

PROFESSIONAL EQUIPMENT



LIFETIME EXCELLENCE

COMBINED WITH PROFESSIONAL EQUIPMENT, THE PALFINGER CRANE BECOMES A MULTIFUNCTIONAL TOOL



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PREMIUM HIGHLIGHTS



ROTATOR PACKAGES



- Complete package including the rotator, suspension, connecting hoses and a hook
- Integrated pressure relief valve for safe operation
- Precise start and stop behaviour even at maximum load – counter steering when moving long goods is not necessary

TECHNICAL SPECIFICATIONS

Type	Load capacity (kg)	Torque (Nm)	Deflection moment max. (Nm)	Self weight (kg)
PZR300GPK	3000	450	1750	39
PZR450GPK	4500	850	3000	45
PZR601GPK	6000	1000	4500	63

TRUCK CRANE REQUIREMENTS

Operating pressure: 150 – 320 bar
Pump capacity: 25 – 60 l/min
One hydraulic function on the crane

NOTE:

For further types of rotators and additional technical information please turn to page 26.

STARTER PACKAGES



- Complete sets depending on the application for the easy and quick handling of different loads with the PALFINGER crane
- Maximum safety and service life through the use of products with the highest quality
- All packages include a nice surprise gift from PALFINGER

STARTER PACKAGE

Type: PZ-STARTER



- 4 roundslings - 2 t - length 2 m
- 4 roundslings - 2 t - length 4 m
- 2 roundslings - 3 t - length 3 m
- 4 bow shackles high strength TF 3250 kg
- 4 bow shackles high strength TF 4750 kg
- 2 load hooks for roundslings - 2 t
- + surprise gift - PALFINGER

BASIC PACKAGE

Type: PZ-BASIC



- 1 chain sling 3.55 t - 4.5 m - reducible
- 4 roundslings - 2 t - length 2 m - 3-layer
- 4 roundslings - 2 t - length 4 m - 3-layer
- 2 roundslings - 3 t - length 3 m - 3-layer
- 2 roundslings - 4 t - length 3 m - 3-layer
- 4 bow shackles high strength TF 3250 kg
- 4 bow shackles high strength TF 4750 kg
- 2 bow shackles high strength TF 6500 kg
- + surprise gift - PALFINGER

PREMIUM PACKAGE

Type: PZ-PREMIUM



- 2 chain slings 3.55 t - 4.5 m - reducible
- 4 roundslings - 2 t - length 2 m - 3-layer
- 4 roundslings - 2 t - length 4 m - 3-layer
- 2 roundslings - 3 t - length 3 m - 3-layer
- 2 roundslings - 4 t - length 3 m - 3-layer
- 4 bow shackles high strength TF 3250 kg
- 4 bow shackles high strength TF 4750 kg
- 2 bow shackles high strength TF 6500 kg
- 2 load hooks for roundslings - 2 t
- 2 load hooks for roundslings - 3 t
- 2 lifting belts - 3 t - length 5 m
- + surprise gift - PALFINGER

HPX DRIVE GRAPPLE PACKAGES



- Highest reliability due to the patented HPXdrive
- Precise operation with the flange rotator and shells synchronised by the one-piece piston
- Longer service life due to the innovative, intelligent design and secured system
- Savings in time and money through the use of a completely maintenance-free system
- Solution for a big variety of applications due to the interchangeability of the shells
- Perfect tool for digging thanks to the constant high closing force of 19 kN at 260 bar operating pressure

TECHNICAL SPECIFICATIONS

Type	Volume (litre)	Width B (mm)	Number of teeth	Load capacity (kg)	Self weight (kg)
PZG04-200-GF	200	400	4	3000	290
PZG04-250-GF	250	500	4	3000	305
PZG04-325-GF	325	600	6	3000	320
PZG04-350-GF	350	650	6	3000	325
PZG04-450-GF	450	800	6	3000	340

SCOPE OF DELIVERY: HPXdrive grapple with bolt-on teeth, flange rotator, suspension, connecting hoses, pressure relief valve and non-return valve

TRUCK CRANE REQUIREMENTS

Operating pressure: 260 – 320 bar
Pump capacity: 25 – 75 l/min
Two hydraulic functions on the crane

NOTE:

For further types of grapples and additional technical information please turn to page 34.

CLAMSHELL BUCKET PACKAGES



- Appropriate clamshell bucket for daily use
- Maximum loading height realised by the compact design with the horizontally positioned cylinder
- Long service life thanks to the high quality steel (500 HB) as well as a generously dimensioned bearing system
- Excellent digging characteristics due to the high closing force of 20 kN at 260 bar operating pressure

TECHNICAL SPECIFICATIONS

Type	Volume (litre)	Width B (mm)	Number of teeth	Load capacity (kg)	Self weight (kg)
PZG150GPK	150	325	3	3000	210
PZG250GPK	250	500	5	3000	255
PZG350GPK	350	650	5	3000	275
PZG450GPK	450	800	9	3000	310
PZG550GPK	550	1000	9	3000	345

SCOPE OF DELIVERY: Clamshell bucket with bolt-on teeth, flange rotator, suspension, connecting hoses and non-return valve

TRUCK CRANE REQUIREMENTS

Operating pressure: 260 – 320 bar
Pressure limitation: 320 bar
Pump capacity: 25 – 75 l/min
Two hydraulic functions on the crane

NOTE:

For further technical information please turn to page 50.

HIGH VOLUME CLAMSHELL BUCKET PACKAGES



- The high volume clamshell bucket with a narrow bucket carrier is ideal for handling bulk materials and is able to accomplish light digging operation
- High stability and torsion-free frame thanks to the reinforced buckets
- Long service life because of the generously dimensioned bearing system
- Efficient operation due to the high closing force of 20 kN at 260 bar operating pressure

TECHNICAL SPECIFICATIONS

Type	Volume (litre)	Width B (mm)	Load capacity (kg)	Self weight (kg)
PZG300S-1P	300	640	3000	350
PZG400S-1P	400	800	3000	380
PZG500S-1P	500	1000	3000	405

SCOPE OF DELIVERY: Clamshell bucket with welded hooks, flange rotator, suspension, connecting hoses, pressure relief valve and non-return valve

TRUCK CRANE REQUIREMENTS

Operating pressure: 200 – 320 bar
 Pump capacity: 35 – 75 l/min
 Two hydraulic functions on the crane

NOTE:

For further technical information please turn to page 58.

UNIVERSAL BUCKET PACKAGES



- Ideal solution for handling bulky material as well as for digging tasks
- Maximum loading height realised by the compact design with the horizontally positioned cylinder
- Safe working conditions thanks to the use of an integrated non-return valve
- Highest efficiency due to the high closing force of 28 kN at 260 bar operating pressure

TECHNICAL SPECIFICATIONS

Type	Volume (litre)	Width B (mm)	Number of teeth	Load capacity (kg)	Self weight (kg)
PZG250UP	250	570	5	3000	375
PZG300UP	300	670	5	3000	390
PZG400UP	400	820	7	3000	415
PZG450UP	450	920	7	3000	425

SCOPE OF DELIVERY: Universal bucket with welded hooks and wear plates, flange rotator, suspension, connecting hoses and non-return valve

TRUCK CRANE REQUIREMENTS

Operating pressure: 260 – 320 bar
Pressure limitation: 320 bar
Pump capacity: 25 – 75 l/min
Two hydraulic functions on the crane

NOTE:

For further types of buckets and additional technical information please turn to page 64.

ORANGE PEEL GRAPPLE PACKAGES



- The robust orange peel grapple is used for bulky scrap, building materials and handling facilities – according to the application it is available with different tine shapes and volumes
- PZG-PH: Half closing tines – closing at the lower part of the segments – for handling swarf, scrap, rubbish, waste paper, etc.
- Long service life due to the robust design
- Powerful operation with the high closing force of 11 – 13 kN at 260 bar operating pressure

TECHNICAL SPECIFICATIONS

Type	Number of tines	Volume (litre)	Opening width (mm)	Width (mm)	Height (mm)	Closing force (kN)	Load capacity (kg)	Self weight (kg)
PZG120PH4-PK	4	120	1360	1065	800	13	2000	298
PZG180PH4-PK	4	180	1450	1070	850	12	2000	308
PZG240PH4-PK	4	240	1720	1125	985	11	2000	338
PZG120PH5-PK	5	120	1360	1065	800	13	2000	338
PZG180PH5-PK	5	180	1450	1070	850	12	2000	343
PZG240PH5-PK	5	240	1720	1125	985	11	2000	378

SCOPE OF DELIVERY: Orange peel grapple, flange rotator, suspension, connecting hoses and non-return valve

TRUCK CRANE REQUIREMENTS

Operating pressure: max. 260 bar
Pressure limitation: 260 bar
Pump capacity: 30 – 75 l/min
Two hydraulic functions on the crane

NOTE:

For further types of grapples and additional technical information please turn to page 70.

BRICK STACK GRAPPLE PACKAGES



- The technically advanced brick stack grapple is extremely versatile for palletised and non-palletised building material
- Simple and safe method of operation because of the synchronised function of the clamping arms and the integrated pressure relief valve
- Long service life thanks to the generously dimensioned bearing system
- High efficiency due to the versatile settings for depth and width

TECHNICAL SPECIFICATIONS

Type	Plunge depth (mm)	Load capacity at min./max. plunge depth (kg)	Gripping min./max. (mm)	Height with rotator (mm)	Self weight (kg)
PZS110V-1PK incl. flange rotator PZR450GF	1100 – 1650	1900 – 1350	400 – 1400	1315 – 1865	355
PZS110V-1P incl. shaft rotator PZR450G-68 and tilting device PZSUKVW	1100 – 1650	1900 – 1350	400 – 1400	1315 – 1865	355
PZS110V-1PS incl. shaft rotator PZR450G-68 and quick change system PZZR450SV-PK	1100 – 1650	1900 – 1350	400 – 1400	1315 – 1865	355

SCOPE OF DELIVERY: Brick stack grapple with compression rails, rotator, suspension, connecting hoses, pressure relief valve and non-return valve

TRUCK CRANE REQUIREMENTS

Operating pressure: 200 – 260 bar
 Pump capacity: 25 – 75 l/min
 Two hydraulic functions on the crane

NOTE:

The load capacity listed depends on the integrity of the load (the surface conditions, the size and type of banding). The load capacity does not apply to stacks of low-profile and unbundled concrete and paving stones. For further types of grapples and additional technical information please turn to page 78.

PALLET FORK HYDRAULICALLY SHIFTING PACKAGES



- Efficient handling of a variety of loads for a wide range of applications
- Precise positioning with the rotator – continuous rotation, precise start and stop ability
- Versatile height adjustable in three steps with a lock pin from 1050 – 1650 mm
- Versatile width adjustable with a smooth running, stainless spindle from approx. 475 – 835 mm

TECHNICAL SPECIFICATIONS

Type	Load capacity	Tine length	Tine spread	Tine dimensions	Centre of gravity	Self weight
	(kg)	(mm)	(mm)	(mm)	(mm)	(kg)
PZP150H-PK	1500	980	475 – 815	80 x 35	500	188
PZP200H-PK	2000	980	495 – 835	100 x 35	500	213
PZP250H-PK	2500	980	490 – 830	90 x 40	500	268

SCOPE OF DELIVERY: Pallet fork with protection chain, flange rotator, suspension and connecting hoses

TRUCK CRANE REQUIREMENTS

Operating pressure: max. 200 bar
 Pressure limitation: 200 bar
 Pump capacity: 20 – 40 l/min
 Two hydraulic functions on the crane

NOTE:

For further types of forks and additional technical information please turn to page 88.

