4-leg

Φ of chain (mm)		7	8	10	13	16
WLL (kg)		5000	6300	10600	17000	26500
		3550	4500	7500	11800	19000




ENDLESS CHAIN SLINGS CL. 12

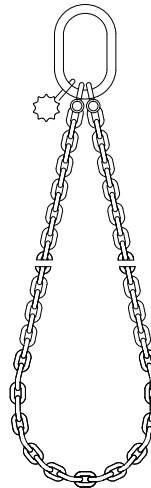


Φ łańcucha (mm)		7	8	10	13	16
WLL (kg)	S 	3750	4750	8000	12500	20000

SINGLE LOOP CHAIN SLINGS CL. 12




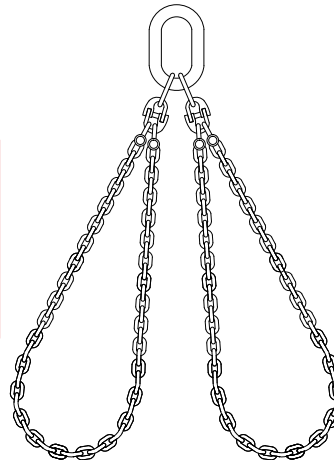
Φ of chain (mm)		7	8	10	13	16
WLL (kg)	0° - 45° 	3350	4250	7100	11200	17500
	45° - 60°	2360	3000	5000	8000	12500



DOUBLE LOOP CHAIN SLINGS CL. 12






Φ of chain (mm)		7	8	10	13	16
WLL (kg)	0° - 45° 	5000	6300	10600	17000	26500
	45° - 60°	3550	4500	7500	11800	19000



special cases of WLL reducing factors

Sling class	Temperature		
	-40° to 200°C	200° to 300°C	300° to 400°C
10	100%	60%	forbidden

Sharp edged loadh		
 R greater than 2 x D of chain	 R greater than D of chain	 sharp edged loadh
100%	70%	50%

STAINLESS CHAIN SLINGS CL. 6

- chains are made in quality class 6,
- tensile strength 630 N/mm²,
- large range of WLL values,
- WOX chain in stainless steel class 6 electrically welded and labeled, components in stainless steel class 6
- the products are based on material 1.4571 (AISI 316 Ti) and 1.4404 (AISI 316L) and 1.4462 (AISI 318 LN) with reduced carbon content.



STAINLESS CHAIN SLINGS CL. 6 (1,2,3 OR 4 - LEG)

Stainless chain slings cl.6 1-leg



Φ of chain (mm)		4	5	6	7	8	10	13	16	20
WLL (kg)		400	630	900	1250	1600	2500	4250	6300	8000
		320	500	720	1000	1280	2000	3400	5040	6400



Stainless chain slings cl.6 2-leg

Φ of chain (mm)		4	5	6	7	8	10	13	16	20	
WLL (kg)		0° - 45°	560	850	1250	1750	2200	3500	5950	8800	11200
		45° - 60°	400	630	900	1250	1600	2500	4250	6300	8000



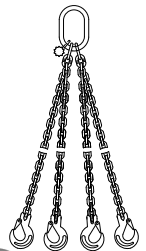
Stainless chain slings cl.6 3-leg

Φ of chain (mm)		4	5	6	7	8	10	13	16	
WLL (kg)		0° - 45°	840	1300	1850	2600	3350	5250	8900	13200
		45° - 60°	600	940	1350	1850	2400	3750	6350	9400

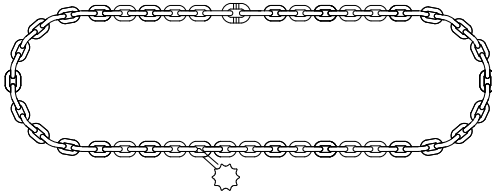


Stainless chain slings cl.6 4-leg

Φ of chain (mm)		4	5	6	7	8	10	13	16	
WLL (kg)		0° - 45°	840	1300	1850	2600	3350	5250	8900	13200
		45° - 60°	600	940	1350	1850	2400	3750	6350	9400



ENDLESS STAINLESS CHAIN SLINGS CL. 6



STEEL 6 CLASS
 PN-EN 818-4
 4 SAFETY RATIO



Φ of chain (mm)		4	5	6	7	8	10	13	16	20
WLL (kg)	S	640	1000	1400	2000	2500	4000	6800	10000	12800

SINGLE LOOP STAINLESS CHAIN SLINGS CL. 6

Φ of chain (mm)		4	5	6	7	8	10
WLL (kg)	0° - 45°	560	850	1250	1750	2200	3500
	45° - 60°	400	630	900	1250	1600	2500

Φ of chain (mm)		13	16	20
WLL (kg)	0° - 45°	5950	8800	11200
	45° - 60°	4250	6300	8000

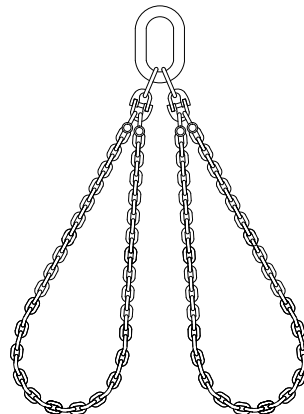
STEEL 6 CLASS
 PN-EN 818-4
 4 SAFETY RATIO



DOUBLE LOOP STAINLESS CHAIN SLINGS CL. 6

STEEL 6 CLASS
 PN-EN 818-4
 4 SAFETY RATIO

Φ of chain (mm)		4	5	6	7	8	10	13	16
WLL (kg)	0° - 45°	840	1300	1850	2600	3350	5250	8900	13200
	45° - 60°	600	940	1350	1850	2400	3750	6350	9400



special cases of WLL reducing factors

Sling class	Temperature		
	-40° to 200°C	200° to 300°C	300° to 400°C
10	100%	60%	forbidden

Sharp edged load		
R greater than 2 x D of chain	R greater than D of chain	sharp edged load
100%	70%	50%



SHACKLES

SHACKLES

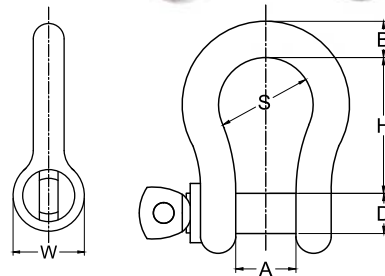
Shackles are most often used in lifting systems as a final, interchangeable connector, used to connect wire rope, chain and round slings, various types of fittings and accessories. Thanks to them it is possible to easily replace damaged steel ropes or chains.

They guarantee durability and reliability of connections, which is why they are used especially where mainly a secure and reliable connection of various types of components is required, e.g. in transport, construction, shipping, engineering. They are usually cast or forged in carbon steel or stainless steel. Shackles are divided into round and oblong.

ROUND SHACKLE BW

- shackle with screw pin,
- made in class 6 according to the standard PN-EN 13889,
- bow and pin made of high-strength steel,
- safety ratio: 6:1,
- galvanized bow, pin protected against corrosion,
- operating temperature: -20°C do +200°C.

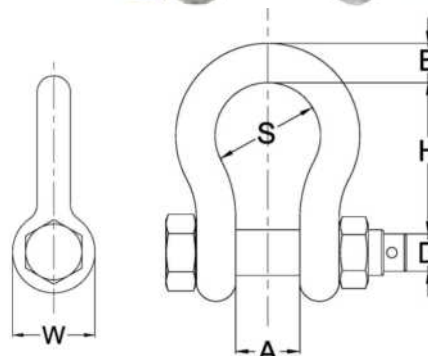
Type	WLL (t)	H (mm)	A (mm)	S (mm)	D (mm)	B (mm)	W (mm)	Weight kg/pcs
BW 00033	0,33	22	9,0	17,0	6,0	5,5	14,5	0,03
BW 00050	0,50	29	11,0	19,5	8,0	7,0	17,5	0,05
BW 00075	0,75	32	12,0	20,0	10,0	9,0	20,5	0,10
BW 00100	1,00	36	15,5	26,0	11,5	10,5	24,5	0,15
BW 00150	1,50	42	15,5	27,5	12,5	11,5	26,5	0,20
BW 00200	2,00	48	20,0	32,5	16,0	13,0	31,0	0,25
BW 00325	3,25	61	26,0	43,0	20,0	17,5	38,5	0,60
BW 00475	4,75	72	31,5	49,5	22,5	21,0	46,0	0,95
BW 00650	6,50	85	35,0	57,0	25,5	24,0	52,5	1,50
BW 00850	8,50	96	42,5	67,0	28,5	27,0	60,5	2,25
BW 00950	9,50	106	45,0	72,5	32,5	30,0	66,0	3,20
BW 01200	12,00	118	49,5	81,0	35,0	34,0	74,0	4,60
BW 01350	13,50	132	56,0	91,0	38,0	35,0	84,5	6,25
BW 01700	17,00	147	57,0	96,5	40,5	39,0	92,0	7,95
BW 02500	25,00	176	68,0	125,0	50,0	45,0	110,0	12,75
BW 03500	35,00	196	79,0	143,0	55,0	52,0	119,0	19,40
BW 04250	42,50	217	102,0	160,0	65,5	55,0	134,0	28,00
BW 05500	55,00	260	105,0	180,0	71,0	65,0	150,0	36,00
BW 08500	85,00	329	127,0	190,0	83,0	75,0	163,0	64,00



ROUND SHACKLE WITH SAFETY BX

- shackle with nut and cotter pin,
- made in class 6 according to the standard PN-EN 13889,
- bow and pin made of high-strength steel,
- safety ratio: 6:1,
- galvanized bow, pin protected against corrosion,
- operating temperature: -20°C do +200°C.

Type	WLL (t)	H (mm)	A (mm)	S (mm)	D (mm)	B (mm)	W (mm)	Weight kg/pcs
BX 00050	0,50	29	11,0	19,5	8,0	7,0	17,5	0,05
BX 00075	0,75	32	12,0	20,0	10,0	9,0	20,5	0,10
BX 00100	1,00	36	15,5	26,0	11,5	10,5	24,5	0,15
BX 00150	1,50	42	15,5	27,5	12,5	11,5	26,5	0,25
BX 00200	2,00	48	20,0	32,5	16,0	13,0	31,0	0,30
BX 00325	3,25	61	26,0	43,0	20,0	17,5	38,5	0,70
BX 00475	4,75	72	31,5	49,5	22,5	21,0	46,0	1,10
BX 00650	6,50	85	35,0	57,0	25,5	24,0	52,5	1,75
BX 00850	8,50	96	42,5	67,0	28,5	27,0	60,5	2,60
BX 00950	9,50	106	45,0	72,5	32,5	30,0	66,0	3,60
BX 01200	12,00	118	49,5	81,0	35,0	34,0	74,0	4,95
BX 01350	13,50	132	56,0	91,0	38,0	35,0	84,5	6,60
BX 01700	17,00	147	57,0	96,5	40,5	39,0	92,0	8,55
BX 02500	25,00	176	68,0	125,0	50,0	45,0	110,0	14,00
BX 03500	35,00	196	79,0	143,0	55,0	52,0	119,0	21,05
BX 04250	42,50	217	102,0	160,0	65,5	55,0	134,0	31,50
BX 05500	55,00	260	105,0	180,0	71,0	65,0	150,0	39,00
BX 08500	85,00	260	135,0	200,0	85,0	77,0	163,0	64,00
BX 12000	120,00	260	135,0	230,0	105,0	91,0	210,0	111,00
BX 15000	150,00	260	145,0	255,0	107,0	116,0	220,0	138,00



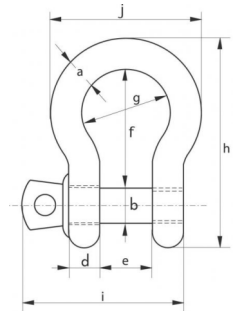
ROUND SHACKLE G-4161



- shackle with screw pin,
- made in class 6 according to the standard PN-EN 13889,
- bow and pin made of high-strength steel,
- safety ratio: 6:1,
- galvanized bow, pin protected against corrosion,
- operating temperature: -20°C do +200°C.



Type	WLL (t)	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	f (mm)	g (mm)	h (mm)	i (mm)	j (mm)	Weight kg/pcs
G-4161-6	0,33	5,0	6	12,5	5	9,5	22	16	41	31	28	0,02
G-4161-8	0,50	7,0	8	17	7	12	29	20	54	40	37	0,05
G-4161-10	0,75	9,0	10	21	9	13,5	32	22	61	49	42	0,10
G-4161-11	1,00	10,0	11	23	10	17	36,5	26	71	56	49	0,14
G-4161-13	1,50	11,0	13	26	11	19	43	29	80	68	54	0,19
G-4161-16	2,00	13,5	16	34	13,5	22	51	32	91	76	63	0,36
G-4161-19	3,25	16,0	19	40	16	27	64	43	114	93	79	0,63
G-4161-22	4,75	19,0	22	47	19	31	76	51	136	107	94	1,01
G-4161-25	6,50	22,0	25	53	22	36	83	58	157	123	107	1,50
G-4161-28	8,50	25,0	28	60	25	43	95	68	176	141	124	2,21
G-4161-32	9,50	28,0	32	67	28	47	108	75	197	158	137	3,16
G-4161-35	12,00	32,0	35	74	32	51	115	83	218	176	154	4,31
G-4161-38	13,50	35,0	38	80	35	57	133	92	240	192	170	5,55
G-4161-42	17,00	38,0	42	89	38	60	146	99	262	208	183	7,43



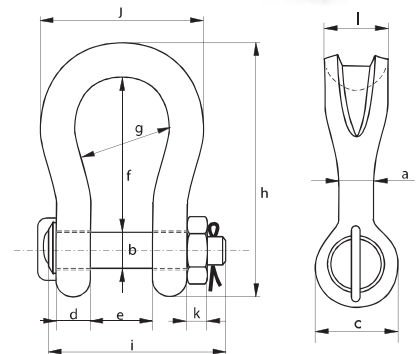
ROUND SHACKLE WITH SAFETY SLING P-6033



- shackle with nut and cotter pin,
- made in class 8 according to the standard PN-EN 13889,
- bow and pin made of high-strength steel,
- safety ratio: 5:1,
- galvanized bow, pin protected against corrosion,
- operating temperature: -20°C do +200°C.



Type	WLL (t)	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	f (mm)	g (mm)	h (mm)	i (mm)	j (mm)	k (mm)	Weight kg/pcs
P-6033-16	3,30	13,5	16	34	13	22	51	32	89	82	58	13	0,40
P-6033-19	5,00	16,0	19	40	16	27	64	43	110	98	75	17	0,73
P-6033-22	7,00	19,0	22	46	19	31	76	51	129	114	89	19	1,18
P-6033-25	9,50	22,0	25	52	22	36	83	58	144	130	102	22	1,73
P-6033-28	12,50	25,0	28	59	25	43	95	68	164	150	118	25	2,56
P-6033-32	15,00	28,0	32	66	28	47	108	75	185	166	131	27	3,60
P-6033-35	18,00	32,0	35	72	32	51	115	83	201	178	147	30	4,95
P-6033-38	21,00	35,0	38	80	35	57	133	92	227	197	162	33	6,62
P-6033-42	30,00	38,0	42	88	38	60	146	99	249	217	175	34	8,11
P-6033-50	40,00	45,0	50	103	45	74	178	126	300	260	216	40	15,00
P-6033-57	55,00	57,0	57	117	57	83	197	138	341	303	252	46	23,00
P-6033-70	85,00	70,0	70	143	70	105	260	180	437	363	320	56	44,00
P-6033-83	120,0	83,0	83	162	83	127	329	190	535	425	356	66	71,00

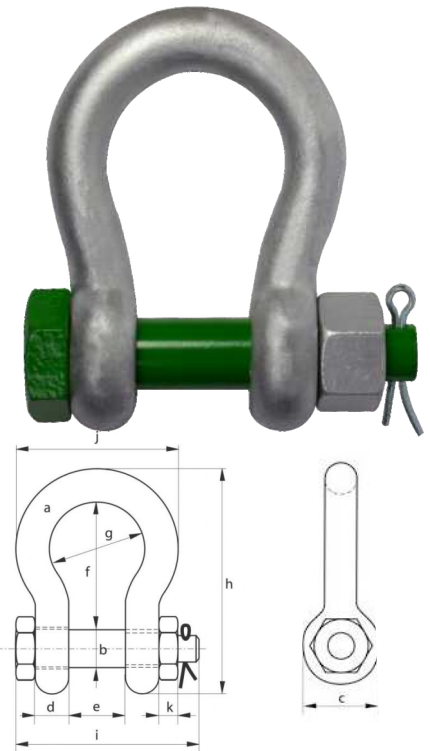


ROUND SHACKLE WITH SAFETY G-4163

- shackle with nut and cotter pin,
- made in class 8 according to the standard PN-EN 13889,
- bow and pin made of high-strength steel,
- safety ratio: 6:1,
- galvanized bow, pin protected against corrosion,
- operating temperature: -20°C do +200°C.



Type	WLL (t)	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	f (mm)	g (mm)	h (mm)	i (mm)	j (mm)	k (mm)	Weight kg/pcs
G-4163-8	0,50	7,0	8	17	7	12	29	20	54	43	37	4	0,06
G-4163-10	0,75	9,0	10	21	9	13,5	32	22	61	51	42	5	0,11
G-4163-11	1,00	10,0	11	23	10	17	36,5	26	71	61	49	8	0,16
G-4163-13	1,50	11,0	13	26	11	19	43	29	80	68	54	11	0,22
G-4163-16	2,00	13,5	16	34	13,5	22	51	32	91	83	63	13	0,42
G-4163-19	3,25	16,0	19	40	16	27	64	43	114	99	79	17	0,74
G-4163-22	4,75	19,0	22	47	19	31	76	51	136	115	94	20	1,18
G-4163-25	6,50	22,0	25	53	22	36	83	58	157	131	107	23	1,77
G-4163-28	8,50	25,0	28	60	25	43	95	68	176	151	124	25	2,58
G-4163-32	9,50	28,0	32	67	28	47	108	75	197	161	137	28	3,66
G-4163-35	12,00	32,0	35	74	32	51	115	83	218	179	154	31	4,91
G-4163-38	13,50	35,0	38	80	35	57	133	92	240	198	170	34	6,54
G-4163-42	17,00	38,0	42	89	38	60	146	99	262	203	183	19	8,19
G-4163-50	25,00	45,0	50	104	45	74	178	126	314	244	226	24	14,22

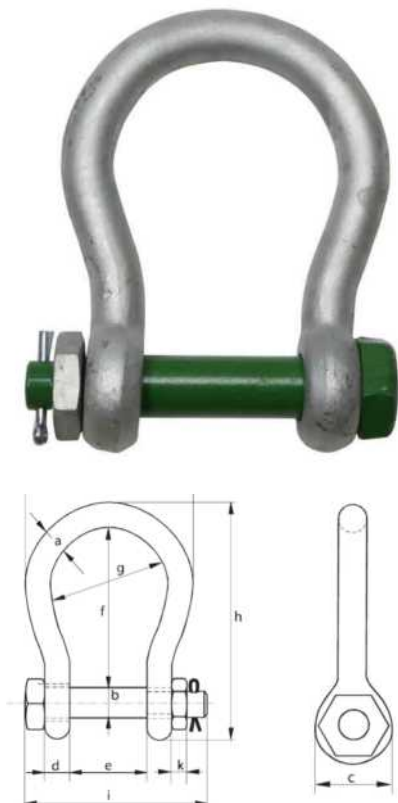


ROUND SHACKLE WITH SAFETY G-4263

- shackle with nut and cotter pin,
- made in class 8 according to the standard PN-EN 13889,
- bow and pin made of high-strength steel,
- safety ratio: 6:1,
- galvanized bow, pin protected against corrosion,
- operating temperature: -20°C do +200°C.

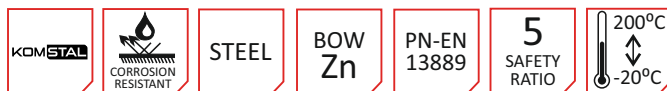


Type	WLL (t)	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	f (mm)	g (mm)	h (mm)	i (mm)	j (mm)	k (mm)	Weight kg/pcs
G-4263-25	4,75	22,0	25	52	22	63	112	88	173	157	132	22	2,08
G-4263-28	6,50	25,0	28	59	25	75	135	105	204	183	155	25	3,14
G-4263-32	8,50	28,0	32	66	28	82	148	115	225	205	171	27	4,36
G-4263-35	9,50	32,0	35	72	32	90	162	126	248	224	190	30	5,95
G-4263-38	12,00	35,0	38	79	35	100	180	140	274	245	210	33	7,87
G-4263-42	16,00	38,0	42	88	38	106	216	159	319	248	235	19	12,50
G-4263-50	25,00	45,0	50	103	45	127	248	175	370	296	265	23	16,70
G-4263-57	30,00	50,0	57	118	50	146	273	207	411	332	307	26	25,00
G-4263-70	55,00	65,0	70	145	65	165	314	213	487	391	343	32	45,00
G-4263-83	70,00	83,0	83	164	83	184	330	254	537	460	420	39	70,00

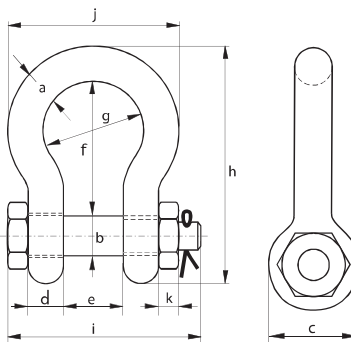


ROUND SHACKLE WITH SAFETY G-5263

- shackle with nut and cotter pin,
- made in class 8 according to the standard PN-EN 13889,
- bow and pin made of high-strength steel,
- safety ratio: 5:1,
- galvanized bow, pin protected against corrosion,
- operating temperature: -20°C do +200°C.



Type	WLL (t)	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	f (mm)	g (mm)	h (mm)	i (mm)	j (mm)	k (mm)	Weight kg/pcs
G-5263-16	3,30	13,5	16	34	13	22	51	32	89	82	58	13	0,40
G-5263-19	5,00	16,0	19	40	16	27	64	43	110	98	75	17	0,73
G-5263-22	7,00	19,0	22	46	19	31	76	51	129	114	89	19	1,19
G-5263-25	9,50	22,0	25	52	22	36	83	58	144	130	102	22	1,73
G-5263-28	12,50	25,0	28	59	25	43	95	68	164	150	118	25	2,56
G-5263-32	15,00	28,0	32	66	28	47	108	75	185	166	131	27	3,60
G-5263-35	18,00	32,0	35	72	32	51	115	83	201	178	147	30	4,95
G-5263-38	21,00	35,0	38	80	35	57	133	92	227	197	162	33	6,62
G-5263-42	30,00	38,0	42	88	38	60	146	99	249	217	175	34	8,11
G-5263-50	40,00	45,0	50	103	45	74	178	126	300	260	216	40	15,00
G-5263-57	55,00	57,0	57	117	57	83	197	138	341	303	252	46	23,00
G-5263-70	85,00	70,0	70	143	70	105	260	180	437	363	320	56	44,00
G-5263-83	120,0	83,0	83	162	83	127	329	190	535	425	356	66	72,00

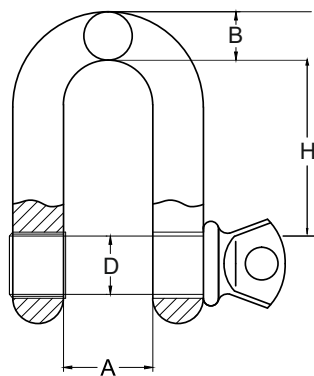


OBLONG SHACKLE DW

- shackle with screw pin,
- made in class 6 according to the standard PN-EN 13889,
- bow and pin made of high-strength steel,
- safety ratio: 6:1,
- galvanized bow, pin protected against corrosion,
- operating temperature: -20°C do +200°C.



Type	WLL (t)	H (mm)	A (mm)	D (mm)	B (mm)	W (mm)	Weight kg/pcs
DW 00033	0,33	20	9,0	6,0	5,0	12,5	0,02
DW 00050	0,50	22	12,0	8,0	7,0	17,0	0,05
DW 00075	0,75	27	13,5	10,0	9,0	21,0	0,09
DW 00100	1,00	31	17,0	11,0	10,0	23,0	0,14
DW 00150	1,50	37	19,0	13,0	11,0	26,0	0,19
DW 00200	2,00	43	22,0	16,0	13,5	34,0	0,39
DW 00325	3,25	51	27,0	20,0	16,0	40,0	0,67
DW 00475	4,75	59	31,0	22,0	19,0	47,0	1,08
DW 00650	6,50	73	36,0	25,0	22,0	53,0	1,66
DW 00850	8,50	85	43,0	28,0	25,0	60,0	2,46
DW 00950	9,50	90	47,0	32,0	28,0	67,0	3,40
DW 01200	12,00	94	51,0	35,0	32,0	74,0	4,51
DW 01350	13,50	115	57,0	38,0	35,0	80,0	6,10
DW 01700	17,00	127	60,0	42,0	38,0	89,0	7,63
DW 02500	25,00	149	74,0	50,0	45,0	114,0	13,25
DW 03500	35,00	171	83,0	57,0	50,0	119,0	18,53
DW 04250	42,50	290	95,0	65,0	57,0	134,0	25,94
DW 05500	55,00	203	105,0	70,0	65,0	145,0	35,33
DW 08500	85,00	229	127,0	83,0	75,0	163,0	64,23

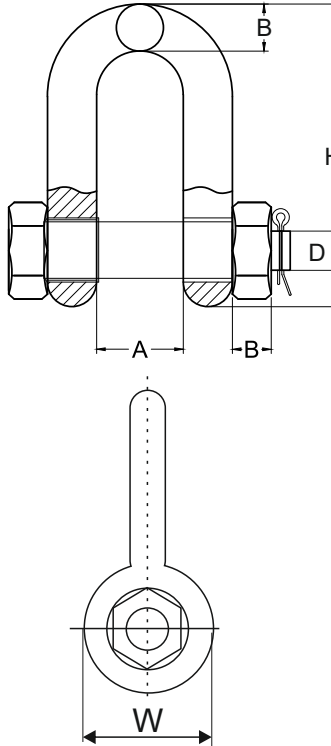


OBLONG SHACKLE WITH SAFETY DX



- shackle with nut and cotter pin,
- made in class 6 according to the standard PN-EN 13889,
- bow and pin made of high-strength steel,
- safety ratio: 6:1,
- galvanized bow, pin protected against corrosion,
- operating temperature: -20°C do +200°C.

Type	WLL (t)	H (mm)	A (mm)	D (mm)	B (mm)	W (mm)	Weight kg/pcs
DX 00075	0,75	26	13,5	10,0	8,0	21,0	0,10
DX 00100	1,00	32	16,0	12,0	10,0	25,0	0,15
DX 00150	1,50	37	19,0	13,0	11,5	27,0	0,22
DX 00200	2,00	43	22,0	16,0	13,5	34,0	0,39
DX 00325	3,25	51	27,0	19,0	16,0	40,0	0,67
DX 00475	4,75	59	31,0	22,0	19,0	47,0	1,08
DX 00650	6,50	73	36,0	25,0	22,0	53,0	1,66
DX 00850	8,50	85	43,0	28,0	25,0	60,0	2,46
DX 00950	9,50	90	47,0	32,0	28,0	67,0	3,40
DX 01200	12,00	94	51,0	35,0	32,0	74,0	4,51
DX 01350	13,50	115	57,0	38,0	35,0	80,0	6,10
DX 01700	17,00	127	60,0	42,0	38,0	89,0	7,63
DX 02500	25,00	149	74,0	50,0	45,0	114,0	13,25
DX 03500	35,00	171	83,0	57,0	50,0	119,0	18,53
DX 04250	42,50	190	95,0	65,0	57,0	134,0	25,94
DX 05500	55,00	203	105,0	70,0	65,0	145,0	35,33
DX 08500	85,00	229	127,0	83,0	75,0	163,0	52,97

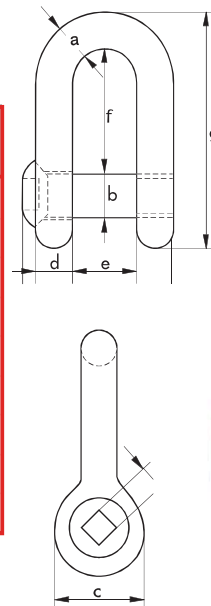


OBLONG SHACKLE WITH A SQUARE LOOP G-4159



- oblong shackle with a square loop,
- made in class 8 according to the standard PN-EN 13889,
- bow and pin made of high-strength steel,
- safety ratio: 6:1,
- galvanized bow, pin protected against corrosion,
- operating temperature: -20°C do +200°C.

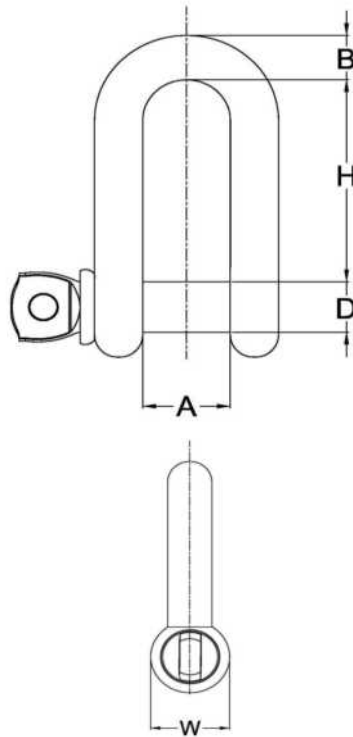
Type	WLL (t)	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	f (mm)	g (mm)	h (mm)	i (mm)	Weight kg/pcs
G-4159-16	2,00	13,5	16	34	13	22	43	81	51	11	0,34
G-4159-19	3,25	16,0	19	40	16	27	51	97	63	11	0,60
G-4159-22	4,75	19,0	22	46	19	31	59	112	74	11	0,98
G-4159-25	6,50	22,0	25	52	22	36	73	134	85	13	1,26
G-4159-28	8,50	25,0	28	59	25	43	85	154	99	13	2,14
G-4159-32	9,50	28,0	32	66	28	47	90	167	110	17	3,05
G-4159-35	12,00	32,0	35	72	32	51	94	180	122	17	3,56
G-4159-38	13,50	35,0	38	80	35	57	115	209	135	17	5,17
G-4159-42	17,00	38,0	42	88	38	60	127	230	145	17	6,84



OBLONG SHACKLE A-TYPE

- shackle with screw pin,
- made according to the standard DIN 82101,
- galvanized shackle
- safety ratio: 5:1,
- galvanized bow, pin protected against corrosion,
- operating temperature: -20°C do +200°C.

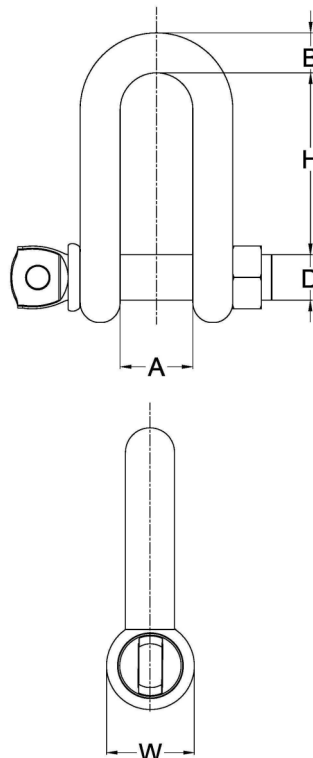
Type	WLL (t)	H (mm)	A (mm)	D (mm)	B (mm)	W (mm)	Weight kg/pcs
A 0025	0,25	24	11,0	M8	8,0	16,0	0,05
A 0040	0,40	30	14,0	M10	10,0	20,0	0,10
A 0063	0,63	36	17,0	M12	12,0	24,0	0,18
A 0100	1,00	49	21,0	M16	15,0	32,0	0,39
A 0160	1,60	61	27,0	M20	19,0	40,0	0,80
A 0200	2,00	67	30,0	M22	21,0	44,0	1,10
A 0250	2,50	73	33,0	M24	23,0	48,0	1,40
A 0315	3,15	83,5	38,0	M27	26,0	54,0	2,00
A 0400	4,00	91	42,0	M30	29,0	60,0	2,70
A 0500	5,00	111	47,0	M36	33,0	72,0	4,30
A 0630	6,30	119,5	53,0	M39	37,0	78,0	5,80
A 0800	8,00	139	59,5	M44	41,5	88,0	7,90
A 1000	10,00	146	66,0	M48	46,0	94,0	10,05



OBLONG SHACKLE WITH SAFETY C-TYPE

- shackle with nut and cotter pin,
- made according to the standard DIN 82101,
- galvanized shackle
- safety ratio: 5:1,
- galvanized bow, pin protected against corrosion,
- operating temperature: -20°C do +200°C.

Type	WLL (t)	H (mm)	A (mm)	D (mm)	B (mm)	W (mm)	Weight kg/pcs
C 0063	0,63	36	17,0	M12	12,0	24,0	0,20
C 0100	1,00	49	21,0	M16	15,0	32,0	0,37
C 0160	1,60	61	27,0	M20	19,0	40,0	0,69
C 0200	2,00	67	30,0	M22	21,0	44,0	1,10
C 0250	2,50	73	33,0	M24	23,0	48,0	1,50
C 0315	3,15	83,5	38,0	M27	26,0	54,0	2,10
C 0400	4,00	91	42,0	M30	29,0	60,0	2,90
C 0500	5,00	111	47,0	M36	33,0	72,0	4,70
C 0630	6,30	119,5	53,0	M39	37,0	78,0	6,30
C 0800	8,00	139,5	60,0	M44	41,0	90,0	8,50
C 1000	10,00	147	66,0	M48	46,0	96,0	10,80

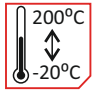


OBLONG SHACKLE G-4151

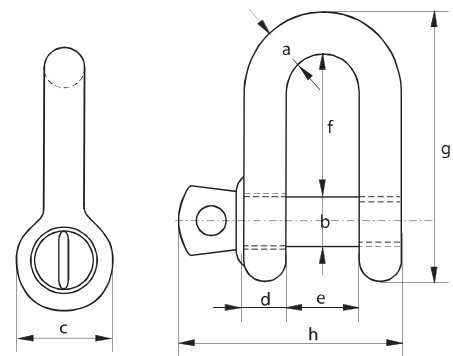
- shackle with screw pin,
- made in class 8 according to the standard PN-EN 13889,
- bow and pin made of high-strength steel,
- safety ratio: 6:1,
- galvanized bow, pin protected against corrosion,
- operating temperature: -20°C do +200°C.



STEEL

BOW
ZnPN-EN
138896
SAFETY
RATIO

Type	WLL (t)	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	f (mm)	g (mm)	h (mm)	Weight kg/pcs
G-4151-6	0,33	5,0	6	12	5	9,5	19	33	29,5	0,02
G-4151-8	0,50	7,0	8	16,5	7	12	22	41,5	38	0,05
G-4151-10	0,75	9,0	10	20	9	13,5	26	50	46,5	0,09
G-4151-11	1,00	10,0	11	22,5	10	17	32	59	54	0,14
G-4151-13	1,50	11,0	13	26,5	11	19	37	68	59,5	0,19
G-4151-16	2,00	13,5	16	34	13,5	22	43	81	73	0,32
G-4151-19	3,25	16,0	19	40	16	27	51	97	89	0,54
G-4151-22	4,75	19,0	22	46	19	31	59	112	103	0,87
G-4151-25	6,50	22,0	25	52	22	36	74	134	119	1,34
G-4151-28	8,50	25,0	28	59	25	43	85	154	137	2,08
G-4151-32	9,50	28,0	32	66	28	47	90	167	153	2,77
G-4151-35	12,00	32,0	35	72	32	51	94	180	170	3,72
G-4151-38	13,50	35,0	38	80	35	57	115	209	186	5,14
G-4151-42	17,00	38,0	42	88	38	60	127	230	203	6,85
G-4151-50	25,00	45,0	50	103	45	74	149	271	243	11,45

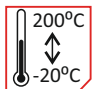


OBLONG SHACKLE WITH SAFETY G-4153

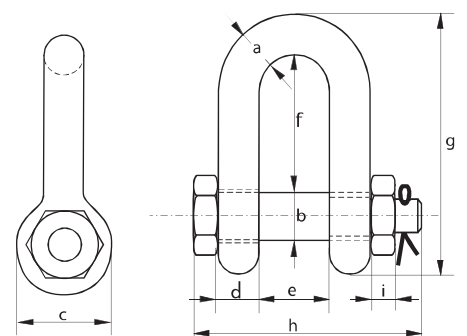
- shackle with nut and cotter pin,
- made in class 8 according to the standard PN-EN 13889,
- bow and pin made of high-strength steel,
- safety ratio: 6:1,
- galvanized bow, pin protected against corrosion,
- operating temperature: -20°C do +200°C.

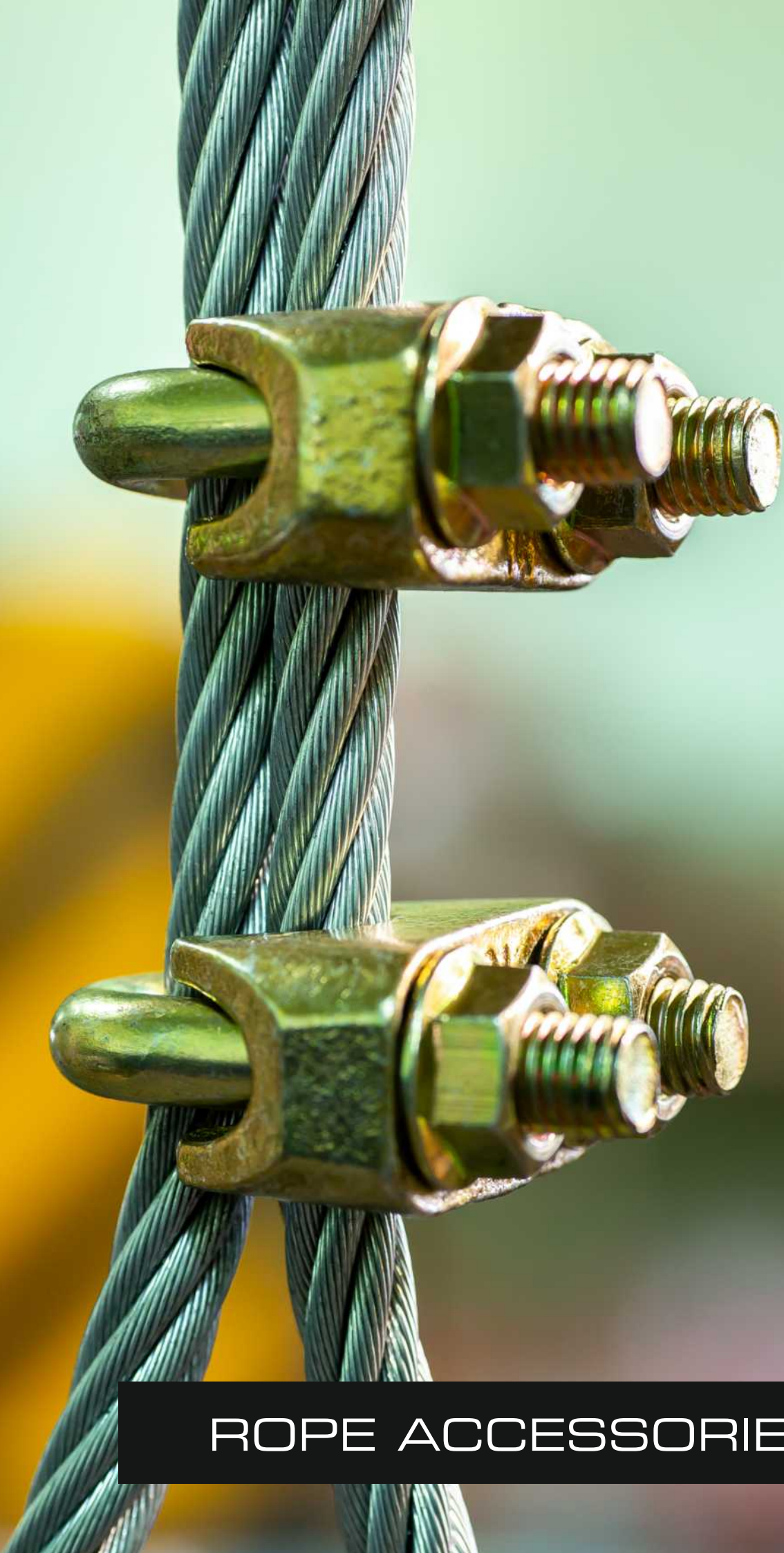


STEEL

BOW
ZnPN-EN
138896
SAFETY
RATIO

Type	WLL (t)	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	f (mm)	g (mm)	h (mm)	i (mm)	Weight kg/pcs
G-4153-16	2,00	13,5	16	34	13	22	43	81	82	13	0,39
G-4153-19	3,25	16,0	19	40	16	27	51	97	98	17	0,67
G-4153-22	4,75	19,0	22	46	19	31	59	112	114	19	1,08
G-4153-25	6,50	22,0	25	52	22	36	73	134	130	22	1,66
G-4153-28	8,50	25,0	28	59	25	43	85	154	150	25	2,46
G-4153-32	9,50	28,0	32	66	28	47	90	167	166	27	3,40
G-4153-35	12,00	32,0	35	72	32	51	94	180	178	30	4,51
G-4153-38	13,50	35,0	38	80	35	57	115	209	197	33	6,10
G-4153-42	17,00	38,0	42	88	38	60	127	230	202	19	7,63
G-4153-50	25,00	45,0	50	103	45	74	149	271	249	23	12,88
G-4153-57	35,00	50,0	57	111	50	83	171	305	269	26	17,35
G-4153-65	42,50	57,0	65	130	57	95	190	345	301	29	25,94
G-4153-70	55,00	65,0	70	145	65	105	203	376	330	32	35,33
G-4153-83	85,00	75,0	83	162	73	127	229	427	380	39	52,97





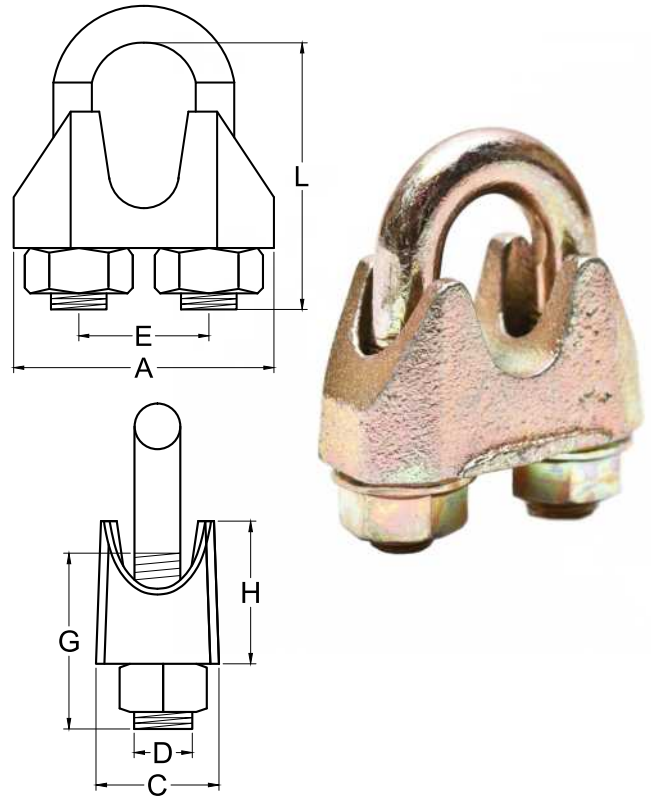
ROPE ACCESSORIES

ROPE CLAMPS DIN 741

- low carbon steel clamps,
- in accordance with DIN 741,
- U-shaped base and clamp casting with two fastening nuts for secure connection to the ropes,
- galvanic zinc coating for improved corrosion resistance.



