



HYVA
ATTACHMENTS FOR LOADER
CRANE

Contents

		Pages
Premium line - our Bestsellers		4 et seqq.
HYVA Rotators and Accessories		9 et seqq.
Fully Hydraulic Quick Change Device H 506 SmartFlow		16 et seq.
Brick Stack Grapples		
H 332 & H 333	Brick stack grapple with parallel opening	18
	Accessories for brick stack grapples	19
H 331	Brick stack grapple with scissor grab	21
Pallet Forks		
H 401	with tines adjustable by spindle	22
H 401 H	with hydraulic compensation of center of gravity and tines adjustable by spindle	23
H 401T	telescopic with tines adjustable by spindle	25
H 401 HT	telescopic with hydraulic compensation of center of gravity & tines adjustable by spindle	26
H 415	with spring loaded center of gravity and tines adjustable by lock pin	28
H 414	with manual center of gravity and tines adjustable by lock pin	29
H 414T	telescopic with manual center of gravity and tines adjustable by lock pin	30
H 460	Universal extension for pallet forks H 401(H), H 414, H 415	31
Universal Fork: H 461		32
Grapples with HPXdrive		34 et seq.
HPXdrive Standard	with exchangeable shells - overview for daily use	35 et seq.
H 604HPX	Clamshell buckets	37
H 626HPX	Clamshell buckets	39
H 604U HPX	Universal buckets with open shells	41
H 613 HPX	Rock grapple	43
H 632 HPX	Timber grapple	44
H 641 HPX	Hay and forestry grapple	45
HPXdrive Heavy Duty	with exchangeable shells - overview for heavy duty tasks	46 et seq.
H 605HPX	Clamshell buckets	48
H 605HPX-Z	Clamshell buckets for Z-cranes	50
H 605U HPX	Universal buckets with open shells	52
H 605U HPX-Z	Universal buckets with open shells for Z-cranes	54
H 613 HPX-HD	Rock grapple	56
H 632 HPX-HD	Timber grapple	58
H 641 HPX-HD	Hay and forestry grapple	60
Clamshell Buckets with Hydraulic Cylinder		
H 626 & H 604	Clamshell buckets with horizontal hydraulic cylinder	62 et seq.
H 605 & H 606	Clamshell buckets with horizontal hydraulic cylinder	64 et seq.
H 605U	Universal grapple with horizontal hydraulic cylinder	70
H 602 & H 622	High volume clamshell buckets with horizontal hydraulic cylinder	72 et seq.
H 603 & H 607	Clamshell buckets with vertical hydraulic cylinder	76 et seq.
Accessories for Clamshell Buckets		
Orange Peel Grapples		
H 652/2	asymmetric for Z-cranes	82
H 650 klein	with 120 - 240 liters capacity	83

H 650 groß	with 250 - 500 liters capacity	85
Attachments for Telehandlers		
H 634-3Z	Harvester	87
H 930P	Pipe grapple	88
Logging Grapple: H 634		89
Rail Grapples		
H 632HPX Rail	Rail Grapple with HPXdrive:	91
H 632R	Universal rail grapples	92
H 632-2-R	Universal rail grapples	93
Container Discharge Units		
H 920-1	for containers with ring system	94
H 920-11	for containers with ring system	95
H 920-22	for containers with HYVA mushroom system	95
H 920-12	for containers with HYVA mushroom system	96
H 921	for containers with HYVA mushroom or ring system	96
H 920-31	for twin-hook containers system Schäfer	97
H 924	Docking device container discharge units (+specs for HYVA mushroom & ring system)	98
Hydraulic Load Hooks		99
Manipulators		
H 930-1000 Special	Pole grapple	100
H 931-1000	3-axes-manipulator	100
H 930	Manipulator	101
H 932MB	Barrier lifter	102
Earth Drills and Augers		
3000TC, 5500TC & 7000TC	for loader cranes up to 18 t/m	103
S4 & S5	Augers	104
HYVA K-Line		
	Hyva Premium Plus Brick Clamp K-Line	108
	Hyva Junior Power Brick Clamp K-Line	109
	Hyva Power Brick Clamp K-Line	110
	Hyva Twin Brick Clamp K-Line	111
	Hyva Pallet Fork K-Line	112

Rotators	Page
H 03 S Rotator with shaft	10
H 04 S Rotator with shaft	10
H 04 F Rotator with flange	11
H 06 F Rotator with flange	11



Brick Stack Grapples	Page
H 332V-1100 c Brick stack grapple - parallel grab Complete package * with rotator, short hoses, upper suspension and compression rails	18
H 332-1000 c Brick stack grapple - parallel grab Complete package * with rotator, short hoses, upper suspension and compression rails	18
H 331-1000 c Brick stack grapple - scissor grab Complete package * with rotator, short hoses, upper suspension and compression rails	22
H 331-1200 c Brick stack grapple - scissor grab Complete package * with rotator, short hoses, upper suspension and compression rails	22



Pallet Forks

Page

H 401H-2000-500 Pallet Fork
with hydraulic centre of gravity adjustment

23

H 401H-2000-600 Pallet Fork
with hydraulic centre of gravity adjustment

23

H 401-1500-500 Pallet Fork
with spring loaded centre of gravity adjustment

24

H 401-2000-500 Pallet Fork
with spring loaded centre of gravity adjustment

24

H 414-2000-500 Pallet Fork
with mechanical centre of gravity adjustment

30

H 414-2000-600 Pallet Fork
with mechanical centre of gravity adjustment

30

H 415-2000-500 Pallet Fork
with spring loaded centre of gravity adjustment

29

Universal Fork

Page

H 461-1500 c Universal Fork
Complete package * with rotator, short hoses and upper suspension

34



Clamshell Buckets with HPXdrive Standard

Page

H 604HPX-250 c Clamshell buckets with HPXdrive SD

Complete package with teeth, rotator and upper suspension, 250 l volume

40

H 604HPX-325 c Clamshell buckets with HPXdrive SD

Complete package with teeth, rotator and upper suspension, 325 l volume

40

H 604HPX-350 c Clamshell buckets with HPXdrive SD

Komplettpaket mit Zähnen, Drehmotor und Aufhängung, 350 l volume

40

H 604HPX-450 c Grabgreifer mit HPXdrive SD

Complete package with teeth, rotator and upper suspension, 450 l volume

40



Clamshell Buckets with HPXdrive Heavy Duty

Page

H 605HPX-250 c Clamshell buckets with HPXdrive HD

Complete package with teeth, rotator and upper suspension, 250 l volume

51

H 605HPX-350 c Clamshell buckets with HPXdrive HD

Complete package with teeth, rotator and upper suspension, 350 l volume

51

H 605HPX-450 c Clamshell buckets with HPXdrive HD

Complete package with teeth, rotator and upper suspension, 450 l volume

51



Clamshell Buckets with Cylinder

Page

H 604-250 c Clamshell bucket for daily routine

Complete package * with teeth, rotator, short hoses and upper suspension, 250 l volume

62

H 604-350 c Clamshell bucket for daily routine

Complete package * with teeth, rotator, short hoses and upper suspension, 350 l volume

62

H 604-450 c Clamshell bucket for daily routine

Complete package * with teeth, rotator, short hoses and upper suspension, 450 l volume

62



Clamshell Buckets with Cylinder

Page

H 605-250 c Clamshell bucket for heavy tasks

Complete package * with teeth, rotator, short hoses and upper suspension, 250 l volume 64

H 605-350 c Clamshell bucket for heavy tasks

Complete package * with teeth, rotator, short hoses and upper suspension, 350 l volume 64



Universal Clamshell Bucket

Page

H 605U-400 c Universal clamshell bucket

Complete package * with wear plates, rotator, short hoses, upper suspension and welded hooks, 400 l volume 66

High Volume Clamshell Buckets

Page

H 602-500 c High volume clamshell bucket

Complete package * with rotator, short hoses and upper suspension, 500 l volume 68

H 602-650 c High volume clamshell bucket

Complete package * with rotator, short hoses and upper suspension, 650 l volume 68



High Volume Clamshell Buckets

Page

H 622-300 c High volume clamshell bucket

Complete package * with rotator, short hoses and upper suspension, 300 l volume 69

H 622-400 c High volume clamshell bucket

Complete package * with rotator, short hoses and upper suspension, 400 l volume 69

H 622-500 c High volume clamshell bucket

Complete package * with rotator, short hoses and upper suspension, 500 l volume 66

Clamshell Buckets with Cylinders	Page
----------------------------------	------


H 607-215 c Clamshell bucket Complete package * with teeth, rotator, short hoses and upper suspension, 215 l volume	72
H 607-255 c Clamshell bucket Complete package * with teeth, rotator, short hoses and upper suspension, 255 l volume	72



Container Discharge Units	Page
---------------------------	------

H 920-1Ac Container discharge unit for container with ring system (load capacity 4500 kg)	87
H 920-1Bc Container discharge unit for container with ring system (load capacity 2500 kg)	87
H 921 Container discharge unit for container with HYVA-mushroom or ring system	87



	<p>The secure service of the container discharge units H 921 and H 920-12 can only be guaranteed by HYVA GmbH in case the ORIGINAL HYVA FIXED AND HOIST DISCS are used on the container in the specified distance dimensions!</p>
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Barrier Lifter	Page
----------------	------

H 932MB-6/10 Barrier lifter for concrete barriers and big blocks	95
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Earth Drills	Page
--------------	------

3000TC Earth drill for augers type S4 with diameters of 100 - 600 mm	97
5500TC Earth drill for augers type S5 with diameters of 150 - 800 mm	97
7000TC Earth drill for augers type S5 with diameters of 150 - 1000 mm	97



HYVA-ROTATOR LINE



HYVA manufactures rotators for truck loaders, excavators and logging operations. Years of experience in designing rotators and hydraulic load handling equipment guarantee high efficiency, long lasting rotators, specially tailored to meet your requirements. The gear-type design ensures a very compact and powerful rotator. The precision control and braking ability is especially appreciated by operators. A grapple does not rotate unexpectedly when digging, even under maximum load, and there is no need for stability compensation when handling longer lengths of timber... These are only some of the many working situations where operators appreciate the advantages of using HYVA-rotators. HYVA-Rotators are the solution.

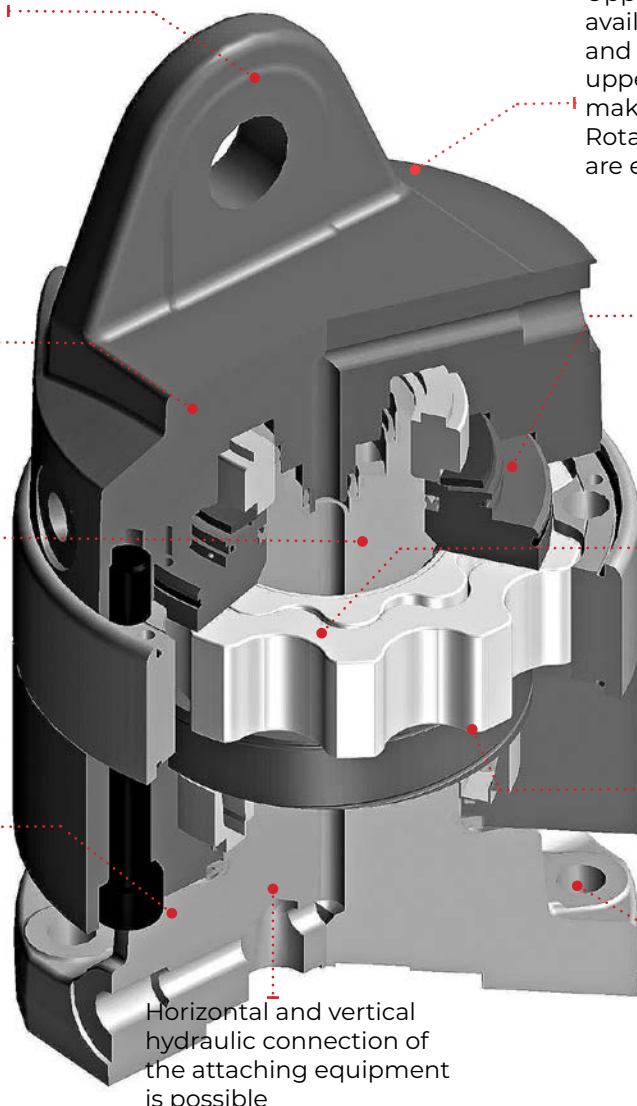
FEATURES OF THE HYVA-ROTATORS

The rotator head is made of spherically cast iron or forged tempered steel, depending on operational requirements

The pressure relief valve, integrated in the rotator head, allows the rotator independence from the hydraulic system of the crane or excavator – where an extra pressure relief valve does not need to be installed

A very high degree of sealing between the distributor and rotor unit results in minimal internal leakage. Powerful drive and braking moments are therefore possible, even at high oil temperature

Oil passages for a single hydraulic circuit are standard and generously dimensioned for high capacity flow. Connection with standard fittings is possible because flange and rotator shaft are a single unit, which also means there are no seams between flange and rotator shaft. Rotators with four oil passages are also available



Upper and lower connections are available in a variety of dimensions and are standard. HYVA carries upper suspensions for all current makes and models of cranes. Rotator heads with pin connections are equipped with steel bushings

All seals are specially designed for the application. All biodegradable synthetic oils are perfectly suitable

The rotor unit is made of high quality tempered steel and the outer surface is hardened through a nitrate-coating

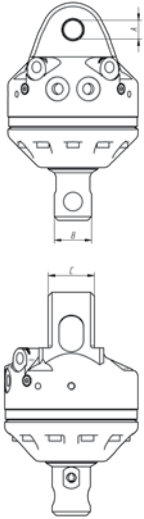
Generously dimensioned roller bearings guarantee absorption of rated pressure and tension loads and tilting moments

The forged, one-piece flange shaft is made of durable tempered steel

Horizontal and vertical hydraulic connection of the attaching equipment is possible

PRODUCT RANGE

Rotator with shaft up to 3000 kg load capacity (incl. fittings)



Type	Load capacity (kg)	Shaft Ø D (mm)	Upper connection (Width E x Pin-Ø A) (mm)	Torque (Nm)	Moment of deflection max. (Nm)	Self weight (kg)
H 03 S*	3000	49.5	60 x 25	450	1750	24

* only for pallet forks

Operating pressure: max. 37 MPa (370 bar)

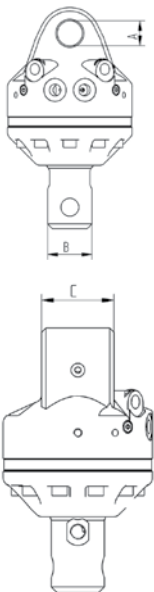
Oil flow rotate: max. 40 l/min

Oil flow feedthrough: max. 75 l/min

Hydraulic coupling in: G 3/8"

Hydraulic coupling out: G 1/4"

Rotators with shaft up to 4500 kg load capacity (incl. fittings)



Type	Load capacity (kg)	Shaft Ø D (mm)	Upper connection (Width E x Pin-Ø A) (mm)	Torque (Nm)	Moment of deflection max. (Nm)	Self weight (kg)
H 04 S59-30	4500	59	84 x 30	850	3000	26
H 04 S	4500	62	84 x 30	850	3000	26
H 04 S63-30	4500	63	84 x 30	850	3000	26
H 04 S68-30	4500	68	84 x 30	850	3000	26
H 04 S68-30US*	4500	68	84 x 30	1000	4500	28
H 04 S69-30	4500	69	84 x 30	850	3000	26

* steel motor-head

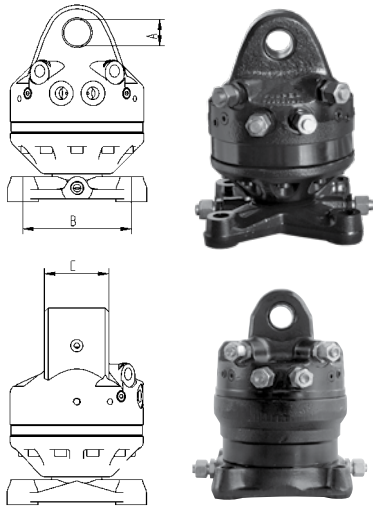
Operating pressure: max. 37 MPa (370 bar)

Oil flow rotate: max. 40 l/min

Oil flow feedthrough: max. 75 l/min

Hydraulic coupling: G 1/2"

Rotators with flange up to 4500 kg load capacity (incl. fittings)



Type	Load capacity (kg)	Shaft Ø D (mm)	Upper connection (Width E x Pin-Ø A) (mm)	Torque (Nm)	Moment of deflection max. (Nm)	Self weight (kg)
H 04 F	4500	140	84 x 30	850	3000	26
H 04 F140-30US*	4500	140	84 x 30	1000	8500	31
H 04 F140-30V**	4500	140	84 x 30	850	3000	26
H 04 F140-30LM***	4500	140	84 x 30	850	3000	26

* steel motor-head ** additional vertical connection

*** low maintenance with plastic bushings and additional vertical connection

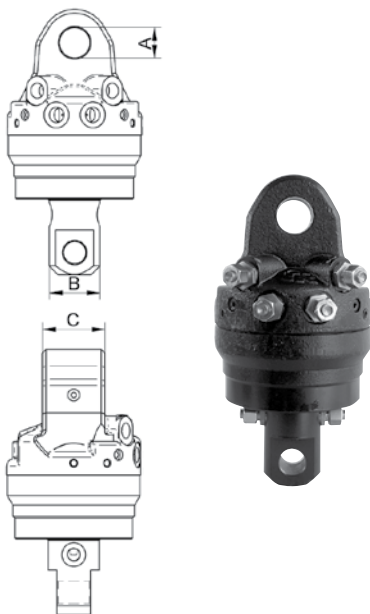
Operating pressure:	max. 37 MPa (370 bar) (LM-version max. 32 MPa (320 bar))
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Oil flow rotate: max. 40 l/min

Oil flow feedthrough:	max. 75 l/min
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Hydraulic coupling: M18 x 1,5

Rotators with shaft up to 6000 kg load capacity (incl. fittings)



Type	Load capacity (kg)	Shaft Ø D (mm)	Upper connection (Width E x Pin-Ø A) (mm)	Torque (Nm)	Moment of deflection max. (Nm)	Self weight (kg)
H 06 S68-40	6000	68	84 x 40	1000	4500	32
H 06 S69-40	6000	69	84 x 40	1000	4500	32

Operating pressure:	max. 37 MPa (370 bar)
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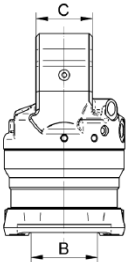
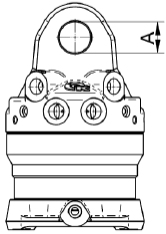
Oil flow rotate: max. 40 l/min

Oil flow feedthrough:	max. 75 l/min
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Hydraulic coupling in: G 1/2"

Hydraulic coupling out:	M18 x 1,5
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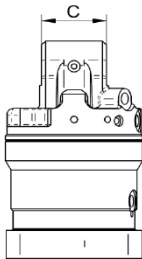
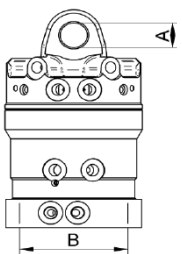
Rotator with flange up to 6000 kg load capacity (incl. fittings)



Type	Load capacity (kg)	Shaft Ø D (mm)	Upper connection (Width E x Pin-Ø A) (mm)	Torque (Nm)	Moment of deflection max. (Nm)	Self weight (kg)
H 06 F140-40	6000	140	84 x 40	1000	8500	34

Operating pressure:	max. 37 MPa (370 bar)
Oil flow rotate:	max. 40 l/min
Oil flow feedthrough:	max. 75 l/min
Hydraulic coupling in:	G 1/2"
Hydraulic coupling out:	M18 x 1,5

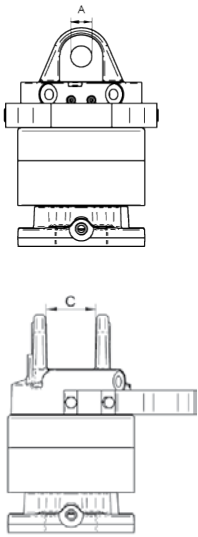
Rotators with flange and 4 oil ducts to operate 2 different functions (incl. fittings)



Type	Load capacity (kg)	Shaft Ø D (mm)	Upper connection (Width E x Pin-Ø A) (mm)	Torque (Nm)	Hydraulic cou- plings	Moment of deflection max. (Nm)	Self weight (kg)
H 06 F140-40	4500	140	84 x 30	1000	M 18 x 1,5	3000	40
H 06 F173-35-4	6000	173	81 x 35	1000	G 1/2"	8500	45
H 10 F173-35-2/4	10000	173	81 x 35	2000	G 1/2" & G 3/4"	12000	72

	H 04 F / H 06 F	H 10 F
Operating pressure:	max. 37 MPa (370 bar)	max. 37 MPa (370 bar)
Oil flow rotate:	max. 40 l/min	max. 50 l/min
Oil flow feedthrough:	max. 75 l/min	max. 75 l/min

Rotators with flange for logging (incl. hose guard and fittings)



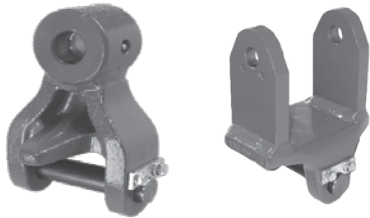
Type	Load capacity (kg)	Hole pattern of flange B (mm)	Upper connection (Width E x Pin-ØA) (mm)	Torque (Nm)	Moment of deflection max. (Nm)	Self weight (kg)
H 06 F173-35	6000	173	81 x 35	1000	8500	45
H 10 F173-35/1	10000	173	81 x 35	2000	12000	62
H 10 F173-35/2	10000	173	81 x 35	2000	12000	65
H 10 F173-45	10000	173	100 x 45	2000	12000	68
H 10 F173-52	10000	173	136 x 52,2	2000	12000	70

	H 06 F	H 10 F
Operating pressure:	max. 37 MPa (370 bar)	max. 37 MPa (370 bar)
Oil flow rotate:	max. 40 l/min	max. 50 l/min
Oil flow feedthrough:	max. 75 l/min	max. 75 l/min
Hydraulic coupling:	G 1/2"	G 1/2"

ACCESSORIES FOR ROTATORS

H 501 – Upper suspension between rotator and crane

An upper suspension is a cardan link between rotator and crane. It is available for all current makes and models of cranes. Please specify dimensions when ordering.



Type	Load capacity (kg)	Self weight (approx. kg)
H 501 (3000)	up to 3000	5
H 501 (4500)	up to 4500	10
H 501 (6000)	up to 6000	15
H 501 (10,000)	up to 10000	25

H 511 –Upper suspension with pendulum damper between rotator and crane

A pendulum damper reduces the horizontal swing of the attachment. It can also be retrofitted to an existing upper suspension.



Type	Load capacity (kg)	Self weight (approx. kg)
H 511 (4500)	up to 4500	15
H 511 (6000)	up to 6000	20
H 511 (10,000)	up to 10000	30

H 206 – Hose guard

The hose guard is a metal bow to be attached onto the rotator. It is designed to protect the hoses of the rotator from damage i.e. from protruding branches.



Type	Load capacity (kg)	Self weight (approx. kg)
H 206	hose guard for the rotator	3

H 502 – Reduction link between rotator and grapple

A reduction link adapts a shaft type rotator to an attachment with a standard hole pattern for a flange (H 502).



Type	Load capacity (kg)	Self weight (approx. kg)
H 502 (3000)	up to 3000	2
H 502 (4500)	up to 4500	3
H 502 (6000)	up to 6000	4

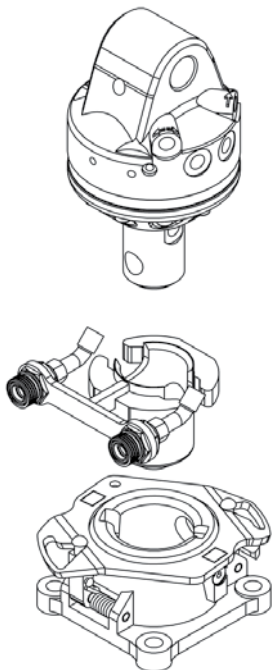
H 460 – Accessories for Attaching Pallet Forks with shaft rotator



Type	Description	Type of rotator	Weight (approx. kg)
H 460 03 (H 03 S)	rigid suspension link with pin for all HYVA shaft-type rotators	H 03	8
H 460 03 (H 04 S)		H 04	10
H 460 08 (H 03 S)	rigid hook for all HYVA shaft rotators	H 03	8
H 460 08 (H 04 S)		H 04	9
H 460 04 (H 04 S)	non-rotating swinging hook for all HYVA shaft rotators	H 04	12
H 460 04 (H 06 S)		H 06	15
H 460 10	non-rotating swinging hook for all HYVA flange rotators	H 10 F173	25

H 505 – Quick change system for shaft-type rotators up to 4000 kg load capacity

The quick change system enables an easy exchange between different attachments. The mechanical coupling and locking is achieved by the turning motion of the rotator. You simply disconnect the quick couplings and disengage the locking device manually. The upper element of the quick change system is available for all H 04 - shaft rotators. The H 505 system allows the easy exchange between pallet fork and brick stack grapple for example - not suitable for heavy duty work.

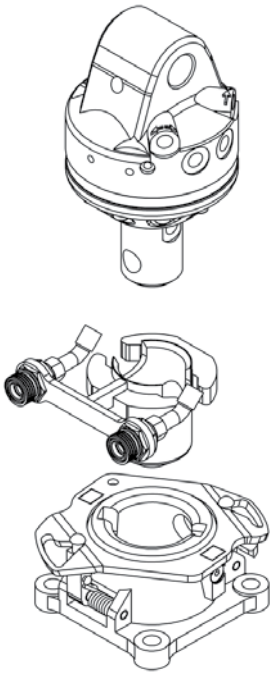


Type	Description	Hole pattern of flange (mm)	Self weight (kg)
H 505	complete, incl. hydraulic couplings (H 204 03)	4x Ø18 / 140	12
H 505 01	upper element fitted to rotator incl. mobile and fixed parts		5
H 204 01	mobile part of hydraulic quick coupling (2 pieces) for H 505 01		
H 505 02	lower element mounted to the attachment	4x Ø18 / 140	7
H 505 03	rigid suspension link with non-rotating hook to connect to the H 505 01		7
H 505 05	distance ring between H 505 and H 461 universal fork		5



H 505 HD – Heavy duty quick change system for shaft-type rotators

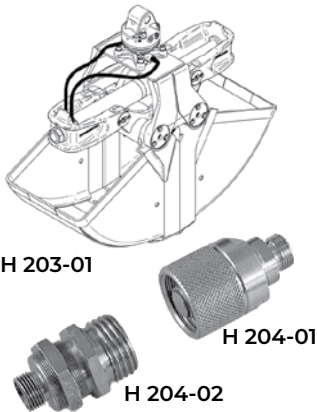
The quick change system enables an easy exchange between different attachments. The mechanical coupling and locking is achieved by the turning motion of the rotator. You simply disconnect the quick couplings and disengage the locking device manually. The upper element of the heavy duty quick change system is available for the HYVA shaft rotators H 04 S68-30US or H 06 S68-40. The H 505 system allows the easy exchange between pallet fork and clamshell bucket for example - especially developed for the heavy duty task with clamshell buckets.



Type	Description	Hole pattern of flange (mm)	Self weight (kg)
H 505 HD	complete, incl. hydraulic couplings (H 204 03)	4x Ø18 / 140	18
H 505 01 HD	upper element HD fitted to rotator incl. mobile and fixed parts		7
H 204 01	mobile part of hydraulic quick coupling (2 pieces) for H 505 01 HD		
H 505 02 HD	lower element HD mounted onto attachment	4x Ø18 / 140	11
H 505 03 HD	rigid suspension link with non-rotating hook to connect to the H 505 01 HD		14
H 505 05	distance ring between H 505 HD and H 461 universal fork		5



H 203 – Connecting hoses / H 204 – Hydraulic quick change kit for hoses



Type	Description
H 203 01	short connecting hoses between rotator and attachment with standard fittings M 18 x 1,5 (2 pieces)
H 203 03	long connecting hoses between rotator and crane. Please specify dimensions (4 pieces)
H 204 01	mobile part of hydraulic quick coupling for hose (Ø 10 mm, 2 pieces)
H 204 02	fixed part of hydraulic quick coupling fo rotator (Ø 10 mm, 2 pieces)
H 204 03	hydraulic quick change kit incl. mobile and fixed parts (2 pieces each) mounted with adapters to rotator

H 203-01

H 204-01

H 204-02

H 506 HD SMARTFLOW

FULLY HYDRAULIC QUICK CHANGE DEVICE

No time-consuming connecting and disconnection of short hoses anymore.

No risky climbing up and down the truck load bed anymore.

No loss of time anymore due to manual works when changing attachments.

Short hose connection only between quick change lower part and attachment.

Fully hydraulic change of attachment within only a few seconds.

Different lower parts for mechanically or hydraulically operated attachments available!



The new fully hydraulic quick change device for loader crane attachments allows for a fast exchange of hydraulic or mechanical tools at the truck crane without any manual works at attachment or rotator.

Fast and easy! No manual reconnection of the hoses necessary anymore when changing the attachment!

Lower part with or without hydraulics available, depending on the use of a hydraulically or mechanically operated attachment.

Available for HYVA rotators H 04 S68-30US, H 06 S68-35 and H 06 S68-40.

Robust and compact construction – short hose connection to the hydraulic attachment are connected directly to the lower part of the quick change device.

Weather protection cap available to protect the quick change device lower part when not connected to the upper part.

Non-rotating load hook also available.

Matching all crane attachments with flange hole pattern 140mm.



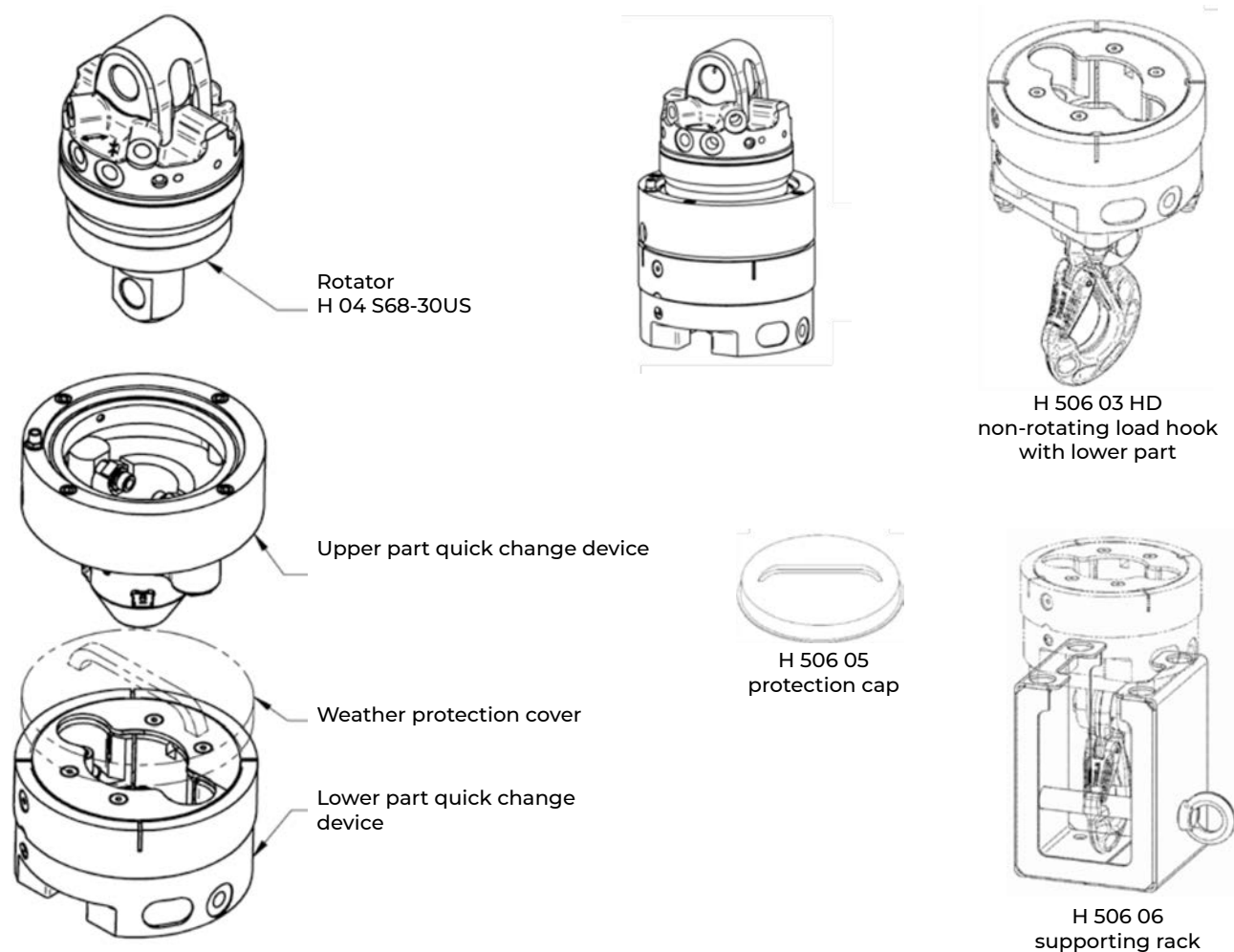
Quick change device H 506 HD

Type	Description	Hole pattern (mm)	Weight (kg)
H 506 HD	complete incl. upper and lower part with hydraulic couplings	4x Ø17 / 140	45
H 506 01 HD	upper part		19
H 506 02 HD	lower part with couplings for hydraulic attachment	4x Ø17 / 140	26
H 506 04 HD	lower part without couplings for mechanical attachment	4x Ø17 / 140	23
H 506 03 HD	non-rotating load hook incl. mechanical lower part		32
H 506 05	weather protection cap		
H 506 06	supporting rack for H 506 03 HD		6

Technical data

Operating pressure open-close (attachment):	37 MPa (370 bar)
Pump capacity open-close (attachment):	50 l/min
Operating pressure connect-disconnect:	15 MPa (150 bar)
Pump capacity connect-disconnect:	5 l/min

Technical drawings



BRICK STACK GRAPPLE – PARALLEL SQUEEZE

The technically unique H 332 brick stack grapple is a versatile tool for palletized and non-palletized materials.

Rigid or adjustable plunge depth of parallel opening and closing clamping arms - hydraulically operated.

Versatile tool with opening range of 400 mm to 1400 mm i.e. for handling of single concrete products like curbstones, or handling of brick packs.

Handling of heavy loads with reinforced version **H 333**.

Adjustable plunge depth of **H 332V** and **H 333V** can match the size of the stack-easy adaption with a mechanical latch.

Precise synchronisation of the arms as a result of two in series double acting hydraulic cylinders.

Safety through internal pressure relief valve (independent from crane pressure) and non-return valve (safe clamping force at pressure drop).

Long life due to generously dimensioned bearings, integrated grease reservoir, automatic wear compensation of main bearing, spherical central bearing for the cylinders.

Easy to use with durable and replaceable rubber inserts – simple to operate between the stacks.



H 332V

Packages brick stack grapple H 332 c

Type	Plunge depth (mm)	Load capacity at plunge depth min./max. (kg)	Gripping A min./ max. (mm)	Height (incl. rotator) (mm)	Self weight (kg)
H 332-1000 c	1000	2000	400 – 1400	1415	310
H 332V-1100 c	1100 – 1650	1900 / 1350	400 – 1400	1515 – 2065	355
Package consists of:	brick stack grapple, rotator H 04 F, short connecting hoses H 203 01, upper suspension H 501 (4500), compression rails H 381 29 (1000), pressure relief valve, non-return valve				

Please note: compression rails will be H 381 39 for packages in the UK. Other packages with different opening ranges available in the UK: H 332-850c / H 332-1000c / H 332-1100c / H 332-1200 / H 332-1300c.

