



This user information presents a general overview regarding the operation of some plate clamps and does not substitute the existing operating instructions for specific load hoisting tackle.

Lifting operations with load hoisting tackle may be carried out by competent persons (trained in theory and practice) only.

When operated correctly, our Tigrip products will offer the highest degree of safety, avoid damage to products and people and present a long life expectancy.

Modification of delivery condition

Design and construction of the load hoisting tackle may not be altered without authorization of the manufacturer, e.g. by bending, welding, grinding, cutting-off parts, adding boreholes, removal of safety devices like locking mechanisms, bolts, shear pins etc. Otherwise the validity of the declaration of conformity will be void and any liability and warranty of the manufacturer ceased.

Limitations of operation

Loading

The rated capacity (WLL) indicated on the tackle is the maximum load which must not be exceeded.

Temperature

Clamps without protective lining may normally (depending on manufacturer) be operated at ambient temperatures of -40° up to +100° C without capacity reduction. Clamps with protective lining may be subject to reduced temperature areas due to application of affixed linings, e.g. model TBP and TSB, which can be operated from -20° up to +40° C.

Shock loading, swinging of load

The indicated capacities are based on shock-free loading of the tackle. Light bumps as occurred during lifting and lowering as well as transporting of load with the crane are admitted. Heavier shock loadings (e.g. crashing against obstacles during transport) as well as swinging of the load are strictly forbidden.

Chemicals

Load hoisting tackle may not be operated without hesitation in the area of chemicals or chemical vapours – consult our specialists beforehand. Hoisting tackle which has been subject to chemicals or vapours must be taken out of service and should be returned to us for inspection.

Transport of people

Transport of people with hoisting equipment and tackle is generally forbidden!

Operation in danger zones

Lifting or transport of loads must be avoided while personnel are in the danger zone. When using clamps or grabs without a positive fit but with force fit or friction fit the load must not be suspended above people - see AMVO §18(6)!

Lifting products

Load hoisting tackle have been designed for specific applications and must not be used for other jobs without prior authorization of the manufacturer. This refers e.g. to the thickness of material (jaw capacity of the clamp), surface condition, hardness* and temperature of material. Relative information is given in the respective operating instructions. These have to be available to the operator to ensure safe handling of the product.

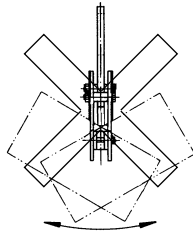
* Please observe that for special steel plates the surface hardness may deviate substantially from the core hardness, e.g. for cold work steel.

Inspection before initial operation

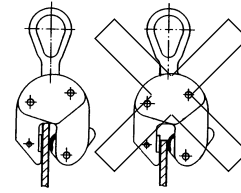
- Ensure that the surface of the steel plate, in the area where the clamp is to be attached, is dry and free from grease, paint, dirt and scale and is not coated, so that the teeth resp. the protective lining on the moving jaw can make good contact with the surface of the load.
- Check the fixed jaw and the moving jaw for wear and defects. Both jaws must have clean profiles and teeth must not be heavily worn (observe respective advice given in the operating instruction, guiding value max. 30% wear). Protective linings must not be contaminated, damaged, uneven or heavily worn.
- The entire hoisting tackle has to be checked for damage, corrosion, cracks or deformations.
- It should be easy to open and close the clamp.
- Check the function of the spring. In the CLOSED position this must present a noticeable spring pressure force when the hook ring is pressed down.

Application advice

- Load hoisting tackle must always be in perfect condition and provided with a legible identity plate.
- Prior to initial operation and every time before work, the tackle is to be visually inspected for obvious deficiencies.
- The suspension eye must have sufficient space in the load hook and move freely. A safety latch to prevent accidental out-hooking of the tackle must be available.
- Do not lift or transport loads while personnel are in the danger zone and do not allow people to pass under a suspended load. Note: a safe form-fit attachment requires sufficient hardness of the load. Ensure that the load or parts thereof cannot slip and fall down.
- The load hoisting tackle must be positioned over the gravity centre of the load, so that a swinging movement is avoided.
- If longer sheets of metal or profiles are to be transported, we recommend using two clamps to prevent load swinging. The clamps can be used in combination with a spreader beam or with double strand chain slings and clamps with hinged hook ring (e.g. model TBS). Observe the maximum angle from the vertical and possible capacity restrictions.
- Clamps without hinged hook ring must not be loaded laterally! (Slanted attachment of the clamp onto the steel plate in pulling direction of the clamp is normally not permitted, as the jaws would grip too close to the edge of the plate. Thus a correct fit of the clamp on the plate is not assured!).



- Always insert the load fully into the mouth of the clamp and make sure that the housing has contact on either side of the plate.
- Clamps designed for the transport of steel plate in vertical position may only accept one single plate at a time. The clamping effect must be assured on either side of the load!
- Special clamps are available for the transport of steel plate in horizontal position which allows handling of several plates at a time.
- A load must not be suspended or left unattended in raised or tensioned condition for a longer period of time.
- When attaching the clamp, the operator must ensure that neither the clamp, slings or load pose a danger to himself or other personnel.
- The operator may not move the load until he is convinced that the load is correctly attached and all personnel are outside the danger zone.
- Please take note of possible capacity restrictions depending on the pivoting range resp. pulling direction of the clamp. (Note: Not all clamp types on the market are designed for a pivoting range of 180° – strictly observe the operating instructions!).
- In case of malfunction stop using the load hoisting tackle immediately.



Due to the limitations of space in this catalogue we could not respond to all applications. Please contact us for further information.

Maintenance and repair

- To ensure safe operation, all load hoisting tackle must be subjected to regular inspections according to the maintenance instructions given by the manufacturer.
- Load hoisting tackle which are due for maintenance (normally once per year, unless adverse working conditions dictate shorter periods) or products with obvious defects may be returned to us for inspection and repair.
- Inspections and tests must be performed by competent persons or specialist workshops that use original spare parts.

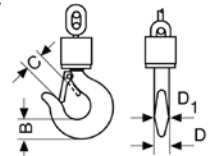
Inspections

- Inspections are visual and functional and shall establish that the load hoisting tackle is safe and has not been damaged by incorrect transport or storage. In addition check for damage, wear, corrosion and other deficiencies as well as completeness and function of safety devices. Inspections are instigated by the user.
- All load hoisting tackle has to be cleaned prior to inspection. The cleaning procedure must not cause chemical damages (e.g. no acid – embrittlement), no incorrect temperature stress by e.g. flame cleaning or possible concealment of cracks due to excessive material loss (sand blasting).
- We shall be pleased to consult you in this respect. Please submit your load hoisting tackle for inspection in clean condition. This will reduce inspection costs considerably.

Criteria for disposal of load hoisting tackle

Load hoisting tackle must no longer be operated if e.g.:

- The identification (identity plate) is missing or illegible.
- Housing, components and suspension of the tackle present obvious deficiencies, e.g. cuts, grooves, cracks, excessive corrosion, staining due to heat, signs of subsequent welding resp. spatters (which cannot be easily removed) and leave stains.
- Ropes show breakages of wires resp. bruises (criteria for disposal of ropes are given in classification DIN 15020), damages to the rope sleeve and similar failures.
- The load chain presents twisted or distorted links or shows an elongation of 5 % resp. undergoes the averaged nominal thickness of the link by more than 10 %.
- The opening (C) of either suspension or load hook has increased/deformed by more than 10 % of the nominal dimension or shows wear in the hook mouth (dimensions B resp. D) of more than 5 %.
- If the inspection revealed that the tackle has been overloaded or deteriorated it can only be used again after careful inspection and repair – if necessary.



For information on training please see pages 4-5.

Technical questionnaire TIGRIP® Load Hoisting Tackle and Crane Weighers

Company: _____

Date: _____

Contact: _____

e-Mail: _____

Phone: _____

Fax: _____

Clamps and grabs

Information about the load:

What will be transported?

Weight min. _____ kg - max. _____ kg

Length min. _____ mm - max. _____ mm

Width min. _____ mm - max. _____ mm

Height min. _____ mm - max. _____ mm

External diameter min. _____ mm - max. _____ mm

Internal diameter min. _____ mm - max. _____ mm

Material ☐ Steel ☐ Concrete ☐ Wood ☐ Paper ☐ Others

Surface hardness for steel: _____ HRC

Surface condition ☐ Oiled ☐ Greasy ☐ Dry ☐ Scales ☐ Others

How should/may the load be grabbed/clamped:

☐ Grabbed from underneath ☐ Jaws ☐ Protective lining ☐ Others

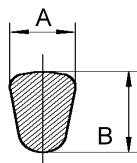
Information about the clamp/grab:

What kind of grab will be needed?

Type of crane hook or dimensions A - B

Model: _____ A = _____

B = _____



Other restrictions: _____



Plate clamp with safety lock model TBL

Capacity 500 - 3000 kg

This clamp is primarily used for transporting single steel plates in the vertical position, as well as lifting and turning through 180°. This clamp can also be used for transporting steel constructions and profiles. It is recommended to use a pair of plate clamps in conjunction with a spreader beam for large sized sheets and long materials which have a tendency to sag.

The jaw can be opened and closed with the locking lever (except for the TBL 0.5 t which uses a positive spring-loaded cam). The safety lock overrides the spring-loaded cam, preventing the clamp from opening even when there is no load.

This plate clamp is service-friendly, making it easy to exchange parts, which are available individually or in kits. Clamp repair is available by the factory, or can be done by certified and experienced staff.

The TBL 0.5 is equipped with a safety lock (positive spring-loaded cam), but comes without locking lever.

The min. load is 10% of the nominal WLL.



Technical data model TBL

Model	EAN-No. 4025092*	Capacity kg	Jaw capacity Z mm	Weight kg
TBL 0.5	*550000	500	0 - 16	1.5
TBL 1.0	*550017	1000	0 - 20	3.0
TBL 2.0	*550024	2000	0 - 32	9.3
TBL 3.0	*550048	3000	0 - 32	9.3

The surface hardness of the material must not exceed HRC 30/Brinell 300.

Dimensions model TBL

Model	TBL 0.5	TBL 1.0	TBL 2.0	TBL 3.0
A, mm	99	126	192	192
B, mm	195	225	312	312
Ø C, mm	29	50	80	80
D, mm	33	49	75	75
E, mm	47	70	96	96
F, mm	50	82	100	100
G, mm	48	55	81	81
H, mm	11	12	20	20
I, mm	16	20	24	24

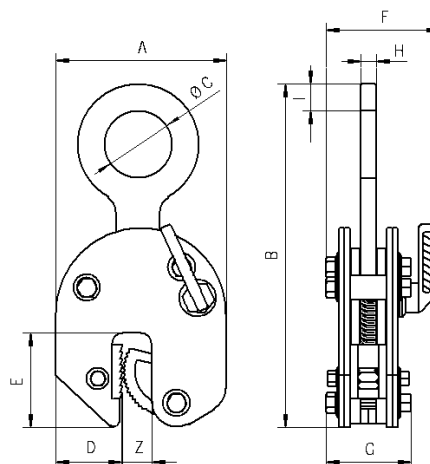


Plate clamp with safety lock model TBL

Capacity 4000 - 30000 kg

This clamp is primarily used for transporting single steel plates in the vertical position, as well as lifting and turning through 180°. This clamp can also be used for transporting steel constructions and profiles.

It is recommended to use a pair of plate clamps in conjunction with a spreader beam for large sized sheets and long materials which have a tendency to sag.

These plate clamps have the same design and applications as the clamp model TBL with a capacity from 500 - 3000 kg.

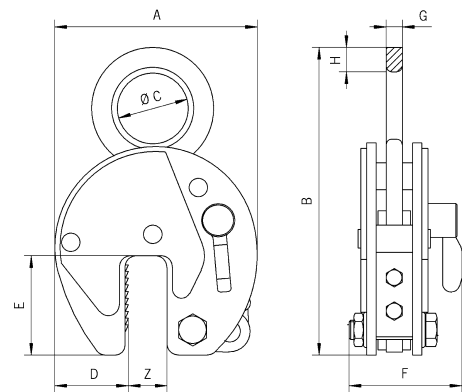


The surface hardness of the material must not exceed HRC 30/Brinell 300.

Technical data model TBL

Model	EAN-No. 4025092*	Capacity kg	Jaw capacity Z mm	Weight kg
TBL 4.0 S	*556545	4000	0 - 32	11.2
TBL 4.0 L	*556569	4000	30 - 60	11.9
TBL 6.0 S	*557221	6000	0 - 50	20.6
TBL 6.0 L	*556583	6000	50 - 100	23.2
TBL 8.0 S	*557245	8000	0 - 50	24.2
TBL 8.0 L	*557269	8000	50 - 100	28.8
TBL 10.0 S	*557283	10000	0 - 50	29.5
TBL 10.0 L	*557306	10000	50 - 100	35.1
TBL 12.0 S	*557320	12000	0 - 50	52.1
TBL 12.0 L	*557344	12000	50 - 100	63.0
TBL 15.0 S	*552936	15000	0 - 50	76.0
TBL 15.0 L	*552943	15000	50 - 100	86.0
TBL 20.0 S	*552950	20000	0 - 65	123.0
TBL 20.0 L	*551892	20000	65 - 130	135.0
TBL 30.0 S	*552967	30000	0 - 65	195.0
TBL 30.0 L	*552974	30000	65 - 130	256.0

The min. load is 10% of the nominal WLL.



Dimensions model TBL

Model	TBL 4.0 S	TBL 4.0 L	TBL 6.0 S	TBL 6.0 L	TBL 8.0 S	TBL 8.0 L	TBL 10.0 S	TBL 10.0 L	TBL 12.0 S	TBL 12.0 L	TBL 15.0 S	TBL 15.0 L	TBL 20.0 S	TBL 20.0 L	TBL 30.0 S	TBL 30.0 L
A, mm	197	228	293	362	293	362	293	362	360	460	360	460	462	560	462	560
B, mm	339	339	442	482	450	482	503	503	550	615	550	615	674	724	667	732
Ø C, mm	80	80	89	89	89	89	110	110	130	130	130	130	130	130	60	60
D, mm	68	68	95	114	95	114	95	114	125	175	125	175	165	195	165	195
E, mm	93	100	143	143	143	143	143	143	162	162	162	162	210	210	210	210
F, mm	110	110	129	129	129	129	139	139	154	154	204	204	235	235	295	295
G, mm	20	20	20	20	20	20	25	25	30	30	45	45	45	45	65	65
H, mm	32	32	35	35	42	42	45	45	55	55	55	55	65	65	66	67



Plate clamp with hinged hook ring and safety lock model TBS

Capacity 1000 - 3000 kg

The TBS plate clamp with hinged hook ring can be used for the safe handling of plates at various angles. It can lift plates from the horizontal and put down in the vertical or alternatively lift it over the edge by gripping it from the side. The hinged hook ring ensures adequate clamping force in every position. Depending on the angle of usage capacity restrictions have to be taken into account, as shown in the diagram below.

The hinged hook ring has the added advantage of providing enough clamping force to hold a plate safely. Even when transporting large-sized plates with the 2-legged lifting system slipping of the load and damage to the clamp is avoided.

In addition to transporting plates, this clamp is suitable for turning steel structures and welded constructions.

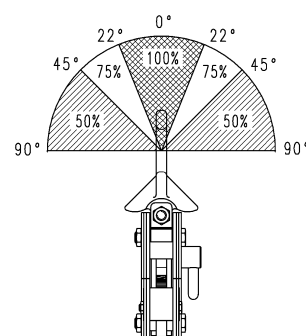


The min. load is 10% of the nominal WLL.

The surface hardness of the material must not exceed HRC 30/Brinell 300.

Technical data model TBS

Model	EAN-No. 4025092*	Capacity kg	Jaw capacity Z mm	Weight kg
TBS 1.0	*550031	1000	0 - 20	4.6
TBS 2.0	*550086	2000	0 - 32	14.3
TBS 3.0	*550079	3000	0 - 32	14.3



Dimensions model TBS

Model	TBS 1.0	TBS 2.0	TBS 3.0
A, mm	126	192	192
B, mm	270	382	382
Ø C, mm	50	80	80
D, mm	49	75	75
E, mm	70	96	96
F, mm	95	132	132
G, mm	63	92	92
H, mm	12	20	20
I, mm	23	30	30

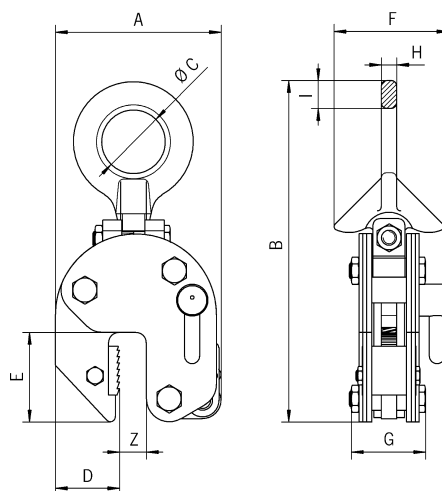
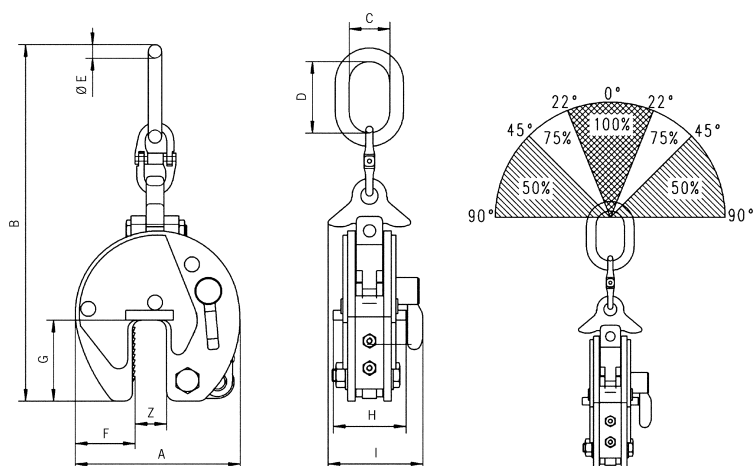


Plate clamp with pivoting shackle and safety lock model TBS

Capacity 4500 - 10000 kg

The surface hardness of the material must not exceed HRC 30/Brinell 300.



Technical data model TBS

Model	EAN-No. 4025092*	Capacity kg	Jaw capacity Z mm	Weight kg
TBS 4.5	*550352	4500	0 - 50	34.4
TBS 6.0 S	*550383	6000	0 - 50	38.0
TBS 6.0 L	*551250	6000	50 - 100	42.0
TBS 8.0 S	*552578	8000	0 - 50	39.0
TBS 8.0 L	*557528	8000	50 - 100	42.4
TBS 10.0 S	*552516	10000	0 - 50	68.0
TBS 10.0 L	*557542	10000	50 - 100	80.0



The min. load is 10% of the nominal WLL.

Dimensions model TBS

Model	TBS 4.5	TBS 6.0 S	TBS 6.0 L	TBS 8.0 S	TBS 8.0 L	TBS 10.0 S	TBS 10.0 L
A, mm	292	292	367	292	367	360	446
B, mm	675	737	785	737	785	903	921
C, mm	90	95	98	98	98	110	112
D, mm	180	176	180	176	180	195	195
Ø E, mm	27.8	27.8	27.8	27.8	27.8	33	33
F, mm	95	95	115	95	115	125	168
G, mm	143	143	143	143	143	162	162
H, mm	135	137	135	136	136	170	170
I, mm	185	188	188	210	210	223	223





Plate clamp model Shark

Capacity 1000 - 2000 kg

Features

- For the toughest operating conditions.
- This clamp is primarily used for transporting single steel plates in the vertical position, as well as lifting and turning through 180°, up to a surface hardness of HRC 40.
- Quality as yet unknown for plate clamps, guarantees highest safety standards and an extremely long service life.
- Fulfills the requirements of all relevant standards and EU-Directives.

Option

- Special jaws for a surface hardness up to HRC 50. Especially for alloyed/stainless steel and slippery surfaces.

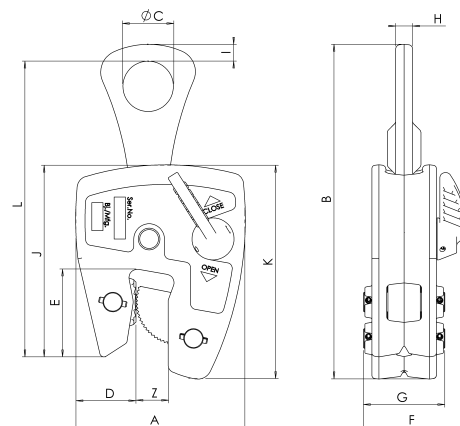
The min. load is 10% of the nominal WLL.