PALLET FORKS FOR HOOK OPERATION



- Easy shifting of the collar by using a panel enables the handling of different loads
- Multifunctional use because of the easily adjustable throat height and tine spread
- Robust and economic product for handling palletised goods
- The lightweight version enables greater operating ranges

TECHNICAL SPECIFICATIONS

Type	Load capacity (kg)	Throat height (mm)	Tine spread (mm)	Self weight (kg)
PZP150	1500	1050 – 1650	325 – 920	120
PZP200	2000	1050 – 1650	345 – 940	130

SCOPE OF DELIVERY: Pallet fork with a protection chain

NOTE:

For further technical information please turn to page 98.

UNIVERSAL FORK PACKAGES



- Higher rigidity in connection with lower weight due to the design with one square beam
- Different tine spreads enable the adaption to plates to be transported
- In addition to the standard setting from 400 – 1600 mm there are also tine spreads to 1830 and 2130 mm
- Safe handling of plates and sheets due to the possibility of clamping of the lower element of the fork
- Ideal solution for handling wallboards and other building materials supplied in a lying position
- Protection of the sheets through semi-tapered tines equipped with rollers and pads

TECHNICAL SPECIFICATIONS

Type	Load capacity (kg)	Tine spread (mm)	Height of load max. (mm)	Depth of load max. (kg)	Self weight (kg)
PZP150WP	1500	640 – 1600	1250	460	405
PZP200WP	2000	640 – 1600	1250	460	418
PZP250WP	2500	640 – 1600	1250	460	438

SCOPE OF DELIVERY: Universal fork, shaft rotator, suspension, quick change system, connecting hoses, rigid hook, pressure relief valve and lowering brake valve

TRUCK CRANE REQUIREMENTS

Operating pressure: 200 – 320 bar
Pump capacity: 40 – 75 l/min
Two hydraulic functions on the crane

NOTE:

For further technical information please turn to page 104.

BOTTLE BANK DISCHARGE UNIT PACKAGE



- The ideal solution for disposers who have to empty units both with a ring system and a mushroom system in their catchment area
- Time-saving and cost-effective one-man operation
- Long service life thanks to the robust mechanics and the integrated pressure relief valve
- Protection from damage of the container due to the automatic lift stop and an additional height control system

TECHNICAL SPECIFICATIONS

Type	Load capacity (kg)	Lift of hook max. (mm)	Height with rotator (mm)	Self weight (kg)
PZC250PR	2500	500	1055	170

SCOPE OF DELIVERY: Bottle bank discharge unit, flange rotator, suspension with pendulum brake, connecting hoses, pressure relief valve and non-return valve

TRUCK CRANE REQUIREMENTS

Operating pressure: 200 – 320 bar
 Pump capacity: 25 – 60 l/min
 Two hydraulic functions on the crane

NOTE:

Safe operation can only be guaranteed in combination with the original fixed and hoist discs on the container with the specified distance dimensions. For further types of bottle bank discharge units and additional technical information please turn to page 113.

BARRIER LIFTERS



- Fast and convenient handling of concrete barriers and blocks by one-man operation
- Maximum safety thanks to the use of carbide gripping pads
- Easy handling because of the mechanical “latch & release” system
- The pin position can easily be changed for different gripping ranges

TECHNICAL SPECIFICATIONS

Type	Opening range min./max. (mm)	Load capacity max. (kg)	Self weight (kg)
PZB932-6/10	100 – 310	6580	165

NOTE:

For further types of barrier lifters and additional technical information please turn to page 118.

WORKMAN BASKETS



- In combination with the SH-crane range the requirements of the workman basket EN280 are fulfilled
- Maximum economic efficiency due to the low self weight with maximum permissible floor space
- Applicable even on cranes with lower loading capacity
- Smooth levelling due to the optimised recirculation ball steering
- The quick change system enables fast and simple mounting on the crane

TECHNICAL SPECIFICATIONS

Type	Load capacity (kg)	Floor space (m ²)	Width / Depth / Height (mm)	Self weight (kg)
BB040	200 (2 persons and tools)	0.98	1400 x 700 x 1160	200
BB041	120 (1 person and tools)	0.60	850 x 700 x 1160	120

TRUCK CRANE REQUIREMENTS

The crane needs PALTRONIC 150 with a radio remote control
Preparation for workman baskets according to EN280

NOTE:

For further types of workman baskets and additional technical information please turn to page 122.

EARTH AUGERS



- Highest drilling performance in earth, gravel layers or soft rock
- Augers are available with diameters from 150 – 900 mm
- Easy mounting on the drive unit by means of a simple bolt fixing
- Appropriate drilling teeth can be obtained for any subsurface (earth, gravel layers, soft rock)
- No extra overflow oil line (leak oil) or adaptations on the crane necessary

TECHNICAL SPECIFICATIONS

Diameter*	150	200	225	250	300	350	400	500	600	800
Needed auger drive	BEG30	BEG30	BEG30	BEG50	BEG50	BEG50	BEG50	BEG50	BEG80	BEG80
Depth max. (mm)	2000	2000	2000	4500	4500	4500	4500	4000	6000	3000
Recommended crane	>9 mt	>9 mt	>9 mt	>12 mt	>12 mt	>12 mt	>12 mt	>12 mt	>15 mt	>15 mt

* available for drilling in earth, soft rock and gravel layers

TRUCK CRANE REQUIREMENTS

Operating pressure: max. 260 bar
 Pump capacity: 20 – 50 l/min
 One hydraulic function on the crane

NOTE:

Operation is only possible with a maximum of two pulled out extensions. For further technical information please turn to page 130.

CAR LIFTING DEVICE PACKAGE



- Car lifting device with rotator connection for daily use, hydraulically adjustable from 400 – 700 mm
- Easy and quick loading and unloading procedure thanks to the perfectly coordinated overall system
- High level of safety against damage to the vehicles due to the various possibilities of adjustment
- Easy balance of the centre of gravity with the compensating cylinder

TECHNICAL SPECIFICATIONS

Type	Length (mm)	Width extended (mm)	For wheel size (inch)	For wheel width (mm)	Load capacity per wheel clamp (kg)	Self weight (kg)
PZLG35PK	2400	1800 – 2500	12 – 20	355	892	244

SCOPE OF DELIVERY: Lifting device, mounting bracket, wheel clamp set (4 pcs.), wheel clamp strap set (4 pcs.), flange rotator, suspension and connecting hoses

TRUCK CRANE REQUIREMENTS

Operating pressure: 200 bar
 Pressure limitation: 200 bar
 Pump capacity: 20 – 50 l/min
 Two hydraulic functions on the crane

NOTE:

For further types of car lifting devices and additional technical information please turn to page 136.

PALFINGER HYBRID PACKAGES



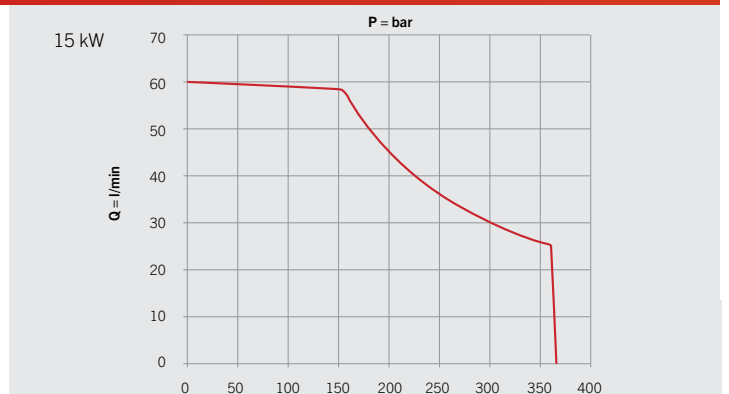
- Quick and effective operation in noise- and pollution-sensitive areas due to a simple connection to the power grid
- Environmentally friendly concept with power control and the use of engines of the highest energy efficiency class (IE03)
- Easy switching between motor- and electro drive on the control box
- Saving potential of up to 80 % of the operating costs

TECHNICAL SPECIFICATIONS

Type	Power max. (kW)	Pressure max. (bar)	Volume flow max. (l/min)	Voltage required (V)	Frequency required (Hz)	Electrical connection required (A)	Speed of engine (min ⁻¹)
EP1498P	7.5	365	58	3 x 400	50	16	1500
EP1500P	15	365	58	3 x 400	50	32	1500

SCOPE OF DELIVERY: Engine, load sensing pump, power regulator, damping rods and control box

POWER REGULATION



NOTE: For further technical information please turn to page 182.

HYDRAULIC AGGREGATE FOR STATIONARY CRANES PACKAGES



- Due to the adjustment of those units to the specific needs of our cranes, a smooth and efficient electro-hydraulic drive of the crane can be ensured
- Quick and efficient operation resulting from the power control of the aggregate
- High level of operational safety by providing optional equipment such as the oil pan or the tank heater
- The perfectly coordinated overall concept guarantees a simple and quick setup

TECHNICAL SPECIFICATIONS

Type	Power max. (kW)	Pressure max. (bar)	Volume flow max. (l/min)	Volume of tank (litre)	Recommended for crane (mt)
EP1901P	15	365	60	250	-9
EP1902P	30	365	90	400	-23
EP1903P	55	365	142	400	-50
EP1904P	75	365	195	630	-150

SCOPE OF DELIVERY: Engine, load sensing pump, power regulator, pressure- and flow compensator, damping rods, tank, control box and oil pan

NOTE:

For further technical information please turn to page 184.