Brick stack grapples H 332 / H 333

Type	Plunge depth (mm)	Load capacity at plunge depth min./max. (kg)	Gripping A min./ max. (mm)	Height (incl. rotator) (mm)	Self weight (kg)
H 332-850	850	2200	400 – 1400	1065	245
H 332-1000	1000	2000	400 – 1400	1215	255
H 332-1300	1300	1600	400 – 1400	1515	275
H 332V-850	850 – 1400	2200 / 1600	400 – 1400	1065 – 1615	290
H 332V-1100	1100 – 1650	1900 / 1350	400 – 1400	1315 – 1865	340
H 333-850	850	3000	400 – 1400	1090	400
H 333-1000	1000	2500	400 – 1400	1240	415
H 333V-1100	1100 – 1650	2300 / 1600	400 – 1400	1340 – 1890	490

The price does not include the compression rails.

Wider opening ranges 400 – 1800 mm are available for H 332 and H 333

Please note: the load capacity listed in the table depends on the load (the surface conditions, the size of individual stones, stack size and kind of bundling). The capacity listed does not apply to stacks of low-profile and unbundled items.

Accessories

Type	Description
H 04 F	recommended HYVA rotator for H 332 / H 333

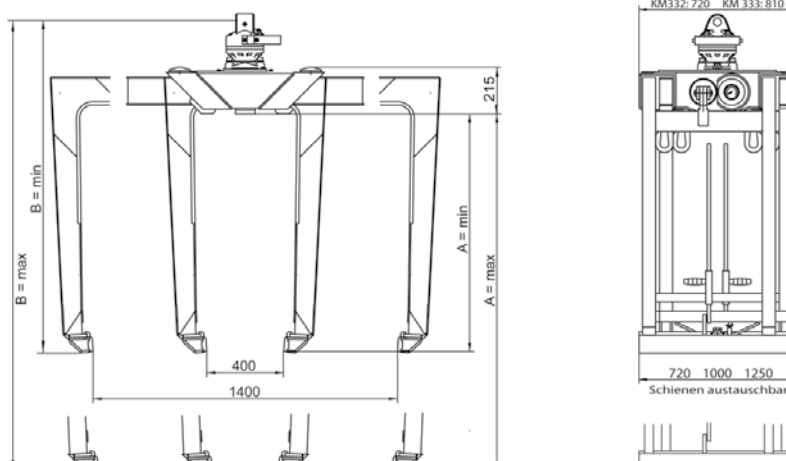
Requirements of truck crane

Operating pressure at oil flow:

20 - 26 MPa (200 - 260 bar) at max. 75 l/min

20 - 37 MPa (200 - 370 bar) at max. 40l/min

Technical drawings



ACCESSORIES FOR BRICK STACK GRAPPLES

Compression rails

H 381 29	Type	Description	Length (mm)	Weight (kg)
	H 381 29 (720)	compression rails with smooth rubber inserts (2 pieces)	720	17
	H 381 29 (1000)		1000	24
	H 381 29 (1250)		1250	28
H 381 39 	H 381 39 (720)	compression rails with two rubber inserts, upper insert contoured, lower insert smooth (2 pieces each)	720	24
	H 381 39 (1000)		1000	33
	H 381 39 (1250)		1250	42
H 381 32 	H 381 32 (1000)	spring loaded rails with parallel-action teeth (2 pieces) - fitted in seconds by locking lever	1000	62
	H 381 32 (1250)		1250	76
H 391 09 	H 381 09 (720)	compression rails for adapter H 381 38 (2 pieces)	720	17
	H 381 09 (1000)		1000	23
	H 381 09 (1250)		1250	28

Type	Description	Weight (kg)
H 381 38	adapter for clamping arms to take compression rails H 381 09	40
Please note:	additional lengths of compression rails are available on request.	

Others

Non-standard opening range:

all grapples are available with opening ranges not listed.

Non-standard plunge depth:

all grapples are available with plunge depth not listed.



Type	Description	Weight (kg)
H 381 08 S	tilting device to reduce overall height of the equipment in transport	for shaft rotators 12
H 381 08 F		for flange rotators 18



Type	Description	Weight (kg)
H 381 18	height reduction link to reduce the overall height of the equipment in transport - for flange rotators	15



Type	Description	Weight (kg)
H 381 05	height stop for quick adjustment of plunge depth	8
H 381 06	spring loaded guide rails for stabilizing the top layer of the stack	----
H 381 07	spring loaded guide plates for lateral stabilizing of the stack	----
H 381 31	adapter for concrete pipes with diameters from 800 to 1350 mm	60

BRICK STACK GRAPPLE - SCISSOR GRAB

The robust brick stack grapple H 331 handles loads up to 2000 kg.

Fixed plunge depth with pivot clamping arms - hydraulically operated.

Versatile tool with opening range of 40 mm to 1500 mm i.e. for handling of single concrete products like curbstones, or handling of palletized brick packs.

Synchronised function of clamping arms due to sturdy gear-toothed quadrants.

Safety through internal pressure relief valve (independent from crane pressure) and holding valve (safe clamping force at pressure drop).

Reduced overall height in comparison to the plunge depth due to lower rotator position.

Compression rails with durable and replaceable rubber inserts.



Packages brick stack grapple H 331 c

Type	Plunge depth A (mm)	Load capacity (kg)	Gripping D (min./max.) (mm)	Height C (mm)	Self weight (kg)
H 331-1000 c	1000	2000	220 - 1420	1565	353
H 331-1100 c	1100	2000	160 - 1450	1665	360
H 331-1200 c	1200	1800	98 - 1475	1765	365
H 331-1300 c	1300	1600	40 - 1500	1865	372
Package consists of:	brick stack grapple, HYVA rotator H 04 F, short connecting hoses H 203 01, upper suspension H 501 (4500), compression rails H 381 40 (1000), pressure relief valve, holding valve				
Please note:	the load capacity listed in the table depends on the load (the surface conditions, the size of individual stones, stack size and Type of banding). The grapple is not suitable for stacks of low-profile and unbundled items.				
	full plunge depth is only suitable up to opening range of 1100 mm (see technical drawings).				

Accessories

Type	Description	Self weight (kg)
H 511 (4500)	upper suspension with pendulum damper	15
H 381 40 (1000)	compression rails – 1000 mm (2 pieces)	40
H 381 40 (1250)	compression rails – 1250 mm (2 pieces)	52
H 685 06 hook set 4	lifting hooks with safety latches (4 pieces)	----

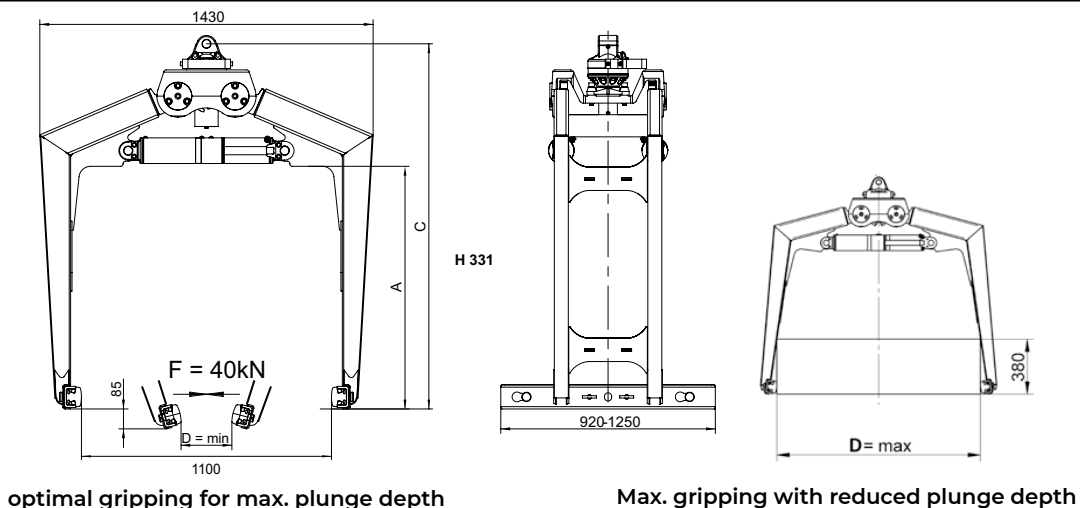
Requirements of truck crane

Operating pressure at oil flow:

20 - 26 MPa (200 - 260 bar) at max. 75 l/min

20 - 37 MPa (200 - 370 bar) at max. 40 l/min

Technical drawings



PALLET FORK WITH TINES ADJUSTABLE BY SPINDLE-H 401

The efficient pallet fork H 401 with a spring loaded centre of gravity can easily be adapted to different loads with adjustable plunge depth and adjustable tine spread.

Efficient handling of many different kinds of loads like stone or brickstack, protection trellis or other general cargo is possible due to the easy adjustment with a stainless steel-plastic-sliding guide in the upper part.

Versatile height from 1050 mm to 1650 mm adjustable in three steps with a lock pin.

Versatile width of tines from 475 mm to max. 835 mm adjustable with a smooth running, stainless spindle.

Easy to use due to the dimensions of the pallet fork. Since no part of the pallet fork is wider than a standard pallet, a second row can be loaded and loads close to walls can also be handled without problems.



Pallet fork H 401

Type	Load capacity (kg)	Throat height N (min./max.) (mm)	Tine length L (mm)	Tine spread Z (min./max.) (mm)	Tine Dimension (width x height) (mm)	Centre of gravity (mm)	Self weight ²⁾ (kg)
H 401-1500-500	1500	1050 – 1650	980	475 – 815	80 x 35	500	130
H 401-2000-500	2000	1050 – 1650	980	495 – 835	100 x 35	500	150
H 401-2500-500	2500	1050 – 1650	980	475 – 815	90 x 40	500	210
H 401-3000-500	3000	1050 – 1650	980	485 – 825	100 x 45	500	225
H 401-1500-600	1500	1050 – 1650	1150	495 – 835	100 x 35	600	165
H 401-2000-600	2000	1050 – 1650	1150	475 – 815	90 x 40	600	205
H 401-2500-600	2500	1050 – 1650	1150	485 – 825	100 x 45	600	230

Package consists of: pallet fork, protection chain H 460 01, 2 chain elements for suspension

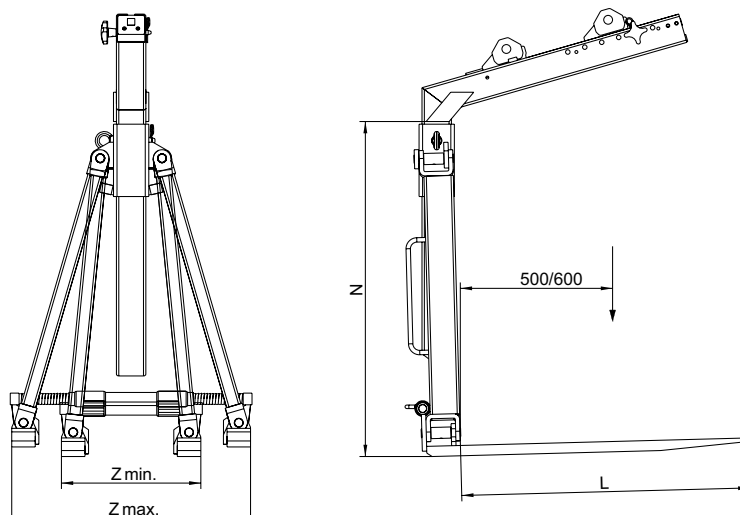
²⁾ weight without protection chain

Please note: a protection trellis or net is mandatory for loose material (EN 13155). Spring loaded centre of gravity functions with a min. pack weight of approx. 250 to 500 kg.

Accessories

Type	Description
H 04 S	HYVA shaft rotator – up to 4500 kg load capacity
H 401-2000-500	rigid suspension link with pin for rotator H 04 S

Technical drawings



PALLET FORK WITH TINES ADJUSTABLE BY SPINDLE-H 401 H

The efficient hydraulic pallet fork H 401 H with hydraulically compensating centre of gravity can easily be adapted to different loads with adjustable plunge depth and adjustable tine spread and provides a more comfortable use.

Efficient handling of many different kinds of loads like stone or brickstack, protection trellis or other general cargo is possible due to the hydraulic shifting.

Precise positioning of the loads is no problem in combination with the HYVA rotator – continuous rotation, precise start and braking ability.

Versatile height from 1050 mm to 1650 mm adjustable in three steps with a lock pin.

Versatile width of tines from 475 mm to max. 835 mm adjustable with a smooth running, stainless spindle.

Easy to use due to the dimensions of the pallet fork. Since no part of the pallet fork is wider than a standard pallet, a second row can



Package pallet fork H 401 H-1500 c

Type	Load capacity (kg)	Throat height N (mm)	Tine length L (mm)	Tine spread Z (min./max.) (mm)	Tine dimensions (width x height) (mm)	Centre of gravity (mm)	Self weight ¹⁾ (kg)
H 401H-1500 c	1500	1050 – 1650	980	475 – 815	80 x 35	500	200

Package consists of: pallet fork, rotator H 04 F, short connecting hoses H 203 01, upper suspension H 501 (4500), protection chain H 460 01

Pallet fork H 401H

Type	Load capacity (kg)	Throat height N (mm)	Tine length L (mm)	Tine spread Z (min./max.) (mm)	Tine dimensions (width x height) (mm)	Centre of gravity (mm)	Self weight ¹⁾ (kg)
H 401 H-1500-500	1500	1050 – 1650	980	475 – 815	80 x 35	500	150
H 401 H-2000-500	2000	1050 – 1650	980	495 – 835	100 x 35	500	175
H 401 H-2500-500	2500	1050 – 1650	980	475 – 815	90 x 40	500	230
H 401 H-1500-600	1500	1050 – 1650	1150	495 – 835	100 x 35	600	180
H 401 H-2000-600	2000	1050 – 1650	1150	475 – 815	90 x 40	600	230
H 401 H-2500-600	2500	1050 – 1650	1150	485 – 825	100 x 45	600	250

Package consists of: pallet fork, protection chain H 460 01

¹⁾ weight without rotator and protection chain

Please note: a protection trellis or net is mandatory for loose material (EN 13155)

Accessories

Type	Description
H 04 F	recommended HYVA rotator for H 401 H
H 04 S	HYVA shaft rotator – up to 4500 kg load capacity
H 505	quick change system for shaft-type rotators
H 502 (4500)	reduction link between rotator and grapple
H 401 H-2000-600	rigid suspension link with pin for rotator H 04 S

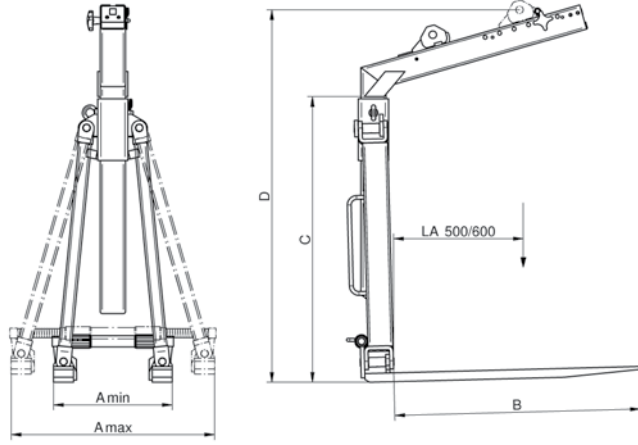
Requirements of truck crane

Operating pressure at oil flow:

max. 20 MPa (200 bar) at 20 - max. 40 l/min

⚠ Mind the pressure!

Technical drawings



TELESCOPIC FORK WITH TINES ADJUSTABLE BY SPINDLE-H 401T

The telescopic pallet fork H 401T with spring loaded centre of gravity is based on the regular H 401, but additionally features the possibility to extend to a height of up to 2500 mm.

Efficient handling of overheight loads such as insulating material – thanks to the adjustable height of up to 2500 mm and the easy adjustment with a stainless steel-plastic-sliding guide in the upper part.

Versatile height from 1200 mm to 2500 mm adjustable in steps with a lock pin.

Versatile width of tines from 475 mm to max. 835 mm adjustable with a smooth running, stainless spindle.

Easy to use due to the dimensions of the pallet fork. Since no part of the pallet fork is wider than a standard pallet, a second row can be loaded. As no part of the pallet fork is wider than the tines, loads close to walls can be handled without problems.



Pallet fork H 401H

Type	Load capacity (kg)	Throat height N (mm)	Tine length L (mm)	Tine spread Z (min./max.) (mm)	Tine dimensions (width x height) (mm)	Centre of gravity (mm)	Self weight ¹⁾ (kg)
H 401T-1500-500	1500	1200 – 2500	980	475 – 815	80 x 35		145
H 401T-2000-500	2000	1200 – 2500	980	495 – 835	100 x 35	500	165
H 401T-2500-500	2500	1200 – 2500	980	475 – 815	90 x 40	500	230
H 401T-3000-500	3000	1200 – 2500	980	485 – 825	100 x 45	500	245
H 401T-1500-600	1500	1200 – 2500	1150	495 – 835	100 x 35	600	180
H 401T-2000-600	2000	1200 – 2500	1150	475 – 815	90 x 40	600	225
H 401T-2500-600	2500	1200 – 2500	1150	485 – 825	100 x 45	600	250

Package consists of: telescopic pallet fork, protection chain H 460 01, 2 chain elements for suspension

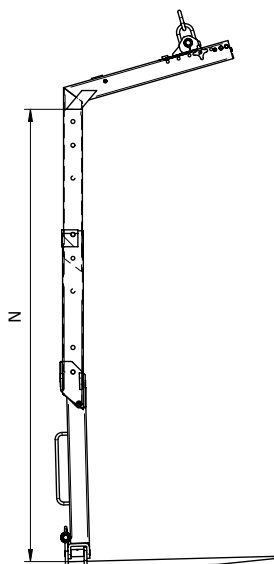
¹⁾ weight without rotator and protection chain

Please note: protection trellis or net is mandatory for loose material (EN 13155). Automatic compensation of centre of gravity functions with a min. pack weight of approx. 250 to 500 kg.

Accessories

Type	Description
H 04 S	HYVA shaft rotator – up to 4500 kg load capacity
H 460 03 (H 04 S)	rigid suspension link with pin for rotator H 04 S

Technical drawings



TELESCOPIC FORK WITH SPINDLE ADJUSTMENT-H 401 HT

The telescopic pallet fork H 401 HT with hydraulically compensating centre of gravity is based on the regular H 401 H, but additionally features the possibility to extend to a height of up to 2500 mm and provides a more comfortable use than the mechanical version.

Efficient handling of overheight loads such as insulating material – thanks to the adjustable height of up to 2500 mm and the hydraulic shifting (H 401HT).

Precise positioning of the loads is no problem in combination with the HYVA rotator – continuous rotation, precise start and braking ability.

Versatile height from 1200 mm to 2500 mm adjustable in steps with a lock pin.

Versatile width of tines from 475 mm to max. 835 mm adjustable with a smooth running, stainless spindle.

Easy to use due to the dimensions of the pallet fork. Since no part of the pallet fork is wider than a standard pallet, a second row can be loaded. As no part of the pallet fork is wider than the tines, loads close to walls can be handled without problems.



Pallet fork H 401H

Type	Load capacity (kg)	Throat height N (mm)	Tine length L (mm)	Tine spread (min./max.) (mm)	Tine dimensions (width x height) (mm)	Centre of gravity (mm)	Self weight ¹⁾ (kg)
H 401 HT-1500-500	1500	1200 – 2500	980	475 – 815	80 x 35	500	165
H 401 HT-2000-500	2000	1200 – 2500	980	495 – 835	100 x 35	500	190
H 401 HT-2500-500	2500	1200 – 2500	980	475 – 815	90 x 40	500	250
H 401 HT-1500-600	1500	1200 – 2500	1150	495 – 835	100 x 35	600	195
H 401 HT-2000-600	2000	1200 – 2500	1150	495 – 835	100 x 35	600	195
H 401 HT-2500-600	2500	1200 – 2500	1150	485 – 825	100 x 45	600	250

Package consists of: telescopic pallet fork, protection chain H 460 01

¹⁾ weight without rotator and protection chain

Please note: protection trellis or net is mandatory for loose material (EN 13155)


Accessories

Type	Description
H 04 F	recommended HYVA rotator for H 401 HT
H 04 S	HYVA shaft rotator – up to 4500 kg load capacity
H 505	quick change system for shaft-type rotators
H 502 (4500)	reduction link between rotator and grapple
H 460 03 (H 04 S)	rigid suspension link with pin for rotator H 04 S
H 460 (1100x1100)	protection trellis for loads up to 2000 kg – dimensions: 1100x1100x1500mm
H 460 (1300x1300)	protection trellis for loads up to 2000 kg – dimensions: 1300x1300x1500mm

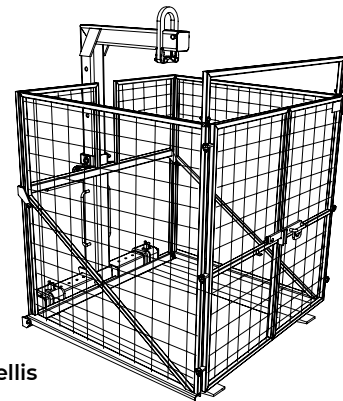
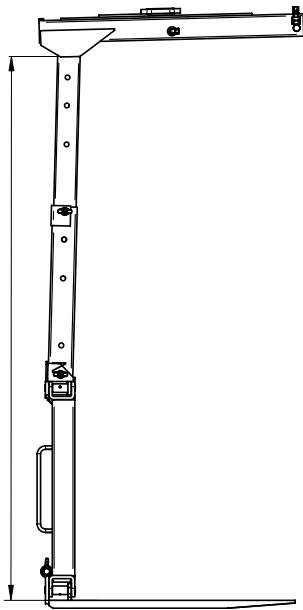
Requirements of truck crane

Operating pressure at oil flow:

max. 20 MPa (200 bar) at 20 - max. 40 l/min

 Mind the pressure!

Technical drawings



**H 460
protection trellis**

The protection trellis is used to secure loose loads handled with pallet forks H 415 and H 414 – e.g. brick packages, loose construction materials. When handling loose material, a protection trellis or net to secure the load, is obligatory (EN 13155). The maximum capacity is 2000 kg. The protection trellis can be mounted within a few minutes and is thus suitable for each construction site without any problems.

PALLET FORK WITH TINES ADJUSTABLE BY LOCK PIN-H 415

The robust pallet fork H 415 with spring loaded centre of gravity compensation can easily be adapted to different loads with adjustable plunge depth and adjustable tine spread.

Efficient handling of many different kinds of loads in an economic, one-man operation is possible due to the automatic shifting of the H 415 to a preset position. Compression springs return slide to initial position.

Throat height adjustable in steps from 1050 mm to 1650 mm with a lock pin.

Tine spread adjustable in steps from 325 mm to max. 975 mm with a lock pin.



Pallet fork H 415

Type	Load capacity (kg)	Throat height N (mm)	Tine length L (mm)	Tine spread Z (min./max.) (mm)	Tine dimensions (width x height) (mm)	Centre of gravity (mm)	Self weight ¹⁾ (kg)
H 415-1500-500	1500	1050 – 1650	980	325 – 920	80 x 35	500	135
H 415-2000-500	2000	1050 – 1650	980	345 – 940	100 x 35	500	155
H 415-2500-500	2500	1050 – 1650	980	355 – 945	90 x 40	500	180
H 415-3000-500	3000	1050 – 1650	980	385 – 975	100 x 45	500	215
H 415-1500-600	1500	1050 – 1650	1150	345 – 940	100 x 35	600	170
H 415-2000-600	2000	1050 – 1650	1150	355 – 945	90 x 40	600	200
H 415-2500-600	2500	1050 – 1650	1150	385 – 975	100 x 45	600	225
H 415-3000-600	3000	1050 – 1650	1150	385 – 975	100 x 45	600	225

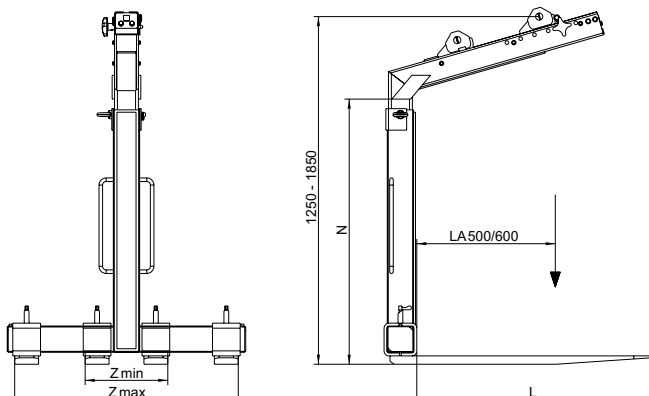
Package consists of: pallet fork, protection chain H 460 01, 2 chain elements for suspension

Please note: protection trellis or net is mandatory for loose material (EN 13155). Automatic compensation of centre of gravity functions with a min. pack weight of approx. 250 to 500 kg.

Accessories

Type	Description
H 460 (1100x1100)	protection trellis for loads up to 2000 kg – dimensions: 1100x1100x1500mm
H 460 (1300x1300)	protection trellis for loads up to 2000 kg – dimensions: 1300x1300x1500mm
H 04 S	HYVA shaft rotator – up to 4500 kg load capacity
H 460 03 (H 04 S)	rigid suspension link with pin for rotator H 04 S

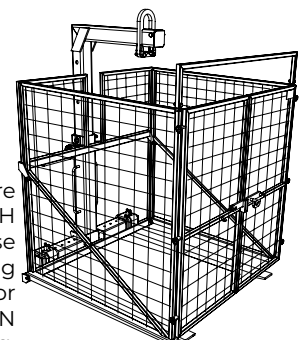
Technical drawings



H 460 protection trellis

The protection trellis is used to secure loose loads handled with pallet forks H 415 and H 414 – e.g. brick packages, loose construction materials. When handling loose material, a protection trellis or net to secure the load, is obligatory (EN 13155). The maximum capacity is 2000 kg.

The protection trellis can be mounted within a few minutes and is thus suitable for each construction site without any problems.



PALLET FORK WITH TINES ADJUSTABLE BY LOCK PIN-H 414

The robust pallet fork H 414 with manual centre of gravity compensation is an economic alternative.

Manual change of position of shifting collar by the operator.

Suspension Ring for HYVA flange or shaft rotator, or for a crane hook is included in the package.

Throat height adjustable in steps from 1050 mm to 1650 mm with a lock pin.

Tine spread adjustable in steps from 325 mm to max. 975 mm with a lock pin.



Pallet fork H 414

Type	Load capacity (kg)	Throat height N (mm)	Tine length L (mm)	Tine spread Z (min./max.) (mm)	Tine dimensions (width x height) (mm)	Centre of gravity (mm)	Self weight ¹⁾ (kg)
H 414-1500-500	1500	1050 – 1650	980	325 – 920	80 x 35	500	125
H 414-2000-500	2000	1050 – 1650	980	345 – 940	100 x 35	500	140
H 414-2500-500	2500	1050 – 1650	980	355 – 945	90 x 40	500	165
H 414-3000-500	3000	1050 – 1650	980	385 – 975	100 x 45	500	200
H 414-1500-600	1500	1050 – 1650	1150	345 – 940	100 x 35	600	150
H 414-2000-600	2000	1050 – 1650	1150	355 – 945	90 x 40	600	195
H 414-2500-600	2500	1050 – 1650	1150	385 – 975	100 x 45	600	210
H 414-3000-600	3000	1050 – 1650	1150	385 – 975	100 x 45	600	210

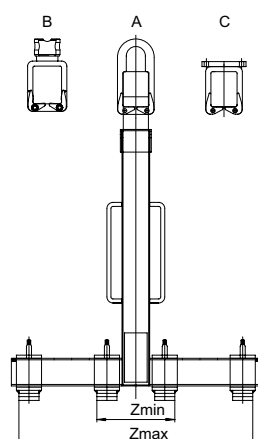
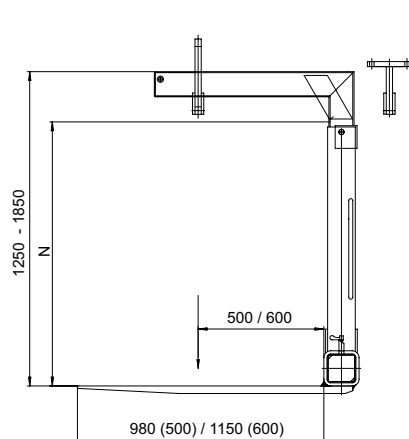
Package consists of: pallet fork, protection chain H 460 01

Please note: a protection trellis or net is mandatory for loose material (EN 13155)

Accessories

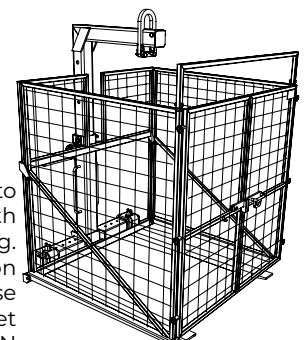
Type	Description
H 460 (1100x1100)	protection trellis for loads up to 2000 kg – dimensions: 1100x1100x1500mm
H 460 (1300x1300)	protection trellis for loads up to 2000 kg – dimensions: 1300x1300x1500mm
H 04 F	HYVA flange rotator for precise positioning of the load – up to 4500 kg load capacity
H 04 S	HYVA shaft rotator for precise positioning of the load – up to 4500 kg load capacity
H 505	quick change system for shaft-type rotators
H 502 (4500)	reduction link between rotator and grapple
H 460 04 (H 04 S)	non-rotating hook for rotator H 04 S

Technical drawings



Connection for:
A crane hook
B shaft rotator
C flange rotator

H 460
 protection trellis



The protection trellis is used to secure loose loads handled with pallet forks H 415 and H 414 – e.g. brick packages, loose construction materials. When handling loose material, a protection trellis or net to secure the load, is obligatory (EN 13155). The maximum capacity is 2000 kg. The protection trellis can be mounted within a few minutes and is thus suitable for each construction site without any problems.

TELESCOPIC PALLET FORK WITH LOCK PIN ADJUSTMENT-H 414T

The robust telescopic pallet fork H 414T with manual centre of gravity compensation is an economic alternative due to its versatility. Besides the properties of the regular H 414 pallet fork, the H 414T additionally features the possibility to extend to a height of up to 2500 mm.

Manual change of position of shifting collar by the operator.

Suspension Ring for HYVA flange or shaft rotator, or for a crane hook is included in the package.

Throat height adjustable in steps from 1100 mm to 2500 mm with a lock pin.

Tine spread adjustable in steps from 345 mm to max. 975 mm with a lock pin.



Pallet fork H 415

Type	Load capacity (kg)	Throat height N (mm)	Tine length L (mm)	Tine spread Z (min./max.) (mm)	Tine dimensions (width x height) (mm)	Centre of gravity (mm)	Self weight ¹⁾ (kg)
H 414T-1500-500	1500	1100 – 2500	980	345 – 935	80 x 35	500	140
H 414T-2000-500	2000	1100 – 2500	980	365 – 950	100 x 35	500	155
H 414T-2500-500	2500	1100 – 2500	980	370 – 960	90 x 40	500	190
H 414T-3000-500	3000	1100 – 2500	980	385 – 975	100 x 45	500	225
H 414T-1500-600	1500	1100 – 2500	1150	365 – 950	100 x 35	600	165
H 414T-2000-600	2000	1100 – 2500	1150	370 – 960	90 x 40	600	220
H 414T-2500-600	2500	1100 – 2500	1150	385 – 975	100 x 45	600	235

Package consists of: telescopic pallet fork, protection chain H 460 01

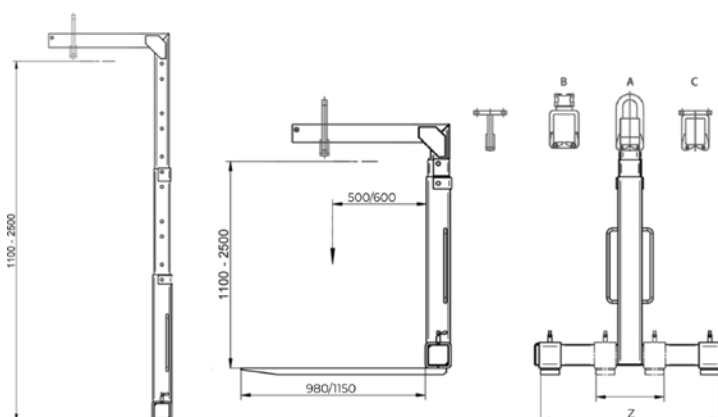
* weight w/o rotator w/suspension ring for crane hook

Please note: a protection trellis or net is mandatory for loose material (EN 13155)

Accessories

Type	Description
H 460 (1100x1100)	protection trellis for loads up to 2000 kg – dimensions: 1100x1100x1500mm
H 460 (1300x1300)	protection trellis for loads up to 2000 kg – dimensions: 1300x1300x1500mm
H 04 F	HYVA flange rotator for precise positioning of the load – up to 4500 kg load capacity
H 04 S	HYVA shaft rotator for precise positioning of the load – up to 4500 kg load capacity
H 505	quick change system for shaft-type rotators
H 502 (4500)	reduction link between rotator and grapple
H 460 04 (H 04 S)	grapple H 460 04 (H 04 S)

Technical drawings



Connection for:
A crane hook
B shaft rotator
C flange rotator

UNIVERSAL EXTENSIONS FOR PALLET FORKS - KM 460

Thanks to the universal extensions for the pallet forks H 401 (H), H 414 and H 415, the throat height of each of these types can be extended by 750 mm or 1200 mm respectively.

Fast mounting due to easy positioning of the extension by lock pin between upper and lower part of the respective pallet fork.

Throat height adjustable in steps with a lock pin. The general throat height can be extended by the extension but also removed easily.

Adjustable tine spread and all other functions of the pallet forks remain untouched.

Ideally adjusted to the respective load capacity/centre of gravity of the pallet fork.

Two lengths available: 750 mm or 1200 mm.

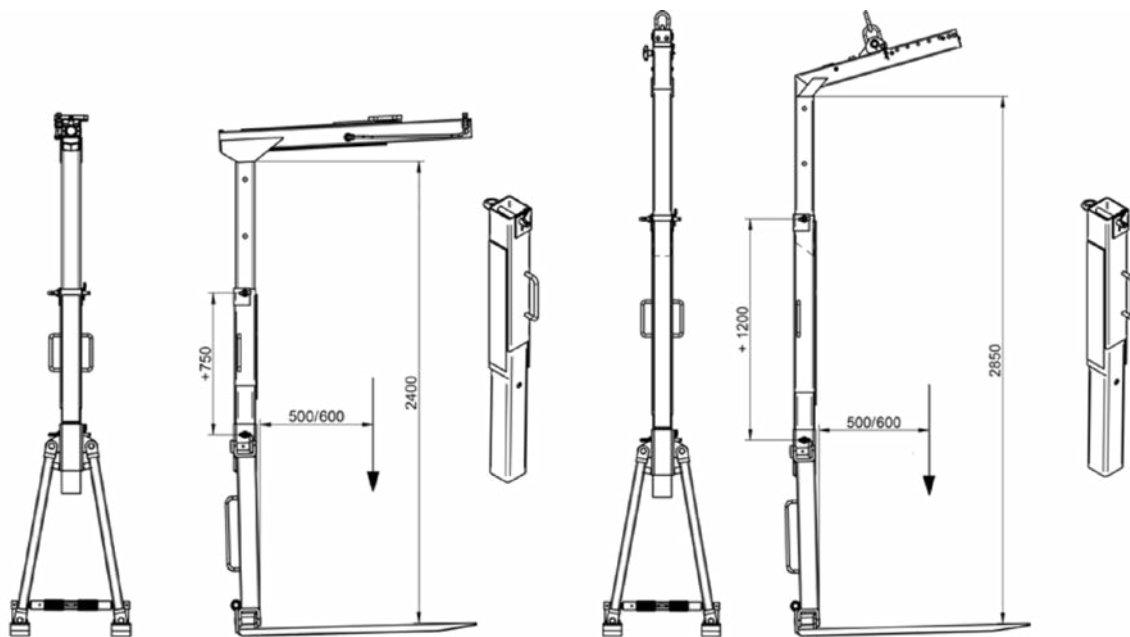


Extensions for pallet forks H 460

Type	for Pallet forks H 401 (H) / H 414 / H 415 load capacities / centres of gravity (kg/mm)	Extension for throat height by (mm)	Weight (only extension) (kg)
H 460-750-500	1500/500 / 1500/600/2000/500	750	26
H 460-750-600	2000/600/2500/500 / 2500/600/3000/500*	750	35
H 460-1200-500	1500/500 / 1500/600/2000/500	1200	35
H 460-1200-600	2000/600/2500/500 / 2500/600/3000/500*	1200	49
Package consists of:	extension, lock pin		

* 3000/600 on request

Technical drawings



Extension by 750 mm on H 401 H (w/o rotator)

Extension by 1200 mm on H 401

UNIVERSAL FORK-H 461

The universal fork H 461 for loader cranes handles wallboards and other lying building materials up to a size of 1250 height and 460 mm depth.