Type	rope diameter (mm)	D (mm)	L (mm)	E (mm)	H (mm)	A (mm)	C (mm)	G (mm)	Weight 100pcs
D741-03	3	4	20	9	12	21	10	10	1,4
D741-05	5	5	24	11	13	23	11	10	1,5
D741-06	6	5	28	13	15	26	12	11	1,6
D741-08	8	6	34	16	19	30	14	15	4,1
D741-10	10	8	42	19	22	34	18	17	6,0
D741-11	11	8	44	20	22	36	19	18	7,0
D741-13	13	10	55	24	30	42	23	21	11,8
D741-14	14	10	57	25	30	44	23	22	12,4
D741-16	16	12	63	29	33	40	26	26	21,0
D741-19	19	12	75	32	38	54	29	30	23,6
D741-22	22	14	85	37	44	61	33	34	23,8
D741-26	26	14	95	41	45	65	35	37	41,0
D741-30	30	16	110	48	50	74	37	43	62,0
D741-34	34	16	120	52	55	80	42	50	75,0
D741-40	40	16	140	58	60	88	45	55	104,0
D741-45	45	18	163	65	75	97	49	60	134,0
D741-50	50	20	170	72	77	106	51	65	175,0

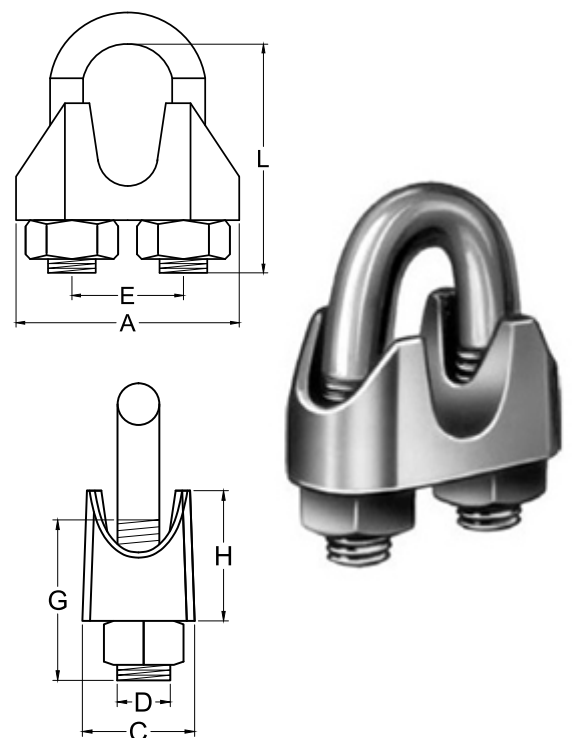


REINFORCED ROPE CLAMPS EN 13411-5 A-TYPE

- body made of malleable cast iron, U bolt made of structural steel,
- used when a high level of end safety is required,
- in accordance with the standard EN-13411-5,
- base and U-shaped clamp cast with two fastening nuts for secure connection with ropes,
- galvanic zinc coating for improved corrosion resistance.

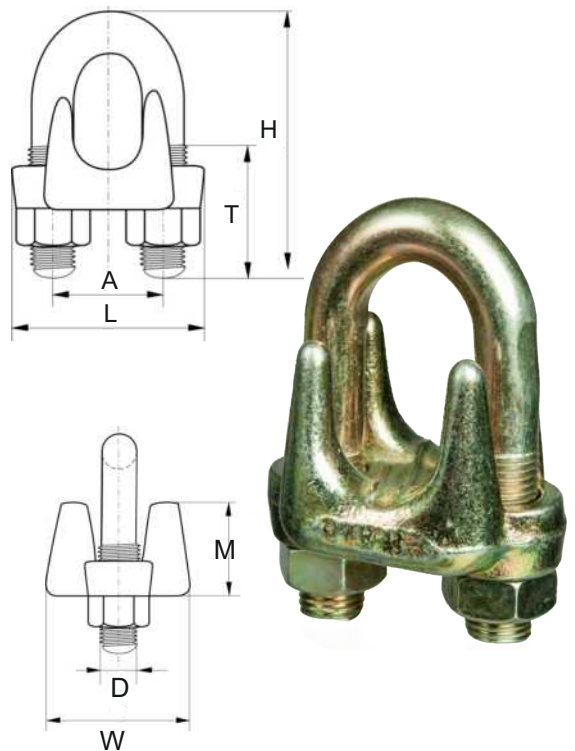


Type	rope diameter (mm)	min. amount of clamps per loop	D (mm)	L (mm)	E (mm)	G (mm)	A (mm)	C (mm)	H (mm)	Weight 100pcs
A-05	3 - 5	3	M5	25	7	14	25	13	13	2,0
A-6,5	5 - 6,5	3	M6	32	8	17	30	16	14	4,0
A-08	6,5 - 8	4	M8	41	10	20	39	20	18	8,2
A-10	8 - 10	4	M8	46	12	24	40	20	21	9,2
A-12	10 - 12	4	M10	56	14	28	50	25	24	21,5
A-14	12 - 14	4	M12	66	16	31	59	30	28	39,5
A-16	14 - 16	4	M14	76	20	35	64	32	35	43,0
A-19	16 - 19	5	M14	83	23	36	68	33	40	49,0
A-22	19 - 22	5	M16	96	25	40	74	34	44	68,0
A-26	22 - 26	5	M20	111	26	50	84	38	51	117,0
A-30	26 - 30	6	M20	127	34	55	95	41	59	140,0
A-34	30 - 34	6	M22	141	38	60	105	45	67	213,0
A-40	34 - 40	6	M24	159	44	65	117	49	77	268,0



REINFORCED ROPE CLAMPS EN 13411-5 B-TYPE

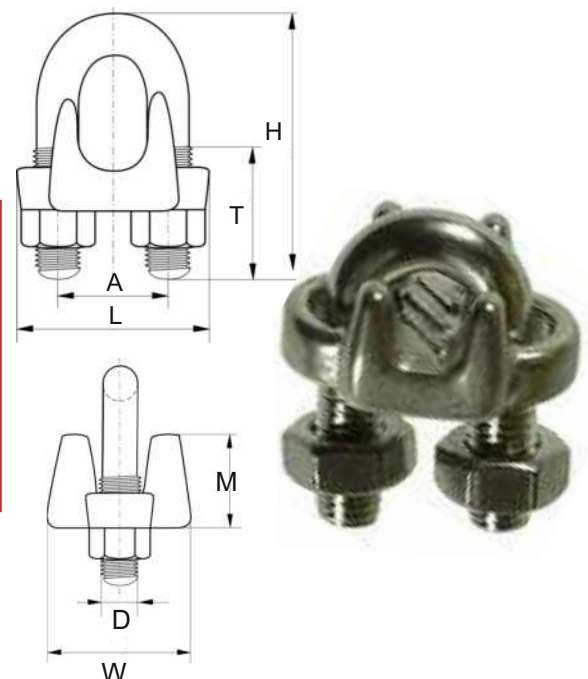
- body made of malleable cast iron, U bolt made of structural steel,
- used when a high level of end safety is required,
- in accordance with the standard EN-13411-5,
- base and U-shaped clamp cast with two fastening nuts for secure connection with ropes,
- galvanic zinc coating for improved corrosion resistance,
- intended for use only with right-handed ropes.



Type	rope diameter (mm)	min. amount of clamps per loop	D (mm)	H (mm)	A (mm)	T (mm)	L (mm)	W (mm)	M. (mm)	Weight 100pcs
B-1/8	3 - 4	2	5	24	7	11	24	21	10	2,0
B-3/16	5	2	6	31	9	13	29	24	13	4,0
B-1/4	6 - 7	2	8	34	11	13	37	30	18	8,0
B-5/16	8	3	10	45	12	19	43	33	19	14,0
B-3/8	9 - 10	3	11	49	15	19	49	42	25	19,0
B-7/16	11	3	12	60	18	25	58	46	26	31,0
B-1/2	12 - 13	3	13	61	17	25	58	48	31	34,0
B-9/16	14 - 15	3	14	72	19	32	63	52	31	36,0
B-5/8	16	3	14	74	19	32	64	54	36	45,0
B-3/4	18 - 20	4	16	86	22	37	72	57	38	68,0
B-7/8	22	4	19	98	26	41	80	62	40	108,0
B-1	24 - 26	5	19	108	29	46	88	67	47	113,0
B-11/8	28 - 30	6	19	117	32	51	91	73	48	140,0
B-11/4	32 - 34	7	22	130	37	54	105	79	56	207,0
B-11/8	36	7	22	140	38	59	108	79	58	234,0
B-11/2	38 - 40	8	22	147	44	60	112	85	64	266,0

STAINLESS ROPE CLAMPS

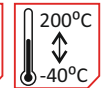
- made entirely of AISI 316 steel,
- polished,
- acid resistant.



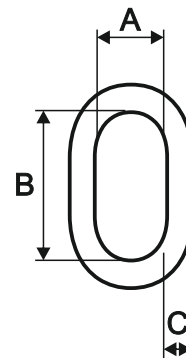
Type	rope diameter (mm)	min. amount of clamps per loop	D (mm)	H (mm)	A (mm)	T (mm)	L (mm)	W (mm)	M. (mm)	Weight 100pcst
BN-1/8	3	2	6	24	6,5	11	23	19,0	9,5	2,0
BN-3/16	5	2	6	31	9,5	14	29	21,5	10,5	4,0
BN-1/4	6	2	8	35	11,0	15	35,5	29,5	16,5	8,0
BN-5/16	8	3	10	46	12,5	19	42	32,0	18,0	14,0
BN-3/8	10	3	10	48	17,0	19	48	40,0	23,0	19,0
BN-1/2	13	3	12	60	17,0	25	57	47,0	29,0	34,0

STANDARD AND CONE-SHAPED ROPE CLAMPS

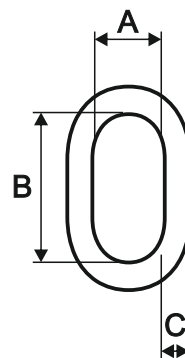
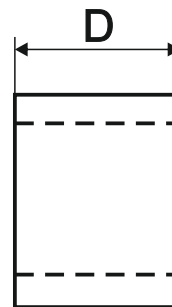
- type "A" for clamping steel ropes,
- made of aluminum according to standard EN 13411-3.



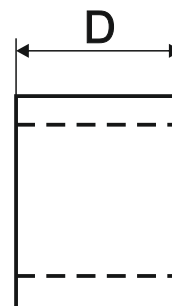
Type		rope diameter (mm)	D (mm)	C (mm)	A (mm)	B (mm)	Weight 1000pcs
standard	cone-shaped						
ZA-010	ZS-010	1	5	0,65	1,2	2,4	0,10
ZA-015	ZS-015	1,5	6	0,75	1,7	3,4	0,21
ZA-020	ZS-020	2	7	0,85	2,2	4,4	0,24
ZA-025	ZS-025	2,5	9	1,05	2,7	5,4	0,50
ZA-030	ZS-030	3	11	1,25	3,3	6,6	0,84
ZA-035	ZS-035	3,5	13	1,50	3,8	7,6	1,32
ZA-040	ZS-040	4	14	1,70	4,4	8,8	1,81
ZA-050	ZS-050	5	18	2,10	5,5	11,0	3,57
ZA-060	ZS-060	6	21	2,50	6,6	13,2	5,86
ZA-065	ZS-065	6,5	23	2,70	7,2	14,4	7,55
ZA-080	ZS-080	8	28	3,30	8,8	17,6	13,70
ZA-100	ZS-100	10	35	4,10	10,9	21,8	26,40
ZA-110	ZS-110	11	39	4,50	12,1	24,2	35,80
ZA-120	ZS-120	12	42	4,90	13,2	26,4	45,80
ZA-130	ZS-130	13	46	5,40	14,2	28,4	59,70
ZA-140	ZS-140	14	49	5,80	15,3	30,6	73,50
ZA-160	ZS-160	16	56	6,70	17,5	35,0	111,0
ZA-180	ZS-180	18	63	7,60	19,6	39,2	153,0
ZA-200	ZS-200	20	70	7,40	21,7	43,4	217,0
ZA-220	ZS-220	22	77	9,20	24,3	48,6	292,0
ZA-240	ZS-240	24	84	10,00	26,4	52,8	376,0
ZA-260	ZS-260	26	91	10,90	28,5	57,0	481,0
ZA-280	ZS-280	28	98	11,70	31,0	62,0	603,1
ZA-300	ZS-300	30	105	12,50	33,1	66,2	739,0
ZA-320	ZS-320	32	112	13,40	35,2	70,4	897,0
ZA-340	ZS-340	34	119	14,20	37,8	75,6	1080
ZA-360	ZS-360	36	126	15,00	39,8	79,6	1275
ZA-380	ZS-380	38	133	15,80	41,9	83,8	1490
ZA-400	ZS-400	40	140	16,60	44,0	88,0	1734
ZA-420	ZS-420	42	147	17,50	46,2	92,4	2020
ZA-440	ZS-440	44	154	18,30	48,4	96,8	2314
ZA-460	ZS-460	46	161	19,20	50,6	101,2	2662
ZA-480	ZS-480	48	168	20,00	52,8	105,6	3010
ZA-500	ZS-500	50	175	20,80	55,0	110,0	3412
ZA-520	ZS-520	52	182	21,60	57,2	114,4	3813
ZA-540	ZS-540	54	189	22,50	59,4	118,8	4293
ZA-560	ZS-560	56	196	23,30	61,6	123,2	4772
ZA-580	ZS-580	58	203	24,20	63,8	127,6	5326
ZA-600	ZS-600	60	210	25,00	66,0	132,0	5880



Standard rope clamp



Cone-shaped rope clamp

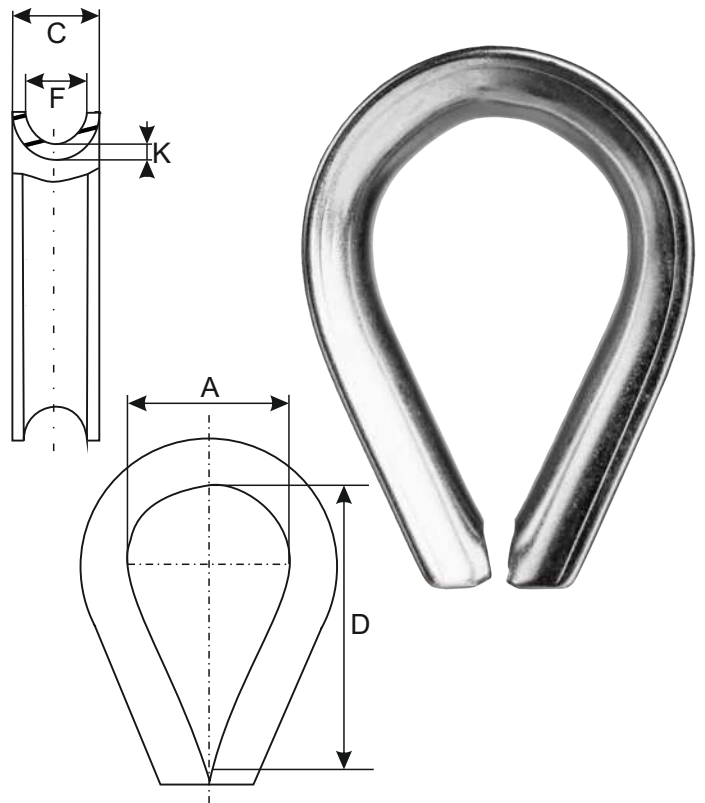


THIMBLE DIN 6899

- thimble according to the standard DIN 6899 / PN 80247,
- stal węglowa, stal kwasoodporna A4,
- galvanic zinc coating for improved corrosion resistance.



Type	rope diameter (mm)	D (mm)	A (mm)	C (mm)	F (mm)	K (mm)	Weight kg/pcs
K6899-04	4	20	10	8	5,0	2,1	0,01
K6899-06	6	30	15	10	7,0	2,6	0,03
K6899-08	8	44	21	14	11,5	4,0	0,06
K6899-10	10	60	27	16	12,5	5,0	0,12
K6899-12	12	64	31	18	14,0	6,0	0,15
K6899-14	14	72	38	21	18,0	7,0	0,25
K6899-16	16	86	44	26	21,0	8,0	0,35
K6899-18	18	97	46	27	23,0	9,0	0,50
K6899-20	20	107	51	29	24,0	10,0	0,65
K6899-22	22	115	60	32	26,0	10,0	0,80
K6899-24	24	126	64	33	27,0	11,0	1,00
K6899-26	26	148	68	38	31,0	12,0	1,45
K6899-28	28	144	76	39	33,0	12,0	1,85
K6899-32	32	170	82	49	41,0	14,0	2,25
K6899-36	36	180	90	55	40,0	16,0	4,30
K6899-40	40	200	100	60	44,0	18,0	5,70

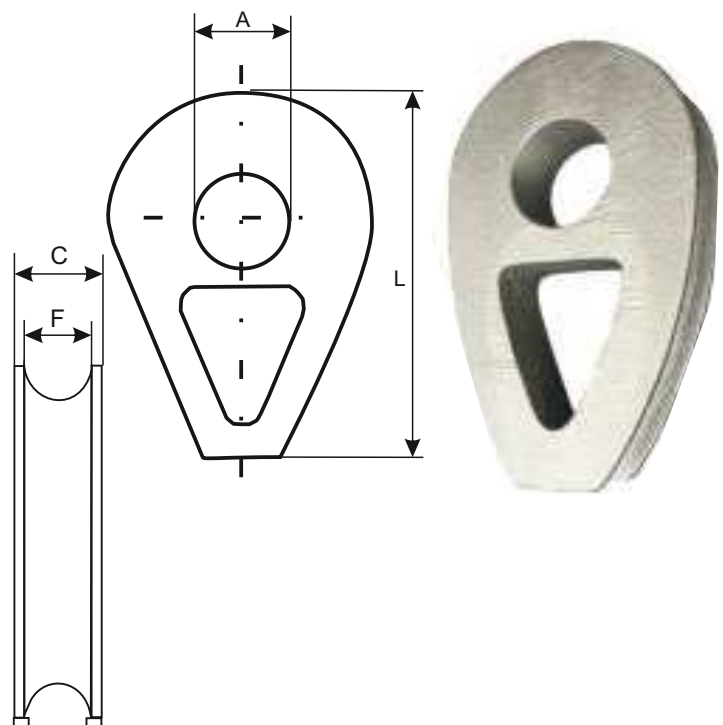


FULL THIMBLE DIN 3091

- thimble according to the standard DIN 3091,
- made of malleable cast iron,
- galvanic zinc coating for improved corrosion resistance.



Type	rope diameter (mm)	L (mm)	A min/max (mm)	C (mm)	F (mm)	Weight kg/pcs
K3091-08	8	66	14 / 20	15,0	9	0,18
K3091-10	10	82	18 / 25	17,5	11	0,32
K3091-12	12	98	21 / 30	20,0	13	0,52
K3091-14	14	114	25 / 35	23,5	16	0,80
K3091-16	16	130	28 / 40	26,0	18	0,90
K3091-18	18	145	31 / 45	28,5	20	1,21
K3091-20	20	161	35 / 50	31,0	22	1,61
K3091-22	22	177	38 / 55	33,5	24	2,11
K3091-24	24	193	41 / 60	36,0	26	2,71
K3091-26	26	209	44 / 65	39,5	29	3,55
K3091-28	28	224	47 / 70	42,0	31	4,20
K3091-32	32	256	53 / 80	47,0	35	6,30
K3091-36	36	288	59 / 90	53,0	40	8,84
K3091-40	40	320	65 / 100	58,0	44	11,00
K3091-44	44	352	70 / 110	63,0	48	15,00
K3091-48	48	384	76 / 120	69,0	53	20,00
K3091-52	52	416	81 / 130	74,0	57	25,00

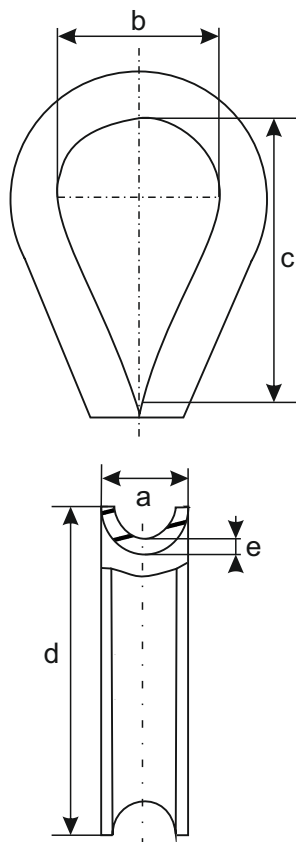


STAINLESS THIMBLE AISI 316

- stainless and acid-resistant steel thimble,
- high-strength stainless steel (INOX) type AISI 316,
- chrome-nickel steel alloy providing corrosion resistance and high temperature resistance.



Type	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	Weight 100/pcs
AISI316-02	2	9,0	15,0	23	1,0	0,20
AISI316-025	2,5	9,5	15,7	24	1,0	0,20
AISI316-03	3	10,0	16,0	25	1,0	0,30
AISI316-04	4	11,0	17,0	28	1,0	0,50
AISI316-05	5	13,0	20,0	32	1,0	0,50
AISI316-06	6	16,0	25,0	39	1,2	0,80
AISI316-07	7	18,0	28,0	40	1,2	1,00
AISI316-08	8	20,0	32,0	49	1,4	1,20
AISI316-10	10	26,0	40,0	55	1,9	3,40
AISI316-12	12	28,0	45,0	70	2,0	4,50
AISI316-14	14	34,0	56,0	80	2,2	7,30
AISI316-16	16	37,0	62,0	85	2,5	12,20
AISI316-18	18	42,0	65,0	95	2,5	15,10
AISI316-20	20	45,0	78,0	115	3,0	19,00
AISI316-22	22	50,0	88,0	125	3,0	22,30
AISI316-24	24	58,0	96,0	135	4,0	40,50
AISI316-26	26	66,0	105,0	140	4,0	49,70

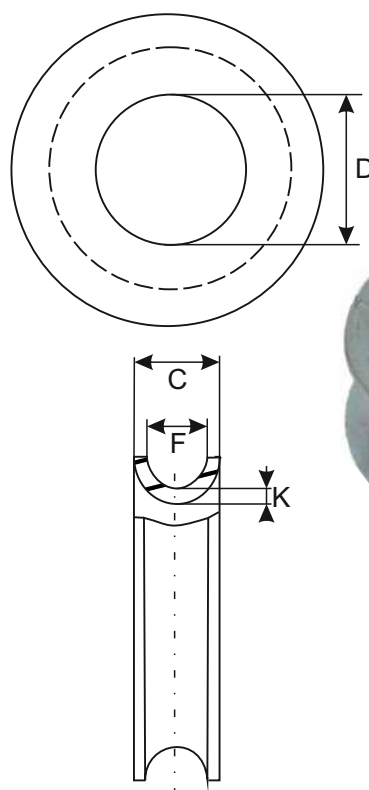


ROUND THIMBLE

- round thimble - welded
- made of steel,
- galvanized,
- with a deep groove, to the rope.



Type	rope diameter (mm)	D (mm)	C (mm)	F (mm)	K (mm)	Weight kg/pcs
KO-08	8	13	13	9	4	0,02
KO-10	10	18	15	11	5	0,04
KO-12	12	20	19	13	6	0,05
KO-14.1	14	25	22	16	7	0,09
KO-14.2	14	28	22	16	7	0,14
KO-16.1	16	35	25	18	8	0,21
KO-16.2	16	40	25	18	8	0,25
KO-16.3	16	45	25	18	8	0,29
KO-16.4	16	50	25	18	8	0,35

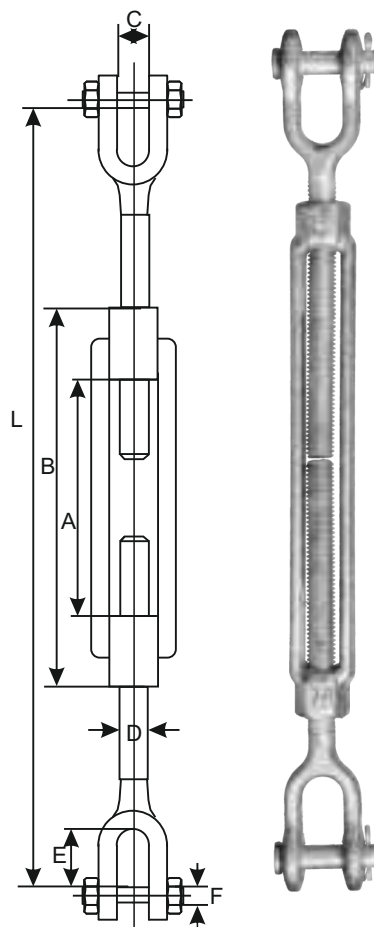


RIGGING SCREW FORK - FORK

- rigging screw fork - fork,
- made of structural steel, galvanized,
- made in accordance with ASTM F1145-92,
- safety ratio: 5:1,
- operating temperature: -20°C do +200°C.



Type	Size		WLL (t)	A (mm)	B (mm)	C (mm)	E (mm)	F (mm)	L min (mm)	L max (mm)	kg/pcs
	(mm)	inch									
SWW10/152	10x152	3/8"x6"	0,54	152	180	13	23	8,0	270	410	0,3
SWW12/152	12x152	1/2"x6"	1,00	152	190	16	27	9,5	300	440	0,7
SWW12/229	12x229	1/2"x9"	1,00	229	265	15	27	10,0	390	590	0,9
SWW16/152	16x152	5/8"x6"	1,59	152	200	20	34	16,0	325	470	1,3
SWW16/229	16x229	5/8"x9"	1,59	229	270	20	34	13,0	415	635	1,6
SWW16/300	16x300	5/8"x12"	1,59	300	350	20	34	13,0	495	780	1,8
SWW20/152	20x152	3/4"x6"	2,36	152	205	24	38	16,0	360	500	2,3
SWW20/222	20x229	3/4"x9"	2,36	229	285	24	38	16,0	470	650	2,3
SWW20/300	20x300	3/4"x12"	2,36	300	360	24	38	16,0	520	800	2,5
SWW22/152	22x152	7/8"x6"	3,27	152	212	28	42	18,5	400	530	3,1
SWW22/229	22x229	7/8"x9"	3,27	229	290	28	42	18,5	490	700	3,3
SWW22/457	22x457	7/8"x18"	3,27	457	515	28	42	18,5	715	1145	5,0
SWW25/152	25x152	1"x6"	4,54	152	220	30	40	22,0	450	590	4,3
SWW25/300	25x300	1"x12"	4,54	300	375	32	50	22,0	590	850	5,7
SWW25/610	25x610	1"x24"	4,54	610	680	32	50	22,0	890	1480	8,8
SWW32/300	32x300	1 1/4"x12"	6,91	300	380	45	72	28,5	670	950	8,3
SWW32/450	32x450	1 1/4"x18"	6,91	450	525	45	72	28,5	800	1240	11,0
SWW32/610	32x610	1 1/4"x24"	6,91	610	695	45	72	28,5	980	1565	14,0
SWW38/305	38x305	1 1/2"x12"	9,71	305	400	50	75	36,0	720	1020	14,6
SWW38/457	38x457	1 1/2"x18"	9,71	457	540	50	75	36,0	860	1280	16,7
SWW38/610	38x610	1 1/2"x24"	9,71	610	705	50	75	36,0	1020	1600	19,7
SWW44/460	44x460	1 3/4"x18"	12,70	460	570	56	95	42,0	945	1360	28,3
SWW44/610	44x610	1 3/4"x24"	12,70	610	700	60	95	42,0	1070	1650	30,3
SWW50/610	50x610	2"x24"	16,78	610	725	68	110	50,0	1240	1800	44,0
SWW63/610	63x610	2 1/2"x24"	27,22	610	770	73	127	54,0	1300	1840	77,1

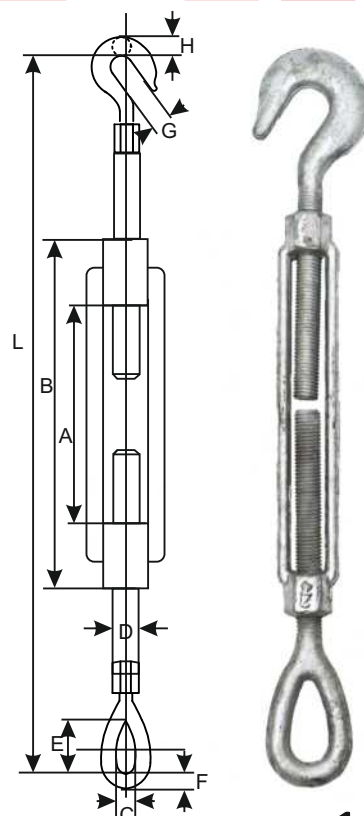


RIGGING SCREW HOOK - LOOP

- two sided rigging screw hook - loop,
- made of structural steel, galvanized,
- made in accordance with ASTM F1145-92,
- safety ratio: 5:1,
- operating temperature: -20°C do +200°C.



Typeod	Size		WLL (t)	A (mm)	B (mm)	C (mm)	E (mm)	F (mm)	G (mm)	H (mm)	L min (mm)	L max (mm)	kg/pcs
	mm	inch											
SHO6/102	6x102	0,25x4	0,18	102	123	8,5	19,5	6,5	11,5	12,5	195	285	0,15
SHO8/114	8x114	5/16x4,5	0,32	114	138	11,5	23,0	8,0	12,5	13,0	220	320	0,25
SHO10/152	10x152	3/8x6	0,45	152	180	13,5	28,0	9,0	13,5	14,5	275	415	0,40
SHO12/152	12x152	0,5x6	0,68	152	190	18,0	35,5	12,0	18,0	20,0	315	455	0,70
SHO16/152	16x152	5/8x6	1,02	152	200	22,0	44,0	15,0	21,0	25,0	350	490	1,25
SHO20/229	20x229	0,75x9	1,36	229	285	25,0	54,0	16,0	26,0	27,0	470	690	2,30
SHO25/305	25x305	1x12	2,27	305	380	35,0	73,0	24,0	32,0	38,0	630	920	5,20
SHO32/305	32x305	1,25x12	2,95	305	392	44,0	90,0	30,0	42,0	47,0	694	1000	8,10
SHO32/610	32x610	1,25x24	2,95	310	690	44,0	88,0	30,0	37,0	41,0	1000	1600	12,45

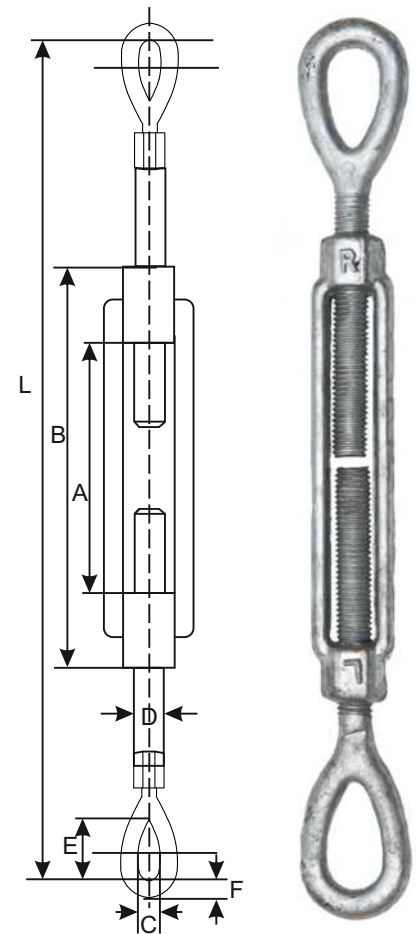


RIGGING SCREW LOOP - LOOP

- rigging screw loop - loop,
- made of structural steel, galvanized,
- made in accordance with ASTM F1145-92,
- safety ratio: 5:1,
- operating temperature: -20°C do +200°C.



Type	Size mm inch	WLL (t)	A (mm)	B (mm)	C (mm)	E (mm)	F (mm)	L min (mm)	L max (mm)	kg/pcs
SOO6/102	6x102 0,25x4	0,23	102	123	8,5	19,5	6,5	195	285	0,15
SOO8/114	8x114 5/16x4,5	0,36	114	138	11,5	23,0	8,0	220	320	0,25
SOO10/152	10x152 3/8x6	0,54	152	180	13,5	28,0	9,0	275	415	0,40
SOO12/152	12x152 0,5x6	1,00	152	190	18,0	35,5	12,0	315	455	0,70
SOO16/152	16x152 5/8x6	1,59	152	200	22,0	41,0	15,0	350	490	1,25
SOO20/229	20x229 0,75x9	2,36	229	285	25,0	52,0	16,0	470	690	2,30
SOO25/305	25x305 1x12	4,51	305	380	35,0	73,0	24,0	630	920	5,15
SOO32/305	32x305 1,25x12	6,91	305	392	44,0	90,0	30,0	724	1250	8,05

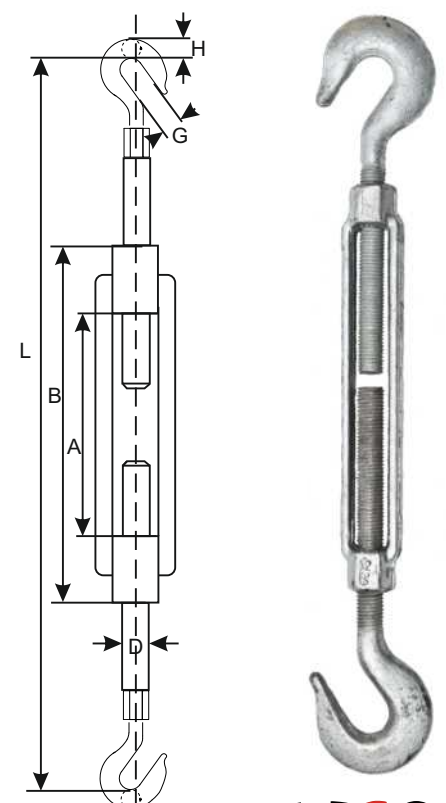


RIGGING SCREW HOOK - HOOK

- rigging screw hook - hook,
- made of structural steel, galvanized,
- made in accordance with ASTM F1145-92,
- safety ratio: 5:1,
- operating temperature: -20°C do +200°C.



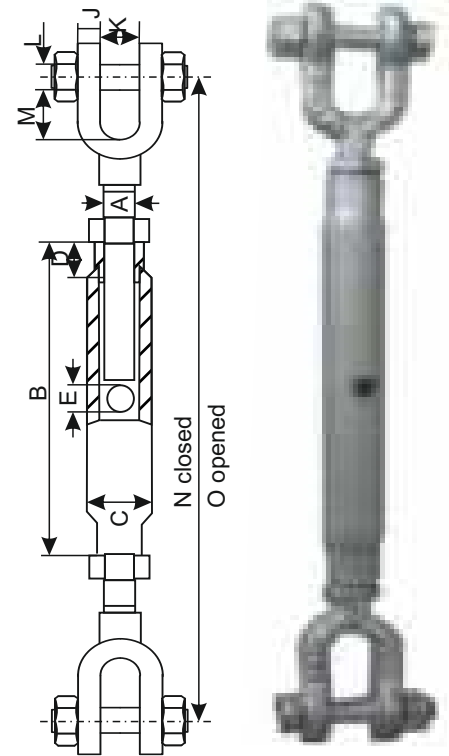
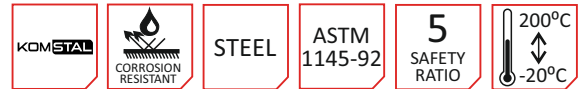
Type	Size mm inch	WLL (t)	A (mm)	B (mm)	G (mm)	H (mm)	L min (mm)	L max (mm)	kg/pcs
SHH6/102	6x102 0,25x4	0,18	102	123	11,5	12,5	195	285	0,15
SHH8/114	8x114 5/16x4,5	0,32	114	138	12,5	13,0	220	320	0,25
SHH10/152	10x152 3/8x6	0,45	152	180	13,5	14,5	275	415	0,40
SHH12/152	12x152 0,5x6	0,68	152	190	18,0	20,0	315	455	0,70
SHH16/152	16x152 5/8x6	1,02	152	200	21,0	25,0	350	490	1,25
SHH20/229	20x229 0,75x9	1,36	229	285	25,0	28,0	470	690	2,30
SHH25/305	25x305 1x12	2,27	305	380	32,0	38,0	630	920	5,15
SHH32/305	32x305 1,25x12	2,95	305	392	42,0	47,0	670	975	8,15



CLOSED TURNBUCKLE

- closed turnbuckle hook - hook,
- made of structural steel, galvanized,
- made in accordance with ASTM F1145-92,
- safety ratio: 5:1, • operating temperature: -20°C do +200°C.

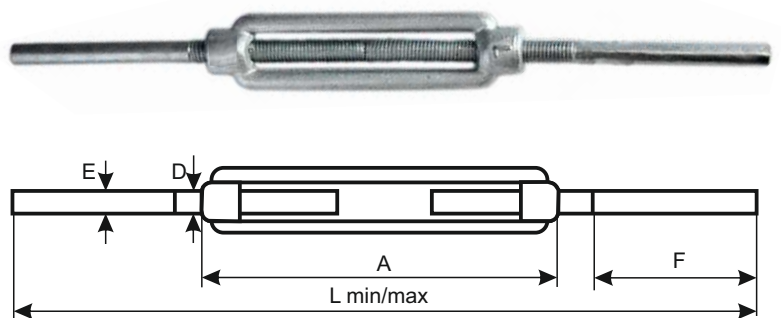
Type	Size A (mm)	WLL (t)	B (mm)	C (mm)	D (mm)	E (mm)	J (mm)	K (mm)	L (mm)	M (mm)	N (mm)	O (mm)
SOZ6/105	6	0,20	105	15	11	5	6	9	5,0	21	175	305
SOZ8/127	8	0,32	127	18	13	6	6	9	6,5	21	203	305
SOZ10/152	10	0,50	152	21	16	8	8	11	8,0	21	235	349
SOZ12/229	12	0,70	229	25	19	9	9	19	10,00	35	343	524
SOZ16/229	16	1,20	229	27	22	11	9	22	12,00	51	361	550
SOZ20/229	20	1,50	229	34	28	11	11	22	16,00	48	387	550
SOZ22/305	22	2,20	305	38	32	13	13	25	20,00	60	476	702
SOZ24/356	24	5,00	356	42	32	13	14	32	22,00	65	556	822
SOZ27/356	27	5,00	356	45	41	13	14	32	22,00	65	559	822
SOZ33/381	33	7,00	381	51	41	14	19	38	24,00	76	604	872
SOZ36/381	36	10,00	381	54	44	16	19	38	27,00	76	610	872
SOZ39/407	39	10,00	407	57	44	16	20	47	32,00	90	670	949
SOZ45/407	45	13,00	407	70	51	17	25	51	36,00	111	705	959
SOZ48/407	48	17,00	407	76	70	19	25	51	42,00	121	743	977
SOZ50/500	50	17,00	500	76	60	19,5	32	56	42,00	121	900	1300



TURNBUCKLE DIN1480

- two-sided screw connector, with rod ends for welding,
- made of structural steel, galvanized,
- made in accordance with DIN1480,
- safety ratio: 5:1,
- operating temperature: -20°C do +200°C.

Type	Size	A (mm)	E (mm)	F (mm)	L _{min} (mm)	L _{max} (mm)	kg/pcs
SS1480M8	M8	110	7,15	55	300	375	0,15
SS1480M10	M10	125	9,00	75	330	405	0,30
SS1480M12	M12	125	10,80	75	365	445	0,45
SS1480M16	M16	170	14,60	105	395	500	1,00
SS1480M20	M20	200	18,30	110	440	565	1,70
SS1480M24	M24	255	22,00	125	505	670	2,75
SS1480M30	M30	255	27,60	125	520	680	4,15
SS1480M36	M36	295	33,30	130	570	740	7,10
SS1480M42	M42	330	39,99	140	640	830	11,90



WIRELOCK

- resin intended for connecting steel ropes with socket rope ends,
- provides 100% rope strength,
- operating temperature: -54°C do +115°C,
- freezing point of the mixed component without extra admixtures of enhancers / accelerators +9 °C to 43 °C,
- ideal for use in the field (without any machine).

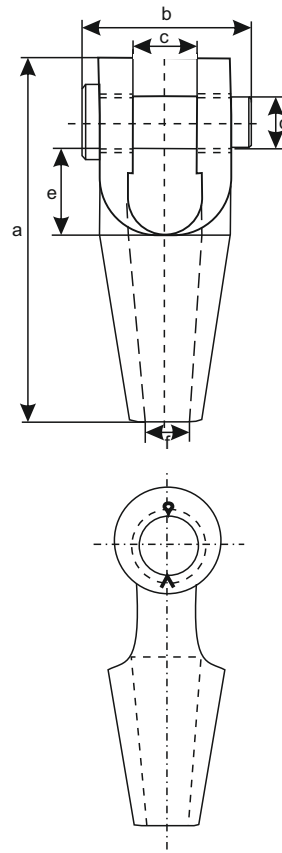


FORK SOCKET

- potting rope end G-6412.
- made of high-strength steel,
- operating temperature from -20°C to +200°C.



Type	WLL (t)	rope diameter (mm)	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	f (mm)	kg/pcs
SOW 6-7	8,0	6-7	109	51	19	16	33	9,0	0,4
SOW 8-10	12,0	8-10	124	62	21	21	34	12,0	0,7
SOW 11-13	20,0	11-13	143	66	26	25	37	11,5	1,0
SOW 14-16	25,0	14-16	172	82	33	30	49	18,0	1,8
SOW 18-19	40,0	18-19	205	95	38	35	58	21,0	3,0
SOW 20-22	55,0	20-22	235	110	44	41	68	24,0	4,6
SOW 23-26	75,0	23-26	275	130	51	51	75	28,0	8,0
SOW 27-30	90,0	27-30	306	144	57	57	85	32,0	11,0
SOW 31-36	125,0	31-36	338	155	63	64	95	38,0	16,0
SOW 37-39	150,0	37-39	394	178	76	70	127	41,0	22,0
SOW 40-42	170,0	40-42	418	187	76	76	127	44,0	27,0
SOW 43-58	225,0	43-48	468	213	89	89	134	51,0	41,0
SOW 49-54	280,0	49-54	552	240	101	108	191	57,0	64,0
SOW 55-60	360,0	55-60	598	270	113	121	196	63,0	88,0
SOW 61-68	425,0	61-68	654	303	127	127	213	73,0	125,0
SOW 69-75	460,0	69-75	696	349	133	133	216	79,0	155,0
SOW 81-86	625,0	81-86	788	391	159	159	228	92,0	230,0
SOW 87-932	720,0	87-93	852	411	171	171	242	99,9	265,0
SOW 94-102	875,0	94-102	914	447	191	191	254	108,0	400,0
SOW 108-115	1200,0	108-115	1160	489	206	206	369	125,0	660,0
SOW 120-130	1300,0	120-130	1310	603	225	225	390	143,0	735,0

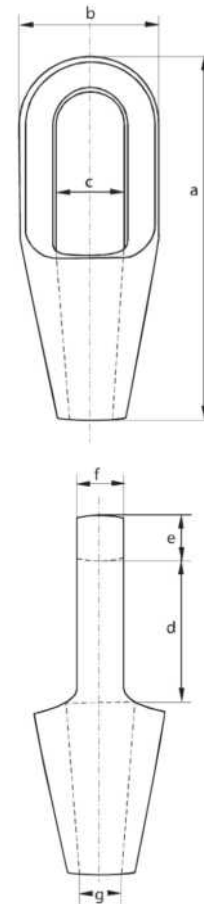


CLOSED SOCKET

- potting rope end G-6411.
- made of high-strength steel,
- operating temperature from -20°C to +200°C.