ROTATORS



ROTATORS



- The gear-type design provides a very compact and powerful rotator
- Precise start and stop behaviour – even at maximum load – stability compensation when handling longer loads is not necessary
- Rotators with flange are easily and quickly bolted directly to the attachment
- Precise and flexible operation because of the indefinite range of rotation
- The compact design provides additional protection
- Rotators with a shaft in combination with a reduction link make changing attachments as easy as changing a pin and hooking up the hydraulic connections
- The integrated pressure relief valve protects from overload
- A hose guard is available as an option
- Secure and unhindered function is guaranteed

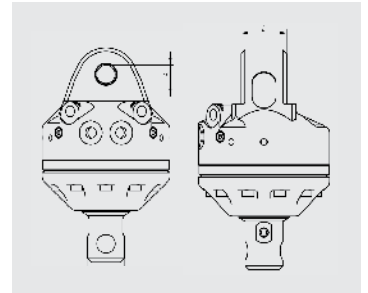
ROTATOR WITH SHAFT UP TO 3000 KG LOAD CAPACITY (incl. fittings)

Type	Load capacity (kg)	Shaft- \varnothing B (mm)	Upper connection C x A* (mm)	Torque (Nm)	Moment of deflection max. (Nm)	Self weight (kg)
PZR300G	3000	49.5	60 x 25	450	1750	24

* length C x \varnothing shaft A

Operating pressure: 320 bar
Pump capacity: 25 – 60 l/min

Hydraulic couplings-in: G 3/8"
Hydraulic couplings-out: G 1/4"



ROTATORS WITH SHAFT UP TO 4500 KG LOAD CAPACITY (incl. fittings)

Type	Load capacity (kg)	Shaft- \varnothing B (mm)	Upper connection C x A* (mm)	Torque (Nm)	Moment of deflection max. (Nm)	Self weight (kg)
PZR450G-59	4500	59	84 x 30	850	3000	26
PZR450G-62	4500	62	84 x 30	850	3000	26
PZR450G-63	4500	63	84 x 30	850	3000	26
PZR450G-68	4500	68	84 x 30	850	3000	26
PZR450G-68-30S**	4500	68	84 x 30	850	3000	28
PZR450G-69	4500	69	84 x 30	850	3000	26

* length C x \varnothing shaft A ** steel motor-head

Operating pressure: 320 bar **Pump capacity:** 25 – 60 l/min **Hydraulic couplings (input, output):** M 18 x 1.5

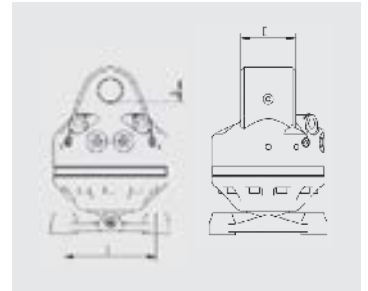


ROTATORS WITH FLANGE UP TO 4500 KG LOAD CAPACITY (incl. fittings)

Type	Load capacity (kg)	Hole pattern flange B (mm)	Upper connection C x A* (mm)	Torque (Nm)	Moment of deflection max. (Nm)	Self weight (kg)
PZR450GF	4500	□ 140	84 x 30	850	3000	26
PZR450GF-30V**	4500	□ 140	84 x 30	850	3000	26

* length C x \varnothing shaft A ** vertical connection in addition for the attachment

Operating pressure: 320 bar **Pump capacity:** 25 – 60 l/min **Hydraulic couplings (input, output):** M 18 x 1.5

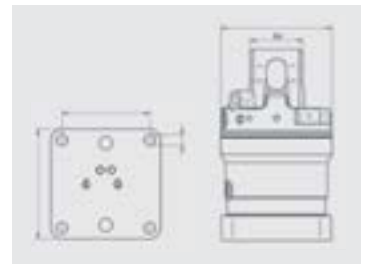


ROTATOR WITH FLANGE AND 4 OIL DUCTS (incl. fittings)

Type	Load capacity (kg)	Hole pattern flange B (mm)	Upper connection C x A* (mm)	Torque (Nm)	Moment of deflection max. (Nm)	Self weight (kg)
PZR450GF-4	4500	□ 140	84 x 30	850	3000	40

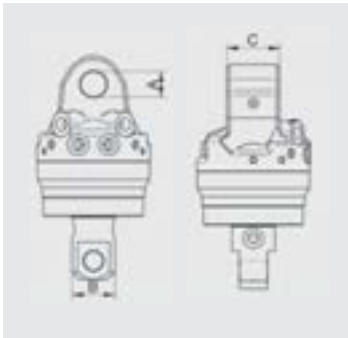
* length C x \varnothing shaft A

Operating pressure: 320 bar **Pump capacity:** 25 – 50 l/min **Hydraulic couplings (input, output):** M 18 x 1.5



ROTATORS

ROTATORS WITH SHAFT UP TO 6000 KG LOAD CAPACITY (incl. fittings)



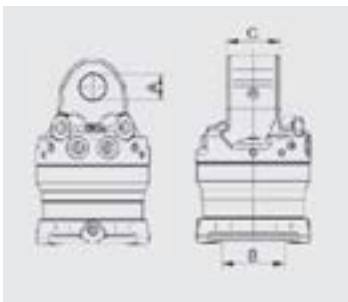
Type	Load capacity (kg)	Shaft- \varnothing B (mm)	Upper connection C x A* (mm)	Torque (Nm)	Moment of deflection max. (Nm)	Self weight (kg)
PZR601G	6000	68	84 x 40	1000	4500	32
PZR601GA**	6000	68	84 x 40	1000	4500	32

* length C x \varnothing shaft A **positioning pin and hydraulic connection in line

Operating pressure: 320 bar
Pump capacity: 25 – 75 l/min

Hydraulic couplings-in: G 1/2"
Hydraulic couplings-out: M 18 x 1.5

ROTATOR WITH FLANGE UP TO 6000 KG LOAD CAPACITY (incl. fittings)



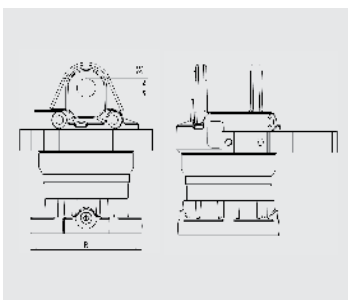
Type	Load capacity (kg)	Hole pattern flange B (mm)	Upper connection C x A* (mm)	Torque (Nm)	Moment of deflection max. (Nm)	Self weight (kg)
PZR601GF	6000	□ 140	84 x 40	1000	8500	34

* length C x \varnothing shaft A

Operating pressure: 320 bar
Pump capacity: 25 – 75 l/min

Hydraulic couplings-in: G 1/2"
Hydraulic couplings-out: M 18 x 1.5

ROTATOR WITH FLANGE UP TO 6000 KG LOAD CAPACITY (incl. hose guard and fittings)



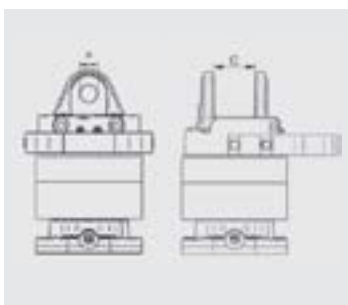
Type	Load capacity (kg)	Hole pattern flange B (mm)	Upper connection C x A* (mm)	Torque (Nm)	Moment of deflection max. (Nm)	Self weight (kg)
PZR601GF-35	6000	Ø173	81 x 35	1000	8500	34

* length C x \varnothing shaft A

Operating pressure: 320 bar
Pump capacity: 25 – 75 l/min

Hydraulic couplings-in: G 1/2"
Hydraulic couplings-out: G 1/2"

ROTATORS WITH FLANGE UP TO 10000 KG LOAD CAPACITY (incl. hose guard and fittings)



Type	Load capacity (kg)	Hole pattern flange B (mm)	Upper connection C x A* (mm)	Torque (Nm)	Moment of deflection max. (Nm)	Self weight (kg)
PZR1000GF	10000	Ø 173	81 x 35	2000	12000	65
PZR1000GF-45	10000	Ø 173	100 x 45	2000	12000	68

* length C x \varnothing shaft A

Operating pressure: 320 bar
Pump capacity: 25 – 75 l/min

Hydraulic couplings-in: G 1/2"
Hydraulic couplings-out: G 1/2"

NOTE:

Complete packages for rotators are listed on page 6.

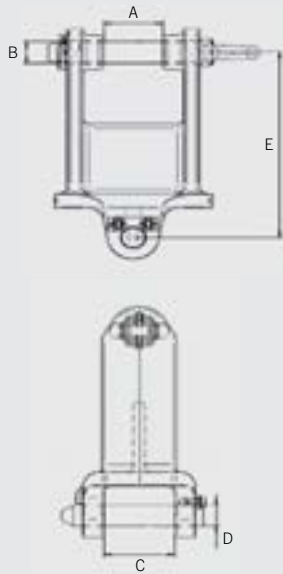
ACCESSORIES FOR ROTATORS



- An upper suspension is a cardan link between the rotator and the crane – available for all common models of cranes
- The hose protection is a metal bow which is attached to the rotator
- The hose protection is designed to protect the hoses of the rotator from damage, i.e. from protruding branches
- A reduction link adapts a shaft type rotator to an attachment with a standard hole pattern for a flange rotator
- The quick change system allows an easy exchange between different attachments
- The mechanical coupling and locking of the quick change system is achieved by the turning motion of the rotator
- Simply disconnect quick couplings and disengage the locking device manually
- The upper element of the quick change system is available for all shaft rotators
- The system can be used on most attachments, which allows the versatility to quickly change the application with a minimum of down-time
- The quick change system is not suitable for extreme loads such as the wooden crane operation

ACCESSORIES FOR ROTATORS

UPPER SUSPENSION BETWEEN ROTATOR AND CRANE



Type	Upper width A (mm)	Upper pin-Ø B (mm)	Lower width C (mm)	Lower pin-Ø D (mm)	Length E (mm)	For rotators	Crane	Self weight (kg)
UL167	22	25	64	25	170	PZR300G	up to PK 4200	10
UL168	72	30	64	25	170	PZR300G	PK-crane	10
UL045	71	30	85	30	263	PZR450(G,GF)	PK-crane	10
UL045K	71	30	85	30	173	PZR450(G,GF)	PK-crane	10
UL045L	71	30	85	30	400	PZR450(G,GF)	PK-crane	10
UL045-42	71	42	85	30	253	PZR450(G,GF)	PK-crane	10
UL090KK	72	30	77	25	173	PZR450(G,GF)	PK-crane	12
UL090	72	30	76	25	245	PZR450(G,GF)	PK-crane	12
UL134	22	25	85	30	173	PZR450(G,GF)	PK-crane	10
UL135	72	30	85	40	278	PZR601(G,GF)	PK-crane	15
UL135K	72	30	85	40	173	PZR601(G,GF)	PK-crane	15
UL135-42	71	42	85	40	268	PZR601(G,GF)	PK-crane	15
UL153	71	30	80	35	270	PZR1000GF	PK-crane	25
UL153K	71	30	80	35	245	PZR1000GF	PK-crane	25
UL153-42	71	42	80	35	370	PZR1000GF	PK-crane	25
UL144	79	40	85	30	150	PZR450(G,GF)	Epsilon crane	10
UL136	79	40	85	30	240	PZR450(G,GF)	Wallboard crane	10
UL137	108	30	86	40	185	PZR601(G,GF)	Wallboard crane	15
UL138	79	40	86	40	185	PZR601(G,GF)	Epsilon crane	15
UL154	80	40	80	35	150	PZR1000GF	Epsilon crane	25
UL155	80	40	80	35	240	PZR1000GF	Epsilon crane	25
UL192-PB*	71	30	85	30	263	PZR450(G,GF)	PK-crane	15
UL193-PB*	71	30	85	40	263	PZR601GF	PK-crane	20

* with single pendulum brake

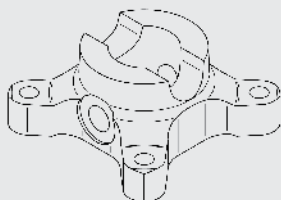
NOTE: Please specify dimensions when ordering.