Different tine spreads: besides the standard tine spread of 640-1600mm further tine spreads are available (up to 1000, 1830 or 2130 mm), depending on the sheets that have to be handled.

Safe transport of sheets of wallboard in the hinged lower section. The boards can be lifted and folded into a vertical position and clamped between the tines and frame, preventing them from sliding during handling.

Protection of the sheets during unloading through semi-tapered forged tines, equipped with rollers and pads. A standard centre slide gives an additional support point for your loads.

Security is assured even in case of a drop in pressure due to the integrated counterbalance valve that prevents the fork from opening unintentionally. The hydraulic cylinder is equipped with a pressure relief valve to prevent overload.

Accurate positioning of the load is ensured by the tilt cylinder and the rotator.

The special version of the universal fork, the H 461A with a second suspension point on the main beam enables the unloading of lying boards through narrow openings in the wall.



Package universal fork H 461-1500 c

Type	Load capacity (kg)	Tine spread Z (min./max.) (mm)	Height of load max. (mm)	Depth of load max. (mm)	Weight (kg)
H 461-1500 c	1500	640 – 1830	1250	460	410

Package consists of:

universal fork, rotator H 04 F, short connecting hoses H 203 01, upper suspension H 501 (4500), pressure relief valve, counterbalance valve

Universal fork H 461

Type	Load capacity (kg)	Tine spread Z (min./max.) (mm)	Height of load max. (mm)	Depth of load max. (mm)	Weight (kg)
H 461-800	800	600 – 1000	1250	460	265
H 461-1000	1000	640 – 1600	1250	460	340
H 461-1500/1600		640 – 1600	1250	460	380
H 461-1500/1830	1500	640 – 1830	1250	460	390
H 461-1500/2130		640 – 2130	1250	460	395
H 461-2000/1600		640 – 1600	1250	460	390
H 461-2000/1830	2000	640 – 1830	1250	460	400
H 461-2000/2130		640 – 2130	1250	460	405
H 461-2500/1600		640 – 1600	1250	460	400
H 461-2500/1830	2500	640 – 1830	1250	460	410
H 461-2500/2130		640 – 2130	1250	460	415

Please note:

max. dimensions of the load are 1250 x 460 mm (height x depth). The max. width of the load is depending on the tine spread. H 461-800 is delivered with an integrated rack and an upper suspension for a shaft rotator

H 461A:

special version of Universal Fork H 461-1500/1600 is delivered with 2nd suspension point on the main beam

Accessories

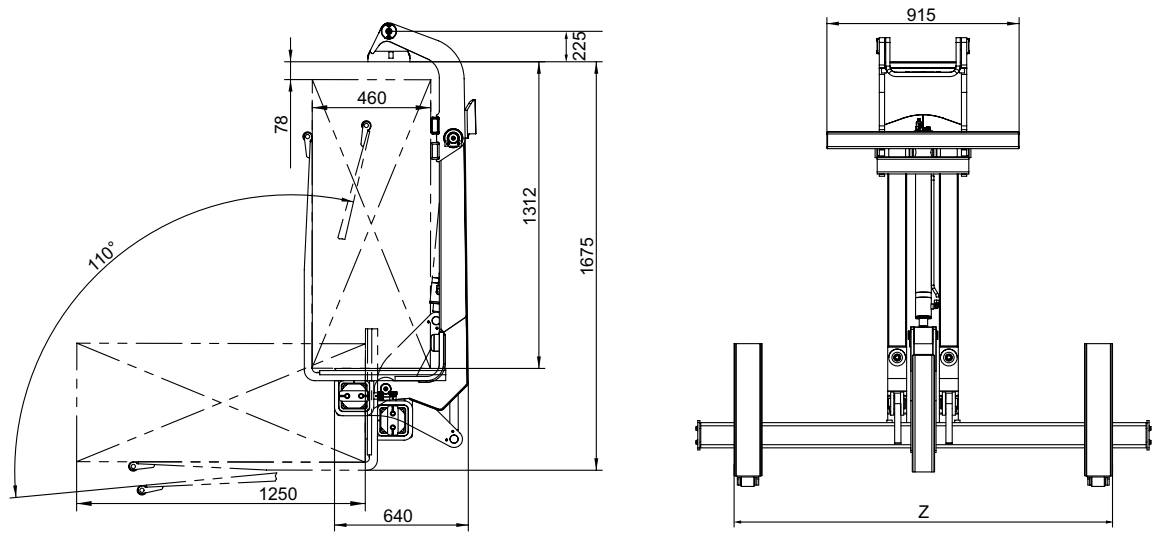
Type	Description
H 04 F	recommended HYVA rotator for H 461 (for load capacity over 1000 kg)
H 04 S	HYVA shaft rotator for precise positioning of the load – up to 4500 kg load capacity
H 04 S68-30US	HYVA shaft rotator for precise positioning of the load – up to 4500 kg load capacity
H 505 + H 505 05	quick change system for H 04 S with distance ring (for load capacity over 1000 kg, not in combination with H 461-800)

H 505 HD + H 505 05	heavy duty quick change system for H 04 S68-30US with distance ring (for over 1000 kg, not in combination with H 461-800)
H 502 (4500)	reduction link between rotator and grapple
H 461 08	adjustable clamping device to secure single sheets of smaller packs (for load capacity over 1000 kg)
H 461 09	rack for safe and easy storage of folded universal fork (for load capacity over 1000 kg)

Requirements of truck crane

Operating pressure at oil flow:
 20 - 26 MPa (200 – 260 bar) at max. 75 l/min
 20 - 37 MPa (200 – 370 bar) at max. 40 l/min

Technical drawings



HPXdrive

SETTING THE STANDARD FOR INNOVATIVE GRAB TECHNOLOGY FOR MORE THAN 15 YEARS!

The hydraulic drive unit **HPXdrive**, characterized by its constant closing force, is optimally suited for daily operations in general construction, civil engineering and landscaping. In contrast to conventional hydraulic grabs, with the **HPXdrive** the torque is generated by two hollow shafts, which run opposed and have a helix thread, hydraulically driven by a single piston. The force is delivered to two shafts, on which the shells are mounted. These advantages of the **HPXdrive** - technology provide an extended service life and higher efficiency. The compact design of the **HPXdrive** without open greasing points allows for operations in water protection areas, as no lubricant can be washed out.

VAST LIFESPAN EXTENSION COMPARED TO CONVENTIONAL CYLINDER GRABS AT EXTREMELY LOW COST OF OWNERSHIP.

**CONSTANT CLOSING FORCE DURING THE COMPLETE CLOSING CYCLE.
NO PROTRUDING COMPONENTS.**

LOW MAINTENANCE.

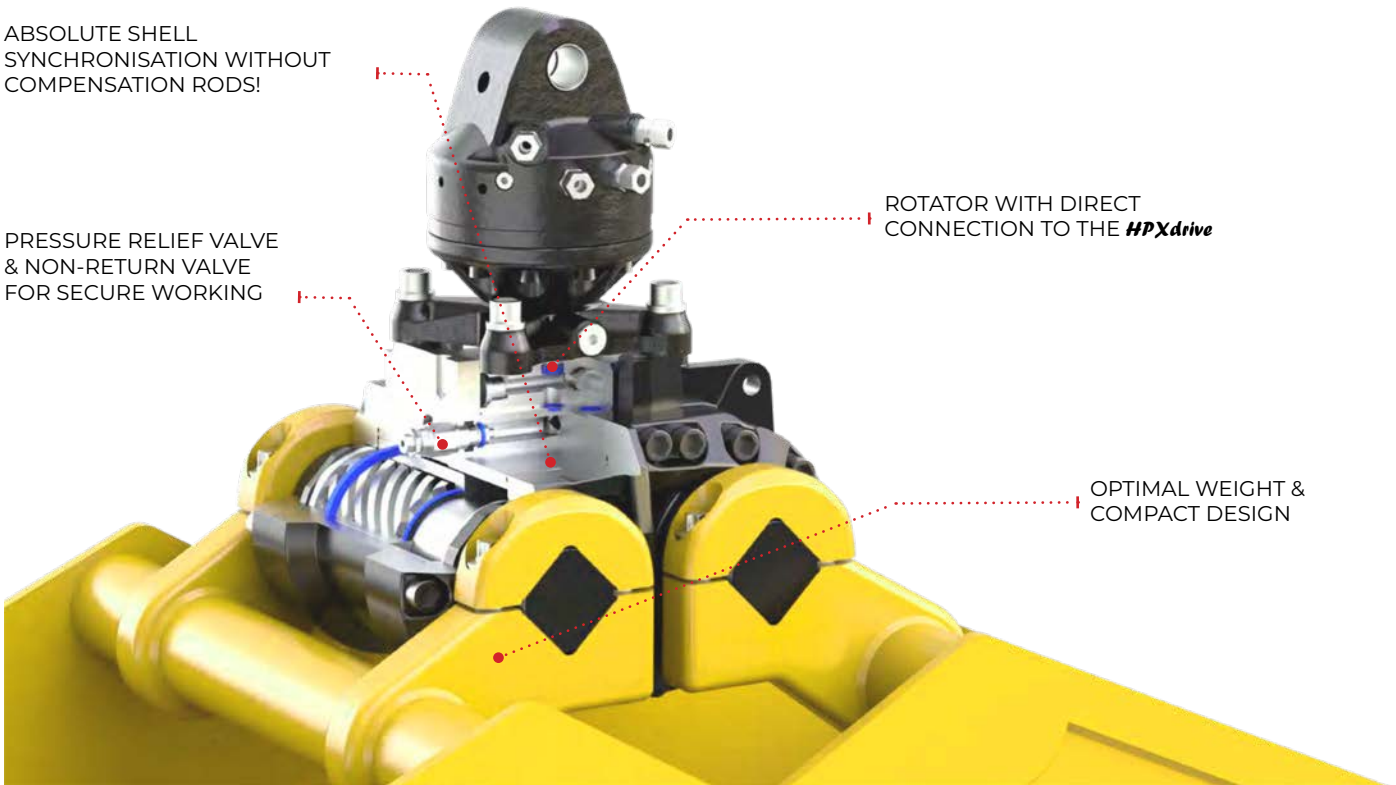
NO GREASE POINTS! IDEAL FOR WORKS IN WATER PROTECTION AREAS AND UNDER WATER!

ABSOLUTE SHELL
SYNCHRONISATION WITHOUT
COMPENSATION RODS!

PRESSURE RELIEF VALVE
& NON-RETURN VALVE
FOR SECURE WORKING

ROTATOR WITH DIRECT
CONNECTION TO THE **HPXdrive**

OPTIMAL WEIGHT &
COMPACT DESIGN



The bucket shells are bolted to the shafts and therefore easy to replace by another set. Different types of shells for diverse applications can be refitted onto the driving unit, e.g. clamshell bucket with or without open shells, multi purpose grab and rock and timber grab.

EASY SHELL EXCHANGE IN LESS THAN 10 MINUTES!



Shells mounted



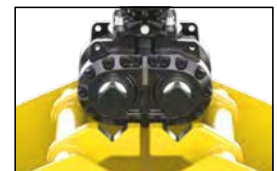
Loosen 4 bolts on each
side



Remove connecting
pieces one
after another



HPXdrive loosened

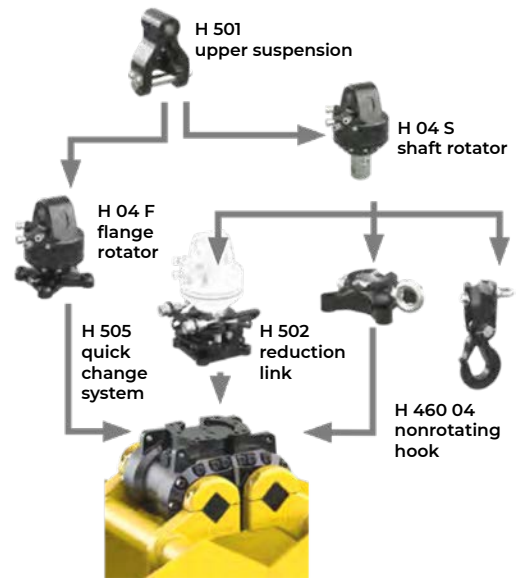


Lift **HPXdrive** for
exchange of shells

HPXdrive Standard-DRIVE UNIT FOR DAILY ROUTINE JOBS

The **HPXdrive** Standard as an allround unit is perfect for the daily routine jobs. The advantages of the **HPXdrive**-technology like the constant high closing force and the compact design, guarantee a long life and reliability.

The standard rotator of the **HPXdrive** Standard is the HYVA rotator with flange H 04 F140-30V. In case a quick change to a non-rotating hook is necessary, the **HPXdrive** can be delivered with the HYVA shaft rotator H 04 S in combination with either the quick change system H 505 or the reduction link H 502.



Technical information **HPXdrive Standard**:

Torque (at 26 MPa):	12000 Nm
Operating pressure at oil flow:	26 MPa (260 bar) at max. 75 l/min. 26 - 37 MPa (260 - 370 bar) at max. 40 l/min.

HPXdrive Standard with flange rotator HPX-SD-04F-30V

Package consists of:	upper suspension H 501 (4500), rotator H 04 F140-30V, drive unit HPXdrive Standard with pressure relief valve and non-return valve
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Self weight: 160 kg

Height: 480 mm



HPXdrive Standard / 502 with shaft rotator and reduction link HPX-SD-502

Package consists of:	upper suspension H 501 (4500), rotator H 04 S, reduction link H 502 (4500), short connecting hoses H 203 01, drive unit HPXdrive Standard with pressure relief valve and non-return valve
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Self weight: 165 kg

Height: 535 mm



HPXdrive Standard / 505 with shaft rotator and quick change system HPX-SD-505

Package consists of:	upper suspension H 501 (4500), rotator H 04 S, quick exchange system H 505, connecting hoses H 203 01, drive unit HPXdrive Standard with pressure relief valve and non-return valve
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Self weight: 170 kg

Height: 575 mm

Note: for heavy duty tasks we recommend the quick change system H 505 HD in combination with H 04 S68-30US



HPXdrive Standard-EXCHANGEABLE SHELLS

The bucket shells of the **HPXdrive Standard** are bolted to the shafts, and therefore it is very easy to replace them with another set of shells. Different types of shells for different applications can be refitted onto the driving unit, e.g. clamshell bucket, rock grapple, timber grapple, hay and forestry grapple and multi purpose clamshell. Other types of shells are available on request.

The interchangeable shells are delivered with an exchange aid that guarantees the **HPXdrive Standard** can be positioned with ease.



Package consists of: exchangeable shells, bolt-on teeth (for H 604HPX, H 626HPX), exchange aid kit



Type	Volume (litre)	Width (mm)	Opening max. (mm)	Number of teeth/tines	Self weight (kg)
Shells for clamshell bucket – H 604HPX					
H 604HPX-200S	200	400	1395	4	130
H 604HPX-250S	250	500	1395	4	145
H 604HPX-325S	325	600	1395	6	160
H 604HPX-350S	350	650	1395	6	165
H 604HPX-450S	450	800	1395	6	180



Type	Volume (litre)	Width (mm)	Opening max. (mm)	Number of teeth/tines	Self weight (kg)
Shells for small clamshell bucket – H 626HPX					
H 626HPX-95S	95	400	900	4	90
H 626HPX-100S	100	450	900	4	95
H 626HPX-150S	150	600	900	6	120



Type	Volume (litre)	Width (mm)	Opening max. (mm)	Number of teeth/tines	Self weight (kg)
Shells for clamshell bucket with open shells – H 604U HPX					
H 604U HPX-250S	250	570	1595	-	215
H 604U HPX-300S	300	670	1595	-	235
H 604U HPX-400S	400	820	1595	-	255
H 604U HPX-500S	500	1020	1595	-	285



Type	Volume (litre)	Width (mm)	Opening max. (mm)	Number of teeth/tines	Self weight (kg)
Tines for rock grapple – H 613HPX					
H 613HPX-0,16S	0,16 m ²	400	1225	-	75



Type	Volume (litre)	Width (mm)	Opening max. (mm)	Number of teeth/tines	Self weight (kg)
Tines for timber grapple – H 632HPX					
H 632HPX-0,16S	0,16 m ²	400	1225	-	75



Type	Volume (litre)	Width (mm)	Opening max. (mm)	Number of teeth/tines	Self weight (kg)
Tines for hay and forestry grapple – H 641HPX					
H 641HPX-0,2S	0,20 m ²	670	1200	7	95
H 641HPX-0,4S	0,40 m ²	940	1695	7	160

CLAMSHELL BUCKET WITH *HPXdrive* - H 604HPX

An allround clamshell bucket using the *HPXdrive* Standard for digging and handling, the H 604HPX is ideal for the daily routine work. The revolutionary *HPXdrive* technology guarantees a reliable and low maintenance attachment.

Reliability of the *HPXdrive*! The movement of the arms of the grapple is generated by two hollow shafts, which run opposed and have a helix thread, hydraulically driven by a single piston. No more hydraulic cylinders!

Longer life cycle up to 50%! Self-lubrication: The drive unit runs in a permanent oil bath. The compact design makes the *HPXdrive* resistant to dirt and debris.

Versatility by different types of shells that can easily be refitted onto the unit.

Profitability through low maintenance costs and longer life cycle.

Precise handling with the gear-type HYVA rotator and shells synchronised by the single piston turning both shafts of the *HPXdrive*.

Rotator with shaft is available as an alternative, in case a quick change to a non-rotating hook is favoured.

Constant closing force (19 kN at 26 MPa operating pressure) over the entire opening and closing process.



Packages clamshell bucket H 604HPX with HYVA flange rotator

Type	Volume (litre)	Width E (mm)	Height (w/rotator) (mm)	Opening A max. (mm)	Number of teeth	Self weight (kg)	Closing force (kN)	Load capacity (kg)
H 604HPX-200 c	200	400	1020	1390	4	290	19	3000
H 604HPX-250 c	250	500	1020	1390	4	305	19	3000
H 604HPX-325 c	325	600	1020	1390	6	320	19	3000
H 604HPX-350 c	350	650	1020	1390	6	325	19	3000
H 604HPX-450 c	450	800	1020	1390	6	340	19	3000

Package consists of: clamshell bucket, bolt-on teeth, rotator H 04 F140-30V, upper suspension H 501 (4500), pressure relief valve, non-return valve

HPX-H 505 add also available with a shaft rotator and quick change system H 505

HPX-H 505 HD add for heavy duty tasks we recommend the quick change system H 505 HD in combination with the HYVA rotator H 04 S68-30US

Packages clamshell bucket H 604HPX/502 with HYVA shaft rotator and reduction link

Type	Volume (litre)	Width E (mm)	Height (w/rotator) (mm)	Opening A max. (mm)	Number of teeth	Self weight (kg)	Closing force (kN)	Load capacity (kg)
H 604HPX-200/502 c	200	400	1075	1390	4	295	19	3000
H 604HPX-250/502 c	250	500	1075	1390	4	310	19	3000
H 604HPX-325/502 c	325	600	1075	1390	6	325	19	3000
H 604HPX-350/502 c	350	650	1075	1390	6	330	19	3000
H 604HPX-450/502 c	450	800	1075	1390	6	345	19	3000

Package consists of: clamshell bucket, bolt-on teeth, rotator H 04 S, reduction link H 502 (4500), short connecting hoses H 203 01, upper suspension H 501 (4500), pressure relief valve, non-return valve

Accessories

Type	Description
H 680 01	scraper
H 685 05	adapters for compression rails (load capacity max. 250 kg, without compression rails)
H 685 06 hook set 2	welded hooks (2 pieces)
H 685 07 set	wear plates to protect horizontal cutting edges (2 pieces)
H 685 08 HPX-450	extension for excavating e.g. trenches (for canal and civil engineering) – 450 mm (30 kg)
H 204 01	mobile part of hydraulic quick coupling for hose (∅ 10 mm, 2 pieces)
H 204 03	hydraulic quick change kit incl. mobile and fixed parts (2 pc. each) mounted to rotator

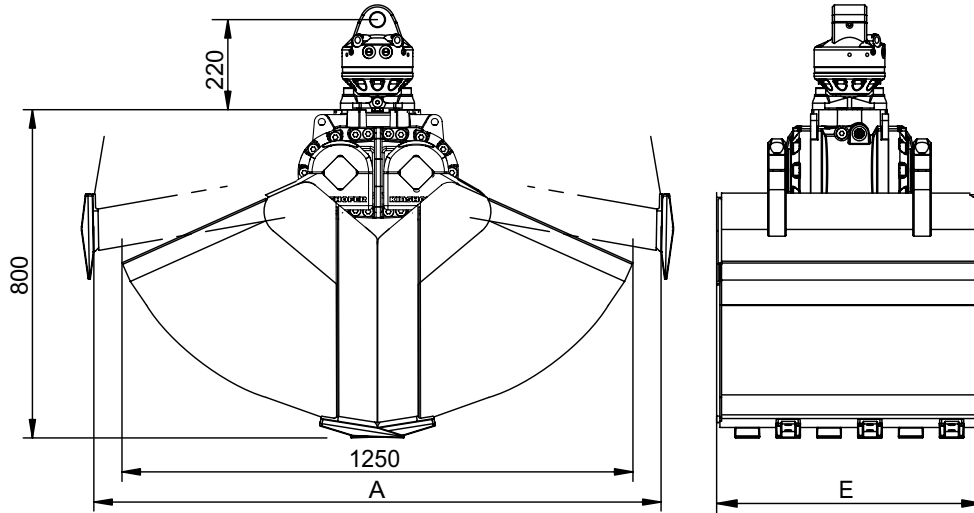
Requirements of truck crane

Operating pressure at oil flow:

26 MPa (260 bar) at max. 75 l/min

26 - 37 MPa (260 - 370 bar) at max. 40 l/min

Technical drawings



SMALL VOLUME CLAMSHELL BUCKET WITH *HPXdrive* - H 626HPX

The H 626HPX with the *HPXdrive Standard* for digging and handling, is due to its size ideal for small cranes. The revolutionary *HPXdrive* technology guarantees a reliable and low maintenance attachment.

Reliability of the *HPXdrive*! The movement of the arms of the grapple is generated by two hollow shafts, which run opposed and have a helix thread, hydraulically driven by a single piston. No more hydraulic cylinders!

Longer life cycle up to 50%! **Self-lubrication:** The drive unit runs in a permanent oil bath. The compact design makes the *HPXdrive* resistant to dirt and debris.

Versatility with different types of shells that can easily be refitted onto the driving unit.

Profitability through low maintenance costs and longer life cycle.

Precise handling with the gear-type HYVA rotator and shells synchronised by the single piston turning both shafts of the *HPXdrive*.

Rotator with shaft is available as an alternative, in case a quick change to a non-rotating hook is favoured.

Constant closing force (31 kN at 26 MPa operating pressure) over the entire opening and closing process.



Packages clamshell bucket H 626HPX with HYVA flange rotator

Type	Volume (litre)	Width E (mm)	Height (w/rotator) (mm)	Opening A max. (mm)	Number of teeth	Self weight (kg)	Closing force (kN)	Load capacity (kg)
H 626HPX-95 c	95	400	770	890	4	250	31	2000
H 626HPX-100 c	100	450	770	890	4	255	31	2000
H 626HPX-150 c	150	600	770	890	6	280	31	2000

Package consists of:

clamshell bucket, bolt-on teeth, rotator H 04 F140-30V, upper suspension H 501 (4500), pressure relief valve, non-return valve

HPX-H 505 add

also available with a shaft rotator and quick change system H 505

HPX-H 505 HD add

for heavy duty tasks we recommend the quick change system H 505 HD in combination with the HYVA rotator H 04 S68-30US

Packages clamshell bucket H 626HPX/502 with HYVA shaft rotator and reduction link

Type	Volume (litre)	Width E (mm)	Height (w/rotator) (mm)	Opening A max. (mm)	Number of teeth	Self weight (kg)	Closing force (kN)	Load capacity (kg)
H 626HPX-95/502 c	95	400	825	890	4	255	31	2000
H 626HPX-100/502 c	100	450	825	890	4	260	31	2000
H 626HPX-150/502 c	150	600	825	890	6	285	31	2000

Package consists of:

clamshell bucket, bolt-on teeth, rotator H 04 S, reduction link H 502 (4500), short connecting hoses H 203 01, upper suspension H 501 (4500), pressure relief valve, non-return valve

Accessories

Type	Description
H 680 02	scraper
H 685 06 hook set 2	welded hooks (2 pieces)
H 685 07 set	wear plates to protect horizontal cutting edges (2 pieces)
H 204 01	mobile part of hydraulic quick coupling for hose (Ø 10 mm, 2 pieces)
H 204 03	hydraulic quick change kit incl. mobile and fixed parts (2 pc. each) mounted to rotator

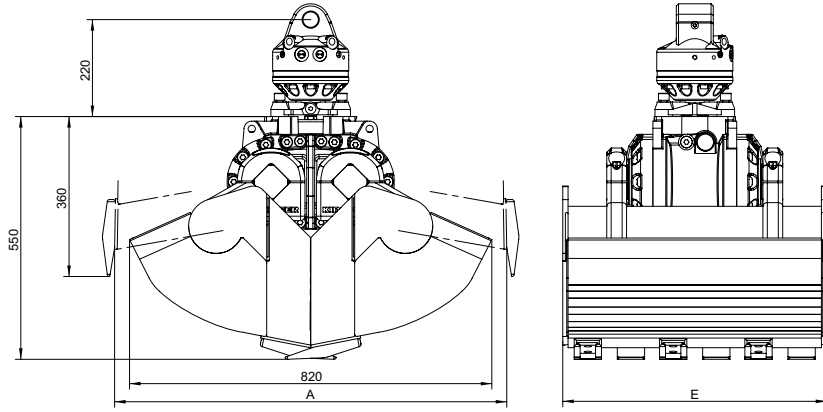
Requirements of truck crane

Operating pressure at oil flow:

26 MPa (260 bar) at max. 75 l/min

26 - 37 MPa (260 - 370 bar) at max. 40 l/min

Technical drawings



UNIVERSAL CLAMSHELL BUCKET WITH *HPXdrive* - H 604U HPX

The H 604U HPX is a clamshell bucket using the *HPXdrive* Standard for handling and easy digging tasks. The open shells enable the handling of bulky materials. Non-return valve, pressure relief valve, welded hooks and reversible wear plates are delivered on each grapple. The revolutionary *HPXdrive* technology guarantees a reliable and low maintenance attachment.

Reliability of the *HPXdrive*! The movement of the arms of the grapple is generated by two hollow shafts, which run opposed and have a helix thread, hydraulically driven by a single piston. No more hydraulic cylinders!

Longer life cycle up to 50%! **Self-lubrication:** The drive unit runs in a permanent oil bath. The compact design makes the *HPXdrive* resistant to dirt and debris.

Versatility with different types of shells that can easily be refitted onto the driving unit.

Profitability through low maintenance costs and longer life cycle.

Precise handling with the gear-type HYVA rotator and shells synchronised by the single piston turning both shafts of the *HPXdrive*.

Rotator with shaft is available as an alternative, in case a quick change to a non-rotating hook is favoured.

Constant closing force (17 kN at 26 MPa operating pressure) over the entire opening and closing process.



Packages clamshell bucket H 604U HPX with HYVA flange rotator

Type	Volume (litre)	Width E (mm)	Height (mm)	Opening A max. (mm)	Self weight (kg)	Closing force (kN)	Load capacity (kg)
H 604U HPX-250 c	250	570	1100	1590	375	17	3000
H 604U HPX-300 c	300	670	1100	1590	395	17	3000
H 604U HPX-400 c	400	820	1100	1590	415	17	3000
H 604U HPX-500 c	500	1020	1100	1590	445	17	3000
Package consists of:	clamshell bucket, rotator H 04 F140-30V, upper suspension H 501 (4500), wear plates H 685 07 set, welded hooks H 685 06 hook set 2, pressure relief valve, non-return valve						
HPX-H 505 add	also available with a shaft rotator and quick change system H 505						
HPX-H 505 HD add	for heavy duty tasks we recommend the quick change system H 505 HD in combination with the HYVA rotator H 04 S68-30US						

Packages clamshell bucket H 604U HPX/502 with HYVA shaft rotator and reduction link

Type	Volume (litre)	Width E (mm)	Height (mm)	Opening A max. (mm)	Self weight (kg)	Closing force (kN)	Load capacity (kg)
H 604U HPX-250/502 c	250	570	1155	1590	380	17	3000
H 604U HPX-300/502 c	300	670	1155	1590	395	17	3000
H 604U HPX-400/502 c	400	820	1155	1590	420	17	3000
H 604U HPX-500/502 c	500	1020	1155	1590	450	17	3000
Package consists of:	clamshell bucket, rotator H 04 S, reduction link H 502 (4500), short connecting hoses H 203 01, upper suspension H 501 (4500), wear plates H 685 07, welded hooks H 685 06 hook set 2, pressure relief valve, non-return valve						

Accessories

Type	Description
H 685 05	adapters for compression rails (load capacity max. 250 kg, without compression rails)
H 381 09 (720)	compression rails – length 720 mm (2 pieces)
H 381 09 (1000)	compression rails – length 1000 mm (2 pieces)
H 685 09 C	side plates to screw onto the grapple for easy digging tasks (4 pieces)
H 204 01	mobile part of hydraulic quick coupling for hose (Ø 10 mm, 2 pieces)
H 204 03	hydraulic quick change kit incl. mobile and fixed parts (2 pc. each) mounted to rotator

Accessories

Type	Description
H 685 05	adapters for compression rails (load capacity max. 250 kg, without compression rails)
H 381 09 (720)	compression rails – length 720 mm (2 pieces)
H 381 09 (1000)	compression rails – length 1000 mm (2 pieces)
H 685 09 C	side plates to screw onto the grapple for easy digging tasks (4 pieces)
H 204 01	mobile part of hydraulic quick coupling for hose (Ø 10 mm, 2 pieces)
H 204 03	hydraulic quick change kit incl. mobile and fixed parts (2 pc. each) mounted to rotator

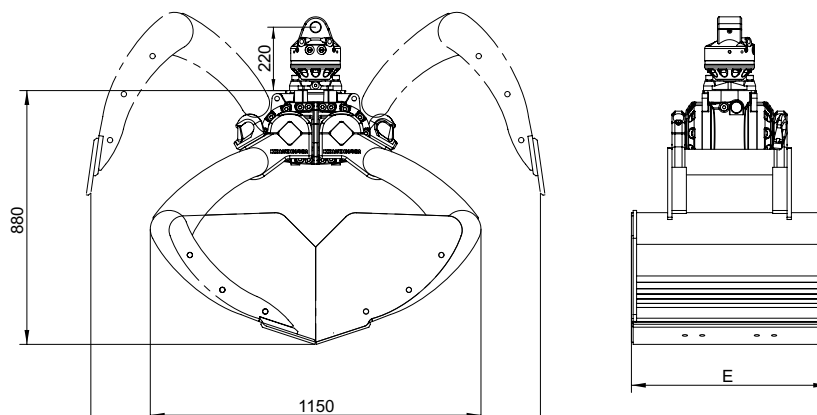
Requirements of truck crane

Operating pressure at oil flow:

26 MPa (260 bar) at max. 75 l/min

26 - 37 MPa (260 - 370 bar) at max. 40 l/min

Technical drawings



ROCK GRAPPLE WITH *HPXdrive* - H 613HPX

The H 613HPX with *HPXdrive* Standard for positioning and handling natural stones, curbstones etc. is an ideal tool for landscaping architecture. A non-return valve secures constant pressure even in case of unexpected pressure drop. The revolutionary *HPXdrive* technology guarantees a reliable and low maintenance attachment.

Reliability of the *HPXdrive*: The movement of the arms of the grapple is generated by two hollow shafts, which run opposed and have a helix thread, hydraulically driven by a single piston. No more hydraulic cylinders!

Longer life cycle up to 50%! **Self-lubrication**: The drive unit runs in a permanent oil bath. The compact design makes the *HPXdrive* resistant to dirt and debris.

Versatility with different types of shells that can easily be refitted onto the driving unit.

Profitability through low maintenance costs and longer life cycle.

Precise handling with the gear-type HYVA rotator and shells synchronised by the single piston turning both shafts of the *HPXdrive*.

Rotator with shaft is available as an alternative, in case a quick change to a non-rotating hook is favoured.

Constant closing force (18 kN at 26 MPa operating pressure) over the entire opening and closing process.



Package rock grapple H 613HPX with HYVA flange rotator

Type	Capacity (m ²)	Width E (mm)	Height	Opening A max. (mm)	Self weight (kg)	Closing force (kN)	Load capacity (kg)
H 613HPX-0.16 c	0,16	400	1000	1200	235	18	1000
Package consists of:	rock grapple, rotator H 04 F140-30V, upper suspension H 501 (4500), pressure relief valve, non-return valve						
HPX-H 505 add	also available with a shaft rotator and quick change system H 505						
HPX-H 505 HD add	for heavy duty tasks we recommend the quick change system H 505 HD in combination with the HYVA rotator H 04 S68-30US						

Package rock grapple H 613HPX/502 with HYVA shaft rotator and reduction link

Type	Capacity (m ²)	Width E (mm)	Height	Opening A max. (mm)	Self weight (kg)	Closing force (kN)	Load capacity (kg)
H 613HPX-0.16 c	0,16	400	1055	1200	240	18	1000
Package consists of:	rock grapple, rotator H 04 S, reduction link H 502 (4500), short connecting hoses H 203 01, upper suspension H 501 (4500), pressure relief valve, non-return valve						

Accessories

Type	Description
H 685 06 hook set 2	welded hooks (2 pieces)
H 204 01	mobile part of hydraulic quick coupling for hose (Ø 10 mm, 2 pieces)
H 204 03	hydraulic quick change kit incl. mobile and fixed parts (2 pc. each) mounted to rotator

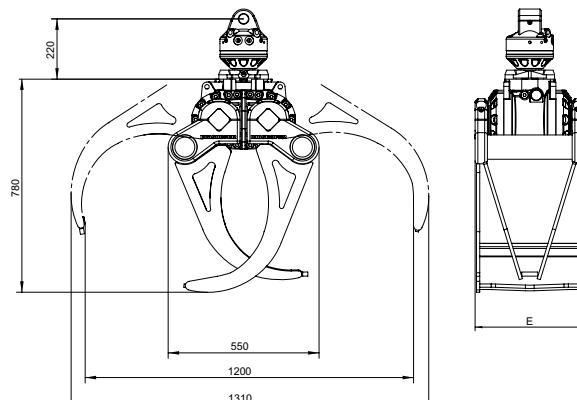
Requirements of truck crane

Operating pressure at oil flow:

26 MPa (260 bar) at max. 75 l/min

26 - 37 MPa (260 - 370 bar) at max. 40 l/min

Technical drawings



TIMBER GRAPPLE WITH *HPXdrive* - H 632HPX

The H 632HPX with *HPXdrive* Standard for loading short logs, shrubbery, branches etc. A non-return valve secures constant pressure even in case of unexpected pressure drop. The revolutionary *HPXdrive* technology guarantees a reliable and low maintenance attachment.

Reliability of the *HPXdrive*! The movement of the arms of the grapple is generated by two hollow shafts, which run opposed and have a helix thread, hydraulically driven by a single piston. No more hydraulic cylinders!

Longer life cycle up to 50%! **Self-lubrication**: The drive unit runs in a permanent oil bath. The compact design makes the *HPXdrive* resistant to dirt and debris.

Versatility with different types of shells that can easily be refitted onto the driving unit.

Profitability through low maintenance costs and longer life cycle.

Precise handling with the gear-type HYVA rotator and shells synchronised by the single piston turning both shafts of the *HPXdrive*.