Type	WLL (t)	rope diameter (mm)	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	f (mm)	g (mm)	kg/pcs
SOZ 6-7	8,0	6-7	101	37	22	40	11	13,0	9,0	0,3
SOZ 8-10	12,0	8-10	119	43	25	48	14	17,5	12,0	0,5
SOZ 11-13	20,0	11-13	140	52	30	56	18	23,5	15,0	0,75
SOZ 14-16	25,0	14-16	162	68	37	66	21	26,0	17,5	1,5
SOZ 18-19	40,0	18-19	194	76	42	78	27	32,0	21,5	2,1
SOZ 20-22	55,0	20-22	224	92	47	90	33	38,0	24,0	3,6
SOZ 23-26	75,0	23-26	253	104	57	103	36	44,0	28,0	5,8
SOZ 27-30	90,0	27-30	282	114	63	116	39	51,0	32,0	7,0
SOZ 31-36	125,0	31-36	312	127	70	130	43	57,0	38,0	10,5
SOZ 37-39	150,0	37-39	358	136	79	155	51	63,0	41,0	13,0
SOZ 40-42	170,0	40-42	390	146	83	171	54	70,0	44,0	17,0
SOZ 43-58	225,0	43-48	443	171	93	198	55	76,0	51,0	26,0
SOZ 49-54	280,0	49-54	502	193	100	224	62	82,0	57,0	37,5
SOZ 55-60	360,0	55-60	548	216	112	247	73	92,0	63,0	50,0
SOZ 61-68	425,0	61-68	697	241	140	270	79	102,0	73,00	65,0
SOZ 69-75	460,0	69-75	644	273	159	286	79	124,0	79,0	94,0
SOZ 81-86	625,0	81-86	743	311	184	311	102	146,0	92,0	145,0
SOZ 87-93	720,0	87-93	788	330	187	330	102	159,9	99,0	168,0
SOZ 94-102	875,0	94-102	845	362	216	356	108	178,0	108,0	210,0
SOZ 108-115	1200,0	108-115	1000	405	235	425	125	190,0	125,0	330,0
SOZ 120-130	1300,0	120-130	1150	450	260	525	125	200,0	143,0	500,0

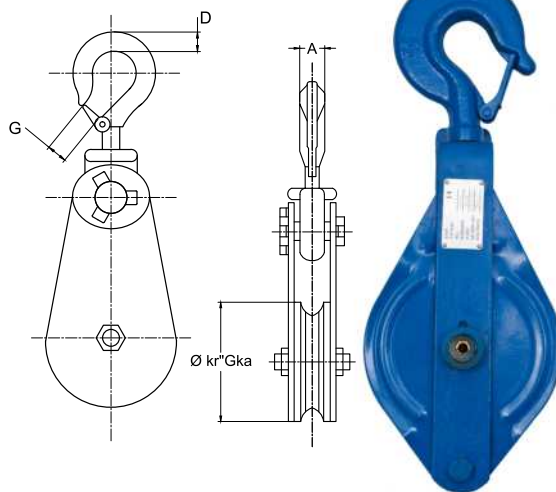


PULLEY BLOCK EXH

- made of steel sheet,
- forged steel rollers,
- operating temperature from -20°C to +50°C,
- consists of a single wheel with a recess for a rope, a double-sided cover and fastening hook equipped with a special lock, thanks to which it is possible to remove the block without dismantling the entire system.



Type	WLL (t)	roller diameter (mm)	rope diameter (mm)	H (mm)	W (mm)	B (mm)	D (mm)	A (mm)	G (mm)	kg/pcs
EXH 2x75	2,0	75	7-9	296	83	71	32	24	23	3,7
EXH 4x115	4,0	115	10-12	358	121	71	39	32	34	6,0
EXH 4x150	4,0	150	16-18	412	162	71	39	33	34	8,2
EXH 8x200	8,0	200	20-22	549	209	96	60	40	37	18,1
EXH 10x250	10,0	250	24-26	720	260	114	66	51	55	33,7
EXH 12x300	12,0	300	24-26	810	210	122	78	58	55	50,0
EXH 22x400	22,0	400	28-32	1050	418	142	92	71	72	110,0
EXH 30x500	32,0	500	32-35	1256	514	155	106	84	89	208,0

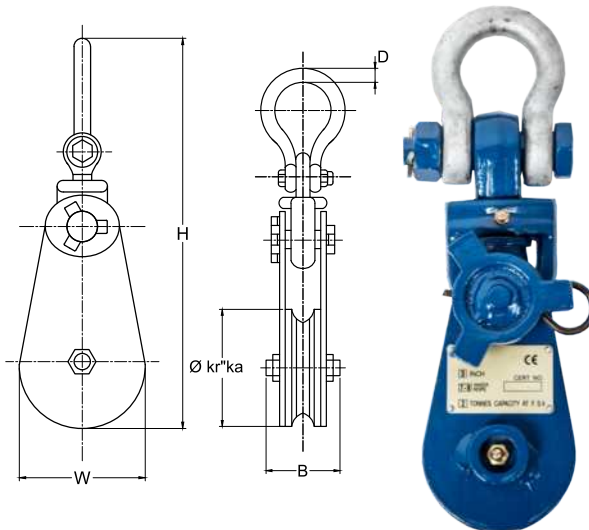


PULLEY BLOCK EXS

- made of steel sheet,
- forged steel rollers,
- operating temperature from -20°C to +50°C,
- model adapted for permanent assembly without the possibility of accidental removal from a transport line or chain,
- block equipped with a shackle type handle.



Type	WLL (t)	roller diameter (mm)	rope diameter (mm)	H (mm)	W (mm)	B (mm)	D (mm)	R (mm)	kg/pcs
EXS 2x75	2,0	75	7-9	290	82	71	16,5	21,5	4,0
EXS 4x115	4,0	115	10-12	365	121	71	24,0	28,0	6,2
EXS 4x150	4,0	150	16-18	420	162	71	24,0	28,0	8,3
EXS 8x200	8,0	200	20-22	530	210	94	25,5	33,0	18,0
EXS 10x250	10,0	250	24-26	670	260	115	32,0	41,0	34,0
EXS 12x300	12,0	300	24-26	797	310	133	39,0	49,0	56,0
EXS 22x400	22,0	400	28-32	1015	413	147	54,0	63,0	114,0
EXS 30x500	32,0	500	32-35	1177	514	162	69,0	77,0	213,0

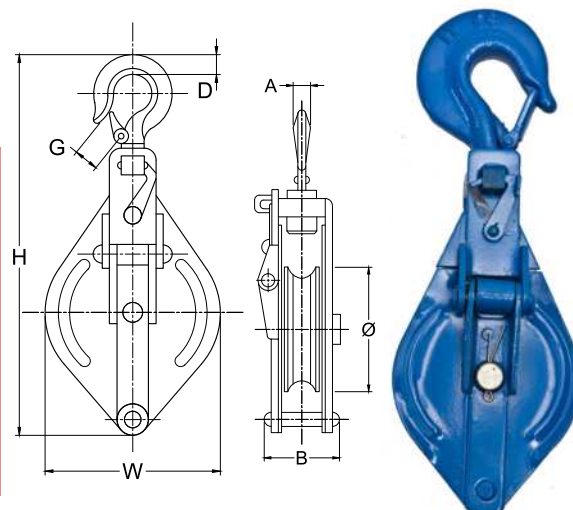


PULLEY BLOCK EXK

- made of steel sheet,
- forged steel rollers,
- operating temperature from -20°C to +50°C,
- consists of a single wheel with a recess for a rope, a double-sided cover and fastening hook equipped with a special lock, thanks to which it is possible to remove the block without dismantling the entire system.



Type	WLL (t)	roller diameter (mm)	rope diameter (mm)	H (mm)	W (mm)	B (mm)	D (mm)	A (mm)	G (mm)	kg/pcs
EXK 0,5	0,5	75	8	270	88	41	29	17	21	1,5
EXK 1,0	1,0	100	10	312	112	47	31	21	20	2,6
EXK 1,5	1,5	125	13	375	140	58	38	23	21	4,6
EXK 2,0	2,0	150	16	443	168	78	42	25	31	7,6
EXK 3,0	3,0	180	19	498	205	83	45	30	29	11,1
EXK 4,0	4,0	200	22	591	226	113	63	36	34	19,2
EXK 5,0	5,0	250	25	707	276	134	63	44	37	34,2

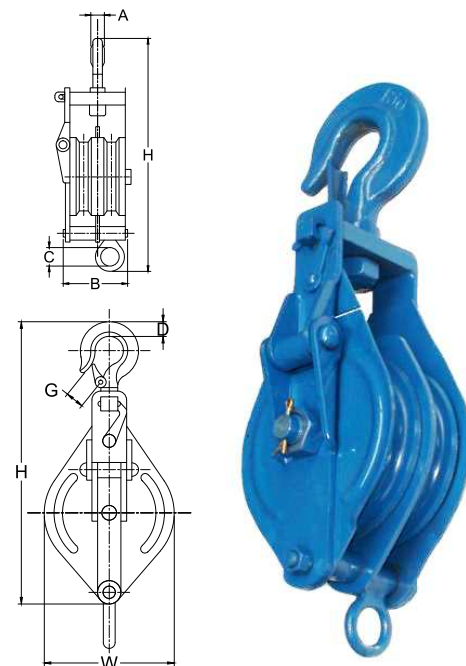


PULLEY BLOCK EXD

- made of steel sheet,
- forged steel rollers,
- operating temperature from -20°C to +50°C,
- consists of a double rope pulley placed in the outer casing and a special lateral lock enabling the rope to be removed and attached at any time,
- is equipped with a fastening hook with a ratchet protection against falling from the suspension and an additional bottom solid wheel enabling attachment of the free end of the block.

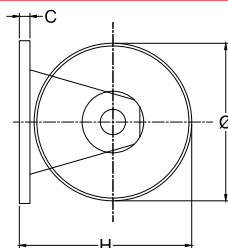


Type	WLL (t)	roller diameter (mm)	rope diameter (mm)	H (mm)	W (mm)	B (mm)	D (mm)	A (mm)	G (mm)	C (mm)	kg/pcs
EXD 0,5-75	0,5	75	8	270	88	41	29	17	21	1,5	
EXD 1-100	1,0	100	10	347	111	91	31	21	19	21,0	4,2
EXD 2-150	2,0	150	16	483	168	147	42	26	31	27,5	12,0
EXD 3-180	3,0	180	19	443	226	171	59	36	33	27,5	29,5
EXD 4-200	4,0	200	22	650	226	171	59	36	33	27,5	29,5
EXD 5-250	5,0	250	25	591	226	113	63	36	34	19,2	
EXD 6-300	6,0	300	28	707	276	134	63	44	37	34,2	

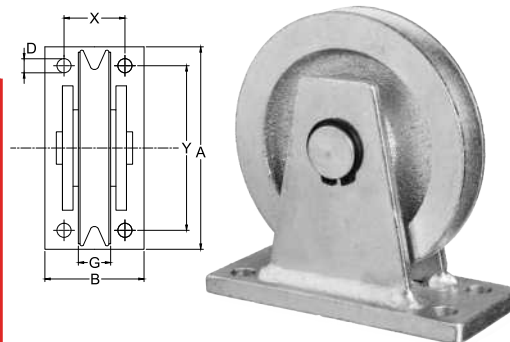


SCREW DOWN PULLEY KPR

- made of steel sheet,
- forged steel rollers,
- safety ratio: 4,
- operating temperature from -20°C to +50°C.



Type	WLL (t)	roller diameter (mm)	rope diameter (mm)	A (mm)	B (mm)	C (mm)	H (mm)	G (mm)	D (mm)	X (mm)	Y (mm)	kg/pcs
KPR 0,5	0,5	100	7	122	60	7,5	109	18	10	30,0	90,0	1,35
KPR 1,0	1,0	125	8	140	60	9,0	138	21	12	35,0	110,0	2,20
KPR 2,0	2,0	150	10	180	80	11,0	168	24	14	40,5	139,5	4,30
KPR 3,0	3,0	200	12	230	100	15,0	221	30	18	50,0	170,0	8,20
KPR 5,0	5,0	275	15	320	121	20,0	302	37	23	60,0	260,0	17,00

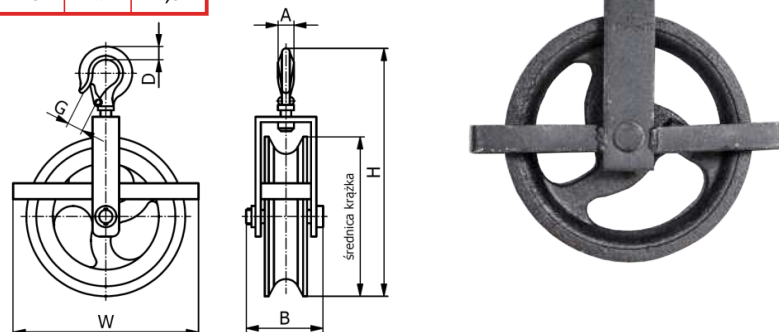


PULLEY N 0,2

- made of steel sheet,
- forged steel rollers,
- safety ratio: 4,
- operating temperature from -20°C to +50°C.



Type	WLL (t)	roller diameter (mm)	rope diameter (mm)	H (mm)	W (mm)	B (mm)	D (mm)	A (mm)	G (mm)	kg/pcs
N 0,2	0,2	190	28	300	244	68	19	18	17	2,9



BRICKLAYER'S PULLEY Z500



Bricklayer's pulley Z500 A, B, C, D, E and F type are used as portable devices for assembly and masonry works, when lifting or lowering loose loads using a polyamide or textile rope.

Features:

- all parts made of steel and cast iron,
- solid and simple construction,
- simple operation and assembly,
- minimum maintenance requirements,
- 6 modifications for different suspension methods,
- for use with a polyamide rope with hook type Z500L (Ø 11mm, basic rope length 20 m.),
- also suitable for use with other polyamide or hemp ropes up to Ø 16mm,
- capacity: 500kg,
- the construction of the lift meets the requirements specified by the Directive of the European Parliament and the Council of Europe 2006/42 / ES.



Use:

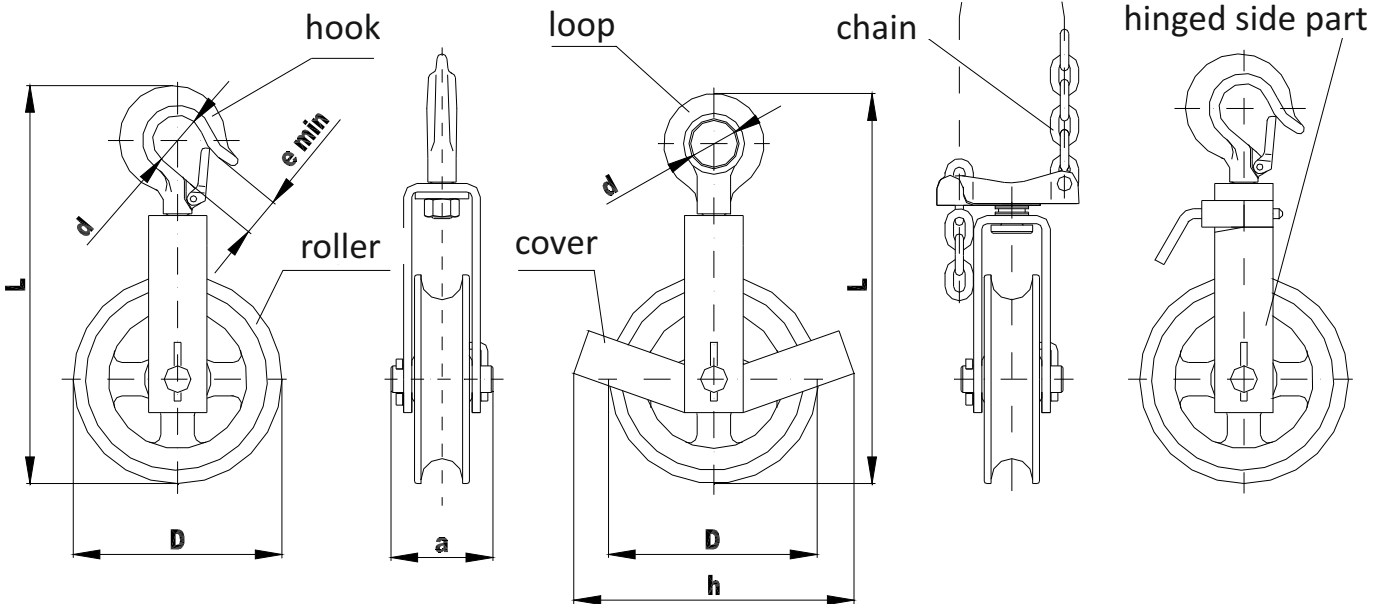
- for assembly and masonry works,
- for manually lifting and lowering loads.

Bricklayer's pulleys A, C

Bricklayer's pulleys B, D

Bricklayer's pulley E

Bricklayer's pulley F



Type	Capacity (kg)	a	d	D	e min	h	L	Weight (kg)
Z500 A with hook, without cover	500	61	30	125	20	–	240	1,6
Z500 B with hook, without cover	500	61	28	125	–	–	233	1,7
Z500 C with hook, with cover	500	61	30	125	20	165	240	1,8
Z500 D with hook, with cover	500	61	28	125	–	165	233	1,9
Z500 E with chain, without cover	500	61	–	125	–	–	–	2,3
Z500 F with hook, without cover	500	61	30	125	20	–	256	1,7

STANDARD PULLEY BLOCK K10, K11, K12, K15



STEEL
CAST
IRON

CLASS
1Bm

CAPACITY
from 0,5
to 6 t

50°C
↕
-20°C

Standard pulley blocks serve as mobile tools during installation, repair and other work. They are used for lifting and towing loads in any direction by manually pulling on the rope, but usually using an engine driven windlass.

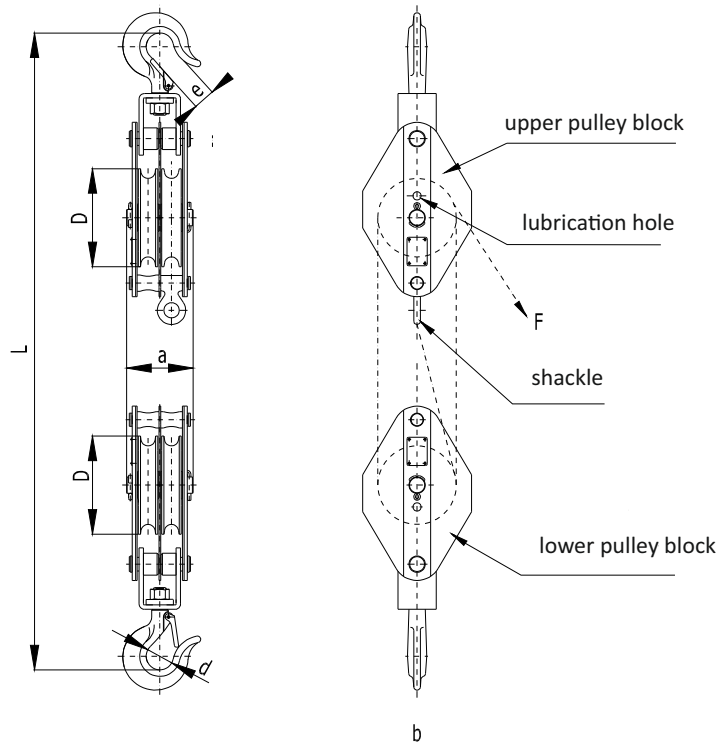
The K10 – K12 type pulley blocks are intended for textile rope, the K15 type for steel rope (the rope are not part of the product).

Features:

- all parts made of steel and cast iron,
- solid and simple construction,
- simple operation and assembly,
- minimum maintenance requirements,
- the pulley consists of two slopes - the upper and the lower block,
- each block has one to three discs,
- on the upper block there is a hook for fixing the supporting part of the rope,
- the rope is not included in the set,
- pulleys type K10, K11 and K12 are designed for hemp and polyamide (textile) ropes with a safety factor of 7,
- pulleys, type K 15 are designed for steel ropes with a safety factor of 5,
- capacity: 0,5 - 6t,
- the construction of the lift meets the requirements specified by the Directive of the European Parliament and the Council of Europe 2006/42 / ES.

Use:

- for assembly and repair work,
- for lifting, moving and lowering loads.



Type	Capacity (t)	Main dimensions (mm)						Technical parameters				
		a	b	d	D	emin	Lmin	Rope	Pulleys	Ø of rope max.	Operating force F (N)	Weight (kg)
K10-0,5	0,5	72	145	30	125	18,5	730	textile	1	25	2660	14
K11-1	1	115	145	36	125	23,5	930	textile	2	25	2760	19
K11-2	2	125	200	50	180	35,5	1215	textile	2	26	5670	30
K12-0,3	0,3	75	65	30	60	18,5	570	textile	3	10	575	3,5
K15-1	1	80	200	36	180	23,5	1175	steel	1	12,5	5620	20
K15-2	2	100	250	50	230	35,5	1215	steel	1	12,5	11260	43
K15-4	4	115	300	56	280	39,5	1410	steel	1	20	22400	54
K15-6	6	145	350	63	325	50	1770	steel	1	20	33730	104



VERTICAL LIFTING CLAMP
TYPE SWL
SERIAL NO. 1545
JAWOPENING
KOMSTAL MICHAŁ KOMIJSZA GENERALNA MACZKA 71B
43-300 LUBESKO-BIALA NIP 796 706 98 37

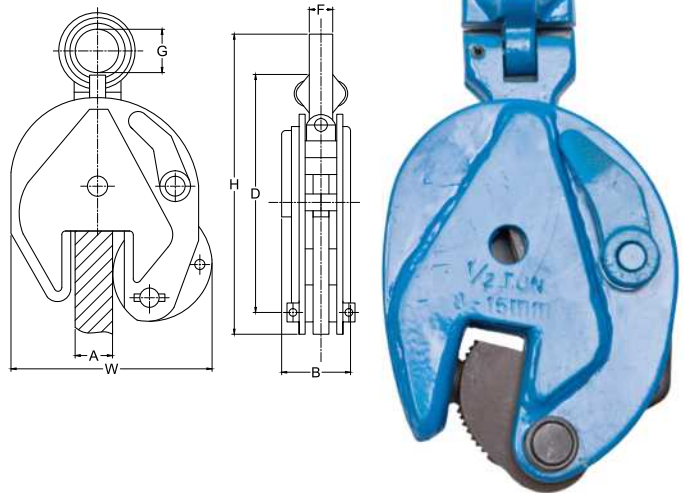
LIFTING CLAMPS

PLATE CLAMP EXU - VERTICAL

- suitable for the lifting of single steel plate in a vertical position,
- two jaws: fixed and movable,
- self-locking chucks,
- the joint allows the ear to bend in two planes,
- use for the hardness of the material below 25HRC,
- complies with the provisions of the Machinery Directive: 2006/42/WE,
- made according to the harmonized standard: PN-EN 13155,
- operating temperature from -40°C to +100°C.



Type	WLL (t)	A grip range (mm)	H (mm)	W (mm)	B (mm)	G (mm)	F (mm)	Weight kg/pcs
EXU 0,5	0,50	0-15	215	110	48	30	10	1,90
EXU 1,0	1,00	0-20	300	150	65	48	13	4,60
EXU 2,0	2,00	0-25	360	180	70	68	17	7,10
EXU 3,0	3,00	0-30	435	205	100	75	21	15,30
EXU 5,0	5,00	0-52	470	235	100	75	21	17,70
EXU 8,0	8,00	40-80	600	290	115	84	25	50,00
EXU 12,0	12,00	50-90	730	450	120	80	25	65,00

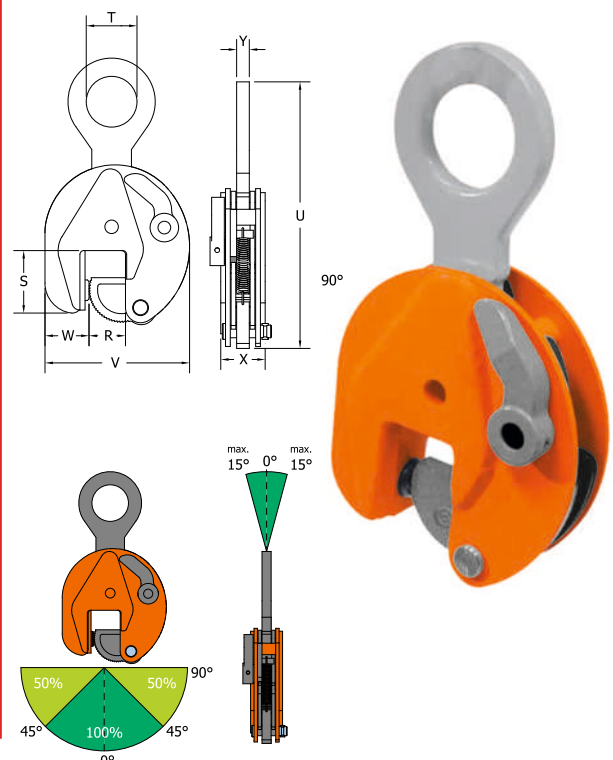


VERTICAL LIFTING CLAMP VCW

- for vertical lifting and moving of steel plates and structures,
- made of high quality steel,
- use for the hardness of the material below 25HRC,
- equipped with a safety mechanism, ensuring the clamp does not slip when lifting force is applied and when load is being lowered,
- lifting capacity and jaw opening are clearly engraved in the body,
- complies with the provisions of the Machinery Directive: 2006/42/WE,
- made according to the harmonized standard: PN-EN 13155,
- operating temperature from -40°C to +100°C.



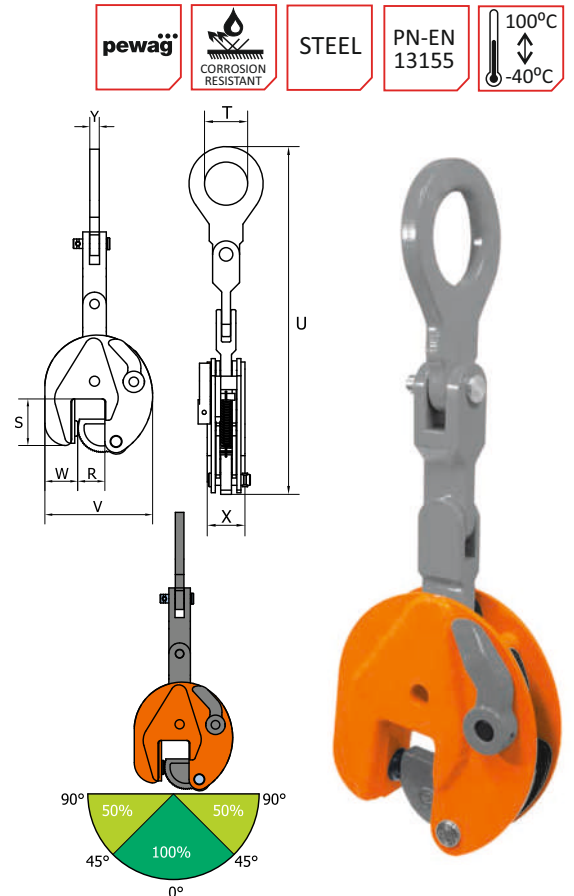
Type	WLL (t)	R grip range (mm)	S (mm)	T (mm)	U (mm)	V (mm)	W (mm)	X (mm)	Y (mm)	Weight kg/pcs
VCW 0,75	0,75	0-13	47	30	202	100	37	37	10	1,7
VCEW 1	1,00	0-25	56	45	263	141	37	47	15	3,5
VCEW 2	2,00	0-35	78	64	336	183	56	56	16	7,0
VCEW 3	3,00	0-35	78	64	336	183	56	56	16	7,0
VCE 4,5	4,50	0-25	85	70	423	203	60	77	20	15,0
VCEW 4,5	4,50	0-45	85	70	425	228	60	78	20	16,0
VCW 6	6,00	0-32	114	75	490	225	78	78	20	19,0
VCEW 6	6,00	0-50	114	75	490	259	82	78	20	21,0
VCW 7,5	7,50	0-40	111	75	530	246	76	82	20	24,0
VCEW 7,5	7,50	0-55	111	75	522	267	70	86	20	26,0
VCW 9	9,00	0-55	111	75	522	267	70	86	20	27,0
VCW 12	12,00	0-52	148	85	617	295	100	94	44	37,0
VCW 15	15,00	0-76	209	86	810	373	136	106	49	70,0
VCW 17	17,00	0-76	209	86	810	373	136	106	49	71,0
VCW 20	20,00	0-80	250	100	933	563	153	140	66	149,9
VCW 25	25,00	5-85	250	100	925	563	148	140	66	149,0
VCW 30	30,00	10-90	250	100	918	568	153	142	66	155,5



VERTICAL LIFTING CLAMP VMPW

- for lifting and moving of all steel plates and structures from vertical and diagonal positions,
- materials used: high quality steel, • powder coated components,
- use for the hardness of the material below 25HRC,
- safety mechanism: locking device, tension spring and lever,
- complies with the provisions of the Machinery Directive: 2006/42/WE,
- made according to the harmonized standard: PN-EN 13155,
- operating temperature from -40°C to +100°C.

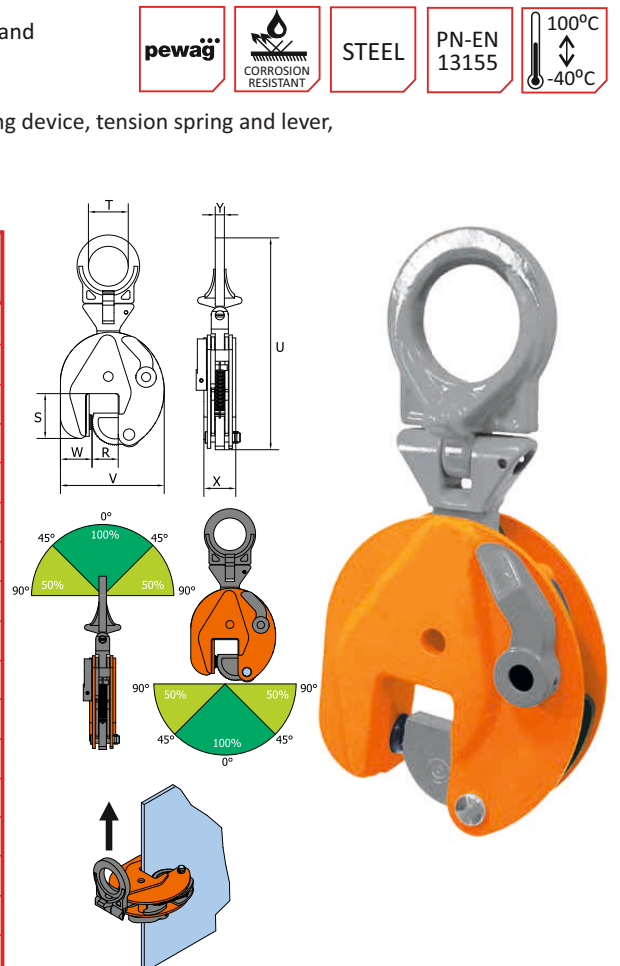
Type	WLL (t)	R grip range (mm)	S (mm)	T (mm)	U (mm)	V (mm)	W (mm)	X (mm)	Y (mm)	Weight kg/pcs
VMPW0,75	0,75	0-13	47	30	307	100	37	37	10	2,0
VEMPW 1	1,00	0-25	56	45	403	141	37	47	15	4,5
VEMPW 2	2,00	0-35	78	64	516	183	56	56	16	8,0
VEMPW 3	3,00	0-35	78	64	516	183	56	56	16	8,0
VMPW 4,5	4,50	0-25	85	70	648	203	60	77	20	17,8
VEMPW4,5	4,50	0-45	85	70	650	228	60	78	20	19,0
VMPW 6	6,00	0-32	114	75	760	225	78	78	20	24,0
VEMPW 6	6,00	0-50	114	75	760	259	82	78	20	25,5
VMPW 7,5	7,50	0-40	111	75	800	246	76	82	20	29,0
VEMPW7,5	7,50	0-55	111	75	792	267	70	86	20	30,5
VMPW 9	9,00	0-55	111	75	792	267	70	86	20	31,0
SVMPW 6	6,00	40-90	114	75	756	275	70	78	20	26,0
SVMPW7,5	7,50	50-100	111	75	695	312	70	86	20	31,5
SVMPW 9	9,00	50-100	111	75	792	312	70	86	20	32,5



VERTICAL LIFTING CLAMP VUW

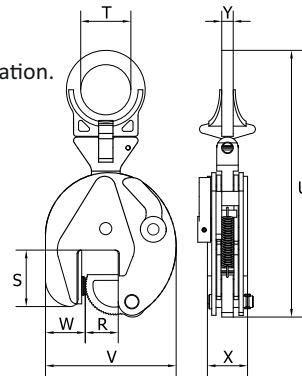
- Clamp-version with movable lifting shackle for lifting and moving steel plates and structures from all positions (horizontal, vertical and sidelong).
- materials used: high quality steel, • powder coated components,
- use for the hardness of the material below 25HRC, • safety mechanism: locking device, tension spring and lever,
- complies with the provisions of the Machinery Directive: 2006/42/WE,
- made according to the harmonized standard: PN-EN 13155,
- operating temperature from -40°C to +100°C.

Type	WLL (t)	R grip range (mm)	S (mm)	T (mm)	U (mm)	V (mm)	W (mm)	X (mm)	Y (mm)	Weight kg/pcs
VUW 0,75	0,75	0-13	47	30	203	100	37	37	10	1,8
VEUW 1	1,00	0-25	56	50	292	141	37	47	15	3,8
VEUW 2	2,00	0-35	78	70	372	183	56	56	16	8,0
VEUW 3	3,00	0-35	78	70	372	183	56	56	16	8,0
VUW 4,5	4,50	0-25	85	70	429	203	60	77	20	16,0
VEUW 4,5	4,50	0-45	85	70	432	228	60	78	20	16,5
VUW 6	6,00	0-32	114	78	528	225	78	78	32	22,0
VEUW 6	6,00	0-50	114	78	527	259	82	78	32	24,0
VUW 7,5	7,50	0-40	111	78	567	246	76	82	32	27,0
VEUW 7,5	7,50	0-55	111	78	560	267	70	86	32	28,0
VUW 9	9,00	0-55	111	78	560	267	70	86	32	29,0
VUW 12	12,00	0-52	148	85	648	295	100	94	48	41,0
VUW 15	15,00	0-76	209	85	816	373	136	106	48	73,0
VUW 17	17,00	0-76	209	85	816	373	136	106	48	74,0
VUW 20	20,00	0-80	250	100	948	563	153	140	71	160,0
VUW 25	25,00	5-85	250	100	948	563	148	140	71	160,0
VUW 30	30,00	10-90	250	100	948	568	153	142	71	167,0

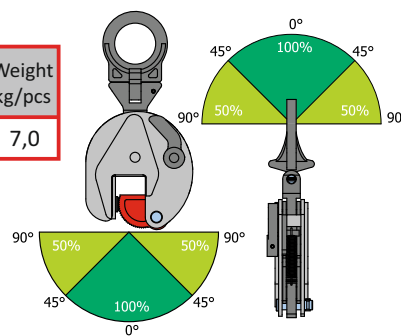


VERTICAL LIFTING CLAMP VUW-R

- For lifting and moving of stainless steel plates and structures,
- equipped with a movable universal lifting eye,
- Pivot and cam are made of stainless steel; additionally, the body and the lock lever are nickel plated to prevent corrosion due to carbon contamination.
- materials used: high quality steel,
- powder coated components,
- use for the hardness of the material below 25HRC,
- safety mechanism: locking device, tension spring and lever,
- complies with the provisions of the Machinery Directive: 2006/42/WE,
- made according to the harmonized standard: PN-EN 13155,
- operating temperature from -40°C to +100°C.

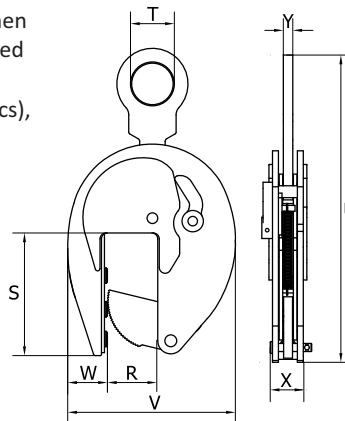


Type	WLL (t)	R grip range (mm)	S (mm)	T (mm)	U (mm)	V (mm)	W (mm)	X (mm)	Y (mm)	Weight kg/pcs
VUW-R 2	2,00	0-20	78	70	370	165	54	56	16	7,0

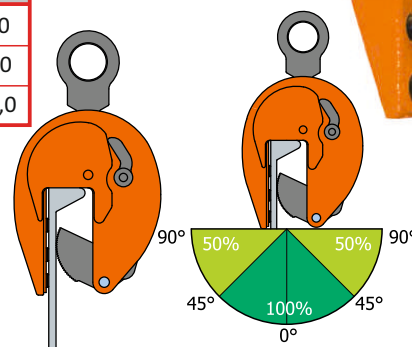


VERTICAL LIFTING CLAMP VHPW

- for lifting and moving of Holland-profile (HP) steel rails and structures with HP-profiles.,
- equipped with a safety mechanism, ensuring the clamp does not slip when lifting force is applied and when load is being lowered. The clamp is locked in closed as well as in open position
- useful as a "big-jaw" opening clamp (e.g. serving of lathes with large discs),
- equipped with three pivots for extra powerful clamping force,
- materials used: high quality steel,
- powder coated components,
- use for the hardness of the material below 25HRC,
- safety mechanism: locking device, tension spring and lever,
- complies with the provisions of the Machinery Directive: 2006/42/WE,
- made according to the harmonized standard: PN-EN 13155,
- operating temperature from -40°C to +100°C.

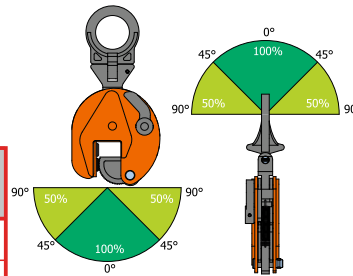
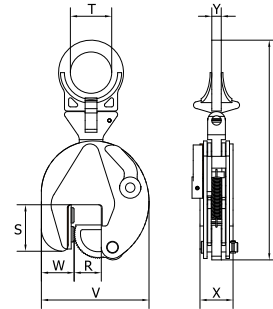
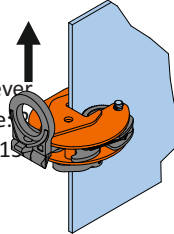


Type	WLL (t)	R grip range (mm)	S (mm)	T (mm)	U (mm)	V (mm)	W (mm)	X (mm)	Y (mm)	Weight kg/pcs
VHPW 1	1,00	0-80	207	70	520	283	67	64	16	19,0
VHPW 1,5	1,50	0-80	207	70	520	283	67	64	16	19,0
VHPWA1,5	1,50	0-155	160	70	523	256-333	62	66	16	18,0



VERTICAL LIFTING CLAMP VHPUW

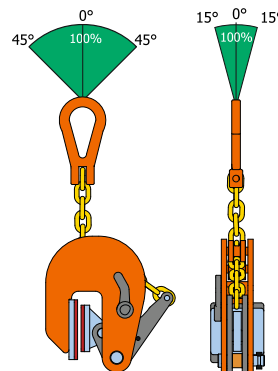
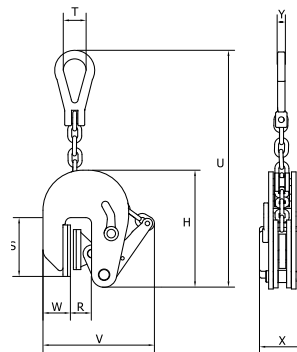
- for lifting and moving sheet metal from vertical and horizontal position,
- it is designed for the use of moving, lifting and lowering holland profiles and/or construction units with built-in holland profiles
- equipped with a movable universal lifting eye and two pivots,
- handle equipped with a lifting eye with cardan joint - suitable for lifting from any desired position,
- higher abrasion resistance and longer life,
- materials used: high quality steel,
- powder coated components,
- use for the hardness of the material below 25HRC,
- safety mechanism: locking device, tension spring and lever
- complies with the provisions of the Machinery Directive.
- made according to the harmonized standard: PN-EN 13155
- operating temperature from -40°C to +100°C.



Type	WLL (t)	R grip range (mm)	S (mm)	T (mm)	U (mm)	V (mm)	W (mm)	X (mm)	Y (mm)	Weight kg/pcs
VHPUW 3	3,00	0-35	93	70	369	182	58	54	16	8,0
VHPUW 5	5,00	0-45	110	70	434	228	58	86	20	17,3

VERTICAL LIFTING CLAMP VNMW

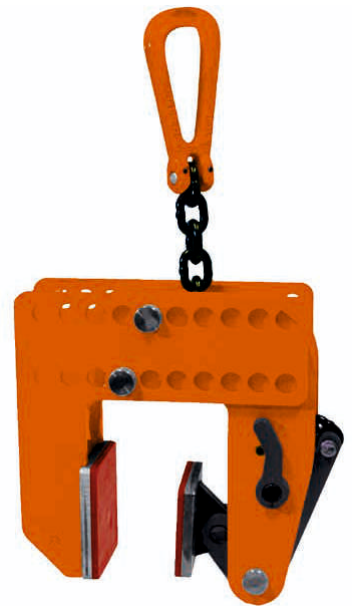
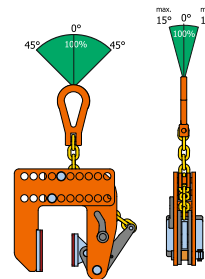
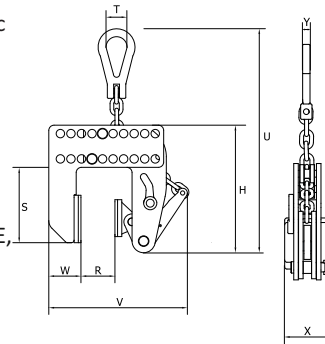
- particularly suitable for lifting, handling and moving (stainless) steel, aluminium, wood and marble plates and will not leave any marks,
- non-marking clamp equipped with two special synthetic pads,
- the clamp is mounted in the crane hook by means of a lifting chain with reeving link
- higher abrasion resistance and longer life,
- materials used: high quality steel,
- powder coated components,
- use for the hardness of the material below 25HRC,
- safety mechanism: locking device, tension spring and lever,
- complies with the provisions of the Machinery Directive: 2006/42/WE,
- made according to the harmonized standard: PN-EN 13155,
- operating temperature from -40°C to +100°C.



Type	WLL (t)	R grip range (mm)	S (mm)	T (mm)	U (mm)	V (mm)	W (mm)	X (mm)	Y (mm)	Weight kg/pcs
VNMV 0,5	0,50	1-20	205	40	462	224	48	80	14	6,0
VSNMV 0.5	0,50	17-37	205	40	462	241	48	80	14	6,0
VNMV 1	1,00	1-30	232	40	470	282	46	80	14	6,5
VNMV 1.5	1,50	1-40	232	40	470	282	46	80	14	6,5
VNMV 2	2,00	1-50	362	50	704	408	63	80	18	15,0
VNMV 3	3,00	1-60	362	50	704	408	63	80	18	15,5

VERTICAL LIFTING CLAMP VNMAW

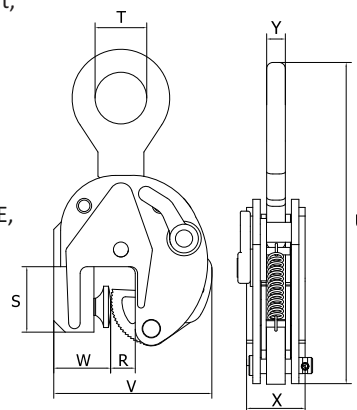
- for moving, lifting and lowering special materials such as stainless steels (Inox), aluminium sheet metal, wooden boards and chipboard,
- this special clamp is fitted with two clamp jaws made from a synthetic material that leave no imprint on the material to be lifted during use,
- higher abrasion resistance and longer life,
- materials used: high quality steel,
- powder coated components,
- use for the hardness of the material below 25HRC,
- safety mechanism: locking device, tension spring and lever,
- complies with the provisions of the Machinery Directive: 2006/42/WE,
- made according to the harmonized standard: PN-EN 13155,
- operating temperature from -40°C to +100°C.