Technical data model Shark

Model	EAN-No. 4025092*	Capacity kg	Jaw capacity Z mm	Weight kg
Shark 1.0	*558808	1000	0 - 20	3.3
Shark 2.0	*558815	2000	0 - 32	6.8

Dimensions model Shark

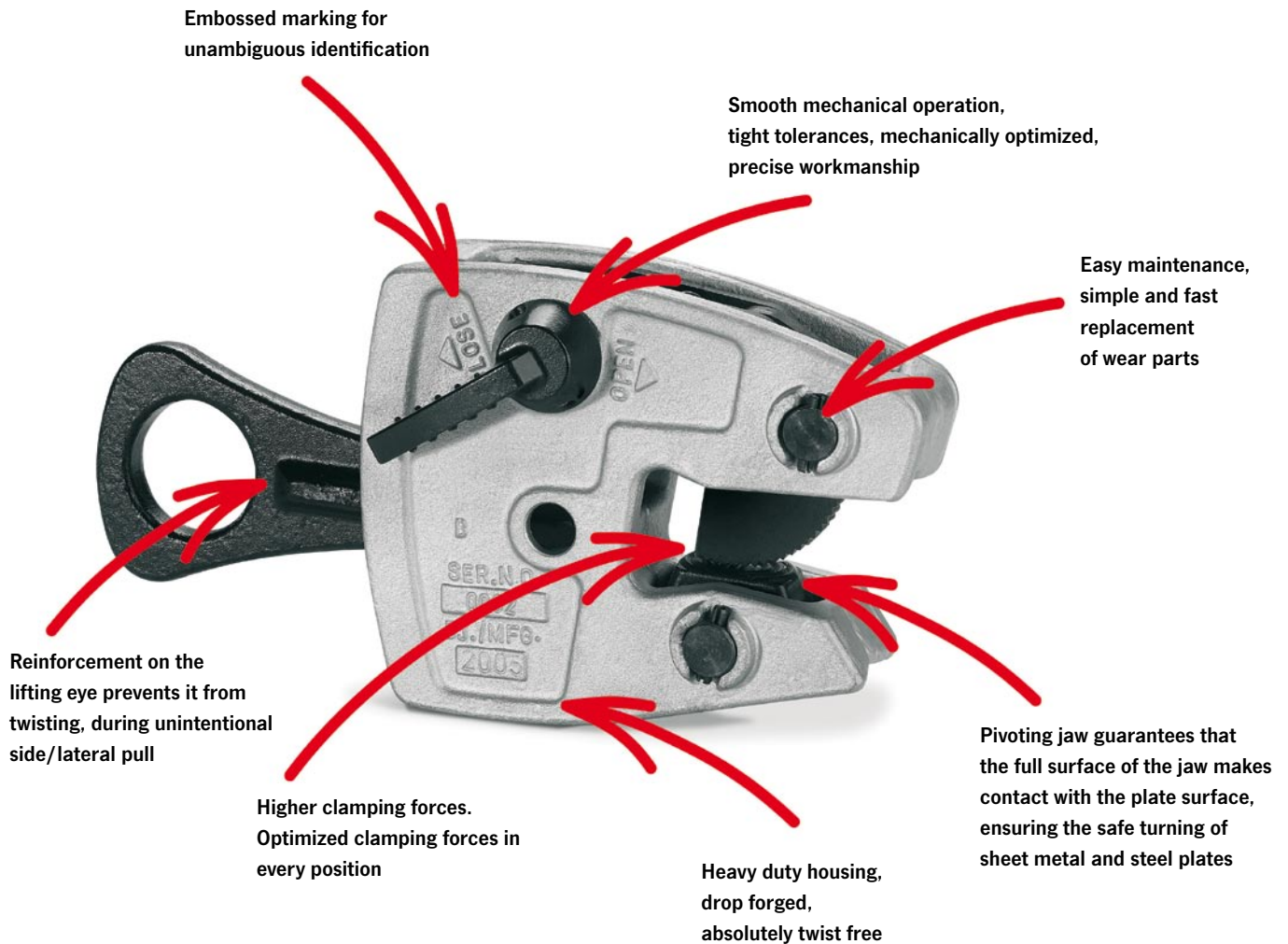
Model	Shark 1.0	Shark 2.0
A, mm	120	170
B, mm	240	345
Ø C, mm	36	65
D, mm	42	58
E, mm	60	80
F, mm	72	88
G, mm	58	69
H, mm	12	15
I, mm	12	19
J, mm	137	191
K, mm	152	214
L, mm	210	302



The surface hardness of the material must not exceed HRC 40.

Tigrip® Load Hoisting Tackle Grabs & Clamps

The advantages at a glance:



Patent pending for special jaws



Special jaw





Plate clamp with hinged hook ring model Shark-S

Capacity 1000 - 2000 kg

Features

- For the toughest operating conditions.
- This clamp is primarily used for transporting single steel plates in the vertical position, as well as lifting and turning through 180°, up to a surface hardness of HRC 40.
- With hinged hook ring to be used as a two-legged lifting system (see diagram of forces).
- Quality as yet unknown for plate clamps, guarantees highest safety standards and an extremely long service life.
- Fulfills the requirements of all relevant standards and EU-Directives.

Option

- Special jaws for a surface hardness up to HRC 50. Especially for alloyed/stainless steel and slippery surfaces.

The min. load is 10% of the nominal WLL.

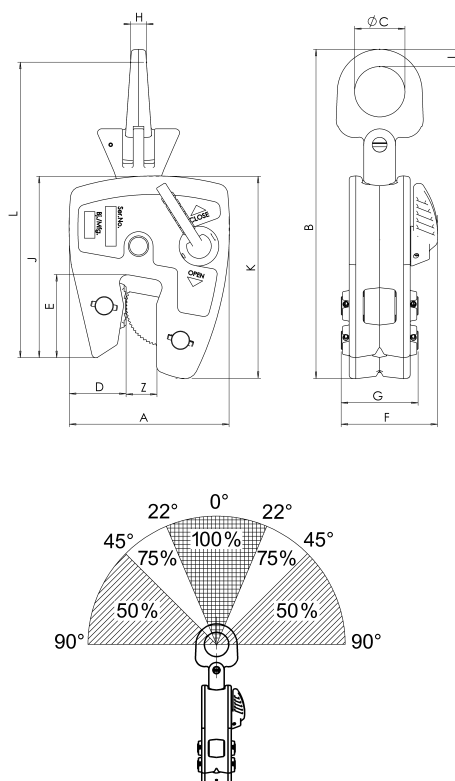
The surface hardness of the material must not exceed HRC 40.

Technical data model Shark-S

Model	EAN-No. 4025092*	Capacity kg	Jaw capacity Z mm	Weight kg
Shark-S 1.0	*558822	1000	0 - 20	3.6
Shark-S 2.0	*558839	2000	0 - 32	7.8

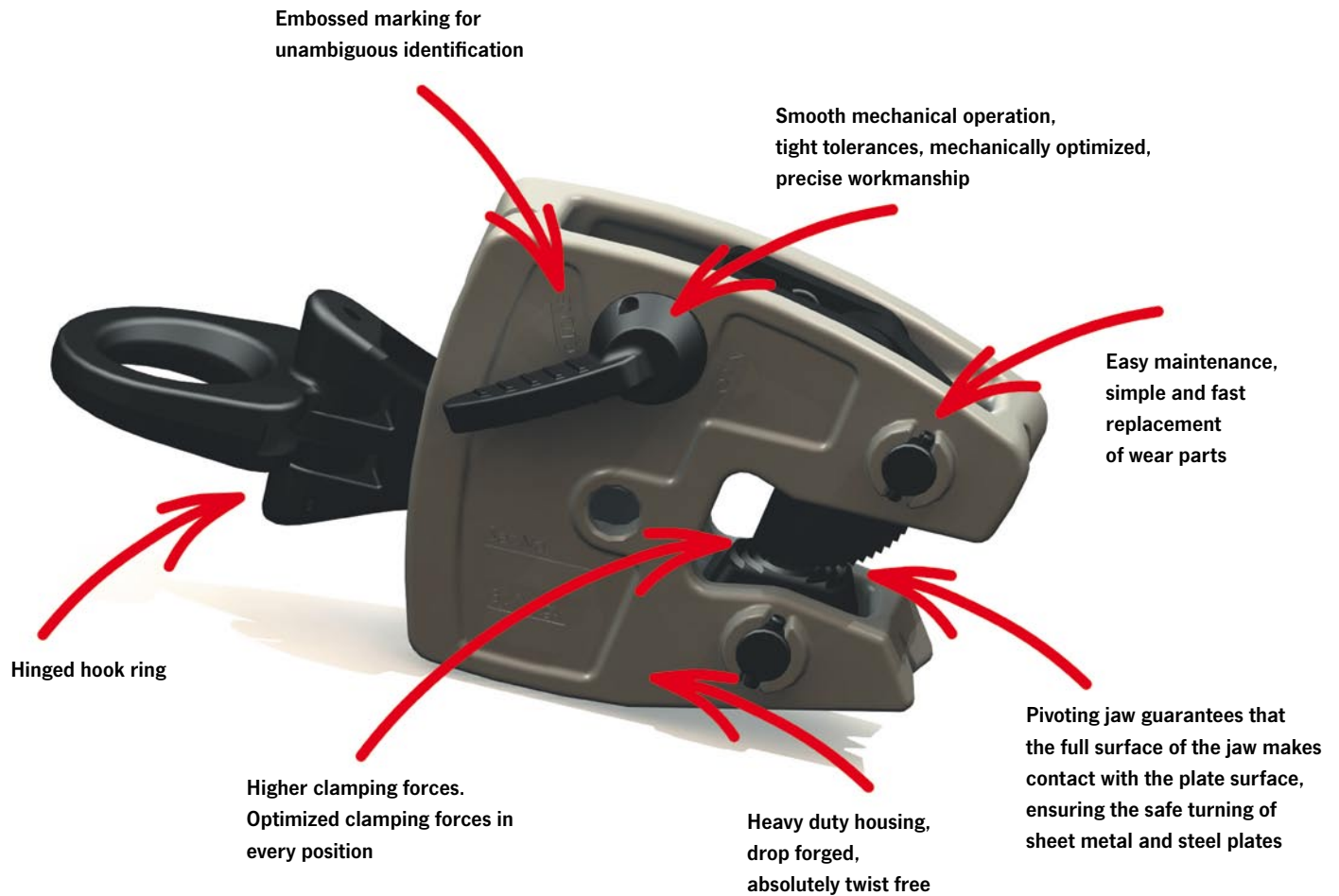
Dimensions model Shark-S

Model	Shark-S 1.0	Shark-S 2.0
A, mm	120	170
B, mm	248	349
Ø C, mm	38	65
D, mm	42	58
E, mm	60	80
F, mm	72	88
G, mm	58	69
H, mm	12	19
I, mm	13	20
J, mm	137	191
K, mm	152	214
L, mm	223	326



Tigrip® Load Hoisting Tackle Grabs & Clamps

The advantages at a glance:



Patent pending for special jaws



Special jaw



Universal grab model TAG

Capacity 350 - 10000 kg

The universal grab TAG saves time, as it does not require chains, cables etc. when hoisting and loading material. The large jaw capacity allows to tackle a variety of sizes with only one clamp. It can be used for loading machine tools, lifting steel constructions, welding and assembly jobs as well as for concrete and prefabricated pieces.

Features

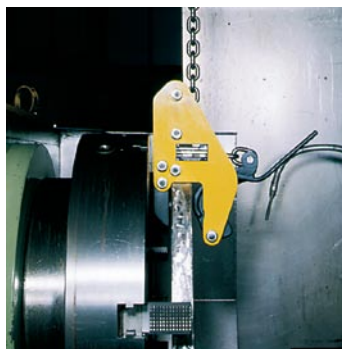
- The automatic clamping force is retained by a positive tension spring, even if there is slack in the chain.
- The "Quick-Open" type universal grab opens by lifting and simultaneously pulling the lever out against the tension spring. The jaw is closed by the spring.
- Universal grabs up to 2.0 t capacity are equipped with round chains, clamps with higher capacities are delivered with roller chains.

Option

- Grabs up to 1.25 t WLL are available with a protective lining on the clamping jaws upon request. This results in a decrease of the jaw capacity by 10 mm.



! The surface hardness of the material must not exceed HRC 30/Brinell 300.



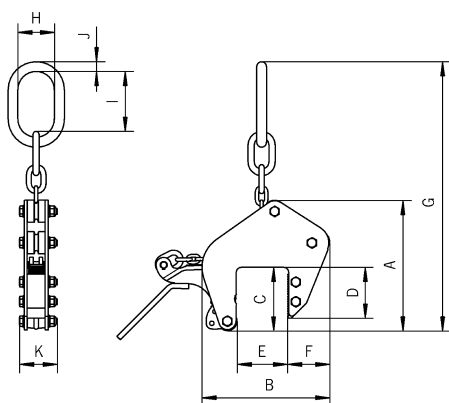
Special version of universal grab model TAG with modified side plates for use in confined spaces.

Technical data model TAG

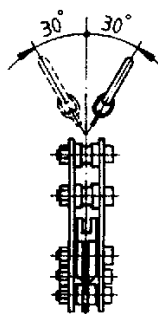
Model	EAN-No. 4025092*	Capacity kg	Jaw width mm	Jaw capacity mm	Weight kg
TAG 0.35/100	*550413	350	100	0 - 100	8.7
TAG 0.35/200	*551724	350	200	90 - 200	16.3
TAG 0.75/100	*550253	750	100	0 - 100	8.6
TAG 0.75/200	*552806	750	200	90 - 200	16.6
TAG 1.25/100	*550468	1250	100	0 - 100	14.9
TAG 1.25/200	*551502	1250	200	90 - 200	24.3
TAG 2.0/100	*550642	2000	100	0 - 100	20.8
TAG 2.0/200	*551366	2000	200	90 - 200	29.1
TAG 3.0/90	*550840	3000	90	5 - 90	26.5
TAG 5.0/90	*550345	5000	90	5 - 90	30.5
TAG 5.0/170	*551915	5000	170	80 - 170	43.8
TAG 10.0/100	*552059	10000	100	0 - 100	70.0
TAG 10.0/200	*553001	10000	200	100 - 200	105.0

Dimensions model TAG

Model	TAG 0.35/100	TAG 0.35/200	TAG 0.75/100	TAG 0.75/200	TAG 1.25/100	TAG 1.25/200	TAG 2.0/100	TAG 2.0/200	TAG 3.0/90	TAG 5.0/90	TAG 5.0/170	TAG 10.0/100	TAG 10.0/200
A, mm	264	382	264	382	320	382	328	375	297	297	354	405	440
B, mm	259	434	259	434	289	434	415	515	290	290	423	423	562
C, mm	128	195	128	195	128	195	135	195	136	136	180	160	200
D, mm	100	156	100	156	100	156	115	165	106	106	155	130	175
E, mm	100	200	100	200	100	200	100	200	90	90	170	100	200
F, mm	85	120	85	120	85	120	105	160	91	91	118	160	183
G, mm	550	760	550	760	570	760	571	750	570	570	620	720	840
H, mm	75	75	75	75	75	75	75	75	82	82	82	102	102
I, mm	121	121	121	121	121	121	121	121	111	111	111	144	144
J, mm	20	20	20	20	20	20	20	20	32	32	32	40	40
K, mm	78	90	83	90	83	90	105	105	137	147	147	208	208



Model TAG



Only for model TAG up to 2.0 t

**The min. load is 10%
of the nominal WLL.**



In order to achieve a maximum capacity, the contact surface should be bright and free from dirt, oil, grease, scale, corrosion, paint etc.

Permanent load lifting magnets model TPM

Capacity

100 - 1000 kg (Flat material),

50 - 500 kg (Round material)

TPM load lifting magnets are ideal tools for easy, quick and thus economical transport of heavy objects made of ferro-magnetic material. Typical operating areas are workshops and warehouses, loading and unloading of machines as well as construction of jigs and fixtures.

Compact design of the units for a large number of applications.

The load is not affected mechanically which allows lifting of flat as well as round material. The efficient magnet body provides strong lifting capacity at low dead weight. The permanent magnets do not require electric energy and will leave only minor residual magnetism on the material after use.

The magnets are activated/deactivated easily by turning a locking lever. In activated condition the hand lever will be safely locked and thus prevent unintended demagnetising.

The selection of the appropriate magnet model should be made under consideration of the varying conditions of the contact surface, kind of material alloy and plate thickness/bar diameter (see table).



Tigrip® Load Hoisting Tackle Grabs & Clamps

Technical data model TPM

Model	EAN-No. 4025092*	Flat material capacity** max. kg	Material thickness min. mm	Flat material length of material max. mm	Round material capacity** max. kg	Round material diameter mm	Round material length of material max. mm	Test load kg
TPM 0.1	*558853	100	14	2000	50	200 - 300	2000	300
TPM 0.3	*558860	300	20	2500	150	200 - 300	2500	900
TPM 0.5	*558877	500	24	3000	250	200 - 400	3000	1500
TPM 0.8	*558884	800	34	3500	400	200 - 400	3500	2400
TPM 1.0	*558891	1000	40	3500	500	200 - 400	3500	3000

**measured on mild steel St 37

Dimensions model TPM

Model	TPM 0.1	TPM 0.3	TPM 0.5	TPM 0.8	TPM 1.0
A, mm	122	192	232	302	332
B, mm	69	95	120	154	154
C, mm	185	225	270	320	320
D, mm	160	250	250	450	450

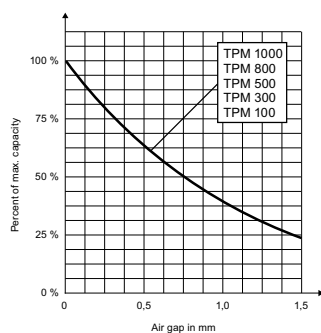


Diagram: WLL/air gap

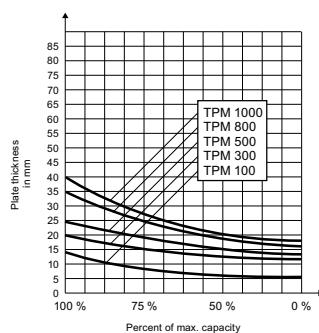
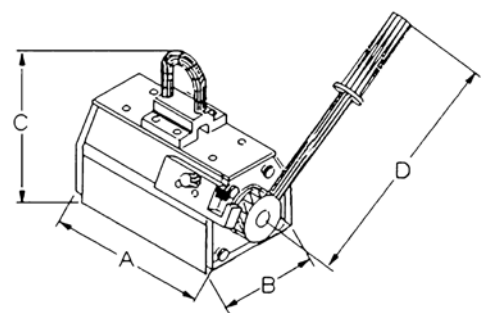
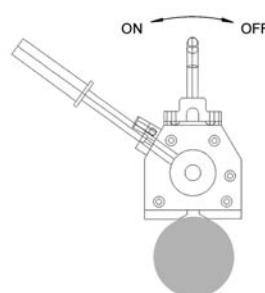
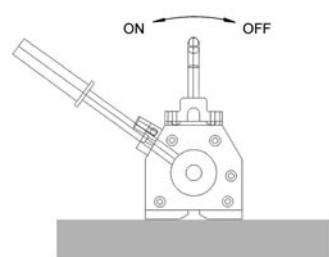


Diagram: WLL/material thickness



Model TPM



Correct use On/Off

Reduction of capacity	% of capacity
Temperature $\leq 60^{\circ}\text{C}$	100 %
Humidity $\leq 80\%$	100 %
St 52	95 %
Alloy steel	80 %
High carbon steel	70 %
Cast iron	45 %
Nickel	45 %
Austenitic, stainless steel	0 %
Brass	0 %
Aluminium	0 %





Non-marring grab model TBP

Capacity 500 - 1500 kg

The TBP non-marring grab is suitable for lifting, turning and transporting of plates with a sensitive surface without leaving behind indentations.

It can be used for aluminium and stainless steel plate or those with an extremely hard surface.

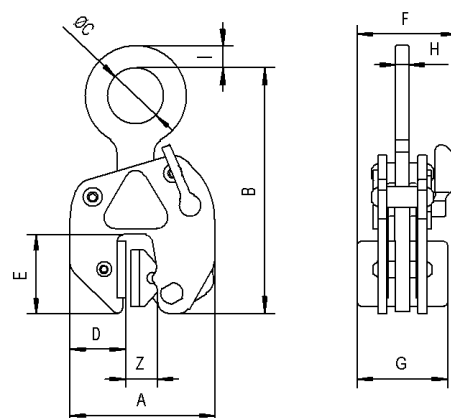
! The surface of the plate must be free of oil, grease or any other liquid to ensure safe transport.

Technical data model TBP

Model	EAN-No. 4025092*	Capacity kg	Jaw capacity Z mm	Weight kg
TBP 0.5	*556378	500	0 - 10	3.0
TBP 1.5	*556392	1500	0 - 20	12.6

Dimensions model TBP

Model	TBP 0.5	TBP 1.5
A, mm	127	215
B, mm	200	345
D, mm	52	75
E, mm	69	135
F, mm	87	131
G, mm	76	118
H, mm	13	20
I, mm	20	24
Ø C, mm	55	85



Model TBP

! The min. load is 10% of the nominal WLL.