Rotator with shaft is available as an alternative, in case a quick change to a non-rotating hook is favoured.

Constant closing force (18 kN at 26 MPa operating pressure) over the entire opening and closing process.



Package rock grapple H 613HPX with HYVA flange rotator

Type	Capacity (m ²)	Width E (mm)	Height	Log-Ø min. (mm)	Opening A max. (mm)	Self weight (kg)	Closing force (kN)	Load capacity (kg)
H 613HPX-0.16 c	0,16	400	1000	170	1220	235	18	1000
Package consists of:	timber grapple, rotator H 04 F140-30V, upper suspension H 501 (4500), pressure relief valve, non-return valve							
HPX-H 505 add	also available with a shaft rotator and quick change system H 505							
HPX-H 505 HD add	for heavy duty tasks we recommend the quick change system H 505 HD in combination with the HYVA rotator H 04 S68-30US							

Package timber grapple H 632HPX/502 with HYVA shaft rotator and reduction link

Type	Capacity (m ²)	Width E (mm)	Height	Log-Ø min. (mm)	Opening A max. (mm)	Self weight (kg)	Closing force (kN)	Load capacity (kg)
H 613HPX-0.16 c	0,16	400	1055	170	1220	240	18	1000
Package consists of:	timber grapple, rotator H 04 S, reduction link H 502 (4500), short connecting hoses H 203 01, upper suspension H 501 (4500), pressure relief valve, non-return valve							

Accessories

Type	Description
H 204 01	mobile part of hydraulic quick coupling for hose (Ø 10 mm, 2 pieces)
H 204 03	hydraulic quick change kit incl. mobile and fixed parts (2 pc. each) mounted to rotator

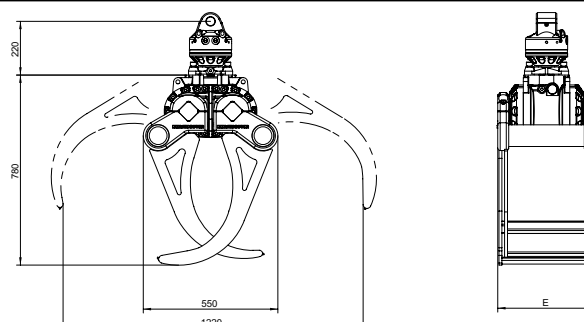
Requirements of truck crane

Operating pressure at oil flow:

26 MPa (260 bar) at max. 75 l/min

26 - 37 MPa (260 - 370 bar) at max. 40 l/min

Technical drawings



HAY AND FORESTRY GRAPPLE WITH *HPXdrive* - H 641HPX

The hay and forestry grapple H641HPX using the *HPXdrive* Standard is ideal for handling hay, brushwood, compost or manure – often used for municipal operations and road work. The revolutionary *HPXdrive* technology guarantees a reliable and low maintenance attachment.

Reliability of the *HPXdrive*! The movement of the arms of the grapple is generated by two hollow shafts, which run opposed and have a helix thread, hydraulically driven by a single piston. No more hydraulic cylinders!

Longer life cycle up to 50%! Self-lubrication: The drive unit runs in a permanent oil bath. The compact design makes the *HPXdrive* resistant to dirt and debris.

Versatility with different types of shells that can easily be refitted onto the driving unit.

Profitability through low maintenance costs and longer life cycle.

Precise handling with the gear-type HYVA rotator and shells synchronised by the single piston turning both shafts of the *HPXdrive*.

Rotator with shaft is available as an alternative, in case a quick change to a non-rotating hook is favoured. Constant closing force (18 kN/14 kN at 26 MPa operating pressure) over the entire opening and closing process.



Package hay and forestry grapple H 641HPX with HYVA flange rotator

Type	Capacity (m ²)	Width E (mm)	Height (+ rotator) (mm)	Opening max.A (mm)	Number of tines	Self weight (kg)	Closing force (kN)	Load capacity (kg)
H 641HPX-0.2 c	0,20	670	950	1190	7	255	18	1000
H 641HPX-0.4 c	0,40	940	1190	1630	7	320	14	2000
Package consists of:	hay and forestry grapple, rotator H 04 F140-30V, upper suspension H 501 (4500), pressure relief valve, non-return valve							
HPX-H 505 add	also available with a shaft rotator and quick change system H 505							
HPX-H 505 HD add	for heavy duty tasks we recommend the quick change system H 505 HD in combination with the HYVA rotator H 04 S68-30US							

Package hay and forestry grapple H 641HPX/502 with HYVA shaft rotator and reduction link

Type	Capacity (m ²)	Width E (mm)	Height (+ rotator) (mm)	Opening max.A (mm)	Number of tines	Self weight (kg)	Closing force (kN)	Load capacity (kg)
H 641HPX-0.2/502 c	0,20	670	1005	1200	7	260	18	1000
H 641HPX-0.4/502 c	0,40	940	1245	1695	7	325	14	2000
Package consists of:	hay and forestry grapple, rotator H 04 S, reduction link H 502 (4500), short connecting hoses H 203 01, upper suspension H 501 (4500), pressure relief valve, non-return valve							

Accessories

Type	Description
H 204 01	mobile part of hydraulic quick coupling for hose (Ø 10 mm, 2 pieces)
H 204 03	hydraulic quick change kit incl. mobile and fixed parts (2 pc. each) mounted to rotator

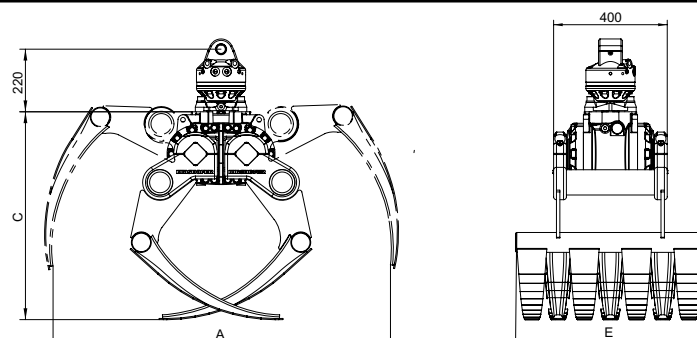
Requirements of truck crane

Operating pressure at oil flow:

26 MPa (260 bar) at max. 75 l/min

26 - 37 MPa (260 - 370 bar) at max. 40 l/min

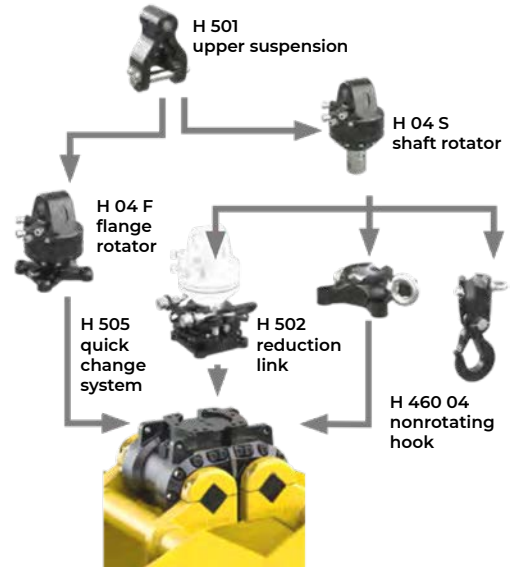
Technical drawings



HPXdrive Heavy Duty-DRIVE UNIT FOR HEAVY TASKS

The **HPXdrive Heavy Duty** is a powerful version for difficult tasks. The advantages of the HPXdrive technology – the constant high closing force and the compact design – guarantee a long life and reliability.

The standard rotator of the **HPXdrive Heavy Duty** is the HYVA rotator with flange H 04 F140-30V. In case a quick change to a non-rotating hook is necessary, the **HPXdrive** can be delivered with the HYVA shaft rotator H 04 S in combination with the quick change system H 505 or the reduction link H 502.



Technical information **HPXdrive Heavy Duty**:

Torque (at 32 MPa):	21000 Nm
Operating pressure at oil flow:	max. 32 MPa (320 bar) at 40 - max. 90 l/min ⚠Mind the pressure!

HPXdrive Heavy Duty with flange rotator HPX-SD-04F-30V

Package consists of:	upper suspension H 501 (4500), rotator H 04 F140-30V, drive unit HPXdrive Standard with pressure relief valve and non-return valve
Self weight:	195 kg
Height:	510 mm



HPXdrive Heavy Duty / 502 with shaft rotator and reduction link HPX-SD-502

Package consists of:	upper suspension H 501 (4500), rotator H 04 S, reduction link H 502 (4500), short connecting hoses H 203 01, drive unit HPXdrive Standard with pressure relief valve and non-return valve
Self weight:	200 kg
Height:	565 mm



HPXdrive Heavy Duty / 505 with shaft rotator and quick change system HPX-SD-505

Package consists of:	upper suspension H 501 (4500), rotator H 04 S, quick exchange system H 505, connecting hoses H 203 01, drive unit HPXdrive Standard with pressure relief valve and non-return valve
Self weight:	205 kg
Height:	605 mm

Note: for heavy duty tasks we recommend the quick change system H 505 HD in combination with H 04 S68-30US











HPXdrive Heavy Duty-EXCHANGEABLE SHELLS

The bucket shells of the **HPXdrive Heavy Duty** are bolted to the shafts, and therefore it is very easy to replace them with another set of shells. Different types of shells for different applications can be refitted onto the driving unit, e.g. clamshell bucket, rock grapple, timber grapple, hay and forestry grapple. Other types of shells are available on request.

The interchangeable shells are delivered with an exchange aid that guarantees the **HPXdrive Heavy Duty** can be positioned with ease.



Package consists of: exchangeable shells, bolt-on teeth (for H 605HPX), exchange aid kit

Type	Volume (litre)	Width (mm)	Opening max. (mm)	Number of teeth/tines	Self weight (kg)
Shells for heavy duty clamshell bucket – H 605HPX					
 H 605HPX-200S	200	400	1420	4	140
 H 605HPX-250S	250	500	1420	4	170
 H 605HPX-350S	350	650	1420	6	200
 H 605HPX-450S	450	800	1420	6	225
 H 605HPX-550S	550	1000	1420	8	265
Shells for heavy duty clamshell bucket for Z-cranes – H 605HPX-Z					
 H 605HPX-Z-240S	240	500	1420	-	180
 H 605HPX-Z-300S	300	650	1420	-	210
 H 605HPX-Z-370S	370	800	1420	-	235
H 605HPX-Z-460S	460	1000	1420	-	275
Shells for heavy duty clamshell bucket with open shells – H 605U HPX					
H 605U HPX-300S	300	670	1545	-	275
H 605U HPX-400S	400	820	1545	-	260
H 605U HPX-450S	450	920	1545	-	275
H 605U HPX-500S	500	1020	1545	-	335
Shells for heavy duty clamshell bucket with open shells for Z-cranes – H 605U HPX-Z					
H 605U HPX-Z-400S	400	820	1545	-	275
H 605U HPX-Z-450S	450	920	1545	-	285
H 605U HPX-Z-500S	500	1020	1545	-	300
H 605U HPX-Z-600S	600	1220	1545	-	335
Tines for heavy duty rock grapple – H 613HPX-HD					
H 613HPX-HD-0,35S	0,16 m ²	400	1705	-	135
Tines for heavy duty timber grapple – H 632HPX-HD					
H 632HPX-HD-0,16S	0,16 m ²	400	1290	-	90
Tines for heavy duty hay and forestry grapple – H 641HPX-HD					
H 641HPX-HD-0,4S	0,40 m ²	940	1720	7	195

HEAVY DUTY CLAMSHELL BUCKET WITH *HPXdrive* - H 605HPX

A powerful clamshell bucket with the *HPXdrive Heavy Duty* manages even difficult tasks thanks to its high closing force – ideal for digging and handling. The revolutionary *HPXdrive* technology guarantees a reliable and low maintenance attachment.

Reliability of the *HPXdrive*! The movement of the arms of the grapple is generated by two hollow shafts, which run opposed and have a helix thread, hydraulically driven by a single piston. No more hydraulic cylinders!

Longer life cycle up to 50%! **Self-lubrication:** The drive unit runs in a permanent oil bath. The compact design makes the *HPXdrive* resistant to dirt and debris.

Versatility with different types of shells that can easily be refitted onto the driving unit.

Profitability through low maintenance costs and longer life cycle.

Precise handling with the gear-type HYVA rotator and shells synchronised by the single piston turning both shafts of the *HPXdrive*.

Rotator with shaft is available as an alternative, in case a quick change to a non-rotating hook is favoured.

Constant closing force (30 kN at 32 MPa operating pressure) over the entire opening and closing process; high efficiency provided by hydro static bearings of the axes.



Packages clamshell bucket H 605HPX with HYVA flange rotator

Type	Volume (litre)	Width E (mm)	Height (w/rotator) (mm)	Opening A max. (mm)	Number of teeth	Self weight (kg)	Closing force (kN)	Load capacity (kg)
H 605HPX-200 c	200	400	1035	1420	4	335	30	3000
H 605HPX-250 c	250	500	1035	1420	4	360	30	3000
H 605HPX-350 c	350	650	1035	1420	6	390	30	3000
H 605HPX-450 c	450	800	1035	1420	6	420	30	3000
H 605HPX-550 c	550	1000	1035	1420	8	455	30	3000
Package consists of:	clamshell bucket, bolt-on teeth, rotator H 04 F140-30V, upper suspension H 501 (4500), non-return valve							
HPX-H 505 add	also available with a shaft rotator and quick change system H 505							
HPX-H 505 HD add	for heavy duty tasks we recommend the quick change system H 505 HD in combination with the HYVA rotator H 04 S68-30US							

Packages clamshell bucket H 605HPX/502 with HYVA shaft rotator and reduction link

Type	Volume (litre)	Width E (mm)	Height (w/rotator) (mm)	Opening A max. (mm)	Number of teeth	Self weight (kg)	Closing force (kN)	Load capacity (kg)
H 605HPX-200/502 c	200	400	1090	1420	4	340	30	3000
H 605HPX-250/502 c	250	500	1090	1420	4	365	30	3000
H 605HPX-350/502 c	350	650	1090	1420	6	395	30	3000
H 605HPX-450/502 c	450	800	1090	1420	6	425	30	3000
H 605HPX-550/502 c	550	1000	1090	1420	8	460	30	3000
Package consists of:	clamshell bucket, bolt-on teeth, rotator H 04 S, reduction link H 502 (4500), short connecting hoses H 203 01, upper suspension H 501 (4500), pressure relief valve, non-return valve							

Accessories

Type	Description
H 680 01	scraper
H 685 05	adapters for compression rails (load capacity max. 250 kg, without compression rails)
H 685 06 hook set 2	welded hooks (2 pieces)
H 685 07 set	wear plates to protect horizontal cutting edges (2 pieces)
H 685 08 HPX-450	extension for excavating e.g. trenches (for canal and civil engineering) – 450 mm (30 kg)
H 204 01	mobile part of hydraulic quick coupling for hose (Ø 10 mm, 2 pieces)
H 204 03	hydraulic quick change kit incl. mobile and fixed parts (2 pc. each) mounted to rotator

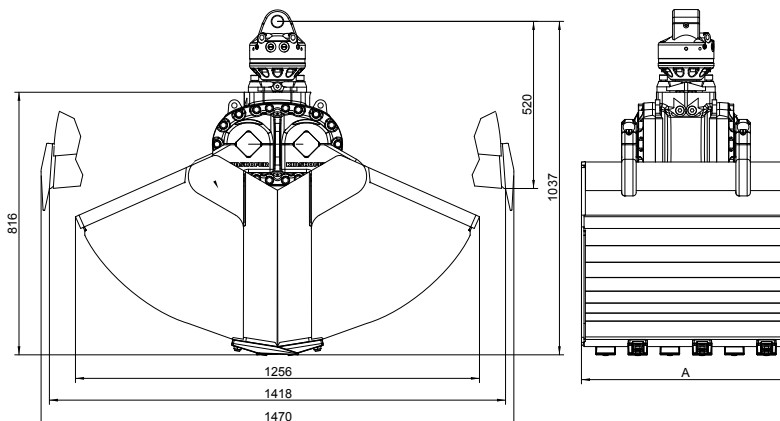
Requirements of truck crane

Operating pressure at oil flow:

max. 32 MPa (320 bar) at 40 - max. 90 l/min

⚠ Mind the pressure!

Technical drawings



HD CLAMSHELL BUCKET W / *HPXdrive* for Z-cranes - H 605HPX-Z

The H 605 HPX-Z universal grapple with integrated flap rests flat and safe against the crane arm in its transport position. The special flap at the shell carrier allows to transport a large universal grapple, whereat the grapple does not protrude the carrier machine's width (2,55 m)* – without any loss in loading volume. The flap is secured automatically by a robust pressure piece with rubber bump.

Reliability of the *HPXdrive*. The movement of the arms of the grapple is generated by two hollow shafts, which run opposed and have a helix thread, hydraulically driven by a single piston. No more hydraulic cylinders!

Longer life cycle up to 50%! **Self-lubrication:** The drive unit runs in a permanent oil bath. The compact design makes the *HPXdrive* resistant to dirt and debris.

Profitability through low maintenance costs and longer life cycle.

Versatility with different types of shells that can easily be refitted onto the driving unit.

Precise handling with the gear-type HYVA rotator and shells synchronised by the single piston turning both shafts of the *HPXdrive*.

Constant closing force (34 kN at 32 MPa operating pressure) over the entire opening and closing process; high efficiency provided by hydro static bearings of the axes.



Packages clamshell bucket H 605HPX-Z with HYVA flange rotator

Type	Volume (litre)	Width E (mm)	Height (mm)	Opening A max. (mm)	Self weight (kg)	Closing force (kN)	Load capacity (kg)
H 605HPX-Z-240 c	240	500	1010	1420	370	34	3000
H 605HPX-Z-300 c	300	650	1010	1420	400	34	3000
H 605HPX-Z-370 c	370	800	1010	1420	430	34	3000
H 605HPX-Z-460 c	460	1000	1010	1420	465	34	3000
Package consists of:	clamshell bucket, bolt-on teeth, rotator H 04 F140-30V, upper suspension H 501 (4500), non-return valve						
HPX-H 505 add	also available with a shaft rotator and quick change system H 505						
HPX-H 505 HD add	for heavy duty tasks we recommend the quick change system H 505 HD in combination with the HYVA rotator H 04 S68-30US						

Packages clamshell bucket H 605HPX-Z/502 with HYVA shaft rotator and reduction link

Type	Volume (litre)	Width E (mm)	Height (mm)	Opening A max. (mm)	Self weight (kg)	Closing force (kN)	Load capacity (kg)
H 605HPX-Z-240/502 c	240	500	1065	1545	375	34	3000
H 605HPX-Z-300/502 c	300	650	1065	1545	405	34	3000
H 605HPX-Z-370/502 c	370	800	1065	1545	435	34	3000
H 605HPX-Z-460/502 c	460	1000	1065	1545	465	34	3000
Package consists of:	clamshell bucket, bolt-on teeth, rotator H 04 F140-30V, upper suspension H 501 (4500), non-return valve						

Accessories

Type	Description
H 685 05	adapters for compression rails (load capacity max. 250 kg, without compression rails)
H 685 06 hook set 2	welded hooks (2 pieces)
H 685 07 set	wear plates to protect horizontal cutting edges (2 pieces)
H 204 01	mobile part of hydraulic quick coupling for hose (Ø 10 mm, 2 pieces)
H 204 03	hydraulic quick change kit incl. mobile and fixed parts (2 pc. each) mounted to rotator

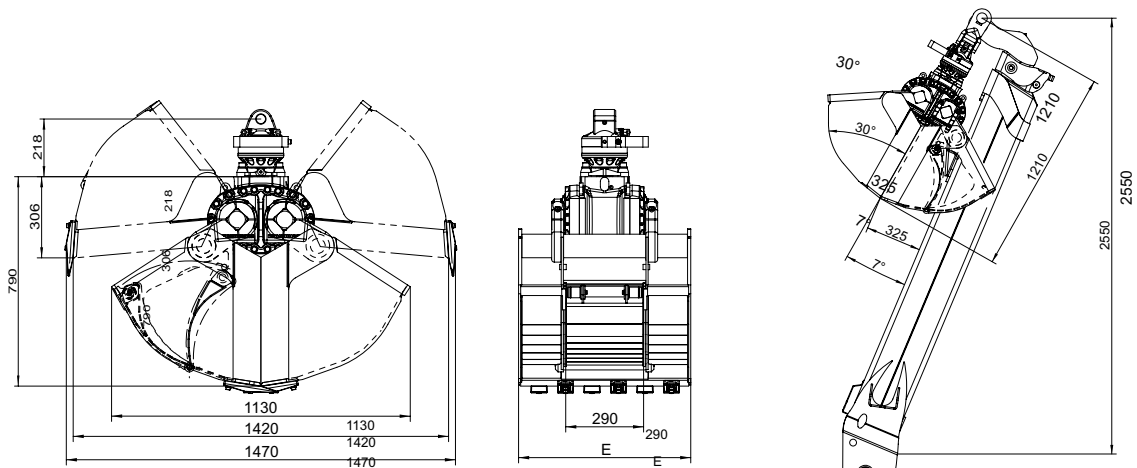
Requirements of truck crane

Operating pressure at oil flow:

max. 32 MPa (320 bar) at 40 - max. 90 l/min

⚠ Mind the pressure!

Technical drawings



HD UNIVERSAL BUCKET WITH *HPXdrive* - H 605U HPX

The H 605U HPX is a powerful clamshell bucket using the **HPXdrive Heavy Duty** for handling and easy digging tasks. The open shells enable the handling of bulky materials. Non-return valve, welded hooks and reversible wear plates are delivered on each grapple. The revolutionary **HPXdrive** technology guarantees a reliable and low maintenance attachment.

Reliability of the **HPXdrive!** The movement of the arms of the grapple is generated by two hollow shafts, which run opposed and have a helix thread, hydraulically driven by a single piston. No more hydraulic cylinders!

Longer life cycle up to 50%! **Self-lubrication:** The drive unit runs in a permanent oil bath. The compact design makes the **HPXdrive** resistant to dirt and debris.

Versatility with different types of shells that can easily be refitted onto the driving unit. **Profitability** through low maintenance costs and longer life cycle.

Precise handling with the gear-type HYVA rotator and shells synchronised by the single piston turning both shafts of the **HPXdrive**.

Rotator with shaft is available as an alternative, in case a quick change to a non-rotating hook is favoured.

Constant closing force (28 kN at 32 MPa operating pressure) over the entire opening and closing process; high efficiency provided by hydro static bearings of the axes.



Packages clamshell bucket H 605U HPX with HYVA flange rotator

Type	Volume (litre)	Width E (mm)	Height (mm)	Opening A max. (mm)	Self weight (kg)	Closing force (kN)	Load capacity (kg)
H 605U HPX-300 c	300	670	1115	1545	430	28	3000
H 605U HPX-400 c	400	820	1115	1545	455	28	3000
H 605U HPX-450 c	450	920	1115	1545	470	28	3000
H 605U HPX-500 c	500	1020	1115	1545	485	28	3000
Package consists of:	clamshell bucket, rotator H 04 F140-30V, upper suspension H 501 (4500), wear plates H 685 07 set, welded hooks H 685 06 hook set 2, non-return valve						
HPX-H 505 add	also available with a shaft rotator and quick change system H 505						
HPX-H 505 HD add	for heavy duty tasks we recommend the quick change system H 505 HD in combination with the HYVA rotator H 04 S68-30US						

Packages clamshell bucket H 605U HPX/502 with HYVA shaft rotator and reduction link

Type	Volume (litre)	Width E (mm)	Height (mm)	Opening A max. (mm)	Self weight (kg)	Closing force (kN)	Load capacity (kg)
H 605U HPX-300/502 c	300	670	1170	1545	435	28	3000
H 605U HPX-400/502 c	400	820	1170	1545	460	28	3000
H 605U HPX-450/502 c	450	920	1170	1545	475	28	3000
H 605U HPX-500/502 c	500	1020	1170	1545	490	28	3000
Package consists of:	clamshell bucket, rotator H 04 S, reduction link H 502 (4500), short connecting hoses, H 203 01, upper suspension H 501 (4500), wear plates H 685 07, welded hooks H 685 06 hook set 2, non-return valve						

Accessories

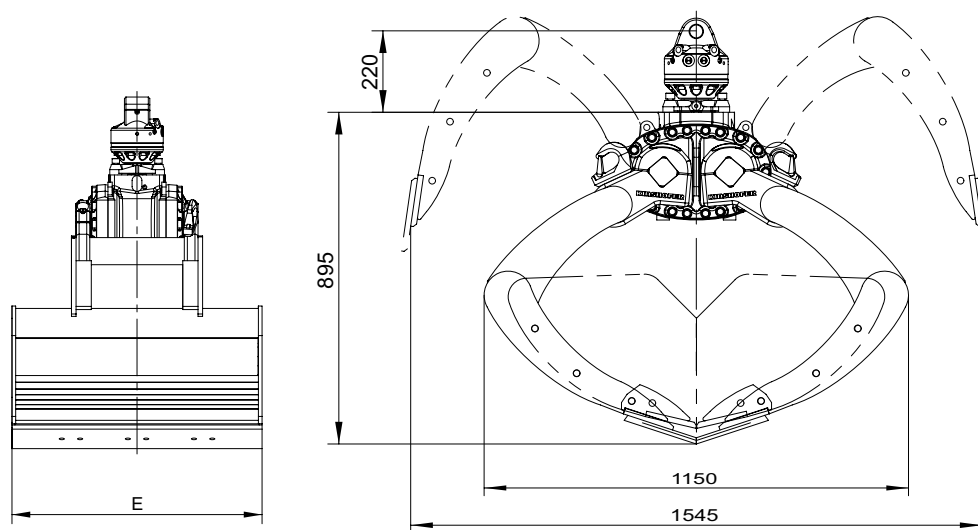
Type	Description
H 685 05	adapters for compression rails (load capacity max. 250 kg, without compression rails)
H 381 09 (720)	compression rails – length 720 mm (2 pieces)
H 381 09 (1000)	compression rails – length 1000 mm (2 pieces)
H 685 09 C	side plates to screw onto the grapple for easy digging tasks (4 pieces)
H 204 01	mobile part of hydraulic quick coupling for hose (Ø 10 mm, 2 pieces)
H 204 03	hydraulic quick change kit incl. mobile and fixed parts (2 pc. each) mounted to rotator

Requirements of truck crane

Operating pressure at oil flow:

max. 32 MPa (320 bar) at 40 - max. 90 l/min

⚠ Mind the pressure!



HD UNIVERSAL BUCKET W/ *HPXdrive* Z-cranes - H 605U HPX-Z

The H 605U HPX-Z universal grapple with integrated flap rests flat and safe against the crane arm in its transport position. The special flap at the shell carrier allows to transport a large universal grapple, whereat the grapple does not protrude the carrier machine's width (2,55 m)*, without any loss in loading volume. The flap is secured automatically by a robust pressure piece with rubber bump.

Reliability of the *HPXdrive*. The movement of the arms of the grapple is generated by two hollow shafts, which run opposed and have a helix thread, hydraulically driven by a single piston. No more hydraulic cylinders!

Longer life cycle up to 50%! **Self-lubrication:** The drive unit runs in a permanent oil bath. The compact design makes the *HPXdrive* resistant to dirt and debris.

Profitability through low maintenance costs and longer life cycle.

Versatility by different types of shells that can easily be refitted onto the driving unit.

Constant closing force (28 kN at 32 MPa operating pressure) over the entire opening and closing process; high efficiency provided by hydro static bearings of the axes.

Precise handling with the gear-type HYVA rotator and shells synchronised by the single piston



Packages clamshell bucket H 605U HPX-Z with HYVA flange rotator

Type	Volume (litre)	Width E (mm)	Height (mm)	Opening A max. (mm)	Self weight (kg)	Closing force (kN)	Load capacity (kg)
H 605U HPX-Z-400 c	400	820	1145	1545	465	28	3000
H 605U HPX-Z-450 c	450	920	1145	1545	480	28	3000
H 605U HPX-Z-500 c	500	1020	1145	1545	495	28	3000
H 605U HPX-Z-600 c	600	1220	1145	1545	525	28	3000
Package consists of:	clamshell bucket, rotator H 04 F140-30V, upper suspension H 501 (4500), wear plates H 685 07 set, welded hooks H 685 06 hook set 2, non-return valve						
HPX-H 505 add	also available with a shaft rotator and quick change system H 505						
HPX-H 505 HD add	for heavy duty tasks we recommend the quick change system H 505 HD in combination with the HYVA rotator H 04 S68-30US						

Packages clamshell bucket H 605U HPX-Z/502 with HYVA shaft rotator and reduction link

Type	Volume (litre)	Width E (mm)	Height (mm)	Opening A max. (mm)	Self weight (kg)	Closing force (kN)	Load capacity (kg)
H 605U HPX-Z-400/502 c	400	820	1215	1545	470	28	3000
H 605U HPX-Z-450/502 c	450	920	1215	1545	485	28	3000
H 605U HPX-Z-500/502 c	500	1020	1215	1545	500	28	3000
H 605U HPX-Z-600/502 c	600	1220	1215	1545	530	28	3000
Package consists of:	clamshell bucket, rotator H 04 S, reduction link H 502 (4500), short connecting hoses, H 203 01, upper suspension H 501 (4500), wear plates H 685 07, welded hooks H 685 06 hook set 2, non-return valve						

Accessories

Type	Description
H 685 06 hook set 2	welded hooks (2 pieces)
H 685 09 C	side plates to screw onto the grapple for easy digging tasks (4 pieces)
H 204 01	mobile part of hydraulic quick coupling for hose (Ø 10 mm, 2 pieces)
H 204 03	hydraulic quick change kit incl. mobile and fixed parts (2 pc. each) mounted to rotator

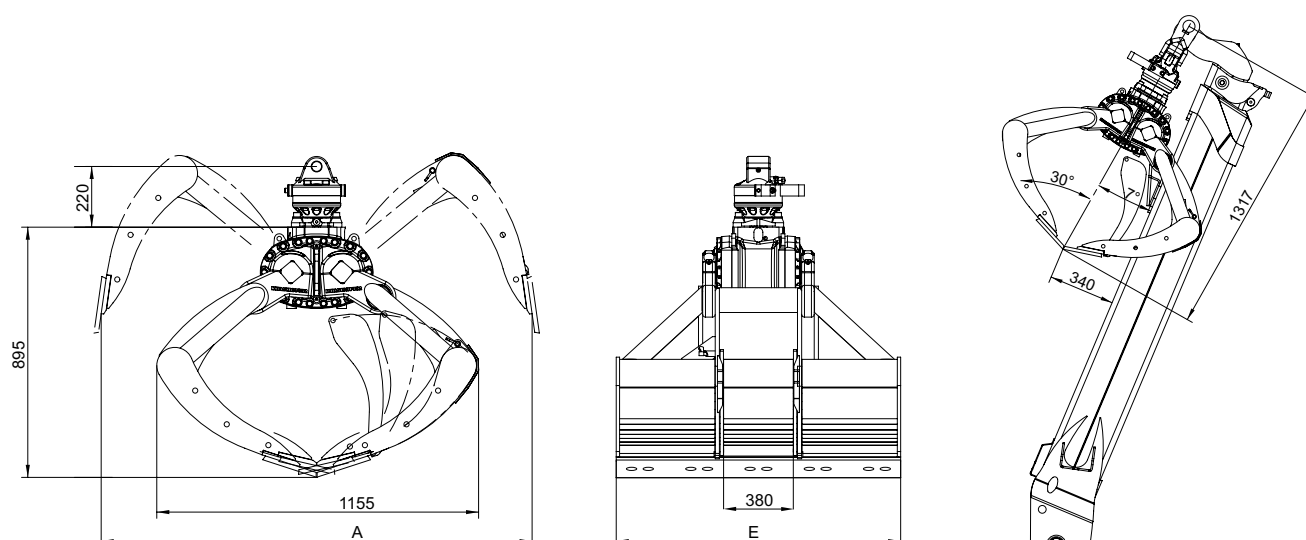
Requirements of truck crane

Operating pressure at oil flow:

max. 32 MPa (320 bar) at 40 - max. 90 l/min

⚠ Mind the pressure!

Technical drawings



HEAVY DUTY ROCK GRAPPLE WITH *HPXdrive* - H 613HPX-HD

The H 613HPX-HD with *HPXdrive Heavy Duty* for positioning and handling natural stones, curbstones etc. A non-return valve secures constant pressure even in case of unexpected pressure drop. The revolutionary *HPXdrive* technology guarantees a reliable and low maintenance attachment.

Reliability of the *HPXdrive*! The movement of the arms of the grapple is generated by two hollow shafts, which run opposed and have a helix thread, hydraulically driven by a single piston. No more hydraulic cylinders!

Longer life cycle up to 50%! **Self-lubrication:** The drive unit runs in a permanent oil bath. The compact design makes the *HPXdrive* resistant to dirt and debris.

Versatility with different types of shells that can easily be refitted onto the driving unit.

Profitability through low maintenance costs and longer life cycle.

Precise handling with the gear-type HYVA rotator and shells synchronised by the single piston turning both shafts of the *HPXdrive*.

Rotator with shaft is available as an alternative, in case a quick change to a nonrotating hook is favoured.

Constant closing force (22 kN at 32 MPa operating pressure) over the entire opening and closing process; high efficiency provided by hydro static bearings of the axes.



Package rock grapple H 613HPX-HD with HYVA flange rotator

Type	Capacity (m ²)	Width E (mm)	Height C (mm)	Opening A max. (mm)	Self weight (kg)	Closing force (kN at 32 MPa)	Load capacity (kg)
H 613HPX-HD-0.35 c	0,35	400	1260	1710	335	22	2000
Package consists of:	rock grapple, rotator H 04 F140-30V, upper suspension H 501 (4500), non-return valve						
HPX-H 505 add	also available with a shaft rotator and quick change system H 505						
HPX-H 505 HD add	for heavy duty tasks we recommend the quick change system H 505 HD in combination with the HYVA rotator H 04 S68-30US						

Package rock grapple H 613HPX-HD/502 with HYVA shaft rotator and reduction link

Type	Capacity (m ²)	Width E (mm)	Height C (mm)	Opening A max. (mm)	Self weight (kg)	Closing force (kN at 32 MPa)	Load capacity (kg)
H 613HPX-HD-0.35 c	0,35	400	1315	1710	340	22	2000
Package consists of:	rock grapple, rotator H 04 S, reduction link H 502 (4500), short connecting hoses H 203 01, upper suspension H 501 (4500), non-return valve						


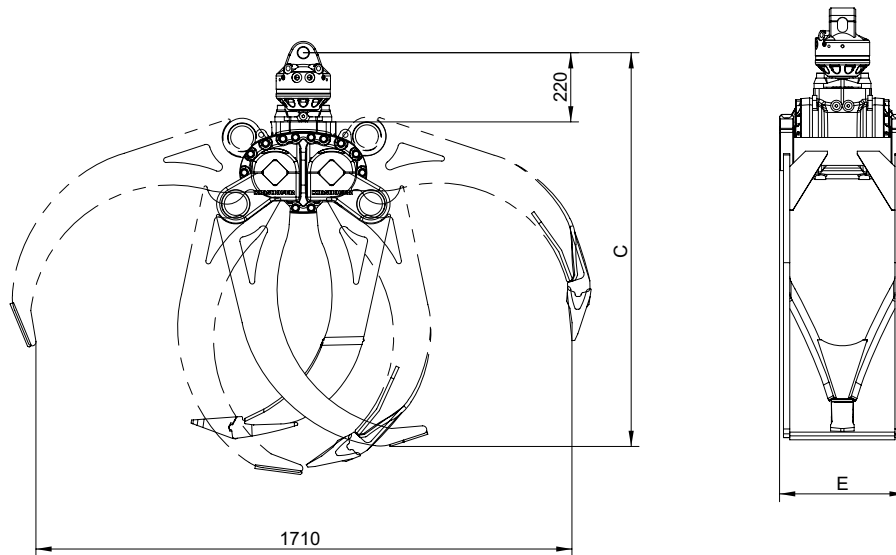
Accessories

Type	Description
H 685 06 hook set 2	welded hooks (2 pieces)
H 204 01	mobile part of hydraulic quick coupling for hose (Ø 10 mm, 2 pieces)
H 204 01	hydraulic quick change kit incl. mobile and fixed parts (2 pc. each) mounted to rotator

Requirements of truck crane

Operating pressure at oil flow:

max. 32 MPa (320 bar) at 40 - max. 90 l/min

 Mind the pressure!**Technical drawings**

HEAVY DUTY TIMBER GRAPPLE WITH *HPXdrive* - H 632HPX-HD

The H 632HPX with *HPXdrive Heavy Duty* for loading short logs, shrubbery, branches etc. A non-return valve secures constant pressure even in case of unexpected pressure drop. The revolutionary *HPXdrive* technology guarantees a reliable and low maintenance attachment.