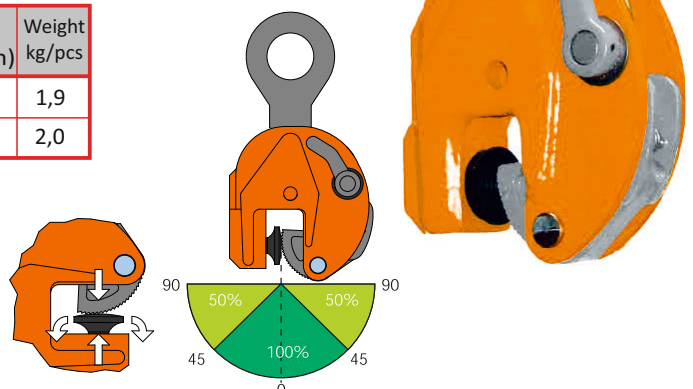
Type	WLL (t)	R grip range (mm)	S (mm)	T (mm)	U (mm)	V (mm)	W (mm)	X (mm)	Y (mm)	Weight kg/pcs
VNMAV 0,5	0,50	1-180	143	40	410	235-395	61	80	14	10,0

VERTICAL LIFTING CLAMP VJPW

- for vertical lifting and moving of panels and plates,
- special movable toothed ring causes additional pressure on the lifted element, thanks to which there is no risk of the load slipping out,
- has no restriction for a minimum working load (WLL),
- higher abrasion resistance and longer life,
- materials used: high quality steel,
- powder coated components,
- use for the hardness of the material below 25HRC,
- safety mechanism: locking device, tension spring and lever,
- complies with the provisions of the Machinery Directive: 2006/42/WE,
- made according to the harmonized standard: PN-EN 13155,
- operating temperature from -40°C to +100°C.

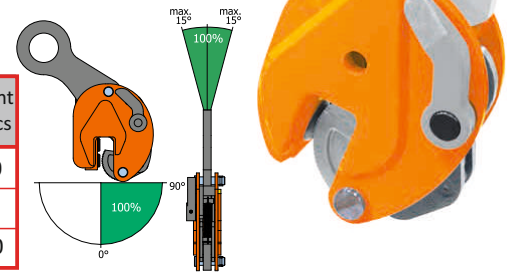
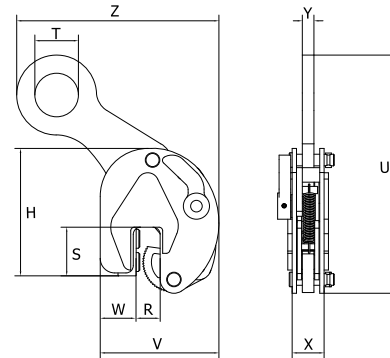


Type	WLL (t)	R grip range (mm)	S (mm)	T (mm)	U (mm)	V (mm)	W (mm)	X (mm)	Y (mm)	Weight kg/pcs
VJPW 0,25	0,25	0-13	54	30	202	113	50	37	10	1,9
VJPUW0,25	0,25	0-13	54	30	202	113	50	37	10	2,0



VERTICAL LIFTING CLAMP BKW

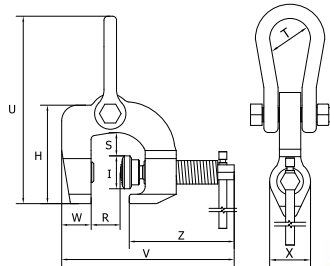
- for lifting and moving of steel beams, profiles and structures where the load must stay in position,
- the special shape of the lifting shackle places the centre of the gravity of the beam beneath the lifting shackle.,
- recommended for moving and stacking of steelbeams,
- higher abrasion resistance and longer life,
- materials used: high quality steel,
- powder coated components,
- use for the hardness of the material below 25HRC,
- safety mechanism: locking device, tension spring and lever,
- complies with the provisions of the Machinery Directive: 2006/42/WE,
- made according to the harmonized standard: PN-EN 13155,
- operating temperature from -40°C to +100°C.



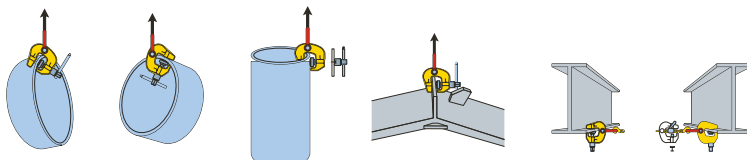
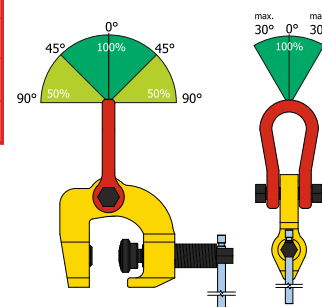
Type	WLL (t)	R grip range (mm)	V (mm)	W (mm)	S (mm)	H (mm)	T (mm)	Z (mm)	X (mm)	U (mm)	Y (mm)	Weight kg/pcs
BKW 1	1,00	0-15	136	43	45	154	35	200	47	225	15	3,0
BKW 1.5	1,50	0-20	170	56	67	210	60	312	56	374	16	7,0
BKW 3	3,00	0-25	208	58	66	252	70	380	77	410	20	15,0

SCREW CLAMP SCCW

- universal screw clamp for vertical and horizontal lifting and moving of a large variety of steel structures,
- the SCCW screw clamp is fitted with a movable cam on the thread spindle and a fixed pivot on the clampbody,
- the movable lifting eye ensures a secure mounting of the clamp,
- higher abrasion resistance and longer life,
- materials used: high quality steel,
- powder coated components,
- use for the hardness of the material below 25HRC,
- safety mechanism: locking device, tension spring and lever,
- complies with the provisions of the Machinery Directive: 2006/42/WE,
- made according to the harmonized standard: PN-EN 13155,
- operating temperature from -40°C to +100°C.



Type	WLL (t)	R grip range (mm)	S (mm)	I (mm)	W (mm)	V (mm)	Z (mm)	U (mm)	H (mm)	U (mm)	Y (mm)	Weight kg/pcs
SCCW0,5	0,50	0-35	18	27,5	26	108	158	211	82	25	27	1,0
SCCW 1	1,00	0-30	44	42,0	46	275	210	204	128	38	46	3,2
SCCW1,5	1,50	0-40	29	42,0	40	150	220	232	140	46	46	3,5
SCCW 3	3,00	0-60	38	50,0	46	190	280	278	184	50	60	7,8
SCCW 6	6,00	0-100	60	63,0	70	296	446	390	249	100	75	22,0
SCCWW1	1,00	50-100	88	42,0	50	225	258	273	190	45	46	6,3
SCCWW3	3,00	25-75	76	49,0	60	215	250	291	191	50	54	7,8



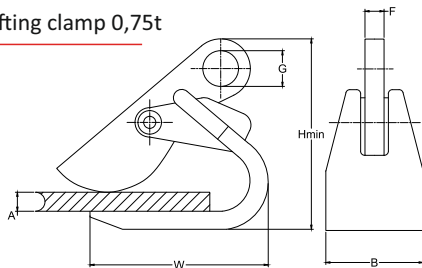
HORIZONTAL LIFTING CLAMP KMT

- for lifting individual sheets or associated sheet packages,
- two jaws: fixed and movable
- horizontal lifting clamps must be used in pairs,
- use for the hardness of the material below 25HRC,
- complies with the provisions of the Machinery Directive: 2006/42/WE,
- made according to the harmonized standard: PN-EN 13155,
- operating temperature from -40°C to +100°C.

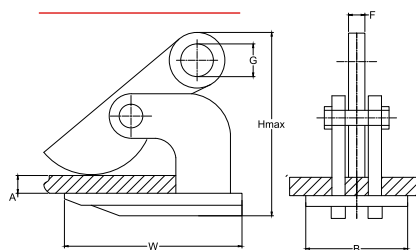


Type	WLL (t)		A _{grip} range (mm)	H (mm)	W (mm)	B (mm)	G (mm)	F (mm)	Weight kg/pcs
	one	pair							
KMT 0,75	0,75	1,50	0-50	218	127	100	30	50	4,00
KMT 1,5	1,50	3,00	0-50	270	220	110	36	20	7,50
KMT 2,5	2,50	5,00	0-60	315	260	130	40	22	14,00
KMT 3,0	3,00	6,00	0-60	345	270	140	40	22	18,00
KMT 4,0	4,00	8,00	0-100	400	300	170	40	25	29,00

lifting clamp 0,75t

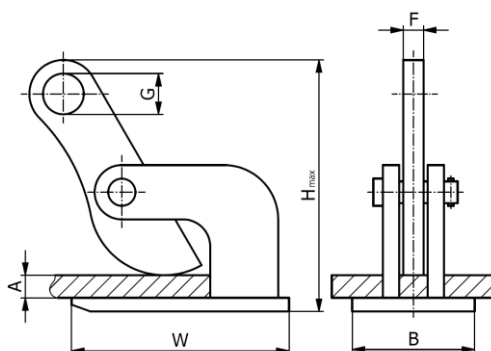


lifting clamps 1,5t - 4t



HORIZONTAL LIFTING CLAMP KMU

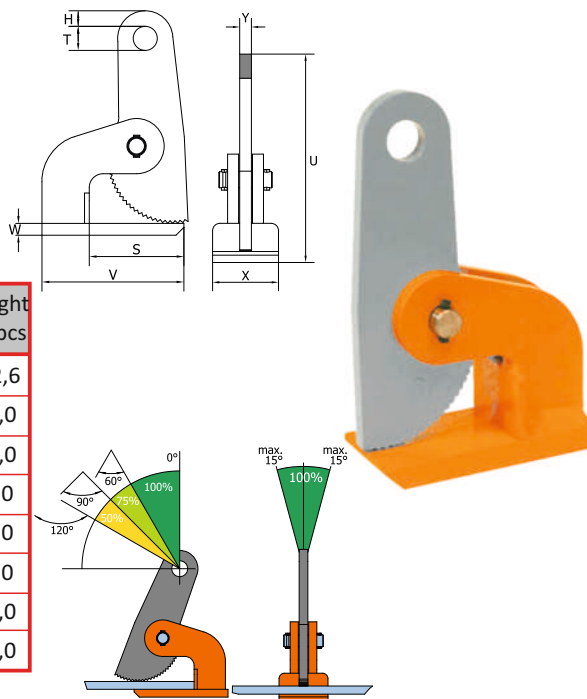
- for lifting individual sheets in a horizontal position, in particular thin sheets that may bend when lifted,
- two jaws: fixed and movable,
- horizontal lifting clamps must be used in pairs,
- use for the hardness of the material below 25HRC,
- complies with the provisions of the Machinery Directive: 2006/42/WE,
- made according to the harmonized standard: PN-EN 13155,
- operating temperature from -40°C to +100°C.



Type	WLL (t)		A _{grip} range (mm)	H (mm)	W (mm)	B (mm)	G (mm)	F (mm)	Weight kg/pcs
	one	pair							
KMU 0,75	0,75	1,50	0-50	218	127	100	30	15	4,00
KMU 1,00	1,00	2,00	0-45	192	194	101	21	17	7,00
KMU 1,50	1,50	3,00	0-50	270	220	110	36	20	7,50
KMU 3,00	3,00	6,00	0-60	315	260	130	40	22	14,00

HORIZONTAL LIFTING CLAMP HXW

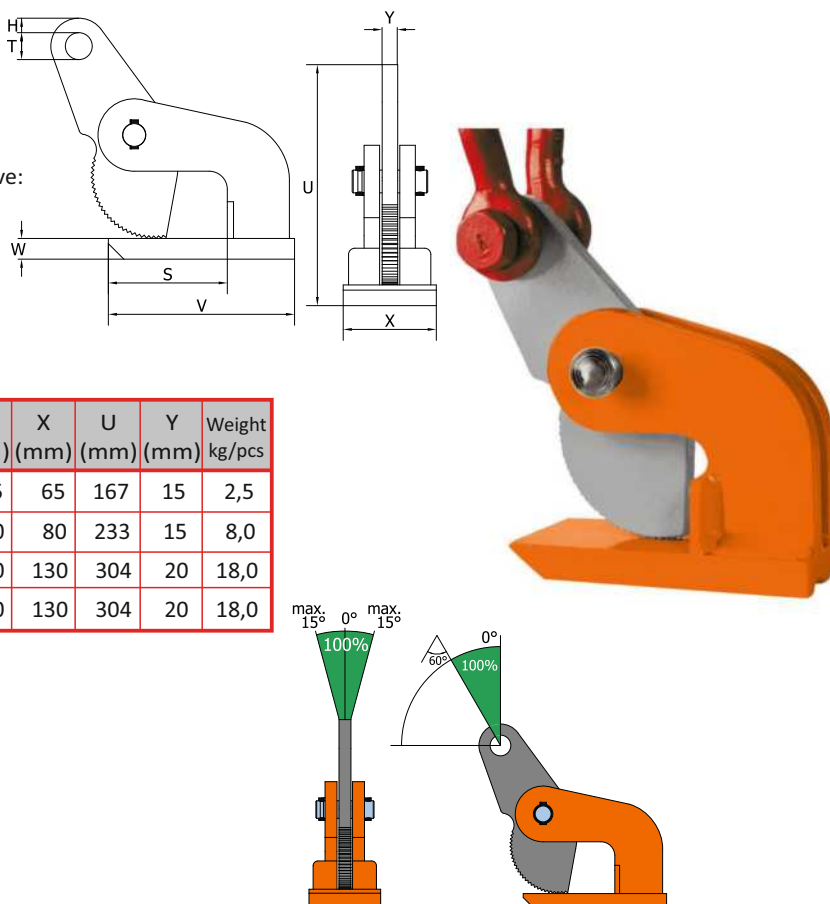
- the clamps have a compact shape and a relative light unit weight – but with a high lifting capacity. They are used for lifting and transporting single sheets or secured stacks of sheets,
- horizontal lifting clamps must always be used in pairs,
- consists of a housing, a jaw and a pin,
- the jaw also serves as a carrying eye and ensures secure attachment during transport,
- use for the hardness of the material below 25HRC,
- complies with the provisions of the Machinery Directive: 2006/42/WE,
- made according to the harmonized standard: PN-EN 13155,
- operating temperature from -40°C to +100°C.



Type	WLL (t) pair	R grip range (mm)	V (mm)	S (mm)	W (mm)	T (mm)	H (mm)	X (mm)	U (mm)	Y (mm)	Weight kg/pcs
HXW 1	1,00	0-35	140	99	10	25,0	11,5	65	188	15	2,6
HXW 2	2,00	0-60	180	118	15	30,5	19,5	90	287	16	7,0
HXW 3	3,00	0-60	180	118	20	30,5	19,5	90	291	16	8,0
HXW 4	4,00	0-60	220	145	25	30,5	19,5	105	304	20	13,0
HXW 6	6,00	0-60	220	145	25	30,5	19,5	110	307	20	14,0
HXW 8	8,00	0-60	225	135	35	30,5	19,5	120	336	30	19,0
HXW 10	10,00	0-60	225	135	35	30,5	19,5	120	336	30	19,0
HXW 12	12,00	0-60	225	135	35	30,5	19,5	120	336	30	19,0

HORIZONTAL LIFTING CLAMP DHW

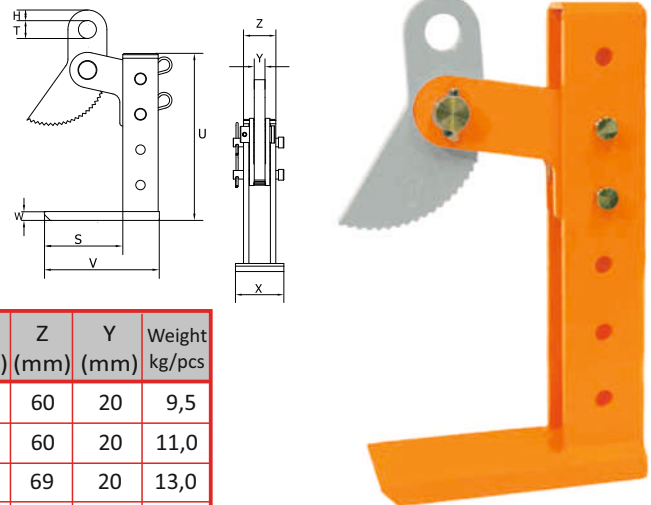
- for lifting and horizontal moving of thin sheets that deflect when being lifted. Compact shape and relatively low unit weights with a high lifting capacity,
- horizontal lifting clamps must always be used in pairs,
- consists of a housing, a jaw and a pin,
- the jaw also serves as a carrying eye and ensures secure attachment during transport,
- use for the hardness of the material below 25HRC,
- complies with the provisions of the Machinery Directive: 2006/42/WE,
- made according to the harmonized standard: PN-EN 13155,
- operating temperature from -40°C to +100°C.



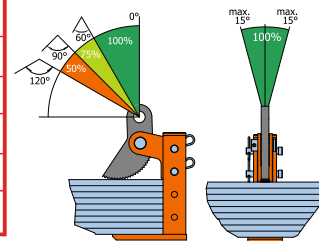
Type	WLL (t) pair	R grip range (mm)	V (mm)	S (mm)	W (mm)	T (mm)	H (mm)	X (mm)	U (mm)	Y (mm)	Weight kg/pcs
DHW 1	1,00	0-15	140	99	10	22,5	13,5	65	167	15	2,5
DHW 2	2,00	0-35	180	114	20	26,0	14,0	80	233	15	8,0
DHW 4	4,00	0-50	235	129	30	40,0	25,0	130	304	20	18,0
DHW 6	6,00	0-50	235	129	30	40,0	25,0	130	304	20	18,0

HORIZONTAL LIFTING CLAMP HSKW

- for lifting, handling and moving of banded/secured stacks and single steel plates. The adjustment of the jaw opening width can be done quickly and easily without any tools,
- horizontal lifting clamps should always be used with a minimum of two pieces,
- can also be used in an upright position under a traverse,
- consists of a housing, a jaw and a pin,
- the jaw also serves as a carrying eye and ensures secure attachment during transport,
- use for the hardness of the material below 25HRC,
- complies with the provisions of the Machinery Directive: 2006/42/WE,
- made according to the harmonized standard: PN-EN 13155,
- operating temperature from -40°C to +100°C.

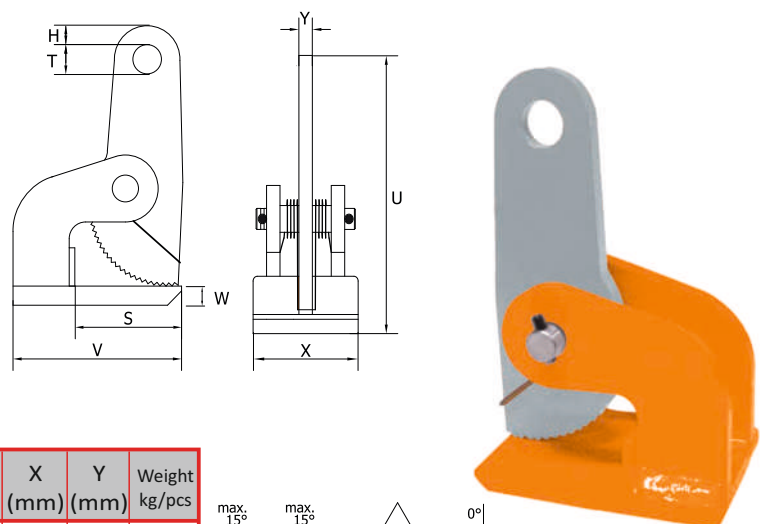


Type	WLL (t) pair	R grip range (mm)	V (mm)	S (mm)	W (mm)	T (mm)	H (mm)	U (mm)	X (mm)	Z (mm)	Y (mm)	Weight kg/pcs
HSKW/180 1,5	1,50	3-180	201	135	15	30,5	18,0	289	90	60	20	9,5
HSKW/300 1,5	1,50	3-300	201	135	15	30,5	18,0	409	90	60	20	11,0
HSKW/180 3	3,00	3-180	241	165	20	30,5	18,0	296	105	69	20	13,0
HSKW/300 3	3,00	3-300	241	165	20	30,5	18,0	416	105	69	20	15,0
HSKW/180 4,5	4,50	3-180	241	165	20	30,5	18,0	296	105	69	20	13,0
HSKW/420 4,5	4,50	3-420	241	165	20	30,5	18,0	536	105	69	20	17,0
HSKW/180 6	6,00	3-180	256	160	25	30,5	18,0	304	120	75	20	18,0
HSKW/420 6	6,00	3-420	256	160	25	30,5	18,0	544	120	75	20	24,0
HSKW/180 9	9,00	3-180	256	160	25	30,5	18,0	304	120	75	20	18,0
HSKW/420 9	9,00	3-420	256	160	25	30,5	18,0	544	120	75	20	24,0

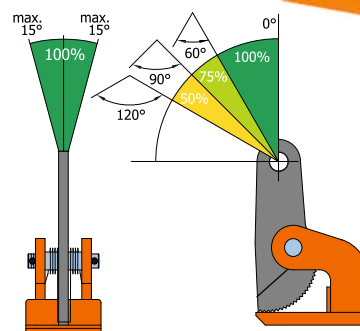


HORIZONTAL LIFTING CLAMP HXW-V

- used for lifting and transporting horizontally bent and shaped steel sheets with an evenly flat fastening point,
- the HXW-V horizontal lifting clamps has a torsion spring attached to the cam assembly allowing the clamp to close on any desired spot. The spring allows one operator to place the clamps and guide the hoist,
- horizontal lifting clamps must always be used in pairs,
- consists of a housing, a jaw and a pin,
- the jaw also serves as a carrying eye and ensures secure attachment during transport,
- use for the hardness of the material below 25HRC,
- complies with the provisions of the Machinery Directive: 2006/42/WE,
- made according to the harmonized standard: PN-EN 13155,
- operating temperature from -40°C to +100°C.

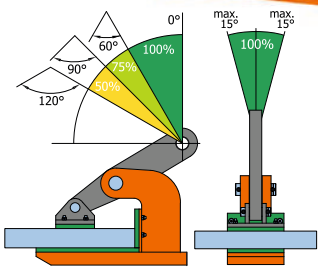
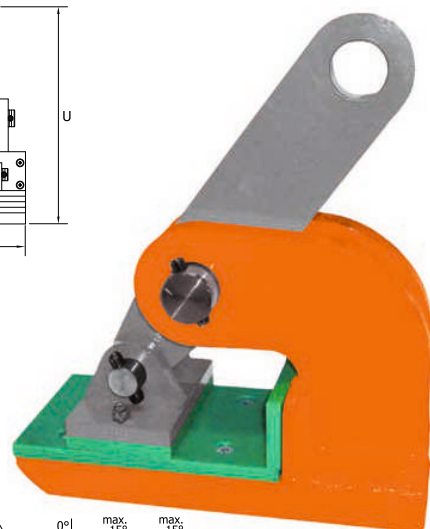
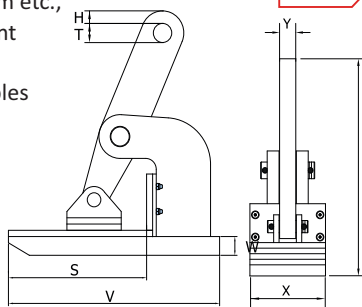


Type	WLL (t) pair	R grip range (mm)	V (mm)	S (mm)	W (mm)	T (mm)	H (mm)	U (mm)	X (mm)	Y (mm)	Weight kg/pcs
HXWV 1	1,00	0-35	140	99	10	26,5	12,0	188	85	15	3,0
HXWV 2	2,00	0-60	180	114	15	30,5	19,0	286	125	16	8,0
HXWV 3	3,00	0-60	200	125	20	30,5	19,0	302	140	20	12,2
HXWV 4	4,00	0-60	200	139	30	30,5	19,0	316	165	20	17,0
HXWV 6	6,00	0-60	200	139	30	30,5	19,0	316	165	20	17,0



HORIZONTAL LIFTING CLAMP NMHW

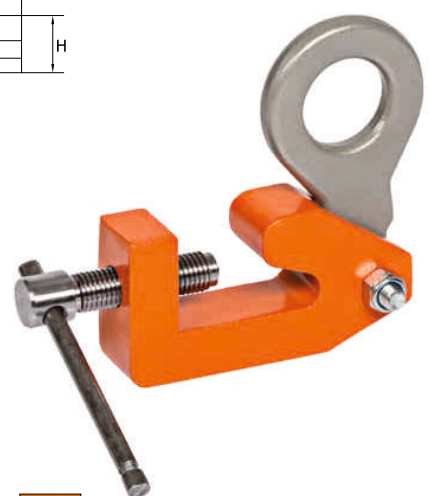
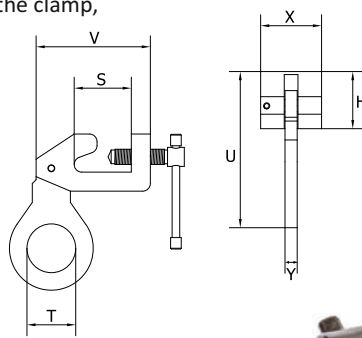
- the NMHW lifting clamp is suited for moving and lifting objects with fragile surfaces, like stainless steel, wood panels, aluminium etc.,
- the jaw and cam is covered with a high quality, pressure resistant protective cover,
- horizontal lifting clamps must always be used in pairs (or multiples thereof),
- consists of a housing, a jaw and a pin,
- the jaw also serves as a carrying eye and ensures secure fastening of the element during transport,
- use for the hardness of the material below 25HRC,
- complies with the provisions of the Machinery Directive: 2006/42/WE,
- made according to the harmonized standard: PN-EN 13155,
- operating temperature from -40°C to +100°C.



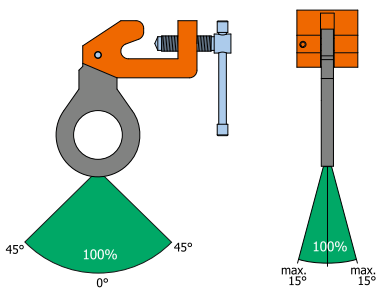
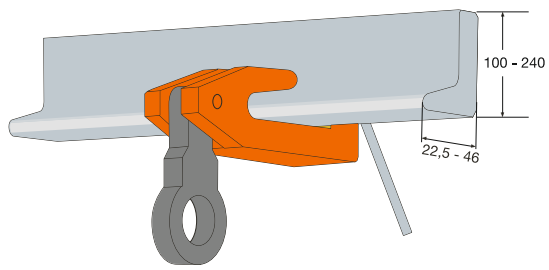
Type	WLL (t) pair	R grip range (mm)	V (mm)	S (mm)	W (mm)	T (mm)	H (mm)	U (mm)	X (mm)	Y (mm)	Weight kg/pcs
NMHW 1	1,00	0-25	140	94	15	20,0	10,0	155	65	15	2,4
NMHW 2	2,00	0-45	225	151	23	30,5	15,0	267	90	15	7,5
NMHW 3	3,00	0-45	225	151	20	30,5	15,0	271	90	15	8,3
NMHW 4	4,00	0-50	250	161	20	30,5	17,5	300	115	30	13,0
NMHW 6	6,00	0-50	250	161	25	30,5	17,5	306	130	30	18,0

SCREW CLAMP SHIPBUILDING BSW

- for use as a temporary lifting point in any room where holland profile (HP) is being used, such as sectional ship parts and ship engine rooms ,
- the BSW clamp is equipped with a thread spindle for attaching the clamp ,
- is used for HP-100 to HP-240 (HP = holland profile),
- consists of a housing, a jaw and a pin,
- the jaw also serves as a carrying eye and ensures secure fastening of the element during transport,
- use for the hardness of the material below 25HRC,
- complies with the provisions of the Machinery Directive: 2006/42/WE,
- made according to the harmonized standard: PN-EN 13155,
- operating temperature from -40°C to +100°C.

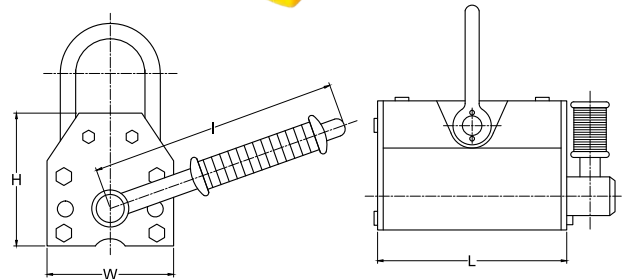


Type	WLL (t)	R grip range (mm)	V (mm)	S (mm)	T (mm)	U (mm)	H (mm)	X (mm)	Y (mm)	Weight kg/pcs
BSW 1,5	1,50	HP 100-240	150	74	45	180	75	40	16	2,9
BSW 3	3,00	HP 100-240	150	75	65	205	75	80	16	6,0



LIFTING MAGNET PML

- for lifting flat and round elements,
- meets the requirements of the Machinery Directive and standards PN-EN 13155,
- powder coated components,
- without external power supply - turning the field on and off with a mechanical lever,
- increased attraction in the air gap,
- made of neodymium magnets,
- easy and quick assembly to lifting devices,
- safety ratio 3:1,
- operating temperature from -40°C to +80°C.



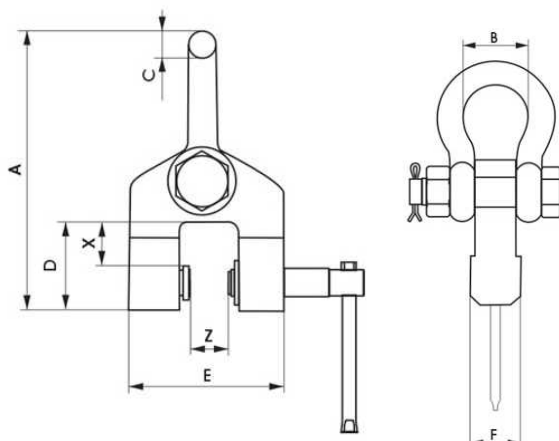
Type	WLL (t)		H (mm)	W (mm)	L (mm)	I (mm)	Weight (kg/pcs)
	□	⊘					
PML 0,1	0,10	0,03	67	62	92	126	3,00
PML 0,3	0,30	0,10	91	92	162	155	11,00
PML 0,6	0,60	0,20	117	122	232	196	25,00
PML 1,0	1,00	0,30	163	176	258	285	37,00
PML 2,0	2,00	0,60	212	234	378	426	125,00
PML 3,0	3,00	1,00	261	286	458	521	220,00
PML 6,0	6,00	2,00	266	296	720	700	398,00

SCREW CLAMP US

- for lifting, pulling, rotating elements of steel structures and sheets,
- equipped with a shackle,
- lifting perpendicular to the screw lock,
- operating temperature from -40°C to +100°C.

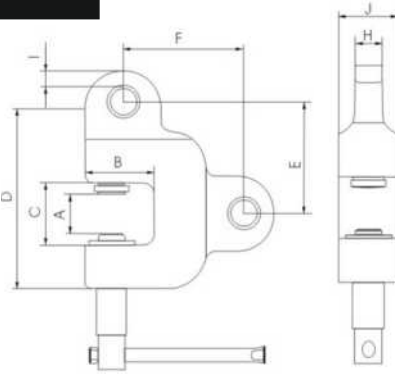


Type	WLL (t)	R zakres chwytania (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	X (mm)	Weight (kg/pcs)
US 1,5	1,50	0 - 32	255	65	26	75	130	44	40	7,0
US 3,0	3,00	0 - 50	290	74	30	85	170	50	40	11,0
US 5,0	5,00	0 - 80	470	130	50	135	225	72	50	27,0



SCREW CLAMP USC

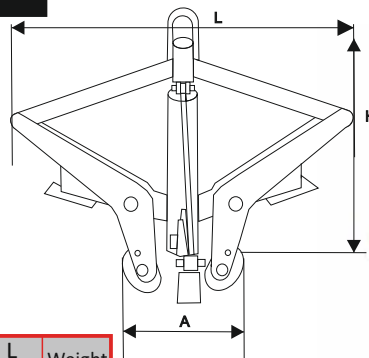
- for lifting, pulling, rotating elements of steel structures and sheets,
- equipped with two handles,
- lifting in a direction perpendicular or parallel to the screw lock,
- operating temperature from -40°C to +100°C



Type	WLL (t)	R grip range (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	I (mm)	J (mm)	Weight kg/pcs
USC 0,5	0,50	0-28	28	43	45	125	72	83	26	16	12	35	2,6
USC 1,5	1,50	0-35	35	60	55	158	93	99	35	24	16	50	5,4
USC 3,0	3,00	0-35	35	67	65	192	114	120	46	34	17	60	9,0
USC 5,0	5,00	0-40	40	85	75	230	133	150	55	40	18	75	16,4
USC 7,5	7,50	0-40	40	92	75	240	143	162	65	50	23	80	20,8

CLAMP FOR HANDLING WIRE COILS

- for lifting and transporting coils of wire in a circle,
- has replaceable jaws made of wear-resistant steel,
- the possibility of equipping the jaws with a claw,
- operating temperature from -40°C to +100°C.

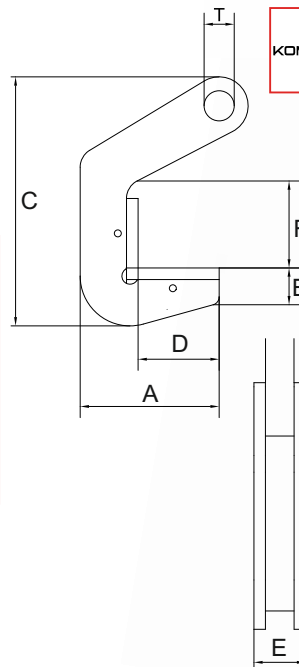


Type	WLL (t)	A min (mm)	A max (mm)	H min (mm)	H max (mm)	L min (mm)	L max (mm)	Weight kg/pcs
UTK - 3	3,00	500	800	1050	1655	1100	1360	155
UTK - 5	5,00	600	900	1350	1655	1100	1450	185

PIPE LIFTING CLAMP KRU

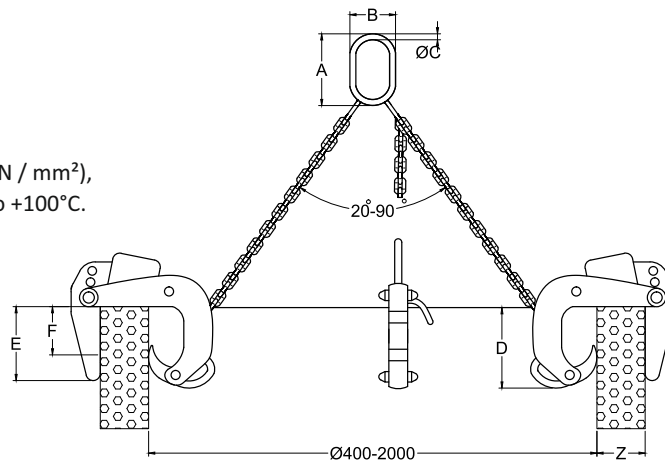
- for transporting pipes,
- used in pairs,
- operating temperature from -40°C to +100°C.

Type	WLL (t) paia	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	Weight kg/pcs
KRU - 1,5	1,50	120	32	195	75	38	40	1,6
KRU - 3,0	3,00	120	32	195	75	38	40	2,2
KRU - 4,0	4,00	120	32	205	75	42	50	2,8
KRU - 6,0	6,00	120	32	205	75	42	50	3,3
KRU - 8,0	8,00	120	32	205	75	45	70	4,5



CONCRETE PIPE LIFTING CLAMP KBK

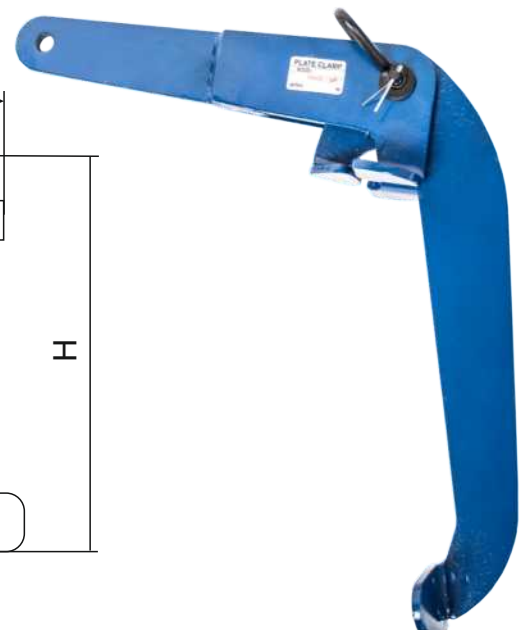
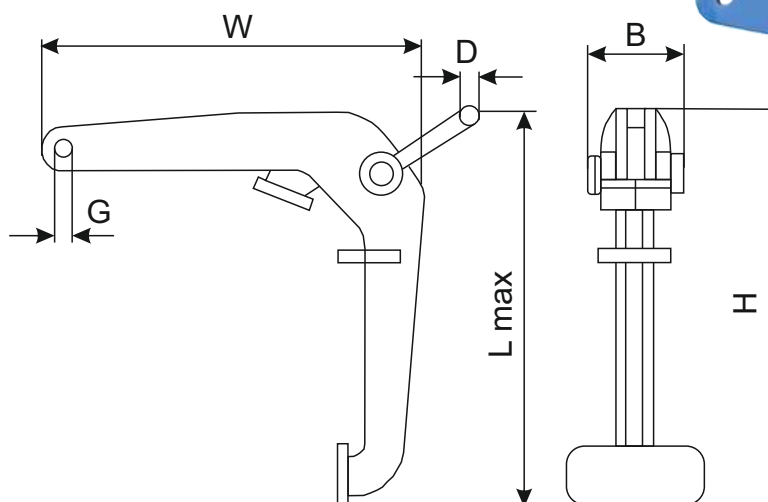
- it is a three-legged lifting system for the safe and non-marring transport of concrete pipes up,
- solid construction,
- simple and safe handling,
- large jaw capacity
- for heavy duty use
- safety ratio: 4,
- steel in class 8 (tensile strength 800 N / mm²),
- operating temperature from -40°C to +100°C.



Type	WLL (t)	R grip range (mm)	diameter (mm)	L (mm)	A (mm)	B (mm)	C (mm)	W (mm)	E (mm)	H (mm)	D (mm)	Weight kg/pcs
KBK 1,5	1,50	40-120	2000	1500	135	75	18	340	230	345	50	29,0
KBK 2,1	2,10	40-120	3000	2500	160	90	22	360	220	420	50	53,0
KBK 3,0	3,00	50-180	2500	2000	160	90	23	470	275	470	65	78,0
KBK 4,0	4,00	90-220	3000	2500	160	90	23	470	275	480	65	90,0

DRUM CLAMP KBB

- for lifting steel barrels vertically,
- safety ratio: 4,
- steel in class 8 (tensile strength 800 N / mm²),
- operating temperature from -40°C to +100°C.



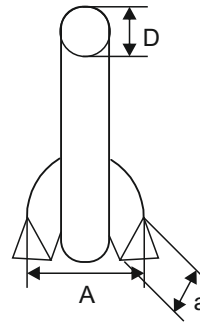
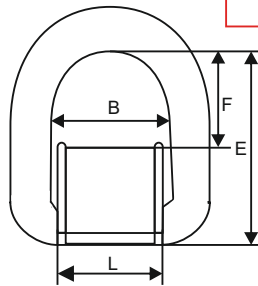
Type	WLL (t)	B (mm)	D (mm)	G (mm)	L max (mm)	W (mm)	H (mm)	Weight kg/pcs
KBB 0,6	0,60	107	10	16	570	410	450	6,7



LIFTING POINTS

LASHING EYE KOM FOR WELDING

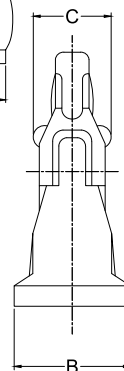
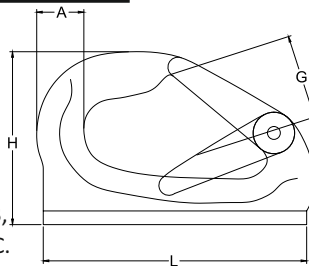
- movable eye for attaching hooks and fastening,
- possibility of loading in all directions,
- lifting capacity from 1.12 to 15 tons,
- for welding on machine parts,
- safety ratio: 4,
- link made of stainless steel, carbon steel body,
- steel grade 8,
- spring preventing the cell from falling,
- corrosion resistant,
- in accordance with the standard EN 12195-3,
- operating temperature from -40°C to +200°C.



Type	WLL (t)	E (mm)	D (mm)	F (mm)	B (mm)	A (mm)	L (mm)	weld a min (mm)	Weight kg/pcs
KOM 0112	1,12	65	13,5	37	40	38	37	10	0,42
KOM 0200	2,00	73	14,5	44	42	39	40	12	0,48
KOM 0315	3,15	76	17,5	43	45	42	44	14	0,68
KOM 0530	5,30	96	23,5	52	55	59	49	18	1,50
KOM 0800	8,00	112	28,5	62	70	69	66	22	2,48
KOM 1500	15,00	150	35,0	86	96	88	88	30	5,58

HOOK KHS FOR WELDING

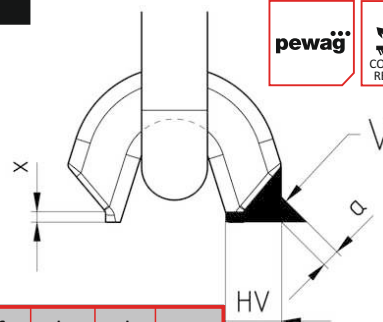
- hook for welding,
- large area for welding.,
- lifting capacity from 2 to 10 tons,
- safety ratio: 4,
- steel grade 8,
- corrosion resistant,
- in accordance with the standard EN 12195-3,
- operating temperature from -40°C to +200°C.



Type	WLL (t)	A (mm)	B (mm)	C (mm)	G (mm)	L (mm)	H (mm)	Weight kg/pcs
KHS 2	2,00	24	34	36	26	81	91	0,82
KHS 3	3,00	31	36	38	29	115	105	1,22
KHS 5	5,00	44	43	48	36	159	133	2,62
KHS 8	8,00	50	52	48	32	165	136	3,32
KHS 10	10,00	54	55	48	45	202	168	5,60

LIFTING POINT PLEW FOR WELDING

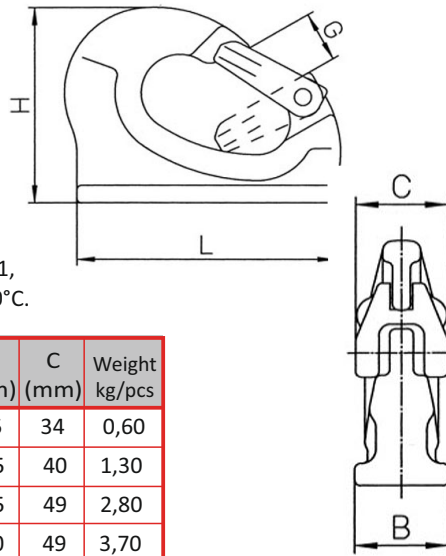
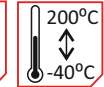
- movable eye for attaching hooks and fastening,
- possibility of loading in all directions,
- load capacity from 1.5 to 19 tons,
- handle for screwing or welding on machine parts,
- safety ratio: 4,
- alloy steel link, carbon steel body,
- steel grade 8, • corrosion resistant,
- in accordance with the standard EN 12195-3,
- operating temperature from -40°C to +200°C.



Type	WLL (t)	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	f (mm)	h (mm)	l (mm)	Weight kg/pcs
PLEW 1,5	1,50	32	38	65	14	65	40	25	35	0,32
PLEW 2,5	2,50	37	44	75	16	76	47	28	41	0,50
PLEW 4	4,00	43	48	84	18	83	51	32	45	0,75
PLEW 6,7	6,70	58	60	107	24	108	64	44	56	1,70
PLEW 10	10,00	69	66	126	27	123	69	54	61	2,80
PLEW 19	19,00	92	95	171	38	168	100	68	89	6,50

WELD-ON HOOK AHW

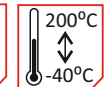
- hook for welding,
- well suited for welding onto excavator bucket, spreader beams etc,
- Its outstanding features include a die-forged, tempered safety catch, making it extrarobust.
- large area for welding.,
- lifting capacity from 1.3 to 10 tons,
- safety ratio: 4,
- steel grade 8,
- corrosion resistant,
- in accordance with the standard EN 1677-1,
- operating temperature from -40°C to +200°C.