HOSE PROTECTIONS



Type	For rotator
PZZR450S	PZR450 (G,GF)
PZZR601S	PZR601 (G,GF)

REDUCTION LINKS BETWEEN ROTATOR AND ATTACHMENT



Type	Description
PZZR450R-XX*	Between 3 t and 4.5 t shaft rotator and attachment
PZZR601R-GA	Between 6 t shaft rotator and attachment
PZZR601R-GK	Between 4.5 t and 6 t rotator, shaft 69 mm, positioning pin and hydraulic connection rotated 90° and attachment
PZZR450R-68-59	Reduction link 68 mm for 59 mm
PZZR1000F/W	Adapter plate for PZR1000GF

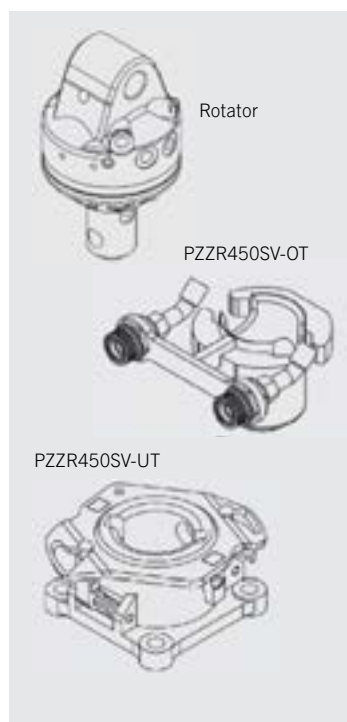
* please specify Ø shaft when ordering (50, 59, 62, 63, 68, 69)

QUICK CHANGE SYSTEM FOR SHAFT TYPE ROTATORS

Type	Description	Flange attachment hole pattern of flange (mm)	Self weight (kg)
PZZR450SV-PK*	Complete, incl. hydraulic couplings (BL981-L, BL981-F), load capacity up to 4.5 t	4 x Ø18 / □ 140	12
PZZR450SV-OT*	Upper element (fitted to rotator), incl. 2 pcs. BL981-L, load capacity up to 4.5 t		5
PZZR450SV-UT	Lower element (mounted onto attachment), load capacity up to 4.5 t	4 x Ø18 / □ 140	7
PZZR450-A/LH	Rigid suspension link with non-rotating hook to connect to the upper element instead of the lower element, e.g. for attaching pallet forks, load capacity up to 4.5 t		7
PZZR450-W/SV	Intermediary between PZP-W and PZZR450SV-PK		
PZZR601SV-PK	HD, complete, incl. hydraulic couplings (BL981-L, BL981-F), load capacity up to 6 t	4 x Ø18 / □ 140	18
PZZR601SV-OT	HD, upper element (fitted to rotator), incl. 2 pcs. BL981-L, load capacity up to 6 t		7
PZZR601SV-UT	HD, lower element (mounted onto attachment), load capacity up to 6 t	4 x Ø18 / □ 140	11
PZZR601-A/LH	HD, rigid suspension link with non-rotating hook, e.g. for attaching pallet forks, load capacity up to 6 t		14

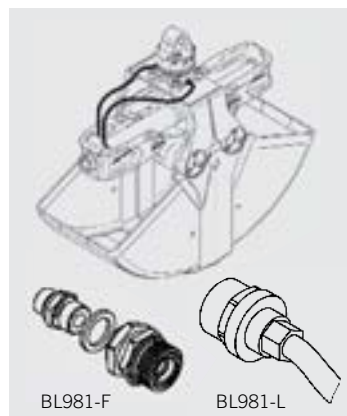
* please specify type of rotator when ordering

NOTE: For heavy duty use the quick change system "HD-heavy duty" in combination with the shaft rotator PZR601 is recommended.



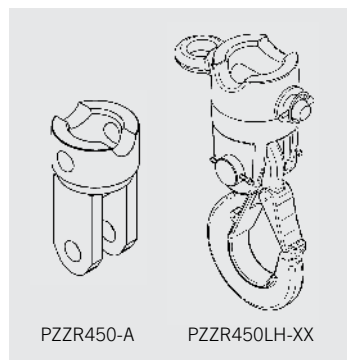
CONNECTING HOSES AND HYDRAULIC QUICK CHANGE KIT

Type	Description
BL462	Connecting hoses between rotator and crane 900 mm, 4 pcs.
BL462-R	Connecting hoses between rotator and crane 900 mm, 2 pcs.
BL463	Connecting hoses between rotator and attachment 500 mm, 2 pcs.
BL513	Connecting hoses between rotator and crane version D and E 1200 mm, 4 pcs.
BL462-MF	Connecting hoses between rotator and crane 900 mm, 4 pcs. for multi-faster
BL513-MF	Connecting hoses between rotator and crane version D and E 1200 mm, 4 pcs. for multi-faster
BL981-L	Mobile part of hydraulic quick coupling for fitting to the hose (Ø 10 mm, 2 pcs.)
BL981-F	Fixed part of hydraulic quick coupling for fitting to the rotator (Ø 10 mm, 2 pcs.)
BL981-PK	Hydraulic quick change kit incl. mobile and fixed parts, 2 pcs. each, mounted with adapters to rotator



ACCESSORIES FOR ATTACHING PALLET FORKS ETC.

Type	Description
PZZR450-A**	Rigid suspension link 4.5 t with pin for all shaft rotators
PZZR450LH-XX*	Non-rotating hook 4.5 t for all shaft rotators
PZZR450LH-SB	Safety latch 4.5 t for PZZR450LH-XX* (3 pcs.)
* please specify Ø shaft when ordering (50, 59, 62, 63, 68, 69) ** please specify model of the crane fork when ordering	
PZZR601LH-F	Rigid hook 6 t for PZR601GF flange rotator
PZZR601LH-W	Rigid hook 6 t for PZR601G shaft rotator, shaft 68 mm
PZZR1000LH-F	Rigid hook 10 t for PZR1000GF flange rotator
PZZR1000LH-W	Rigid hook 10 t for PZR1000GF with adapter plate, shaft 69 mm



HPX DRIVE



HPX DRIVE STANDARD CLAMSHELL BUCKETS FOR DAILY USE



- The universal clamshell bucket for daily use is suitable for loading and excavating
- Reliability of the HPXdrive – the movement is generated by two opposing hollow shafts with a helix thread, hydraulically driven by a single piston
- Longer service life due to the design-related insensitivity and compact construction
- Versatile application options because of the simple interchangeability of the shells
- Economic efficiency thanks to low maintenance costs and decreased downtimes with extended operating life
- Precise handling with the flange rotator and shells synchronised by the single piston turning both shafts
- A rotator with shaft is available as an alternative, in case a quick change to a non-rotating hook is desired
- Constant high closing force of 19 kN at 260 bar operating pressure for the entire gripping range

TECHNICAL SPECIFICATIONS: COMPLETE PACKAGE WITH SHAFT ROTATOR

Type	Volume (litre)	Width B (mm)	Height (mm)	Opening width (mm)	Number of teeth	Closing force (kN)	Load capacity (kg)	Self weight (kg)
PZG04-200-502	200	400	1075	1390	4	19	3000	295
PZG04-250-502	250	500	1075	1390	4	19	3000	310
PZG04-325-502	325	600	1075	1390	6	19	3000	325
PZG04-350-502	350	650	1075	1390	6	19	3000	330
PZG04-450-502	450	800	1075	1390	6	19	3000	345

SCOPE OF DELIVERY: Clamshell bucket with bolt-on teeth, shaft rotator PZR450G-68, reduction link PZZR450R-68, connecting hoses BL463, upper suspension UL045, HPXdrive standard with pressure relief valve and non-return valve

NOTE: The PZG04 is also available with shaft rotator and quick change system PZZR450SV-PK. Complete packages with flange rotators are listed on page 8.

ACCESSORIES

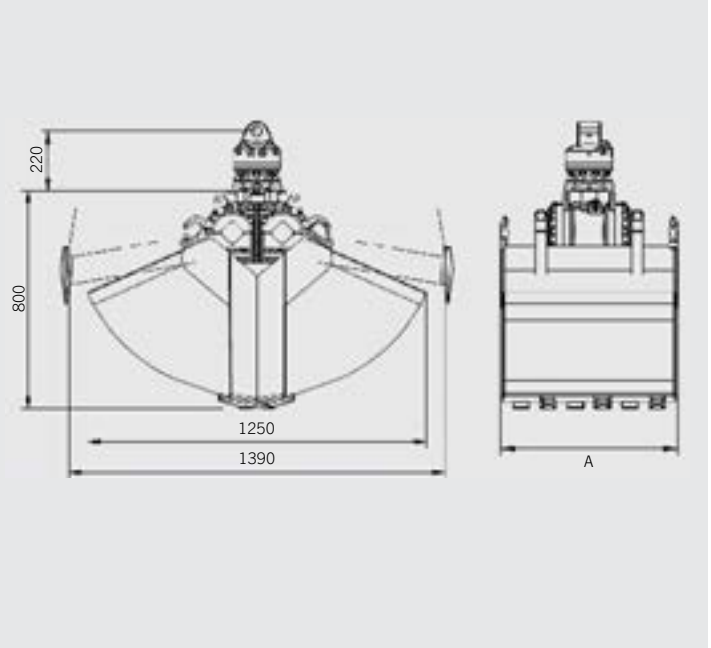
Type	Description
PZZG-SC*	Scraper
PZZG-AV/AS	Adapter for compression rails
PZZG002-AH	Welded hooks
PZZG-VK	Wear plates to protect the horizontal cutting edges (2 pcs.)
PZHP450V	Extension for excavating for canal construction and civil engineering (30 kg)
BL981-L	Mobile part of hydraulic quick coupling for fitting to the hoses (Ø 10 mm, 2 pcs.)
BL981-F	Fixed part of hydraulic quick coupling for fitting to the rotator (Ø 10 mm, 2 pcs.)
PZHP04ZA	Central lifting device for PZHP04

* please specify type of grapple when ordering

TRUCK CRANE REQUIREMENTS

Operating pressure: 260 – 320 bar
 Pump capacity: 25 – 75 l/min
 Two hydraulic functions on the crane

TECHNICAL DRAWING



HPX DRIVE STANDARD HAY- AND FORESTRY GRAPPLE



- The multipurpose grapple is especially suitable for grass, hay, undergrowth and branches, as well as for rubbish, waste, paper, silage and manure
- Reliability of the HPXdrive
- The torque is generated by two opposing hollow shafts, hydraulically driven by a single piston
- Longer service life due to the design-related insensitivity and compact construction
- Precise handling with the flange rotator and shells synchronised by the single piston, turning both shafts
- The narrowly spaced pivots ensure a high closing force
- Efficiency thanks to the low maintenance costs

TECHNICAL SPECIFICATIONS: COMPLETE PACKAGE WITH FLANGE ROTATOR

Type	Cross sectional area (m ²)	Width B (mm)	Height C with rotator (mm)	Opening A max. (mm)	Number of tines	Closing force (kN)	Load capacity (kg)	Self weight (kg)
PZG041-02-GF	0.2	670	950	1190	7	18	1000	255
PZG041-04-GF	0.4	940	1190	1630	7	14	2000	320

SCOPE OF DELIVERY: Grapple, flange rotator PZR450GF, upper suspension UL045, connecting hoses BL462 and BL463, HPXdrive standard with pressure relief valve and non-return valve

TECHNICAL SPECIFICATIONS: COMPLETE PACKAGE WITH SHAFT ROTATOR

PZG041-02-502	0.2	670	1005	1200	7	18	1000	260
PZG041-04-502	0.4	940	1245	1695	7	14	2000	325

SCOPE OF DELIVERY: Grapple, shaft rotator PZR450G-68, reduction link PZZR450R-68, upper suspension UL045, connecting hoses BL462 and BL463, HPXdrive standard with pressure relief valve and non-return valve

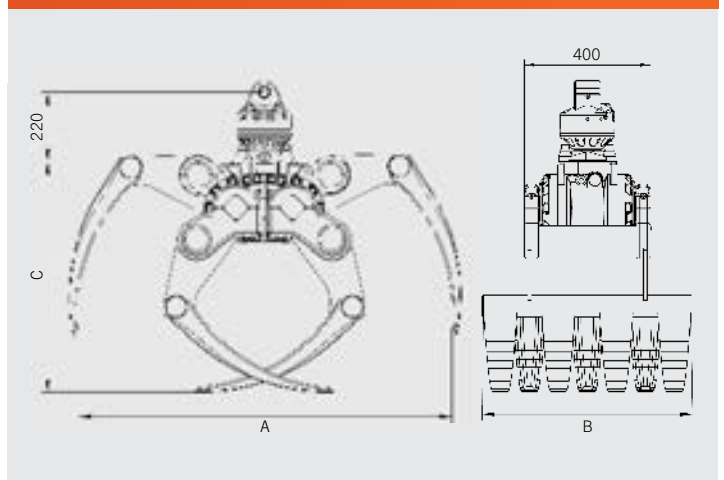
ACCESSORIES

Type	Description
BL981-L	Mobile part of hydraulic quick coupling for fitting to the hoses (Ø 10 mm, 2 pcs.)
BL981-F	Fixed part of hydraulic quick coupling for fitting to the rotator (Ø 10 mm, 2 pcs.)