Reliability of the *HPXdrive*: The movement of the arms of the grapple is generated by two hollow shafts, which run opposed and have a helix thread, hydraulically driven by a single piston. No more hydraulic cylinders!

Longer life cycle up to 50%! **Self-lubrication**: The drive unit runs in a permanent oil bath. The compact design makes the *HPXdrive* resistant to dirt and debris.

Versatility with different types of shells that can easily be refitted onto the driving unit.

Profitability through low maintenance costs and longer life cycle.

Precise handling with the gear-type HYVA rotator and shells synchronised by the single piston turning both shafts of the *HPXdrive*.

Rotator with shaft is available as an alternative, in case a quick change to a nonrotating hook is favoured.

Constant closing force (31 kN at 32 MPa operating pressure) for the entire opening and closing process; high efficiency provided by hydro static bearings of the axes.



Package timber grapple H 632HPX-HD with HYVA flange rotator

Type	Capacity (m ²)	Width E (mm)	Height C (mm)	Log-Ø D min. (mm)	Opening A max. (mm)	Self weight (kg)	Closing force (kN at 32 MPa)	Load capacity (kg)
H 632HPX-HD-0.16 c	0,16	400	1010	170	1290	285	31	2000

Package consists of: timber grapple, rotator H 04 F140-30V, upper suspension H 501 (4500), non-return valve

HPX-H 505 add also available with a shaft rotator and quick change system H 505

HPX-H 505 HD add for heavy duty tasks we recommend the quick change system H 505 HD in combination with the HYVA rotator H 04 S68-30US

Package timber grapple H 632HPX-HD/502 with HYVA shaft rotator and reduction link

Type	Capacity (m ²)	Width E (mm)	Height C (mm)	Log-Ø D min. (mm)	Opening A max. (mm)	Self weight (kg)	Closing force (kN at 32 MPa)	Load capacity (kg)
H 632HPX-HD-0.16/502 c	0,16	400	1065	170	1290	290	31	2000

Package consists of: timber grapple, rotator H 04 S, reduction link H 502 (4500), short connecting hoses H 203 01, upper suspension H 501 (4500), non-return valve


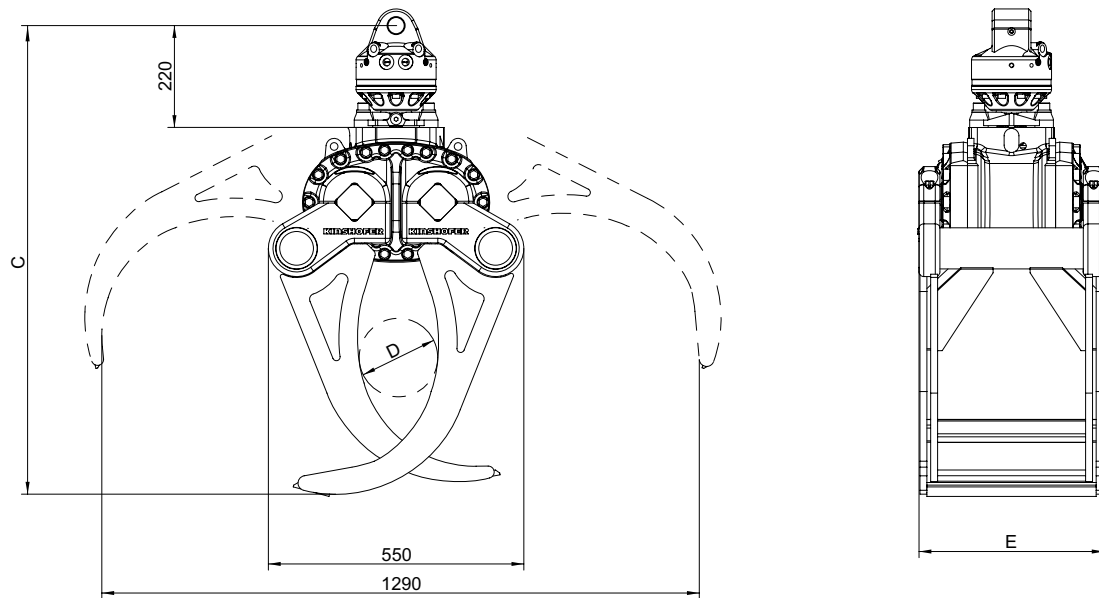
Accessories

Type	Description
H 204 01	mobile part of hydraulic quick coupling for hose (Ø 10 mm, 2 pieces)
H 204 03	hydraulic quick change kit incl. mobile and fixed parts (2 pc. each) mounted to rotator

Requirements of truck crane

Operating pressure at oil flow:

max. 32 MPa (320 bar) at 40 - max. 90 l/min

 Mind the pressure!**Technical drawings**

HD HAY AND FORESTRY GRAPPLE WITH *HPXdrive* - H 641HPX-HD

The hay and forestry grapple H 641HPX-HD using the *HPXdrive Heavy Duty* is ideal for handling hay, brushwood, compost or manure – often used for municipal operations and road work. The revolutionary *HPXdrive* technology guarantees a reliable and low maintenance attachment.

Reliability of the *HPXdrive*! The movement of the arms of the grapple is generated by two hollow shafts, which run opposed and have a helix thread, hydraulically driven by a single piston. No more hydraulic cylinders!

Longer life cycle up to 50%! **Self-lubrication:** The drive unit runs in a permanent oil bath. The compact design makes the *HPXdrive* resistant to dirt and debris.

Versatility with different types of shells that can easily be refitted onto the driving unit.

Profitability through low maintenance costs and longer life cycle.

Precise handling with the gear-type HYVA rotator and shells synchronised by the single piston turning both shafts of the *HPXdrive*.

Rotator with shaft is available as an alternative, in case a quick change to a non-rotating hook is favoured.

Constant closing force (23 kN at 32 MPa operating pressure) over the entire opening and closing process; high efficiency provided by hydro static bearings of the axes.



Package hay and forestry grapple H 641HPX-HD with HYVA flange rotator

Type	Capacity (m ²)	Width E (mm)	Height C (mm)	Opening A max. (mm)	Number of tines	Self weight (kg)	Closing force (kN at 32 MPa)	Load capacity (kg)
H 641HPX-HD-0.4 c	0,40	940	1200	1720	7	390	23	2000

Package consists of: hay & forestry grapple, rotator H 04 F140-30V, upper suspension H 501 (4500), non-return valve

HPX-H 505 add also available with a shaft rotator and quick change system H 505

HPX-H 505 HD add for heavy duty tasks we recommend the quick change system H 505 HD in combination with the HYVA rotator H 04 S68-30US

Package hay and forestry grapple H 641HPX-HD/502 with HYVA shaft rotator and reduction link

Type	Capacity (m ²)	Width E (mm)	Height C (mm)	Opening A max. (mm)	Number of tines	Self weight (kg)	Closing force (kN at 32 MPa)	Load capacity (kg)
H 641HPX-HD-0.4/502 c	0,40	940	1255	1720	7	395	23	2000

Package consists of: hay and forestry grapple, rotator H 04 S, reduction link H 502 (4500), short connecting hoses H 203 01, upper suspension H 501 (4500), non-return valve


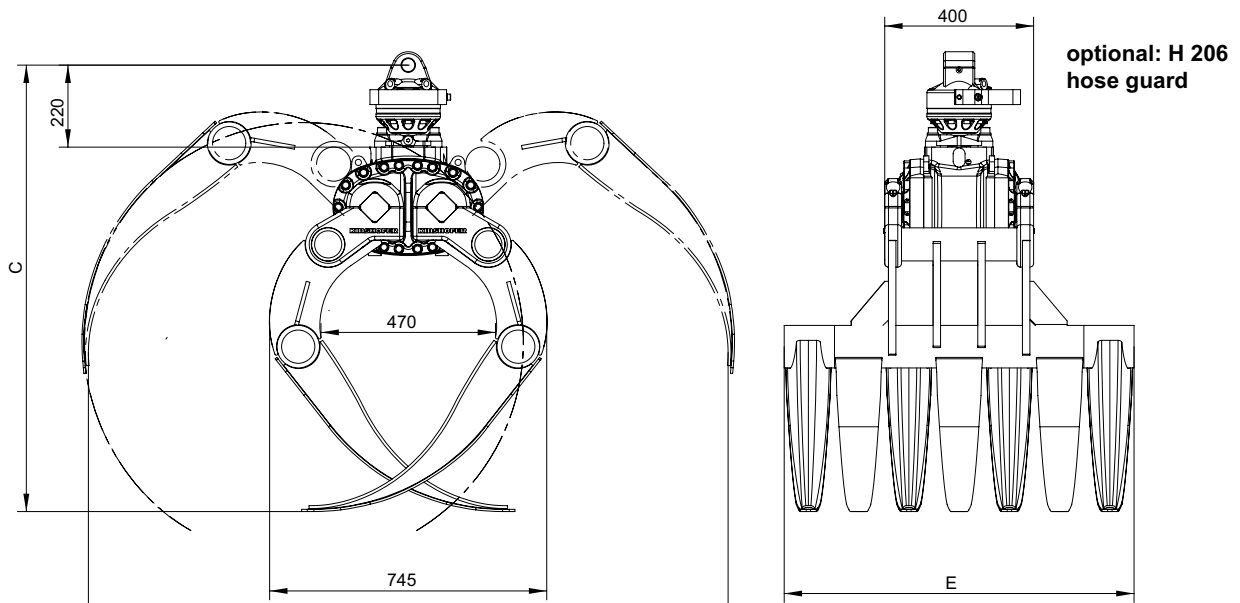
Accessories

Type	Description
H 204 01	mobile part of hydraulic quick coupling for hose (Ø 10 mm, 2 pieces)
H 204 03	hydraulic quick change kit incl. mobile and fixed parts (2 pc. each) mounted to rotator

Requirements of truck crane

Operating pressure at oil flow:

max. 32 MPa (320 bar) at 40 - max. 90 l/min

 Mind the pressure!**Technical drawings**

SMALL CLAMSHELL BUCKET W/HORIZONTAL CYLINDERS - H 626

The H 626 is the ideal solution for light weight loader cranes in daily routine work – robust, effective, budget priced.

Maximum loading height is achieved through the compact design with the horizontal double-cylinder.

Synchronized opening and closing through sturdy compensation bar.

Bolt-on digging teeth are delivered with each clamshell bucket.

Good digging behaviour through the closely positioned shell pivots.

Excellent digging characteristics are a result of high closing forces (27 kN at 26 MPa operating pressure).

Long life is ensured through the use of 500 HB steel in the manufacture of the cutting edges.

Reduced wear out due to a generously dimensioned bearing system; service-friendly design.



Packages clamshell bucket H 626 c

Type	Volume (litre)	Width E (mm)	Opening A max. (mm)	Number of teeth	weight (kg)	Closing force (kN at 32 MPa)	capacity (kg)
H 626-95 c	95	400	825	4	125	27	3000
H 626-100 c	100	450	825	4	130	27	3000
Package consists of:	clamshell bucket, bolt-on teeth, rotator H 04 F, short connecting hoses H 203 01, upper suspension H 501 (4500), non-return valve						


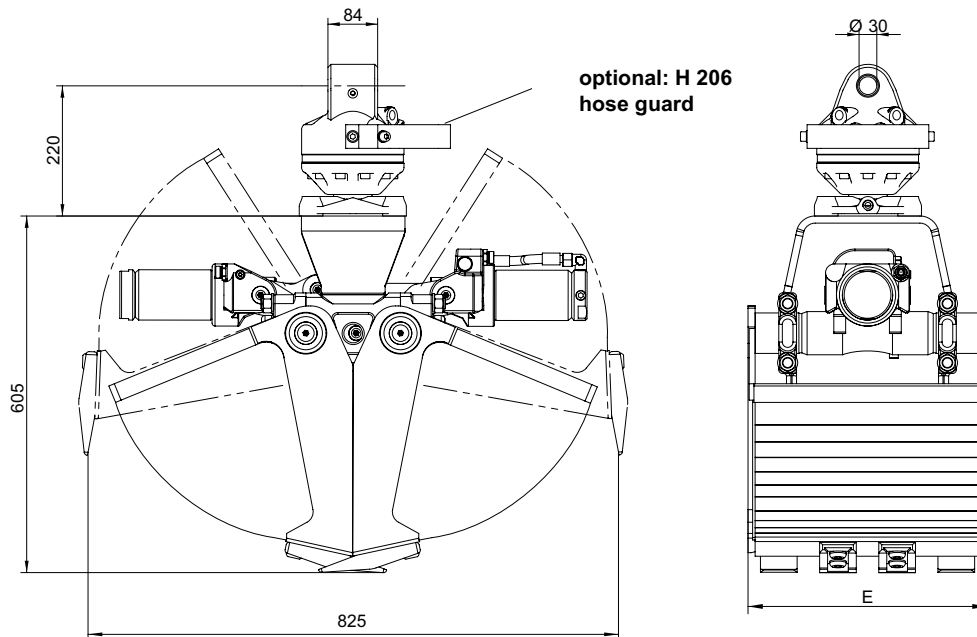
Accessories

Type	Description
H 04 F	recommended HYVA rotator for H 626
H 03 S	HYVA shaft rotator for precise positioning of the load – up to 3000 kg load capacity
H 04 S	HYVA shaft rotator for precise positioning of the load – up to 4500 kg load capacity
H 04 S68-30US	recommended HYVA shaft rotator for heavy duty tasks – up to 4500 kg load capacity
H 505	quick change system for shaft-type rotator H 04 S
H 505 HD	quick change system HD for shaft-type rotator H 04 S68-30US
H 502 (3000)	reduction link between rotator and grapple for H 03 S
H 502 (4500)	reduction link between rotator and grapple for H 04 S
H 680 02	scraper
H 685 06 hook set 2	welded hooks (2 pieces)
H 685 06 eye set 2	welded eyes (2 pieces)
H 685 07 set	wear plates to protect horizontal cutting edges (2 pieces)

Requirements of truck crane

Operating pressure at oil flow:

max. 32 MPa (320 bar) at 40 - max. 90 l/min

 Mind the pressure!**Technical drawings**

CLAMSHELL BUCKET WITH HORIZONTAL CYLINDER - H 604

The H 604 is the ideal solution for light weight loader cranes in daily routine work – robust, effective, budget priced.

Maximum loading height is achieved through the compact design with the horizontal hydraulic cylinder.

Long life is ensured through the use of 500 HB steel in the manufacture of the cutting edges and a generously dimensioned bearing system.

Synchronized opening and closing through sturdy compensation bar.

Bolt-on digging teeth are delivered with each clamshell bucket.

Excellent digging characteristics are a result of high closing forces (20 kN at 26 MPa operating pressure).



Packages clamshell bucket H 604 c

Type	Volume (litre)	Width E (mm)	Opening A max. (mm)	Number of teeth	weight (kg)	Closing force (kN at 32 MPa)	capacity (kg)
H 604-250 c	250	500	1390	5	255	20	3000
H 604-350 c	350	650	1390	5	275	20	3000
H 604-450 c	450	800	1390	9	310	20	3000

Package consists of: clamshell bucket, bolt-on teeth, rotator H 04 F, short connecting hoses H 203 01, upper suspension H 501 (4500), non-return valve


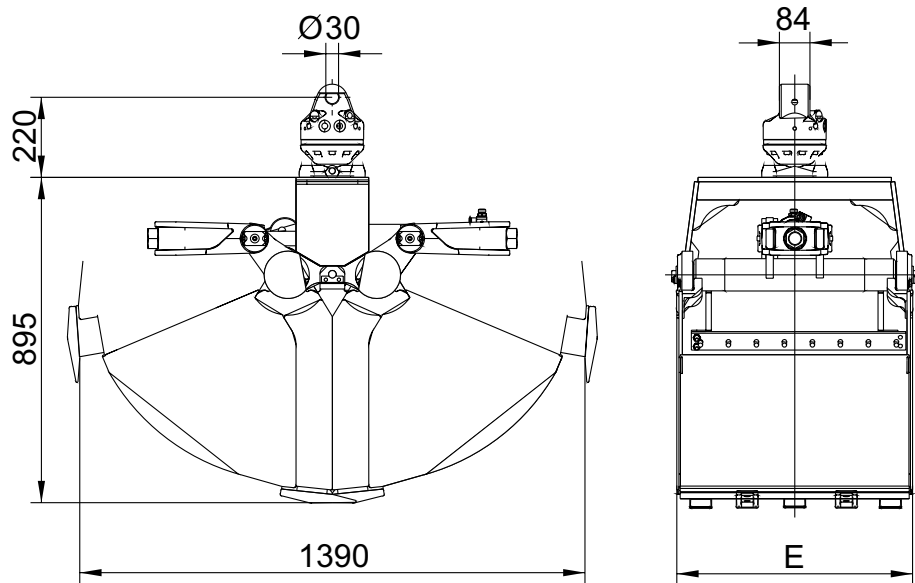
Accessories

Type	Description
H 04 F	recommended HYVA rotator for H 626
H 03 S	HYVA shaft rotator for precise positioning of the load – up to 3000 kg load capacity
H 04 S	HYVA shaft rotator for precise positioning of the load – up to 4500 kg load capacity
H 04 S68-30US	recommended HYVA shaft rotator for heavy duty tasks – up to 4500 kg load capacity
H 505	quick change system for shaft-type rotator H 04 S
H 505 HD	quick change system HD for shaft-type rotator H 04 S68-30US
H 502 (3000)	reduction link between rotator and grapple for H 03 S
H 502 (4500)	reduction link between rotator and grapple for H 04 S
H 680 02	scraper
H 685 06 hook set 2	welded hooks (2 pieces)
H 685 06 eye set 2	welded eyes (2 pieces)
H 685 07 set	wear plates to protect horizontal cutting edges (2 pieces)

Requirements of truck crane

Operating pressure at oil flow:

max. 32 MPa (320 bar) at 40 - max. 90 l/min

 Mind the pressure!**Technical drawings**

HD CLAMSHELL BUCKET WITH HORIZONTAL CYLINDER - H 605

The rugged clamshell bucket H 605 is recognized as successful synthesis of form, function and performance.

Maximum loading height is achieved through the compact design with the horizontal hydraulic cylinder.

Long life is ensured through the use of 500 HB steel in the manufacture of the cutting edges and a generously dimensioned bearing system.

Synchronized opening and closing through sturdy compensation bar.

Bolt-on digging teeth are delivered with each clamshell bucket.

Excellent digging characteristics are a result of high closing forces (30 kN at 26 MPa operating pressure).



Packages clamshell bucket H 605 c

Type	Volume (litre)	Width E (mm)	Opening A max. (mm)	Number of teeth	weight (kg)	Closing force (kN at 32 MPa)	capacity (kg)
H 605-250 c	250	500	1430	3	320	30	3000
H 605-350 c	350	650	1430	5	345	30	3000
Package consists of:	clamshell bucket, bolt-on teeth, rotator H 04 F, short connecting hoses H 203 01, upper suspension H 501 (4500), non-return valve						

Packages clamshell bucket H 605 c

Type	Volume (litre)	Width E (mm)	Opening A max. (mm)	Number of teeth	weight (kg)	Closing force (kN at 32 MPa)	capacity (kg)
H 605-200	200	400	1430	3	265	30	3000
H 605-250	250	500	1430	5	285	30	3000
H 605-350	350	650	1430	5	310	30	3000
H 605-450	450	800	1430	9	340	30	3000
H 605-550	550	1000	1430	9	375	30	3000
H 605-650	650	1200	1430	9	410	30	3000

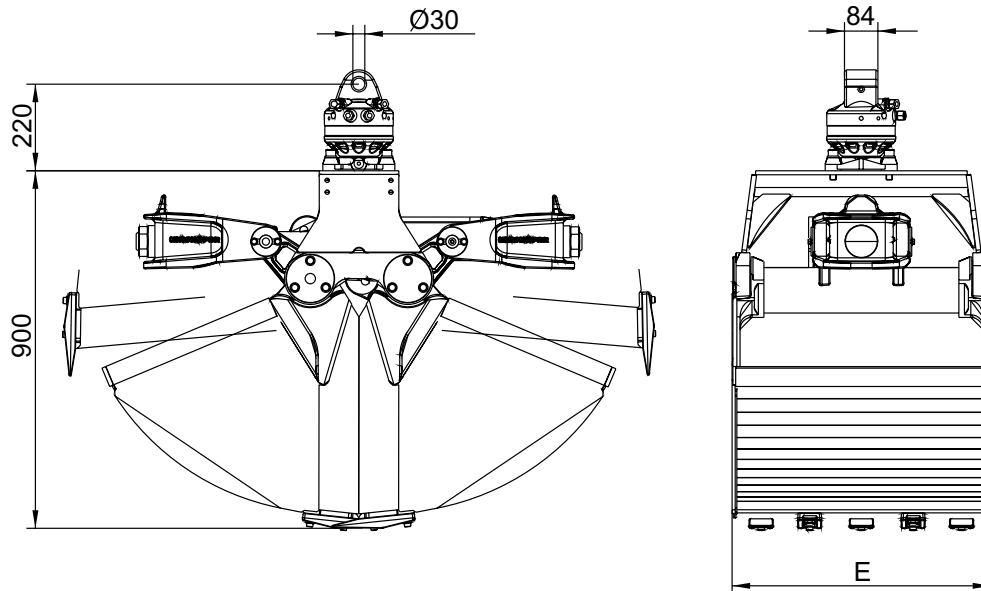
Accessories

Type	Description
H 04 F	recommended HYVA rotator for H 605
H 04 S	HYVA shaft rotator for precise positioning of the load – up to 4500 kg load capacity
H 04 S68-30US	recommended HYVA shaft rotator for heavy duty tasks – up to 4500 kg load capacity
H 505 HD	quick change system HD for shaft-type rotator H 04 S68-30US
H 502 (4500)	reduction link between rotator and grapple
H 680 01	scraper
H 685 06 hook set 2	welded hooks (2 pieces)
H 685 06 eye set 2	welded eyes (2 pieces)
H 685 07 set	wear plates to protect horizontal cutting edges (2 pieces)
H 685 05	adapters for compression rails (Load capacity max. 250 kg, without compression rails)

Requirements of truck crane

Operating pressure at oil flow:

26 - 32 MPa (260 - 320 bar) at 40 - max. 75 l/min

Technical drawings

REINFORCED CLAMSHELL BUCKET W/HORIZONTAL CYLINDER - H606

The rugged clamshell bucket H 606 is the reinforced version of the H 605. The cutting edges, shells and shell frame are reinforced.

Maximum loading height is achieved through the compact design with the horizontal hydraulic cylinder.

Long life is ensured through the use of 500 HB steel in the manufacture of the cutting edges and a generously dimensioned bearing system.

Synchronized opening and closing through sturdy compensation bar.

Bolt-on digging teeth are delivered with each clamshell bucket.

Excellent digging characteristics are a result of high closing forces (30 kN at 26 MPa operating pressure).



Heavy Duty clamshell bucket H 606 incl. teeth

Type	Volume (litre)	Width E (mm)	Opening A max. (mm)	Number of teeth	self weight (kg)	Closing force (kN at 32 MPa)	Load capacity (kg)
H 606-200	200	400	1430	3	315	30	3000
H 606-250	250	500	1430	5	335	30	3000
H 606-350	350	650	1430	5	365	30	3000

Accessories

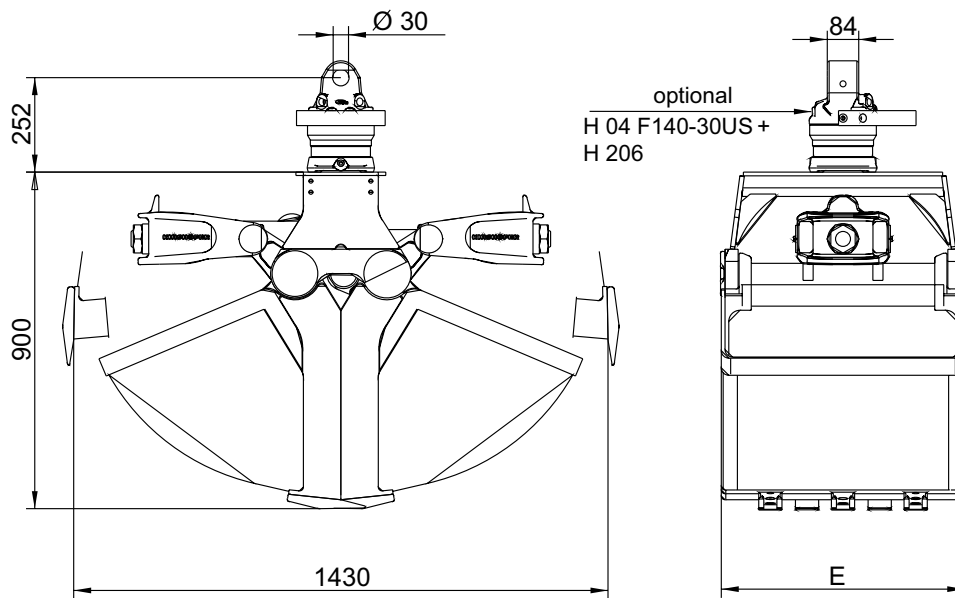
Type	Description
H 04 F	recommended HYVA rotator for H 606 – depending on application
H 06 F140-40	recommended HYVA rotator for H 606 – depending on application
H 04 S	HYVA shaft rotator for precise positioning of the load – up to 4500 kg load capacity
H 04 S68-30US	recommended HYVA shaft rotator for heavy duty tasks – up to 4500 kg load capacity
H 505 HD	quick change system HD for shaft-type rotator H 04 S68-30US
H 502 (4500)	reduction link between rotator and grapple
H 680 01	scraper
H 685 06 hook set 2	welded hooks (2 pieces)
H 685 06 eye set 2	welded eyes (2 pieces)
H 685 07 set	wear plates to protect horizontal cutting edges (2 pieces)
H 685 05	adapters for compression rails (Load capacity max. 250 kg, without compression rails)
H 381 09 (720)	compression rails – length 720 mm (2 pieces)
H 381 09 (1000)	compression rails – length 1000 mm (2 pieces)
H 203 01	short connecting hoses

Requirements of truck crane

Operating pressure at oil flow:

26 - 32 MPa (260 - 320 bar) at 40 - max. 75 l/min

Technical drawings



UNIVERSAL BUCKET WITH HORIZONTAL CYLINDER - H 605U

The H 605U is a robust clamshell bucket and versatile tool for handling all kinds of refuse material. The open sides of the grapple enables the grab of bulk material.

Compact design with a horizontal hydraulic cylinder achieves a maximum loading height. **Long life** due to the use of 500 HB steel in the manufacture of the cutting edges and a generously dimensioned bearing system.

Synchronized opening and closing through sturdy compensation bar.

Safety is assured in the event of an unexpected pressure drop due to the integrated non-return valve.

Wear plates (reversible) and **welded hooks** are delivered on each grapple.

Powerfull operation due to high closing force (28 kN at an operating pressure of 26 MPa).



Packages clamshell bucket H 605U c

Type	Volume (litre)	Width E (mm)	Opening A max. (mm)	Number of teeth	self weight (kg)	Closing force (kN at 32 MPa)	Load capacity (kg)
H 605U-300 c	300	670	1545	5	390	28	3000
H 605U-400 c	400	500	1430	5	335	30	3000
Package consists of:	clamshell bucket, rotator H 04 F, upper suspension H 501 (4500), wear plates H 685 07 set, welded hooks H 685 06 hook set 2, short connecting hoses H 203 01, non-return valve						

Clamshell bucket H 605U

Type	Volume (litre)	Width E (mm)	Opening A max. (mm)	Number of teeth	weight (kg)	Closing force (kN at 32 MPa)	capacity (kg)
H 605U-250	250	570	1545	5	340	28	3000
H 605U-300	300	670	1545	5	355	28	3000
H 605U-400	400	820	1545	7	380	28	3000
H 605U-450	450	920	1545	7	390	28	3000
H 605U-500	500	1020	1545	9	410	28	3000
H 605U-600	600	1220	1545	9	440	28	3000

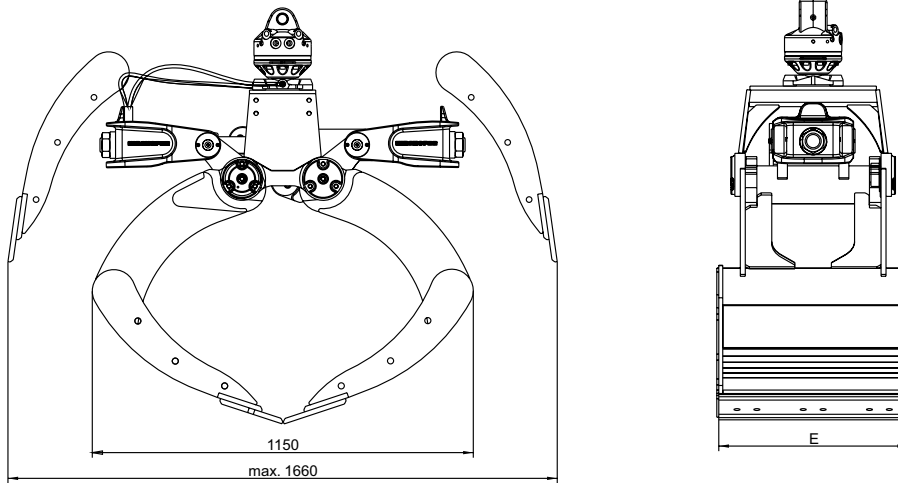
Accessories

Type	Description
H 04 F	recommended HYVA rotator for H 605U
H 04 S	HYVA shaft rotator for precise positioning of the load – up to 4500 kg load capacity
H 04 S68-30US	recommended HYVA shaft rotator for heavy duty tasks – up to 4500 kg load capacity
H 505 HD	quick change system HD for shaft-type rotator H 04 S68-30US
H 502 (4500)	reduction link between rotator and grapple
H 685 05	adapters for compression rails (Load capacity max. 250 kg, without compression rails)
H 381 09 (720)	compression rails – length 720 mm (2 pieces)
H 381 09 (1000)	compression rails – length 1000 mm (2 pieces)
H 685 09 C	side plates to screw onto the grapple for easy digging tasks (4 pieces)

Requirements of truck crane

Operating pressure at oil flow:

26 - 32 MPa (260 - 320 bar) at 40 - max. 75 l/min

Technical drawings

HIGH VOLUME CLAMSHELL BUCKET - H 602

A robust clamshell bucket for handling loose material as sand, gravel, soil – perfectly matched to heavy duty work on vehicle mounted cranes.

Excellent filling characteristics of the rugged grapple due to the special shape of the buckets and the wide separation between their axes that enables wide opening.

Practically no “left overs” of the material to be picked up as the working edges are vertical when the buckets are open and allow a deep plunge into a pile of material.

High stability through reinforced buckets, torsion-free frame, generously dimensioned bearing system and the use of 500 HB steel in the manufacture of cutting edges.

Combination of compensator mechanism and cylinder guard has many advantages: parallel action, longer life for piston rod and seals, significant weight savings.

Efficient handling with high closing forces (28 kN at an operating pressure of 26 MPa).



Packages high volume clamshell bucket H 602 c

Type	Volume (litre)	Width E (mm)	Opening A max. (mm)	Number of teeth (optional)	self weight (kg)	Closing force (kN at 32 MPa)	Load capacity (kg)
H 602-400 c	400	800	1830	9	490	28	3000
H 602-500 c	500	1000	1830	9	535	28	3000
H 602-650 c	650	1200	1830	9	595	28	3000

Package consists of: high volume clamshell bucket, rotator H 04 F, short connecting hoses H 203 01, upper suspension H 501 (4500), non-return valve

Note: UK packages of H 602 includes H 04 F, H 501, H 203 01, H 685 06 eye set 2, H 685 07 set

High volume clamshell bucket H 602

Type	Volume (litre)	Width E (mm)	Opening A max. (mm)	Number of teeth (optional)	weight (kg)	Closing force (kN at 32 MPa)	capacity (kg)
H 602-300	300	500	1830	5	360	28	3000
H 602-400	400	800	1830	9	425	28	3000
H 602-500	500	1000	1830	9	465	28	3000
H 602-650	650	1200	1830	9	515	28	3000
H 602-1000	1000	1200	2190	9	585	23	3000

Accessories

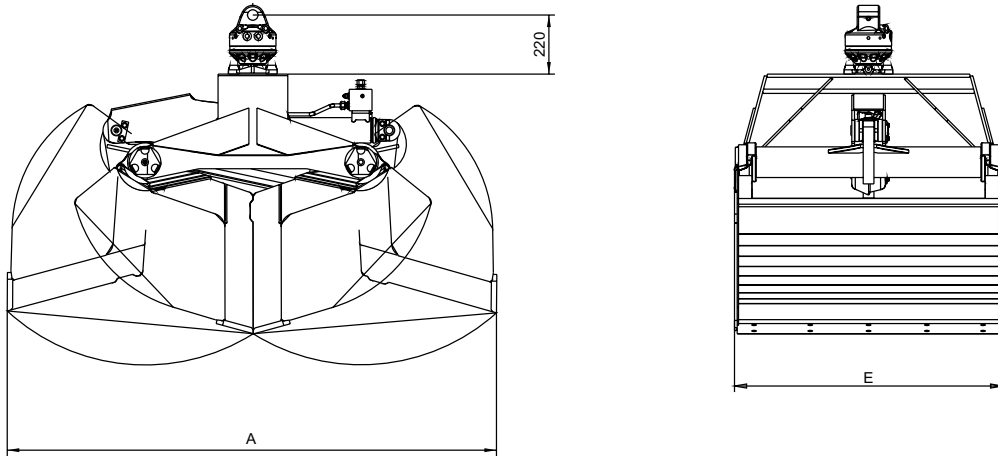
Type	Description
H 04 F	recommended HYVA rotator for H 602
H 04 S68-30US	recommended HYVA shaft rotator for heavy duty tasks – up to 4500 kg load capacity
H 505 HD	quick change system HD for shaft-type rotator H 04 S68-30US
H 502 (4500)	reduction link between rotator and grapple
H 685 06 hook set 2	welded hooks (2 pieces)

Requirements of truck crane

Operating pressure at oil flow:

26 MPa (260 bar) at max. 75 l/min

26 - 37 MPa (260 - 370 bar) at max. 40 l/min

Technical drawings

CLAMSHELL BUCKET WITH NARROW CARRIER - H 622

The high volume clamshell bucket H 622 has a significant narrow frame and can therefore fullfill small digging tasks besides the handling.

The H 622S is a reinforced version with a strong 6t- or 10t-rotator.

Suitable for digging due to the narrow frame.

Compact design due to the narrow frame enables manual filling of the bucket without obstacles.

Practically no „left overs“ of the material to be picked up as the working edges are vertical when the buckets are open and allow a deep plunge into a pile of material.

High stability through reinforced buckets, torsion-free frame, generously dimensioned bearing system and the use of 500 HB steel in the manufacture of cutting edges.

Combination of compensator mechanism and cylinder guard has many advantages: parallel action, longer life for piston rod and seals, significant weight savings.

Efficient handling with high closing forces (H 622: 20 kN at 26 MPa / H 622S: 29 kN at 24 MPa operating pressure).