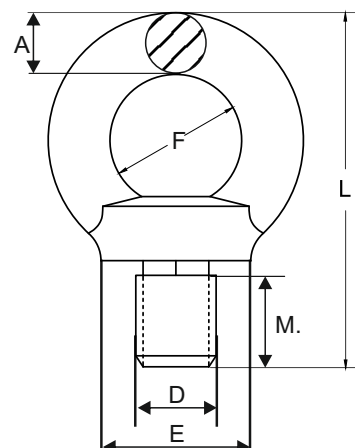
Type	WLL (t)	L (mm)	H (mm)	G (mm)	B (mm)	C (mm)	Weight kg/pcs
AWHW 1,3	1,30	95	71	25	25	34	0,60
AWHW 3,8	3,80	132	105	29	35	40	1,30
AWHW 6,3	6,30	167	130	34	45	49	2,80
AWHW 10	10,0	175	133	34	50	49	3,70

EYE BOLT DIN 580

- screw serves as a fastener (hook) during the lifting element,
- for lifting only in a straight line,
- galvanized,
- safety ratio: 6,
- made of C15 carbon steel,,
- corrosion resistant,
- in accordance with the standard DIN 580,
- operating temperature from -40°C to +200°C.



Type	WLL (t)	D (mm)	A (mm)	F (mm)	L (mm)	E (mm)	M. (mm)	Weight kg/pcs
DIN580-M6	0,07	M6	8	20	49,0	20	13,0	0,06
DIN580-M8	0,14	M8	8	20	49,0	20	13,0	0,06
DIN580-M10	0,23	M10	10	25	62,0	25	17,0	0,11
DIN580-M12	0,34	M12	12	30	73,5	30	20,5	0,18
DIN580-M14	0,49	M14	14	35	89,0	35	27,0	0,35
DIN580-M16	0,70	M16	14	35	89,0	35	27,0	0,35
DIN580-M18	0,90	M18	16	40	101,0	40	30,0	0,45
DIN580-M20	1,20	M20	16	40	101,0	40	30,0	0,45
DIN580-M22	1,50	M22	20	50	126,0	50	36,0	0,74
DIN580-M24	1,80	M24	20	50	126,0	50	36,0	0,74
DIN580-M27	2,50	M27	24	60	154,0	65	45,0	1,66
DIN580-M30	3,60	M30	24	60	154,0	65	45,0	1,66
DIN580-M33	4,30	M33	24	60	154,0	65	45,0	2,65
DIN580-M36	5,10	M36	28	70	182,0	75	54,0	2,65
DIN580-M39	6,10	M39	32	80	210,0	85	63,0	4,03
DIN580-M42	7,00	M42	32	80	210,0	85	63,0	4,03
DIN580-M48	8,60	M48	38	90	236,0	100	68,0	6,38
DIN580-M56	11,50	M56	42	100	265,0	110	78,0	8,80
DIN580-M64	16,00	M64	48	110	298,0	120	90,0	12,40

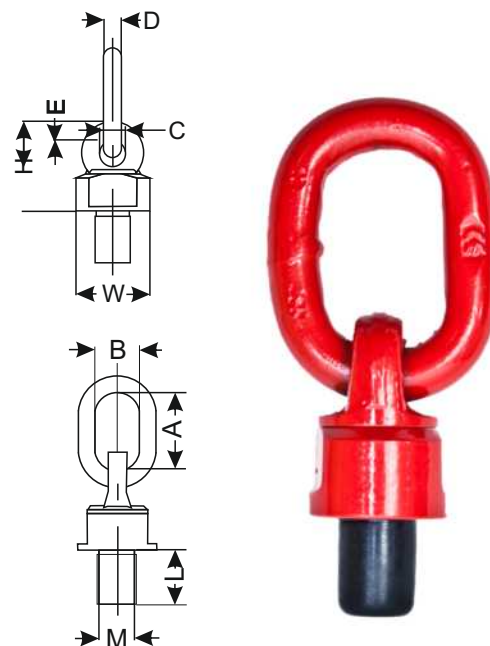


EYE TURNING- SWIVELING BOLT KSU

- used, among others, as the attachment point for machine and lifting,
- lug rotates 360°, tilts 180°,
- safety ratio: 4,
- alloy steel link, carbon steel body, • steel grade 8, • corrosion resistant,
- in accordance with the standard EN 1677-1,
- operating temperature from -40°C to +200°C.



Type	WLL (t)	Screw turn (Nm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	L (mm)	H (mm)	W (mm)	Weight kg/pcs
KSU M8	0,30	6	55	28	15	13	43	13	53	36,5	0,40
KSU M10	0,50	10	55	28	15	13	43	18	53	36,5	0,43
KSU M12	0,50	15	55	28	15	13	43	18	53	36,5	0,44
KSU M16	1,12	50	55	28	15	13	43	20	53	36,5	0,46
KSU M20	2,00	100	70	35	19	16	56	30	68	49,5	1,00
KSU M24	3,20	160	85	38	22	18	66	30	79	57,0	1,45
KSU M27	3,20	190	85	38	22	18	66	30	79	57,0	1,47
KSU M30	5,00	250	85	39	23,5	20	79	35	96	66,0	2,20
KSU M30B	8,00	250	122	50	60	22	94	35	111	79,0	3,68
KSU M36	8,00	320	113	49	27	22	86	50	108	80,0	3,75
KSU M36B	10,00	320	122	49	60	22	94	51	111	79,0	3,84
KSU M42	10,00	400	120	47	28	26	89	50	108	80,0	4,25

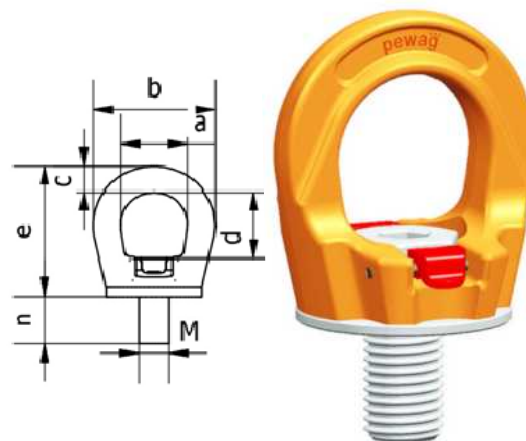


LIFTING POINT WITH ROTARY EYE PLGW

- replaceable central hex bolt that can be rotated 360° ,
- the screw is a replaceable element,
- chromed surface and protected against corrosion,
- safety ratio: 4,
- steel grade 10, • corrosion resistant, • in accordance with the standard EN 1677-1,
- operating temperature from -40°C to +200°C.



Type	thread	WLL (t)	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	f (mm)	n (mm)	Weight kg/pcs	
PLGW 0,3	M8	0,3	25	45	10	27	53	35	15	6	0,17
PLGW 0,5	M10	0,5	25	45	10	27	53	35	15	6	0,18
PLGW 0,7	M12	0,7	30	55	12	32	63	43	20	8	0,29
PLGW 1,5	M16	1,5	35	64	14	36	70	50	25	10	0,45
PLGW 2,3	M20	2,3	40	73	16	41	81	54	30	12	0,58
PLGW 3,2	M24	3,2	50	86	18	50	93	69	35	14	1,10
PLGW 4	M30	4,0	60	110	25	60	114	90	45	17	2,20
PLGW 7	M36	7,0	70	132	31	70	136	108	55	19	3,90
PLGW 9	M42	9,0	80	152	36	72	153	126	65	22	5,80
PLGW 12	M48	12,0	95	179	42	88	179	148	75	24	8,90

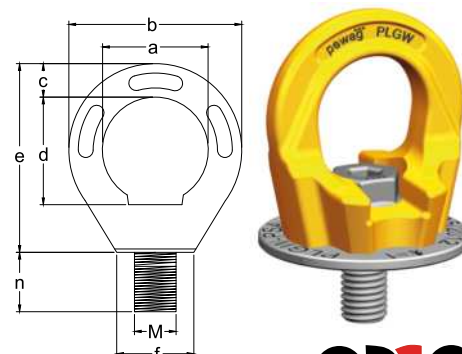


LIFTING POINT WITH EYE PLGW-PSA

- anchor point for the anchor pin,
- ring with 360° rotation° ,
- made of forged alloy steel, tempered,
- safety ratio: 4, • corrosion resistant,
- in accordance with the standard EN 1677-1,
- operating temperature from -40°C to +200°C.



Type	thread	persons	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	f (mm)	n (mm)	Weight kg/pcs	
PLGW PSA M12	M12	1	30	55	12	32	63	55	20	8	0,31
PLGW PSA M16	M16	2	35	64	14	36	70	62	25	10	0,48
PLGW PSA M20	M20	2	40	69	16	41	78	66	30	12	0,63



LIFTING POINT PLAW

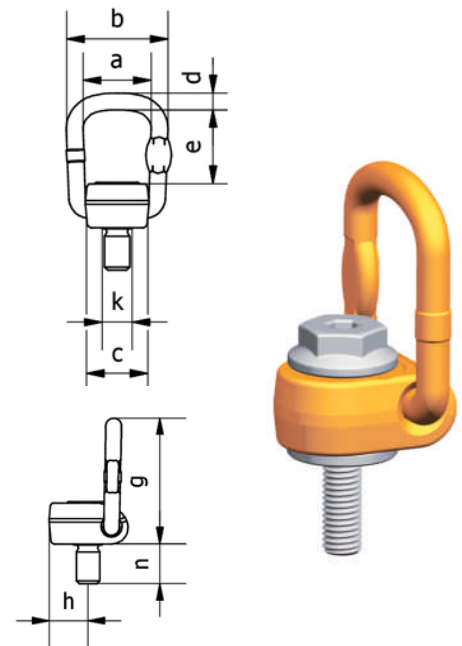
- replaceable central hexagonal screw that can be rotated 360°,
- the load ring is loadable in a wide range and can be positioned at any required angle due to its replaceable and patented spring'
- the hexagonal special screw is also replaceable and secured against loss,
- chromed surface and protected against corrosion,
- safety ratio: 4,
- steel grade 10,
- corrosion resistant,
- in accordance with the standard EN 1677-1,
- operating temperature from -40°C to +200°C.

Type	thread	WLL (t)	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	g (mm)	n (mm)	Hex (mm)	Wrench (mm)	Weight kg/pcs
PLAW 0,3	M8	0,3	45	67	40	11	41	95	20	10	24	0,57
PLAW0,63	M10	0,63	45	67	40	11	41	95	20	10	24	0,58
PLAW 1	M12	1,0	45	67	40	11	41	95	33	10	24	0,60
PLAW 1,5	M16	1,5	45	67	40	11	41	95	33	10	24	0,62
PLAW 2,6	M20	2,5	54	81	50	13	55	112	33	8	24	1,10
PLAW 4	M24	4,0	54	87	50	17	67	142	36	14	36	1,60
PLAW 6	M30	6,0	75	115	67	20	68	143	49	14	36	3,10
PLAW 7	M36	7,0	75	115	67	20	65	143	55	27	-	3,30
PLAW 8	M36	8,0	93	147	85	27	87	188	55	19	36	6,10
PLAW 10	M42	10,0	93	147	85	27	87	188	65	32	-	6,40
PLAW 15	M42	15,0	115	181	105	33	108	246	63	19	55	12,00
PLAW 20	M48	20,0	115	181	105	33	108	246	73	19	55	12,30



STEEL 10 CLASS

4 SAFETY RATIO

LIFTING POINT PLDW

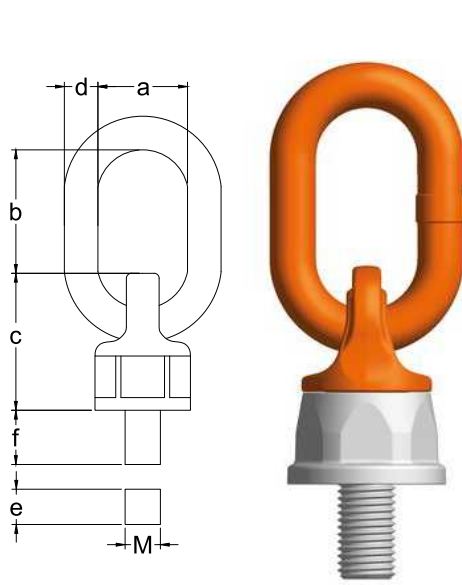
- replaceable central hexagonal screw that can be rotated 360°,
- the high-strength lifting eye is movable by 180°,
- chromed surface and protected against corrosion,
- safety ratio: 4,
- steel grade 10,
- corrosion resistant,
- in accordance with the standard EN 1677-1,
- operating temperature from -40°C to +200°C.

Type	thread	WLL (t)	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	f (mm)	f max (mm)	Wrench (mm)	Weight kg/pcs
PLDW 0,3	M8	0,3	30	38	54	13	38	20	90	34	0,47
PLDW 0,5	M10	0,5	30	38	54	13	38	20	160	34	0,47
PLDW 0,7	M12	0,7	35	48	54	13	38	22	160	34	0,47
PLDW 1	M14	1,0	35	48	54	13	38	22	160	34	0,47
PLDW 1,5	M16	1,5	35	48	54	13	38	33	160	34	0,49
PLDW 2,5	M20	2,5	35	55	75	16	55	33	160	46	1,10
PLDW 4	M24	4,0	40	66	82	17	63	40	260	50	1,50
PLDW 6	M30	6,0	50	70	92	23	72	40	260	60	2,50
PLDW 8	M36	8,0	50	91	114	23	92	55	260	75	4,30
PLDW 10	M42	10,0	65	91	114	27	92	60	260	75	5,10
PLDW12,5	M42	12,5	65	116	114	27	92	68	260	75	5,40



STEEL 10 CLASS

4 SAFETY RATIO

LIFTING POINT PLGWI

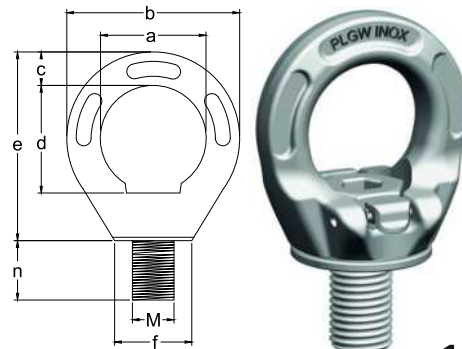
- replaceable central hexagonal screw,
- ring with 360° rotation°,
- made of forged alloy steel, tempered,
- safety ratio: 4,
- corrosion resistant,
- in accordance with the standard EN 1677-1,
- operating temperature from -40°C to +200°C.

Type	thread	WLL (t)	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	f (mm)	n (mm)	Hex (mm)	Weight kg/pcs
PLGWI M20	M20	2,00	40	72	17	40	80	45	30	12	0,60



STEEL 10 CLASS

4 SAFETY RATIO

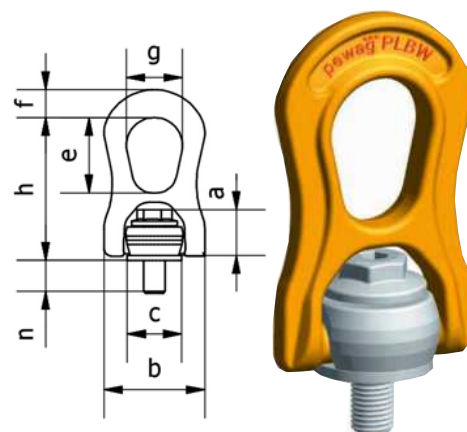



LIFTING POINT WITH ROTARY EYE PLBW

- replaceable central hexagonal screw that can be rotated 360°,
- the screw is a replaceable element,
- chromed surface and protected against corrosion,
- safety ratio: 4, • steel grade 10, • corrosion resistant,
- in accordance with the standard EN 1677-1,
- operating temperature from -40°C to +200°C.



Type	thread	WLL (t)	a (mm)	b (mm)	c (mm)	e (mm)	f (mm)	g (mm)	n (mm)	Hex (mm)	Eye (mm)	Weight kg/pcs
PLBW 0,3	M8	0,3	29	56	30	38	18	27	13	8	15	0,32
PLBW0,63	M10	0,6	29	56	30	38	18	27	15	8	15	0,33
PLBW 1	M12	1,0	29	56	30	38	18	27	17	8	15	0,34
PLBW 1,3	M14	1,3	43	79	45	55	25	38	22	10	24	1,03
PLBW 1,6	M16	1,6	43	79	45	55	25	38	24	10	24	1,04
PLBW 2	M18	2,0	43	79	45	55	25	38	27	10	24	1,07
PLBW 2,5	M20	2,5	43	79	45	55	25	38	30	10	24	1,08
PLBW 3	M22	3,0	64	118	68	85	38	58	33	14	36	3,50
PLBW 4	M24	4,0	64	118	68	85	38	58	36	14	36	3,53
PLBW 5	M27	5,0	64	118	68	85	38	58	40	14	36	3,58
PLBW 6,3	M30	6,3	64	118	68	85	38	58	45	14	55	3,66
PLBW 8	M33	8,0	106	188	108	132	60	91	54	19	55	14,50
PLBW 10	M36	10,0	106	188	108	132	60	91	59	19	55	14,60
PLBW12,5	M42	12,5	106	188	108	132	60	91	69	19	55	14,90
PLBW 15	M48	15,0	106	188	108	132	60	91	74	19	55	15,20

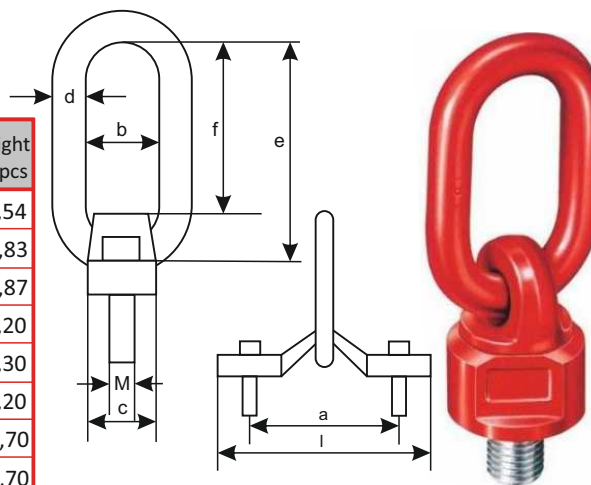


LIFTING POINT AOR

- screwing handle,
- made of forged alloy steel, tempered,
- safety ratio: 4,
- corrosion resistant,
- in accordance with the standard EN 1677-1,
- operating temperature from -40°C to +200°C.



Type	thread	WLL (t)	śred łancucha (mm)	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	f (mm)	l (mm)	Weight kg/pcs
AOR 10	M16	3,15	10	90	40	38	18	112	57	130	1,54
AOR 13	M20	5,30	13	115	50	48	22	149	79	165	2,83
AOR 16	M30	8,00	16	150	65	62	26	183	93	212	5,87
AOR 22	M36	15,00	22	175	75	72	36	226	114	255	11,20
AOR 26	M42	21,20	26	200	95	90	45	272	142	295	19,30
AOR 28	M45	25,00	28	200	95	90	45	272	142	295	20,20
AOR 32	M56	31,50	32	230	110	100	48	336	193	330	31,70
AOR 34	M56	36,00	34	230	110	100	48	336	193	330	31,70

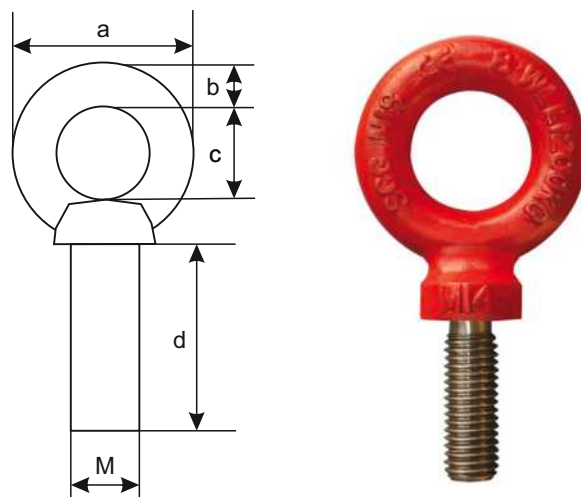


LIFTING POINT RGS

- can be used to fasten machine parts,
- the eyelets can be tightened by hand,
- made of forged alloy steel, tempered,
- safety ratio: 4, • corrosion resistant,
- in accordance with the standard EN 1677-1,
- operating temperature from -40°C to +200°C.

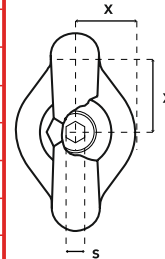
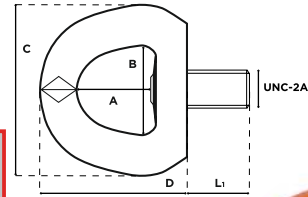


Type	thread	WLL (t)	a (mm)	b (mm)	c (mm)	d (mm)	Weight kg/pcs
RGS 8	M8	0,4	36	8	20	25	0,06
RGS 10	M10	0,7	42	10	22	30	0,10
RGS 12	M12	1,0	51	12	27	36	0,20
RGS 14	M14	1,2	58	14	30	40	0,30
RGS 16	M16	1,5	66	16	36	53	0,40
RGS 20	M20	2,5	76	18	40	58	0,70
RGS 24	M24	4,0	98	22	54	82	1,320



SWIVEL EYE BOLT SEB

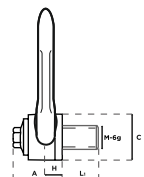
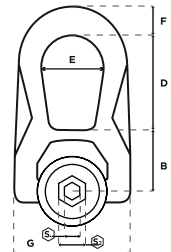
- the SEB lifting ring is a single swivel ring, equipped with 2 pins is specially designed for lifting, including rotating loads,
- It consists of a GRADUP steel ring that has a rotating range of 360°,
- safety ratio: 5, • corrosion resistant,
- in accordance with the standard EN 1677-1,
- operating temperature from -40°C to +200°C.



Type	WLL SW 5:1 (t)	WLL SW 4:1 (t)	thread	L1 (mm)	Screw turn (Nm)	X (mm)	S (mm)	A (mm)	B (mm)	C (mm)	D (mm)	Weight kg/pcs
SEB M8 UP	0,40	0,50	M8	14	6	20	6	30	34	60	57	0,24
SEB M10UP	0,50	0,70	M10	17	10	20	6	30	34	60	57	0,24
SEB M12UP	0,80	0,90	M12	21	15	20	6	30	34	60	57	0,24
SEB M16UP	1,40	1,80	M16	27	50	35	8	38	45	88	80	0,80
SEB M20UP	2,00	2,70	M20	30	100	35	8	38	45	88	80	0,80
SEB M24UP	3,20	3,80	M24	36	160	35	14	38	45	88	80	0,80
SEB M24UP	3,40	4,20	M24	36	160	50	14	58	70	115	106	2,60
SEB M30UP	5,50	6,30	M30	45	250	50	14	58	70	115	106	2,70
SEB M36UP	9,40	11,00	M36	54	320	70	14	83	94	168	155	7,00
SEB M42UP	12,00	15,00	M42	63	400	70	14	83	94	168	155	7,00
SEB M48UP	15,00	16,00	M48	68	600	70	19	80	94	168	155	7,00

DOUBLE SWIVEL LIFTING RING DSR

- the DSR lifting ring is a double swivel ring,
- it is specially designed for simultaneously lifting and rotating loads.
- it consists of a GRADUP steel ring that can swivel under the load.
- the ring swivels 180°, but has a rotating range of 360°.
- safety ratio: 5, • corrosion resistant,
- in accordance with the standard EN 1677-1,
- operating temperature from -40°C to +200°C.



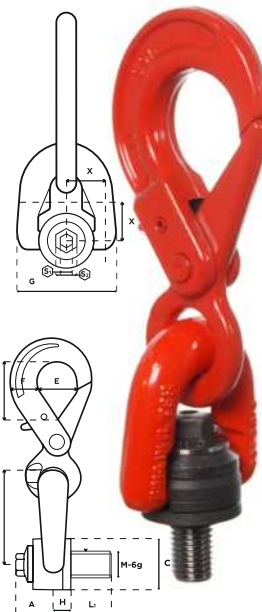
Type	WLL SW 5:1 (t)	WLL SW 4:1 (t)	thread	L1 (mm)	Screw turn (Nm)	S1 (mm)	S2 (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	Weight kg/pcs
DSR M5 UP	0,07	0,10	M5	15	3	8	16	33	30	30	38	27	14	53	9,5	0,30
DSR M6 UP	0,15	0,20	M6	15	4	8	16	33	30	30	38	27	14	53	9,5	0,30
DSR M8 UP	0,40	0,50	M8	15	6	8	16	33	30	30	38	27	14	53	9,5	0,30
DSR M10UP	0,70	0,90	M10	18	10	8	16	33	30	30	38	27	14	53	9,5	0,30
DSR M12UP	1,05	1,30	M12	21	15	8	16	33	30	30	38	27	14	53	9,5	0,30
DSR M14UP	1,40	1,80	M14	23	30	8	20	45	40	45	53	38	17	76	13,0	0,90
DSR M16UP	2,00	2,30	M16	27	50	8	20	45	40	45	53	38	17	76	13,0	0,90
DSR M18UP	2,30	2,30	M18	27	70	8	20	45	40	45	53	38	17	76	13,0	0,90
DSR M20UP	2,50	2,50	M20	30	100	8	20	45	40	45	53	38	17	76	13,0	0,90
DSR M20UP	2,90	3,20	M20	25	100	14	24	62	55	60	83	55	25	115	19,0	2,60
DSR M22UP	3,50	4,50	M22	33	120	14	24	62	55	60	83	55	25	115	19,0	2,60
DSR M24UP	4,40	5,50	M24	36	160	14	24	62	55	60	83	55	25	115	19,0	2,60
DSR M27UP	5,70	6,00	M27	40	200	14	24	62	55	60	83	55	25	115	19,0	2,70
DSR M30UP	6,00	6,30	M30	45	250	14	24	62	55	60	83	55	25	115	19,0	2,70
DSR M30UP	6,70	8,00	M30	45	250	14	30	80	77	78	98	71	26	141	28,0	5,40
DSR M36UP	8,00	8,50	M36	54	320	14	30	80	77	78	98	71	26	141	28,0	5,40
DSR M42UP	8,50	9,00	M42	63	400	14	30	80	77	78	98	71	26	141	28,0	5,40

HOOK-TYPE LIFTING RING DSH

- the DSH hook-type lifting ring is a double swivel ring equipped with an automatic-locking eye hook.
- it consists of a steel ring that has a rotating range of 360°,
- carrying eye and body made of alloy steel,
- safety ratio: 5,
- corrosion resistant,
- in accordance with the standard EN 1677-1,
- operating temperature from -40°C to +200°C.



Type	WLL SW 5:1 (t)	thread	L1 (mm)	Screw turn (Nm)	X (mm)	S1 (mm)	S2 (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	Weight kg/pcs
DSH M8	0,30	M8	14	6	18	8	16	33	56	30	44	32	23	58	9,5	0,80
DSH M10	0,60	M10	17	10	18	8	16	33	56	30	44	32	23	58	9,5	0,80
DSH M12	1,00	M12	21	15	18	8	16	33	56	30	44	32	23	58	9,5	0,80
DSH M14	1,30	M14	23	30	24	8	20	45	81	45	65	46	29	79	13,0	1,90
DSH M16	1,60	M16	27	50	24	8	20	45	81	45	65	46	29	79	13,0	2,00
DSH M18	2,00	M18	27	70	24	8	20	45	81	45	65	46	29	79	13,0	2,00
DSH M20	2,50	M20	30	100	24	8	20	45	81	45	65	46	29	79	13,0	2,00

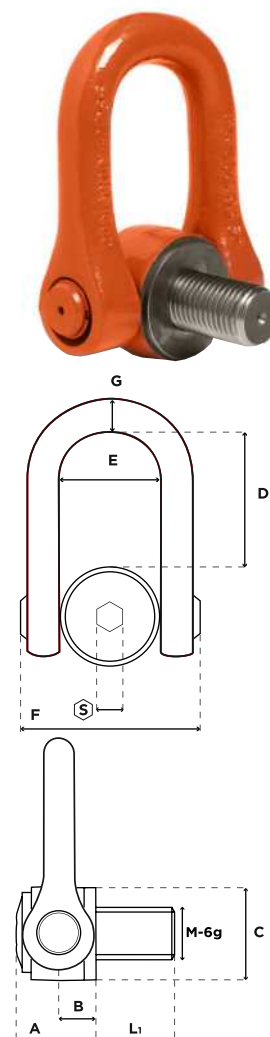


UNIVERSAL DOUBLE SWIVEL SHACKLE DSS

- the universal swivel shackle DSS is a double swivel ring.
- it is specially designed for simultaneously lifting and rotating loads. Its double swivel action ensures perfect alignment with the sling,
- It consists of a GRADUP steel ring that can swivel under the load. The ring swivels 180°, but has a rotating range of 360°.
- safety ratio: 5, • corrosion resistant, • in accordance with the standard EN 1677-1,
- operating temperature from -40°C to +200°C.



Type	WLL SW 5:1 (t)	WLL SW 4:1 (t)	thread	L1 (mm)	Screw turn (Nm)	S (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	Weight kg/pcs
DSS M24UP	4,50	5,50	M24	36	160	19	61	31	70	98	73	149	33	5,40
DSS M30UP	4,70	8,50	M30	45	250	19	61	31	70	98	73	149	33	5,50
DSS M33UP	8,50	10,50	M33	50	250	19	61	31	70	98	73	149	33	5,50
DSS M36UP	11,00	12,00	M36	54	320	19	61	31	70	98	73	149	33	5,50
DSS M36UP	11,00	12,00	M36	54	320	19	61	31	70	98	73	149	33	5,50
DSS M39UP	12,00	14,00	M39	58	320	19	61	31	70	98	73	149	33	5,70
DSS M42UP	13,00	15,00	M42	63	400	19	61	31	70	98	73	149	33	5,80
DSS M42UP	13,00	15,00	M42	63	400	19	61	31	70	98	73	149	33	5,80
DSS M45UP	14,50	16,00	M45	63	400	19	61	31	70	98	73	149	33	5,90
DSS M48UP	17,00	20,00	M48	68	600	19	79	38	90	123	91	182	45	11,00
DSS M48UP	17,00	20,00	M48	68	600	19	79	38	90	123	91	182	45	11,00
DSS M48UP	17,00	20,00	M48	68	600	19	79	38	90	123	91	182	45	11,00
DSS M52UP	19,00	20,00	M52	68	600	19	79	38	90	123	91	182	45	11,20
DSS M56UP	22,00	25,00	M56	78	600	19	79	38	90	123	91	182	45	11,30
DSS M56UP	22,00	25,00	M56	78	600	19	79	38	90	123	91	182	45	11,40
DSS M64UP	25,00	32,10	M64	90	600	19	79	38	95	123	91	182	45	12,20
DSS M64UP	25,00	32,10	M64	90	600	19	79	38	95	123	91	182	45	12,20
DSS M72UP	22,00	25,00	M72	90	600	19	79	38	95	123	91	182	45	14,00
DSS M72UP	22,00	25,00	M72	90	600	19	79	38	95	123	91	182	45	14,00
DSS M80UP	25,00	32,10	M80	90	600	19	79	38	100	123	91	182	45	15,00
DSS M90UP	25,00	32,10	M90	90	600	19	79	38	100	123	91	182	45	15,50
DSSM100UP	25,00	32,10	M100	90	600	19	79	38	110	123	91	182	45	16,50

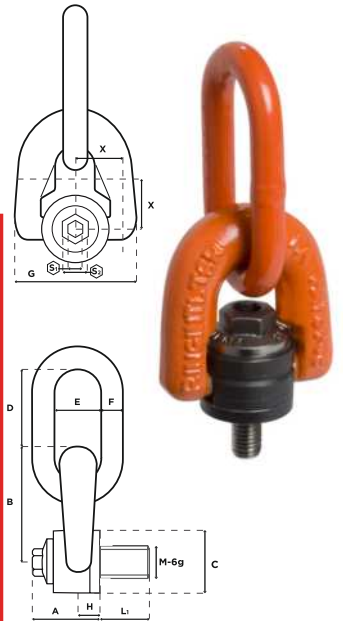


TRIPLE SWIVEL LIFTING RING TSR

- the TSR ring is a triple swivel model with two pivots.
- it can be used for smooth tilting, turning and flipping,
- the optimised design prevents any damage to the sling and load while the ring is swivelling and ensures perfect alignment with the sling,
- it consists of a steel ring that has a rotating range of 360°.
- supporting eye and body made of alloy steel,
- safety ratio: 5, • corrosion resistant, • in accordance with the standard EN 1677-1,
- operating temperature from -40°C to +200°C.



Type	WLL SW 5:1 (t)	thread	L1 (mm)	Screw turn (Nm)	S1 (mm)	S2 (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	Weight kg/pcs
TSR M8	0,30	M8	14	6	8	16	33	56	30	41	25	10	58	9,5	0,40
TSR M10	0,60	M10	17	10	8	16	33	56	30	41	25	10	58	9,5	0,40
TSR M12	1,00	M12	21	15	8	16	33	56	30	41	25	10	58	9,5	0,40
TSR M14	1,30	M14	23	30	8	20	45	81	45	56	37	14	79	13,0	1,10
TSR M16	1,60	M16	27	50	8	20	45	81	45	56	37	14	79	13,0	1,20
TSR M18	2,00	M18	27	70	8	20	45	81	45	56	37	14	79	13,0	1,20
TSR M20	2,50	M20	30	100	8	20	45	81	45	56	37	14	79	13,0	1,20
TSR M22	3,00	M22	33	120	14	24	62	105	60	80	45	20	106	19,0	2,80
TSR M24	4,00	M24	36	160	14	24	62	105	60	80	45	20	106	19,0	2,90
TSR M27	5,00	M27	36	200	14	24	62	105	60	80	45	20	106	19,0	2,90
TSR M30	6,30	M30	45	250	14	24	62	105	60	80	45	20	106	19,0	3,00
TSR M36	10,00	M36	54	320	14	30	81	140	80	111	71	30	148	26,5	7,60
TSR M42	12,50	M42	63	400	14	30	84	146	80	111	71	30	148	26,5	7,80

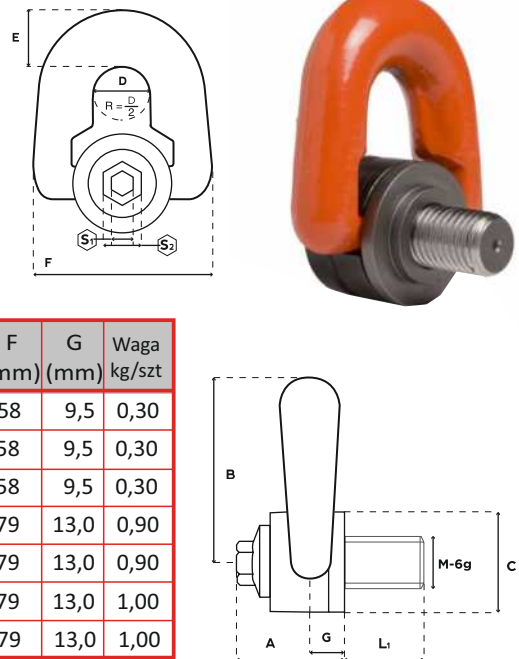


DOUBLE SWIVEL LIFTING POINT DSP

- the DSP double swivel lifting point provides the option of adapting other lifting accessories: passing a cable or rope through it, placement of a ring with a large eye for using hooks that are disproportionate to the lifting ring,
- with its double swivel action, the DSP ring can be perfectly aligned with the sling,
- it consists of a steel ring that has a rotating range of 360°
- supporting eye and body made of alloy steel,
- safety ratio: 5,
- corrosion resistant,
- in accordance with the standard EN 1677-1,
- operating temperature from -40°C to +200°C.



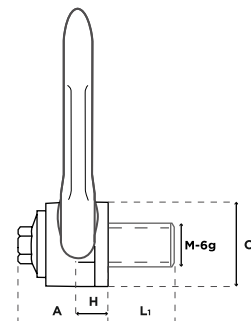
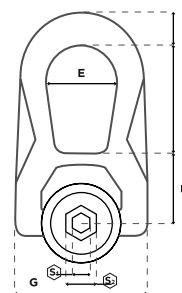
Type	WLL SW 5:1 (t)	thread	L1 (mm)	Screw turn (Nm)	S1 (mm)	S2 (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	Waga kg/szt
DSP M8	0,30	M8	14	6	8	16	33	56	30	19	19	58	9,5	0,30
DSP M10	0,60	M10	17	10	8	16	33	56	30	19	19	58	9,5	0,30
DSP M12	1,00	M12	21	15	8	16	33	56	30	19	19	58	9,5	0,30
DSP M14	1,30	M14	23	30	8	20	45	81	45	25	27	79	13,0	0,90
DSP M16	1,60	M16	27	50	8	20	45	81	45	25	27	79	13,0	0,90
DSP M18	2,00	M18	27	70	8	20	45	81	45	25	27	79	13,0	1,00
DSP M20	2,50	M20	30	100	8	20	45	81	45	25	27	79	13,0	1,00



STAINLESS STEEL DOUBLE SWIVEL LIFTING RING SS DSR



- the SS.DSR stainless steel lifting ring is a double swivel ring.
- it is specially designed for simultaneously lifting and rotating loads. Its double swivel action ensures perfect alignment with the sling.
- the SS.DSR model consists of a stainless steel ring that provides maximum corrosion resistance,
- it can swivel under loads,
- the ring swivels 180°, but has a rotating range of 360°
- safety ratio: 5, • corrosion resistant,
- in accordance with the standard EN 1677-1,
- operating temperature from -40°C to +200°C.

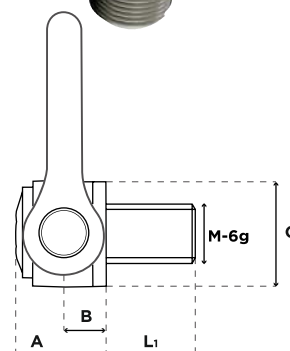
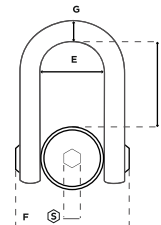
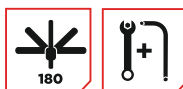


Type	WLL SW 5:1 (t)	WLL SW 4:1 (t)	thread	L1 (mm)	Screw turn (Nm)	S1 (mm)	S2 (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	Weight kg/pcs
SS.DSR M6	0,10	0,15	M6	15	4	8	16	32	30	30	39	28	13	53	9,5	0,30
SS.DSR M8	0,30	0,30	M8	16	6	8	16	32	30	30	39	28	13	53	9,5	0,30
SS.DSR M10	0,50	0,50	M10	16	10	8	16	32	30	30	39	28	13	53	9,5	0,30
SS.DSR M12	0,80	0,80	M12	19	15	8	16	32	30	30	39	28	13	53	9,5	0,30
SS.DSR M14	1,00	1,00	M14	29	30	8	20	44	40	45	53	38	17	76	13,0	0,90
SS.DSR M16	1,40	1,50	M16	26	50	8	20	44	40	45	53	38	17	76	13,0	0,90
SS.DSR M18	1,40	1,50	M18	30	70	8	20	44	40	45	53	38	17	76	13,0	0,90
SS.DSR M20	1,40	1,60	M20	30	100	8	20	44	40	45	53	38	17	76	13,0	0,90
SS.DSR M22	2,20	2,20	M22	42	120	14	24	62	55	58	83	56	25	115	19,0	2,50
SS.DSR M24	2,70	2,70	M24	42	160	14	24	62	55	58	83	56	25	115	19,0	2,60
SS.DSR M27	2,80	2,90	M27	42	200	14	24	62	55	58	83	56	25	115	19,0	2,70
SS.DSR M30	3,00	3,50	M30	47	250	14	24	62	55	58	83	56	25	115	19,0	2,80

STAINLESS STEEL UNIVERSAL DOUBLE SWIVEL SHACKLESS DSS



- the SS.DSS stainless steel lifting ring is a double swivel ring.
- it is specially designed for simultaneously lifting and rotating loads. Its double swivel action ensures perfect alignment with the sling.
- the SS.DSS model consists of a stainless steel ring that provides maximum corrosion resistance and has a rotating range of 360°,
- safety ratio: 5, • in accordance with the standard EN 1677-1,
- operating temperature from -40°C to +200°C.



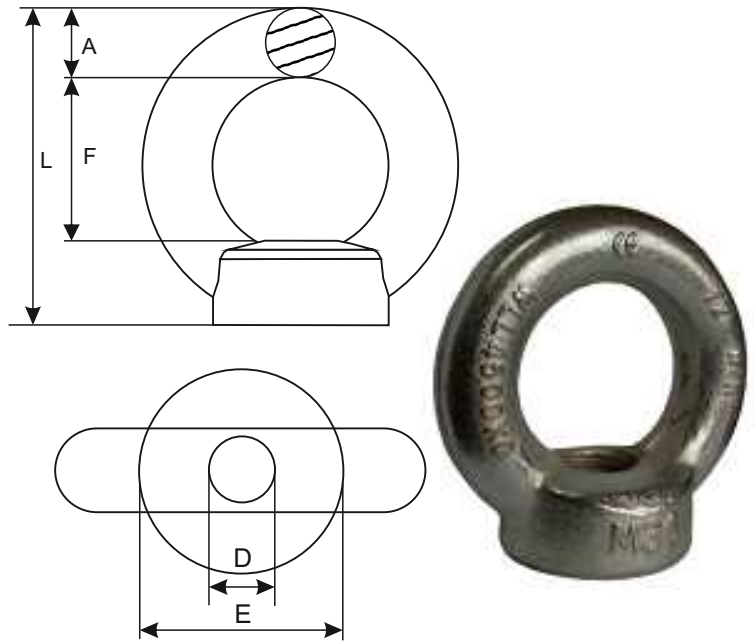
Type	WLL SW 5:1 (t)	WLL SW 4:1 (t)	thread	L1 (mm)	Screw turn (Nm)	S (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	Waga kg/szt
SS.DSS M24	2,70	2,70	M24	36	160	19	61	31	70	98	73	149	30	5,20
SS.DSS M30	3,50	3,50	M30	45	250	19	61	31	70	98	73	149	30	5,20
SS.DSS M33	3,50	3,50	M33	50	250	19	61	31	70	98	73	149	30	5,20
SS.DSS M36	5,00	5,00	M36	54	320	19	61	31	70	98	73	149	30	5,20
SS.DSS M36	5,00	5,00	M36	54	320	19	61	31	70	98	73	149	30	5,20
SS.DSS M39	5,00	5,00	M39	58	320	19	61	31	70	98	73	149	30	5,40
SS.DSS M42	6,00	6,00	M42	63	400	19	61	31	70	98	73	149	30	5,40
SS.DSS M42	6,00	6,00	M42	63	400	19	61	31	70	98	73	149	30	5,40
SS.DSS M45	-	6,00	M45	63	400	19	61	31	70	98	73	149	30	5,70
SS.DSS M48	-	6,40	M48	68	600	19	79	38	90	123	91	182	41	11,00
SS.DSS M48	-	6,40	M48	68	600	19	79	38	90	123	91	182	41	11,00
SS.DSS M48	-	6,40	M48	68	600	19	79	38	90	123	91	182	41	11,00
SS.DSS M52	-	6,40	M52	68	600	19	79	38	90	123	91	182	41	12,20
SS.DSS M56	-	8,00	M56	78	600	19	79	38	90	123	91	182	41	11,30
SS.DSS M56	-	8,00	M56	78	600	19	79	38	90	123	91	182	41	11,40

EYE NUT DIN 582

- serves as a point of attachment during elements lifting,
- galvanized,
- safety ratio: 6,
- made of carbon steel C15,
- corrosion resistant,
- in accordance with the standard 582,
- operating temperature from -40°C to +200°C.