Non-marring grab with chain model TSB

The TSB grab has parallel-facing jaws that equally distribute the clamping pressure over a relatively large surface area. This makes the grab attractive for plate material with sensitive surfaces. The protective lining "Bremsit" offers an outstanding friction coefficient, thereby enhancing the grip of the jaws. This lining can be easily replaced when worn.

Similar to the universal grab, this grab has a large jaw capacity and the security of a safety lock device with a hold-open/hold-closed feature.

The surface of the plate must be free of oil, grease or any other liquid to ensure safe transport.

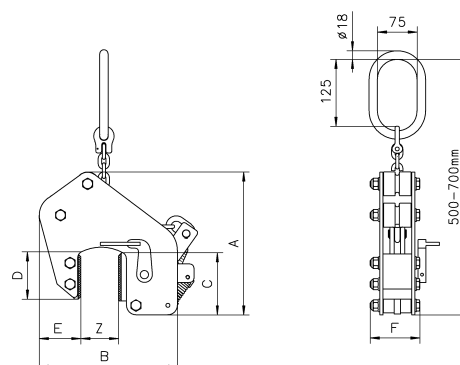


Technical data model TSB

Model	EAN-No. 4025092*	Capacity kg	Jaw capacity Z mm	Weight kg
TSB 0.35/65	*550772	350	0 - 65	11.6
TSB 0.75/65	*550826	750	0 - 65	11.8
TSB 1.25/65	*550727	1250	0 - 65	16.7

Dimensions model TSB

Model	TSB 0.35/65	TSB 0.75/65	TSB 1.25/65
A, mm	270	270	270
B, mm	260	260	260
C, mm	128	128	128
D, mm	100	100	100
E, mm	65	65	65
F, mm	78	78	78



The min. load is 10% of the nominal WLL.



Model TSB

Model TSB



Girder grab for horizontal transport model TTG

Capacity 500 - 7500 kg

The girder grab TTG is designed for the horizontal transport of girders, metal plates, profiles etc. The offset suspension lug ensures that the flange of the girder will be kept practically horizontal during transport.

The positive safety lock keeps the clamp safely locked, even before the lift begins. This allows the operator to place the clamp, lock it closed and move away from the load. The lever ensures easy opening and closing of the clamping jaw and has a "lock open" feature.

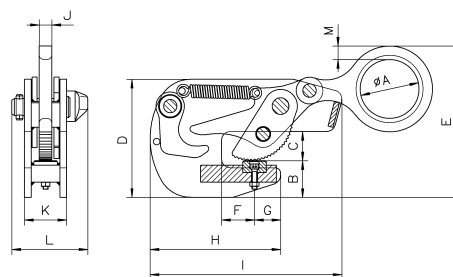
When transporting long girders, it is recommended to use a pair of clamps in conjunction with a spreader beam.

Technical data model TTG

Model	EAN-No. 4025092*	Capacity kg	Jaw capacity mm	Weight kg
TTG 0.5	*557931	500	0 - 20	2.9
TTG 1.5	*550239	1500	0 - 30	6.8
TTG 3.0	*550192	3000	0 - 35	11.3
TTG 4.5	*550451	4500	0 - 40	14.8
TTG 7.5	*551205	7500	0 - 45	30.0

Dimensions model TTG

Model	TTG 0.5	TTG 1.5	TTG 3.0	TTG 4.5	TTG 7.5
Ø A, mm	50	70	80	90	110
B, mm	36	43	55	60	64
C, mm	25	35	42	46	55
D, mm	148	140	180	196	222
E, mm	200	180	214	248	304
F, mm	27	40	40	40	50
G, mm	20	30	32	35	42
H, mm	95	155	190	207	237
I, mm	110	230	284	314	367
J, mm	10	15	20	20	22
K, mm	56	50	60	64	90
L, mm	85	100	114	117	143
M, mm	13	16	20	25	30



Model TTG

Girder grab for vertical transport model TTR

Capacity 750 - 3000 kg

The girder grab TTR is designed for vertical transport, especially for lifting and stacking of girders. The unique position of the offset suspension lug keeps the girder virtually in a vertical position during transport.

The positive safety lock keeps the clamp safely locked, even before the lift begins. This allows the operator to place the clamp, lock it closed and move away from the load. The lever ensures easy opening and closing of the clamping jaw and has a "lock open" feature.



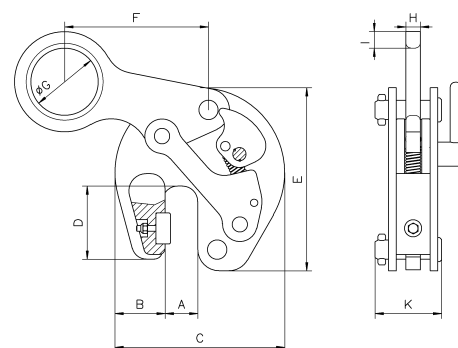
When transporting long girders, it is recommended to use a pair of clamps in conjunction with a spreader beam.

Technical data model TTR

Model	EAN-No. 4025092*	Capacity kg	Jaw capacity mm	Weight kg
TTR 0.75	*550499	750	5 - 16	3.1
TTR 1.50	*550246	1500	5 - 25	6.8
TTR 3.00	*550550	3000	5 - 28	10.9

Dimensions model TTR

Model	TTR 0.75	TTR 1.50	TTR 3.00
A, mm	24	33	37
B, mm	40	53	56
C, mm	132	176	194
D, mm	62	76	78
E, mm	145	190	208
F, mm	118	152	163
Ø G, mm	50	70	80
H, mm	12	15	20
I, mm	12	17	23
K, mm	53	69	85



Model TTR



Girder grab for horizontal transport model TTT

Capacity 750 - 4500 kg

The girder grab TTT is used for the horizontal transport of steel girders. Due to the split fixed jaw, it can be positioned centrally on the end of the beam.

The grab should only be used in pairs.

The safety lock with positive spring tension holds the grab in position on the end of the girder even without load tension.

The lever is used to engage and disengage the jaw and to keep it open.

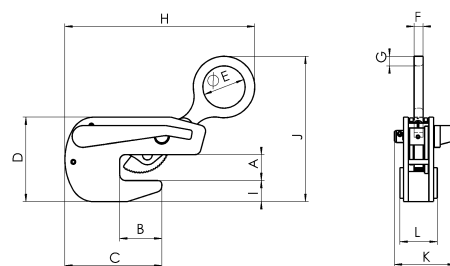
The angle from the vertical must not exceed 30°.

Technical data model TTT

Model	EAN-No. 4025092*	Capacity kg	Jaw capacity mm	Weight kg
TTT 0.75	*558501	750	0 - 20	3
TTT 1.5	*558518	1500	0 - 35	6
TTT 3.0	*558525	3000	0 - 40	10
TTT 4.5	*558532	4500	0 - 45	16

Dimensions model TTT

Model	TTT 0.75	TTT 1.5	TTT 3.0	TTT 4.5
A, mm	30	38	50	60
B, mm	70	70	75	90
C, mm	100	155	195	222
D, mm	142	150	195	222
Ø E, mm	50	70	80	90
F, mm	16	19	19	22
G, mm	16	20	25	30
H, mm	225	335	400	450
I, mm	45	45	80	90
J, mm	200	210	214	248
K, mm	106	120	125	147
L, mm	52	66	80	88



Model TTT

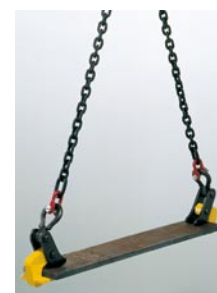
Horizontal lifting gear, model TCH

Capacity 1000 - 10000 kg

The TCH horizontal lifting gear consists of two clamps with a two-legged chain sling. It is especially suited for the transport of single plates with a minimum thickness of approx. 5 mm as well as for plate bundles.

The two-legged version is appropriate for normal sized plates. For extra large or long plates, it is recommended to use two sets of the two-legged lifting gears in conjunction with a spreader beam.

In the standard version, the lifting clamp is suitable for plates up to 1500 mm width. Lifting gears with longer chains for larger plate widths are available upon request. The capacity applies to a pair of lifting clamps. Single clamps are also available.



The angle from the vertical must not exceed 45°.

Technical data model TCH

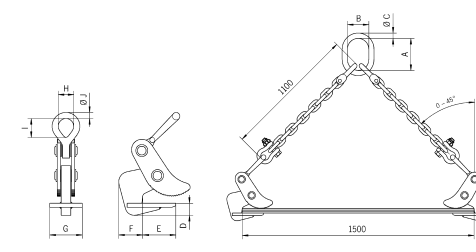
Model	EAN-No. 4025092* for lifting gear, two-legged	EAN-No. 4025092* single clamp	Capacity*	Jaw capacity	Weight**
			kg	mm	kg
TCH 1.0	*551625	*551212	1000	0 - 50	13.0
TCH 2.0	*551991	*551168	2000	5 - 32	17.7
TCH 4.0	*551755	*550895	4000	5 - 50	31.0
TCH 6.0	*553230	*550888	6000	5 - 75	69.0
TCH 8.0	*553247	*552097	8000	5 - 75	72.0
TCH 10.0/1	*553254	*551465	10000	5 - 100	93.8
TCH 10.0/2	*552042	*552738	10000	50 - 150	108.6

*Per pair, up to an angle of 45° from the vertical

**Weight for two single clamps with chain

Dimensions model TCH

Model	TCH 1.0	TCH 2.0	TCH 4.0	TCH 6.0	TCH 8.0	TCH 10.0/1	TCH 10.0/2
A, mm	135	160	180	200	260	300	300
B, mm	75	90	100	110	140	160	160
Ø C, mm	18	22	26	32	36	40	40
D, mm	15	32	44	58	56	70	66
E, mm	82	83	114	172	170	216	218
F, mm	65	61	75	97	100	116	116
G, mm	100	100	99	129	128	149	150
H, mm	32	49	62	90	90	113	113
I, mm	44	72	89	127	130	113	113
Ø J, mm	13	19	26	36	37	50	50



Model TCH



- Capacity ratings are valid for a complete two-legged chain system.
- Also available as single clamp (without shackle).
- The angle from the vertical must not exceed 45°.

Horizontal lifting gear model TGF

Capacity 350 - 6650 kg

The TGF horizontal lifting gear consists of two clamps with a two-legged chain sling and is especially suited for the transport of plate bundles.

For the transport of stainless steel plate bundles, plywood bundles, etc. the clamps are optionally available with flat jaws and protective lining. The clamps are easily adjusted to the height of the plate by a special ratcheting lever.

The lifting clamps are available in special versions for bundle thicknesses up to 400 mm.

Scope of delivery for horizontal lifting gear:

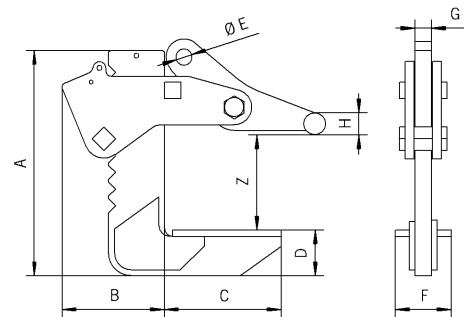
2 clamps and two-legged chain sling for plate width 1500 mm.

Technical data model TGF

Model	EAN-No. 4025092* Horizontal lifting clamp, two-legged	EAN-No. 4025092* Single clamp	Capacity* kg	Jaw capacity Z mm	Weight** kg
TGF 0.3/150	*553087	*553216	350	0 - 150	21
TGF 0.6/150	*553094	*553223	650	0 - 150	22
TGF 1.3/150	*552745	*552554	1300	0 - 150	23
TGF 2.3/150	*551731	*551809	2300	0 - 150	33
TGF 3.3/150	*551342	*550833	3300	0 - 150	39
TGF 5.0/150	*553100	*553322	5000	0 - 150	59
TGF 6.6/150	*553117	*551885	6650	0 - 150	65
TGF 0.3/250	*552882	*553339	350	0 - 250	21
TGF 0.6/250	*553124	*552387	650	0 - 250	22
TGF 1.3/250	*552608	*553346	1300	0 - 250	23
TGF 2.3/250	*552363	*552622	2300	0 - 250	33
TGF 3.3/250	*553131	*551540	3300	0 - 250	39
TGF 5.0/250	*552189	*553353	5000	0 - 250	59
TGF 6.6/250	*553148	*551656	6650	0 - 250	87

*Complete two-legged lifting gear, angle from the vertical max. 45°

**Complete two-legged lifting gear



Model TGF

Dimensions model TGF

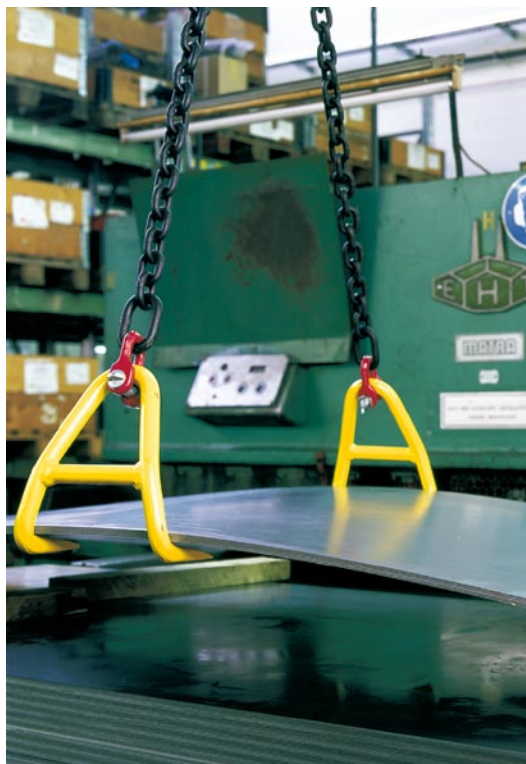
Model	TGF 0.3/150	TGF 0.6/150	TGF 1.3/150	TGF 2.3/150	TGF 3.3/150	TGF 5.0/150	TGF 6.6/150	TGF 0.3/250	TGF 0.6/250	TGF 1.3/250	TGF 2.3/250	TGF 3.3/250	TGF 5.0/250	TGF 6.6/250
A, mm	298	298	298	321	321	405	405	448	448	448	417	417	495	495
B, mm	122	122	122	130	130	185	185	122	122	122	130	130	185	185
C, mm	160	160	160	160	160	210	210	140	140	140	160	160	210	210
D, mm	41	41	41	50	50	82	82	41	41	41	60	60	82	82
Ø E, mm	20	20	20	23	23	30	30	20	20	20	23	23	30	30
F, mm	80	80	80	80	80	100	100	80	80	80	80	80	100	100
G, mm	20	20	20	25	25	30	30	20	20	20	25	25	30	30
Ø H, mm	25	25	25	25	25	40	40	25	25	25	25	25	40	40

Horizontal lifting hook model BVH

Capacity 500 - 7500 kg

The BVH horizontal lifting hooks are used in pairs with chain or wire rope slings to lift plate bundles that are relatively close to the ground.

The high tensile hooks have a serrated lifting surface.



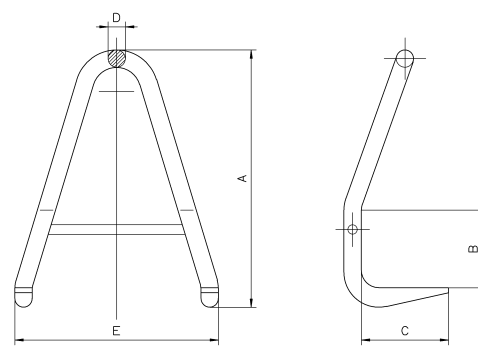
The angle from the vertical must be 30-45°.

The chain has to be in line with the crank of the lifting hooks.

Technical data model BVH

Model	EAN-No. 4025092*	Capacity** kg	Weight kg
BVH 0.5	*557023	500	1.2
BVH 1.12	*557047	1120	1.4
BVH 1.5	*557061	1500	2.4
BVH 2.0	*557085	2000	3.9
BVH 2.5	*557108	2500	8.2
BVH 3.2	*557122	3200	8.3
BVH 4.0	*557146	4000	13.6
BVH 5.0	*557160	5000	21.0
BVH 6.0	*557184	6000	39.0
BVH 7.5	*557207	7500	60.0

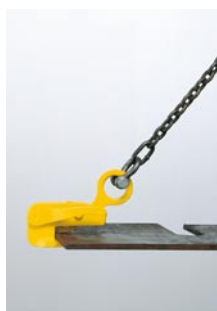
**Per unit



Model BVH

Dimensions model BVH

Model	BVH 0.5	BVH 1.12	BVH 1.5	BVH 2.0	BVH 2.5	BVH 3.2	BVH 4.0	BVH 5.0	BVH 6.0	BVH 7.5
A, mm	180	210	240	280	340	400	530	660	800	980
B, mm	50	60	70	80	100	120	160	200	250	300
C, mm	80	95	105	115	120	140	180	210	250	300
D, mm	18	20	22	26	32	32	36	40	50	60
E, mm	150	170	200	220	270	320	420	520	640	760



Lifting clamp with safety lock model THS

Capacity 750 - 4500 kg

The THS lifting clamp is normally used in pairs especially for the horizontal transport of plates. The transport of slightly sagging plates is also possible. Individually, it can be used to load presses shears, and other machines.

The safety lock is preventing the clamp from opening, even when there is no load. The jaws can be opened and closed with the safety lock lever. This clamp has a lock-open feature.

Option

- The models THS 1.5 and THS 3.0 are available with a hinged hook ring upon request.

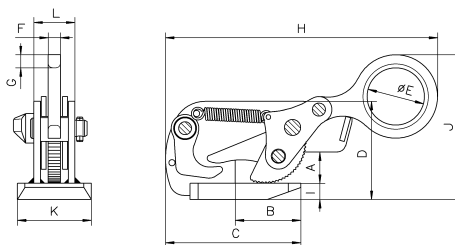
Technical data model THS

Model	EAN-No. 4025092*	Capacity* kg	Jaw capacity mm	Weight kg
THS 0.75	*551267	750	0 - 20	3.2
THS 1.5	*550734	1500	0 - 35	6.1
THS 3.0	*551373	3000	0 - 40	12.7
THS 4.5	*553483	4500	0 - 40	16.5

*Per unit

Dimensions model THS

Model	THS 0.75	THS 1.5	THS 3.0	THS 4.5
A, mm	30	38	45	47
B, mm	70	80	95	110
C, mm	130	165	205	235
D, mm	97	120	160	196
Ø E, mm	50	70	80	90
F, mm	12	15	20	20
G, mm	15	17	25	30
H, mm	255	335	400	450
I, mm	15	20	30	59
J, mm	135	165	195	230
K, mm	80	90	100	110
L, mm	40	50	60	64



Model THS

Lifting clamp model TWH

Capacity 1500 - 5000 kg

The TWH lifting clamp, when used in pairs, is well-suited for horizontal transport of individual and bundled plates. The clamp is not suited for thin plates that have a tendency to sag during transport.

It is normally used in combination with a two-legged chain sling.

The capacity (WLL) applies to a pair of lifting clamps.

Option

- Protective lining



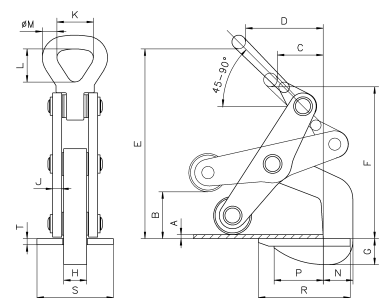
The angle from the vertical must not exceed 45°.

Technical data model TWH

Model	EAN-No. 4025092*	Capacity* kg	Jaw capacity mm	Weight** kg
TWH 30 with rollers	*550529	1500	5 - 60	5.6
TWH 50 with rollers	*551441	2500	10 - 70	10.3
TWH 70 with rollers	*551380	3500	10 - 80	13.4
TWH 100 with rollers	*551618	5000	10 - 102	27.7
TWH 30 with plate	*555654	1500	5 - 60	5.7
TWH 50 with plate	*555661	2500	10 - 70	10.3
TWH 70 with plate	*555678	3500	10 - 80	13.5
TWH 100 with plate	*555685	5000	10 - 102	27.8

*Per pair, angle from the vertical max. 45°

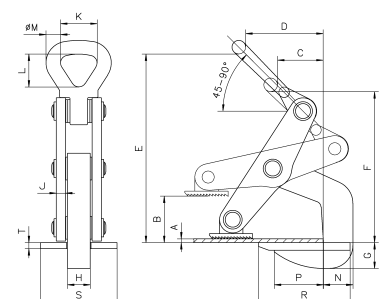
**Per unit



Model TWH with rollers

Dimensions model TWH

Model	TWH 30 with rollers	TWH 50 with rollers	TWH 70 with rollers	TWH 100 with rollers	TWH 30 with plate	TWH 50 with plate	TWH 70 with plate	TWH 100 with plate
A, mm	5	10	10	10	5	10	10	10
B, mm	60	70	80	102	60	70	80	102
C, mm	60	75	90	110	60	75	90	110
D, mm	105	130	162	170	105	130	162	170
E, mm	250	315	345	425	250	315	345	425
F, mm	200	275	292	345	200	275	292	345
G, mm	22	38	48	45	22	38	48	45
H, mm	30	30	30	45	30	30	30	45
J, mm	12	12	15	20	12	12	15	20
K, mm	50	64	64	89	50	64	64	89
L, mm	73	92	92	130	73	92	92	130
Ø M, mm	18	25	25	35	18	25	25	35
N, mm	36	58	65	80	36	58	65	80
P, mm	65	77	105	120	65	77	105	120
R, mm	120	150	185	210	120	150	185	210
S, mm	100	100	100	120	100	100	100	120
T, mm	10	10	10	12	10	10	10	12



Model TWH with plate



Lifting clamp model THK

Capacity 750 - 9000 kg

The THK lifting clamp, when used in pairs, is especially well-suited for horizontal transport of thin plates that have a tendency to sag.