Packages high volume clamshell bucket H 622 c

Type	Volume (litre)	Width E (mm)	Opening A max. (mm)	Number of teeth (optional)	self weight (kg)	Closing force (kN at 32 MPa)	Load capacity (kg)
H 622-300 c	300	640	1670	5	360	20	3000
H 622-400 c	400	800	1670	9	390	20	3000
H 622-500 c	500	1000	1670	9	415	20	3000

Package consists of: high volume clamshell bucket, rotator H 04 F, short connecting hoses H 203 01, upper suspension H 501 (4500), non-return valve

Note: UK package of H 622-400c/-500c incl. H 04 F, H 501, H 203 01, H 685 06 eye set 2, H 685 07 set

Packages high volume clamshell bucket H 622S (other sizes on request)

Type	Volume (litre)	Width E (mm)	Opening A max. (mm)	Number of teeth (optional)	self weight (kg)	Closing force (kN)	Load capacity (kg)
H 622S-500-6t c	500	800	1960	9	450	29	3000
H 622S-500-10t c	500	800	1960	9	470	29	3000

Package consists of: high volume clamshell bucket, rotator (6t: H 06 F173-35; 10t: H 10 F173-35/1) with hose guard,

High volume clamshell bucket H 622

Type	Volume (litre)	Width E (mm)	Opening A max. (mm)	Number of teeth (optional)	self weight (kg)	Closing force (kN)	Load capacity (kg)
H 622-300	300	640	1670	5	315	20	3000
H 622-400	400	800	1670	9	345	20	3000
H 622-500	500	1000	1670	9	370	20	3000

Accessories

Type	Description
H 04 F	recommended HYVA rotator for H 622
H 04 S68-30US	recommended HYVA shaft rotator for heavy duty tasks – up to 4500 kg load capacity
H 505 HD	quick change system HD for shaft-type rotator H 04 S68-30US
H 685 06 hook set 2	welded hooks (2 pieces)
H 685 07 set	wear plates to protect horizontal cutting edges (2 pieces)

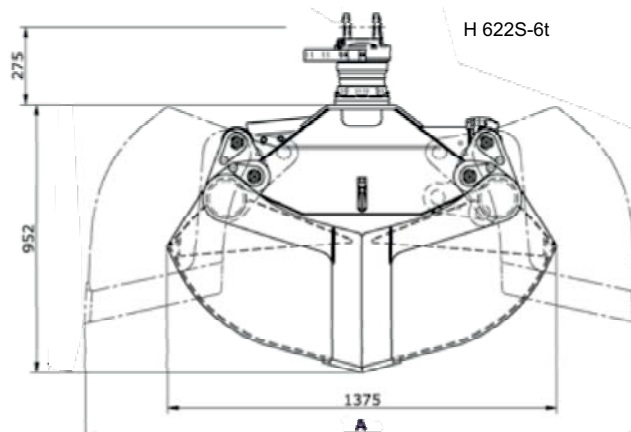
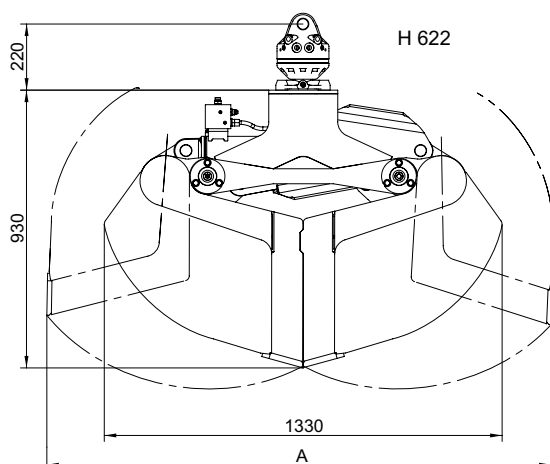
Requirements of truck crane

Operating pressure at oil flow:

H 622: 26 MPa (260 bar) at max. 75 l/min 26 - 37 MPa (260 - 370 bar) at max. 40 l/min

H 622S: 24 MPa (240 bar) at 40 - 75 l/min

Technical drawings



CLAMSHELL BUCKET WITH VERTICAL CYLINDER - H 603

The H 603 is a proven grapple for daily routine work – ideal for excavating foundations, trenches and other similar applications in civil engineering. The closely positioned shell pivots ensure good digging behaviour and high closing pressure.

Good digging behaviour through the closely positioned shell pivots.

Longevity is ensured through the use of 500 HB steel in the manufacture of cutting edges and the generously dimensioned bearing system. The enclosed hydraulic cylinder (in a hub unit) and short hydraulic connection hoses lower the risk of damage and down-time.

Maximum loading height is achieved through the compact design.

Bolt-on digging teeth are delivered with each clamshell bucket.

Excellent digging characteristics are the result of high closing forces (20 kN at an operating pressure of 26 MPa).



Alternatively to the H 603 the H 604HPX can be used with an extension for excavating

Packages clamshell bucket H 603 c

Type	Volume (litre)	Width E (mm)	Opening A max. (mm)	Number of teeth (optional)	self weight (kg)	Closing force (kN)	Load capacity (kg)
H 603-250 c	250	500	1390	5	330	20	3000
H 603-350 c	350	650	1390	5	355	20	3000
Package consists of:	clamshell bucket, bolt-on teeth, rotator H 04 F, short connecting hoses H 203 01, upper suspension H 501 (4500), non-return valve						

High volume clamshell bucket H 602

Type	Volume (litre)	Width E (mm)	Opening A max. (mm)	Number of teeth (optional)	weight (kg)	Closing force (kN at 32 MPa)	capacity (kg)
H 603-150	150	325	1390	3	260	20	3000
H 603-200	200	400	1390	3	275	20	3000
H 603-250	250	500	1390	5	295	20	3000
H 603-325	325	600	1390	5	315	20	3000
H 603-350	350	650	1390	5	320	20	3000
H 603-450	450	800	1390	9	355	20	3000


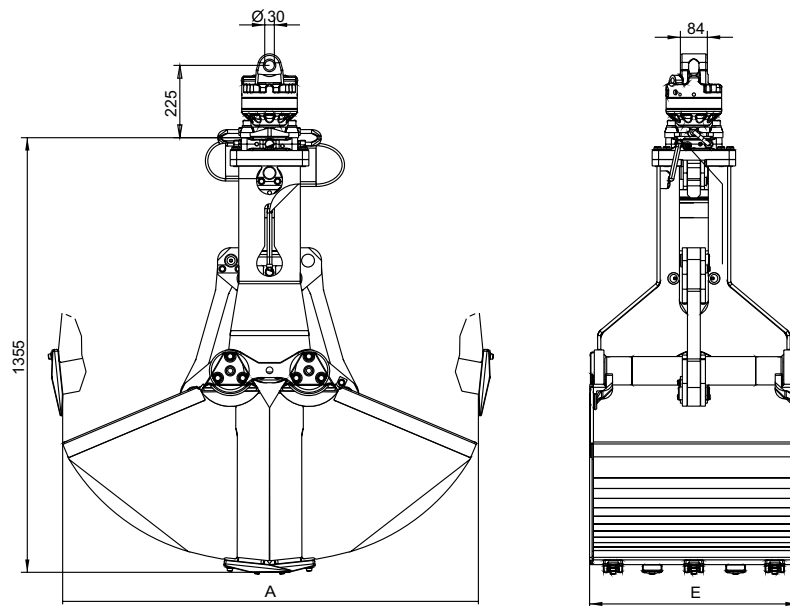
Accessories

Type	Description
H 04 F	recommended HYVA rotator for H 603
H 04 S	HYVA shaft rotator for precise positioning of the load – up to 4500 kg load capacity
H 04 S68-30US	recommended HYVA shaft rotator for heavy duty tasks – up to 4500 kg load capacity
H 505	quick change system for shaft-type rotator H 04 S
H 505 HD	quick change system HD for shaft-type rotator H 04 S68-30US
H 502 (4500)	reduction link between rotator and grapple
H 680 01	scraper
H 685 06 hook set 2	welded hooks (2 pieces)
H 685 06 eye set 2	welded eyes (2 pieces)
H 685 07 set	wear plates to protect horizontal cutting edges (2 pieces)

Requirements of truck crane

Operating pressure at oil flow:

max. 26 MPa (260 bar) at 25 - max. 75 l/min

 Mind the pressure!**Technical drawings**

HD CLAMSHELL BUCKET WITH VERTICAL CYLINDERS - H 607

The powerful clamshell bucket H 607 with two vertical hydraulic cylinders is ideal for heavy digging work in grown soil.

Good digging behaviour due to good plunge behaviour and proven shell geometry.

Long life is ensured through the use of 500 HB steel in the manufacture of cutting edges and the generously dimensioned bearing system. Piston rod protection for the vertical hydraulic cylinders are standard.

Synchronised bucket movements due to sturdy compensation rods.

Bolt-on digging teeth are delivered with each clamshell bucket.

Excellent digging characteristics are the result of high closing forces (32 kN at an operating pressure of 26 MPa).



Alternatively to the H 607 the H 605HPX can be used with an extension for excavating.

Packages clamshell bucket H 607 c

Type	Volume (litre)	Width E (mm)	Opening A max. (mm)	Number of teeth (optional)	self weight (kg)	Closing force (kN)	Load capacity (kg)
H 607-215 c	215	500	1295	5	320	32	3000
H 603-350 c	350	650	1390	5	355	20	3000
Package consists of:	clamshell bucket, bolt-on teeth, rotator H 04 F, short connecting hoses H 203 01, upper suspension H 501 (4500), non-return valve						

High volume clamshell bucket H 602

Type	Volume (litre)	Width E (mm)	Opening A max. (mm)	Number of teeth (optional)	weight (kg)	Closing force (kN at 32 MPa)	capacity (kg)
H 607-135	135	325	1295	3	260	32	3000
H 607-170	170	400	1295	3	270	32	3000
H 607-215	215	500	1295	5	285	32	3000
H 607-255	255	600	1295	5	300	32	3000
H 607-340	340	800	1295	5	300	32	3000


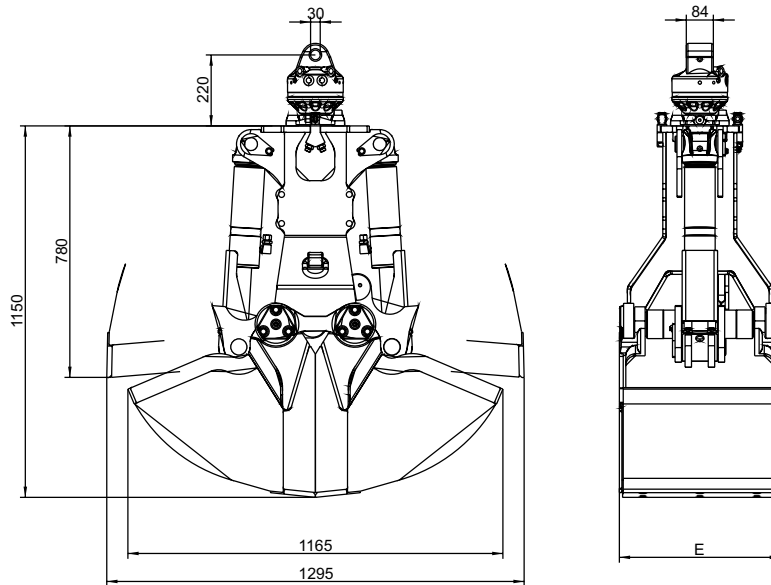
Accessories

Type	Description
H 04 F	recommended HYVA rotator for H 607
H 04 S	HYVA shaft rotator for precise positioning of the load – up to 4500 kg load capacity
H 04 S68-30US	recommended HYVA shaft rotator for heavy duty tasks – up to 4500 kg load capacity
H 505 HD	quick change system HD for shaft-type rotator H 04 S68-30US
H 502 (4500)	reduction link between rotator and grapple
H 680 01	scraper (not for width 800 mm)
H 685 06 hook set 2	welded hooks (2 pieces)
H 685 06 eye set 2	welded hooks (2 pieces)
H 685 07 set	wear plates to protect horizontal cutting edges (2 pieces)

Requirements of truck crane

Operating pressure at oil flow:

max. 26 MPa (260 bar) at 25 - max. 75 l/min

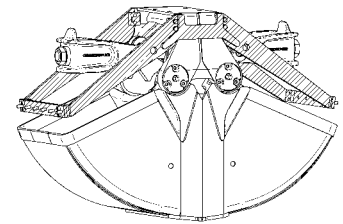
 Mind the pressure!**Technical drawings**

ACCESSORIES FOR CLAMSHELL BUCKETS

H 680 – Scrapers

Scrapers for clamshell buckets with narrow widths clear the inside of the shells of sticky materials such as clay, during each opening. The design varies depending on the grapple.

Type	für Clamshell bucket
H 680 01	H 603/ 604/ 604HPX/ 605/ 605HPX/ 606/ 607
H 680 02	H 626HPX / H 626
H 505 04	link-set for H 604HPX/605HPX/626HPX in combination with H 505 / H 505 HD and scraper H 680



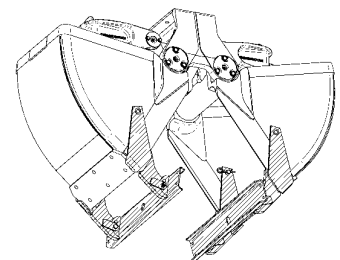
link for the combination
H 505 (HD) + HPXdrive + scraper

H 685 05 – Adapter for compression rails and compression rails

Adapters enable mounting of compression rails or support for concrete rings, for handling paving slabs, curbstones, concrete rings etc. The adapters can only be used with a non-return valve. They are not suitable for the use with a scraper.

Type	für Clamshell bucket
H 685 05	adapters for compression rails (Load capacity max. 250 kg)
H 381 09 (720)	compression rails – length 720 mm lang (2 pieces)
H 381 09 (1000)	compression rails – length 1000 mm lang (2 pieces)

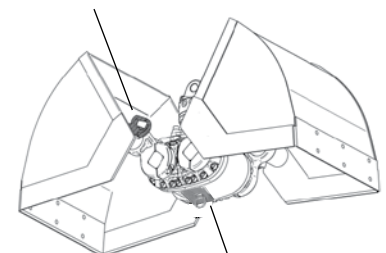
The adapters for compression rails are available for the following clamshell buckets:
H 603/ 604/ 604HPX/ 604U HPX/ 605/ 605U/ 605HPX/ 605U HPX/ 606



H 685 06 - Central lifting devices for HPX, welded hooks and welded eyes

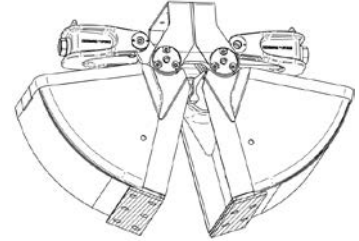
The central lifting device for HPXdrive, welded eyes or welded hooks suit lifting chains or slings. The max. capacity per eye or hook is 1000 kg.

Type	Description
H 685 06 HPX SD	to suit lifting chain or sling, 1 piece
H 685 06 HPX HD	to suit lifting chain or sling, 1 piece
H 685 06 hook	to suit lifting chain or sling, 1 piece
H 685 06 hook set 2	to suit lifting chain or sling, 2 pieces
H 685 06 hook set 4	to suit lifting chain or sling, 4 pieces
H 685 06 eye	to suit lifting chain or sling, 1 piece
H 685 06 eye set 2	to suit lifting chain or sling, 2 pieces

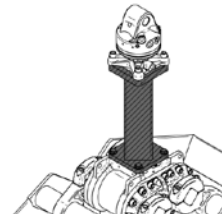


H 685 07 – Wear plates (2 pcs.)

Type	Description
H 685 07 set	Wear plates, 2 pieces, to protect horizontal cutting edges

**H 685 08 – Extension for excavation works with the *HPXdrive Standard* or the *HPXdrive Heavy Duty***

Type	Description
H 685 08 HPX-450	HPXdrive extension for excavating e.g. trenches (for canal and civil engineering) – 450 mm (30 kg)



ASYMMETRIC ORANGE PEEL GRAPPLES - H 652/2

The reliable asymmetric orange peel grapple H 652/2 with half closing tines provides for an easy transport, resting flat against the crane arm and not protruding the width of the carrier machine. It is mainly used for handling scrap, waste and construction materials, and is available with five (H 652-5/2) or six tines (H 652-6/2) – depending on the task.

Asymmetric construction: the grapple rests flat against the crane arm in its transport position (see below drawing).

Special slot on the main carrier allows the transport of a big orange peel grapple, that does not protrude the width of the carrier (2,5 m).

Half closing tines by default, completely closing at the points, for handling waste, scrap, loose materials, etc.

Non-return valve guarantees a secure retention of loads even when pressure drops.

Long service life due to robust design – oil distributor and hydraulic hoses are protected in the center part, generously dimensioned bearings, wearresistant shells made of 400 HB steel, cylinder with piston rod protection, stops for both end positions of tines.

Strong operation due to high closing forces (13 kN at 26 MPa operating pressure).



Asymmetric orange peel grapples H 652-5/2 and H 652-6/2

Type	Number of tines	Volume (Litre)	Opening Ø A (mm)	Width E (closed) (mm)	Height C (mm)	Weight (w/o rotator)	capacity (kg)	Closing force (kN)
H 652-5/2	215	500	1295	5	320	32	3000	
H 652-6/2	350	650	1390	5	355	20	3000	
Package consists of:	orange peel grapple, non-return valve							

Accessories

Type	Description
H 06 F173-35	recommended HYVA rotator for H 652/2

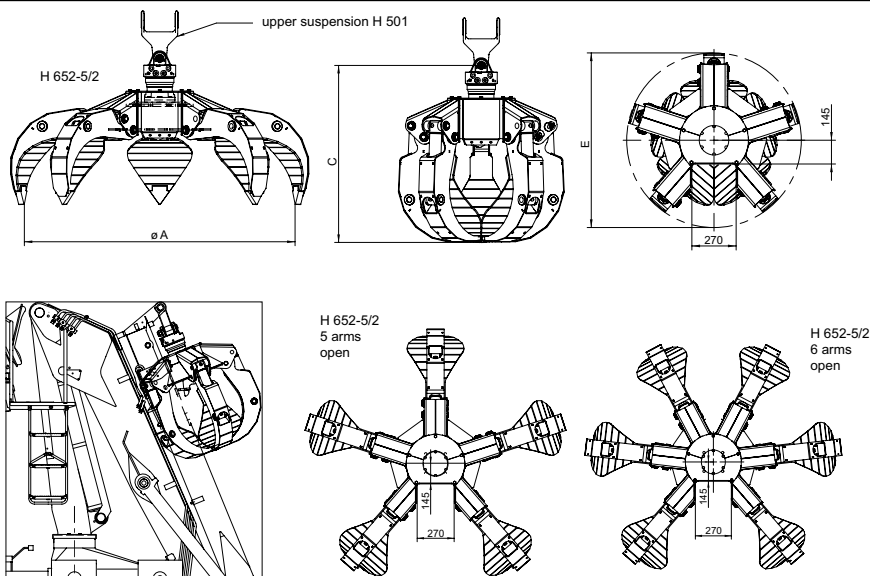
Requirements of truck crane

Operating pressure at oil flow:

max. 26 MPa (260 bar) at 25 - max. 75 l/min

⚠ Mind the pressure!

Technical drawings



ORANGE PEEL GRAPPLES - H 650 SMALL

Small orange peel grapple for the handling of bulky scrap, the H 650 small for various applications is available with different tine shapes, different volumes (120l, 180l, 240l), with 4 or 5 tines.

Different tine shapes of the H 650 series to accommodate handling a variety of materials:

- **H 651:** fully closing tines for handling swarf, loose waste, soil, gravel etc.
- **H 652:** half closing tines for handling swarf, scrap, rubbish, waste paper etc.
- **H 653:** pointed tines for bulky scrap, car bodies, bundled waste paper etc.

Long life due to a solid design: the hydraulic cylinder pistons are protected by the gripping arms and the hydraulic hoses, connections and oil distributor are positioned in the robust centre section. Special wear resistant materials used in the production of the gripping arms and oversized bearings ensure a long service life for these sturdy grapples.

A lifting-eye on the centre section acts as an additional stop.

Powerful operation with high closing force (11 kN to 13 kN at an operating pressure of 26 MPa).



Orange peel grapple H 650 small								
Type	Number of tines	Volume (Litre)	Opening Ø A (mm)	Width E (closed) (mm)	Height C (mm)	Self Weight (w/o rotator)	Load capacity (kg)	Closing force (kN)
H 651-4-120	4	120	1360	1065	800	330	2000	13
H 651-4-180		180	1450	1070	850	345	2000	12
H 651-4-240		240	1720	1125	985	380	2000	11
H 651-5-120	5	120	1360	1065	800	350	2000	13
H 651-5-180		180	1450	1070	850	365	2000	12
H 651-5-240		240	1720	1125	985	415	2000	11
H 652-4-120	4	120	1360	1065	800	260	2000	13
H 652-4-180		180	1450	1070	850	270	2000	12
H 652-4-240		240	1720	1125	985	300	2000	11
H 652-5-120	5	120	1360	1065	800	300	2000	13
H 652-5-180		180	1450	1070	850	305	2000	12
H 652-5-240		240	1720	1125	985	340	2000	11
H 653-4-120	4	120	1360	1065	800	230	2000	13
H 653-4-180		180	1450	1070	850	235	2000	12
H 653-4-240		240	1720	1125	985	250	2000	11
H 653-5-120	5	120	1360	1065	800	275	2000	13
H 653-5-180		180	1450	1070	850	285	2000	12
H 653-5-240		240	1720	1125	985	300	2000	11
Package consists of:	orange peel grapple, non-return valve							

Accessories

Type	Description
H 04 F	recommended HYVA rotator for H 650 small
H 04 F140-30US	recommended HYVA rotator for H 650 small – for heavy duty application

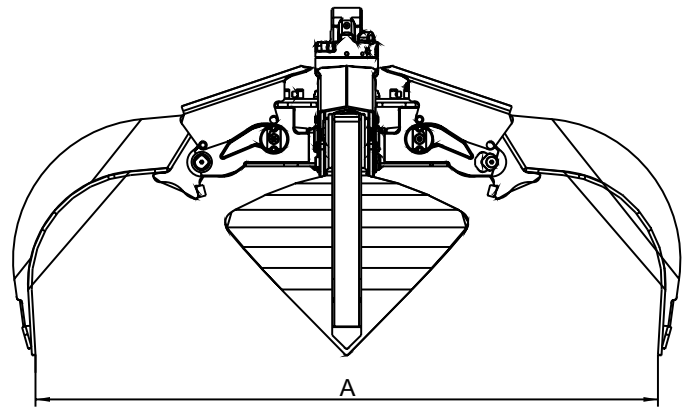
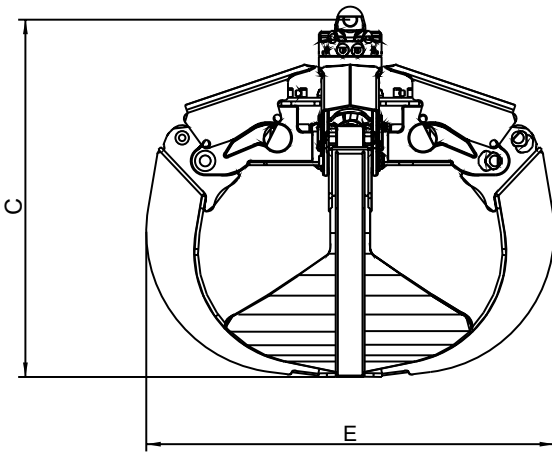
Requirements of truck crane

Operating pressure at oil flow:

max. 26 MPa (260 bar) at 25 - max. 75 l/min

⚠ Mind the pressure!

Technical drawings



ORANGE PEEL GRAPPLES - H 650 LARGE

Large orange peel grapple for the handling of bulky scrap, the H 650 large for various applications is available with different tine shapes, different volumes (250l, 350l, 500l), with 4 or 5 tines.

Different tine shapes of the H 650 series to accommodate handling a variety of materials:

- **H 651:** fully closing tines for handling swarf, loose waste, soil, gravel etc.
- **H 652:** half closing tines for handling swarf, scrap, rubbish, waste paper etc.
- **H 653:** pointed tines for bulky scrap, car bodies, bundled waste paper etc.

Number of tines can be chosen with 4 or 5 tines.

Long life due to a solid design: the hydraulic cylinder pistons are protected by the gripping arms and the hydraulic hoses, connections and oil distributor are positioned in the robust centre section. Special wear resistant materials used in the production of the gripping arms and oversized bearings ensure a long service life for these sturdy grapples.

A lifting-eye on the centre section acts as an additional stop.

Powerful operation with high closing force (13 kN to 18 kN at an operating pressure of 26 MPa).



Orange peel grapple H 650 large								
Type	Number of tines	Volume (Litre)	Opening Ø A (mm)	Width E (closed) (mm)	Height C (mm)	Self Weight (w/o rotator)	Load capacity (kg)	Closing force (kN)
H 651-4-250	4	250	1550	1285	1015	445	2500	18
H 651-4-350		350	1720	1260	1100	470	3000	16
H 651-4-500		500	2155	1320	1350	555	3000	13
H 651-5-250	5	250	1550	1285	1015	520	2500	18
H 651-5-350		350	1720	1260	1100	545	3000	16
H 651-5-500		500	2155	1320	1350	635	3000	13
H 652-4-250	4	250	1550	1285	1015	425	2500	18
H 652-4-350		350	1720	1260	1100	440	3000	16
H 652-4-500		500	2155	1320	1350	505	3000	13
H 652-5-250	5	250	1550	1285	1015	505	2500	18
H 652-5-350		350	1720	1260	1100	520	3000	16
H 652-5-500		500	2155	1320	1350	595	3000	13
H 653-4-250	4	250	1550	1285	1015	390	2500	18
H 653-4-350		350	1720	1260	1100	395	3000	13
H 653-4-500		500	2155	1320	1350	435	3000	13
H 653-5-250	5	250	1550	1285	1015	470	2500	18
H 653-5-350		350	1720	1260	1100	480	3000	16
H 653-5-500		500	2155	1320	1350	525	3000	13
Package consists of:	orange peel grapple, non-return valve							

Accessories	
Type	Description
H 04 F	recommended HYVA rotator for H 650 large
H 04 F140-30US	recommended HYVA rotator for H 650 large – for heavy duty application
H 06 F140-40	recommended HYVA rotator for H 650 large – for heavy duty application

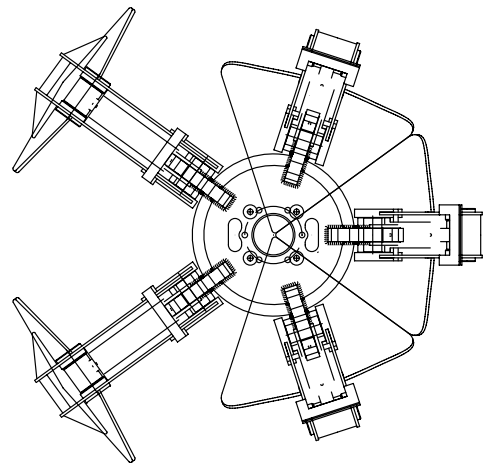
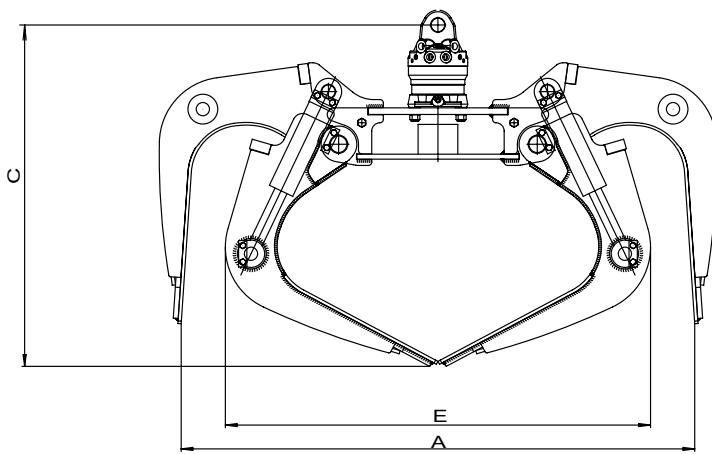
Requirements of truck crane

Operating pressure at oil flow:

max. 26 MPa (260 bar) at 25 - max. 75 l/min

⚠ Mind the pressure!

Technical drawings



HARVESTER FOR TELEHANDLERS - H 634-3Z

The harvester H 634-3Z has been developed especially for telescopic forklifts. During the sawing process, the three robust tines of the integrated grab hold the log firmly and securely. Available in two sizes.

Three interlocking, robust tines made of Hardox 400 steel.

Automatic re-stress of the grab during the sawing process. The re-stress can be stopped by a lever to cut e.g. single branches separately.

Optimum grab design allows to clamp even very thin logs.

Saw equipped with **automatic chain pretension and greasing**.

Precise positioning thanks to the **HYVA-rotation with 4 motors and 2 holding breaks (H 634-0.35-3Z)** or the **worm drive (H 634-0.25-3Z)**.

High torque.

Highly safe hydraulics due to an integrated non-return valve, so the load is held safely even in the case of pressure drops.

8/3 solenoid valve included to operate the grab with only one control circuit.

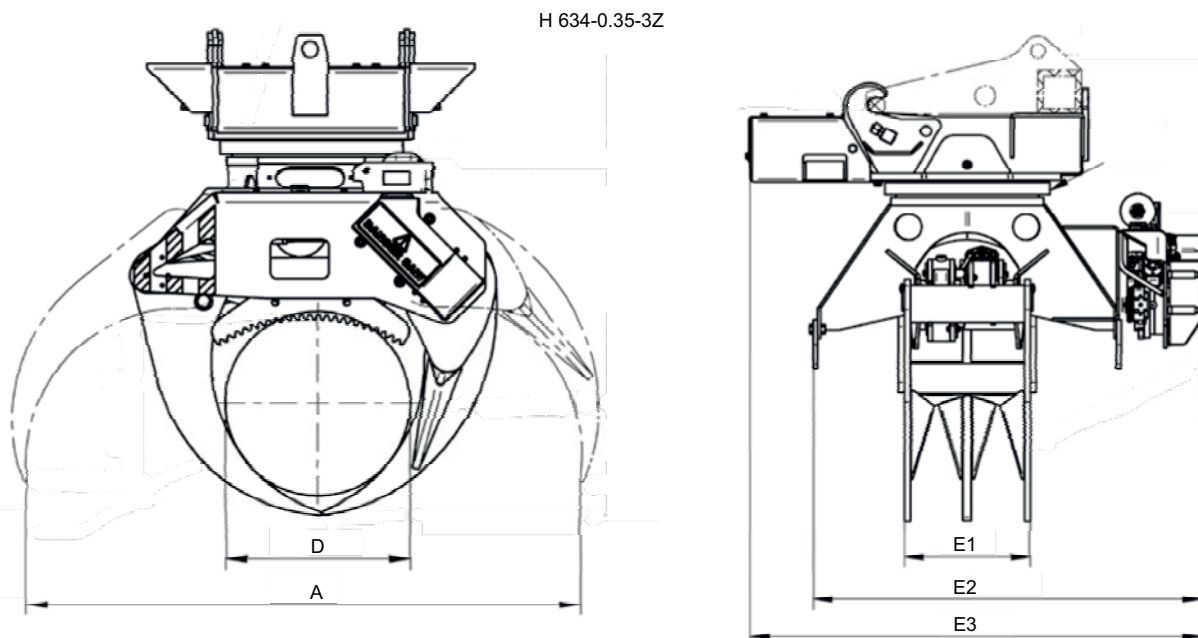


Harvester H 634-3Z									
Type	Capacity (m ²)	Widths E1 / E2 / (E3) (mm)	Log-Ø D max. (mm)	Log-Ø min. (mm)	Opening A max. (mm)	Weight (kg)	Closing force (kN)	Torque (Nm)	Load capacity (kg)
H 634-0.25-3Z	0,25	350 / 1000	520	40	1470	630	13	12000	1250
H 634-0.35-3Z	0,35	430 / 1325 / (1540)	625	50	1710	950	18	14400	2000
Package consists of:	harvester, rotation with 4 motors and 2 holding breaks (H 634-0.35-3Z) or worm drive (H 634-0.25-3Z), quick change adapter for telescopic fork lift, 8/3 solenoid valve, non-return valve								

Requirements of carrier machine

	H 634-0.25-3Z	H 634-0.35-3Z
Operating pressure (open/close):	max. 24 MPa (240 bar) ⚠	max. 28 MPa (280 bar)
Mind the pressures!		
Operating pressure (rotate):	17 MPa (170 bar)	20 MPa (200 bar)
Recommended oil flow (open/close):	60 - 100 l/min	75 - 120 l/min
Recommended oil flow (rotate):	20 - 50 l/min	20 - 50 l/min

Technical drawings



PIPE GRAPPLE FOR TELEHANDLERS - H 930P

The pipe grapple H 930P is the ideal tool to grip, lift, handle and position poles, pipes and tubes with a telehandler.

360° endless rotation.

High load capacities from 1000 kg up to 3000 kg can be positioned easily with the pipe grapple.

Precise positioning due to an integrated rotation with two motors and two holding brakes (H 930-3000P equipped with four motors).

Secure retention of loads thanks to an integrated nonreturn valve and clamping pads at the tine tips.



Pipe grapple H 930P

Type	Load capacity (kg)	Poles Ø (min./max.) (mm)	Width E (mm)	Number of tines	Self weight (kg)	Closing force (kN)	Torque (Nm)
H 930-1000P	1000	70 / 300	1785	2	760	23	5000
H 930-2000P	2000	70 / 300	2175	4	870	45	5000
H 930-3000P	3000	70 / 300	2560	6	1100	68	10000

Package consists of: pole grapple (w/o upper bracket), integrated rotation, non-return valve

Note: poles and pipes always need to be gripped in the center of gravity.

Accessories

Type	Description
H 980-2 c	Solenoid valve to upgrade to the third hydraulic control circuit, to switch when there are only two free hydraulic circuits available for three required functions (rotate, grab and tilt) – for 12/24 V, operating pressure max. 25 MPa, oil flow 60 l/min. Complete including assembly parts, hose protection, hoses and assembly

Requirements of carrier machine

Operating pressure (open/close): max. 25 MPa (250 bar)

Recommended oil flow (open/close): 50 - max. 100 l/min

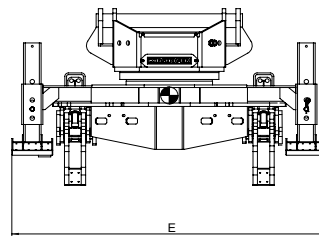
Operating pressure (rotate): max. 25 MPa (250 bar)

Recommended oil flow (rotate): 140 - max. 170 l/min

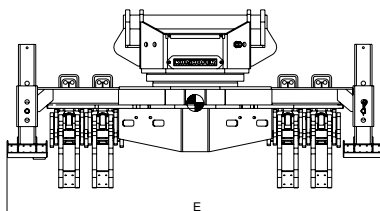
Technical drawings

All 3 technical drawings with optional Manitou-bracket.

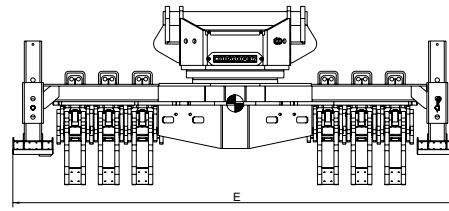
Other brackets on request.



H 930-1000P



H 930-2000P



H 930-3000P

LOGGING GRAPPLE - H 634

The H 634 is a robust and powerful tool for logs – especially for heavy duty operation. Well suited for handling single trunks.

Low height with one horizontal hydraulic cylinder – especially when closed due to the interlocking arms.

Long service life is ensured by the sturdy construction, high quality components and generously dimensioned bearing system. All bearing bolts are case hardened and housed in steel bearing bushes.

Optimised design allows extremely small grapple diameter – ideal for handling thin timber securely. The arms open almost vertically. That enables an easy penetration into the timber stack.

Synchronisation of arms due to sturdy compensation rods.

Protection of the hoses for the hydraulic connections by a hose guard on the HYVA rotator.

Precise positioning of the loads is no problem in combination with the HYVA rotator – continuous rotation, precise start and stop ability.

Safety is assured in the event of an unexpected pressure drop due to the integrated non-return valve.

Reinforced version H 634S with more sturdy construction and equipped with a stronger rotator.