Type	ΦD (mm)	WLL (t)	A (mm)	F (mm)	L (mm)	E (mm)	Weight kg/pcs
DIN582-M8	M8	0,14	8	20	36,0	20	0,05
DIN582-M10	M10	0,23	10	25	45,0	25	0,09
DIN582-M12	M12	0,34	12	30	53,5	30	0,16
DIN582-M16	M16	0,70	14	35	62,0	35	0,24
DIN582-M20	M20	1,20	16	40	71,0	40	0,36
DIN582-M24	M24	1,80	20	50	90,0	50	0,72
DIN582-M30	M30	3,60	24	60	109,0	65	1,32
DIN582-M36	M36	5,10	28	70	128,0	75	2,08
DIN582-M42	M42	7,00	32	80	147,0	85	3,11
DIN582-M48	M48	8,60	38	90	168,0	100	5,02
DIN582-M56	M56	11,50	42	100	187,0	110	6,90
DIN582-M64	M64	16,00	48	110	208,0	120	9,30

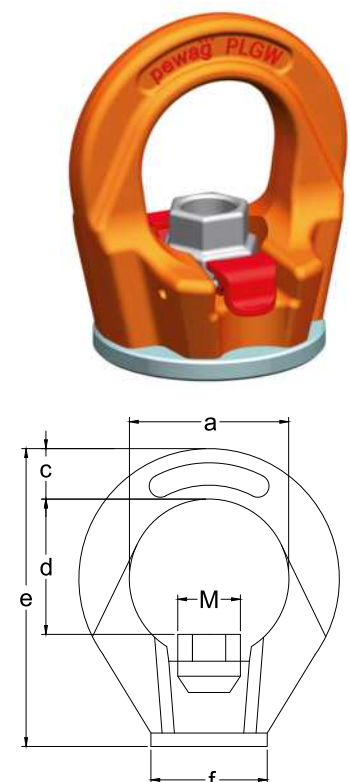


SCREW NUT PLGW-SN

- eye nut, installation without tools,
- the screw is a replaceable element,
- chromed surface and protected against corrosion,
- safety ratio: 4,
- steel grade 10,
- corrosion resistant,
- in accordance with the standard EN 1677-1,
- operating temperature from -40°C to +200°C.



Type	thread	WLL (t)	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	f (mm)	Waga kg/szt
PLGW-SN 0,3	M8	0,3	25	45	10	21	55	35	0,17
PLGW-SN 0,5	M10	0,5	25	45	10	21	55	35	0,17
PLGW-SN 0,7	M12	0,7	30	55	12	25	65	43	0,28
PLGW-SN 1,5	M16	1,5	35	64	14	29	72	50	0,42
PLGW-SN 2,3	M20	2,3	40	69	16	34	80	54	0,50
PLGW-SN 3,5	M24	3,2	50	86	18	40	95	69	1,00
PLGW-SN 4,9	M30	4,9	60	110	25	47	115	90	2,00

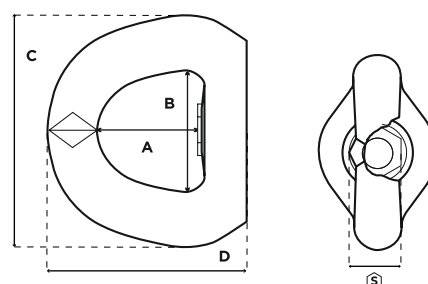


SWIVEL LIFTING RING FE-SEB

- the swivel eye nut FE.SEB is fitted with an automatic position recovery system for optimum orientation in the direction of the sling.
- the hook will move parallel to the contact face of the ring in a 90° pull configuration
- safety ratio: 5,
- corrosion resistant,
- in accordance with the standard EN 1677-1,
- operating temperature from -40°C to +200°C.



Type	WLL SW 5:1 (t)	WLL SW 4:1 (t)	thread	L max (mm)	Screw turn (Nm)	S (mm)	A (mm)	B (mm)	C (mm)	D (mm)	Weight kg/pcs
FE.SEB M8	0,40	0,50	M8	22	6	21	38	45	88	80	0,80
FE.SEB M10	0,50	0,70	M10	22	10	21	38	45	88	80	0,80
FE.SEB M12	0,80	0,90	M12	22	15	21	38	45	88	80	0,80
FE.SEB M16	1,40	1,80	M16	22	50	21	38	45	88	80	0,80
FE.SEB M20	2,00	2,70	M20	35	100	36	55	70	115	106	2,50
FE.SEB M24	3,20	4,20	M24	48	160	40	77	94	168	155	6,30
FE.SEB M30	5,50	6,30	M30	48	250	40	77	94	168	155	6,30
FE.SEB M36	9,40	11,00	M36	48	320	40	77	94	168	155	6,30

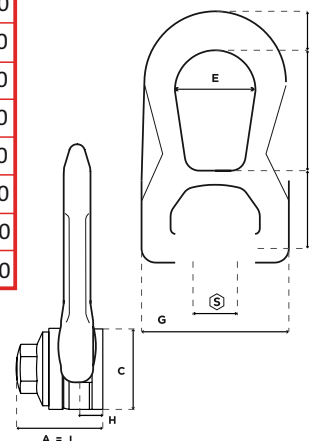


SWIVEL LIFTING RING FE-DSR

- the female double swivel ring FE.DSR has been especially designed to guarantee liftings under load.
- its double articulation allows it to line up perfectly with the sling.
- the female double swivel ring FE.DSR can be used with threaded parts in different lengths.
- 360° rotation, 180° tilt,
- safety ratio: 5,
- corrosion resistant,
- in accordance with the standard EN 1677-1,
- operating temperature from -40°C to +200°C.

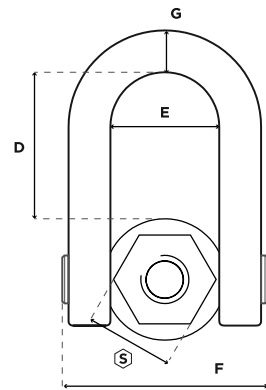
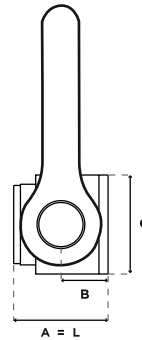


Type	WLL SW 5:1 (t)	WLL SW 4:1 (t)	thread	L max (mm)	Screw turn (Nm)	S (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	Waga kg/szt
FE.DSR M8	0,40	0,50	M8	45	6	20	45	40	45	53	38	17	76	13	0,30
FE.DSR M10	0,70	0,90	M10	45	10	20	45	40	45	53	38	17	76	13	0,30
FE.DSR M12	1,05	1,30	M12	45	15	20	45	40	45	53	38	17	76	13	0,30
FE.DSR M14	1,40	1,80	M14	45	30	20	45	40	45	53	38	17	76	13	0,90
FE.DSR M16	2,00	2,30	M16	45	50	20	45	40	45	53	38	17	76	13	0,90
FE.DSR M18	2,30	2,30	M18	62	70	24	62	55	60	83	55	25	115	19	2,60
FE.DSR M20	2,50	2,50	M20	62	100	24	62	55	60	83	55	25	115	19	2,60
FE.DSR M22	3,50	4,50	M22	62	120	24	26	55	60	83	55	25	115	19	2,60



SWIVEL LIFTING RING FE-DSS

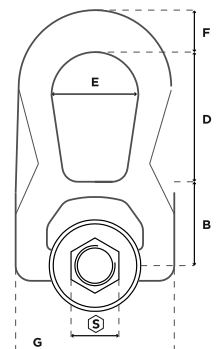
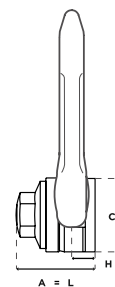
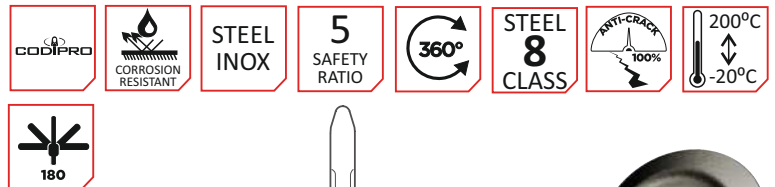
- eye nut, equipped with an automatic positioning system,
- 360° rotation, 180° tilt,
- with a high WLL per lifting ring, the female double swivel shackle FE.DSS has been especially designed for liftings and turnings of heavy loads,
- it can be used with threaded parts in different lengths,
- the shackle of the lifting ring FE.DSS also has a very large hole,
- safety ratio: 5,
- corrosion resistant,
- in accordance with the standard EN 1677-1,
- operating temperature from -40°C to +200°C.



Type	WLL SW 5:1 (t)	WLL SW 4:1 (t)	thread	L max (mm)	Screw turn (Nm)	S (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	Weight kg/pcs
FE.DSS M24UP	4,50	5,50	M24	66	160	50	66	31	70	98	73	149	33	5,8
FE.DSS M27UP	5,20	6,50	M24	66	200	50	66	31	70	98	73	149	33	5,8
FE.DSS M30UP	7,50	8,50	M30	65	250	50	66	31	70	98	73	149	33	5,8
FE.DSS M33UP	8,00	10,50	M33	66	250	50	66	31	70	98	73	149	33	5,8
FE.DSS M36UP	10,00	10,50	M36	66	320	50	66	31	70	98	73	149	33	5,8
FE.DSS M39UP	12,00	12,00	M39	89	320	60	89	38	95	123	91	182	45	12,0
FE.DSS M42UP	13,00	14,00	M42	89	400	60	89	38	95	123	91	182	45	12,0
FE.DSS M45UP	14,50	16,00	M45	89	400	60	89	38	95	123	91	182	45	12,0
FE.DSS M48UP	17,00	20,00	M48	89	600	60	89	38	95	123	91	182	45	12,0
FE.DSS M52UP	19,00	21,00	M52	89	600	60	89	38	95	123	91	182	45	12,0

SWIVEL LIFTING RING SS.FE-DSR

- swivel lifting ring with eye,
- 360° rotation, 180° tilt,
- the stainless steel version of the double swivel ring, SS.FE.DSR, can be used in humid, corrosive, chemical, maritime environment,
- the stainless steel female double swivel ring SS.FE.DSR can be used with threaded parts in different lengths.
- safety ratio: 5,
- corrosion resistant,
- in accordance with the standard EN 1677-1,
- operating temperature from -40°C to +200°C.

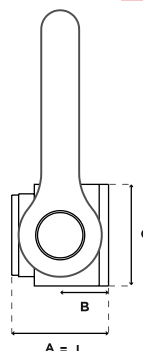


Type	WLL SW 5:1 (t)	WLL SW 4:1 (t)	thread	L max (mm)	Screw turn (Nm)	S (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	Weight kg/pcs
SS.FE.DSR M8	0,30	0,30	M8	43	6	20	43	40	45	53	38	17	76	13	0,90
SS.FE.DSR M10	0,50	0,50	M10	43	10	20	43	40	45	53	38	17	76	13	0,90
SS.FE.DSR M12	0,80	0,80	M12	43	15	20	43	40	45	53	38	17	76	13	0,90
SS.FE.DSR M14	1,00	1,00	M14	43	30	20	43	40	45	53	38	17	76	13	0,90
SS.FE.DSR M16	1,40	1,50	M16	43	50	20	43	40	45	53	38	17	76	13	0,90
SS.FE.DSR M18	1,40	1,50	M18	62	70	24	62	55	58	83	56	25	115	19	2,60
SS.FE.DSR M20	1,40	1,60	M20	62	100	24	62	55	58	83	56	25	115	19	2,60
SS.FE.DSR M22	2,20	2,20	M22	62	120	24	26	55	58	83	56	25	115	19	2,60

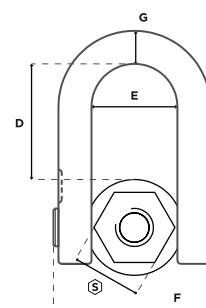
SWIVEL LIFTING RING SS.FE-DSS



- swivel lifting ring, equipped with an automatic positioning system,
- 60° rotation, 180° tilt,
- with a high WLL per lifting ring, the stainless steel female double swivel shackle SS.FE.DSS has been especially designed for liftings and turnings of heavy loads.
- thanks to its stainless steel version, the ring can be used in humid, corrosive, chemical, maritime environment,
- as all female lifting rings in our range, the swivel lifting ring SS.FE.DSS can also be used with threaded parts in different length,
- the shackle of the lifting ring SS.FE.DSS also has a very large hole
- safety ratio: 5,
- corrosion resistant,
- in accordance with the standard EN 1677-1,
- operating temperature from -40°C to +200°C.



Type	WLL SW 5:1 (t)	WLL SW 4:1 (t)	thread	L max (mm)	Screw turn (Nm)	S (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	Weight kg/pcs
SS.FE.DSS M24	2,70	2,70	M24	66	160	50	66	31	70	98	73	149	30	5,8
SS.FE.DSS M30	3,50	3,50	M30	66	250	50	66	31	70	98	73	149	30	5,8
SS.FE.DSS M33	3,50	3,50	M33	66	250	50	66	31	70	98	73	149	30	5,8
SS.FE.DSS M36	5,00	5,00	M36	66	320	50	66	31	70	98	73	149	30	5,8

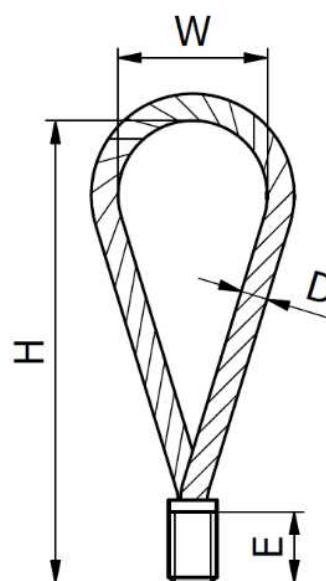


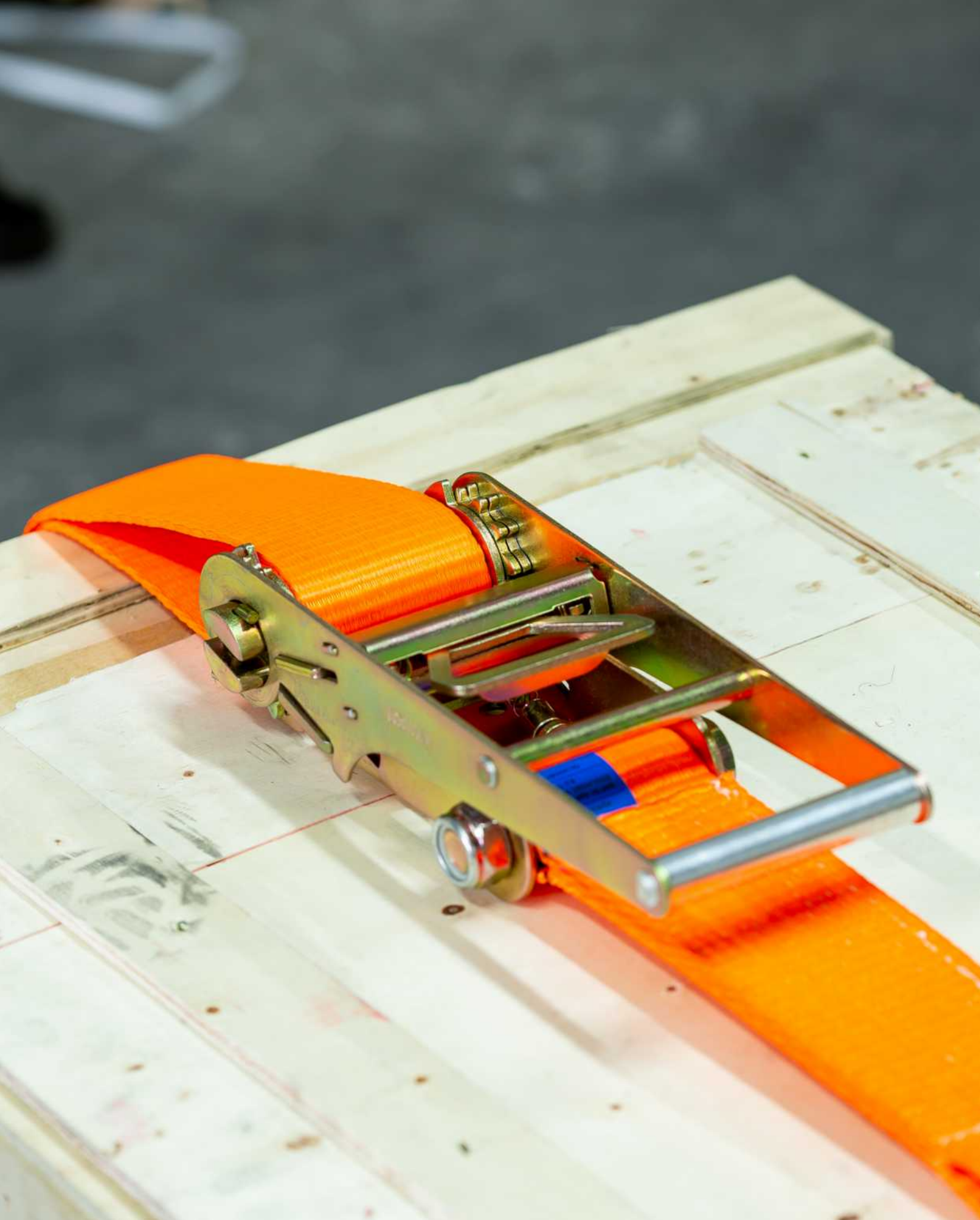
WIRE ROPE EYE BOLT LSU

- flexible, galvanized solid wire rope,
- threaded part of special steel, uncoated,
- galvanized,
- durable round thread,
- corrosion resistant,
- made in accordance with the Machinery Directive 2006/42/W,
- operating temperature from -40°C to +200°C.



Type	WLL (t)	thread	H (mm)	E (mm)	D (mm)	W (mm)	Weight kg/pcs
LSU-M10	0,33	10	114	20	5,5	38	0,05
LSU-M12	0,50	12	128	22	6,0	40	0,06
LSU-M14	0,80	14	155	25	6,5	55	0,08
LSU-M16	1,20	16	175	28	9,0	58	0,10
LSU-M20	1,60	20	210	35	10,0	65	0,20
LSU-M24	2,50	24	255	45	12,0	80	0,40
LSU-M30	4,00	30	300	58	16,0	87	0,90

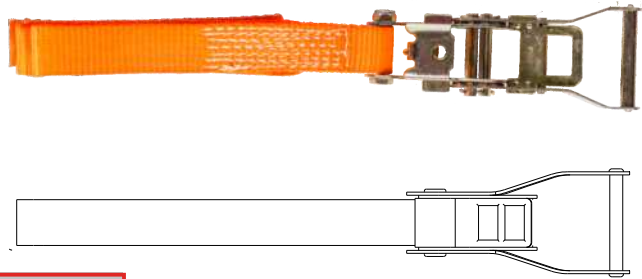





FASTENING SYSTEMS

ONE PIECE LASHING STRAPS

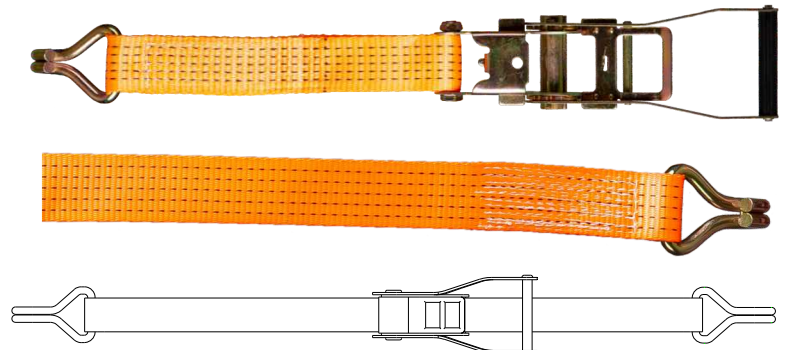
- straps for wrapping and anchoring loads,
- in accordance with the standard PN-EN 12195-2,
- length according to customer's order,
- standard two-toothed profile hook, it is possible to use single-toed hooks, type "S", profile type "U", secured hooks, links, shackles, forged hooks,
- safety ratio: 2 for steel elements, 3 for polyester tape,
- galvanized hooks and tensioner,
- impregnated tape - greater belt abrasion resistance,
- tape resistant to rotting, does not absorb moisture and does not rust.





Type	Name	Tape width (mm)	Fastening capacity LC 	Length (m)
TP1-25	Pas transportowy TP1-25	25	800 daN	wg zamówienia
TP1-35	Pas transportowy TP1-35	35	2000 daN	
TP1-40	Pas transportowy TP1-40	50	4000 daN	
TP1-50	Pas transportowy TP1-50	50	5000 daN	
TP1-75	Pas transportowy TP1-75	75	10000 daN	

TWO PIECE LASHING STRAPS

- straps for wrapping and anchoring loads,
- in accordance with the standard PN-EN 12195-2,
- length according to customer's order,
- standard two-toothed profile hook, it is possible to use single-toed hooks, type "S", profile type "U", secured hooks, links, shackles, forged hooks,
- safety ratio: 2 for steel elements, 3 for polyester tape,
- galvanized hooks and tensioner,
- impregnated tape - greater belt abrasion resistance,
- tape resistant to rotting, does not absorb moisture and does not rust.



Type	Name	Tape width (mm)	Strength of elements	Fastening capacity LC 	Zfastening capacity LC 	Length (m.)
TP2-25	Pas transportowy TP2-25	25	1000 daN	400 daN	800 daN	according to the order
TP2-35	Pas transportowy TP2-35	35	2000 daN	1000 daN	2000 daN	
TP2-40	Pas transportowy TP2-40	50	4000 daN	2000 daN	4000 daN	
TP2-50	Pas transportowy TP2-50	50	5000 daN	2500 daN	5000 daN	
TP2-75	Pas transportowy TP2-75	75	10000 daN	5000 daN	10000 daN	

PRZYKŁADOWE ZAKOŃCZENIA PASÓW

Profiled hook 2J (standard)	Profiled hook U	Profiled hook J	Hak z uchem ME
			
Tape: 25, 35, 50, 75 (mm)	Tape: 35, 50, 75 (mm)	Tape: 25, 35, 50 (mm)	Tape: 50, 75 (mm)

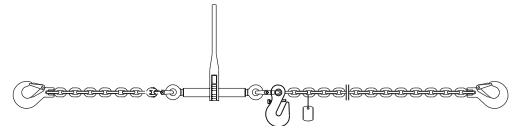
ONE-PART LASHING CHAIN CL 8



- tension ratchet permanently connected to the chain by means of couplings,
- it is possible to use shortening hooks with protection on both sides of the tensioner,
- steel class 8 chain, components in steel class 8,
- anti-corrosive chain protection, powder coated components,
- safety ratio: 2,
- corrosion resistant,
- in accordance with the standard PN-EN 12195-3,
- operating temperature from -40°C to +200°C.



Type	Fixing ability LC (kN)	Standard tension force STF [daN]	Length of lashing (mm)	Operating range (mm)	Hook's throat width E (mm)	Weight kg/pcs
ODJ 8-8	40	1000	355	145	28	10,0
ODJ 10-8	63	1575	355	145	31	14,0
ODJ 13-8	106	1500	365	145	42	22,4
ODJ 16-8	160	2400	355	145	45	37,7



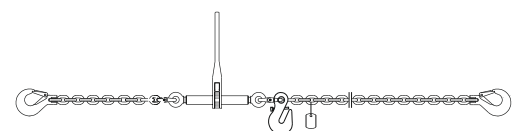
ONE-PART LASHING CHAIN CL.10



- tension ratchet permanently connected to the chain by means of couplings,
- it is possible to use shortening hooks with protection on both sides of the tensioner,
- steel class 10 chain, components in steel class 10,
- anti-corrosive chain protection, powder coated components,
- safety ratio: 2,
- corrosion resistant,
- in accordance with the standard PN-EN 12195-3,
- operating temperature from -40°C to +200°C.



Type	Fixing ability LC (kN)	Standard tension force STF [daN]	Length of lashing (mm)	Operating range (mm)	Hook's throat width E (mm)	Weight kg/pcs
ODJ 8-10	50	1900	355	145	26	10,0
ODJ 10-10	80	3000	365	145	31	14,5
ODJ 13-10	134	2500	576	290	39	25,5
ODJ 16-10	200	-	530	250	45	37,7



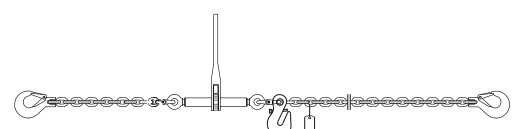
ONE-PART LASHING CHAIN CL.12



- tension ratchet permanently connected to the chain by means of couplings,
- it is possible to use shortening hooks with protection on both sides of the tensioner,
- steel class 12 chain, components in steel class 12,
- anti-corrosive chain protection, powder coated components,
- safety ratio: 2, • corrosion resistant,
- in accordance with the standard PN-EN 12195-3,
- operating temperature from -40°C to +200°C.



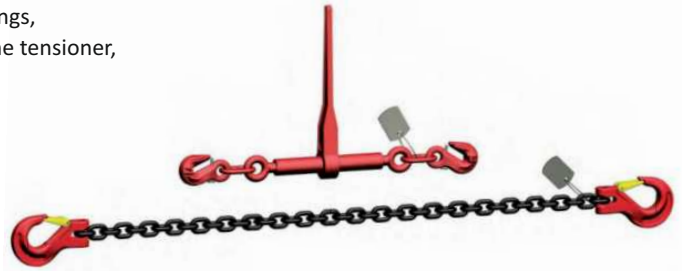
Type	Fixing ability LC (kN)	Standard tension force STF [daN]	Length of lashing (mm)	Operating range (mm)	Hook's throat width E (mm)	Weight kg/pcs
ODJ 8-12	50	1900	355	145	26	10,3
ODJ 10-12	100	3000	365	145	31	15,0
ODJ 13-12	160	2500	576	290	39	26,7



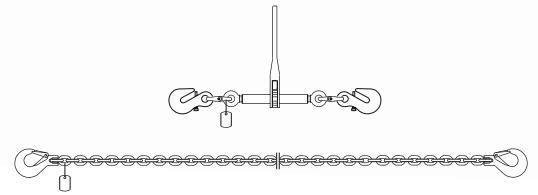
TWO-PART LASHING CHAIN CL 8



- lashing chain with loadbinder,
- tension ratchet permanently connected to the chain by means of couplings,
- it is possible to use shortening hooks with protection on both sides of the tensioner,
- steel class 8 chain, components in steel class 8,
- anti-corrosive chain protection, powder coated components,
- safety ratio: 2, • corrosion resistant,
- in accordance with the standard PN-EN 12195-3,
- operating temperature from -40°C to +200°C.



Type	Fixing ability LC (kN)	Standard tension force STF [daN]	Length of lashing (mm)	Operating range (mm)	Hook's throat width E (mm)	Weight kg/pcs
ODD 8-8	40	1000	420	145	28	9,5
ODD 10-8	63	1575	420	145	31	14,0
ODD 13-8	100	1500	436	145	42	22,0
ODD 16-8	160	2400	430	145	45	35,0

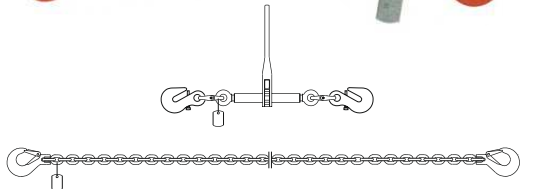
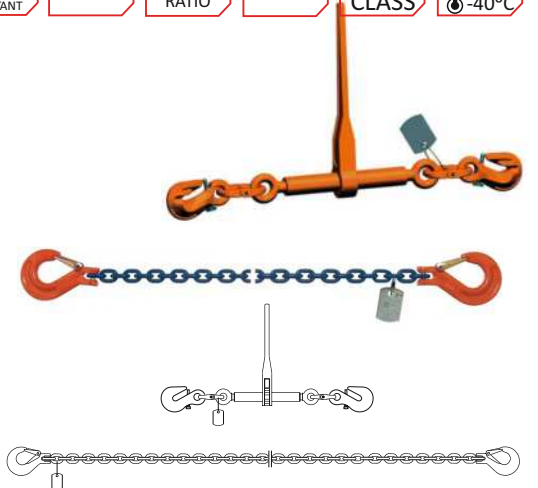


TWO-PART LASHING CHAIN CL.10



- lashing chain with loadbinder,
- tension ratchet permanently connected to the chain by means of couplings,
- it is possible to use shortening hooks with protection on both sides of the tensioner,
- steel class 10 chain, components in steel class 10,
- anti-corrosive chain protection, powder coated components,
- safety ratio: 2, • corrosion resistant,
- in accordance with the standard PN-EN 12195-3,
- operating temperature from -40°C to +200°C.

Type	Fixing ability LC (kN)	Standard tension force STF [daN]	Length of lashing (mm)	Operating range (mm)	Hook's throat width E (mm)	Weight kg/pcs
ODD 7-10	38	1900	420	145	26	9,5
ODD 8-10	50	1900	420	145	26	14,0
ODD 10-10	80	3000	436	145	31	22,0
ODD 13-10	134	2500	430	290	39	35,0

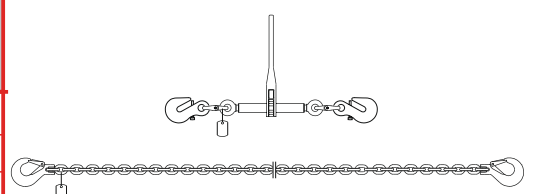


TWO-PART LASHING CHAIN CL.12



- lashing chain with loadbinder,
- tension ratchet permanently connected to the chain by means of couplings,
- it is possible to use shortening hooks with protection on both sides of the tensioner,
- steel class 12 chain, components in steel class 12,
- the use of components in class 12 allows for a 50% greater extraction capacity compared to class 8 with the same mass and dimensions of extraction,
- higher abrasion resistance of the chain and components compared to class 8 due to the use of harder materials,
- anti-corrosive chain protection, powder coated components,
- safety ratio: 2, • corrosion resistant,
- in accordance with the standard PN-EN 12195-3,
- operating temperature from -40°C to +200°C.

Type	Fixing ability LC (kN)	Standard tension force STF [daN]	Length of lashing (mm)	Operating range (mm)	Hook's throat width E (mm)	Weight kg/pcs
ODD 8-12	60,0	1900	420	145	26	9,5
ODD 10-12	100,0	3000	420	145	31	14,0
ODD 13-12	160,0	2500	430	290	39	35,0





STEEL ROPES

Method of marking steel ropes according to PN-EN 12385-2:

STEEL ROPE

22 6x36WS IWRC 1770 B sZ

Dimension (diameter)

Rope construction (6x19M, 8x19S)

Core construction (FC, IWRC, WSC)

Rope strength class (1570, 1770, 1960)

Wire cover (A, B, U)

Rolling direction (sZ, zS, zZ, sS)

Rope construction:

number of strands x number of wires in the strand

Strand structure: Permitted rope - no symbol, Point-to-point rope- M, Rope with a combined contact- N, Rope type Seal- S, Rope type Warrington- W, Rope type Filler- F, Rope type Warrington - Seal- WS

Core construction:

FC - fiber core,
IWRC - steel wire core,
WSC - spring wire core,
WC - steel core.

Wire cover:

U - bare wire,
A - heavily galvanized
(thick layer),
B - galvanized.

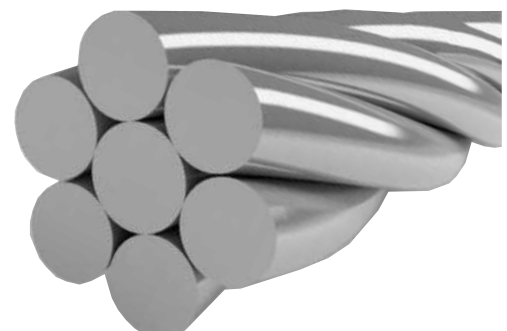
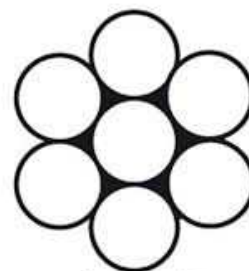
Rolling direction:

right opposite ropes: s / Z, strand direction - left, and ropes - right,
left back rope: z / S, strand direction - right, and rope - left,
right co-fold ropes: z / Z, winding direction of strands and ropes,
left co-fold ropes: s / S, strand direction and ropes - left.

Rope strength class [MPa] – level of required strength for which the value of rope breaking force is determined, determined by values 1770, 1960, 2160, itp. The strength class corresponds directly to the strength of Rm wires per rope, which is expressed by the ratio of the wire breaking force to its cross-section.

GALVANIZED STEEL ROPE 1x7

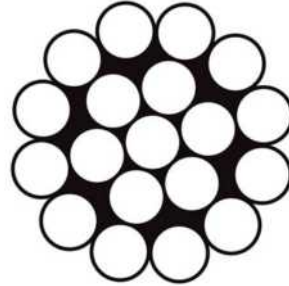
- galvanized steel rope, made in accordance with the standard DIN 3052,
- 1x7 single-layer weave; 1 wire with 7 wires wound around,
- very stiff, not very elastic but highly extensible,
- high greater abrasion resistance than the rope 1x19,
- tensile strength 1770 N/mm².



Type	Dimension diameter (mm)	Constr. RHRL	Weight m/kg	Tensile strength 1770 (N/mm ²) Minimum breaking load (kN)
Rope 1x7 1,0	1,0	1x7	0,005	98
Rope 1x7 1,2	1,2	1x7	0,007	138
Rope 1x7 1,5	1,5	1x7	0,011	215
Rope 1x7 1,8	1,8	1x7	0,016	310
Rope 1x7 2,0	2,0	1x7	0,020	392
Rope 1x7 2,5	2,5	1x7	0,031	613
Rope 1x7 3,0	3,0	1x7	0,045	882
Rope 1x7 3,5	3,5	1x7	0,062	1.206
Rope 1x7 4,0	4,0	1x7	0,080	1.570
Rope 1x7 4,5	4,5	1x7	0,102	1.980
Rope 1x7 5,0	5,0	1x7	0,126	2.450
Rope 1x7 6,0	6,0	1x7	0,181	3.530
Rope 1x7 7,0	7,0	1x7	0,246	4.800
Rope 1x7 8,0	8,0	1x7	0,321	6.270
Rope 1x7 9,0	9,0	1x7	0,407	7.940
Rope 1x7 10,0	10,0	1x7	0,502	9.800
Rope 1x7 12,0	12,0	1x7	0,723	14.100

GALVANIZED STEEL ROPE 1x19

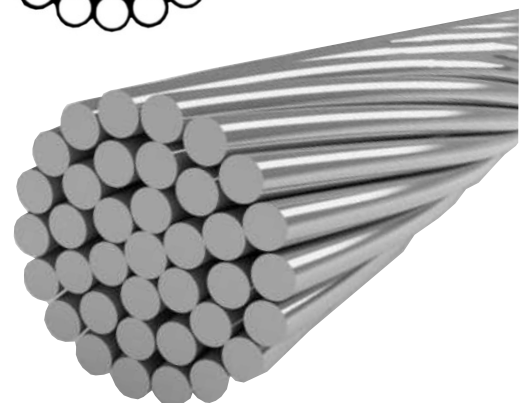
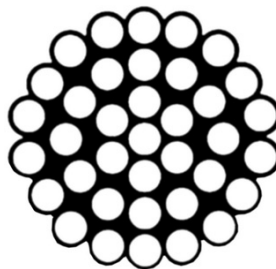
- galvanized steel rope, made in accordance with the standard DIN 3053,
- two-layer weave 1x19, 12+6+1 - the rope consists of 19 wires in two layers,
- stiff, not very elastic but highly extensible,
- increased resistance to abrasion,
- tensile strength 1770 N/mm²,
- rope used mainly where the rope works only in tension, in industrial equipment, as tension and guy ropes (masts, antenna structures) and as suspension ropes (e.g. wires, cables).



Type	Dimension diameter (mm)	Constr. RHRL	Weight m/kg	Tensile strength 1770 (N/mm ²) Minimum breaking load (kN)
Rope 1x19 1,5	1,5	1x19	0,011	213
Rope 1x19 2,0	2,0	1x19	0,019	378
Rope 1x19 2,5	2,5	1x19	0,031	591
Rope 1x19 3,0	3,0	1x19	0,044	851
Rope 1x19 3,5	3,5	1x19	0,060	1.160
Rope 1x19 4,0	4,0	1x19	0,079	1.510
Rope 1x19 4,5	4,5	1x19	0,099	1.935
Rope 1x19 5,0	5,0	1x19	0,124	2.360
Rope 1x19 5,5	5,5	1x19	0,150	2.865
Rope 1x19 6,0	6,0	1x19	0,178	3.400
Rope 1x19 7,0	7,0	1x19	0,243	4.630
Rope 1x19 8,0	8,0	1x19	0,317	6.050
Rope 1x19 9,0	9,0	1x19	0,401	7.660
Rope 1x19 10,0	10,0	1x19	0,495	9.450
Rope 1x19 11,0	11,0	1x19	0,599	11.400
Rope 1x19 12,0	12,0	1x19	0,713	13.600
Rope 1x19 13,0	13,0	1x19	0,837	16.000
Rope 1x19 14,0	14,0	1x19	0,971	18.500
Rope 1x19 15,0	15,0	1x19	1,110	21.300
Rope 1x19 16,0	16,0	1x19	0,270	24.200
Rope 1x19 17,0	17,0	1x19	1,430	27.385
Rope 1x19 18,0	18,0	1x19	0,610	30.690

GALVANIZED STEEL ROPE 1x37

- galvanized steel rope, made in accordance with the standard DIN 3054,
- single layer weave 1x37; twisted gossip in three operations, a structure that contains three layers of wires wound on central wire – 1-6/12/18,
- greater flexibility with less abrasion resistance,
- tensile strength 1770 N/mm²,
- application (the rope only works for stretching): industrial equipment, in cars (brake and gas cables), as tension and suction cables and suspension cables.

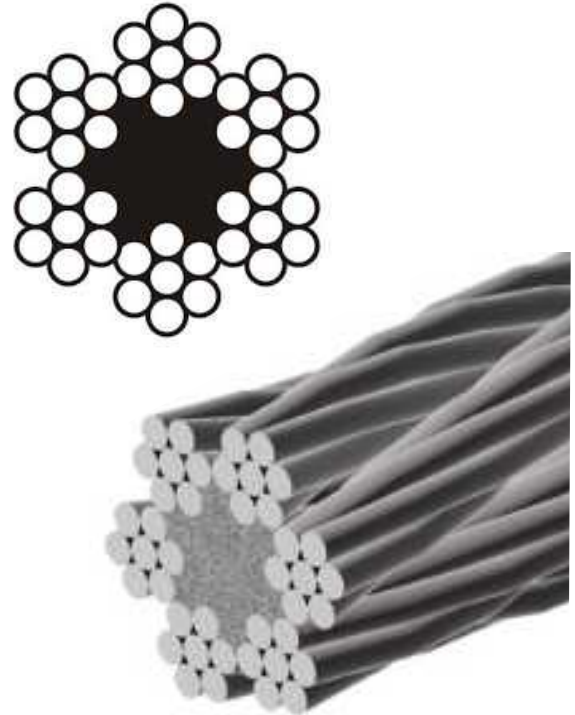


Type	Dimension diameter (mm)	Constr. RHRL	Weight m/kg	Tensile strength 1770 (N/mm ²) Minimum breaking load (kN)
Rope 1x37 4,0	4,0	1x37	0,078	14,5
Rope 1x37 5,0	5,0	1x37	0,122	22,7
Rope 1x37 6,0	6,0	1x37	0,176	32,7
Rope 1x37 7,0	7,0	1x37	0,240	44,4
Rope 1x37 8,0	8,0	1x37	0,313	58,1
Rope 1x37 9,5	9,0	1x37	0,396	73,5
Rope 1x37 10,0	10,0	1x37	0,489	90,7
Rope 1x37 12,0	12,0	1x37	0,710	133,2
Rope 1x37 14,0	14,0	1x37	0,980	184,5
Rope 1x37 16,0	16,0	1x37	1,200	222,3
Rope 1x37 18,0	18,0	1x37	1,540	288,0
Rope 1x37 20,0	20,0	1x37	1,940	361,8
Rope 1x37 22,0	22,0	1x37	2,220	414,0

GALVANIZED STEEL ROPE 6x7 FC

- galvanized steel rope, made in accordance with the standard 12385-4,
- single layer weave 6x7, soft rope with medium elasticity and high load capacity; 6 - number of strands, 7 - number of individual wires in the weave,
- fiber core,
- tensile strength 1770 N/mm²,
- high abrasion resistance with little flexibility,
- diameters of outer layer wires much thicker than with ropes of other structures,
- are often used in fishing (trawling ropes), they are also used in T-bar ski lifts.

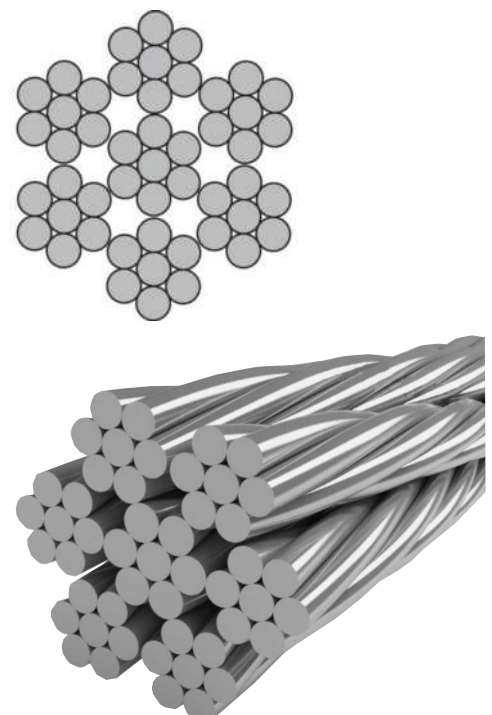
Type	Dimension diameter (mm)	Constr. RHRL	Weight m/kg	Tensile strength 1770 (N/mm ²) Minimum breaking load (kN)
Rope 6x7 2,0	2,0	6x7	1,38	2,35
Rope 6x7 3,0	3,0	6x7	3,11	5,29
Rope 6x7 4,0	4,0	6x7	5,52	9,40
Rope 6x7 5,0	5,0	6x7	8,63	14,70
Rope 6x7 6,0	6,0	6x7	12,40	21,20
Rope 6x7 7,0	7,0	6x7	16,90	28,80
Rope 6x7 8,0	8,0	6x7	22,10	37,60
Rope 6x7 9,0	9,0	6x7	27,90	47,60
Rope 6x7 10,0	10,0	6x7	34,50	58,80
Rope 6x7 11,0	11,0	6x7	41,70	71,10
Rope 6x7 12,0	12,0	6x7	49,70	84,60
Rope 6x7 13,0	13,0	6x7	58,30	99,30
Rope 6x7 14,0	14,0	6x7	67,60	115,00
Rope 6x7 16,0	16,0	6x7	88,30	150,00
Rope 6x7 18,0	18,0	6x7	112,00	190,00
Rope 6x7 20,0	20,0	6x7	138,00	235,00



GALVANIZED STEEL ROPE 6x7 WSC

- galvanized steel rope, made in accordance with the standard 12385-4,
- single layer weave 6x7 soft rope with medium elasticity and high load capacity; 6 - number of weaves, 7 - number of individual wires in the weave, WSC - spring wire core,
- with a steel core in the form of strands WSC - the same construction as the rope strands,
- greater stiffness compared to 6 x7 fiber core ropes,
- they are used similar to ropes with a fiber core, additionally used as reinforcing ropes for rubber conveyor belts.

Type	Dimension diameter (mm)	Constr. RHRL	Weight m/kg	Tensile strength 1770 (N/mm ²) Minimum breaking load (kN)
Rope 6x7 WSC 6	6,0	6x37 WSC	0,144	22,9
Rope 6x7 WSC 7	7,0	6x37 WSC	0,196	31,1
Rope 6x7 WSC 8	8,0	6x37 WSC	0,256	40,7
Rope 6x7 WSC 9	9,0	6x37 WSC	0,326	51,5
Rope 6x7 WSC 10	10,0	6x37 WSC	0,410	63,5
Rope 6x7 WSC 11	11,0	6x37 WSC	0,503	76,9
Rope 6x7 WSC 12	12,0	6x37 WSC	0,605	91,5
Rope 6x7 WSC 13	13,0	6x37 WSC	0,691	107,0
Rope 6x7 WSC 14	14,0	6x37 WSC	0,809	125,0
Rope 6x7 WSC 15	15,0	6x37 WSC	0,900	143,0
Rope 6x7 WSC 16	16,0	6x37 WSC	1,020	163,0
Rope 6x7 WSC 17	17,0	6x37 WSC	1,160	184,0
Rope 6x7 WSC 18	18,0	6x37 WSC	1,320	206,0
Rope 6x7 WSC 19	19,0	6x37 WSC	1,440	229,0
Rope 6x7 WSC 20	20,0	6x37 WSC	1,600	254,0

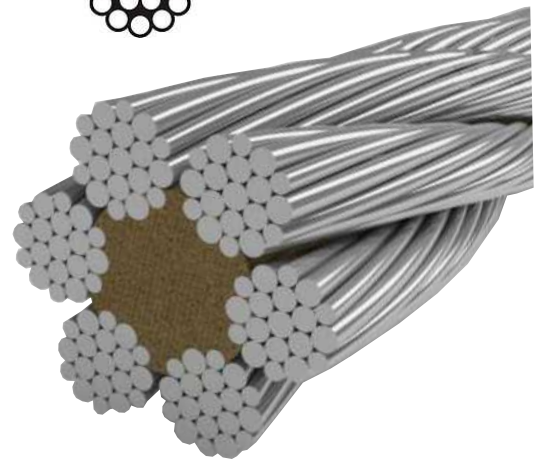
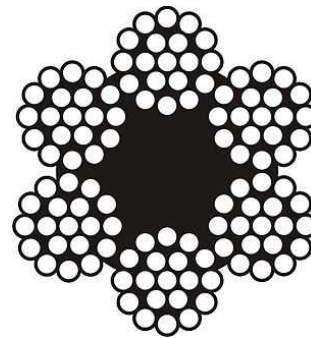


GALVANIZED STEEL ROPE 6x19 FC

- galvanized steel rope, made in accordance with the standard 12385-4,
- three-layer weave 6x19+FC, in each strand 19 wires of the same diameter, in three layers (1+6+12); FC (eng. fibre core) - fiber core, which makes the rope more flexible,
- soft with high elasticity and high load capacity,
- used in winches and hoists,
- use on agricultural and horticultural farms and in fisheries.