TRUCK CRANE REQUIREMENTS

Operating pressure: 260 – 320 bar
 Pump capacity: 25 – 75 l/min
 Two hydraulic functions on the crane

TECHNICAL DRAWING



HPX DRIVE STANDARD DRIVE UNITS



- The drive unit HPXdrive standard is perfectly suitable for daily routine applications
- The advantages of the HPXdrive technology are in particular the constant high closing force and the compact design which guarantee a long service life and economic efficiency
- The standard rotator of the HPXdrive standard is the flange rotator PZR450GF-30V
- The combination with a shaft rotator enables a quick change to the non-rotating hook
- Neither the piston rod, nor the cylinder tubes, nor the compensation rods hinder the shovelling of material, providing no contact points for damage
- HPXdrive – the total absence of hydraulic cylinders makes the unit compact and insusceptible to external influences
- The shells are easily exchangeable through loosening the retaining screws and it is therefore possible to modify one drive unit for various applications
- Torque 1200 Nm at 260 bar

TECHNICAL SPECIFICATIONS: WITH FLANGE ROTATOR

Scope of delivery: Upper suspension UL045, flange rotator PZR450GF-30V, connecting hoses BL462, HPXdrive standard with pressure relief valve and non-return valve

Self weight: 160 kg

Height: 480 mm



PZHP04-GF

TECHNICAL SPECIFICATIONS: WITH SHAFT ROTATOR

Scope of delivery: Upper suspension UL045, shaft rotator PZR450G-68, reduction link PZZR450R-68, connecting hoses BL462 and BL463, HPXdrive standard with pressure relief valve and non-return valve

Self weight: 165 kg

Height: 535 mm



PZHP04-502

TECHNICAL SPECIFICATIONS: WITH SHAFT ROTATOR AND QUICK CHANGE SYSTEM

Scope of delivery: Upper suspension UL045, shaft rotator PZR450G-68, quick change system PZZR450SV-PK, connecting hoses BL462 and BL463, HPXdrive standard with pressure relief valve and non-return valve

Self weight: 170 kg

Height: 575 mm



PZHP04-505

TECHNICAL DRAWING



TRUCK CRANE REQUIREMENTS

Operating pressure: 260 – 320 bar
Pump capacity: 25 – 75 l/min

HPX DRIVE STANDARD EXCHANGEABLE SHELLS



- The shells of the HPXdrive standard are easily exchangeable by loosening the retaining screws
- Different types of shells for various applications can be refitted onto the driving unit, e.g. clamshell buckets, universal buckets, rock grapples, timber grapples and hay- and forestry grapples
- Other types of shells are available on request
- The exchangeable shells are delivered with an exchange aid, which guarantees that the HPXdrive standard can be positioned with ease

TECHNICAL SPECIFICATIONS: CLAMSHELL BUCKETS

Type	Volume (litre)	Width (mm)	Opening max. (mm)	Number of teeth/tines	Self weight (kg)
PZWS04-200	200	400	1395	4	130
PZWS04-250	250	500	1395	4	145
PZWS04-325	325	600	1395	6	160
PZWS04-350	350	650	1395	6	165
PZWS04-450	450	800	1395	6	180

TECHNICAL SPECIFICATIONS: UNIVERSAL BUCKETS

PZWS4U-250	250	570	1595	-	215
PZWS4U-300	300	670	1595	-	235
PZWS4U-400	400	820	1595	-	255
PZWS4U-500	500	1020	1595	-	285

Optionally available with side plates (PZZU008-SW, PZZU010-SW)

TECHNICAL SPECIFICATIONS: ROCK GRAPPLE

PZWS13-016	0.16 m ²	400	1230	-	75
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TECHNICAL SPECIFICATIONS: TIMBER GRAPPLE

PZWS32-016	0.16 m ²	400	1225	-	75
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TECHNICAL SPECIFICATIONS: HAY- AND FORESTRY GRAPPLES

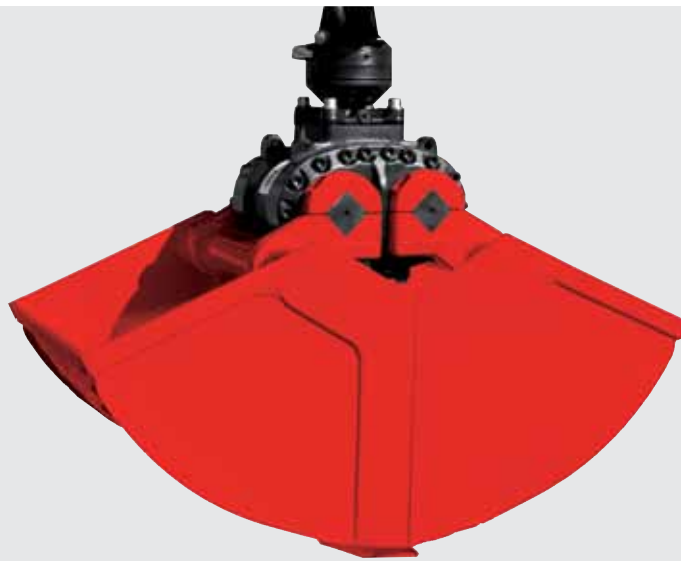
PZWS41-02	0.20 m ²	670	1200	7	95
PZWS41-04	0.40 m ²	940	1695	7	160

TECHNICAL SPECIFICATIONS: GUARD RAIL GRAPPLES

Type	Load capacity (kg)	Closing force (kN)	Width (mm)	Self weight (kg)
PZWS04-VG / Vario Guard	1500	25	2200	415
PZWS04-MG / Mini Guard	1500	25	820	250

SCOPE OF DELIVERY: Exchangeable shells, bolt-on teeth (for PZWS04), exchange aid kit

HPX DRIVE HEAVY DUTY CLAMSHELL BUCKETS



- The powerful clamshell bucket is suitable for heavy duty work due to its high closing force
- Reliability of the HPXdrive – the movement is generated by two opposing hollow shafts with a helix thread, hydraulically driven by a single piston
- Longer service life due to the design-related insensitivity and compact construction
- Versatile application options because of the simple interchangeability of the shells
- Economic efficiency thanks to low maintenance costs and decreased downtimes with extended operating life
- Precise handling with the flange rotator and shells synchronised by the single piston turning both shafts
- A rotator with shaft is available as an alternative in case a quick change to a non-rotating hook is desired
- Constant high closing force of 34 kN at 320 bar operating pressure for the entire gripping range with the almost wear-free, hydrostatic bearing of the shafts

TECHNICAL SPECIFICATIONS: COMPLETE PACKAGE WITH FLANGE ROTATOR

Type	Volume (litre)	Width B (mm)	Height (mm)	Opening width (mm)	Number of teeth	Closing force (kN)	Load capacity (kg)	Self weight (kg)
PZG05-200-GF	200	400	1035	1420	4	34	3000	335
PZG05-250-GF	250	500	1035	1420	4	34	3000	360
PZG05-350-GF	350	650	1035	1420	6	34	3000	390
PZG05-450-GF	450	820	1035	1420	6	34	3000	420
PZG05-550-GF	550	1000	1035	1420	8	34	3000	455

SCOPE OF DELIVERY: Clamshell bucket with bolt-on teeth, flange rotator PZR450GF-30V, connecting hoses BL462, upper suspension UL045, HPXdrive heavy duty with non-return valve

TECHNICAL SPECIFICATIONS: COMPLETE PACKAGE WITH SHAFT ROTATOR

PZG05-200-502	200	400	1090	1420	4	34	3000	340
PZG05-250-502	250	500	1090	1420	4	34	3000	365
PZG05-350-502	350	650	1090	1420	6	34	3000	395
PZG05-450-502	450	800	1090	1420	6	34	3000	425
PZG05-550-502	550	1000	1090	1420	8	34	3000	460

SCOPE OF DELIVERY: Clamshell bucket with bolt-on teeth, shaft rotator PZR450G-68, reduction link PZZR450R-68, connecting hoses BL462 and BL463, upper suspension UL045, HPXdrive heavy duty with non-return valve

NOTE: The PZG05 is also available with shaft rotator and quick change system PZZR450SV-PK.

ACCESSORIES

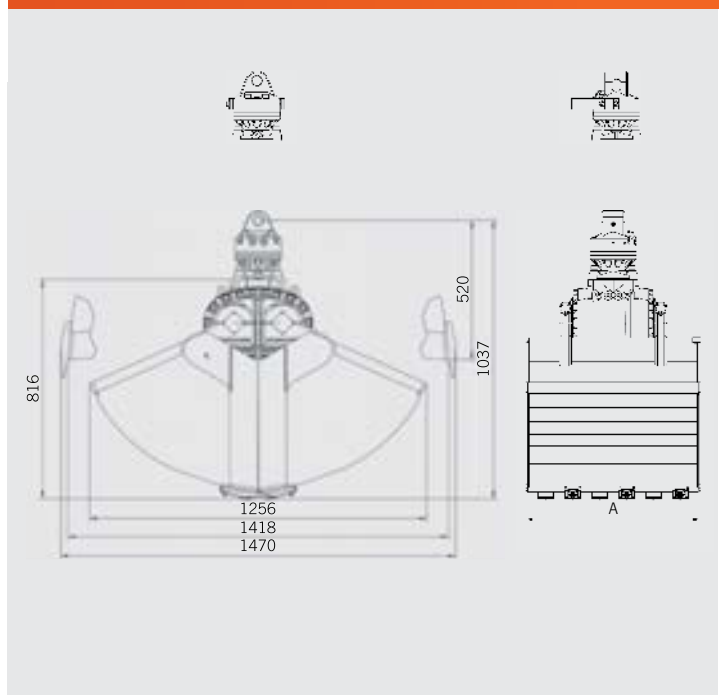
Type	Description
PZZG-SC*	Scraper
PZZG-AV/AS	Adapter for compression rails
PZZG002-AH	Welded hooks
PZZG-VK	Wear plates to protect the horizontal cutting edges (2 pcs.)
PZHP450V	Extension for excavating for canal construction and civil engineering - 450 mm (30 kg)
BL981-L	Mobile part of hydraulic quick coupling for fitting to the hoses (Ø 10 mm, 2 pcs.)
BL981-F	Fixed part of hydraulic quick coupling for fitting to the rotator (Ø 10 mm, 2 pcs.)
PZHP05ZA	Central lifting device for PZHP05