It is normally used in combination with a two-legged chain sling.

The capacity applies to a pair of lifting clamps.



The angle from the vertical must not exceed 30°.

Technical data model THK

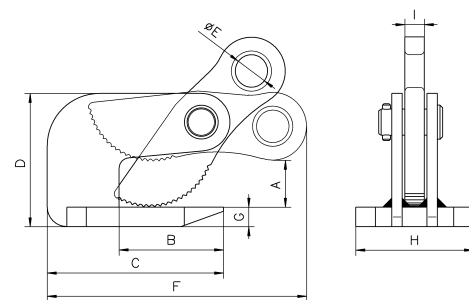
Model	EAN-No. 4025092*	Capacity* kg	Jaw capacity mm	Weight** kg
THK 0.75	*550628	750	0 - 25	1.7
THK 1.5	*550284	1500	0 - 35	3.2
THK 3.0	*550390	3000	0 - 35	5.7
THK 4.5	*551120	4500	0 - 45	8.4
THK 6.0	*551038	6000	0 - 60	11.6
THK 9.0	*551960	9000	0 - 60	17.9

*Per pair, angle up to 30° from the vertical

**Per unit

Dimensions model THK

Model	THK 0.75	THK 1.5	THK 3.0	THK 4.5	THK 6.0	THK 9.0
A, mm	25	36	38	48	63	65
B, mm	72	80	93	103	124	113
C, mm	118	135	168	183	214	223
D, mm	81	102	119	140	176	188
Ø E, mm	20	25	30	30	35	40
F, mm	161	198	227	238	284	317
G, mm	12	15	20	25	30	35
H, mm	86	102	110	122	110	148
I, mm	12	15	20	20	20	20



Model THK

Board clamp model TPZ

Capacity 400 kg

The TPZ clamp is made for lifting and vertically transporting wood, particle board and plastic sheets.

The pliers are fastened to the plate with the aid of a hand-held lever. The jaw, which has a protective lining, grabs once lifting begins and holds the board securely.

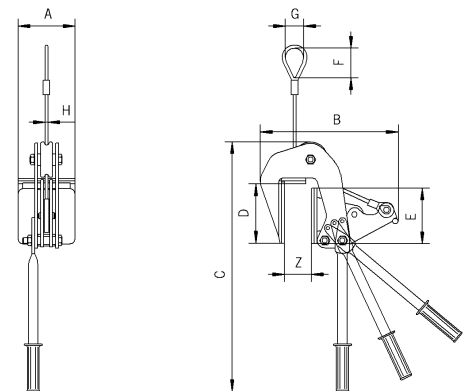


Technical data model TPZ

Model	EAN-No. 4025092*	Capacity kg	Jaw capacity Z mm	Weight kg
TPZ 0.4/55	*555234	400	5 - 55	6.3
TPZ 0.4/100	*558983	400	55 - 100	9.0
TPZ 0.75/60	*558990	750	5 - 60	12.0
TPZ 0.75/120	*559003	750	60 - 120	14.0

Dimensions model TPZ

Model	TPZ 0.4/55	TPZ 0.4/100	TPZ 0.75/60	TPZ 0.75/120
A, mm	120	120	155	155
B, mm	290	335	349	406
C, mm	525	525	545	560
D, mm	125	125	145	145
E, mm	117	117	135	135
F, mm	60	60	121	121
G, mm	40	40	75	75
H, mm	6	6	8 x 24	8 x 24



Model TPZ, up to 400 kg equipped with rope,
from 750 kg equipped with chain.



In order to achieve a maximum capacity, the contact surface should be bright and free from dirt, oil, grease, scale, corrosion, paint etc.

Manual claw, magnetic model THM

Capacity 120 - 170 kg

The THM manual magnetic claw is used for transporting steel sheets horizontally and vertically, lifting plates from racks, pulling steel sheets out of shelving, as well as transporting flat pieces of magnetizable steel.

The clamp, depending on the type, can be used for plate thicknesses from 1 to 5 mm.

Pressing down on the handle activates a cam which releases the magnetic claw from the workpiece.

This manual claw is maintenance-free and keeps the magnetic force for an unlimited period of time.

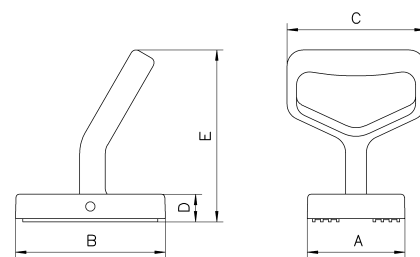
Technical data model THM

Model	EAN-No. 4025092*	Lifting capacity* kg	Pulling capacity* kg	Weight kg
THM 120	*550963	120	70	2
THM 170	*550437	170	100	2

*Measured at a safety factor 2:1 on bright drawn material St 37 k

Dimensions model THM

Model	THM 120	THM 170
A, mm	84	116
B, mm	140	140
C, mm	130	130
D, mm	25	25
E, mm	172	172



Model THM



Hand clamp model THG

Capacity 250 kg

The THG hand clamp is suited for the individual transport of light and thin plates. Pressing down on the hand grip releases the tension spring, allowing the clamp to open and slide onto the plate.

The plate can be transported by holding onto the ergonomically designed hand grip.

The positive spring pressure prevents the plate from accidental slipping out of the clamp.



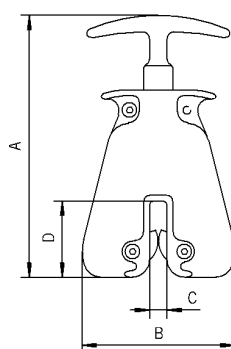
The plate surface of the material must not exceed a hardness of HRC 30.

Technical data model THG

Model	EAN-No. 4025092*	Capacity kg	Jaw capacity mm	Weight kg
THG	*556057	250	0 - 10	1.4

Dimensions model THG

Model	THG
A, mm	184
B, mm	105
C, mm	12
D, mm	53
Thickness, mm	40



Model THG



Attaching



Transport



Screw clamp for vertical and horizontal pulling model TSH

Capacity 750 - 5000 kg

The screw clamp offers many possible applications. It is particularly useful for lifting, turning and pulling steel plates, girders and steel constructions.

The spindle is closed only finger tight.

Once the screw clamp is tightened and lifting begins, the pivoting pad clamping system produces a wedging action against the material, holding it securely.

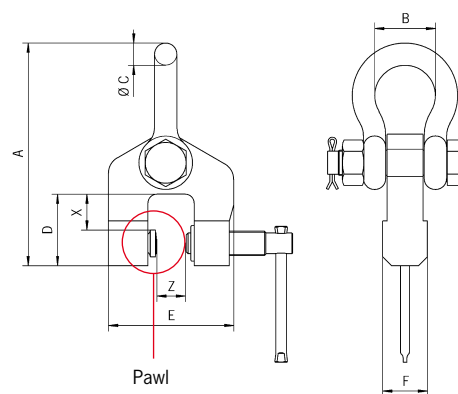
The plate surface of the material must not exceed a hardness level of HRC 50.

Technical data model TSH

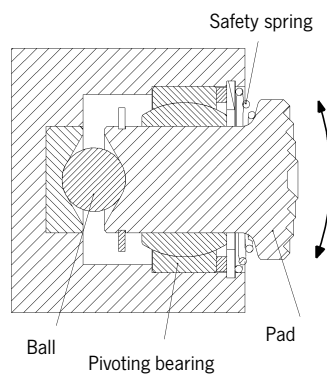
Model	EAN-No. 4025092*	Capacity kg	Jaw capacity Z mm	Weight kg
TSH 0.75	*559027	750	0 - 30	3.1
TSH 1.5	*550123	1500	0 - 32	7.4
TSH 3.0	*550154	3000	0 - 50	11.4
TSH 5.0	*550215	5000	0 - 80	27.6

Dimensions model TSH

Model	TSH 0.75	TSH 1.5	TSH 3.0	TSH 5.0
A, mm	190	255	290	470
B, mm	52	65	74	130
Ø C, mm	19	26	30	50
D, mm	43	75	85	135
E, mm	113	130	170	225
F, mm	35	44	50	72
X, mm	15	40	40	50



Model TSH



Functional drawing pivoting pad

Screw clamp for lifting and pulling model TSD

Capacity 1500 - 7500 kg

The TSD screw clamp is a valuable asset when lifting, pulling and fitting sheet material as well as steel constructions.

The spindle is closed only finger tight.

When the screw clamp is tightened and lifting begins, the pivoting pad clamping system produces a wedging action against the material, holding it securely.



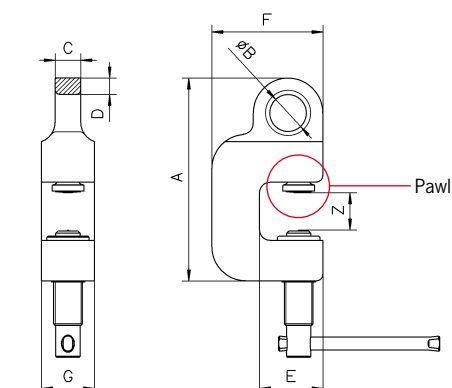
The plate surface of the material must not exceed a hardness level of HRC 50.

Technical data model TSD

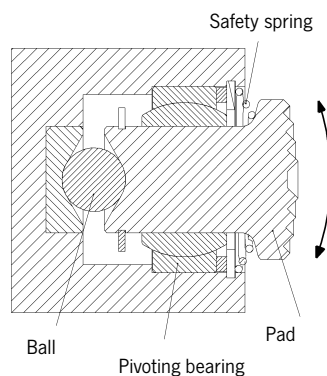
Model	EAN-No. 4025092*	Capacity kg	Jaw capacity Z mm	Weight kg
TSD 1.5	*550598	1500	0 - 35	4.8
TSD 3.0	*550864	3000	0 - 35	8.1
TSD 5.0	*551717	5000	0 - 40	14.5
TSD 7.5	*550987	7500	0 - 40	18.1

Dimensions model TSD

Model	TSD 1.5	TSD 3.0	TSD 5.0	TSD 7.5
A, mm	191	235	275	295
Ø B, mm	35	46	55	65
C, mm	24	34	40	50
D, mm	16	17	18	22
E, mm	60	67	85	92
F, mm	105	120	150	162
G, mm	50	60	75	80



Model TSD



Functional drawing pivoting pad



Screw clamp for three-dimensional pulling model TSZ

Capacity 500 - 7500 kg

The TSZ screw clamp is designed to pull in three directions. It offers many different possibilities for transporting steel constructions, feeding machining centres, etc.

The spindle is closed only finger tight. When the screw clamp is tightened and lifting begins, the pivoting pad clamping system produces a wedging action against the material, holding it securely.



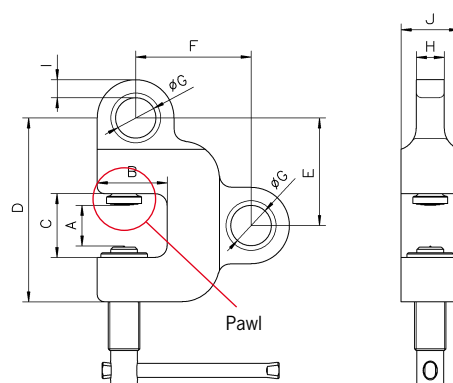
The plate surface of the material must not exceed a hardness level of HRC 50.

Technical data model TSZ

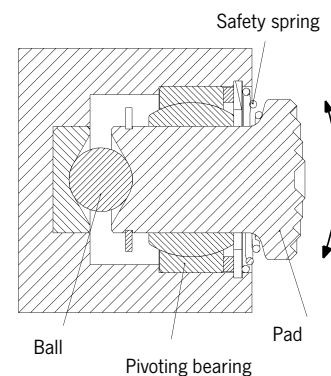
Model	EAN-No. 4025092*	Capacity kg	Jaw capacity mm	Weight kg
TSZ 0.5	*555739	500	0 - 28	2.3
TSZ 1.5	*555746	1500	0 - 35	5.6
TSZ 3.0	*555753	3000	0 - 35	8.8
TSZ 5.0	*555760	5000	0 - 40	16.2
TSZ 7.5	*555777	7500	0 - 40	20.9

Dimensions model TSZ

Model	TSZ 0.5	TSZ 1.5	TSZ 3.0	TSZ 5.0	TSZ 7.5
A, mm	28	35	35	40	40
B, mm	43	60	67	85	92
C, mm	45	55	65	75	75
D, mm	125	158	195	230	240
E, mm	72	93	114	133	143
F, mm	83	99	120	150	162
Ø G, mm	26	35	46	55	65
H, mm	16	24	34	40	50
I, mm	12	16	17	18	23
J, mm	35	50	60	75	80



Model TSZ



Functional drawing pivoting pad

Roundstock grab model TRU

Capacity 100 - 4000 kg

The TRU roundstock grab picks up roundstock and pipe material up to 600 mm in diameter quickly and safely. With its optional protective lining, it can also pick up materials with sensitive surfaces.



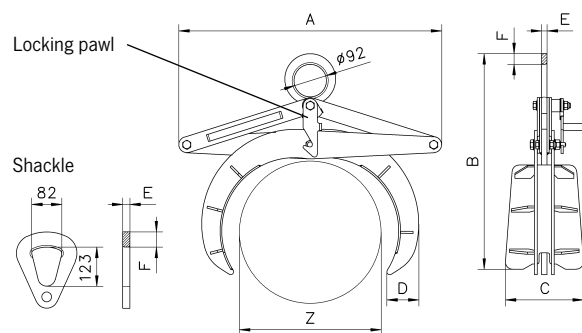
When using protective lining, it is important that the surfaces are dry, clean and free of oil and grease.

Technical data model TRU

Model	EAN-No. 4025092*	EAN-No. 4025092* with protective lining	Capacity kg	Jaw capacity Z mm	Weight kg
TRU 0.1/150	*550918	*551632	100	50 - 150	3.9
TRU 0.5/200	*550475	*551151	500	35 - 200	13.6
TRU 1.0/200	*550949	*552165	1000	35 - 200	13.6
TRU 1.5/300	*550505	*550512	1500	80 - 300	27.0
TRU 3.0/300	*550758	*550536	3000	80 - 300	49.0
TRU 4.0/600	*551526	*550406	4000	200 - 600	204.0

Dimensions model TRU

Model	TRU 0.1/150	TRU 0.5/200	TRU 1.0/200	TRU 1.5/300	TRU 3.0/300	TRU 4.0/600
A, mm	270	503	509	720	740	1420
Bmin., mm	292	417	437	520	582	930
Bmax., mm	458	723	745	937	960	1815
C, mm	97	150	178	204	220	318
D, mm	43	56	82	84	125	205
E, mm	8	15	15	20	20	30
F, mm	17	17	30	25	30	35

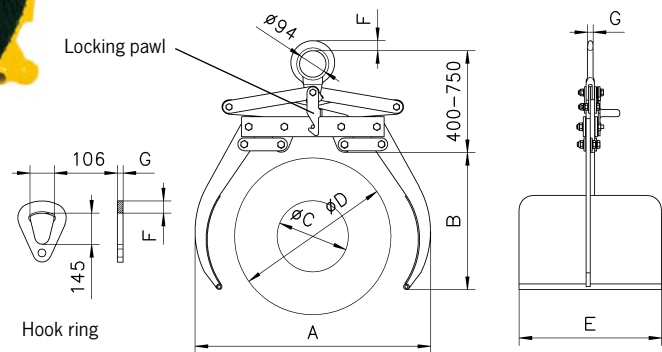


Model TRU, shackle for grabs for 2 t and up capacity.
Locking pawl locks open grab in place.



The picture shows a customized grab. Standard delivery without rollers as shown in technical drawing.

When using protective lining, it is important that the surfaces are dry, clean and free of oil and grease.



Model TR, hook ring for grabs for 2 t and above.
Locking pawl keeps the grab in the open position.

Technical data model TR

Model	EAN-No. 4025092*	EAN-No. 4025092* with protective lining	Capacity kg	Jaw capacity mm	Weight kg
TR 0.2/550	*553506	*552585	200	350 - 550	34
TR 0.2/650	*553513	*554978	200	450 - 650	41
TR 0.3/750	*553520	*554985	300	500 - 750	47
TR 0.5/750	*553537	*551700	500	500 - 750	47
TR 0.5/900	*553544	*552400	500	650 - 900	54
TR 0.75/105	*552561	*554992	750	700 - 1050	56
TR 1.0/750	*553551	*555005	1000	500 - 750	55
TR 1.0/1050	*553568	*555012	1000	700 - 1050	71
TR 2.0/1050	*553575	*555029	2000	700 - 1050	135
TR 3.0/1050	*553582	*555036	3000	700 - 1050	154

Dimensions model TR

Model	TR 0.2/550	TR 0.2/650	TR 0.3/750	TR 0.5/750	TR 0.5/900	TR 0.75/105	TR 1.0/750	TR 1.0/1050	TR 2.0/1050	TR 3.0/1050
A, mm	800	900	1100	1100	1150	1300	1000	1350	1350	1350
B, mm	565	615	665	665	765	815	665	815	815	815
Ø D, mm	550	650	750	750	900	1050	750	1050	1050	1050
E, mm	550	550	550	550	550	550	550	550	800	800
F, mm	35	35	35	35	35	35	35	35	45	45
G, mm	20	20	20	20	20	20	20	20	30	30
Ø C, mm	350	450	500	500	650	700	500	700	700	700

Profile steel grab model TPR

Capacity 500 - 3000 kg

The TPR steel grab is designed for transport of girders, profile steel, etc. It boasts a large jaw capacity, which makes it useful for various flange widths.

The clamping jaws press securely with a positive fit to the girder.

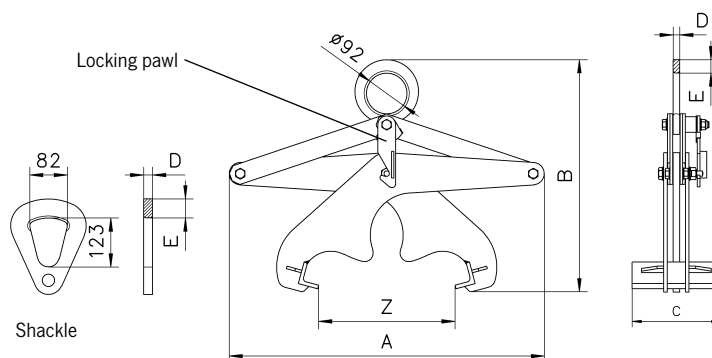


Technical data model TPR

Model	EAN-No. 4025092*	Capacity kg	Jaw capacity Z mm	Weight kg
TPR 0.5/200	*551496	500	0 - 200	15.0
TPR 1.5/300	*551045	1500	0 - 300	22.6
TPR 3.0/300	*553490	3000	0 - 300	41.7

Dimensions model TPR

Model	TPR 0.5/200	TPR 1.5/300	TPR 3.0/300
A, mm	510	710	720
Bmin., mm	390	495	525
Bmax., mm	625	830	920
C, mm	200	200	220
D, mm	15	15	20
E, mm	30	30	43



Model TPR, shackle for grabs for 2 t and up capacity.
Locking pawl locks open grab in place.



Block grab model TVB

Capacity 250/500 kg

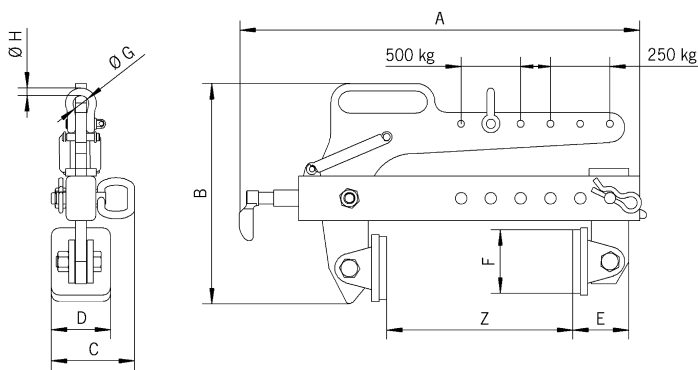
The TVB block grab is useful for the transport of stone and concrete blocks and other materials with parallel surfaces. The grab has a protective lining to ensure a safe and non-marring transport.

The clamping jaw and the center of gravity are easily and quickly adjustable by means of the locking pin.