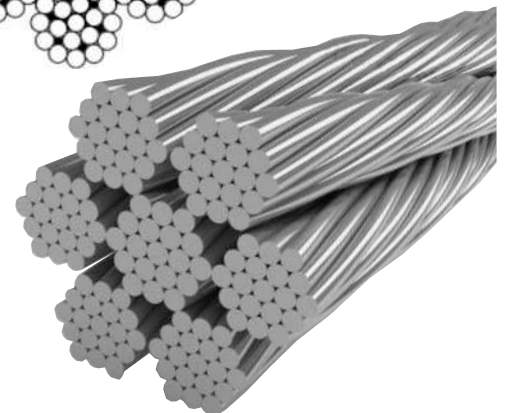
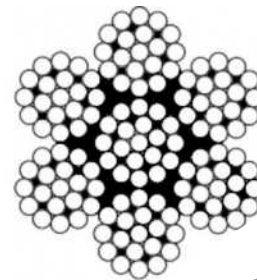


Type	Dimension diameter (mm)	Constr. RHRL	Weight m/kg	Tensile strength (N/mm ²)	
				1770	1960
Minimum breaking load (kN)					
Rope 6x19 3,0	3,0	6x19	3,11	4,89	5,42
Rope 6x19 4,0	4,0	6x19	5,54	8,69	9,63
Rope 6x19 5,0	5,0	6x19	8,65	13,60	15,00
Rope 6x19 6,0	6,0	6x19	12,50	19,60	21,70
Rope 6x19 7,0	7,0	6x19	17,00	26,60	29,50
Rope 6x19 8,0	8,0	6x19	22,10	34,80	38,50
Rope 6x19 9,0	9,0	6x19	28,00	44,00	48,70
Rope 6x19 10,0	10,0	6x19	34,60	54,30	60,20
Rope 6x19 11,0	11,0	6x19	41,90	65,80	72,80
Rope 6x19 12,0	12,0	6x19	49,80	78,30	86,70
Rope 6x19 13,0	13,0	6x19	58,50	91,80	101,70
Rope 6x19 14,0	14,0	6x19	67,80	107,00	118,00
Rope 6x19 16,0	16,0	6x19	88,60	139,00	154,00
Rope 6x19 18,0	18,0	6x19	112,00	176,00	195,00



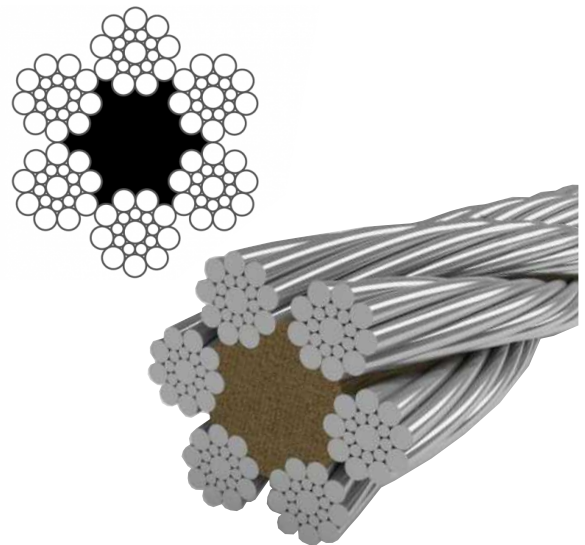
GALVANIZED STEEL ROPE 6x19 WSC (7x19)

Type	Dimension diameter (mm)	Constr. RHRL	Weight m/kg	Tensile strength (N/mm ²)	
				1770	1960
Minimum breaking load (kN)					
Rope 6x19 WSC 8	8,0	6x19 WSC	0,244	41,00	45,40
Rope 6x19 WSC 9	9,0	6x19 WSC	0,318	51,90	57,50
Rope 6x19 WSC 10	10,0	6x19 WSC	0,393	64,10	71,00
Rope 6x19 WSC 11	11,0	6x19 WSC	0,476	77,50	85,90
Rope 6x19 WSC 12	12,0	6x19 WSC	0,573	92,30	102,20
Rope 6x19 WSC 13	13,0	6x19 WSC	0,644	108,30	119,90
Rope 6x19 WSC 14	14,0	6x19 WSC	0,770	126,00	139,00
Rope 6x19 WSC 15	14,0	6x19 WSC	0,880	144,00	157,00
Rope 6x19 WSC 16	16,0	6x19 WSC	0,996	164,00	182,00
Rope 6x19 WSC 17	16,0	6x19 WSC	1,140	185,00	202,00
Rope 6x19 WSC 18	18,0	6x19 WSC	1,260	208,00	230,00
Rope 6x19 WSC 19	19,0	6x19 WSC	1,380	231,00	267,00
Rope 6x19 WSC 20	20,0	6x19 WSC	1,520	256,00	284,00
Rope 6x19 WSC 22	22,0	6x19 WSC	1,710	283,00	343,00
Rope 6x19 WSC 24	24,0	6x19 WSC	1,910	310,00	409,00
Rope 6x19 WSC 25	25,0	6x19 WSC	2,260	369,00	464,00
Rope 6x19 WSC 26	26,0	6x19 WSC	2,460	400,00	480,00
Rope 6x19 WSC 28	28,0	6x19 WSC	2,630	433,00	556,00
Rope 6x19 WSC 30	30,0	6x19 WSC	3,080	502,00	628,00
Rope 6x19 WSC 32	32,0	6x19 WSC	3,520	577,00	727,00
Rope 6x19 WSC 34	34,0	6x19 WSC	4,020	656,00	807,00
Rope 6x19 WSC 35	35,0	6x19 WSC	4,430	741,00	920,00
Rope 6x19 WSC 38	38,0	6x19 WSC	4,810	785,00	1.027,50
Rope 6x19 WSC 40	40,0	6x19 WSC	5,520	925,00	1.135,00



- galvanized steel rope, made in accordance with the standard 12385-4,
- three-layer weave 6x19+WSC, in each strand 19 wires of the same diameter, in three layers (1+6+12); WSC - spring wire core,
- soft with high elasticity and high load capacity,
- similar use as ropes of the same structure with a fiber core, compared to them, they are characterized by greater stiffness, greater breaking force and resistance to transverse pressure.

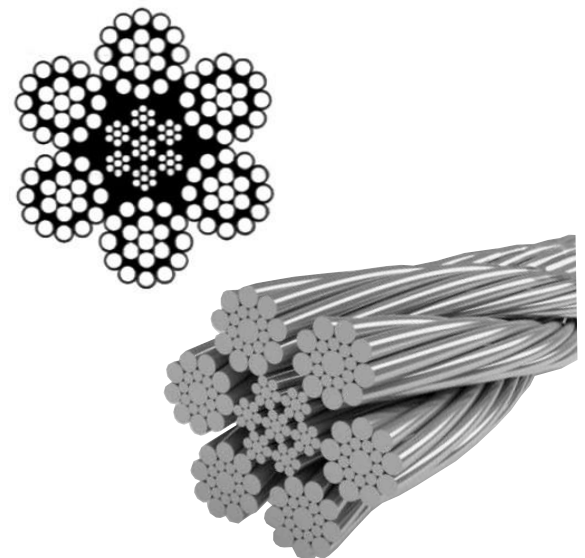
GALVANIZED STEEL ROPE 6x19S FC



Type	Dimension diameter (mm)	Constr. RHRL	Weight kg/100m	Tensile strength (N/mm ²)	
				1770	1960
Minimum breaking load (kN)					
Rope 6x19S-FC 6	6,0	6x19S-FC	12,90	21,00	23,30
Rope 6x19S-FC 7	7,0	6x19S-FC	17,60	28,60	31,70
Rope 6x19S-FC 8	8,0	6x19S-FC	23,00	37,40	41,40
Rope 6x19S-FC 9	9,0	6x19S-FC	29,10	47,30	52,40
Rope 6x19S-FC 10	10,0	6x19S-FC	35,90	58,40	64,70
Rope 6x19S-FC 11	11,0	6x19S-FC	43,40	70,70	78,30
Rope 6x19S-FC 12	12,0	6x19S-FC	51,70	84,10	93,10
Rope 6x19S-FC 13	13,0	6x19S-FC	60,70	98,70	109,00
Rope 6x19S-FC 14	14,0	6x19S-FC	70,40	114,00	127,00
Rope 6x19S-FC 15	15,0	6x19S-FC	80,80	131,00	146,00
Rope 6x19S-FC 16	16,0	6x19S-FC	91,90	150,00	166,00
Rope 6x19S-FC 17	17,0	6x19S-FC	103,80	169,00	187,00
Rope 6x19S-FC 18	18,0	6x19S-FC	116,30	189,00	210,00
Rope 6x19S-FC 20	20,0	6x19S-FC	143,60	234,00	259,00
Rope 6x19S-FC 22	22,0	6x19S-FC	173,80	283,00	313,00
Rope 6x19S-FC 24	24,0	6x19S-FC	206,80	336,00	373,00
Rope 6x19S-FC 26	26,0	6x19S-FC	242,70	395,00	437,00
Rope 6x19S-FC 28	28,0	6x19S-FC	281,50	458,00	507,00
Rope 6x19S-FC 30	30,0	6x19S-FC	322,10	526,00	582,00
Rope 6x19S-FC 32	32,0	6x19S-FC	367,60	598,00	662,00
Rope 6x19S-FC 34	34,0	6x19S-FC	415,00	675,00	748,00
Rope 6x19S-FC 36	36,0	6x19S-FC	465,30	757,00	838,00
Rope 6x19S-FC 38	38,0	6x19S-FC	518,40	843,00	934,00
Rope 6x19S-FC 40	40,0	6x19S-FC	574,40	935,00	1.040,00

- galvanized steel rope, made in accordance with the standard 12385-5,
- three-layer weave 6x19S+FC, positioning the wires in a strand 1-9-9, Seale type - strand with parallel winding with the same number of wires in both layers; FC (eng. fibre core) - fiber core, which makes the rope more flexible,
- high abrasion resistance with quite good elasticity (the result of using large diameter wires in the outer layer of weaves),
- application (due to high abrasion resistance) as trawling ropes, ropes for passenger and goods lifts.

GALVANIZED STEEL ROPE 6x19S IWRC



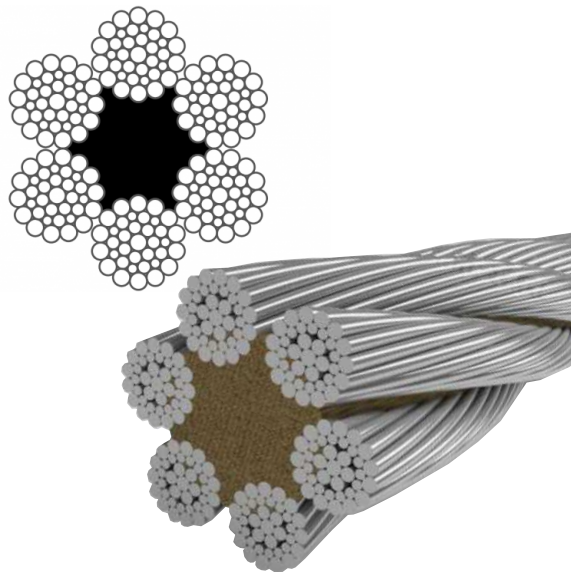
Type	Dimension diameter (mm)	Constr. RHRL	Weight kg/100m	Tensile strength (N/mm ²)	
				1770	1960
Minimum breaking load (kN)					
Rope 6x19S-IWRC 6	6,0	6x19S-IWRC	12,90	22,70	25,10
Rope 6x19S-IWRC 7	7,0	6x19S-IWRC	17,60	30,90	34,20
Rope 6x19S-IWRC 8	8,0	6x19S-IWRC	23,00	40,30	44,70
Rope 6x19S-IWRC 9	9,0	6x19S-IWRC	29,10	51,00	56,50
Rope 6x19S-IWRC 10	10,0	6x19S-IWRC	35,90	63,00	69,80
Rope 6x19S-IWRC 11	11,0	6x19S-IWRC	43,40	76,20	84,80
Rope 6x19S-IWRC 12	12,0	6x19S-IWRC	51,70	90,70	100,00
Rope 6x19S-IWRC 13	13,0	6x19S-IWRC	60,70	106,00	118,00
Rope 6x19S-IWRC 14	14,0	6x19S-IWRC	70,40	124,00	137,00
Rope 6x19S-IWRC 15	15,0	6x19S-IWRC	80,80	142,00	157,00
Rope 6x19S-IWRC 16	16,0	6x19S-IWRC	91,90	161,00	179,00
Rope 6x19S-IWRC 17	17,0	6x19S-IWRC	103,80	182,00	202,00
Rope 6x19S-IWRC 18	18,0	6x19S-IWRC	116,30	204,00	226,00
Rope 6x19S-IWRC 20	20,0	6x19S-IWRC	143,60	252,00	279,00
Rope 6x19S-IWRC 22	22,0	6x19S-IWRC	173,80	305,00	338,00
Rope 6x19S-IWRC 24	24,0	6x19S-IWRC	206,80	363,00	402,00
Rope 6x19S-IWRC 26	26,0	6x19S-IWRC	242,70	426,00	472,00
Rope 6x19S-IWRC 28	28,0	6x19S-IWRC	281,50	494,00	547,00
Rope 6x19S-IWRC 30	30,0	6x19S-IWRC	322,10	567,00	628,00
Rope 6x19S-IWRC 32	32,0	6x19S-IWRC	367,60	645,00	715,00
Rope 6x19S-IWRC 34	34,0	6x19S-IWRC	415,00	728,00	807,00
Rope 6x19S-IWRC 36	36,0	6x19S-IWRC	465,30	817,00	904,00
Rope 6x19S-IWRC 38	38,0	6x19S-IWRC	518,40	910,00	1010,00
Rope 6x19S-IWRC 40	40,0	6x19S-IWRC	574,40	1008,00	1120,00

- galvanized steel rope, made in accordance with the standard 12385-5,
- three-layer weave 6x19+IWRC, arrangement of wires in a strand 1-9-9, Seale type - strand with parallel winding with the same number of wires in both layers, IWRC - steel core in the form of an independent rope,
- similar features to ropes 6x19SFC, but higher breaking strength and better resistance to crushing the greater rigidity,
- similar use as for ropes 6x19S FC.

GALVANIZED STEEL ROPE 6x36 WS-FC



Type	Dimension diameter (mm)	Constr. RHRL	Weight kg/100m	Tensile strength (N/mm ²)	
				1770	1960
Minimum breaking load (kN)					
Rope 6x36WS-FC 10	10,0	6x36WS-FC	36,70	58,40	64,70
Rope 6x36WS-FC 11	11,0	6x36WS-FC	44,40	70,70	78,30
Rope 6x36WS-FC 12	12,0	6x36WS-FC	52,80	84,10	93,10
Rope 6x36WS-FC 13	13,0	6x36WS-FC	62,00	98,70	109,00
Rope 6x36WS-FC 14	14,0	6x36WS-FC	71,90	114,00	127,00
Rope 6x36WS-FC 15	15,0	6x36WS-FC	82,80	131,00	146,00
Rope 6x36WS-FC 16	16,0	6x36WS-FC	94,00	150,00	166,00
Rope 6x36WS-FC 17	17,0	6x36WS-FC	106,10	169,00	187,00
Rope 6x36WS-FC 18	18,0	6x36WS-FC	118,90	189,00	210,00
Rope 6x36WS-FC 19	19,0	6x36WS-FC	132,50	211,00	233,00
Rope 6x36WS-FC 20	20,0	6x36WS-FC	148,80	234,00	259,00
Rope 6x36WS-FC 22	22,0	6x36WS-FC	177,60	283,00	318,00
Rope 6x36WS-FC 24	24,0	6x36WS-FC	211,40	336,00	373,00
Rope 6x36WS-FC 26	26,0	6x36WS-FC	248,10	395,00	437,00
Rope 6x36WS-FC 28	28,0	6x36WS-FC	287,70	458,00	507,00
Rope 6x36WS-FC 30	30,0	6x36WS-FC	330,30	526,00	582,00
Rope 6x36WS-FC 32	32,0	6x36WS-FC	375,80	598,00	662,00
Rope 6x36WS-FC 34	34,0	6x36WS-FC	424,30	675,00	748,00
Rope 6x36WS-FC 36	36,0	6x36WS-FC	475,80	757,00	838,00
Rope 6x36WS-FC 38	38,0	6x36WS-FC	529,90	843,00	934,00
Rope 6x36WS-FC 40	40,0	6x36WS-FC	587,20	935,00	1035,00
Rope 6x36WS-FC 44	44,0	6x36WS-FC	710,50	1131,00	1270,30
Rope 6x36WS-FC 50	50,0	6x36WS-FC	917,50	1460,00	1688,40
Rope 6x36WS-FC 60	60,0	6x36WS-FC	1320,00	2103,00	2330,00

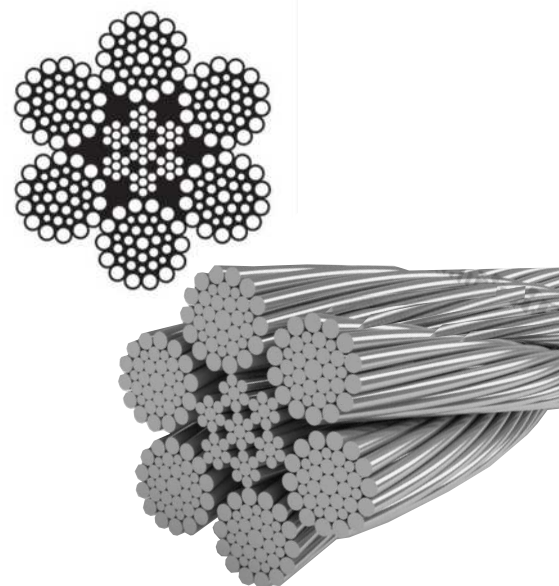


- galvanized steel rope, made in accordance with the standard 12385-4 with a natural fiber core,
- weave of 3 layers of wire scoiled in one operation, formed from a combination of strands of Warrington i Seale type (arrangement of wires in a strand 1+7+7+7+14),
- optimal combination of flexibility and abrasion resistance,
- the most popular and most commonly used rope construction,
- application in many industries.

GALVANIZED STEEL ROPE 6x36 WS-IWRC



Type	Dimension diameter (mm)	Constr. RHRL	Weight kg/100m	Tensile strength (N/mm ²)	
				1770	1960
Minimum breaking load (kN)					
Rope 6x36WS-IWRC 10	10,0	6x36WS-IWRC	36,70	63,00	69,80
Rope 6x36WS-IWRC 11	11,0	6x36WS-IWRC	44,40	76,20	84,40
Rope 6x36WS-IWRC 12	12,0	6x36WS-IWRC	52,80	90,70	100,00
Rope 6x36WS-IWRC 13	13,0	6x36WS-IWRC	62,00	106,00	118,00
Rope 6x36WS-IWRC 14	14,0	6x36WS-IWRC	71,90	124,00	137,00
Rope 6x36WS-IWRC 15	15,0	6x36WS-IWRC	82,80	142,00	157,00
Rope 6x36WS-IWRC 16	16,0	6x36WS-IWRC	94,00	161,00	179,00
Rope 6x36WS-IWRC 17	17,0	6x36WS-IWRC	106,10	182,00	202,00
Rope 6x36WS-IWRC 18	18,0	6x36WS-IWRC	118,90	204,00	226,00
Rope 6x36WS-IWRC 19	19,0	6x36WS-IWRC	132,50	227,00	252,00
Rope 6x36WS-IWRC 20	20,0	6x36WS-IWRC	148,80	252,00	279,00
Rope 6x36WS-IWRC 22	22,0	6x36WS-IWRC	177,60	305,00	338,00
Rope 6x36WS-IWRC 24	24,0	6x36WS-IWRC	211,40	363,00	402,00
Rope 6x36WS-IWRC 26	26,0	6x36WS-IWRC	248,10	426,00	472,00
Rope 6x36WS-IWRC 28	28,0	6x36WS-IWRC	287,70	494,00	547,00
Rope 6x36WS-IWRC 30	30,0	6x36WS-IWRC	330,30	567,00	628,00
Rope 6x36WS-IWRC 32	32,0	6x36WS-IWRC	375,80	645,00	715,00
Rope 6x36WS-IWRC 34	34,0	6x36WS-IWRC	424,30	728,00	807,00
Rope 6x36WS-IWRC 36	36,0	6x36WS-IWRC	475,80	817,00	904,00
Rope 6x36WS-IWRC 38	38,0	6x36WS-IWRC	529,90	910,00	1008,00
Rope 6x36WS-IWRC 40	40,0	6x36WS-IWRC	587,20	1008,00	1116,00
Rope 6x36WS-IWRC 44	44,0	6x36WS-IWRC	710,50	1220,00	1350,00
Rope 6x36WS-IWRC 50	50,0	6x36WS-IWRC	917,50	1575,00	1810,00
Rope 6x36WS-IWRC 60	60,0	6x36WS-IWRC	1320,00	2268,00	2510,00

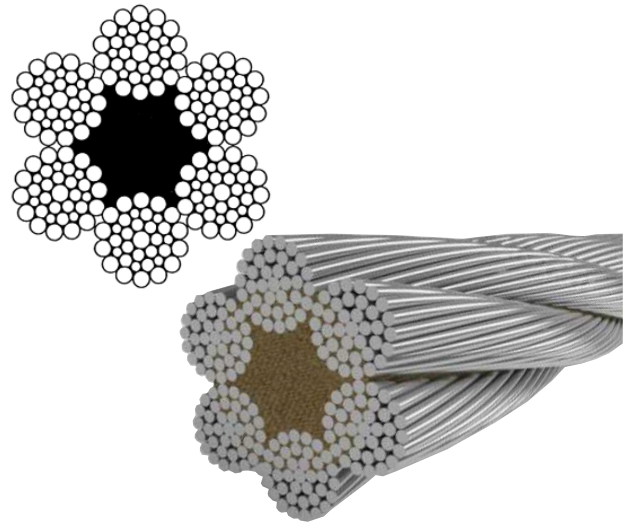


- galvanized steel rope, made in accordance with the standard 12385-4 with a natural steel core,
- formed from a combination of strands of Warrington i Seale type (arrangement of wires in a strand 1+7+7+7+14),
- similar features to ropes 6x36WS-FC, higher breaking strength, better crush strength with higher stiffness,
- used, among others, for horizontal and sloping (to 45°) transport equipment.

GALVANIZED STEEL ROPE 6x37 FC



Type	Dimension diameter (mm)	Constr. RHRL	Weight kg/100m	Tensile strength (N/mm ²)	
				1770	1960
Rope 6x37-FC 6	6,0	6x37-FC	12,50	18,80	20,80
Rope 6x37-FC 7	7,0	6x37-FC	17,00	25,60	28,30
Rope 6x37-FC 8	8,0	6x37-FC	22,10	33,40	37,00
Rope 6x37-FC 9	9,0	6x37-FC	28,00	42,30	46,80
Rope 6x37-FC 10	10,0	6x37-FC	34,60	52,20	57,80
Rope 6x37-FC 11	11,0	6x37-FC	41,90	63,20	70,00
Rope 6x37-FC 12	12,0	6x37-FC	49,80	75,20	83,30
Rope 6x37-FC 13	13,0	6x37-FC	58,50	88,20	97,70
Rope 6x37-FC 14	14,0	6x37-FC	67,80	102,00	113,00
Rope 6x37-FC 15	15,0	6x37-FC	77,00	118,00	130,00
Rope 6x37-FC 16	16,0	6x37-FC	89,00	134,00	148,00
Rope 6x37-FC 18	18,0	6x37-FC	112,00	169,00	187,00
Rope 6x37-FC 20	20,0	6x37-FC	138,40	209,00	231,00
Rope 6x37-FC 22	22,0	6x37-FC	167,00	253,00	280,00
Rope 6x37-FC 24	24,0	6x37-FC	199,00	301,00	333,00
Rope 6x37-FC 26	26,0	6x37-FC	234,00	353,00	391,00
Rope 6x37-FC 28	28,0	6x37-FC	271,00	409,00	453,00
Rope 6x37-FC 30	30,0	6x37-FC	311,00	470,00	520,00
Rope 6x37-FC 32	32,0	6x37-FC	354,00	535,00	592,00
Rope 6x37-FC 34	34,0	6x37-FC	400,00	604,00	668,00
Rope 6x37-FC 40	40,0	6x37-FC	554,00	935,00	925,00
Rope 6x37-FC 44	44,0	6x37-FC	670,00	1010,00	1118,00
Rope 6x37-FC 50	50,0	6x37-FC	936,00	1305,00	1445,00
Rope 6x37-FC 60	60,0	6x37-FC	1246,00	1880,00	2082,00

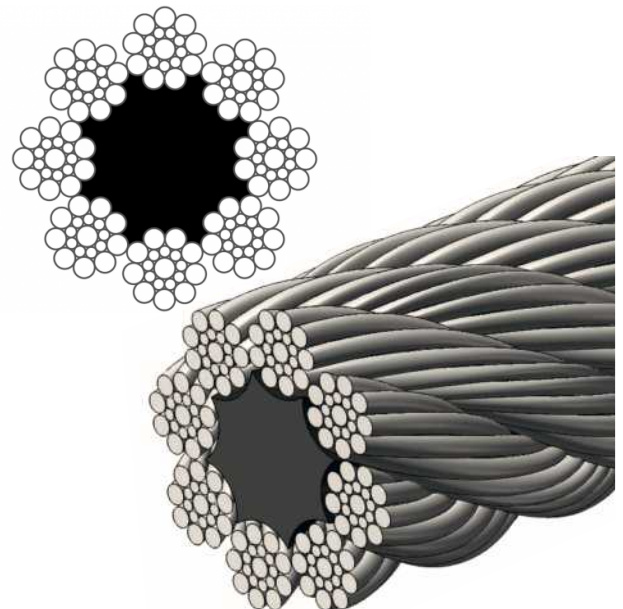


- galvanized steel rope, made in accordance with the standard 12385-4 with a natural fiber core,
- strand structure 1+6+12+18,
- lower abrasion resistance, very high flexibility due to the occurrence of many small diameter wires in the outer layer of weaves in relation to other rope constructions,
- use in shipbuilding, construction, mining, winches and agriculture.

GALVANIZED STEEL ROPE 8x19S FC



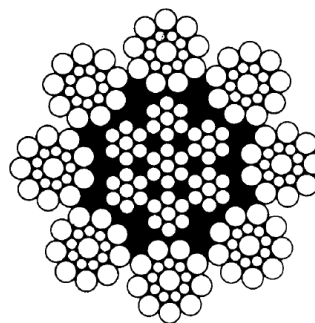
Type	Dimension diameter (mm)	Constr. RHRL	Weight m/kg	Tensile strength
				1770 (N/mm ²)
Rope 8x19S-FC 6	6,0	8x19S-FC	12,50	18,60
Rope 8x19S-FC 6,5	6,5	8x19S-FC	14,70	21,50
Rope 8x19S-FC 7	7,0	8x19S-FC	17,10	24,90
Rope 8x19S-FC 8	8,0	8x19S-FC	22,30	33,20
Rope 8x19S-FC 9	9,0	8x19S-FC	27,50	42,00
Rope 8x19S-FC 10	10,0	8x19S-FC	34,80	51,90
Rope 8x19S-FC 11	11,0	8x19S-FC	42,20	62,80
Rope 8x19S-FC 12	12,0	8x19S-FC	50,20	74,70
Rope 8x19S-FC 13	13,0	8x19S-FC	58,90	87,60
Rope 8x19S-FC 14	14,0	8x19S-FC	68,30	102,00
Rope 8x19S-FC 16	16,0	8x19S-FC	89,20	133,00
Rope 8x19S-FC 18	18,0	8x19S-FC	113,00	168,00
Rope 8x19S-FC 20	20,0	8x19S-FC	139,00	207,00
Rope 8x19S-FC 22	22,0	8x19S-FC	169,00	251,00
Rope 8x19S-FC 24	24,0	8x19S-FC	201,00	299,00
Rope 8x19S-FC 26	26,0	8x19S-FC	236,00	351,00
Rope 8x19S-FC 28	28,0	8x19S-FC	273,00	407,00
Rope 8x19S-FC 32	32,0	8x19S-FC	357,00	531,00



- galvanized steel rope, made in accordance with the standard 12385-4 with a natural fiber core,
- Seale, sstrand with parallel winding with the same number of wires in both layers, arrangement of wires in the strand 1-9-9),
- quite good elasticity and abrasion resistance,
- use in systems where rope resistance to abrasion, flexibility and good co-operation with rewinding rolls is required.

GALVANIZED STEEL ROPE 8x19S IWRC

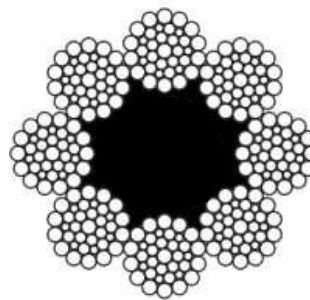
- galvanized steel rope, made in accordance with the standard 12385-4 with a steel core IWRC,
- Seale, strand with parallel winding with the same number of wires in both layers, arrangement of wires in a strand 1-9-9),
- basic properties similar to ropes with fiber cores 8x19S -FC,
- good support of the rope strands by the steel core eliminates the tendency to flatten the ropes,
- rope with quite good elasticity and high abrasion resistance.



Type	Dimension diameter (mm)	Constr. RHRL	Weight kg/100m	Tensile strength 1770 (N/mm ²) Minimum breaking load (kN)
Rope 8x19S-IWRC 8	8,0	8x19S-IWRC	27,20	40,30
Rope 8x19S-IWRC 9	9,0	8x19S-IWRC	33,00	51,00
Rope 8x19S-IWRC 10	10,0	8x19S-IWRC	42,50	63,00
Rope 8x19S-IWRC 11	11,0	8x19S-IWRC	51,40	76,20
Rope 8x19S-IWRC 12	12,0	8x19S-IWRC	61,20	90,70
Rope 8x19S-IWRC 13	13,0	8x19S-IWRC	71,90	106,00
Rope 8x19S-IWRC 14	14,0	8x19S-IWRC	83,30	124,00
Rope 8x19S-IWRC 16	16,0	8x19S-IWRC	109,00	161,00
Rope 8x19S-IWRC 18	18,0	8x19S-IWRC	138,00	204,00
Rope 8x19S-IWRC 20	20,0	8x19S-IWRC	170,00	252,00
Rope 8x19S-IWRC 22	22,0	8x19S-IWRC	206,00	305,00
Rope 8x19S-IWRC 24	24,0	8x19S-IWRC	245,00	363,00
Rope 8x19S-IWRC 26	26,0	8x19S-IWRC	287,00	426,00
Rope 8x19S-IWRC 28	28,0	8x19S-IWRC	333,00	494,00
Rope 8x19S-IWRC 32	32,0	8x19S-IWRC	435,00	645,00

GALVANIZED STEEL ROPE 8x36S FC

- galvanized steel rope, made in accordance with the standard 12385-4 with a natural fiber core,
- rope weave Warrington-Seale, strand with parallel winding, strand having three layers of wires wound in one operation and formed from the connection of strands of the Warrington i Seale type, arrangement of wires in a strand 1-7-7+7-14),
- high flexibility,
- use for work on cranes with low load and not exposed to high temperatures and in applications where high rope flexibility is required.



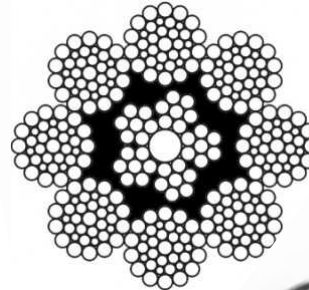
Type	Dimension diameter (mm)	Constr. RHRL	Weight kg/100m	Tensile strength (N/mm ²) 1770 1960 Minimum breaking load (kN)	
Rope 8x36S-FC 8	8,0	8x36S-FC	24,30	33,20	36,80
Rope 8x36S-FC 9	9,0	8x36S-FC	30,80	42,00	46,50
Rope 8x36S-FC 10	10,0	8x36S-FC	38,00	51,90	57,40
Rope 8x36S-FC 11	11,0	8x36S-FC	46,00	62,80	69,50
Rope 8x36S-FC 12	12,0	8x36S-FC	54,70	74,70	82,70
Rope 8x36S-FC 13	13,0	8x36S-FC	64,30	87,60	97,10
Rope 8x36S-FC 14	14,0	8x36S-FC	74,50	102,00	113,00
Rope 8x36S-FC 16	16,0	8x36S-FC	97,30	133,00	147,00
Rope 8x36S-FC 18	18,0	8x36S-FC	123,00	168,00	186,00
Rope 8x36S-FC 20	20,0	8x36S-FC	152,00	207,00	230,00
Rope 8x36S-FC 22	22,0	8x36S-FC	184,00	251,00	278,00
Rope 8x36S-FC 24	24,0	8x36S-FC	219,00	299,00	331,00
Rope 8x36S-FC 26	26,0	8x36S-FC	257,00	351,00	388,00
Rope 8x36S-FC 28	28,0	8x36S-FC	298,00	407,00	450,00
Rope 8x36S-FC 32	32,0	8x36S-FC	389,00	531,00	588,00
Rope 8x36S-FC 36	36,0	8x36S-FC	493,00	672,00	744,00
Rope 8x36S-FC 40	40,0	8x36S-FC	608,00	830,00	919,00
Rope 8x36S-FC 44	44,0	8x36S-FC	736,00	1000,00	1110,00

GALVANIZED STEEL ROPE 8x36S IWRC

- galvanized steel rope, made in accordance with the standard 12385-4 with a steel core,
- good support of the rope strands by the steel core, eliminates the tendency to flatten the ropes,
- single layer rope weave (Warrington-Seale, strand connected with parallel coil, having three layers of coiled wires, arrangement of wires in a strand 1-7-7+7-14),
- high susceptibility to damage,
- use in casting cranes in steelworks of metallurgical plants.



Type	Dimension diameter (mm)	Constr. RHRL	Weight kg/100m	Tensile strength (N/mm ²)	
				1770	1960
Rope 836S-IWRC 8	8,0	8x36S-IWRC	26,80	40,30	44,70
Rope 8x36S-IWRC 9	9,0	8x36S-IWRC	33,90	51,00	56,50
Rope 8x36S-IWRC 10	10,0	8x36S-IWRC	41,80	63,00	69,80
Rope 8x36S-IWRC 11	11,0	8x36S-IWRC	50,60	76,20	84,40
Rope 8x36S-IWRC 12	12,0	8x36S-IWRC	60,20	90,70	100,00
Rope 8x36S-IWRC 13	13,0	8x36S-IWRC	70,70	106,00	118,00
Rope 8x36S-IWRC 14	14,0	8x36S-IWRC	82,00	124,00	137,00
Rope 8x36S-IWRC 16	16,0	8x36S-IWRC	107,00	161,00	179,00
Rope 8x36S-IWRC 18	18,0	8x36S-IWRC	135,00	204,00	226,00
Rope 8x36S-IWRC 20	20,0	8x36S-IWRC	167,00	252,00	279,00
Rope 8x36S-IWRC 22	22,0	8x36S-IWRC	202,00	305,00	338,00
Rope 8x36S-IWRC 24	24,0	8x36S-IWRC	241,00	363,00	402,00
Rope 8x36S-IWRC 26	26,0	8x36S-IWRC	283,00	426,00	472,00
Rope 8x36S-IWRC 28	28,0	8x36S-IWRC	328,00	494,00	547,00
Rope 8x36S-IWRC 32	32,0	8x36S-IWRC	428,00	645,00	715,00
Rope 8x36S-IWRC 36	36,0	8x36S-IWRC	542,00	817,00	904,00
Rope 8x36S-IWRC 40	40,0	8x36S-IWRC	669,00	1010,00	1120,00
Rope 8x36S-IWRC 44	44,0	8x36S-IWRC	810,00	1220,00	1350,00

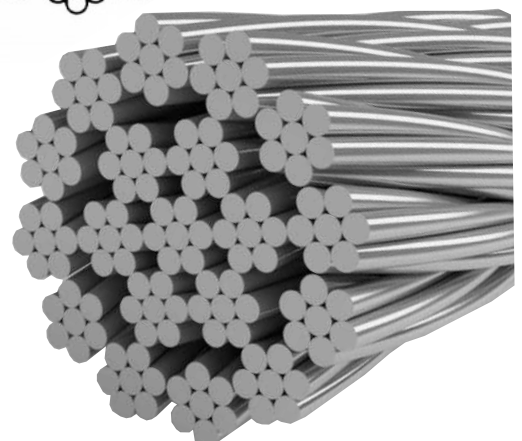
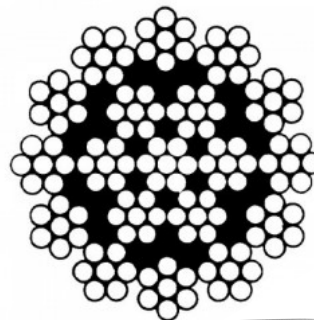


GALVANIZED STEEL ROPE 19x7

- galvanized steel rope, made in accordance with the standard 12385-4 with a natural steel core,
- fully untwisted rope,
- three-layer rope weave 19x7, rope construction: nineteen convoluted, - in each strand there are seven wires of the same diameter in three layers (1+6+12),
- very flexible, long-life, with excellent working performance,
- high crush resistance, high strength and fatigue parameters,
- used in many industries.

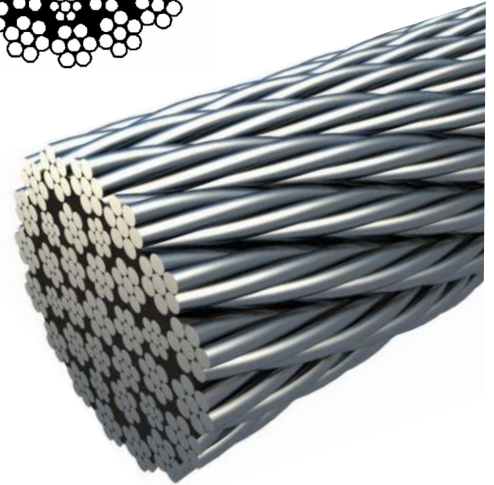
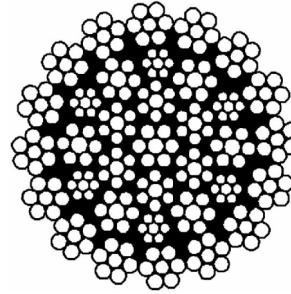


Type	Dimension diameter (mm)	Constr. RHRL	Weight kg/100m	Tensile strength (N/mm ²)	
				1770	1960
Rope 19x7 4	4,0	19x7	6,40	9,30	10,29
Rope 19x7 5	5,0	19x7	10,00	14,50	16,10
Rope 19x7 6	6,0	19x7	14,40	20,90	23,10
Rope 19x7 7	7,0	19x7	19,70	28,50	31,50
Rope 19x7 8	8,0	19x7	25,70	37,20	41,10
Rope 19x7 9	9,0	19x7	32,50	47,00	52,10
Rope 19x7 10	11,0	19x7	40,10	58,10	64,30
Rope 19x7 11	11,0	19x7	48,50	70,20	77,80
Rope 19x7 12	12,0	19x7	58,00	83,60	92,60
Rope 19x7 13	13,0	19x7	67,80	98,10	109,00
Rope 19x7 14	14,0	19x7	79,00	114,00	126,00
Rope 19x7 16	16,0	19x7	103,00	149,00	165,00



GALVANIZED STEEL ROPE 35x7

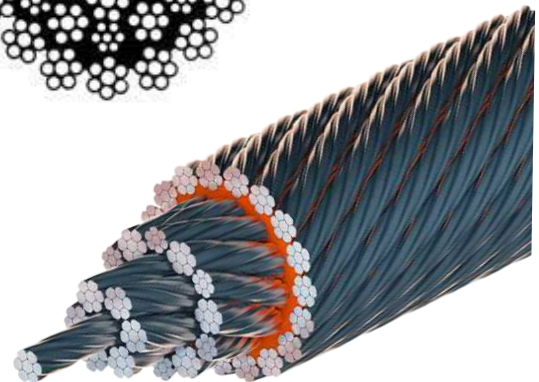
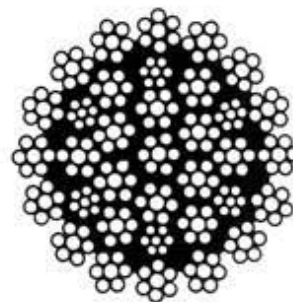
- galvanized steel rope, made in accordance with the standard 12385-4 with a natural steel core,
- fully untwisted, flexible rope,
- four-layer weave 35 x 7, 35 - braided construction in each strand seven wires of the same diameter in four layers (1+6+12+16),
- excellent working performance with extended life,
- high crush resistance, high strength and fatigue parameters,
- used in many industries.



Type	Dimension diameter (mm)	Constr. RHRL	Weight kg/100m	Tensile strength (N/mm ²)	
				1960	2160
Minimum breaking load (kN)					
Rope 35x7 8	8,0	35x7	29,10	45,20	48,40
Rope 35x7 9	9,0	35x7	36,80	57,20	61,20
Rope 35x7 10	10,0	35x7	45,40	70,60	75,60
Rope 35x7 11	11,0	35x7	54,90	85,40	91,50
Rope 35x7 12	12,0	35x7	65,40	102,00	109,00
Rope 35x7 13	13,0	35x7	76,70	119,00	128,00
Rope 35x7 14	14,0	35x7	89,00	138,00	148,00
Rope 35x7 16	16,0	35x7	116,00	181,00	194,00
Rope 35x7 18	18,0	35x7	147,00	229,00	245,00
Rope 35x7 20	20,0	35x7	182,00	282,00	302,00
Rope 35x7 22	22,0	35x7	220,00	342,00	366,00
Rope 35x7 24	24,0	35x7	262,00	406,00	435,00
Rope 35x7 26	26,0	35x7	307,00	476,00	511,00
Rope 35x7 28	28,0	35x7	356,00	553,00	593,00
Rope 35x7 32	32,0	35x7	465,00	723,00	774,00
Rope 35x7 36	36,0	35x7	588,00	914,00	980,00
Rope 35x7 38	38,0	35x7	655,60	1020,00	1091,00

COMPACT 35x7 GALVANIZED STEEL ROPE

- galvanized steel rope, made in accordance with the standard 12385-4 with a natural steel core,
- compacted - made of strands that are crushed during production (otherwise: pressed, hammered),
- non-twisting, flexible rope,
- our-layer weavy 35 x 7, - braided construction in each strand seven wires of the same diameter in four layers (1+6+12+16),
- excellent working performance with extended life,
- high crush resistance, high strength and fatigue parameters,
- use as a carrying rope for cranes.