* please specify type of grapple when ordering

TRUCK CRANE REQUIREMENTS

Operating pressure: 260 – 320 bar
 Pressure limitation: 320 bar
 Pump capacity: 40 – 90 l/min
 Two hydraulic functions on the crane

TECHNICAL DRAWING



HPX DRIVE HEAVY DUTY DRIVE UNITS



- The drive unit HPXdrive heavy duty is perfectly suitable for heavy duty purposes thanks to its high closing force
- The advantages of the HPXdrive technology are the constant high closing force and the compact design in particular
- The torque is generated by two opposing hollow shafts hydraulically driven by a single piston
- HPXdrive – the total absence of hydraulic cylinders makes the unit compact and unsusceptible to external influences
- The shells are easily exchangeable through loosening the retaining screws and it is therefore possible to modify one drive unit for various applications
- Longer service life due to the design-related insensitivity and compact construction
- Efficiency thanks to the low maintenance costs
- The standard rotator of the HPXdrive heavy duty is the flange rotator PZR450GF-30V
- The combination with a shaft rotator enables a quick change to the non-rotating hook
- Torque 21000 Nm at 260 bar

TECHNICAL SPECIFICATIONS: WITH FLANGE ROTATOR

Scope of delivery: Upper suspension UL045, flange rotator PZR450GF-30V, connecting hoses BL462, HPXdrive heavy duty with non-return valve

Self weight: 195 kg

Height: 510 mm



PZHP05-GF

TECHNICAL SPECIFICATIONS: WITH SHAFT ROTATOR

Scope of delivery: Upper suspension UL045, shaft rotator PZR450G-68, reduction link PZZR450R-68, connecting hoses BL462 and BL463, HPXdrive heavy duty with non-return valve

Self weight: 200 kg

Height: 565 mm



PZHP05-502

TECHNICAL SPECIFICATIONS: WITH SHAFT ROTATOR AND QUICK CHANGE SYSTEM

Scope of delivery: Upper suspension UL045, shaft rotator PZR450G-68, quick change system PZZR450SV-PK, connecting hoses BL462 and BL463, HPXdrive heavy duty with non-return valve

Self weight: 205 kg

Height: 605 mm

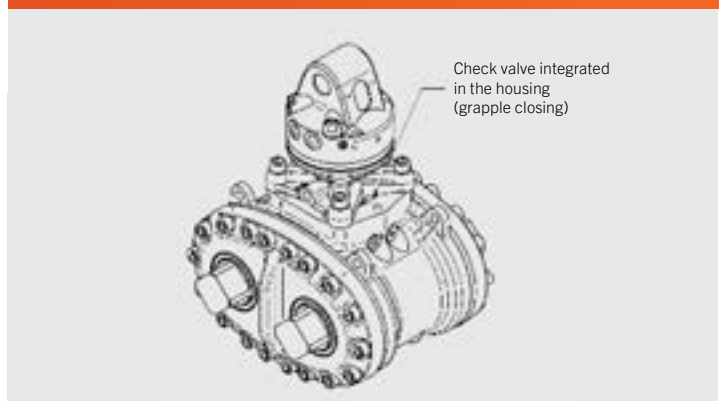


PZHP05-505

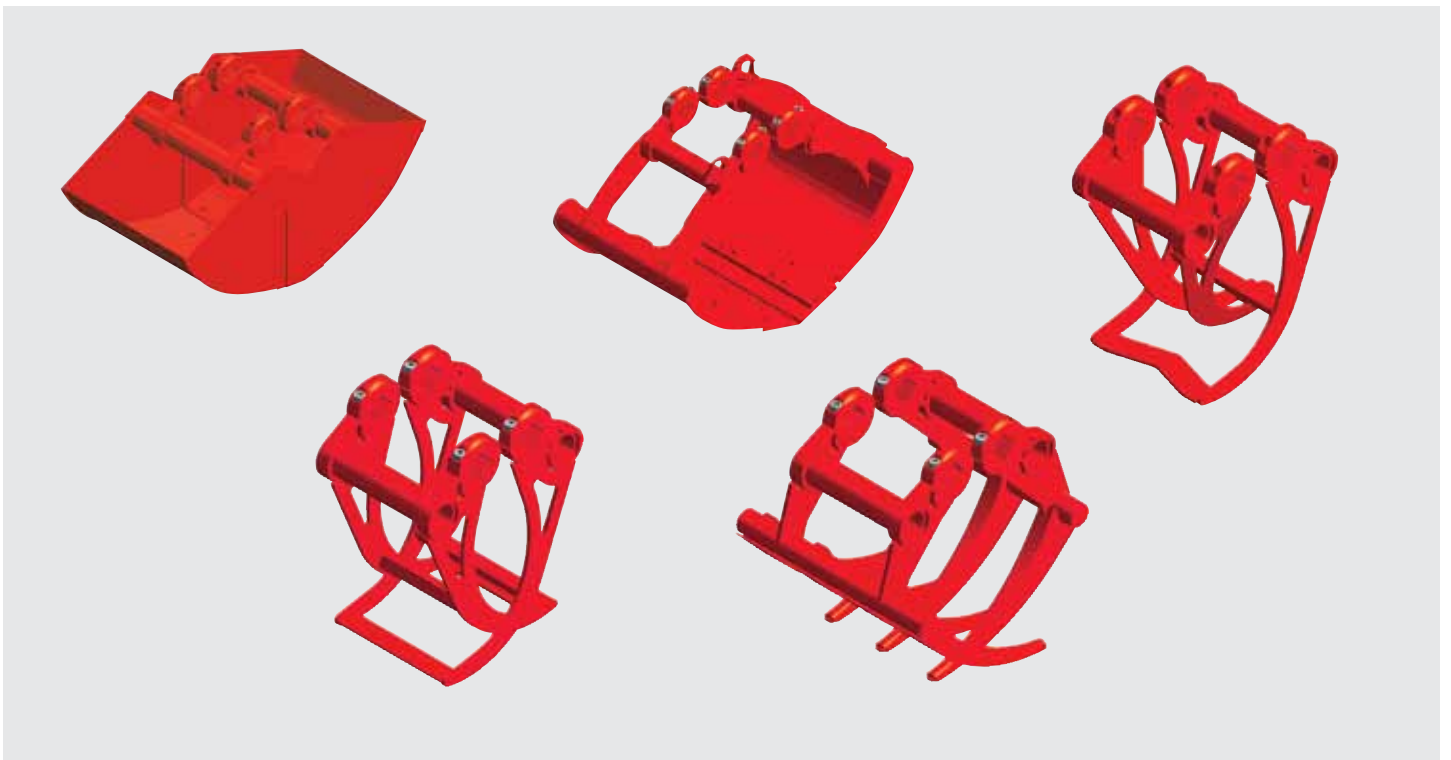
TRUCK CRANE REQUIREMENTS

Operating pressure: 260 – 320 bar
Pressure limitation: 320 bar
Pump capacity: 40 – 90 l/min

TECHNICAL DRAWING



HPX DRIVE HEAVY DUTY EXCHANGEABLE SHELLS



- The shells of the HPXdrive heavy duty are easily exchangeable by loosening the retaining screws
- Different types of shells for various applications can be refitted onto the driving unit, e.g. clamshell buckets, universal buckets, rock grapples, timber grapples and hay- and forestry grapples
- Other types of shells are available on request
- The exchangeable shells are delivered with an exchange aid, which guarantees that the HPXdrive heavy duty can be positioned with ease

TECHNICAL SPECIFICATIONS: CLAMSHELL BUCKETS

Type	Volume (litre)	Width (mm)	Opening max. (mm)	Number of teeth/tines	Self weight (kg)
PZWS05-200	200	400	1420	4	140
PZWS05-250	250	500	1420	4	170
PZWS05-350	350	650	1420	6	200
PZWS05-450	450	800	1420	6	225
PZWS05-550	550	1000	1420	8	265

TECHNICAL SPECIFICATIONS: UNIVERSAL BUCKETS

PZWS5U-250	250	570	1545	5*	220
PZWS5U-300	300	670	1545	5*	240
PZWS5U-400	400	820	1545	7*	260
PZWS5U-450	450	920	1545	7*	275
PZWS5U-500	500	1020	1545	9*	295

* optionally available with bolt-on teeth and side plates (PZZU008-SW, PZZU010-SW)

TECHNICAL SPECIFICATIONS: ROCK GRAPPLE

PZWS13-035S	0.35 m ²	400	1705	-	135
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TECHNICAL SPECIFICATIONS: TIMBER GRAPPLE

PZWS32-016S	0.16 m ²	400	1290	-	90
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TECHNICAL SPECIFICATIONS: HAY- AND FORESTRY GRAPPLE

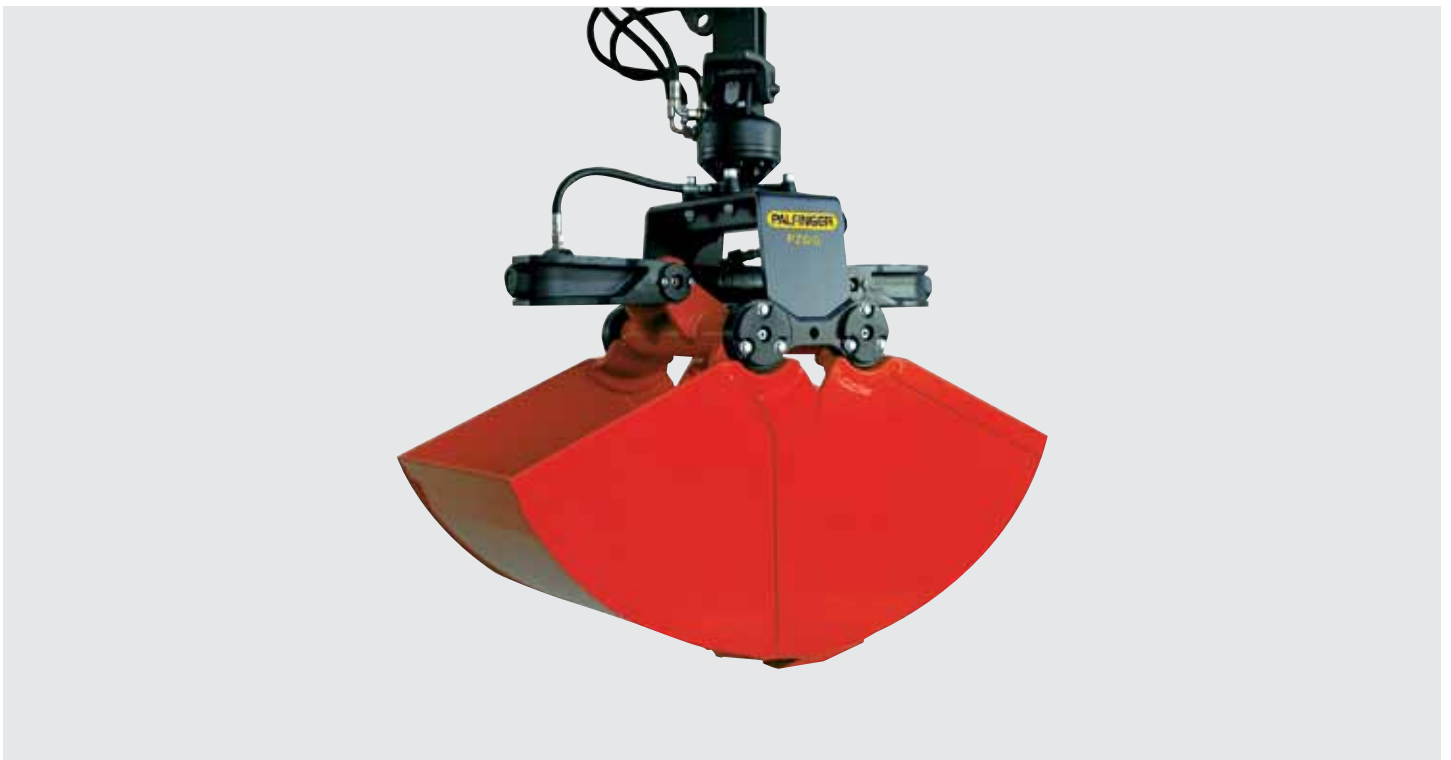
PZWS41-04S	0.40 m ²	940	1720	7	195
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SCOPE OF DELIVERY: Exchangeable shells, bolt-on teeth (for PZWS05), exchange aid kit