It is important that the surfaces are dry, clean and free of oil and grease.

Technical data model TVB

Model	EAN-No. 4025092*	Capacity kg	Jaw capacity Z mm	Weight kg
TVB 500	*556989	0.25/0.5	0 - 240	13



Dimensions model TVB

Model	TVB 500
A, mm	537
B, mm	296
C, mm	112
D, mm	80
E, mm	75
F, mm	85
Ø G, mm	22
Ø H, mm	10

Model TVB



Stone/concrete grab with small jaw capacity model TBG

Capacity 200 - 2500 kg

The TBG block grabs are suited for the transport of all materials with parallel surfaces that can withstand a clamping pressure twice as high as the load being lifted.

The grabs are delivered with a replaceable hard rubber protective lining as standard.



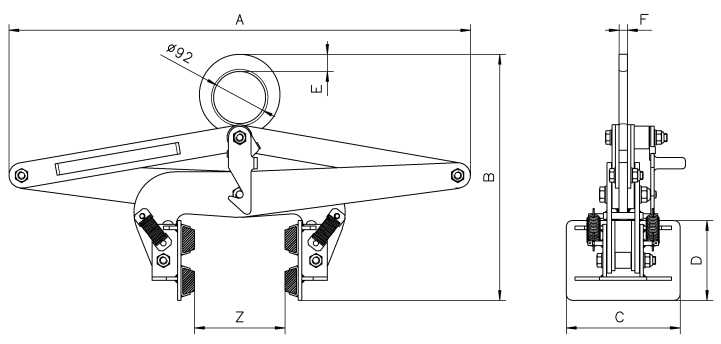
When using rubber protective lining it is important that the surfaces are dry, clean and free of oil and grease.

Technical data model TBG

Model	EAN-No. 4025092*	Capacity kg	Jaw capacity Z mm	Weight kg
TBG 0.2/150	*552141	200	0 - 150	24
TBG 0.3/150	*553599	300	0 - 150	27
TBG 0.5/150	*552455	500	0 - 150	27
TBG 1.0/250	*552356	1000	50 - 250	50
TBG 1.5/250	*552394	1500	50 - 250	50
TBG 2.5/250	*551571	2500	50 - 250	79

Dimensions model TBG

Model	TBG 0.2/150	TBG 0.3/150	TBG 0.5/150	TBG 1.0/250	TBG 1.5/250	TBG 2.5/250
A, mm	815	815	815	1050	1050	1050
Bmin., mm	420	420	420	460	460	460
Bmax., mm	760	760	760	980	980	980
C, mm	200	200	200	250	250	250
D, mm	160	160	160	160	160	160
E, mm	30	30	30	29	29	29
F, mm	15	15	15	20	20	25



Model TBG with small jaw



Stone/concrete grab with large jaw capacity model TBG

Capacity 200 - 5000 kg

The units are delivered with protective linings as standard.



Technical data model TBG

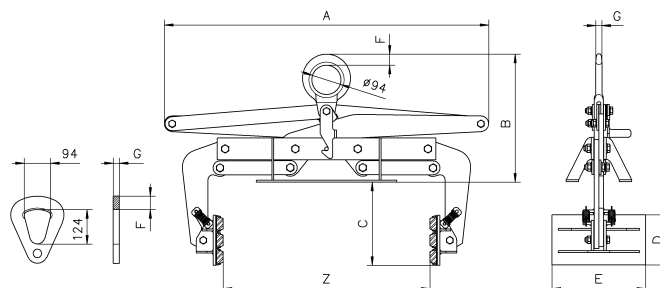
Model	EAN-No. 4025092*	Capacity kg	Jaw capacity Z mm	Weight kg
TBG 0.2/500	*551489	200	200 - 500	49
TBG 0.3/700	*551816	300	400 - 700	52
TBG 0.5/900	*552288	500	600 - 900	55
TBG 1.0/400	*553612	1000	100 - 400	51
TBG 1.0/1100	*552134	1000	800 - 1100	72
TBG 1.5/1300	*553605	1500	1000 - 1300	128
TBG 2.0/500	*553629	2000	200 - 500	126
TBG 3.0/500	*553636	3000	200 - 500	160
TBG 4.0/500	*553643	4000	200 - 500	240
TBG 5.0/500	*553650	5000	200 - 500	270

When using rubber protective lining it is important that the surfaces are dry, clean and free of oil and grease.

Dimensions model TBG

Model	TBG 0.2/500	TBG 0.3/700	TBG 0.5/900	TBG 1.0/400	TBG 1.0/1100	TBG 1.5/1300	TBG 2.0/500	TBG 3.0/500	TBG 4.0/500	TBG 5.0/500
A*, mm	1040	1040	1120	1040	1320	1520	1100	1100	1100	1100
B min., mm	390	390	390	390	390	390	530	530	600	600
B max., mm	840	840	840	840	840	840	1120	1120	1190	1190
C, mm	275	275	275	250	275	275	250	250	250	250
D, mm	160	160	160	160	160	160	160	160	160	160
E, mm	300	300	300	300	300	300	350	350	350	350
F, mm	35	35	35	35	35	35	36	42	48	48
G, mm	20	20	20	20	20	20	25	30	35	35

**Scissor dimensions



Model TBG with large jaw capacity, lug suspension for grabs with 2.0 t and above

Bale grab model TBA

Capacity 200 - 1000 kg

The TBA bale grab transports bales of fiber, wool, fabric, paper, pressed straw and various types of shavings up to a width of 1.3 m. Bales are gripped safely yet gently, and where applicable, the clamps are lined with a soft and pliable material.

The locking pawl only engages if the grab is opened without manual intervention.



The standard grab is equipped with protective linings.

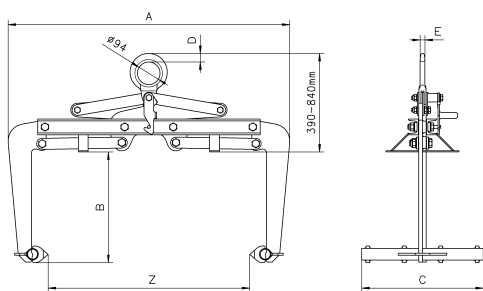
Serrated jaws available on request.

Technical data model TBA

Model	EAN-No. 4025092*	Capacity kg	Jaw capacity Z mm	Weight kg
TBA 0.2/700	*553667	200	250 - 700	40
TBA 0.3/900	*552080	300	450 - 900	42
TBA 0.5/1100	*552776	500	650 - 1100	45
TBA 0.75/1300	*552035	750	850 - 1300	62
TBA 1.0/1300	*553674	1000	850 - 1300	62

Dimensions model TBA

Model	TBA 0.2/700	TBA 0.3/900	TBA 0.5/1100	TBA 0.75/1300	TBA 1.0/1300
A, mm	890	1090	1290	1550	1550
B, mm	420	420	420	420	420
C, mm	500	500	500	500	500
D, mm	35	35	35	35	35
E, mm	20	20	20	20	20



Model TBA 0.2-1 t with serrated jaw



Rail grab with safety lock model TCR

Capacity 1000 - 2000 kg

The TCR rail grab transports rails, as used by railways, easily and safely. A safe grip is ensured by the lever operated safety lock. For long rails, two grabs must be attached to a spreader beam to avoid sagging.

Since the rails are primarily grabbed with positive fit, it is important that the clamp stays in a vertical position during initial lift.

For rails with a larger head or sidings, please inquire about customized grabs.

A TCR multiple rail system is also available for the simultaneous transport of up to 12 rails.

**For special sizes please advise
rail type and profile.**

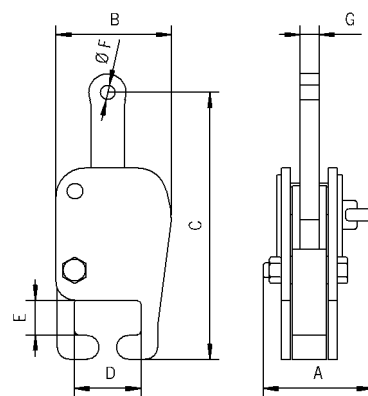
Technical data model TCR

Model	EAN-No. 4025092*	Capacity kg	Weight kg
TCR 1.0	*550802	1000	12.4
TCR 2.0	*551076	2000	13.9

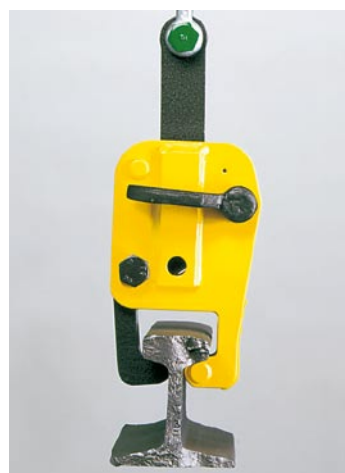
Dimensions model TCR

Model	TCR 1.0	TCR 2.0
A*, mm	144	144
B, mm	152	163
C, mm	350	350
D, mm	90	90
E, mm	46	46
Ø F, mm	20	20
G, mm	25	25

*Scissor dimensions



Model TCR



Inside grab model TDI

Capacity 100 - 5000 kg

Inside grabs are available in three versions for the handling of cylindrical and rectangular hollow bodies. The clamping jaws are available with optional steel jaws, hard manganese serrated jaws or jaws with protective lining, which are designed to grab a variety of shapes and materials. These inside grabs can be equipped with an automatic opening and closing device.

Ideal especially for wire coils and hollow bodies.



For inside grabs with jaws with protective lining, the inside surface of the material must be free of oil and grease.

When ordering, please advise the requested version.

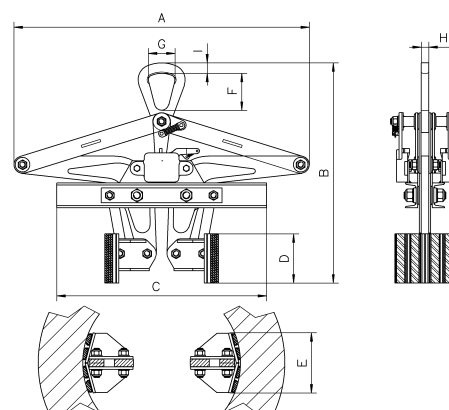
Technical data model TDI

Model	EAN-No. 4025092*	Capacity kg	Jaw capacity mm	Weight kg
TDI 0.1/420	*551410	100	220 - 420	17
TDI 0.5/600	*552066	500	400 - 600	51
TDI 1.0/600	*553704	1000	400 - 600	53
TDI 2.0/800	*553711	2000	550 - 800	150
TDI 3.0/800	*553728	3000	550 - 800	175
TDI 5.0/800**	*553735	5000	550 - 800	220

**with hard manganese serrated jaws

Dimensions model TDI

Model	TDI 0.1/420	TDI 0.5/600	TDI 1.0/600	TDI 2.0/800	TDI 3.0/800	TDI 5.0/800
A, mm	790	1200	1200	1400	1450	1450
B, mm	455	610	600	830	920	795
C, mm	550	800	900	1100	1000	1000
D, mm	80	100	100	120	160	160
E, mm	90	160	160	220	220	65
F, mm	-	-	-	124	151	151
G, mm	Ø 60	Ø 92	Ø 92	83	107	107
H, mm	15	15	15	30	30	35
I, mm	22	30	30	42	42	42



Model TDI



Model TCU



Model TCO



Container transport shackle model TCO



Container transport shackle model TCU

Container lifting lugs model TCO and model TCU

Capacity 32000 - 56000 kg

These container lifting lugs are offered in a set of 4 pieces with a total weight capacity of 56 t.

The lugs serve as flexible attachment points for the transport of containers. Two types are available which can be fastened to either the "top" of the container or laterally.

Model TCO is vertically mounted in the hole at the top of the container. Turning the TCO 90°, locks it securely in place.

Transport is done with the use of a spreader beam in conjunction with wire rope, chain or textile slings making sure the load is suspended vertically.

Model TCU is mounted laterally on the container (in the upper or the lower part) and has a spring-loaded bolt to prevent an accidental release.

Transport is done with the use of a spreader beam in conjunction with wire rope, chain or textile slings up to the below mentioned angles from the vertical.

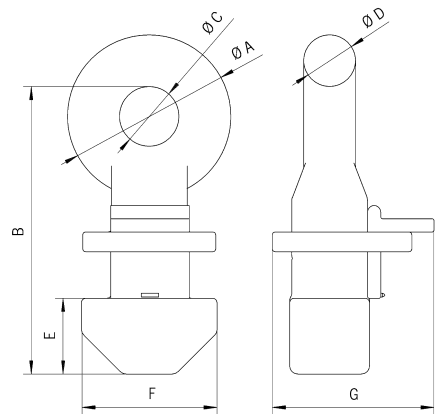
Technical data model TCO and model TCU

Model	EAN-No. 4025092*	Capacity** kg	Weight** kg	Max. angle from the vertical
TCU 32	*556927	32000	19.5	50°
TCU 40	*556927	40000	19.5	36°
TCO 56	*556965	56000	30.1	true vertical lift

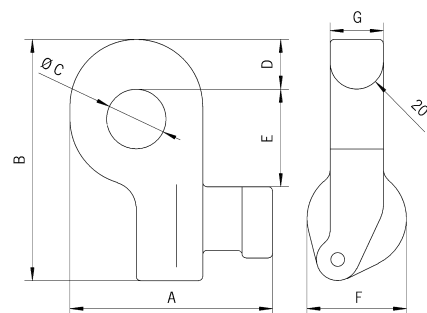
**set of 4 pieces

Dimensions model TCO and model TCU

Model	TCU 32	TCU 40	TCO 56
A, mm	152	152	123
B, mm	181	181	217
Ø C, mm	45	45	45
D, mm	37	37	39
E, mm	73	73	57
F, mm	75	75	101
G, mm	40	40	121



Model TCO



Model TCU



Beam clamp model YC

Capacity 1000 - 10000 kg



Trolley clamp model CTP

Capacity 1000 - 3000 kg



**Push and geared
model HTP and model HTG**

Capacity 500 - 20000 kg



**Swivel truck trolley
with low headroom and
extremely short radius curve
model VLHP and model VLHG**

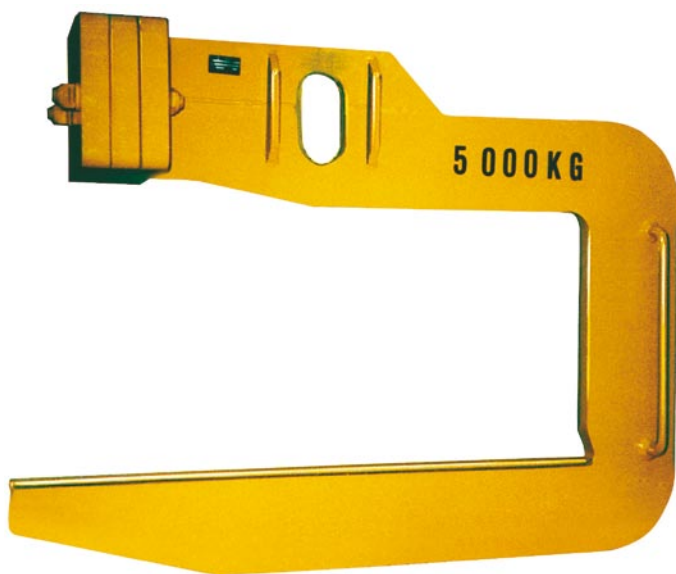
Capacity 250 - 6000 kg



Electric trolley model VTE-U

Capacity 1000 - 5000 kg

! Information about beam clamps and trolleys are presented in the hoisting chapter, from page 54-63.



C-Hook model TCK

Capacity 500 - 10000 kg

Coils, rolls, rings and similar items are transported safely with the Tigrip C-Hooks. Tine length and usable height with the most frequently encountered coil sizes are listed in the table below.

Other working loads, measurements, and models, such as C-Hooks with automatic balancing device, are available upon request.

! Illustration shows tines with 4/4 the length of the coil width (special).

Technical data model TCK

Model	EAN-No. 4025092*	Capacity kg	Weight kg
TCK 0.5/300	*554800	500	21
TCK 0.5/500	*552417	500	30
TCK 0.5/800	*554817	500	46
TCK 1.0/300	*554824	1000	28
TCK 1.0/500	*554831	1000	40
TCK 1.0/800	*552783	1000	95
TCK 2.0/300	*554848	2000	45
TCK 2.0/500	*551830	2000	90
TCK 2.0/800	*552615	2000	140
TCK 2.0/1000	*552479	2000	180
TCK 3.0/300	*554855	3000	68
TCK 3.0/500	*554862	3000	127
TCK 3.0/800	*552431	3000	165
TCK 3.0/1000	*554879	3000	215
TCK 5.0/500	*551298	5000	184
TCK 5.0/800	*554886	5000	238
TCK 5.0/1000	*554893	5000	286
TCK 5.0/1250	*554909	5000	364
TCK 7.5/800	*555043	7500	390
TCK 7.5/1000	*551984	7500	520
TCK 7.5/1250	*551878	7500	650
TCK 7.5/1500	*554916	7500	767
TCK 10.0/1000	*554923	10000	772
TCK 10.0/1250	*551670	10000	810
TCK 10.0/1500	*554930	10000	980

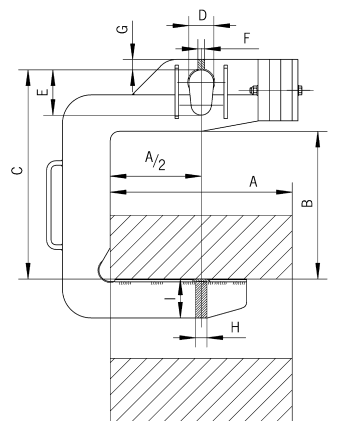
Tigrip® Load Hoisting Tackle C-Hooks

Dimensions model TCK

Model	TCK 0.5/300	TCK 0.5/500	TCK 0.5/800	TCK 1.0/300	TCK 1.0/500	TCK 1.0/800	TCK 2.0/300	TCK 2.0/500	TCK 2.0/800	TCK 2.0/1000
Coil width A, mm	300	500	800	300	500	800	300	500	800	1000
Usable height B, mm	400	400	400	450	450	450	500	500	500	500
C, mm	570	580	580	620	630	630	700	700	720	720
D, mm	60	60	60	60	60	60	75	75	75	75
E, mm	120	120	120	120	120	120	150	150	150	150
F, mm	20	20	25	25	20	30	25	30	30	20
G, mm	25	23	23	23	23	23	38	38	38	35
H, mm	20	20	25	20	25	30	25	30	30	40
I, mm	50	65	70	70	80	90	90	110	125	125

Model	TCK 3.0/300	TCK 3.0/500	TCK 3.0/800	TCK 3.0/1000	TCK 5.0/500	TCK 5.0/800	TCK 5.0/1000	TCK 5.0/1250	TCK 7.5/800	TCK 7.5/1000
Coil width A, mm	300	500	800	1000	500	800	1000	1250	800	1000
Usable height B, mm	500	500	500	500	550	550	550	550	600	600
C, mm	700	700	720	720	800	800	820	820	900	900
D, mm	75	75	75	75	100	100	100	100	110	110
E, mm	150	150	150	150	200	200	200	200	220	220
F, mm	30	20	25	20	25	30	30	30	35	35
G, mm	38	40	40	40	45	45	45	45	50	50
H, mm	30	30	40	40	40	50	50	50	50	60
I, mm	105	125	140	155	145	160	180	200	200	200

Model	TCK 7.5/1250	TCK 7.5/1500	TCK 10.0/1000	TCK 10.0/1250	TCK 10.0/1500
Coil width A, mm	1250	1500	1000	1250	1500
Usable height B, mm	600	600	650	650	650
C, mm	900	920	980	1000	1000
D, mm	110	110	130	130	130
E, mm	220	220	250	250	250
F, mm	35	35	40	45	45
G, mm	45	50	50	55	55
H, mm	60	70	70	70	80
I, mm	220	220	220	240	240



Model TCK



Standard model has tines 3/4 the length of the coil width as shown in drawing.



Other sizes and models available upon request.

Coil hook model TCS

Capacity 500 - 3000 kg

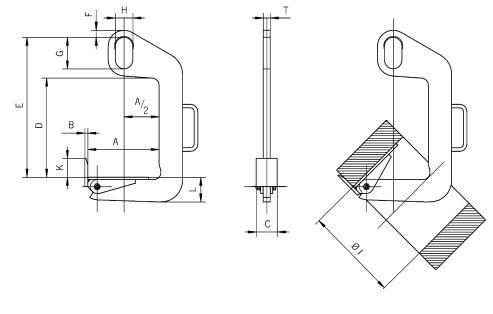
The TCS coil hook is an universal C-Hook. Due to its tipping feature, it can lift or lower the coil, whether the coil is lying flat or is in an upright position. With this tipping device, the coil is tipped safely through 90°.

The slow and safe movement of the tipping device ensures a continuous flowing movement when lifting or lowering the coil. At the same time, the tipping device serves the purpose of preventing accidental slipping of the load during transport.