Packages logging grapple H 634 c								
Type	Capacity (m ²)	Width E (mm)	Log-Ø D2 min. (mm)	Log-Ø D2 max. (mm)	Opening A max. (mm)	Weight (kg)	Closing force (kN)	Load capacity (kg)
H 634-0.25 c	0,25	420	90	460	1470	215	13	4000
H 634-0.35 c	0,35	500	135	590	1950	300	16	5000
Package consists of:	logging grapple, rotator with hose guard (for H 634-0,25: H 06 F173-35, for H 634-0,35: H 10 F173-35), short connecting hoses H 203 01, upper suspension H 501 suiting rotator size, non-return valve							

Logging grapple H 634								
Type	Capacity (m ²)	Width E (mm)	Log-Ø D2 min. (mm)	Log-Ø D2 max. (mm)	Opening A max. (mm)	Weight (kg)	Closing force (kN)	Load capacity (kg)
H 634-0.25	0,25	420	90	460	1470	170	13	4000
H 634-0.35	0,35	500	135	590	1950	225	16	5000
H 634-0.50	0,50	500	170	650	1985	250	15	5000

Reinforced logging grapple H 634S								
Type	Capacity (m ²)	Width E (mm)	Log-Ø D2 min. (mm)	Log-Ø D2 max. (mm)	Opening A max. (mm)	Weight (kg)	Closing force (kN)	Load capacity (kg)
H 634S-0.40	0,40	510	135	590	1950	270	16	6000
H 634S-0.50	0,50	510	170	650	1985	275	16	7000
H 634S-0.70	0,70	590	110	870	2570	530	15	8000

Accessories	
Type	Description
H 06 F173-35	recommended HYVA rotator for H 634-0.25
H 10 F173-35/1	recommended HYVA rotator for H 634-0.35
H 10 F173-45	recommended HYVA rotator for H 634S
H 10 F173-52	recommended HYVA rotator for H 634S

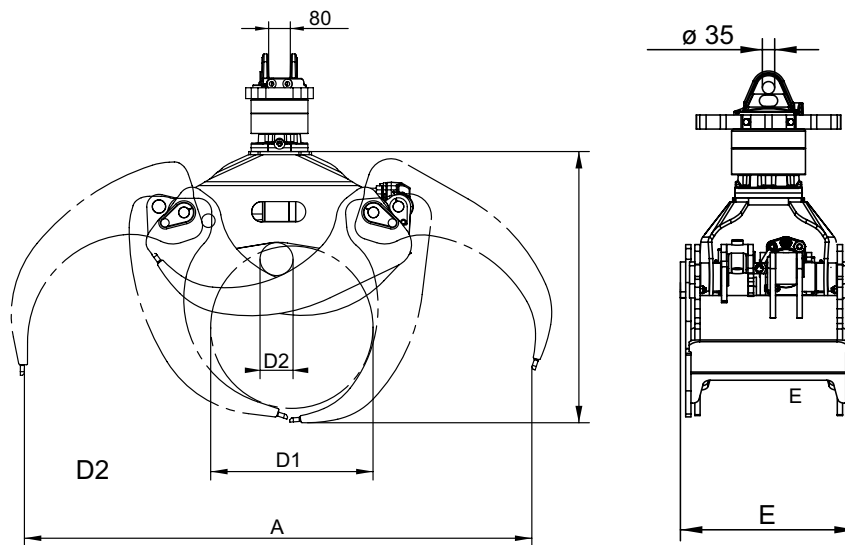
Requirements of truck crane

Operating pressure at oil flow:

max. 24 MPa (240 bar) at 25 - max. 75 l/min

⚠ Mind the pressure!

Technical drawings



RAIL GRAPPLE WITH *HPXdrive* - H 632HPX RAIL

The rail grapple H 632HPX Rail with its HPXdrive is used for the loading and unloading of rails, but also, with care, handle single sleepers. A non-return valve secures constant pressure even in case of unexpected pressure drop.

The revolutionary HPXdrive technology guarantees a reliable and low maintenance attachment. The grapple is ideal for mobile loader cranes as well as for rigidly mounted loader cranes on maintenance trailers.

Reliability of the HPXdrive! The movement of the arms of the grapple is generated by two hollow shafts, which run opposed and have a helix thread, hydraulically driven by a single piston. No more hydraulic cylinder.

Longer life cycle up to 50%! **Self-lubrication:** The drive unit runs in a permanent oil bath. The compact design makes the HPXdrive resistant to dirt and debris.

Versatility with different types of shells that can easily be refitted onto the driving unit.

Profitability through low maintenance costs and longer life cycle.

Rotator with shaft H 04 S is available as an alternative, in case a quick change H 505 (or a reduction link H 502 or e.g. for a non-rotating hook) is required.

Constant closing force (34 kN at 26 MPa operating pressure) during the entire opening and closing process.



Package rail grapple H 632HPX Rail c with HYVA Flange Rotator

Type	Length (mm)	Width (mm)	Height (mm)	Weight (kg)	Closing force (kN) at 26 MPa	Load capacity (kg)
H 632HPX Rail c	1000	560	740	265	34	2000
Package consists of:	rail grapple, HYVA rotator H 04 F140-30V, upper suspension H 501 (4500), non-return valve					
HPX-H 505 add	also available with a shaft rotator and quick change system H 505					

Accessories

Type	Description
H 04 S	HYVA shaft rotator for precise positioning of the load – up to 4500 kg load capacity
H 04 S68-30US	recommended HYVA shaft rotator for heavy duty tasks – up to 4500 kg load capacity
H 505	quick change system for shaft-type rotator H 04 S
H 505 HD	quick change system HD for shaft-type rotator H 04 S68-30US
H 502 (4500)	reduction link between rotator and grapple
H 204 01	mobile part of hydraulic quick coupling for hose (Ø 10 mm, 2 pieces)
H 204 03	hydraulic quick change kit incl. mobile and fixed parts (2 pc. each) mounted to rotator
H 632HPX Rail-S	exchangeable tines for rail grapple, incl. exchange aid – weight tines 125 kg

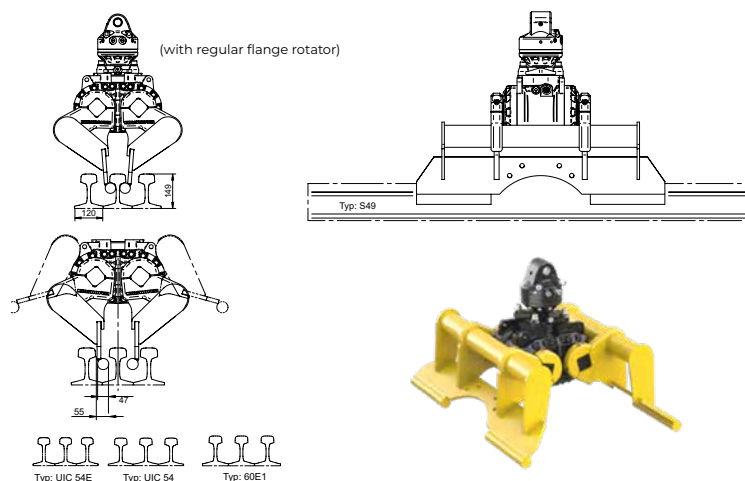
Requirements of truck crane

Operating pressure: 26 MPa (260 bar)

max. 24 MPa (240 bar) at 25 - max. 75 l/min

Recommended oil flow: 25 - max. 75 l/min

Technical drawings



RAILROAD GRAPPLE WITH VERTICAL CYLINDERS - H 632R

Designed to handle the various demands of the rail, the Universal Railroad Grapple with vertical cylinders H 632R c can be used for rails and railroad ties / sleepers – and even for clearing brush.

The Universal Railroad Grapple is **ideal for handling used sleepers or rails – single or bundled.**

Long service life is ensured by the sturdy construction and high quality components.

Reduced wear resulting from generously dimensioned bearing system.

Tine tips are vertical when the grapple is fully opened, allowing easy loading and unloading of bundled ties – directly from gondola cars.

Exchangeable gears are standard and ensure synchronized movement of tines.

Each arm is equipped with a heavy duty hydraulic cylinder, providing an extremely high clamping force.

The **gear-type continuous rotator** allows precise positioning of the grapple.

Safety: a special holding valve provides a safe grip – even if pressure drops.

Central lifting eye included with 3000 kg load capacity.



Universal railroad grapple H 632R c									
Type	Capacity (m ²)	Width (mm)	Opening A max. (mm)	Height C max. (mm)	Height C min. (mm)	Gripping range D min. (kg)	Self weight (kg)	Load capacity (kg)	Closing force (kN)
H 632R-0,25 c	0.35	600	1750	1370	1070	76	440	3000	22.50
H 632R-0,33 c	0.50	600	1980	1500	1195	76	465	3000	19.40
H 632R-0,50 c	0.75	600	2440	1700	1270	76	600	3000	15.30
Package consists of:	universal railroad grapple, HYVA rotator H 04 F140-30US, short connecting hoses, upper suspension H 501 (4500), non-return valve, central lifting eye								

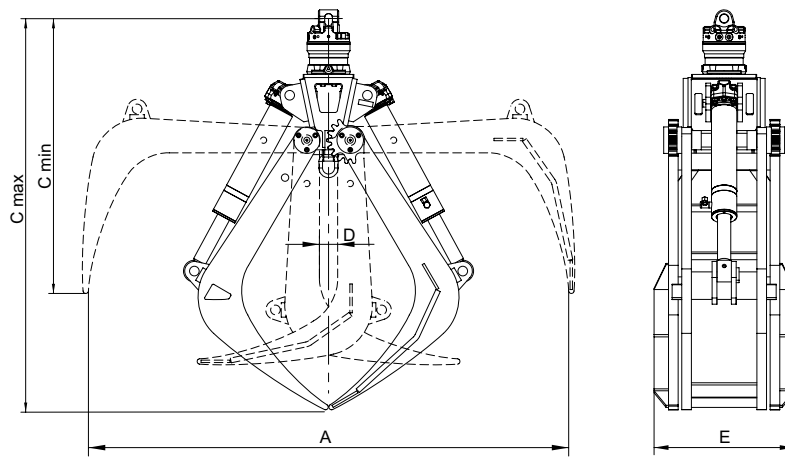
Accessories

Type	Description
H 505 HD	heavy duty quick change system set for HYVA shaft rotators, incl. hydraulic couplings
H 685 06 eye / hook set 2	welded eyes / welded hooks (2 pieces)

Requirements of truck crane

Operating pressure (open/close):	max. 26 MPa (260 bar)
Recommended oil flow (open/close):	25 - max. 75 l/min
Operating pressure (rotation):	max. 32 MPa (320 bar)
Recommended oil flow (rotation):	15 - max. 50 l/min

Technical drawings



RAILROAD GRAPPLE WITH HORIZONTAL CYLINDERS - H 632-2-R

Designed to handle the various demands of the rail, the Universal Railroad Grapple with horizontal cylinders H 632-2-R can be used for rail or ties.

The Universal Railroad Grapple is **ideal for handling used sleepers and rails – and even for clearing brush.**

Long service life is ensured by the sturdy construction and high quality components.

Reduced wear resulting from generously dimensioned bearing system.

Tine tips are vertical when the grapple is fully opened, allowing easy loading and unloading of bundled ties - directly from gondola cars.

Gears are standard and ensure synchronized movement of tines.

The tool is equipped with two horizontal hydraulic cylinders, providing an extremely high clamping force.

The **gear-type continuous rotator** allows precise positioning of the grapple.

Safety: a special holding valve provides a safe grip – even if pressure drops.

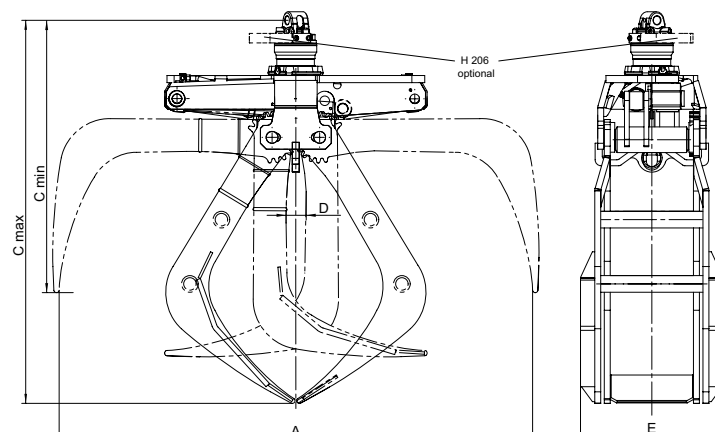


Universal railroad grapple H 632-2-R c									
Type	Capacity (m ²)	Width (mm)	Opening A max. (mm)	Height C max. (mm)	Height C min. (mm)	Gripping range D min. (kg)	Self weight (kg)	Load capacity (kg)	Closing force (kN)
H 632-2-R c	0.50	600	1980	1430	1150	85	355	3000	14
Package consists of:	universal railroad grapple, HYVA rotator H 04 F140-30US, short connecting hoses, upper suspension H 501 (4500), non-return valve, central welded eye								

Accessories	
Type	Description
H 505 HD	heavy duty quick change system set for shaft rotators, incl. hydraulic couplings
H 685 06 eye / hook set 2	welded eyes / welded hooks (2 pieces)
H 206	hose guard

Requirements of truck crane	
Operating pressure (open/close):	max. 26 MPa (260 bar)
Recommended oil flow (open/close):	25 - max. 75 l/min
Operating pressure (rotation):	max. 32 MPa (320 bar)
Recommended oil flow (rotation):	15 - max. 50 l/min

Technical drawings



CONTAINER DISCHARGE UNITS - H 920 -1 / H 920-22

HYVA container discharge attachments with ring system or the fast HYVA mushroom system are characterised by short cycle times and an attractive acquisition price. Containers can be emptied even faster and more cost effectively with a one-man operation.

Container discharge unit H 920-1 with ring system / low overall height

Low overall height due to compact design.

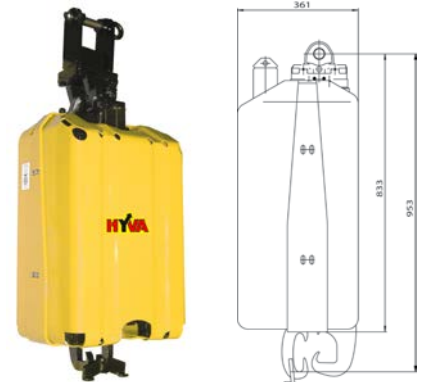
Extremely low maintenance and ecofriendly, because no bearing has to be lubricated.

Hooks on automatically when container is lifted.

Precise positioning with HYVA rotator. **Low maintenance rotator** due to the use of plastic bushings.

Protection against damage of container by **automatic lift stop**.

Available with **two load capacities** (version A and B) .



Type	max. Lift of the hook (mm)	Load capacity (kg)	Height (incl. rotator) (mm)	Self weight*	Operating pressure at oil flow
H 920-1-Ac	500	4500	1160	174	35 MPa (350 bar) at 40 l/min
H 920-1-Bc	500	2500	1160	174	35 MPa (350 bar) at 40 l/min

* incl. motor / excl. upper suspension & pendulum damper

Package consists of: container discharge unit, HYVA-rotator H 04 F140-30LM, connecting tubes, upper suspension with pendulum damper H 511 (4500), non-return valve

Container discharge unit H 920-22 for containers with HYVA mushroom system

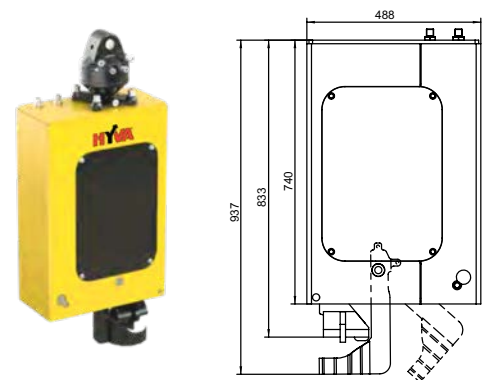
Low overall height due to compact design.

Extremely low maintenance and ecofriendly, because no bearing has to be lubricated.

Hooks on automatically when container is lifted.

Precise positioning with HYVA rotator. **Low maintenance rotator** due to the use of plastic bushings.

Protection against damage of container by **automatic lift stop**.



Type	max. Lift of the hook (mm)	Load capacity (kg)	Height (incl. rotator) (mm)	Self weight*	Operating pressure at oil flow
H 920-22c	500	2500	1157	178	35 MPa (350 bar) at 40 l/min

* incl. motor / excl. upper suspension & pendulum damper

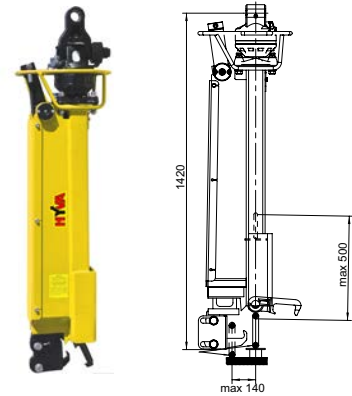
Package consists of: container discharge unit, HYVA-rotator H 04 F140-30LM, connecting tubes, upper suspension with pendulum damper H 511 (4500), non-return valve

CONTAINER DISCHARGE UNITS - H 920-11 / H 921

HYVA container discharge attachments with ring system or the fast HYVA mushroom system are characterised by short cycle times and an attractive acquisition price. Containers can be emptied even faster and more cost effectively with a one-man operation.

Container discharge unit H 920-11 for containers with ring system

Robust mechanics with few moving parts and guided lifting hook.
Precise positioning with HYVA rotator, due to the use of a rotator with vertical oil ducts no externally installed hydraulic hoses are necessary.
 Pressure relief valve ensures **independence of crane operating pressure**.
 Protection against damage of container by **automatic lift stop**.



Type	max. Lift of the hook (mm)	Load capacity (kg)	Height (incl. rotator) (mm)	Self weight*	Operating pressure at oil flow
H 920-11	500	2500	1400	135	20 - 26 MPa (200 - 260 bar) at max. 75 l/min 20 - 37 MPa (200 - 370 bar) at max. 40 l/min

* incl. motor / excl. upper suspension & pendulum damper

Package consists of: container discharge unit, rotator H 04 F140-30V, short connecting hoses H 203 01, non-return valve, upper suspension with pendulum damper H 511 (4500), pressure relief valve

Container discharge unit H 921 for containers with HYVA mushroom system or ring system

Combination model: without any adjustments both types of containers can be handled – with HYVA **mushroom system or ring system**.

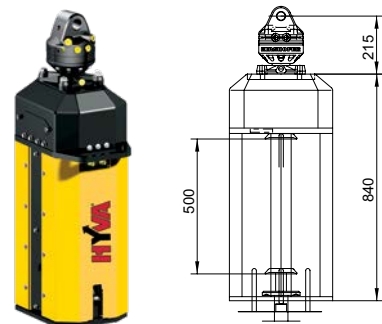
Low overall height due to compact design.

Robust mechanics with self locking spindle.

Precise positioning with HYVA rotator.

Pressure relief valve ensures **independence of crane operating pressure**.

Protection against damage of container by **automatic lift stop and an additional height control system**.



Type	max. Lift of the hook (mm)	Load capacity (kg)	Height (incl. rotator) (mm)	Self weight*	Operating pressure at oil flow
H 921	500	2500	1055	180	20 - 26 MPa (200 - 260 bar) at max. 75 l/min 20 - 37 MPa (200 - 370 bar) at max. 40 l/min

* incl. motor / excl. upper suspension & pendulum damper

Package consists of: container discharge unit, rotator H 04 F, short connecting hoses H 203 01, upper suspension with pendulum damper H 511 (4500), pressure relief valve

CONTAINER DISCHARGE UNITS - H 920-12

HYVA container discharge attachments with the fast HYVA mushroom system are characterised by short cycle times and an attractive acquisition price. Containers can be emptied even faster and more cost effectively with a one-man operation.

Container discharge unit H 920-12 for containers with HYVA mushroom system

Robust mechanics with **self centring hydraulic interlocking**.
Precise positioning with HYVA rotator, direct hose routing.
Independence of crane operating pressure due to the pressure relief valve.
 Protection against damage of container by **automatic lift stop and an additional height control system**.
 Pressure control for **user controlled unlocking**.
 Including **integrated locking indicator**.



Type	max. Lift of the hook (mm)	Load capacity (kg)	Height (incl. rotator) (mm)	Self weight*
H 920-12	500	2500	1490	210

* incl. motor / excl. upper suspension & pendulum damper

Package consists of: container discharge unit, rotator H 04 F140-30V, short connecting hoses H 203 01, non-return valve, upper suspension with pendulum damper H 511 (4500), pressure relief valve

Requirements of truck crane

Operating pressure at oil flow:

20 - 26 MPa (200 - 260 bar) at max. 75 l/min

20 - 37 MPa (200 - 370 bar) at max. 40 l/min

TWIN-HOOK CONTAINER DISCHARGE UNIT - H 920-31

The HYVA container discharge unit with twin-hook for deposit containers with system Schäfer are characterised by short cycle times and an attractive acquisition price. Containers can be emptied even faster and more cost effectively with a one-man operation. The attachment is extremely maintenance low, robust and low-built thanks to its compact construction.

Container discharge unit H 920-31 for containers with twin-hook system

Robust mechanics.

Precise positioning with HYVA rotator, short hose connection.

Independence of crane operating pressure due to the pressure relief valve.

Easy handling thanks to **low overall height**.

Low maintenance.



Type	max. Lift of the hook (mm)	width E (mm)	width D (mm)	Load capacity (kg)	Height C (mm)	Self weight* (kg)
H 920-31	500	805	265	4500	615	160

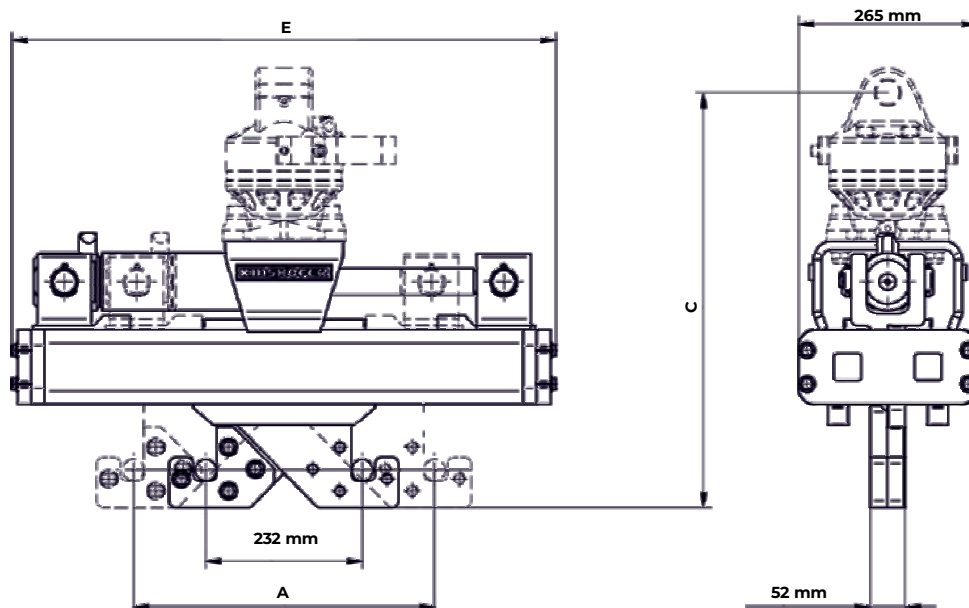
* incl. motor / excl. upper suspension & pendulum damper

Package consists of: container discharge unit, rotator H 04 F, short connecting hoses H 203 01, upper suspension with pendulum damper H 511 (4500), pressure relief valve and non-return valve

Requirements of truck crane

Operating pressure (open/close):	max. 35 MPa (350 bar)
Recommended oil flow (open/close):	40 l/min
Operating pressure (rotation):	max. 26 MPa (260 bar)
Recommended oil flow (rotation):	25 - max. 75 l/min

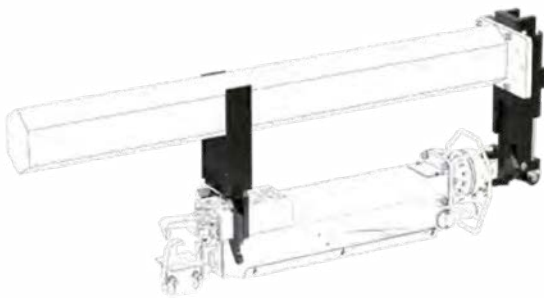
Technical drawings



DOCKING DEVICE FOR CONTAINER DISCHARGE UNITS - H 924

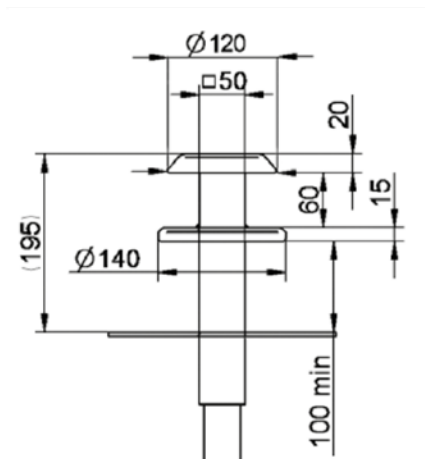
Docking device for container discharge units

Type	Description	Tilting angle (deg.)	Self weight (kg)
H 924	docking device for container discharge units: it allows the discharge unit to be hydraulically docked and locked onto the crane jib. When unlocked, acts as a hydraulic pendulum damper. A solenoid valve for switch-over between the hydraulic circuits is included. Please state crane model when ordering. Operating pressure max. 28 MPa (280 bar).	90°	70

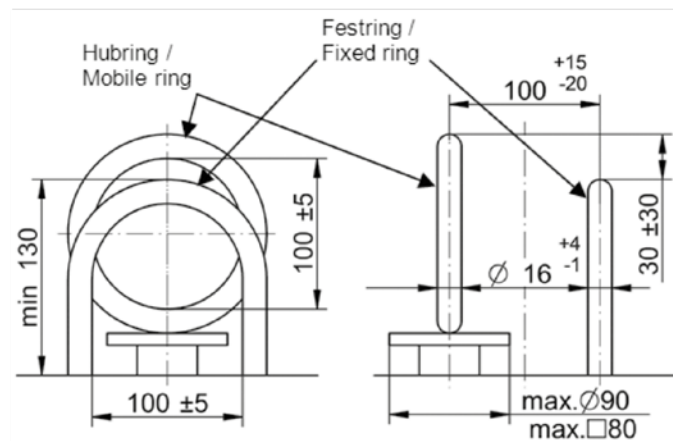


Dimensions for containers with HYVA mushroom or ring system

mushroom system for containers



ring system for containers



mushroom and ring system: leverage hoisting max. 500 mm

HYDRAULIC LOAD HOOKS - H 920-5 / H 920-4

Hydraulic hook H 920-5 for tools and loads with ring system

Low overall height due to compact design.

Precise positioning in combination with HYVA rotator.

The **safety load hook** is equipped with a hydraulic cylinder for opening/closing without opening unintentionally in a loaded condition.

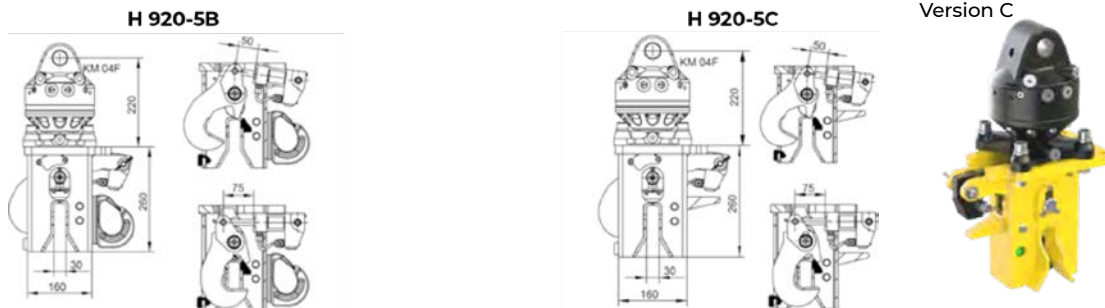
Suitable for the hydraulic suspension of pallet forks with vertical crane hook suspension or with additional hook (version B) for the fast and precise load suspension with e.g. tightropes, lashing straps, etc. and the following release of the loads (version C w/o additional hook).

Including **integrated locking indicator**.



Type	Width (mm)	Load capacity (kg)	Ring - Ø max. (mm)	Height (incl. rotator) (mm)	Self weight (kg)	Operating pressure at oil flow
H 920-5Bc	310	4500	30	480	48	37 MPa (370 bar) at 2 - max. 10 l/min
H 920-5Cc	305	4500	30	480	47	37 MPa (370 bar) at 2 - max. 10 l/min
Package consists of:	hydraulic hook, rotator H 04 F, short connection hoses H 203 01, upper suspension H 501 (4500), non-return valve					

Technical drawings



Hydraulic hook H 920-4 for containers and loads with ring system

The hydraulic hook facilitates the fast and precise lifting and loosening of containers and loads with ring system.

Precise positioning in combination with HYVA rotator.

Low overall height due to compact design.

Robust mechanics with hydraulic cylinder (open/close).

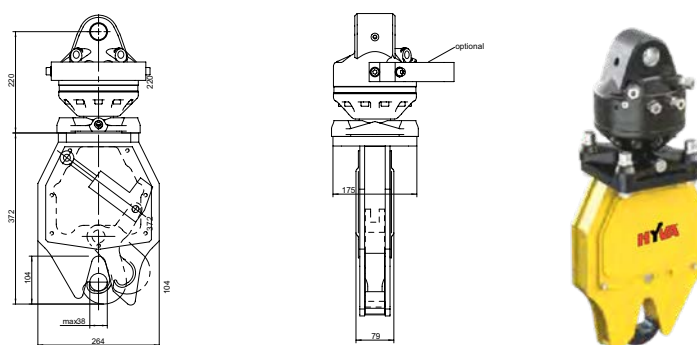
V-shaped cutout **facilitates ring suspension**.

Rotator with vertical oil ducts, so **no open short hose** connections.

Type	Width (mm)	Height (with motor) (mm)	Ring - Ø max. (mm)	Self weight (incl. rotator) (kg)	Load capacity max. (kg)	Betriebsdruck bei Literleistung
H 920-4c	264	592	38	46	2500	20 MPa (200 bar) bei 2 - max. 10 l/min

Package consists of: hydraulic hook, rotator H 04 F140-30V, upper suspension H 501 (4500), non-return valve

Technical drawings



H 930-1000 SPECIAL/H 931-1000 - Manipulator / 3-Axes-Manipulator

The pole grapple H 930-1000 Special is a perfectly matched attachment for drilling sites. Poles can be gripped easily and positioned precisely. The 3-axes-manipulator H 931 features maximum manoeuvrability for your attachments at the loader crane's tip – and provides flexibility of the loader crane's use in any arc position.

3-axes-manipulator: maneuverability by three hydraulic functions: gripping, rotating and tilting (3rd hydraulic cycle needed).

Endless rotation.

High loads up to 1000 kg.

Precise positioning guaranteed by self-locking worm drive (H 931-1000).

5-line feedthrough.


H 930-1000 Special provides an **exchangeable jaw system**.



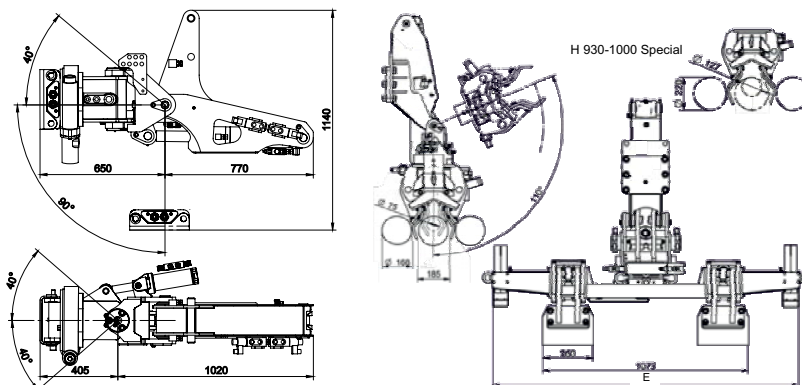
Pole grapple H 930-1000 Special						
Type	Load Capacity (kg)	Gripping range (min./max.) (mm)	Width E (mm)	Number of tines	Self weight (kg)	Closing force (kN)
H 930-1000 Special	1000	(75/168)	1600	2	385	2 x 16
H 930-1000 Special-S	---	(127/220)	---	---	---	---
Package consists of:	manipulator, hydraulically released / self locking brake, HYVA rotator, non-return valve					
Please note:	tubes or poles have to be grabbed always in the centre of gravity					

3-Axes-manipulator H 931-1000					
Type	Load Capacity (kg)	Slewing angle	Tilting angle	Rotation	Self weight (kg)
H 931-1000	1000	130°	± 40°	360° endless	290
Package consists of:	manipulator, hydraulically released / self locking brake, HYVA rotator, non-return valve				
Please note:	tubes or poles have to be grabbed always in the centre of gravity				

Accessories	
Type	Description
H 980-2 c	Solenoid valve to upgrade to the third hydraulic control circuit, to switch when there are only two free hydraulic circuits available for three required functions (rotate, grab and tilt) – for 12/24 V, operating pressure max. 25 MPa, oil flow 60 l/min. Complete including assembly parts, hose protection, hoses and assembly

Requirements of truck crane	
Type	Operating pressure at oil flow:
H 930-1000 Special	max. 20 MPa (200 bar) at 20 - max. 40 l/min
H 931-1000	20 - 24 MPa (200 - 240 bar) at 20 - max. 30 l/min  Mind the pressure!

Technical drawings



MANIPULATOR - H 930

A hydraulically operated attachment used for positioning tubes or poles, the H 930 is for use on loader cranes with three functions. Flange mounting on the mechanical extension of the crane.



Manoeuvrability through three hydraulic functions gripping, lifting and turning (rotation and tilting) of straight round poles (three hydraulic circuits are necessary). Unlimited angle of rotation.

Heavy loads of 500 kg up to 3000 kg can be handled by the HYVA manipulators.

Precision operation assured through continuous rotation, equipped with mechanically operating, hydraulic pilot controlled brake to prevent unintentional rotation.

Manipulator H 930						
Type	Load Capacity (kg)	Pipe - Ø(min./max.) (mm)	Width E (mm)	Number of tines	Self weight (kg)	Closing force (kN)
H 930-500	500	100/300	785	1	235	11
H 930-1000	1000	100/300	1275	2	310	23
H 930-2000	2000	250/600	2165	4	865	25
H 930-3000	3000	250/600	2560	6	1085	39
Package consists of:	manipulator, HYVA rotator (H 930-500 / H 930-1000) / HYVA rotary drive (H 930-2000 / H 930-3000), hydraulic pilot controlled brake, non-return valve					

Please note: tubes or poles have to be grabbed always in the centre of gravity

Accessories

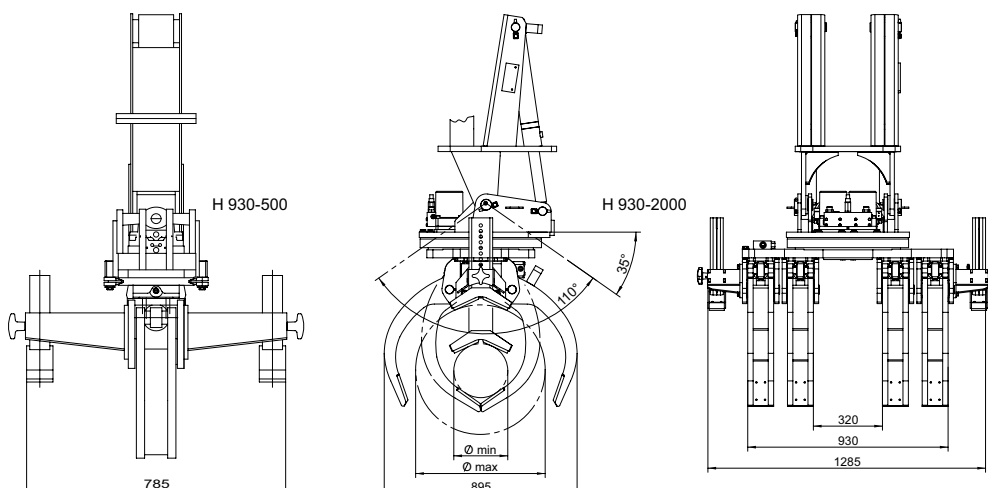
Type	Description
H 980-2 c	Solenoid valve to upgrade to the third hydraulic control circuit, to switch when there are only two free hydraulic circuits available for three required functions (rotate, grab and tilt) – for 12/24 V, operating pressure max. 25 MPa, oil flow 60 l/min. Complete including assembly parts, hose protection, hoses and assembly

Requirements of truck crane

Type	Operating pressure at oil flow:
H 930-500 / H 930-1000	max. 20 MPa (200 bar) at 20 - max. 40 l/min
H 930-2000	max. 25 MPa (250 bar) at 20 - max. 40 l/min
H 930-3000	max. 25 MPa (250 bar) at 20 - max. 75 l/min

Mind the pressure!