GRAPPLES



CLAMSHELL BUCKETS WITH HORIZONTAL HYDRAULIC CYLINDER FOR DAILY USE



- Maximum loading height and optimum power transmission is achieved through the compact design with the horizontal hydraulic cylinder
- Long service life is ensured through the use of 500 HB steel in the manufacture of the cutting edges and a generously dimensioned bearing system
- Synchronised opening and closing through the unique compensating mechanism as well as the cylinder protection
- The extremely robust bucket carrier guarantees torsional stiffness
- Bolt-on digging teeth are delivered with each clamshell bucket
- Excellent digging characteristics are the result of the high closing force of 20 kN at 260 bar operating pressure

TECHNICAL SPECIFICATIONS

Type	Volume (litre)	Width B (mm)	Opening max. (mm)	Number of teeth	Closing force (kN)	Load capacity (kg)	Self weight (kg)
PZG150G	150	325	1390	3	20	3000	185
PZG200G	200	400	1390	3	20	3000	195
PZG250G	250	500	1390	5	20	3000	220
PZG325G	325	600	1390	5	20	3000	235
PZG350G	350	650	1390	5	20	3000	240
PZG450G	450	800	1390	9	20	3000	275
PZG550G	550	1000	1390	9	20	3000	290

SCOPE OF DELIVERY: Clamshell bucket with bolt-on teeth, and non-return valve

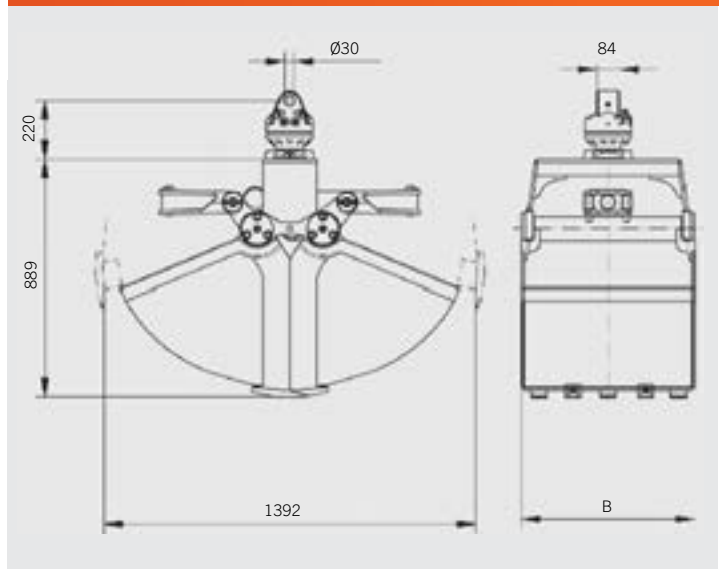
NOTE: Complete packages with flange rotators are listed on page 9.

ACCESSORIES

Type	Description
PZR450GF	Recommended flange rotator – load capacity 4500 kg
PZR450G-XX*	Shaft rotator – load capacity 4500 kg
PZZR450SV-PK	Quick change system for shaft rotators
PZZR450R-XX*	Reduction link between rotator and grapple
PZZG-SC**	Scraper
PZZG002-AH	Welded hooks
PZZG-VK	Wear plates to protect the horizontal cutting edges (2 pcs.)
PZZG-AV/AS	Adapters for mounting compression rails
PZZS072A-09	Compression rails – length 720 mm (2 pcs.)
PZZS100A-09	Compression rails – length 1000 mm (2 pcs.)
PZ102-7000	Bolt-on tooth cpl., incl. screws and nuts

* please specify Ø shaft when ordering ** please specify type of grapple

TECHNICAL DRAWING



TRUCK CRANE REQUIREMENTS

Operating pressure: 260 – 320 bar
 Pressure limitation: 320 bar
 Pump capacity: 25 – 75 l/min
 Two hydraulic functions on the crane

CLAMSHELL BUCKETS WITH HORIZONTAL HYDRAULIC CYLINDER HEAVY DUTY



- The rugged clamshell bucket is a successful composition of design, function and performance
- Maximum loading height is achieved through the compact design with the horizontal hydraulic cylinder
- All bearing bushes are made of a high-strength bronze alloy with lubrication pockets to secure the emergency running properties
- A special V-section sealing ring prevents the ingress of water and dirt
- The hydraulic cylinder with an integrated pressure relief valve ensures a continuous operating pressure and makes the clamshell bucket independent from the carrier unit
- Long service life is ensured through the use of 500 HB steel in the manufacture of the cutting edges and a generously dimensioned bearing system
- Synchronised opening and closing through the unique compensating mechanism as well as the cylinder protection
- Bolt-on digging teeth are delivered with each clamshell bucket
- Excellent digging characteristics are the result of a high closing force of 30kN at 260 bar operating pressure

TECHNICAL SPECIFICATIONS: COMPLETE PACKAGE

Type	Volume (litre)	Width B (mm)	Opening max. (mm)	Number of teeth	Closing force (kN)	Load capacity (kg)	Self weight (kg)
PZG200G-1P	200	400	1430	3	30	3000	285
PZG250G-1P	250	500	1430	5	30	3000	320
PZG350G-1P	350	650	1430	5	30	3000	345

SCOPE OF DELIVERY: Clamshell bucket with bolt-on teeth, flange rotator PZR450GF, connecting hoses BL462 and BL463, upper suspension UL045 and non-return valve

TECHNICAL SPECIFICATIONS

PZG200G-1	200	400	1430	3	30	3000	265
PZG250G-1	250	500	1430	5	30	3000	285
PZG350G-1	350	650	1430	5	30	3000	310
PZG450G-1	450	800	1430	9	30	3000	340
PZG550G-1	550	1000	1430	9	30	3000	375
PZG650G-1	650	1200	1430	9	30	3000	410

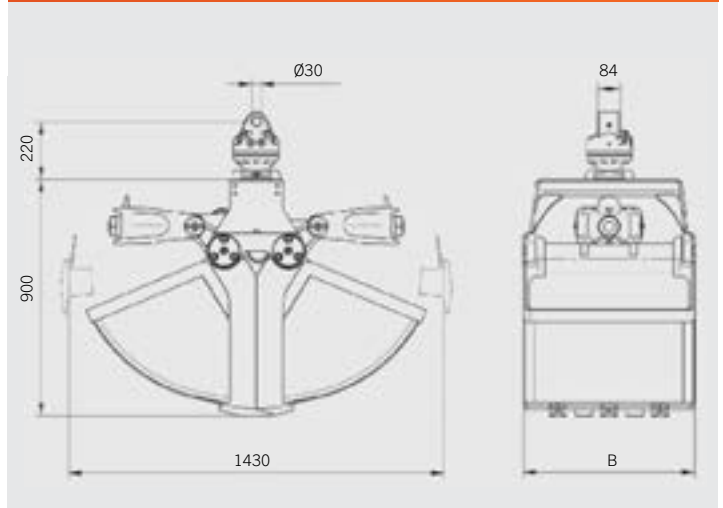
SCOPE OF DELIVERY: Clamshell bucket with bolt-on teeth and non-return valve

ACCESSORIES

Type	Description
PZR450GF	Recommended flange rotator – load capacity 4500 kg
PZR450G-XX*	Shaft rotator – load capacity 4500 kg
PZZR450SV-PK	Quick change system for shaft rotators
PZZR450R-XX*	Reduction link between rotator and grapple
PZZG-SC**	Scraper
PZZG002-AH	Welded hooks
PZZG-VK	Wear plates to protect the horizontal cutting edges (2 pcs.)
PZZG-AV/AS	Adapters for mounting compression rails
PZZS072A-09	Compression rails – length 720 mm (2 pcs.)
PZZS100A-09	Compression rails – length 1000 mm (2 pcs.)
PZ102-7000	Bolt-on tooth cpl., incl. screws and nuts

* please specify Ø shaft when ordering ** please specify type of grapple

TECHNICAL DRAWING



TRUCK CRANE REQUIREMENTS

Operating pressure: 260 – 320 bar
 Pump capacity: 25 – 75 l/min
 Two hydraulic functions on the crane

CLAMSHELL BUCKETS WITH VERTICAL HYDRAULIC CYLINDER FOR DAILY USE



- The clamshell bucket for daily routine work is ideal for excavating foundations, trenches and other similar applications in civil engineering
- Good digging performance due to its plunging behaviour and the approved shell geometry
- Long service life is ensured through the use of 500 HB steel in the manufacture of cutting edges and the generously dimensioned bearing system
- The hydraulic cylinder is enclosed in a carrier box, lowering the risk of damage and down-time
- Synchronised shell operation thanks to the generously dimensioned push rods between the carrier box and the shells
- All bearing bushes are made of a high-strength bronze alloy to secure the emergency running properties
- The clamshell bucket with scraper is designed specially for excavating foundations and graves
- Bolt-on digging teeth are delivered with each clamshell bucket
- Excellent digging characteristics are the result of the high closing force of 20 kN at 260 bar operating pressure

TECHNICAL SPECIFICATIONS

Type	Volume (litre)	Width B (mm)	Opening max. (mm)	Number of teeth	Closing force (kN)	Load capacity (kg)	Self weight (kg)
PZG150GV	150	325	1390	3	20	3000	260
PZG200GV	200	400	1390	3	20	3000	275
PZG250GV	250	500	1390	5	20	3000	295
PZG325GV	325	600	1390	5	20	3000	315
PZG350GV	350	650	1390	5	20	3000	320
PZG450GV	450	800	1390	9	20	3000	355

SCOPE OF DELIVERY: Clamshell bucket with bolt-on teeth and non-return valve

TECHNICAL SPECIFICATIONS: WITH SCRAPER

PZG100GVF	100	600	800	5	30	3000	280
PZG125GVF	125	760	800	7	30	3000	315
PZG150GVF	150	600	1000	5	30	3000	275
PZG190GVF	190	760	1000	7	30	3000	305
PZG200GVF	200	600	1000	5	30	3000	295