Technical data model TCS

Model	EAN-No. 4025092*	Capacity kg	Weight kg
TCS 0.5/120	*554947	500	6.9
TCS 0.5/200	*552257	500	9.6
TCS 1.0/200	*552264	1000	15.4
TCS 1.0/300	*552875	1000	20.0
TCS 2.0/200	*551977	2000	24.8
TCS 2.0/300	*551908	2000	33.4
TCS 3.0/200	*552011	3000	45.0
TCS 3.0/300	*552714	3000	51.0



Model TCS

Dimensions model TCS

Model	TCS 0.5/120	TCS 0.5/200	TCS 1.0/200	TCS 1.0/300	TCS 2.0/200	TCS 2.0/300	TCS 3.0/200	TCS 3.0/300
Coil width A min., mm	50	100	100	200	100	200	100	200
Coil width A max., mm	120	200	200	300	200	300	200	300
B, mm	10	10	10	10	12	12	15	15
C, mm	60	60	80	80	90	90	100	100
D, mm	330	330	460	460	420	420	610	610
E, mm	470	470	600	600	600	600	820	820
F, mm	20	20	20	20	30	30	40	40
G, mm	110	110	110	110	135	135	160	160
H, mm	60	60	60	60	75	75	90	90
K, mm	50	50	60	60	80	80	100	100
L, mm	45	50	65	70	85	95	100	110
T, mm	20	20	25	25	30	30	35	35
Ø I, mm	220	300	300	400	300	400	300	400

Barrel grab for transport of upright barrels model TFA

Capacity 300 kg

This unit grabs upright barrels and sets them down in the same position. Although the clamping jaws are fitted with a hard rubber lining to provide a friction hold, it is the positive fit on the rim that provides extra safety. This additional feature is indispensable if the surface of the barrels is stained with oil or grease.

The clamping jaws fitted with a protective lining enable the non-marring and secure grab around the circumference of the barrel. The clamp is suitable for standard type barrels.



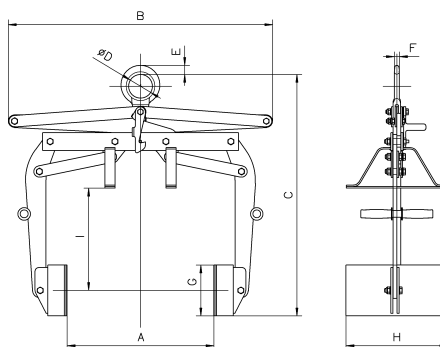
Technical data model TFA

Model	EAN-No. 4025092*	Capacity kg	Jaw capacity diameter mm	Weight kg
TFA 0.3/600	*557009	300	400 - 600	57



Dimensions model TFA

Model	TFA 0.3/600
A, mm	600
B, mm	1040
C, mm	950
Ø D, mm	90
E, mm	34
F, mm	15
G, mm	200
H, mm	400
I, mm	400



Model TFA

For barrels according to DIN 6643.



For barrels according to DIN 6643.

Barrel grab with tipping device model TFA-D

Capacity 300 kg

The grab with tipping device is suited to lift, transport as well as tipping and emptying the barrel.

In order to tip the barrel easily, it must be picked up at the correct center of gravity.

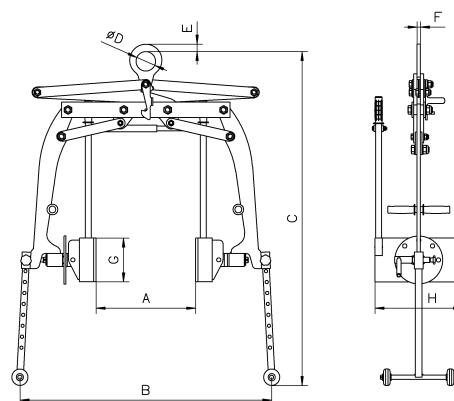


Technical data model TFA D

Model	EAN-No. 4025092*	Capacity kg	Jaw capacity diameter mm	Weight kg
TFA 0.3/600 D	*557917	300	400 - 600	83

Dimensions model TFA D

Model	TFA 0.3/600 D
A, mm	600
B, mm	1150
C, mm	1525
Ø D, mm	90
E, mm	34
F, mm	15
G, mm	200
H, mm	400



Model TFA-D

Barrel grab model TFA 0.35/700 R and model TFA 0.35/700 TR

Capacity 350 kg

These barrel grabs are designed for transport of steel barrels. The clamping jaws press securely with a positive fit underneath the rim of the barrel.



TFA 0.35/700 R

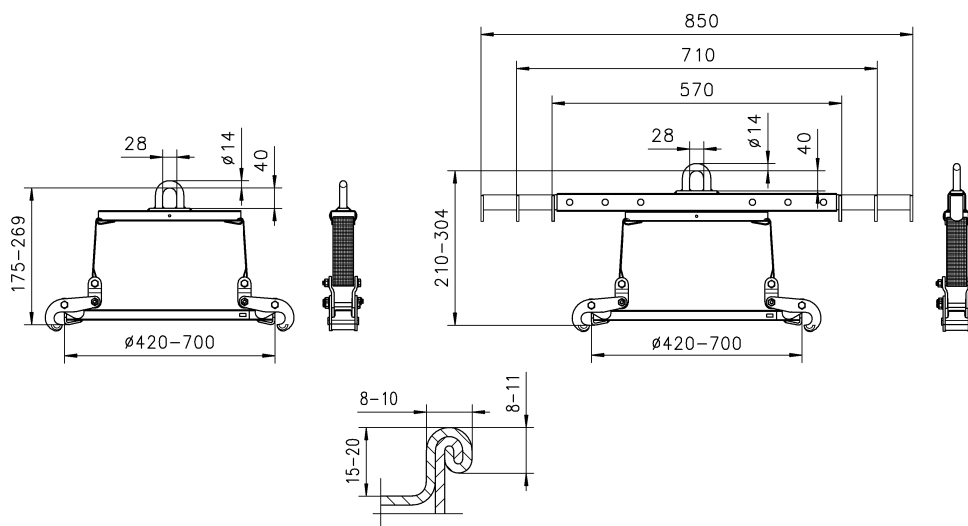


TFA 0.35/700 TR

TFA 0.35/700 TR is a combination unit for the transport of barrels that can be used with either an overhead crane or forklift.

Technical data model TFA R/TR

Model	EAN-No. 4025092*	Capacity kg	Jaw capacity diameter mm	Weight kg
TFA 0.35/700 R	*551014	350	420 - 700	5.7
TFA 0.35/700 TR	*551472	350	420 - 700	9.2





Barrel rim clamp model TFRK

Capacity 500 kg

The TFRK barrel rim clamp can be used individually, as a pair, or as a multi-legged chain sling.

The clamp grabs under the rim of the barrel. A spring-loaded cam prevents the accidental opening of the clamp.

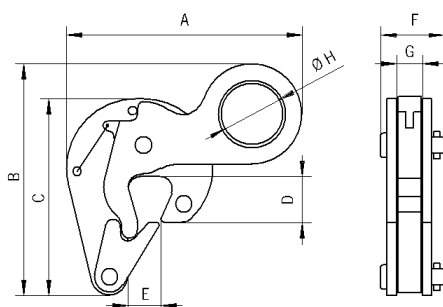
For barrels according to DIN 6643.

Technical data model TFRK

Model	EAN-No. 4025092*	Capacity kg	Weight kg
TFRK	*556415	500	1.5

Dimensions model TFRK

Model	TFRK 0.5
A, mm	152
B, mm	150
C, mm	127
D, mm	30
E, mm	21
F, mm	41
G, mm	17
Ø H, mm	40



Barrel clamp model TFK

Capacity 500 kg

Its light weight and small overall design makes it ideal for lifting barrels where access or space is limited.

The center of gravity of the barrel is the lifting point during transport.



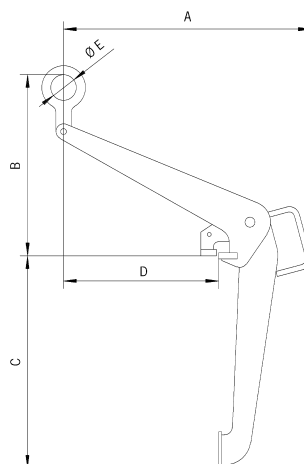
For barrels according to DIN 6643.

Technical data model TFK

Model	EAN-No. 4025092*	Capacity kg	Weight kg
TFK 0.5	*556071	500	7.3

Dimensions model TFK

Model	TFK 0.5
A, mm	479
B, mm	350
C, mm	410
D, mm	300
Ø E, mm	50



Model TFK



Crate grab with tipping device model TKA/d

Capacity 150 kg

The crate grab with tipping device is an absolutely safe unit, which not only securely transports stacking boxes, but can empty them in mid-air as well.

A safety lever system prevents the accidental opening of the grab.

The clamping jaws tightly grab under the rim of the crate without damaging the crate. To engage the tipping motion in order to empty the crate, the safety lock must be manually unlocked. The tipping motion is limited to 100°. This prevents the crate from flipping completely over while emptying, thereby reducing the risk of injury.

Option

Grabs for other sizes of crates are available upon request.

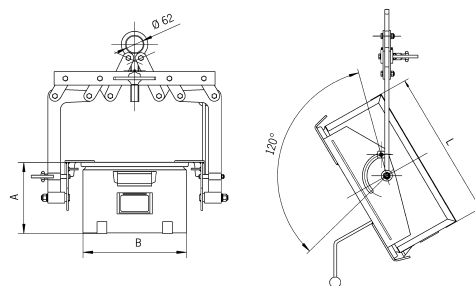
Please provide the crate dimensions or a sample crate when ordering.

Technical data model TKA/d

Model	EAN-No. 4025092*	Capacity kg	Weight kg
TKA 0.15/330d	*551519	150	25.8
TKA 0.15/480d	*552103	150	26.0

Dimensions model TKA/d

Model	TKA 0.15/330d	TKA 0.15/480d
A, mm	200 - 300	300
B, mm	315 - 330	470 - 480
L, mm	465 - 540	550 - 660



Model TKA.../...d

Crate grab model TKA a/i

Capacity 250 kg

The easy-handling crate grab, which grabs on the side plates or the front sides of the crate, transports crates safely and without damaging them.

The moveable jaws press the edge of the crate gently against the outside grab support rails. Stacking boxes made of steel or plastic will not get deformed. After the box has been set down, the safety device holds the grab open.

When lifting the crate and grabbing the support rails, the safety device must be manually pulled back until it lies over the safety bolt. With further lifting, the jaws grab under the outer top edge of the crate and lift it up safely.

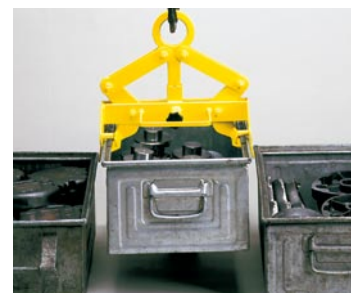
The crate grab is available as an external or internal operating grab.



Model TKA.../...a external operating



Model TKA.../...i internal operating

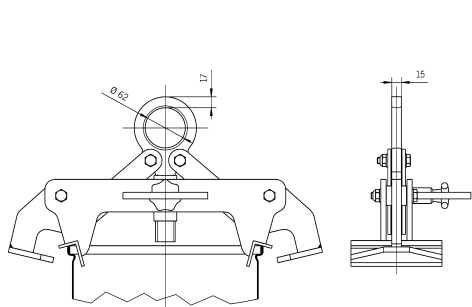


Model TKA.../...i internal operating

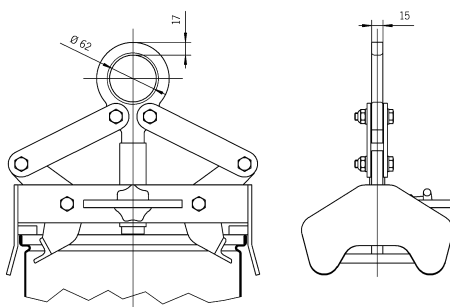
Please provide the crate dimensions or a sample crate when ordering.

Technical data model TKA a/i

Model	EAN-No. 4025092*	Weight kg	Capacity kg	Jaw capacity mm
TKA 0.25/320a	*558082	9.3	250	320
TKA 0.25/480a	*558044	9.3	250	480
TKA 0.25/600a	*558099	9.3	250	600
TKA 0.25/320i	*558051	8.5	250	320
TKA 0.25/480i	*558068	8.5	250	480
TKA 0.25/600i	*558075	8.5	250	600



Model TKA.../...a external operating



Model TKA.../...i internal operating



Concrete pipe lifting gear model BTG

Capacity 1500 - 3000 kg

Lifting gear for the vertical transport of concrete pipe and culverts must be very versatile. Most important, it must be absolutely safe and easy to handle under even the harshest conditions.

The Tigrip concrete pipe lifting gear meets all these requirements. It is a three-legged lifting system for the safe and non-marring transport of concrete pipes up to a diameter of Ø 2000 mm and a load of up to 3 t. The jaw capacity is designed for concrete pipe thicknesses from 40 - 220 mm. Attachment and removal of the clamps can be done easily due to the handles that have been incorporated into each clamp.

Features

- Solid construction
- Safety factor 4:1
- Simple and safe handling
- Large jaw capacity
- For the toughest operating conditions
- Lightweight design
- Service-friendly

For concrete pipes according to DIN 4034.
Lifting gear for concrete pipe up to a diameter of Ø 3000 mm available upon request.



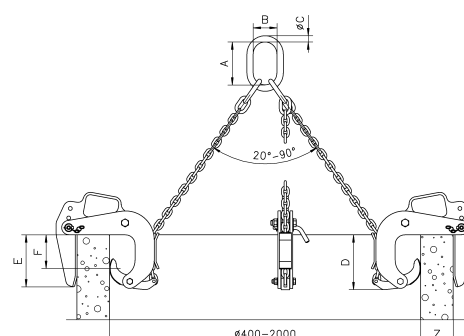
Technical data model BTG

Model	EAN-No. 4025092*	Capacity** kg	Jaw capacity Z mm	Mouth depth E mm	Pressure line F mm	Weight kg
BTG 1.5/120	*550147	1500	40 - 120	165	100	35
BTG 3.0/180 TM-N	*551199	3000	50 - 180	245	175	90
BTG 3.0/220 TM-N	*550819	3000	90 - 220	245	175	94

**Per lifting gear – three-legged

Dimensions model BTG

Model	BTG 1.5/120	BTG 3.0/180 TM-N	BTG 3.0/220 TM-N
A, mm	135	180	180
B, mm	75	100	100
Ø C, mm	18	26	26
D, mm	180	310	310



Model BTG

Trench shield grab model TCP

Capacity 1500 - 5500 kg

The TCP grab is suitable for vertical positioning and transportation of trench shields.

Once the grab is set onto the trench shield, a spring-loaded bolt locks itself into the hole of the shield.

Releasing the bolt is done with the 15 m pull cord attached to the grab.

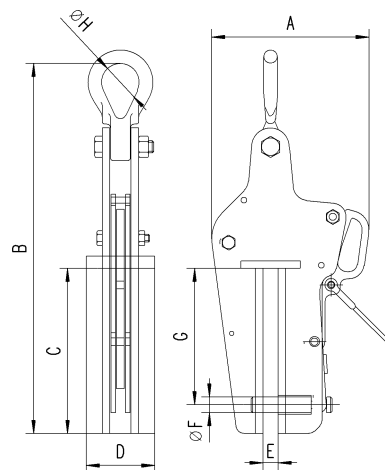


Technical data model TCP

Model	EAN-No. 4025092*	Capacity kg	Weight kg
TCP 1.5	*555807	1500	12.2
TCP 3.0	*555791	3000	19.5
TCP 5.5	*555784	5500	26.7

Dimensions model TCP

Model	TCP 1.5	TCP 3.0	TCP 5.5
A, mm	207	226	269
B, mm	488	517	575
C, mm	218	218	218
D, mm	90	100	120
E, mm	18	24	24
Ø F, mm	20	24	30
G, mm	180	180	180
Ø H, mm	50	63	89



Model TCP



Trench shield clamp model TPP

Capacity 3000 - 12000 kg

The TPP trench shield clamp is similar to a regular plate clamp in its construction but has a much deeper jaw.

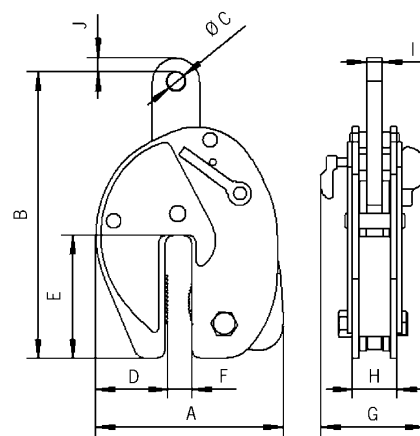
The compact construction combined with a high capacity makes it ideal for pulling trench shields out of the ground. A safety lock prevents the accidental opening of the clamp.

Technical data model TPP

Model	EAN-No. 4025092*	Capacity kg	Jaw capacity mm	Weight kg
TPP 3	*556255	3000	0 - 20	16.0
TPP 8	*556217	8000	0 - 30	27.8
TPP 12	*556231	12000	0 - 30	53.0

Dimensions model TPP

Model	TPP 3	TPP 8	TPP 12
A, mm	224	294	361
B, mm	325	445	486
Ø C, mm	20	30	40
D, mm	88	109	145
E, mm	147	194	190
F, mm	25	42	41
G, mm	123	146	167
H, mm	60	72	90
I, mm	20	25	30
J, mm	18	26	32



Model TPP

Pipe hook model TRO

Capacity 2000 - 10000 kg

The pipe hooks are used in pairs for the safe transport of pipes.

Scope of delivery

The shackles are included with the hooks.



Technical data model TRO for 60° - 90° chain - top angle

Model	EAN-No. 4025092*	Capacity** kg	Weight** kg
TRO 2/90	*556729	2000	3.1
TRO 4/90	*556743	4000	5.6
TRO 6/90	*556767	6000	10.5
TRO 8/90	*556781	8000	17.8
TRO 10/90	*556804	10000	22.0

**Per pair

Dimensions model TRO for 60° - 90° chain - top angle

Model	TRO 2/90	TRO 4/90	TRO 6/90	TRO 8/90	TRO 10/90
t, mm	20	30	30	40	40
A, mm	0 - 40	0 - 50	0 - 60	0 - 70	0 - 80
B, mm	35	40	51	55	69
C, mm	40	48	62	67	80
D, mm	62	77	90	105	115
E, mm	62	77	90	105	115
F, mm	116	142	173	190	221
Ø G, mm	16.3	24.3	24.3	30.3	30.3
H, mm	47.6	72.2	72.2	95.3	95.3
Ø I, mm	12.7	19	19	25.4	25.4
J, mm	30.2	44.5	44.5	58.7	58.7

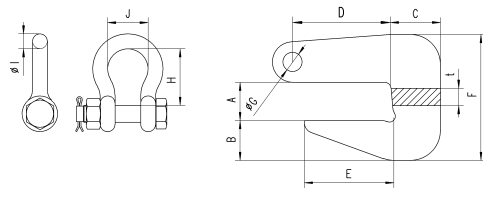
Technical data model TRO for 90° - 120° chain - top angle

Model	EAN-No. 4025092*	Capacity** kg	Weight** kg
TRO 2/120	*556828	2000	3.5
TRO 4/120	*556842	4000	8.8
TRO 6/120	*556866	6000	14.9
TRO 8/120	*556880	8000	18.6
TRO 10/120	*556903	10000	23.0

**Per pair

Dimensions model TRO for 90° - 120° chain - top angle

Model	TRO 2/120	TRO 4/120	TRO 6/120	TRO 8/120	TRO 10/120
t, mm	20	30	40	40	50
A, mm	0 - 30	10 - 40	20 - 50	30 - 65	30 - 75
B, mm	34	39	43	54	60
C, mm	40	50	55	65	70
D, mm	82	95	106	119	143
E, mm	75	80	95	100	125
F, mm	106	131	153	185	208
Ø G, mm	16.3	24.3	30.3	30.3	36.3
H, mm	30.2	44.5	58.7	58.7	73
Ø I, mm	12.7	19	25.4	25.4	31.8
J, mm	47.6	72.2	95.3	95.3	117



Model TRO



Clamps for cable drums model TKB

Capacity 5000 kg

Specifically designed for the transport of cable drums, these clamps are used in pairs together with a two-legged chain sling.

By the spreading of the clamp, it locks inside the drum.

The clamps can be held in place by a locking lever.

Easy handling, light-weight design, and the size of the clamp contribute to a safe transport of all types of cable drums.