Technical drawings



BARRIER LIFTER - H 932MB

The H 932MB Barrier Lifter is a mechanical grapple for fast and convenient handling of concrete barriers and blocks.

Safe: Carbide gripping pads ensure safe operation, even on wet or coated surfaces. An optical power indicator illustrates the range for optimum grip.

Efficient: The fully integrated, mechanically operated "latch & release" system allows the unit to function independently, without assistance from a ground man.

Versatile: Multi-position arms are a standard feature. This means one unit can achieve different gripping ranges by simply changing a pin position.

Cost-effective: The elimination of slings and chains means more cycles can be achieved per hour.

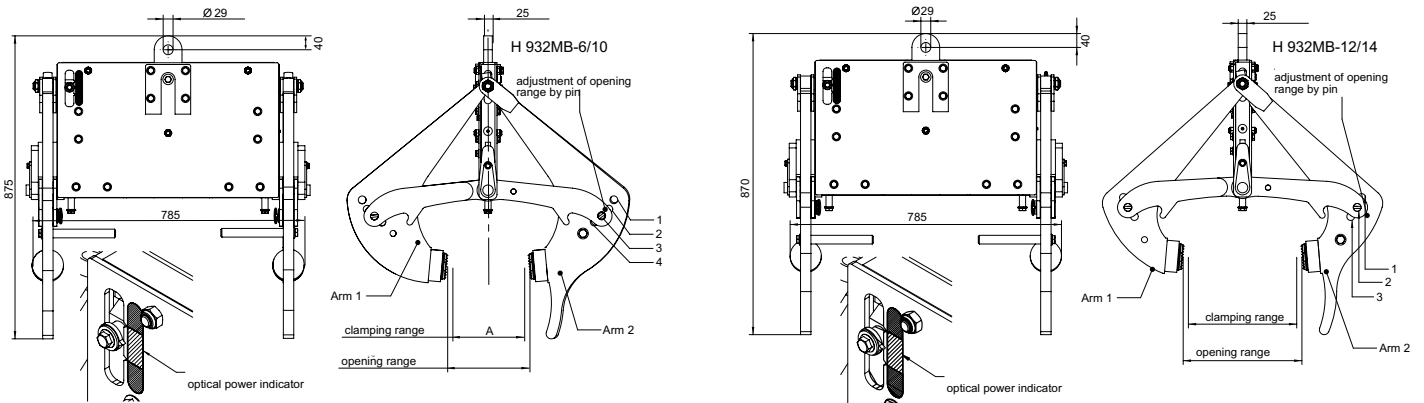
Fast: The "latch & release" system functions automatically each time the load line is slackened.



Manipulator H 930

Type	Opening range A (min./max.) (mm)	Self weight (kg)	Load capacity max. (kg)
H 932MB-6/10	115 – 305	162	6580
H 932MB-12/14	295 – 395	150	6580

Technical drawings



EARTH DRILLS - 3000TC / 5500TC / 7000TC

The robust earth drills for truck cranes up to 18 t/m are an economical and customized solution for earth drills e.g. for fencing, road signage, landscaping and tree planting. Well borings, screw pile installations and sound barrier installations are also no problem for the earth drills.

Non Dislodgement Shaft (NDS) for more safety and lower down times, as this unique construction prevents the output shaft from dislodgement.

Pre-filled with a **colored gear oil**. Not only is the use of a colored oil a good indicator of correct service, but it also aids identifying possible hydraulic oil leaks.

The heavy duty fabricated hoods feature forged steel ears; these high strength ears easily transmit the high torsional loads, experienced whilst drilling, without becoming fatigued.

Easy access oil service points.



Earth drills for truck cranes 3000TC / 5500TC / 7000TC								
Type	For cranes up to (t/m)	Shaft standard	Shaft option (mm)	Speed range (RPM)	Height (mm)	Diameter (mm)	Weight (kg)	Suitable augers
3000TC	9	65 round	2" hex; 57 square	7 - 46	665	244	73	S4 100 - 600
5500TC	15	75 square	2,5" hex	11 - 38	780	269	108	S5 150 - 800
7000TC	9 - 18	75 square	2,5" hex	9 - 30	780	269	110	S5 150 - 1000

Package consists of: earth drill, connecting link for suspension

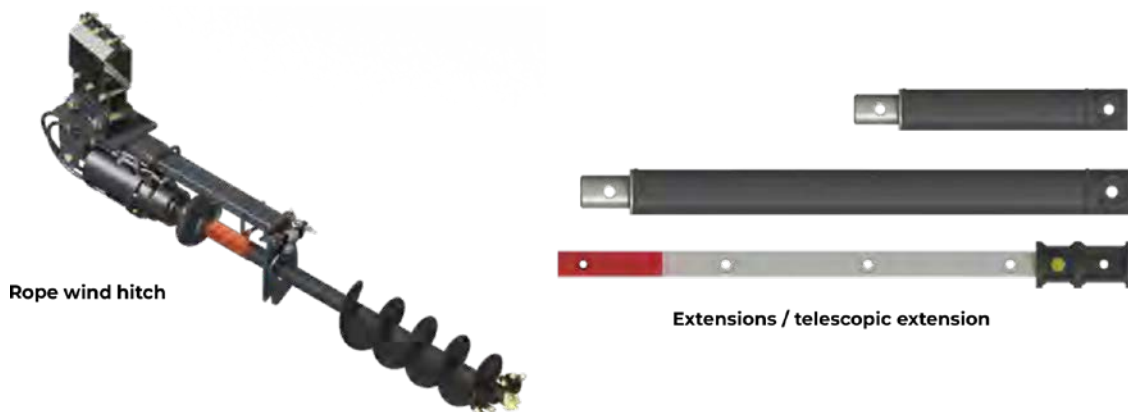
Accessories

Type	Description
S4 Ext 500	extension suitable for earth drill 3000TC and S4 augers – 500 mm
S4 Ext 800	extension suitable for earth drill 3000TC and S4 augers – 800 mm
S4 Ext 1000	extension suitable for earth drill 3000TC and S4 augers – 1000 mm
S5 Ext 1000	extension suitable for earth drills 5500TC / 7000TC and S5 augers – 1000 mm
S5 Ext 1500	extension suitable for earth drills 5500TC / 7000TC and S5 augers – 1500 mm
S5 Ext 2000	extension suitable for earth drills 5500TC / 7000TC and S5 augers – 2000 mm
S6 TeleExt 1500	telescopic extension suitable for earth drills 5500TC / 7000TC and S5 augers starting from diameter 300 mm – 1500 mm length
S6 TeleExt 2000	telescopic extension suitable for earth drills 5500TC / 7000TC and S5 augers starting from diameter 300 mm – 2000 mm length
Rope Wind Hitch	rope wind hitch for safe position on the truck crane during transport

Technical Details

Type	3000TC	5500TC	7000TC
Oil pressure range:	80 - 260 bar	80 - 260 bar	80 - 240 bar
Oil flow range:	5 - 35 l/min	15 - 50 l/min	15 - 50 l/min
Torque range:	959 - 3116 Nm	1685 - 5477 Nm	2098 - 6819 Nm

Technical drawings



AUGERS FOR EARTH DRILLS - S4

The S4 auger is perfectly matched to the 3000TC earth drill and every task. A constant spiral configuration and a shallow pitch flight guarantee extreme efficiency and productivity. Suitable for truck cranes up to 9 t/m.

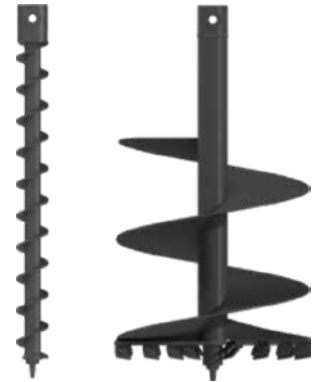
Higher productivity by constant spiral configuration and the perfectly angled tooth holder.
Interchangeable pilots and teeth allow for differing ground conditions.

Easy fitting of teeth and pilots.

Patented Shock Lock-System: incorporating a shock absorbing rubber element to protect the tungsten carbide on the tooth assembly coupled with a solid locking pin prevent tooth loss.

High flexibility thanks to **different auger extensions.**

For earth drill 3000TC.



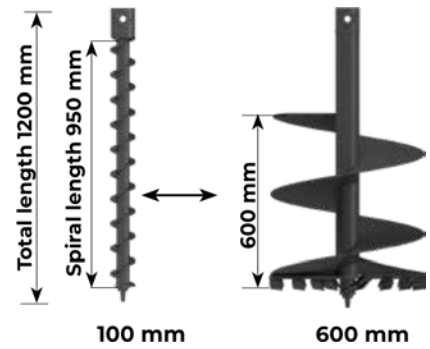
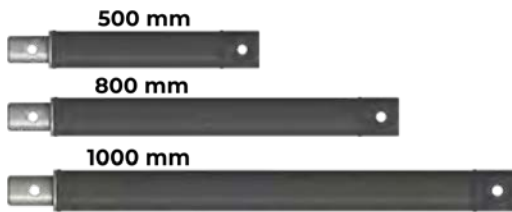
S4 Augers (specify pilot and teeth when ordering)

Type	Diameter (mm)	Spiral length (mm)	Total length (mm)	Weight (kg)	Number of teeth	Type of teeth
S4-100 Earth	100	950	1200	17	0	Earth
S4-100 Tungsten				17	0	Tungsten
S4-100 Extra-Dig				17	0	Extra-Dig*
S4-150 Earth	150	780	1200	21	2	Earth
S4-150 Tungsten				22	2	Tungsten
S4-150 Extra-Dig				22	2	Extra-Dig*
S4-200 Earth	200	750	1200	24	2	Earth
S4-200 Tungsten				24	2	Tungsten
S4-200 Extra-Dig				24	2	Extra-Dig*
S4-225 Earth	225	750	1200	27	2	Earth
S4-225 Tungsten				28	2	Tungsten
S4-225 Extra-Dig				27	2	Extra-Dig*
S4-250 Earth	250	700	1200	27	3	Earth
S4-250 Tungsten				28	3	Tungsten
S4-250 Extra-Dig				28	3	Extra-Dig*
S4-300 Earth	300	700	1200	32	4	Earth
S4-300 Tungsten				33	4	Tungsten
S4-300 Extra-Dig				32	4	Extra-Dig*
S4-350 Earth	350	675	1200	35	4	Earth
S4-350 Tungsten				36	4	Tungsten
S4-350 Extra-Dig				36	4	Extra-Dig*
S4-400 Earth	400	925	1200	38	5	Earth
S4-400 Tungsten				39	5	Tungsten
S4-400 Extra-Dig				38	5	Extra-Dig*
S4-450 Earth	450	625	1200	42	6	Earth
S4-450 Tungsten				43	6	Tungsten
S4-450 Extra-Dig				43	6	Extra-Dig*
S4-500 Earth	500	625	1200	48	6	Earth
S4-500 Tungsten				48	6	Tungsten
S4-500 Extra-Dig				48	6	Extra-Dig*

S4-600 Earth	600	600	1200	54	8	Earth
S4-600 Tungsten				56	8	Tungsten
S4-600 Extra-Dig				55	8	Extra-Dig*

* Tungsten-teeth with special digging pilot

S4 Extensions



Note: All augers mentioned above are equipped with Shock Lock tooth holders. Total length is length including pilot.

AUGERS FOR EARTH DRILLS - S5

The S5 auger is perfectly matched to the corresponding earth drills and every task. A constant spiral configuration and a shallow pitch flight guarantee extreme efficiency and productivity. Suitable for truck cranes from 9 t/m up to 18 t/m.

Higher productivity by constant spiral configuration and the perfectly angled tooth holder.
Interchangeable pilots and teeth allow for differing ground conditions.

Easy fitting of teeth and pilots.

Patented Shock Lock-System: incorporating a shock absorbing rubber element to protect the tungsten carbide on the tooth assembly coupled with a solid locking pin prevent tooth loss. High flexibility thanks to **different auger extensions** and telescopic extensions.

For earth drills 5500TC and 7000TC.



S5 Augers (specify pilot and teeth when ordering)

Type	Diameter (mm)	Spiral length (mm)	Total length (mm)	Weight (kg)	Number of teeth	Type of teeth
S5-150 Earth	150	1080	1500	36	0	Earth
S5-150 Tungsten				35	0	Tungsten
S5-150 Rock				35	2	Rock
S5-200 Earth	200	977	1500	41	2	Earth
S5-200 Tungsten				40	2	Tungsten
S5-200 Rock				40	3	Rock
S5-225 Earth	225	975	1500	45	2	Earth
S5-225 Tungsten				44	2	Tungsten
S5-225 Rock				44	4	Rock
S5-250 Earth	250	965	1500	46	2	Earth
S5-250 Tungsten				46	2	Tungsten
S5-250 Rock				45	4	Rock
S5-300 Earth	300	900	1500	51	4	Earth
S5-300 Tungsten				51	4	Tungsten
S5-300 Rock				50	5	Rock
S5-350 Earth	350	900	1500	56	4	Earth
S5-350 Tungsten				56	4	Tungsten
S5-350 Rock				55	6	Rock
S5-400 Earth	400	875	1500	62	5	Earth
S5-400 Tungsten				61	5	Tungsten
S5-400 Rock				59	7	Rock
S5-450 Earth	450	750	1500	66	6	Earth
S5-450 Tungsten				66	6	Tungsten
S5-450 Rock				63	8	Rock
S5-500 Earth	500	750	1500	73	6	Earth
S5-500 Tungsten				73	6	Tungsten
S5-500 Rock				73	6	Rock
S5-600 Earth	600	750	1500	84	8	Earth
S5-600 Tungsten				84	8	Tungsten
S5-600 Rock				82	11	Rock

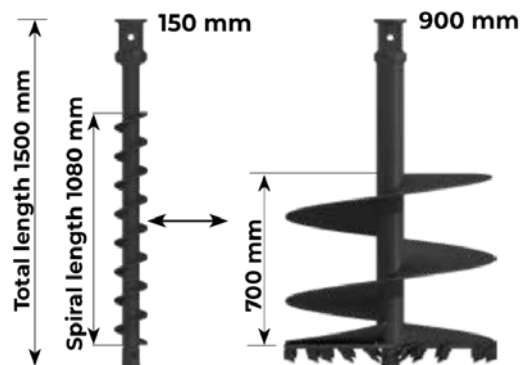
S5-700 Earth	700	700	1500	99	9	Earth
S5-700 Tungsten				99	9	Tungsten
S5-700 Rock				95	13	Rock
S5-750 Earth	750	700	1500	101	9	Earth
S5-750 Tungsten				101	9	Tungsten
S5-750 Rock				98	14	Rock
S5-800 Earth	800	700	1500	109	9	Earth
S5-800 Tungsten				109	9	Tungsten
S5-800 Rock				113	15	Rock
S5-900 Earth	900	700	1500	137	10	Earth
S5-900 Tungsten				137	10	Tungsten
S5-900 Rock				133	17	Rock
S5-1000 Earth	1000	525	1500	119	11	Earth
S5-1000 Tungsten				119	11	Tungsten
S5-1000 Rock				133	19	Rock

* Tungsten-teeth with special digging pilot

S5 Extension



S6 Telescopic extension



Note:
All augers mentioned above are equipped with Shock Lock tooth holders. Total length is length including pilot.

HYVA PREMIUM PLUS BRICK CLAMP K-LINE

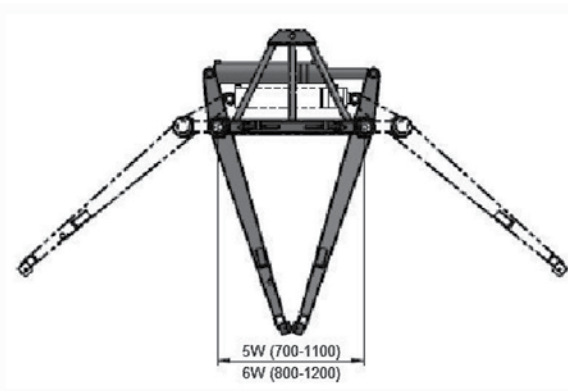
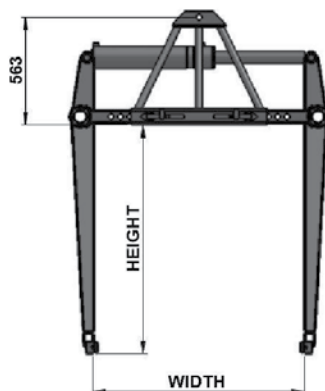
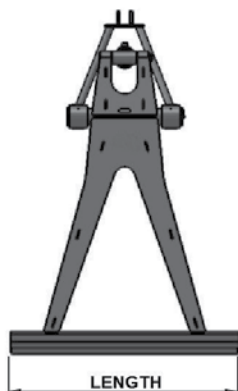
Hyva Premium Plus, light weight brick clamp is suitable for all palletized and non-palletized construction materials.

Capacity 3.500 kg | Max. working pressure: 200 bar | Non return valve prevents loss of clamping force | 2 hoses with 1/2" quick release couplings | Low own weight due to the use of high tensile steel | Easy width adjustment | Several options available for clamping rail | Stand up bracket for easy "parking" | Height reduction due to the possibility of Å at stowing | Cylinder RAL1023, Clamp RAL9005



Hyva code	Description	Width (mm)	Length (mm)	Height (mm)	Weight (kg)	Parallel Guide (P)	Relief valve + Manometer (V)
85998110	PREMIUMPLUS L1000-H1150-5W-0-0	700 – 1100	1000	1150	290	no	no
85998120	PREMIUMPLUS L1000-H1150-5W-P-0	700 – 1100	1000	1150	300	yes	no
85998130	PREMIUMPLUS L1000-H1150-5W-0-V	700 – 1100	1000	1150	290	no	yes
85998140	PREMIUMPLUS L1000-H1150-5W-P-V	700 – 1100	1000	1150	300	yes	yes
85998150	PREMIUMPLUS L1000-H1150-6W-0-0	800 – 1300	1000	1150	300	no	no
85998160	PREMIUMPLUS L1000-H1150-6W-P-0	800 – 1300	1000	1150	310	yes	no
85998170	PREMIUMPLUS L1000-H1150-6W-0-V	800 – 1300	1000	1150	300	no	yes
85998200	PREMIUMPLUS L1000-H1150-6W-P-V	800 – 1300	1000	1150	310	yes	yes
85998210	PREMIUMPLUS L1200-H1150-5W-0-0	700 – 1100	1200	1150	300	no	no
85998220	PREMIUMPLUS L1200-H1150-5W-P-0	700 – 1100	1200	1150	310	yes	no
85998230	PREMIUMPLUS L1200-H1150-5W-0-V	700 – 1100	1200	1150	300	no	yes
85998240	PREMIUMPLUS L1200-H1150-5W-P-V	700 – 1100	1200	1150	310	yes	yes
85998250	PREMIUMPLUS L1200-H1150-6W-0-0	800 – 1300	1200	1150	310	no	no
85998260	PREMIUMPLUS L1200-H1150-6W-P-0	800 – 1300	1200	1150	320	yes	no
85998270	PREMIUMPLUS L1200-H1150-6W-0-V	800 – 1300	1200	1150	310	no	yes
85998300	PREMIUMPLUS L1200-H1150-6W-P-V	800 – 1300	1200	1150	320	yes	yes
85998310	PREMIUMPLUS L1300-H1150-5W-0-0	700 – 1100	1300	1150	310	no	no
85998320	PREMIUMPLUS L1300-H1150-5W-P-0	700 – 1100	1300	1150	320	yes	no
85998330	PREMIUMPLUS L1300-H1150-5W-0-V	700 – 1100	1300	1150	310	no	yes
85998340	PREMIUMPLUS L1300-H1150-5W-P-V	700 – 1100	1300	1150	320	yes	yes
85998350	PREMIUMPLUS L1300-H1150-6W-0-0	800 – 1300	1300	1150	320	no	no
85998360	PREMIUMPLUS L1300-H1150-6W-P-0	800 – 1300	1300	1150	330	yes	no
85998370	PREMIUMPLUS L1300-H1150-6W-0-V	800 – 1300	1300	1150	320	no	yes
85998380	PREMIUMPLUS L1300-H1150-6W-P-V	800 – 1300	1300	1150	330	yes	yes

Technical drawings



HYVA JUNIOR POWER BRICK CLAMP K-LINE

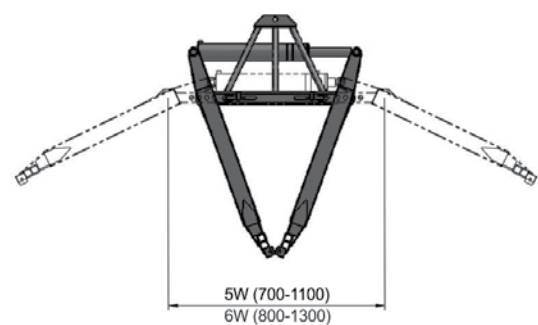
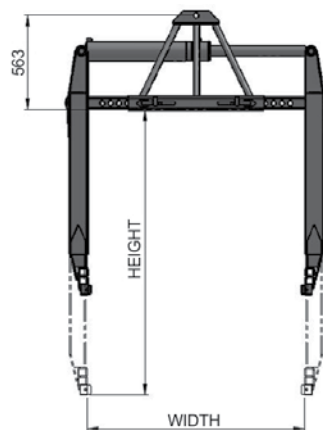
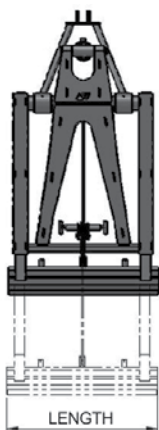
Hyva Junior Power height adjustable brick clamp is suitable for all palletized and non-palletized construction materials.

Capacity 2.500 kg - 1.900 kg, depending on chosen height | Max. working pressure: 200 bar | Non return valve prevents loss of clamping force | 2 hoses with 1/2" quick release couplings | Low own weight due to the use of high tensile steel. | Easy width adjustment. | Several options available for clamping rail. | Stand up bracket for easy "parking" | Height reduction due to the possibility of Å at stowing. | Cylinder RAL1023, Clamp RAL9005



Hyva code	Description	Width (mm)	Length (mm)	Height (mm)	Weight (kg)	Parallel Guide (P)	Relief valve + Manometer (V)
85997600	HA JUN-POWER L1000-H1150-5W-0-0	700 – 1100	1000	1100-1700	445	no	no
85997610	HA JUN-POWER L1000-H1150-5W-P-0	700 – 1100	1000	1100-1700	475	yes	no
85997620	HA JUN-POWER L1000-H1150-5W-0-V	700 – 1100	1000	1100-1700	445	no	yes
85997630	HA JUN-POWER L1000-H1150-5W-P-V	700 – 1100	1000	1100-1700	475	yes	yes
85997640	HA JUN-POWER L1000-H1150-6W-0-0	800 – 1300	1000	1100-1700	455	no	no
85997650	HA JUN-POWER L1000-H1150-6W-P-0	800 – 1300	1000	1100-1700	485	yes	no
85997660	HA JUN-POWER L1000-H1150-6W-0-V	800 – 1300	1000	1100-1700	455	no	yes
85997670	HA JUN-POWER L1000-H1150-6W-P-V	800 – 1300	1000	1100-1700	485	yes	yes
85997700	HA JUN-POWER L1200-H1150-5W-0-0	700 – 1100	1200	1100-1700	465	no	no
85997710	HA JUN-POWER L1200-H1150-5W-P-0	700 – 1100	1200	1100-1700	495	yes	no
85997720	HA JUN-POWER L1200-H1150-5W-0-V	700 – 1100	1200	1100-1700	465	no	yes
85997730	HA JUN-POWER L1200-H1150-5W-P-V	700 – 1100	1200	1100-1700	495	yes	yes
85997740	HA JUN-POWER L1200-H1150-6W-0-0	800 – 1300	1200	1100-1700	475	no	no
85997750	HA JUN-POWER L1200-H1150-6W-P-0	800 – 1300	1200	1100-1700	505	yes	no
85997760	HA JUN-POWER L1200-H1150-6W-0-V	800 – 1300	1200	1100-1700	475	no	yes
85997770	HA JUN-POWER L1200-H1150-6W-P-V	800 – 1300	1200	1100-1700	505	yes	yes

Technical drawings



HYVA POWER BRICK CLAMP K-LINE

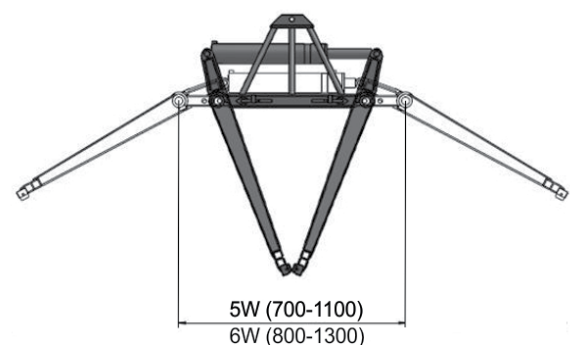
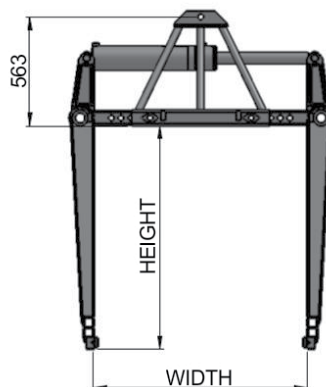
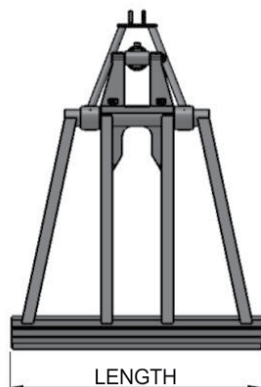
Hyva Power brick clamp is suitable for all palletized and non-palletized construction materials.

Capacity 4.500 kg | Max. working pressure: 200 bar | Non return valve prevents loss of clamping force | 2 hoses with 1/2" quick release couplings | Low own weight due to the use of high tensile steel | Easy width adjustment | Several options available for clamping rail | Stand up bracket for easy "parking" | Height reduction due to the possibility of A at stowing | Cylinder RAL1023, Clamp RAL900



Hyva code	Description	Width (mm)	Length (mm)	Height (mm)	Weight (kg)	Parallel Guide (P)	Relief valve + Manometer (V)
85997300	POWER L1000-H1150-5W-0-0	700 – 1100	1000	1150	390	no	no
85997310	POWER L1000-H1150-5W-P-0	700 – 1100	1000	1150	400	yes	no
85997320	POWER L1000-H1150-5W-0-V	700 – 1100	1000	1150	390	no	yes
85997330	POWER L1000-H1150-5W-P-V	700 – 1100	1000	1150	400	yes	yes
85997340	POWER L1000-H1150-6W-0-0	800 – 1300	1000	1150	400	no	no
85997350	POWER L1000-H1150-6W-P-0	800 – 1300	1000	1150	410	yes	no
85997360	POWER L1000-H1150-6W-0-V	800 – 1300	1000	1150	400	no	yes
85997070	POWER L1000-H1150-6W-P-V	800 – 1300	1000	1150	410	yes	yes
85997400	POWER L1200-H1150-5W-0-0	700 – 1100	1200	1150	400	no	no
85997410	POWER L1200-H1150-5W-P-0	700 – 1100	1200	1150	410	yes	no
85997420	POWER L1200-H1150-5W-0-V	700 – 1100	1200	1150	400	no	yes
85997430	POWER L1200-H1150-5W-P-V	700 – 1100	1200	1150	410	yes	yes
85997440	POWER L1200-H1150-6W-0-0	800 – 1300	1200	1150	410	no	no
85997450	POWER L1200-H1150-6W-P-0	800 – 1300	1200	1150	420	yes	no
85997460	POWER L1200-H1150-6W-0-V	800 – 1300	1200	1150	410	no	yes
85997470	POWER L1200-H1150-6W-P-V	800 – 1300	1200	1150	420	yes	yes
85997500	POWER L1300-H1150-5W-0-0	700 – 1100	1300	1150	410	no	no
85997510	POWER L1300-H1150-5W-P-0	700 – 1100	1300	1150	420	yes	no
85997520	POWER L1300-H1150-5W-0-V	700 – 1100	1300	1150	410	no	yes
85997530	POWER L1300-H1150-5W-P-V	700 – 1100	1300	1150	420	yes	yes
85997540	POWER L1300-H1150-6W-0-0	800 – 1300	1300	1150	420	no	no
85997550	POWER L1300-H1150-6W-P-0	800 – 1300	1300	1150	430	yes	no
85997560	POWER L1300-H1150-6W-0-V	800 – 1300	1300	1150	420	no	yes
85997570	POWER L1300-H1150-6W-P-V	800 – 1300	1300	1150	430	yes	yes

Technical drawings



HYVA TWIN BRICK CLAMP K-LINE

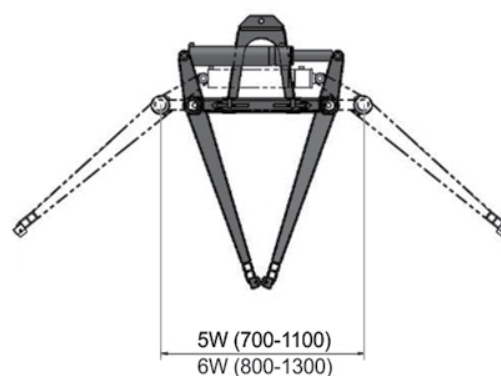
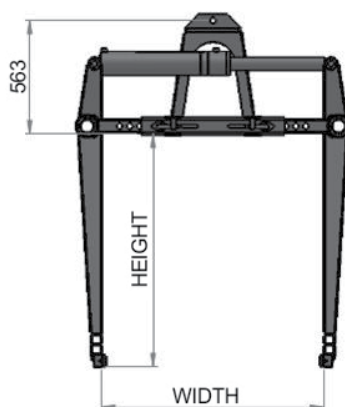
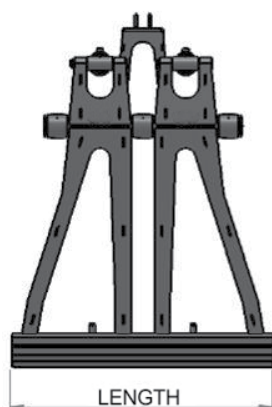
Hyva Twin brick clamp is suitable for all palletized and non-palletized construction materials.

Capacity 5.500 kg | Max. working pressure: 140 bar | Non return valve prevents loss of clamping force | 2 hoses with 1/2" quick release couplings | Low own weight due to the use of high tensile steel | Easy width adjustment | Several options available for clamping rail | Stand up bracket for easy "parking" | Height reduction due to the possibility of Å at stowing | Cylinder RAL1023, Clamp RAL9005



Hyva code	Description	Width (mm)	Length (mm)	Height (mm)	Weight (kg)	Parallel Guide (p)	Relief valve + Manometer (v)
85997800	TWIN L1000-H1150-5W-0-V	700 – 1100	1000	1150	465	no	yes
85997810	TWIN L1000-H1150-5W-P-V	700 – 1100	1000	1150	495	yes	yes
85997840	TWIN L1000-H1150-6W-0-V	800 – 1300	1000	1150	480	no	yes
85997850	TWIN L1000-H1150-6W-P-V	800 – 1300	1000	1150	510	yes	yes
85997900	TWIN L1200-H1150-5W-0-V	700 – 1100	1200	1150	475	no	yes
85997910	TWIN L1200-H1150-5W-P-V	700 – 1100	1200	1150	505	yes	yes
85997940	TWIN L1200-H1150-6W-0-V	800 – 1300	1200	1150	490	no	yes
85997950	TWIN L1200-H1150-6W-P-V	800 – 1300	1200	1150	520	yes	yes
85998000	TWIN L1300-H1150-5W-0-V	700 – 1100	1300	1150	480	no	yes
85998010	TWIN L1300-H1150-5W-P-V	700 – 1100	1300	1150	510	yes	yes
85998040	TWIN L1300-H1150-6W-0-V	800 – 1300	1300	1150	505	no	yes
85998050	TWIN L1300-H1150-6W-P-V	800 – 1300	1300	1150	535	yes	yes

Technical drawings



HYVA PALLET FORK K-LINE

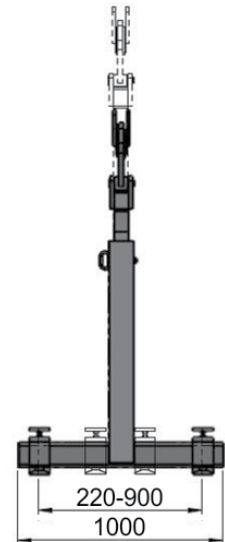
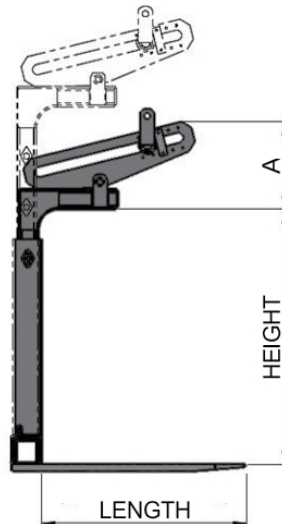
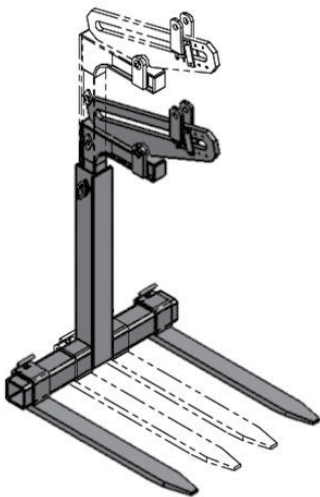
Hyva 2.5 T and 3.3 T pallet fork is suitable for safely loading and unloading palletized materials.

Capacity 2.500 kg & 3.300 kg | Low own weight due to the use of high tensile steel | Easy adjustable center of gravity by balancer | Easy width adjustment: 220 mm to 900 mm | Hook height adjustable in 3 positions | Load center of gravity: 600 mm | Stand up bracket for easy "parking" | Height reduction due to the possibility of Å at stowing | Pallet fork: RAL9005.



Hyva code	Description	Width (mm)	Length (mm)	Fork dimensions (mm)	A (mm)	Height (mm)	Weight (kg)
85991100	PALLETHAAK 2.5T STD L=0800	1000	800	100x35x800	429	1250-1500-1750	195
85991200	PALLETHAAK 2.5T STD L=1000	1000	1000	100x35x1000	429	1250-1500-1750	200
85991300	PALLETHAAK 2.5T STD L=1150	1000	1150	100x35x1150	429	1250-1500-1750	205
85991400	PALLETHAAK 3.3T STD L=1150	1000	1150	100x35x1150	429	1250-1500-1750	250
85999160	EXTRA SET LEPELS, 650X80X35	100	650	80x35x600	449	NVT	NVT
85999170	EXTRA SET LEPELS, 1150X100X35	100	1150	100x35x1150	449	NVT	NVT

Technical drawings



110 countries
+3,500 employees
20,000 customers
+30 subsidiaries
12 production facilities



Hyva is a leading provider of innovative and highly efficient transport solutions for commercial vehicles used in transport, construction, mining, materials handling and environmental service industries.

Founded in 1979 in the Netherlands, the company has a global presence with more than 30 wholly owned subsidiaries, extraordinary service coverage and 12 manufacturing facilities in Brazil, China, Europe and India.

For more information on Hyva, please visit www.hyva.com

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