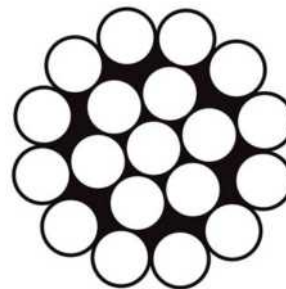


Type	Dimension diameter (mm)	Constr. RHRL	Weight kg/100m	Tensile strength (N/mm ²)	
				1960	2160
Minimum breaking load (kN)					
Rope 35x7K 10	10,0	35x7K	48,00	87,60	98,30
Rope 35x7K 11	11,0	35x7K	58,00	105,00	118,00
Rope 35x7K 12	12,0	35x7K	68,00	124,00	140,00
Rope 35x7K 13	13,0	35x7K	81,00	144,00	162,00
Rope 35x7K 14	14,0	35x7K	94,00	168,00	188,00
Rope 35x7K 15	15,0	35x7K	108,00	196,20	206,00
Rope 35x7K 16	16,0	35x7K	122,00	224,00	251,00
Rope 35x7K 18	18,0	35x7K	155,00	274,00	308,00
Rope 35x7K 19	19,0	35x7K	173,00	307,00	344,00
Rope 35x7K 22	22,0	35x7K	241,00	415,00	466,00
Rope 35x7K 24	24,0	35x7K	284,00	491,00	555,00
Rope 35x7K 26	26,0	35x7K	335,00	588,00	660,00
Rope 35x7K 28	28,0	35x7K	391,00	676,00	758,00
Rope 35x7K 30	30,0	35x7K	446,00	794,00	900,00
Rope 35x7K 32	32,0	35x7K	53,00	873,00	980,00
Rope 35x7K 34	34,0	35x7K	574,00	1023,00	1105,00
Rope 35x7K 36	36,0	35x7K	642,00	1110,00	1232,00

STAINLESS STEEL ROPE 1x19



- stainless steel, acid-resistant rope, in accordance with the standard DIN 3053,
- two-layer weave 1x19, 12+6+1 - the rope consists of 19 wires in two layers,
- stiff, not very elastic but highly extensible,
- increased resistance to abrasion,
- tensile strength 1570 N/mm²,
- mainly used where the rope works only under tension, i.e. in industrial devices, as tension and guy ropes (masts, antenna constructions) and as suspension ropes (e.g. wires, cables).

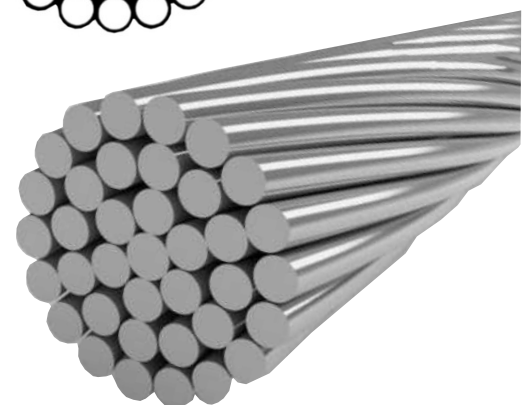
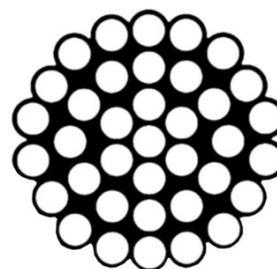


Type	Dimension diameter (mm)	Constr. RHRL	Weight kg/100m	Tensile strength 1570 (N/mm ²) Minimum breaking load (kN)
Rope 1x19 INOX 1	1,00	1x19	0,50	0,825
Rope 1x19 INOX 1,5	1,50	1x19	1,11	1,860
Rope 1x19 INOX 2	2,00	1x19	1,98	3,300
Rope 1x19 INOX 2,5	2,50	1x19	3,10	5,150
Rope 1x19 INOX 3	3,00	1x19	4,46	7,420
Rope 1x19 INOX 4	4,00	1x19	7,93	13,200
Rope 1x19 INOX 5	5,00	1x19	12,40	20,600
Rope 1x19 INOX 6	6,00	1x19	17,80	29,700

STAINLESS STEEL ROPE 1x37



- stainless steel, acid-resistant rope, in accordance with the standard DIN 3054,
- single layer weave, the strand is twisted in three operations, a structure that contains three layers of wires wound on a central wire – 1-6/12/18,
- very stiff, not very elastic but highly extensible,
- greater flexibility with less abrasion resistance,
- tensile strength 1570 N/mm²,
- use: (the rope only works on stretching): industrial equipment in cars (brake and gas cables) as tension and suction cables as well as suspension cables.



Type	Dimension diameter (mm)	Constr. RHRL	Weight kg/100m	Tensile strength 1570 (N/mm ²) Minimum breaking load (kN)
Rope 1x37 INOX 1	1,00	1x37	5,00	950,6
Rope 1x37 INOX 1,2	1,20	1x37	7,20	1274,0
Rope 1x37 INOX 1,5	1,50	1x37	11,25	2254,0
Rope 1x37 INOX 1,6	1,60	1x37	12,80	2597,0
Rope 1x37 INOX 1,8	1,80	1x37	16,20	3200,0
Rope 1x37 INOX 2	2,00	1x37	20,20	3822,0
Rope 1x37 INOX 2,5	2,50	1x37	31,25	5586,0
Rope 1x37 INOX 3	3,00	1x37	45,00	8000,0
Rope 1x37 INOX 3,5	3,50	1x37	61,25	9310,0
Rope 1x37 INOX 4	4,00	1x37	80,00	12740,0
Rope 1x37 INOX 5	5,00	1x37	125,00	18900,0
Rope 1x37 INOX 6	6,00	1x37	180,00	26000,0
Rope 1x37 INOX 8	8,00	1x37	320,00	45000,0
Rope 1x37 INOX 10	10,00	1x37	500,00	72000,0
Rope 1x37 INOX 12	12,00	1x37	720,00	101000,0

STAINLESS STEEL ROPE 7x7

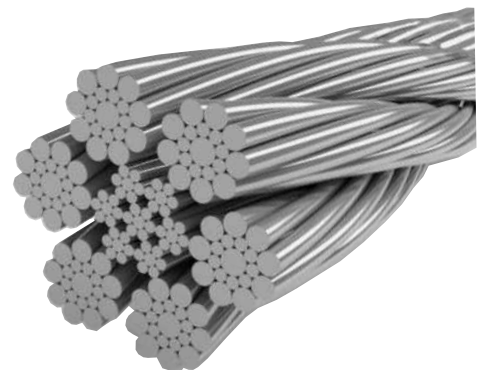
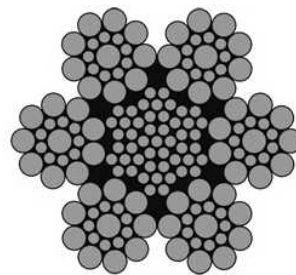
- stainless steel, acid-resistant rope, in accordance with the standard 12385-4,
- single layer weave 7x7; 7 - number of weaves, 7 - number of individual wires in the weave,
- with a steel core in the form of strandsi WSC – the same construction as the rope strands,
- soft rope, medium elasticity and high load capacity,
- has increased resistance to chemical agents,
- recommended especially for acid and alkaline environments, where galvanized ropes are subject to accelerated corrosion,
- used in the food, chemical, pharmaceutical, yacht and water sports industries,



Type	Dimension diameter (mm)	Constr. RHRL	Weight kg/100m	Tensile strength 1570 (N/mm ²) Minimum breaking load (kN)
Rope 7x7 INOX 1	1,00	7x7	0,38	0,61
Rope 7x7 INOX 2	2,00	7x7	1,54	2,44
Rope 7x7 INOX 3	3,00	7x7	3,46	5,48
Rope 7x7 INOX 4	4,00	7x7	6,14	9,75
Rope 7x7 INOX 5	5,00	7x7	9,60	15,20
Rope 7x7 INOX 6	6,00	7x7	13,80	21,90

STAINLESS STEEL ROPE 6x19 IWRC

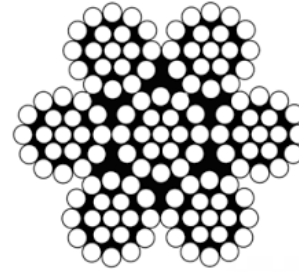
- stainless steel, acid-resistant rope, in accordance with the standard 12385-4,
- three-layer weave 6x19+IWRC, arrangement of wires in a strand 1-9-9, Seale type - strand with parallel winding with the same number of wires in both layers, IWRC - steel core in the form of an independent rope,
- has increased resistance to chemical agents,
- recommended especially for acid and alkaline environments, where galvanized ropes are subject to accelerated corrosion.



Type	Dimension diameter (mm)	Constr. RHRL	Weight kg/100m	Tensile strength 1570 (N/mm ²) Minimum breaking load (kN)
Rope 6x19 INOX 3	3,00	6x19	3,10	4,34
Rope 6x19 INOX 4	4,00	6x19	5,50	7,71
Rope 6x19 INOX 5	5,00	6x19	8,70	12,00
Rope 6x19 INOX 6	6,00	6x19	13,00	17,40
Rope 6x19 INOX 7	7,00	6x19	17,00	23,60
Rope 6x19 INOX 8	8,00	6x19	22,00	30,80
Rope 6x19 INOX 9	9,00	6x19	28,00	39,00
Rope 6x19 INOX 10	10,00	6x19	35,00	48,20
Rope 6x19 INOX 12	12,00	6x19	50,00	69,40

STAINLESS STEEL ROPE 7x19

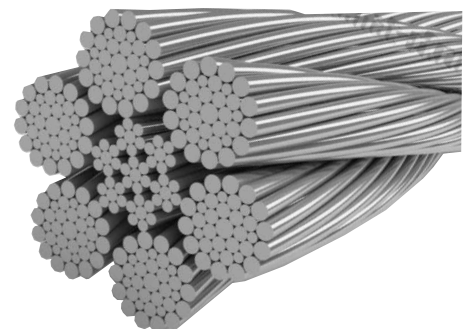
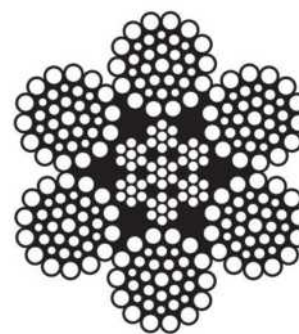
- stainless steel, acid-resistant rope, in accordance with the standard 12385-4,
- three-layer weave 6x19+IWRC, in each strand 19 wires of the same diameter, in three layers (1+6+12); steel core (WSC),
- tensile strength 1570 N/mm²,
- has increased resistance to chemical agents,
- recommended especially for acid and alkaline environments, where galvanized ropes are subject to accelerated corrosion.



Type	Dimension diameter (mm)	Constr. RHRL	Weight kg/100m	Tensile strength 1570 (N/mm ²) Minimum breaking load (kN)
Rope 7x19 INOX 3	1,00	7x19	3,40	5,12
Rope 7x19 INOX 4	1,50	7x19	6,10	9,09
Rope 7x19 INOX 5	2,00	7x19	9,50	14,20
Rope 7x19 INOX 6	2,50	7x19	13,80	20,50
Rope 7x19 INOX 7	3,00	7x19	18,70	27,80
Rope 7x19 INOX 8	4,00	7x19	24,30	36,40
Rope 7x19 INOX 10	5,00	7x19	38,10	56,80
Rope 7x19 INOX 12	6,00	7x19	54,80	81,80

STAINLESS STEEL ROPE 6x36 WS/IWRC

- stainless steel, acid-resistant rope, in accordance with the standard 12385-4,
- single layer rope weave (number of strands 6, arrangement of wires in a strand 1+7+7+7+14), steel core IWRC,
- the most flexible and most durable rope among ropes 6 strands (not compact). The 6x36 Warrington-Seale weave provides a very large metallic cross-sectional area. this is associated with high rope strength while maintaining high flexibility.
- tensile strength 1570 N/mm²,
- has increased resistance to chemical agents,
- recommended especially for acid and alkaline environments, where galvanized ropes are subject to accelerated corrosion,
- recommended for all types of electric and mechanical winches: high flexibility allows winding the rope on small diameter drums, while the steel core protects the rope against crushing on the lower layers of the drum.

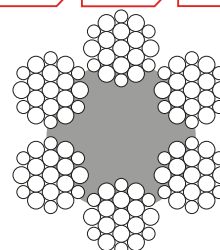


Type	Dimension diameter (mm)	Constr. RHRL	Weight kg/100m	Tensile strength 1570 (N/mm ²) Minimum breaking load (kN)
Rope 6x36 WS-IWRC INOX 10	10,00	6x36 WS-IWRC	40,90	55,90
Rope 6x36 WS-IWRC INOX 12	12,00	6x36 WS-IWRC	58,90	80,50
Rope 6x36 WS-IWRC INOX 14	14,00	6x36 WS-IWRC	80,16	110,00
Rope 6x36 WS-IWRC INOX 16	16,00	6x36 WS-IWRC	104,70	143,00
Rope 6x36 WS-IWRC INOX 18	18,00	6x36 WS-IWRC	132,50	181,00
Rope 6x36 WS-IWRC INOX 20	20,00	6x36 WS-IWRC	163,60	224,00
Rope 6x36 WS-IWRC INOX 22	22,00	6x36 WS-IWRC	198,00	271,00
Rope 6x36 WS-IWRC INOX 24	24,00	6x36 WS-IWRC	236,00	322,00

SPECIALIST ROPE 6x19W +FC

- specialist rope made of galvanized steel,
- in accordance with the standard 12385-5,
- three-layer weave 6x19W+FC; fiber core (FC), • tensile strength 1770 N/mm².

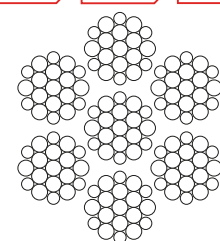
Type	Dimension diameter (mm)	Constr. RHRL	Weight kg/100m	Tensile strength (N/mm ²)		cross-sectional area mm ²
				1570	1770	
Spec. rope 6x19W+FC 6,0	6,00	6x19W+FC	0,132	19,40	21,90	14,7
Spec. rope 6x19W+FC 6,5	6,50	6x19W+FC	0,155	22,80	25,70	17,2
Spec. rope 6x19W+FC 7,0	7,00	6x19W+FC	0,179	26,40	29,80	20,0
Spec. rope 6x19W+FC 8,0	8,00	6x19W+FC	0,235	34,50	38,90	26,2



SPECIALIST ROPE 6x19W +WSC

- specialist rope made of galvanized steel,
- in accordance with the standard 12385-5,
- three-layer weave 6x19W+WSC; spring wire core (WSC),
- tensile strength 1770 N/mm².

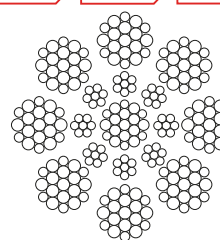
Type	Dimension diameter (mm)	Constr. RHRL	Weight kg/100m	Tensile strength 1770 (N/mm ²)		cross-sectional area mm ²
				Minimum breaking load (kN)		
Spec. rope 6x19W+WSC 6,0	6,00	6x19W+FC	0,148	23,60		17,2



SPECIALIST ROPE 8x19W +IWRC

- specialist rope made of galvanized steel,
- in accordance with the standard 12385-5,
- three-layer weave 6x19W+IWRC; steel wire core (IWRC),
- tensile strength 1770 N/mm².

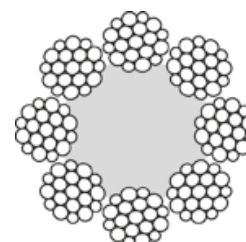
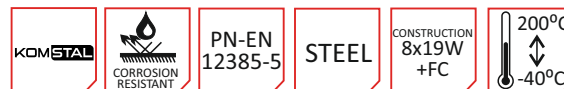
Type	Dimension diameter (mm)	Constr. RHRL	Weight kg/100m	Tensile strength (N/mm ²)		cross-sectional area mm ²
				1570	1770	
Spec. rope 8x19W+IWRC 6,5	6,50	8x19W+IWRC	0,177	-	31,50	20,1
Spec. rope 8x19W+IWRC 8,0	8,00	8x19W+IWRC	0,268	43,30	46,60	30,4



SPECIALIST ROPE 8x19W +FC

- specialist rope made of galvanized steel,
- in accordance with the standard 12385-5,
- three-layer weave 8x19W+FC; r fiber core (FC), • tensile strength 1570 N/mm².

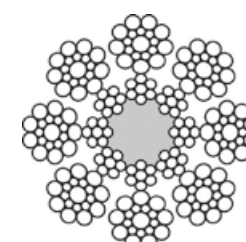
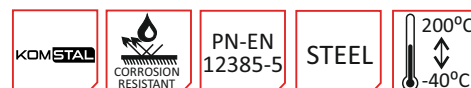
Type	Dimension diameter (mm)	Constr. RHRL	Weight kg/100m	Tensile strength 1570 (N/mm ²)		cross-sectional area mm ²
				Minimum breaking load (kN)		
Spec. rope 8x19W+FC 8,0	8,00	8x19W+FC	0,225	29,40		23,2
Spec. rope 8x19W+FC 9,0	9,00	8x19W+FC	0,283	37,30		29,4
Spec. rope 8x19W+FC 10,0	10,00	8x19W+FC	0,350	46,00		36,3
Spec. rope 8x19W+FC 11,0	11,00	8x19W+FC	0,423	55,70		43,9
Spec. rope 8x19W+FC 12,0	12,00	8x19W+FC	0,505	66,20		52,3
Spec. rope 8x19W+FC 13,0	13,00	8x19W+FC	0,592	77,40		30,1
Spec. rope 8x19W+FC 14,0	14,00	8x19W+FC	0,686	90,20		71,1
Spec. rope 8x19W+FC 16,0	16,00	8x19W+FC	0,896	118,00		92,9



SPECIALIST ROPE K-200S

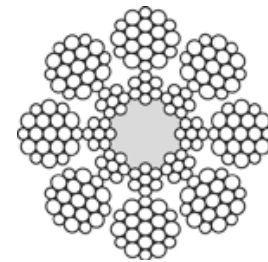
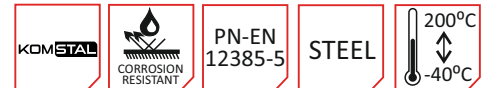
- specialist rope made of galvanized steel, • in accordance with the standard 12385-5,
- tensile strength 1570 N/mm².

Type	Dimension diameter (mm)	Weight kg/100m	Tensile strength 1570 (N/mm ²)	cross-sectional area mm ²
Spec. rope K-200S 8,0	8,00	0,243	38,50	27,4
Spec. rope K-200S 10,0	10,00	0,379	58,90	42,8
Spec. rope K-200S 11,0	11,00	0,456	73,20	51,7
Spec. rope K-200S 12,0	12,00	0,544	84,90	61,6
Spec. rope K-200S 13,0	13,00	0,645	101,90	72,3
Spec. rope K-200S 14,0	14,00	0,745	118,20	83,9
Spec. rope K-200S 16,0	16,00	0,971	150,00	109,5



SPECIALIST ROPE K-200W

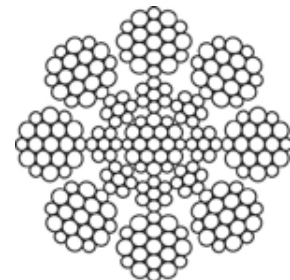
- specialist rope made of galvanized steel,
- in accordance with the standard 12385-5,
- tensile strength 1570 N/mm².



Type	Dimension diameter (mm)	Weight kg/100m	Tensile strength 1570 (N/mm ²) Minimum breaking load (kN)	cross-sectional area mm ²
Spec. rope K-200W 8,0	8,00	0,250	40,00	28,5
Spec. rope K-200W 10,0	10,00	0,394	61,30	44,5
Spec. rope K-200W 11,0	11,00	0,470	76,10	53,8
Spec. rope K-200W 12,0	12,00	0,560	88,30	64,1
Spec. rope K-200W 13,0	13,00	0,660	106,00	75,2
Spec. rope K-200W 14,0	14,00	0,767	123,00	87,2
Spec. rope K-200W 16,0	16,00	1,020	156,00	113,9

SPECIALIST ROPE K-240W

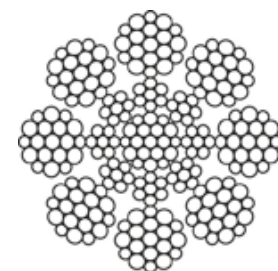
- specialist rope made of galvanized steel,
- in accordance with the standard 12385-5,
- tensile strength 1570 N/mm².



Type	Dimension diameter (mm)	Weight kg/100m	Tensile strength 1570 (N/mm ²) Minimum breaking load (kN)	cross-sectional area mm ²
Spec. rope K-240W 8,0	8,00	0,268	43,30	30,4
Spec. rope K-240W 10,0	10,00	0,423	67,70	49,4
Spec. rope K-240W 11,0	11,00	0,512	81,90	59,7
Spec. rope K-240W 12,0	12,00	0,610	97,40	71,7
Spec. rope K-240W 13,0	13,00	0,715	114,00	83,4
Spec. rope K-240W 14,0	14,00	0,829	133,00	96,7
Spec. rope K-240W 16,0	16,00	1,083	173,00	126,0

SPECIALIST ROPE K-240W

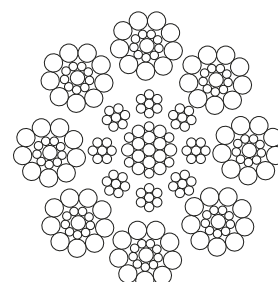
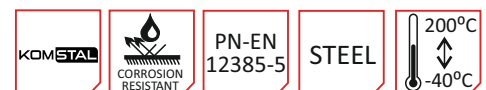
- specialist rope made of galvanized steel,
- in accordance with the standard 12385-5,
- tensile strength 1770 N/mm².



Type	Dimension diameter (mm)	Weight kg/100m	Tensile strength 1770 (N/mm ²) Minimum breaking load (kN)	cross-sectional area mm ²
Spec. rope K-240W 6,5	6,50	0,177	31,50	20,1

SPECIALIST ROPE K-280S

- specialist rope made of galvanized steel,
- in accordance with the standard 12385-5,
- tensile strength 1770 N/mm².



Type	Dimension diameter (mm)	Weight kg/100m	Tensile strength 1770 (N/mm ²) Minimum breaking load (kN)	cross-sectional area mm ²
Spec. rope K-280S 8,0	8,00	0,261	44,90	30,8



WELDING ACCESSORIES

WT CLAMP



- special construction and precise workmanship, guaranteeing always identical distances between fixing points,
- the arms are made of casted aluminium which allows a clamping force to meet the requirements for all pipe dimensions within the range of the WT Clamp (27 – 355 mm)
- wall thickness of up to 15 mm,
- butterfly adjusting screws with pressed stainless balls at the ends,
- can be used for the welding of all kinds of materials such as carbon steel, stainless steel, duplex, super duplex and titanium without the risk of damage to the surface and the introduction of impurities that can be centers of subsequent corrosion.

Type	Range (inch)	Range (mm)	Weight (kg)
WT 125	1,0 - 2,5	27 - 64	0,75
WT 26	2,0 - 6,0	60 - 168	2,60
WT 614	6,0 - 14,0	168 - 356	7,50



S.C. CLAMP



- special construction and precise workmanship, guaranteeing always identical distances between fixing points,
- made of sink forged steel,
- it provides enough clamping force to meet to requirements for all pipe dimensions within the range of 1"-14" (25mm-355mm),
- wall thickness of up to 15 mm,
- butterfly adjusting screws with pressed stainless balls at the ends,
- can be used for the welding of all kinds of materials such as carbon steel, stainless steel, duplex, super duplex and titanium without the risk of damage to the surface and the introduction of impurities that can be centers of subsequent corrosion.

Type	Range (inch)	Range (mm)	Weight (kg)
SC 13	1,0 - 3,0	26 - 76	1,50
SC 25	2,0 - 5,0	51 - 127	3,10
SC 47	4,0 - 7,0	102 - 177	3,30
SC 59	5,0 - 9,0	127 - 228	6,90
SC 1014	10,0 - 14,0	254 - 355	8,80



2500S MANUAL PIPE CLAMP SINGLE (5"-60")

FOR STAINLESS STEEL PIPES

- single chain clamp type 2500D for stainless steel pipe is an easy tool for clamping pipe to pipe, pipe to bend, pipe to tee or pipe to flange,
- low weight - easy work both in the factory hall and in the field,
- has a clamping force of 2500 kg,
- these clamps can adjust and align pipes with wall-thickness up to 1/2" (12 mm),
- the clamps can be used for several pipe dimensions, simply by removing the jack-bars,
- the jack-bars are made of stainless steel on all our clamps. Type 2500D can be used for stainless steel, duplex and other exotic materials, as only stainless steel is in contact with the pipe,
- all clamps can be used for pipe dimensions from 5".

Type	Range (inch)	No. jackbars	Weight(kg)
PJ2500SS512	5,0 - 12,0	4	6,30
PJ2500SS516	5,0 - 16,0	5	7,30
PJ2500SS520	5,0 - 20,0	6	8,30
PJ2500SS524	5,0 - 24,0	7	9,10
PJ2500SS532	5,0 - 32,0	10	11,70
PJ2500SS536	5,0 - 36,0	11	12,80
PJ2500SS542	5,0 - 42,0	13	14,20
PJ2500SS548	5,0 - 48,0	14	16,10
PJ2500SS554	5,0 - 54,0	15	17,80
PJ2500SS560	5,0 - 60,0	16	19,50



2500S MANUAL PIPE CLAMP SINGLE (5"-60")

FOR CARBON STEEL PIPE

- single chain clamp type 2500D for carbon steel pipe is an easy tool for clamping pipe to pipe, pipe to bend, pipe to tee or pipe to flange,
- low weight - easy work both in the factory hall and in the field,
- has a clamping force of 2500 kg,
- these clamps can adjust and align pipes with wall-thickness up to 1/2" (12 mm),
- the clamps can be used for several pipe dimensions, simply by removing the jack-bars,
- the jack-bars are made of stainless steel on all our clamps. Type 2500D can be used for stainless steel, duplex and other exotic materials, as only stainless steel is in contact with the pipe,
- all clamps can be used for pipe dimensions from 5".

Type	Range (inch)	No. jackbars	Weight(kg)
PJ2500SM512	5,0 - 12,0	4	6,30
PJ2500SM516	5,0 - 16,0	4	6,70
PJ2500SM520	5,0 - 20,0	5	7,70
PJ2500SM524	5,0 - 24,0	6	8,50
PJ2500SM532	5,0 - 32,0	8	10,50
PJ2500SM536	5,0 - 36,0	9	11,50
PJ2500SM542	5,0 - 42,0	11	13,20
PJ2500SM548	5,0 - 48,0	13	15,40
PJ2500SM554	5,0 - 54,0	14	17,10
PJ2500SM560	5,0 - 60,0	15	18,80



2500D MANUAL PIPE CLAMP DOUBLE (5"-60")

FOR STAINLESS STEEL PIPES

- double chain clamp type 2500D for stainless steel pipe is an easy tool for clamping pipe to pipe, pipe to bend, pipe to tee or pipe to flange,
- low weight - easy work both in the factory hall and in the field,
- has a clamping force of 2500 kg,
- these clamps can adjust and align pipes with wall-thickness up to 1/2" (12 mm),
- the clamps can be used for several pipe dimensions, simply by removing the jack-bars,
- the jack-bars are made of stainless steel on all our clamps. Type 2500D can be used for stainless steel, duplex and other exotic materials, as only stainless steel is in contact with the pipe,
- all clamps can be used for pipe dimensions from 5".

Type	Range (inch)	No. jackbars	Weight(kg)
PD2500DS512	5,0 - 12,0	4	11,00
PD2500DS516	5,0 - 16,0	5	12,60
PD2500DS520	5,0 - 20,0	6	14,20
PD2500DS524	5,0 - 24,0	7	15,40
PD2500DS532	5,0 - 32,0	10	19,40
PD2500DS536	5,0 - 36,0	11	20,50
PD2500DS542	5,0 - 42,0	13	22,70
PD2500DS548	5,0 - 48,0	14	24,10
PD2500DS554	5,0 - 54,0	15	25,20
PD2500DS560	5,0 - 60,0	16	27,00



2500D MANUAL PIPE CLAMP DOUBLE (5"-60")

FOR CARBON STEEL PIPE

- double chain clamp type 2500D for carbon steel pipe is an easy tool for clamping pipe to pipe, pipe to bend, pipe to tee or pipe to flange,
- low weight - easy work both in the factory hall and in the field,
- has a clamping force of 2500 kg,
- these clamps can adjust and align pipes with wall-thickness up to 1/2" (12 mm),
- the clamps can be used for several pipe dimensions, simply by removing the jack-bars,
- the jack-bars are made of stainless steel on all our clamps. Type 2500D can be used for stainless steel, duplex and other exotic materials, as only stainless steel is in contact with the pipe,
- all clamps can be used for pipe dimensions from 5".

Type	Range (inch)	No. jackbars	Weight(kg)
PD2500DM512	5,0 - 12,0	4	11,00
PD2500DM516	5,0 - 16,0	4	11,80
PD2500DM520	5,0 - 20,0	5	13,40
PD2500DM524	5,0 - 24,0	6	14,60
PD2500DM532	5,0 - 32,0	8	17,80
PD2500DM536	5,0 - 36,0	9	18,90
PD2500DM542	5,0 - 42,0	11	21,20
PD2500DM548	5,0 - 48,0	13	23,30
PD2500DM554	5,0 - 54,0	14	24,40
PD2500DM560	5,0 - 60,0	15	26,20



SINGLE AND DOUBLE CHAIN CLAMPS



- heavy chain clamps: type S - single row, and type D - double row,
- variety 200 equipped with a heavy type chain, and variety 300 equipped with an extra-heavy type chain,
- type D200 - chain spacing 110mm, D300 spacing - 160mm,
- setting elements with wall thickness up to 12mm,
- buckle: three-link sections of chains between clamps,
- chain at both ends terminated with a two-link segment to which the clamp is attached.



Chain clamp S200 single row, heavy type chain

Type	Range (inch)	No. jackbars
PJS200810	8,0 - 10,0	5
PJS200812	8,0 - 12,0	6
PJS200816	8,0 - 16,0	7
PJS200820	8,0 - 20,0	9
PJS200824	8,0 - 24,0	11
PJS200828	8,0 - 28,0	13
PJS200832	8,0 - 32,0	14
PJS200836	8,0 - 36,0	16
PJS200840	8,0 - 40,0	18
PJS200844	8,0 - 44,0	19
PJS200848	8,0 - 48,0	21
PJS200852	8,0 - 52,0	23
PJS200856	8,0 - 56,0	25
PJS200860	8,0 - 60,0	26

Chain clamp S300 single row, extra-heavy type chain

Type	Range (inch)	No. jackbars
PJS300816	12,0 - 16,0	5
PJS300820	12,0 - 20,0	6
PJS300824	12,0 - 24,0	7
PJS300828	12,0 - 28,0	9
PJS300832	12,0 - 32,0	10
PJS300836	12,0 - 36,0	11
PJS300840	12,0 - 40,0	12
PJS300844	12,0 - 44,0	13
PJS300848	12,0 - 48,0	15
PJS300852	12,0 - 52,0	16
PJS300856	12,0 - 56,0	17
PJS300860	12,0 - 60,0	18



Chain clamp D200 double row, heavy type chain

Type	Range (inch)	No. jackbars
PDD200812	8,0 - 12,0	6
PDD200816	8,0 - 16,0	7
PDD200820	8,0 - 20,0	9
PDD200824	8,0 - 24,0	11
PDD200828	8,0 - 28,0	13
PDD200832	8,0 - 32,0	14
PDD200836	8,0 - 36,0	16
PDD200840	8,0 - 40,0	18
PDD200844	8,0 - 44,0	19
PDD200848	8,0 - 48,0	21
PDD200852	8,0 - 52,0	23
PDD200856	8,0 - 56,0	25
PDD200860	8,0 - 60,0	26

Chain clamp D300 double row, extra-heavy type chain

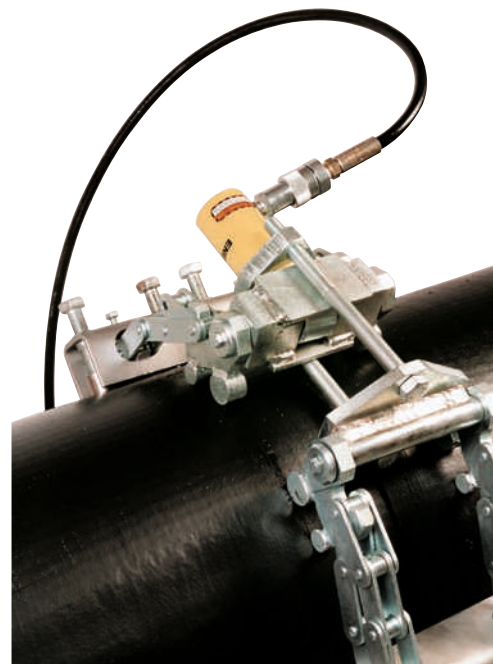
Type	Range (inch)	No. jackbars
PDD300816	12,0 - 16,0	5
PDD300820	12,0 - 20,0	6
PDD300824	12,0 - 24,0	7
PDD300828	12,0 - 28,0	9
PDD300832	12,0 - 32,0	10
PDD300836	12,0 - 36,0	11
PDD300840	12,0 - 40,0	12
PDD300844	12,0 - 44,0	13
PDD300848	12,0 - 48,0	15
PDD300852	12,0 - 52,0	16
PDD300856	12,0 - 56,0	17
PDD300860	12,0 - 60,0	18



HP CLAMP MANUAL CHAIN CLAMP (12"-60")

- the "easy-to-handle", flexible system to be used for pipe-to-pipe, pipe-to-bend and pipe-to-tee or flange,
- low weight, easy operation,
- the HP Clamp is the only hydraulic chain clamp in the world which can operate on pipe diameters from 6" (168 mm) to 60" (1524 mm). The HP Clamp is able to align and adjust pipes and fittings with wall thickness up to 1" (25 mm).
- the chain is fastened to the pipe by means of a hydraulic cylinder with a hand pump,
- when the diameter of the pipe changes, the chain length and the number of screw clamps change,
- all components are in contact with a positioned stainless steel pipe,
- screw clamps are adjustable and can be easily removed,
- can be equipped with a special chain extender, the so-called "extra chain".

Type	Range (inch)	No. jackbars	weight without pump (kg)
CHHP616	6,0 - 16,0	5	33,00
CHHP620	6,0 - 20,0	6	38,00
CHHP624	6,0 - 24,0	7	43,00
CHHP632	6,0 - 32,0	9	53,00
CHHP636	6,0 - 36,0	10	57,00
CHHP642	6,0 - 42,0	11	63,00
CHHP648	6,0 - 48,0	12	68,00
CHHP652	6,0 - 52,0	13	73,00
CHHP656	6,0 - 56,0	14	78,00
CHHP660	6,0 - 60,0	15	83,00



HD CLAMP MANUAL CHAIN CLAMP (12"-60")

- HD Clamp flexible system to be used for pipe-to-pipe, pipe-to-bend and pipe-to-tee or flange
- low weight, easy operation,
- the HD Clamp can operate on pipe diameters from 12" (304,8 mm) to 60" (1524 mm). The HD Clamp is able to align and adjust pipes and fittings with wall thickness up to 1" (20 mm).,
- fastening the chain to the pipe using a screw clamp,
- when the diameter of the pipe changes, the chain length and the number of screw clamps change,
- all components are in contact with a positioned stainless steel pipe,
- screw clamps are adjustable and can be easily removed,
- can be equipped with a special chain extender, the so-called "extra chain".

Type	Range (inch)	No. jackbars	weight without pump (kg)
CHHD616	6,0 - 16,0	5	33,00
CHHD620	6,0 - 20,0	6	38,00
CHHD624	6,0 - 24,0	7	43,00
CHHD632	6,0 - 32,0	9	53,00
CHHD636	6,0 - 36,0	10	57,00
CHHD642	6,0 - 42,0	11	63,00
CHHD648	6,0 - 48,0	12	68,00
CHHD652	6,0 - 52,0	13	73,00
CHHD656	6,0 - 56,0	14	78,00
CHHD660	6,0 - 60,0	15	83,00

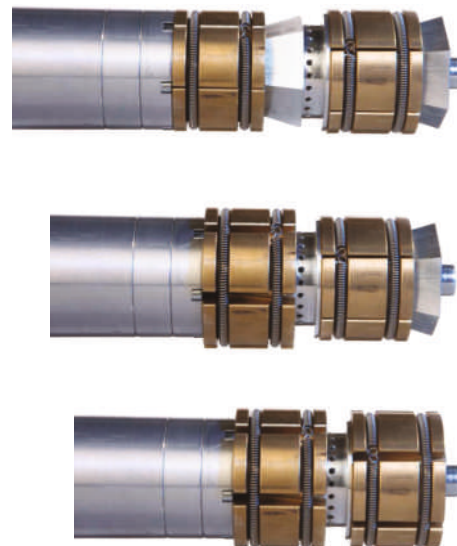


PNEUMATIC INTERNAL LINE-UP CLAMP COMBI



- pneumatic expansion,
- two-head centralizers, two-stage operation,
- independent control of the operation of the front and rear centering head,
- precise assembly of the connector in all assembly conditions,
- exchangeable jaws,
- CCP models: centering with straightening: up to 10 mm thick wall centering: up to 40 mm wall thickness.

Type	Size (inch)	Length (mm)	weight (kg)	Working range* (mm)
CWCCP02	2	500	4	6
CWCCP03	3	520	8	6
CWCCP04	4	590	14	8
CWCCP05	5	670	22	8
CWCCP06	6	670	25	8
CWCCP08	8	680	50	8



HYDRAULIC INTERNAL LINE-UP CLAMP COMBI



- hydraulic expansion,
- two-head centralizers, two-stage operation,
- independent control of the operation of the front and rear centering head,
- precise assembly of the connector in all assembly conditions,
- exchangeable jaws,
- CCP models: centering with straightening: up to 15 mm thick wall centering: up to 40 mm wall thickness.

Kod	Rozmiar (cale)	Długość (mm)	Masa (kg)	Working range* (mm)
CWCCH06	6	810	29	10
CWCCH08	8	810	49	10
CWCCH10	10	650	74	10
CWCCH12	12	650	94	10
CWCCH14	14	650	115	10
CWCCH16	16	650	135	10
CWCCH18	18	650	170	10
CWCCH20	20	650	188	10
CWCCH22	22	650	224	10
CWCCH24	24	650	283	10



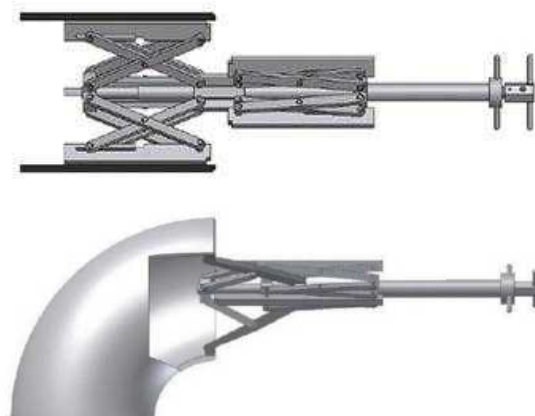
*skok - zakres naprężania po średnicy

INTERNAL MANUAL PIPE CLAMP CWIMC



- Internal Manual Pipe Clamp (IMC) for welding flanges to pipe,
- the clamps has a range from 2,25" (56 mm) and up to 37" (940 mm).

Type	Range (inch)	Range (mm)	Weight (kg)
CWIMC 56140	2,5 - 5,0	56 - 140	1,35
CWIMC 85220	3,0 - 8,0	85 - 220	4,00
CWIMC 120315	4,0 - 12,0	120 - 315	12,00
CWIMC 180520	7,0 - 20,0	180 - 520	27,00
CWIMC 400940	15,0 - 37,0	400 - 940	46,00



INTERNAL MANUAL FLANGE CLAMP CWIMF



- Internal Manual Flange Clamp suitable for clamping flanges to bends.
- The IMF clamp is a fast and easy tool to use,
- the IMF Clamps has a range from 2,25" (56mm) up to 37" (940mm),
- a flange or similar element is attached to the upper expansion element and fixed there.

Type	Range (inch)	Range (mm)	Weight (kg)
CWIMF 56115	2,0 - 6,0	56 - 115	1,00
CWIMF 85195	3,0 - 7,0	85 - 195	3,00
CWIMF 120315	5,0 - 12,0	120 - 315	10,00
CWIMF 180520	6,0 - 12,0	180 - 520	24,00

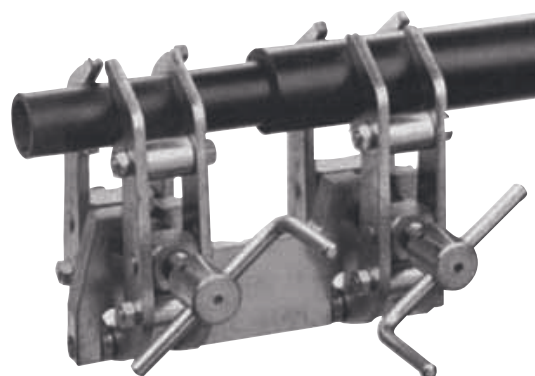


Double Manual CLAMP CWDMC



- the Double Manual Clamp for orbital welding or normal welding is able to clamp pipes of different dimensions,
- the range of the clamps is from 0,4" (10mm) up to 5,5" (140mm)
- used for manual and orbital welding,
- for carbon and stainless steel pipes,
- regardless of pipe diameters, DMC will always place them on the same axis (coaxial).

Kod	Zakres (cale)	Zakres (mm)	Masa (kg)
CWDMC 1070	0,3 - 2,7	10 - 70	2,20
CWDMC 40140	1,5 - 5,0	40 - 140	5,70
CWDMC 75330	2,9 - 12,0	75 - 330	24,00



WT FIX AND WT FOLD PIPE STANDS



- WT Fix and WT Fold Pipe Stands, the max load is 1500 kg.,
- prismatic support for pipes up to a maximum diameter of 610 mm,
- roller kits are available.

Type	H min (mm)	H max (mm)	Weight (kg)
ST FOLD folding	85	125	12,00
ST FIX fixed	85	125	11,50



SWT MULTI PIPE STAND



- WT Multi Pipe Stand is built for a max load of 2000 kg,
- the height is adjustable from 740-1090mm.,
- each roller works independently for easy customization of the parts to be welded.
- WT Multi is supplied with steel rollers as standard.

Type	Height min (mm)	Height max (mm)	spacing rollers (mm)	Weight (kg)
ST MULTI	740	1090	100-915	56





TRANSPORT DEVICES

TRANSPORT TROLLEYS (ROLLS) CBR



- transport trolleys (rollers) are designed for transporting loads with a mass not exceeding the permissible working load (DOR), on flat, even, dry and hard surfaces,
- should be used in the set,
- the set consists of two parts: front and back. The front part is equipped with a handle for pulling the load. The rear part consists of two sets of rollers connected by a rod, allowing adjustment of their spacing,
- the surfaces of both parts are covered with non-slip rubber,
- rotating front part,
- load stability is greater due to three-point support,
- they are not suitable for work in acid and chemically aggressive environment,
- allowed temperature range from -10°C to +50°C.



Transport trolley CBR Type	Wheel dimensions (mm)	Number of wheels (pcs)	Dimension of bearing surfaces (mm)	Adjustable width (mm)	Length x width (mm)	Height (mm)	DOR (t)	Weight (kg)	Set DOR (t)	
CBR 8	przód	φ80 x 70	4	φ150	-	230 x 230	110	4	13	8
	tył	φ80 x 70	4	140 x 120	300 - 1000	170 x 140	110	4	15	
CBR 16	przód	φ80 x 70	8	φ160	-	560 x 420	110	8	44	16
	tył	φ80 x 70	8	200 x 160	400 - 1300	200 x 200	110	8	28	
CBR 24	przód	φ80 x 70	12	φ180	-	230 x 230	110	12	64	24
	tył	φ80 x 70	12	220 x 180	400 - 1400	256 x 200	110	12	36	
CBR 36	przód	φ80 x 70	18	φ200	-	780 x 550	110	18	86	36
	tył	φ80 x 70	18	280 x 200	400 - 1500	300 x 250	110	18	52	

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