**Various sizes are available upon request.
Please supply dimensions C and D.**

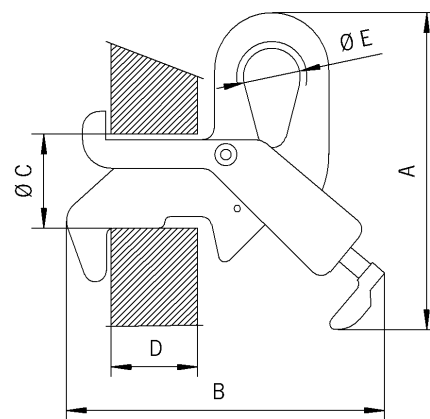
Technical data model TKB

Model	EAN-No. 4025092*	Capacity** kg	Weight kg
TKB	*556606	5000	11

**Per pair

Dimensions model TKB

Model	TKB
A, mm	277
B, mm	277
Ø C, mm	82
D, mm	85
Ø E, mm	50



Model TKB

Tine hook model TZh

Capacity 1500 - 10000 kg

For fastening hoisting equipment and loads to forklift tines.

The TZh are pushed onto the forklift tines and are fastened with two spindles. The pivoting as well as swivelling hook with safety latch ensures safety while lifting.



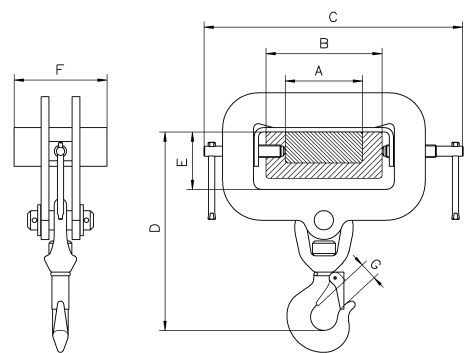
Attention must be paid to the working load limit of the single forklift tines.

Technical data model TZh

Model	EAN-No. 4025092*	Capacity kg	Weight kg
TZh 1.5/150	*557566	1500	7.2
TZh 3.0/150	*557580	3000	10.8
TZh 5.0/150	*557603	5000	17.3
TZh 5.0/200	*557627	5000	24.7
TZh 10.0/200	*557641	10000	43.0

Dimensions model TZh

Model	TZh 1.5/150	TZh 3.0/150	TZh 5.0/150	TZh 5.0/200	TZh 10.0/200
A, mm	100	100	100	150	150
B, mm	150	150	150	200	200
Cmin., mm	310	350	350	440	440
Cmax., mm	360	400	400	490	490
D, mm	260	270	295	320	420
E, mm	74	74	74	94	94
F, mm	120	120	120	180	180
G, mm	25	28	34	34	45



Model TZh
Swivel hooks, pivoting and swivelling



Customised models
on page 168-169.

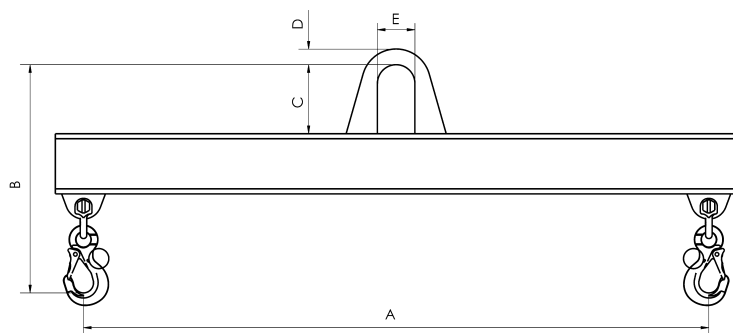
Spreader beam, non-adjustable model TTS-E

Capacity 1000 - 10000 kg

Tigrip spreader beams are the practical and safe choice for either long material to prevent sagging and shifting, or for loads where the weight has to be carefully distributed or suspended from several points. The extensive standard program offers a wide variety of capacities, working widths, adjustable ranges and hooks for common applications.

This heavy-duty and cost-effective standard type is complemented by various customized designs. These may be spreader beams with hooks for plate material, or with C-hooks, crane forks, or grabs for bulky and long materials.

Special designs with laterally fixed hooks are fitted with slings to pick up rolls, pipes and similar objects. Also available are the so-called "star" spreader beams for picking up cylindrical materials or spreader beams with side hooks and 4-point support which share the easy operation, reliability and safety of all Tigrip spreader beams.



Model TTS-E without adjustments

Technical data model TTS-E

Model	EAN-No. 4025092*	Capacity kg	Working width mm	Hook mouth mm	Weight kg
TTS 1.0/1000 E	*552905	1000	1000	23	23
TTS 2.0/1000 E	*554534	2000	1000	23	25
TTS 3.0/1000 E	*552813	3000	1000	30	28
TTS 5.0/1000 E	*554541	5000	1000	38	41
TTS 7.5/1000 E	*554558	7500	1000	42	50
TTS 10.0/1000 E	*554565	10000	1000	42	61
TTS 1.0/1500 E	*552851	1000	1500	23	31
TTS 2.0/1500 E	*554572	2000	1500	23	33
TTS 3.0/1500 E	*552028	3000	1500	30	41
TTS 5.0/1500 E	*552172	5000	1500	38	64
TTS 7.5/1500 E	*554589	7500	1500	42	74
TTS 10.0/1500 E	*554596	10000	1500	42	90
TTS 1.0/2500 E	*554602	1000	2500	23	46
TTS 2.0/2500 E	*552769	2000	2500	23	69
TTS 3.0/2500 E	*552202	3000	2500	30	88
TTS 5.0/2500 E	*552493	5000	2500	38	106
TTS 7.5/2500 E	*554619	7500	2500	42	148
TTS 10.0/2500 E	*554626	10000	2500	42	181
TTS 1.0/3500 E	*554633	1000	3500	23	77
TTS 2.0/3500 E	*554640	2000	3500	23	118
TTS 3.0/3500 E	*552592	3000	3500	30	138
TTS 5.0/3500 E	*554657	5000	3500	38	167
TTS 7.5/3500 E	*554664	7500	3500	42	235
TTS 10.0/3500 E	*554671	10000	3500	42	272
TTS 1.0/5000 E	*554688	1000	5000	23	163
TTS 2.0/5000 E	*552523	2000	5000	23	189
TTS 3.0/5000 E	*554695	3000	5000	30	223
TTS 5.0/5000 E	*554701	5000	5000	38	295
TTS 7.5/5000 E	*554718	7500	5000	42	372
TTS 10.0/5000 E	*554725	10000	5000	42	478

Dimensions model TTS-E

Model	TTS 1.0/1000 E	TTS 2.0/1000 E	TTS 3.0/1000 E	TTS 5.0/1000 E	TTS 7.5/1000 E	TTS 10.0/1000 E	TTS 1.0/1500 E	TTS 2.0/1500 E	TTS 3.0/1500 E	TTS 5.0/1500 E
B, mm	375	400	470	585	690	770	375	400	490	605
C, mm	110	135	160	180	200	260	110	135	160	180
D, mm	25	30	35	40	60	70	25	30	35	40
E, mm	60	75	90	100	130	130	60	75	90	100

Model	TTS 7.5/1500 E	TTS 10.0/1500 E	TTS 1.0/2500 E	TTS 2.0/2500 E	TTS 3.0/2500 E	TTS 5.0/2500 E	TTS 7.5/2500 E	TTS 10.0/2500 E	TTS 1.0/3500 E	TTS 2.0/3500 E
B, mm	710	790	375	440	530	625	750	830	405	460
C, mm	200	260	110	135	160	180	200	260	110	135
D, mm	60	70	25	30	35	40	60	70	25	30
E, mm	130	130	60	75	90	100	130	130	60	75

Model	TTS 3.0/3500 E	TTS 5.0/3500 E	TTS 7.5/3500 E	TTS 10.0/3500 E	TTS 1.0/5000 E	TTS 2.0/5000 E	TTS 3.0/5000 E	TTS 5.0/5000 E	TTS 7.5/5000 E	TTS 10.0/5000 E
B, mm	550	665	770	850	445	480	570	685	790	890
C, mm	160	180	200	260	110	135	160	180	200	260
D, mm	35	40	60	70	25	30	35	40	60	70
E, mm	90	100	130	130	60	75	90	100	130	130



Spreader beam, adjustable
model TTS

Capacity 1000 - 25000 kg

Technical data model TTS

Model	EAN-No. 4025092*	Capacity kg	Working width Z mm	Hook mouth mm	Weight kg
TTS 1.0/1500	*552646	1000	700 - 1500	18	40
TTS 2.0/1500	*552295	2000	700 - 1500	18	41
TTS 3.0/1500	*553988	3000	700 - 1500	21	53
TTS 5.0/1500	*551281	5000	700 - 1500	23	79
TTS 7.5/1500	*553995	7500	700 - 1500	32	98
TTS 10.0/1500	*552219	10000	700 - 1500	32	117
TTS 12.5/1500	*554008	12500	700 - 1500	40	116
TTS 15.0/1500	*554015	15000	700 - 1500	40	137
TTS 20.0/1500	*554022	20000	700 - 1500	50	180
TTS 25.0/1500	*554039	25000	700 - 1500	50	226
TTS 1.0/2500	*554046	1000	1500 - 2500	18	58
TTS 2.0/2500	*552158	2000	1500 - 2500	18	84
TTS 3.0/2500	*552448	3000	1500 - 2500	21	105
TTS 5.0/2500	*552424	5000	1500 - 2500	23	127
TTS 7.5/2500	*554053	7500	1500 - 2500	32	178
TTS 10.0/2500	*554060	10000	1500 - 2500	32	215
TTS 12.5/2500	*554077	12500	1500 - 2500	40	198
TTS 15.0/2500	*554084	15000	1500 - 2500	40	237
TTS 20.0/2500	*554091	20000	1500 - 2500	50	287
TTS 25.0/2500	*554107	25000	1500 - 2500	50	342
TTS 1.0/3500	*552684	1000	1700 - 3500	18	95
TTS 2.0/3500	*554114	2000	1700 - 3500	18	137
TTS 3.0/3500	*554121	3000	1700 - 3500	21	162
TTS 5.0/3500	*554138	5000	1700 - 3500	23	228
TTS 7.5/3500	*554145	7500	1700 - 3500	32	278
TTS 10.0/3500	*554152	10000	1700 - 3500	32	317
TTS 12.5/3500	*554169	12500	1700 - 3500	40	295
TTS 15.0/3500	*551403	15000	1700 - 3500	40	340
TTS 20.0/3500	*554176	20000	1700 - 3500	50	451
TTS 25.0/3500	*554183	25000	1700 - 3500	50	512
TTS 1.0/5000	*554367	1000	2000 - 5000	18	190
TTS 2.0/5000	*554374	2000	2000 - 5000	18	219
TTS 3.0/5000	*554381	3000	2000 - 5000	21	260
TTS 5.0/5000	*554398	5000	2000 - 5000	23	372
TTS 7.5/5000	*554404	7500	2000 - 5000	32	423
TTS 10.0/5000	*554411	10000	2000 - 5000	32	531
TTS 12.5/5000	*554428	12500	2000 - 5000	40	449
TTS 15.0/5000	*554435	15000	2000 - 5000	40	568
TTS 20.0/5000	*554442	20000	2000 - 5000	50	691
TTS 1.0/8000	*554459	1000	3000 - 8000	18	342
TTS 2.0/8000	*554466	2000	3000 - 8000	18	458
TTS 3.0/8000	*554473	3000	3000 - 8000	21	547
TTS 5.0/8000	*554480	5000	3000 - 8000	23	788
TTS 7.5/8000	*554497	7500	3000 - 8000	32	883
TTS 10.0/8000	*554503	10000	3000 - 8000	32	1319
TTS 12.5/8000	*554510	12500	3000 - 8000	40	979
TTS 15.0/8000	*554527	15000	3000 - 8000	40	1046

Dimensions model TTS

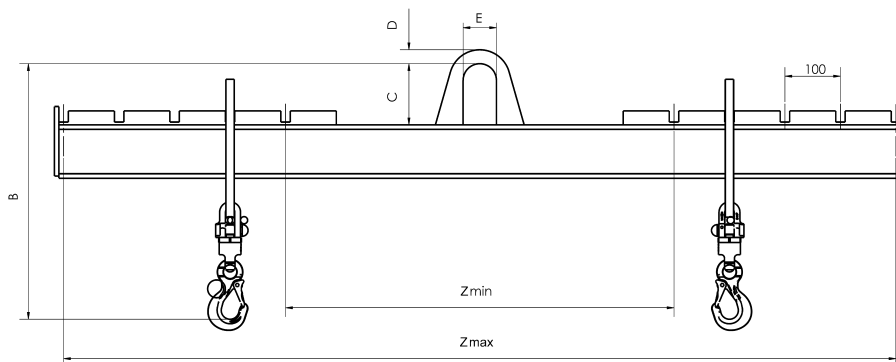
Model	TTS 1.0/1500	TTS 2.0/1500	TTS 3.0/1500	TTS 5.0/1500	TTS 7.5/1500	TTS 10.0/1500	TTS 12.5/1500	TTS 15.0/1500	TTS 20.0/1500	TTS 25.0/1500
B, mm	410	440	540	625	710	805	835	880	990	1200
C, mm	110	135	160	180	200	260	260	260	260	300
D, mm	25	30	35	40	60	70	75	85	90	100
E, mm	60	75	90	100	130	130	140	140	160	160

Model	TTS 1.0/2500	TTS 2.0/2500	TTS 3.0/2500	TTS 5.0/2500	TTS 7.5/2500	TTS 10.0/2500	TTS 12.5/2500	TTS 15.0/2500	TTS 20.0/2500	TTS 25.0/2500
B, mm	410	475	580	645	755	850	885	925	1030	1225
C, mm	110	135	160	180	200	260	260	260	260	300
D, mm	25	30	35	40	60	70	75	85	90	100
E, mm	60	75	90	100	130	130	140	140	160	160

Model	TTS 1.0/3500	TTS 2.0/3500	TTS 3.0/3500	TTS 5.0/3500	TTS 7.5/3500	TTS 10.0/3500	TTS 12.5/3500	TTS 15.0/3500	TTS 20.0/3500	TTS 25.0/3500
B, mm	410	500	605	685	780	875	905	950	1085	1270
C, mm	110	135	160	180	200	260	260	260	260	300
D, mm	25	30	35	40	60	70	75	85	90	100
E, mm	60	75	90	100	130	130	140	140	160	160

Model	TTS 1.0/5000	TTS 2.0/5000	TTS 3.0/5000	TTS 5.0/5000	TTS 7.5/5000	TTS 10.0/5000	TTS 12.5/5000	TTS 15.0/5000	TTS 20.0/5000	TTS 1.0/8000
B, mm	465	520	625	710	800	920	950	995	1125	485
C, mm	110	135	160	180	200	260	260	260	260	110
D, mm	25	30	35	40	60	70	75	85	90	25
E, mm	60	75	90	100	130	130	140	140	160	60

Model	TTS 2.0/8000	TTS 3.0/8000	TTS 5.0/8000	TTS 7.5/8000	TTS 10.0/8000	TTS 12.5/8000	TTS 15.0/8000
B, mm	560	670	755	865	980	1015	1055
C, mm	135	160	180	200	260	260	260
D, mm	30	35	40	60	70	75	85
E, mm	75	90	100	130	130	140	140



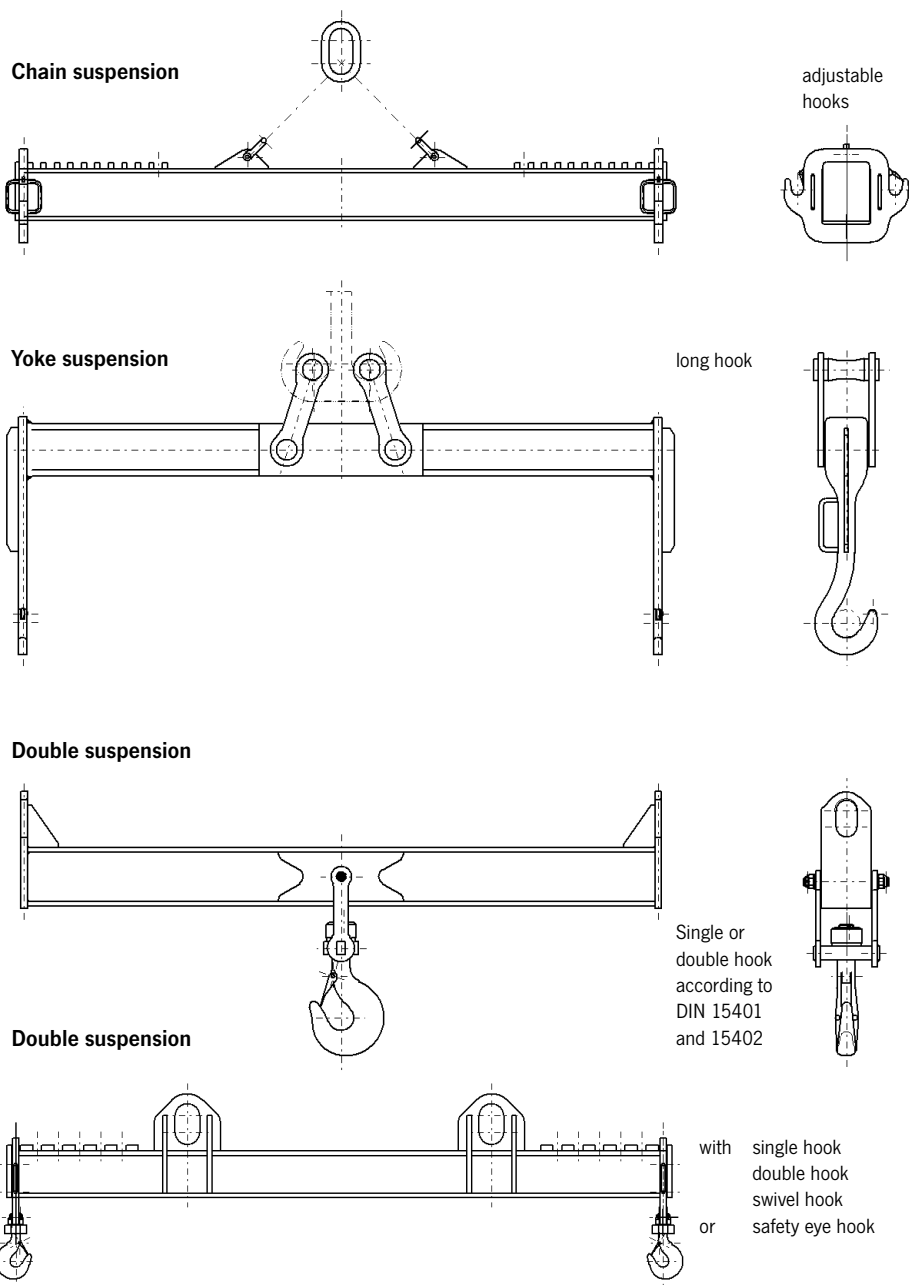
Model TTS with adjustable hooks

Customized spreader beams

Quick overview of our extensive program

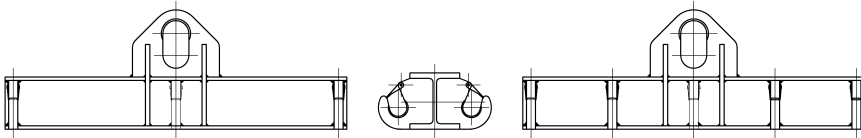
Spreader beams are required in the most different versions and designs.

The illustrations given on these pages reflect a brief overview of the multitude of various spreader beam versions.



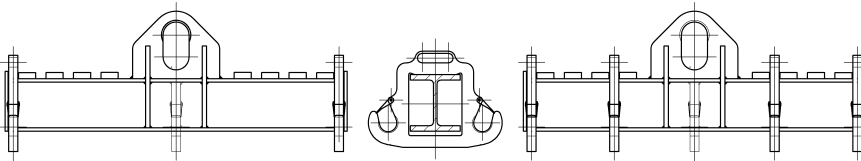
Standard spreader beams

Hooks with safety latch



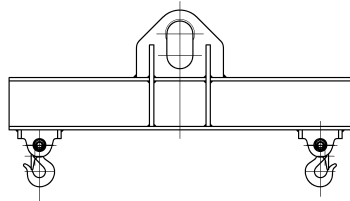
Hooks with safety latch

adjustable



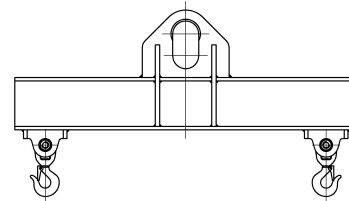
Safety eye hooks

pivoting



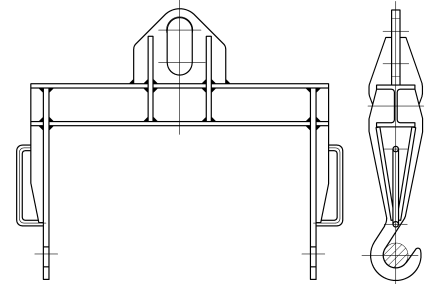
with swivel hooks

swivelling and pivoting



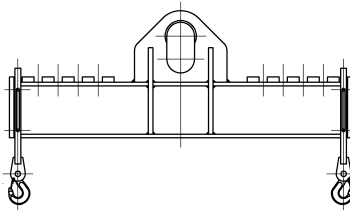
with long hooks

fixed or adjustable



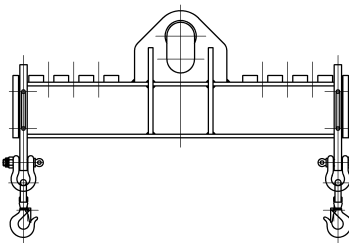
Safety eye hooks

pivoting and adjustable



with swivel hooks

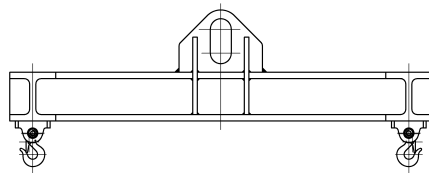
swivelling, pivoting and adjustable



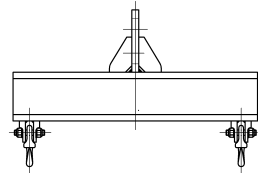
Spreader beams with side hooks

Safety eye hooks

pivoting

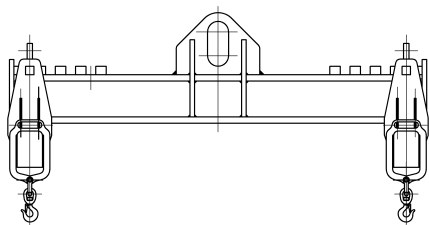


fixed

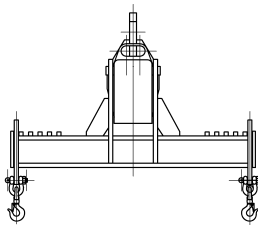


Swivel hooks

swivelling, pivoting and adjustable



adjustable





Spreader beam for box pallets model TTS

Capacity 1000 - 3000 kg

Box pallets with DIN 15155 specifications, are usually moved around with a forklift, but are so sturdy that they can be picked up and transported with a spreader beam grab and an overhead crane hooked up to the top of the box pallet's frame.

Thanks to these spreader beams, the shipping and receiving area is no longer entirely dependent on floor-level material handling equipment such as forklifts.

The version designed for the individual transport of box pallets is equipped with two fixed yokes and two pivoted ones, interconnected with a control bar. The load tackling gear is fixed and unfixed by only one person.

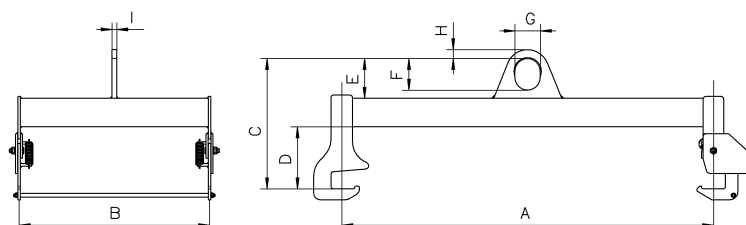
When using these spreader beams, it is important that the hooks be fastened only to the top frame of the box pallets.

Technical data model TTS

Model	EAN-No. 4025092*	Capacity kg	Weight kg
TTS 1.0/1240 - 810	*551595	1000	38
TTS 2.0/1240 - 810	*551236	2000	61
TTS 3.0/1240 - 810	*553742	3000	80

Dimensions model TTS

Model	TTS 1.0/1240 - 810	TTS 2.0/1240 - 810	TTS 3.0/1240 - 810
A, mm	1175	1175	1175
B, mm	600	600	600
C, mm	410	495	520
D, mm	195	215	215
E, mm	125	180	205
F, mm	100	150	170
G, mm	80	100	130
H, mm	28	30	40
I, mm	15	20	25



Spreader beam for Big-Bags model TTB

Capacity 1000 - 2000 kg

This four-point spreader beam in a fixed frame construction with weld-on hooks and safety latch is designed for lifting and transporting of Big-Bags.

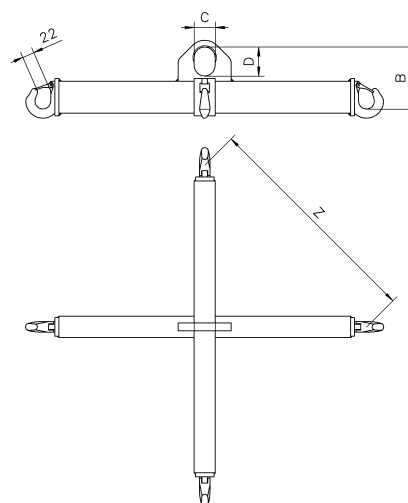


Technical data model TTB

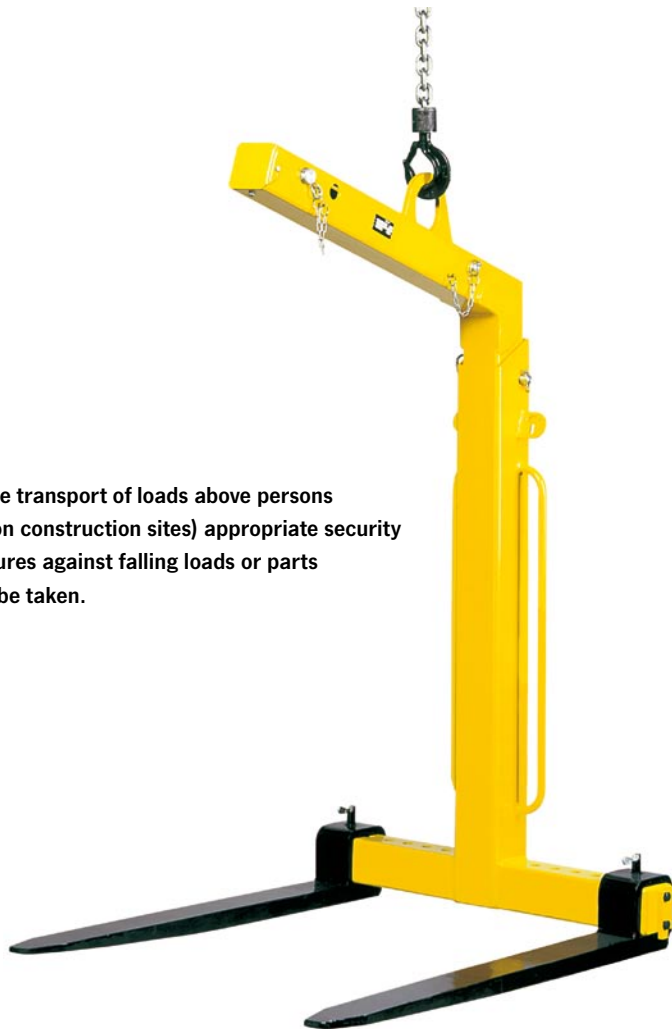
Model	EAN-No. 4025092*	Capacity kg	Working width Z mm	Weight kg
TTB 1.0/1090 - 1090	*556293	1000	750 - 800	27
TTB 1.0/1320 - 1320	*556316	1000	900 - 970	33
TTB 2.0/1090 - 1090	*556330	2000	750 - 800	42
TTB 2.0/1320 - 1320	*556354	2000	900 - 970	44

Dimensions model TTB

Model	TTB 1.0/1090 - 1090	TTB 1.0/1320 - 1320	TTB 2.0/1090 - 1090	TTB 2.0/1320 - 1320
B, mm	210	210	240	240
C, mm	60	60	75	75
D, mm	110	110	135	135



Model TTB



For the transport of loads above persons (e.g. on construction sites) appropriate security measures against falling loads or parts must be taken.

The load must not exceed the fork length.

Crane forks model TKG vhs

Capacity 200 - 5000 kg

These crane forks are equipped with adjustable tines, height adjustability and an automatic balancing system. Crane forks with automatic balancing* tend to point their tines upward when being transported. This prevents the load from unintentionally slipping off the tines.

The shackle is movable and runs on a track depending on the load. The automatic balancing engages by a pressurized gas spring once the forks are loaded. The load will always be in the center of gravity of the forks, ensuring a safe transport.

***The automatic balancing system requires a minimum load of 20 % of the crane forks' working load limit.**

Features

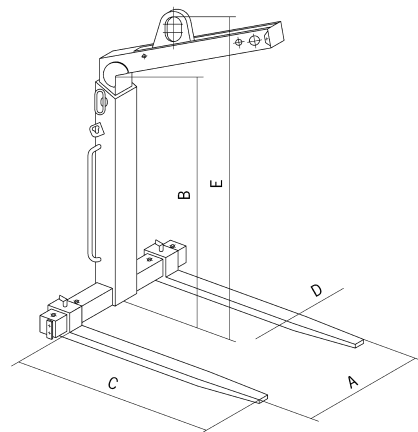
- Safety factor 4:1.
- Maintenance-free.
- Highly visible safety colour.
- For the transport of rings or coils, the fork tines are simply pushed together.
- Easily adjustable tines for all pallet sizes.

Scope of delivery

Chain for load securing.

Technical data model TKG vhs

Model	EAN-No. 4025092*	Capacity kg	Weight kg
TKG 1.0 vhs	*552233	200 - 1000	128
TKG 1.5 vhs	*551113	300 - 1500	158
TKG 2.0 vhs	*550666	400 - 2000	203
TKG 3.0 vhs	*551090	600 - 3000	260
TKG 5.0 vhs	*554794	1000 - 5000	413



Dimensions model TKG vhs

Model	TKG 1.0 vhs	TKG 1.5 vhs	TKG 2.0 vhs	TKG 3.0 vhs	TKG 5.0 vhs
Adjustment of tines A, mm	350 - 900	350 - 900	400 - 900	450 - 900	500 - 1000
Usable height B, mm	1100 - 1600	1300 - 2000	1300 - 2000	1300 - 2000	1300 - 2000
Length of tines C, mm	1000	1000	1000	1000	1000
Section of tines D, mm	100 x 30	100 x 40	120 x 40	120 x 50	150 x 60
Overall height E, mm	1420 - 1920	1650 - 2350	1655 - 2355	1720 - 2420	1710 - 2410

Crane forks model TKG vh

Capacity 1000 - 5000 kg

These crane forks are equipped with adjustable tines and height adjustability. The balancing system engages when the shackle is manually hooked into the appropriate notch.

Features

- Safety factor 4:1.
- Maintenance-free.
- Highly visible safety colour.
- For the transport of rings or coils, the fork tines are simply pushed together.
- Easily adjustable tines for all pallet sizes.

Scope of delivery

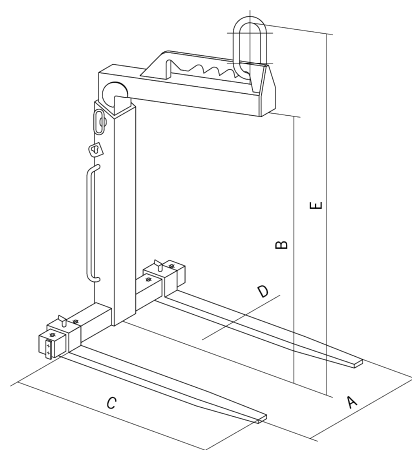
Chain for load securing.



The load must not exceed the fork length.

Technical data model TKG vh

Model	EAN-No. 4025092*	Capacity kg	Weight kg
TKG 1.0 vh	*552370	1000	128
TKG 1.5 vh	*551052	1500	148
TKG 2.0 vh	*554756	2000	193
TKG 3.0 vh	*551564	3000	248
TKG 5.0 vh	*554763	5000	388



Dimensions model TKG vh

Model	TKG 1.0 vh	TKG 1.5 vh	TKG 2.0 vh	TKG 3.0 vh	TKG 5.0 vh
Adjustment of tines A, mm	350 - 900	350 - 900	400 - 900	450 - 900	500 - 1000
Usable height B, mm	1100 - 1600	1300 - 2000	1300 - 2000	1300 - 2000	1300 - 2000
Length of tines C, mm	1000	1000	1000	1000	1000
Section of tines D, mm	100 x 30	100 x 40	120 x 40	120 x 50	150 x 60
Overall height E, mm	1390 - 1890	1600 - 2300	1640 - 2340	1670 - 2370	1700 - 2400



-with digital display and radio control model TWF

The crane weigher can be operated by radio control. The displayed values can be taken off the remote control device and can be transferred to a PC.

Features

- The concept corresponds to model TKA.
- Radio control
- RS 232 interface

Option

- PC cable
- User software

Scope of delivery

- Crane weigher
- Battery charger (3 V, 700 mA)
- Remote control with display
- Carrying case
- Test certificate

Crane weighers

Measuring range 0 - 12 t

The crane weighers TKA and TWF are compact measuring devices for the weighing of loads.

Use appropriate attachments like grade 8 forgings between the hook of the hoist or crane, the crane weigher and the load.

The crane weighers have a liquid crystal display (LCD), which can tare as well as show either the gross or the net load. It also indicates the overload protection at 110 % of the gross weight and the status of the battery.

- with digital display model TKA

Features

- High accuracy
- Lightweight design
- Easy-to-read display
- Easy to use
- Excellent quality
- Robust design
- Housing swivelling 180°
- Retains the peak value to memory
- Rechargeable, with integrated storage battery

Scope of delivery

- Crane weigher
- Battery charger (3 V, 700 mA)
- Carrying case
- Test certificate



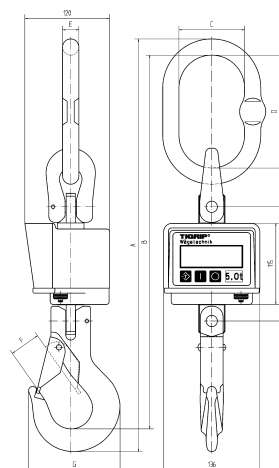
Technical data model TKA and model TWF

Model	TKA 1.0 TWF 1.0	TKA 2.0 TWF 2.0	TKA 3.2 TWF 3.2	TKA 5.0 TWF 5.0	TKA 8.0 TWF 8.0	TKA 12.0 TWF 12.0
EAN-No. model TKA 4025092*	*557368	*557382	*557405	*557429	*557443	*558365
EAN-No. model TWF 4025092*	*558240	*558259	*558266	*558273	*558280	*558372
Measuring range, t	0 - 1.0	0 - 2.0	0 - 3.2	0 - 5.0	0 - 8.0	0 - 12.0
Nominal load, t	1.0	2.0	3.2	5.0	8.0	12.0
Limit load, t	1.1	2.2	3.5	5.5	8.8	13.2
Breaking load, t	≥ 4	≥ 8	≥ 13	≥ 20	≥ 32	≥ 48
Weight with lifting accessories, kg	3.0	3.6	5.9	7.3	10.5	19.8
Accuracy	0.1% of the nominal load					
Resolution step, kg	0.5	1	1	1	2	5
Operation time, approx.*	200 h at 20° C					
Temperature range (operation)	-10° C up to + 50° C					
Temperature range (storage)	-20° C up to + 70° C					
Protection	IP 54					
Display	Height 20.5 mm, 4 ½ digits					
Tare range	100 % of final value					
Overload warning	Overload warning with an exceedance of 110 %					

*with one battery charging

Dimensions model TKA and model TWF

Model	TKA 1.0 TWF 1.0	TKA 2.0 TWF 2.0	TKA 3.2 TWF 3.2	TKA 5.0 TWF 5.0	TKA 8.0 TWF 8.0	TKA 12.0 TWF 12.0
A, mm	395	423	502	585	671	820
B, mm	362	385	455	528	602	725
C, mm	60	60	75	90	100	140
D, mm	110	110	135	160	180	260
E, mm	13	16	18	22	26	35
F, mm	20	25	32	40	49	45
G, mm	70	81	103	126	152	190
H, mm	134	142	154	162	172	190



Model TKA





Load indicator

Measuring range 0 - 100 t

The TIGRIP load indicator is a mechanical measuring instrument with electronic display. On account of its flexibility the TIGRIP load indicator has universal applications. Whether used as a conventional crane weigher or to measure forces, it is the economical choice for various applications. It can be used in conjunction with shackles and hooks.

The load indicator is provided with liquid crystal display (LCD) which can tare as well as show either the gross or the net load. It also indicates the overload protection at 110 % of the gross weight and the status of the battery.

-with digital display model TKZ

Features

- High accuracy
- Lightweight design
- Easy-to-read display
- Easy to use
- Excellent quality
- Robust design
- Retains the peak value to memory
- Rechargeable, with integrated storage battery

Scope of delivery

- Load indicator
- Battery charger (3 V, 700 mA)
- Carrying case
- Test certificate
- Without shackles and hooks



-with digital display and radio control model TZF

The load indicator can be operated via radio control. The displayed values can be taken off the remote control device and can be transmitted to a PC.

Features

- The concept corresponds to model TKZ.
- Radio control
- RS 232 interface

Option

- PC cable
- User software

Scope of delivery

- Load indicator
- Battery charger (3 V, 700 mA)
- Remote control with display
- Carrying case
- Test certificate
- Without shackles and hooks



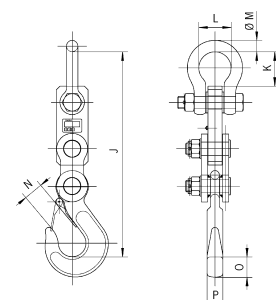
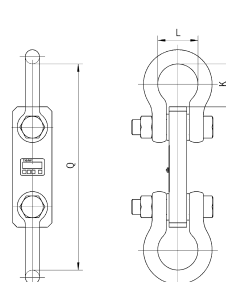
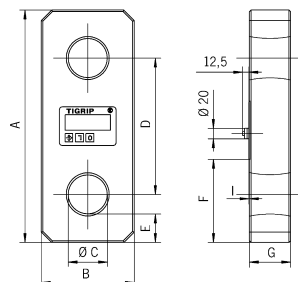
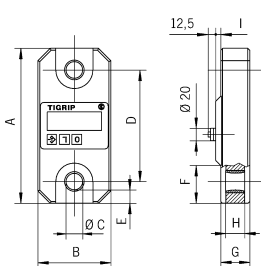
Technical data model TKZ and model TZF

Model	TKZ 2.5 TZF 2.5	TKZ 5.0 TZF 5.0	TKZ 10.0 TZF 10.0	TKZ 20.0 TZF 20.0	TKZ 35.0 TZF 35.0	TKZ 50.0 TZF 50.0	TKZ 100.0 TZF 100.0
EAN-No. model TKZ 4025092*	*557467	*557481	*550116	*550093	*550444	*550369	*557504
EAN-No. model TKZ shackles 4025092*	*453653	*456722	*453714	*453714	*453738	*453745	*456746
EAN-No. model TKZ hooks 4025092*	*557665	*557689	*551311	*551007	*552226	*555050	-
EAN-No. model TZF 4025092*	*558105	*558112	*558129	*558136	*558143	*558150	*558167
EAN-No. model TZF shackles 4025092*	*453653	*456722	*453714	*453714	*453738	*453745	-
EAN-No. model TZF hooks 4025092*	*557665	*557689	*551311	*551007	*552226	*555050	-
Measuring range, t	0 - 2.5	0 - 5.0	0 - 10.0	0 - 20.0	0 - 35.0	0 - 50.0	0 - 100.0
Nominal load, t	2.5	5	10	20	35	50	100
Limit load, t	2.75	5.5	11	22	38.5	55	110
Breaking load, t	≥ 10	≥ 20	≥ 40	≥ 80	≥ 140	≥ 200	≥ 400
Weight, kg	2.8	3.4	4.4	7.6	10.0	25.0	41.0
Accuracy	0.2% of the nominal load						
Resolution step, kg	1	1	10	10	10	10	50
Operation time, approx.*	200 h at 20° C						
Temperature range (operation)	-10° C up to + 50° C						
Temperature range (storage)	-20° C up to + 70° C						
Protection	IP 54						
Display	Height 20.5 mm, 4 ½ digits						
Tare range	100% of final value						
Overload warning	Overload warning with an exceedance of 110 %						

*with one battery charging

Dimensions model TKZ and model TZF

Model	TKZ 2.5 TZF 2.5	TKZ 5.0 TZF 5.0	TKZ 10.0 TZF 10.0	TKZ 20.0 TZF 20.0	TKZ 35.0 TZF 35.0	TKZ 50.0 TZF 50.0	TKZ 100.0 TZF 100.0
A, mm	247	250	325	378	405	450	640
B, mm	118	118	118	141	156	180	260
Ø C, mm	22	27	48	55	64	76	100
D, mm	179	180	213	233	245	264	380
E, mm	26	22	32	45	48	55	80
F, mm	75	60	106	133	146	161	270
G, mm	47	47	47	57	70	80	99
H, mm	24	31	-	-	-	-	-
I, mm	8	8	8	1	1	1	1
J, mm	610	610	690	780	1000	1170	-
K, mm	34	50	105	92	130	140	300
L, mm	38	44	95	95	114	132	238
Ø M, mm	16	19	35	35	44	51	89
N, mm	25	32	50	70	110	115	-
O, mm	23	37	63	80	123	132	-
P, mm	17	28	44	57	90	97	-
Q, mm	315	315	535	562	665	730	1240



Left: Load indicator model TKZ from 2.5 - 5.0 t
Right: Load indicator model TKZ from 10 t

Load indicator with shackle

Load indicator with hook