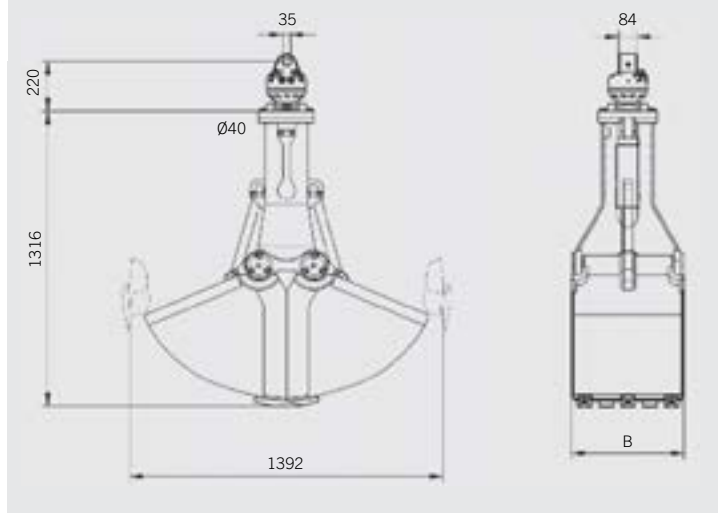
SCOPE OF DELIVERY: Clamshell bucket with bolt-on teeth, scraper and non-return valve

ACCESSORIES

Type	Description
PZR450GF	Recommended flange rotator – load capacity 4500 kg
PZR450G-XX*	Shaft rotator – load capacity 4500 kg
PZZR450SV-PK	Quick change system for shaft rotators
PZZR450R-XX*	Reduction link between rotator and grapple
PZZG-SC**	Scraper
PZZG002-AH	Welded hooks
PZZG-VK	Wear plates to protect the horizontal cutting edges (2 pcs.)
PZZG-AV/AS	Adapters for mounting compression rails (non-return valve necessary)
PZZS072A-09	Compression rails – length 720 mm (2 pcs.)
PZZS100A-09	Compression rails – length 1000 mm (2 pcs.)

* please specify Ø shaft when ordering ** please specify type of grapple

TECHNICAL DRAWING



TRUCK CRANE REQUIREMENTS

Operating pressure: max. 260 bar
 Pressure limitation: 260 bar
 Pump capacity: 25 – 75 l/min
 Two hydraulic functions on the crane

CLAMSHELL BUCKETS WITH VERTICAL HYDRAULIC CYLINDER FOR HEAVY DUTY



- This extremely robust clamshell bucket with two vertical cylinders is ideal for heavy duty digging tasks in grown soil, for excavating earth and for underground constructions
- The two vertically positioned hydraulic cylinders are protected both by their position beside the body as well as by an additional piston rod protection
- Excellent digging performance due to the good plunge behaviour and the approved shell geometry
- Long service life is ensured through the use of 500 HB steel in the manufacture of cutting edges and the generously dimensioned bearing system
- Synchronised bucket movements due to the sturdy and forged compensation rods
- Bolt-on digging teeth are delivered with each clamshell bucket
- Excellent digging characteristics are the result of the high closing force of 32 kN at 260 bar operating pressure

TECHNICAL SPECIFICATIONS: COMPLETE PACKAGE

Type	Volume (litre)	Width B (mm)	Opening max. (mm)	Number of teeth	Closing force (kN)	Load capacity (kg)	Self weight (kg)
PZG215GV-SP	215	500	1295	5	32	3000	320
PZG255GV-SP	255	600	1295	5	32	3000	335

SCOPE OF DELIVERY: Clamshell bucket with bolt-on teeth, flange rotator PZR450GF, connecting hoses BL463, upper suspension UL045 and non-return valve

TECHNICAL SPECIFICATIONS

PZG135GV-S	135	325	1295	3	32	3000	260
PZG170GV-S	170	400	1295	3	32	3000	270
PZG215GV-S	215	500	1295	5	32	3000	285
PZG255GV-S	255	600	1295	5	32	3000	300
PZG340GV-S	340	800	1295	9	32	3000	385

SCOPE OF DELIVERY: Clamshell bucket with bolt-on teeth and non-return valve

ACCESSORIES

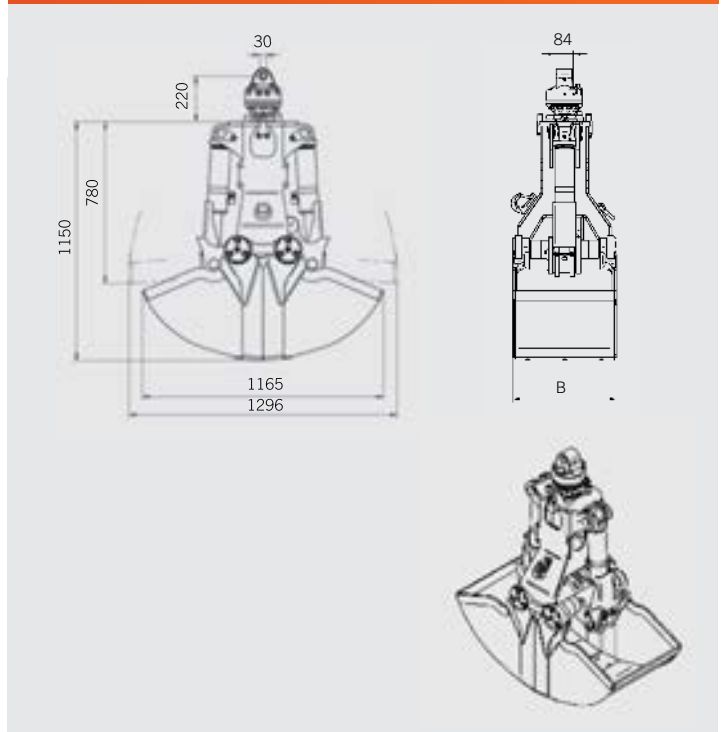
Type	Description
PZR450GF	Recommended flange rotator – load capacity 4500 kg
PZR450G-XX*	Shaft rotator – load capacity 4500 kg
PZZR450SV-PK	Quick change system for shaft rotators
PZZR450R-XX*	Reduction link between rotator and grapple
PZZG002-AH	Welded hooks
PZZG-VK	Wear plates to protect the horizontal cutting edges (2 pcs.)
PZZG-SC**	Scraper

* please specify Ø shaft when ordering ** please specify type of grapple

TRUCK CRANE REQUIREMENTS

Operating pressure: max. 260 bar
 Pressure limitation: 260 bar
 Pump capacity: 30 – 75 l/min
 Two hydraulic functions on the crane

TECHNICAL DRAWING



HIGH VOLUME CLAMSHELL BUCKETS WITH HORIZONTAL HYDRAULIC CYLINDER AND NARROW BUCKET CARRIER



- The clamshell bucket has a significantly narrow frame and can therefore fulfill small digging tasks in addition to handling operation
- The compact design of the narrow frame enables lateral manual filling of the bucket without any obstacles
- Practically no material "left overs" to be picked up as the working edges are vertical when the buckets are open, which allows a deep plunge into a pile of material
- The combination of compensator mechanism and cylinder guard promotes advantages like parallel action, longer service life of the piston rod and seals as well as significant weight savings
- The torsion-free frame also contributes to the low weight
- Long service life through the load-optimised reinforced buckets and the torsion-free frame
- Utilisation of 500 HB steel in the manufacture of cutting edges
- Generously dimensioned bearing system
- The integrated pressure relief valve and non-return valve ensure a secure retention of the load
- Efficient handling with a high closing force of 20 kN at 260 bar operating pressure

TECHNICAL SPECIFICATIONS

Type	Volume (litre)	Width B (mm)	Opening max. (mm)	Number of teeth	Closing force (kN)	Load capacity (kg)	Self weight (kg)
PZG300S-1	300	640	1670	5	20	3000	315
PZG400S-1	400	800	1670	9	20	3000	345
PZG500S-1	500	1000	1670	9	20	3000	370

SCOPE OF DELIVERY: Clamshell bucket with welded hooks PZZG002-AH, pressure relief valve and non-return valve

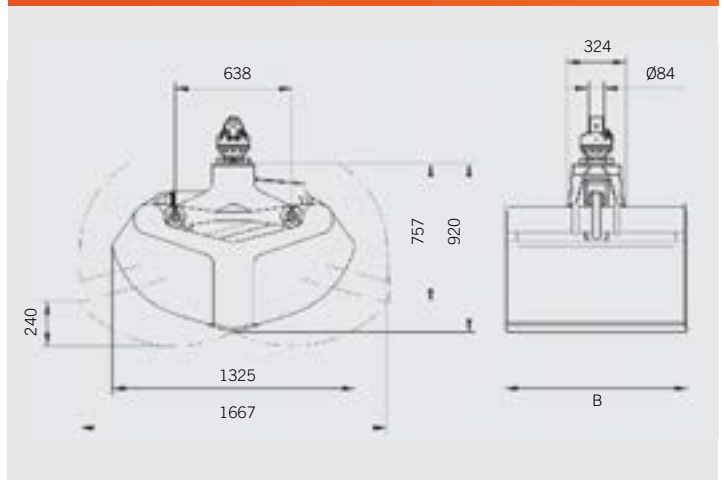
NOTE: Complete packages with flange rotators are listed on page 10.

ACCESSORIES

Type	Description
PZR450GF	Recommended flange rotator – load capacity 4500 kg
PZR450G-XX*	Shaft rotator – load capacity 4500 kg
PZZR450SV-PK	Quick change system for shaft rotators
PZZR450R-XX*	Reduction link between rotator and grapple
PZZG002-AH	Welded hooks
PZZG-VK	Wear plates to protect the horizontal cutting edges (2 pcs.)
PZZG-SK	Lateral cutting edges
PZ102-8000	Bolt-on tooth cpl. incl. screws and nuts

* please specify \varnothing shaft when ordering

TECHNICAL DRAWING



TRUCK CRANE REQUIREMENTS

Operating pressure: 200 – 320 bar

Pump capacity: 30 – 75 l/min

Two hydraulic functions on the crane

HIGH VOLUME CLAMSHELL BUCKETS WITH HORIZONTAL HYDRAULIC CYLINDER FOR HEAVY DUTY



- The robust clamshell bucket is used for excavating with a high handling turnover rate and for loading loose material such as sand, gravel and soil
- High turnover performance due to the functional shape of the buckets and the wide separation between their axes that enables wide opening (good filling behaviour)
- Practically no material "left overs" to be picked up as the working edges are vertical when the buckets are open, which allows a deep plunge into a pile of material
- Efficient design through the combination of a compensator mechanism and a cylinder guard, which protects the piston rod and sealings and contributes to a perfect ratio of weight and stiffness
- All bearing bushes are made of a high-strength bronze alloy with lubrication pockets to secure the emergency running properties
- Long service life through the reinforced buckets and torsion-free frame
- Usage of 500 HB steel in the manufacture of cutting edges
- A special V-section sealing ring prevents the ingress of water and dirt
- Efficient operation with a high closing force of 28 kN at 260 bar operating pressure

TECHNICAL SPECIFICATIONS: COMPLETE PACKAGE

Type	Volume (litre)	Width B (mm)	Opening max. (mm)	Number of teeth	Closing force (kN)	Load capacity (kg)	Self weight (kg)
PZG300SPK	300	500	1830	5	28	3000	410
PZG400SPK	400	800	1830	9	28	3000	465
PZG500SPK	500	1000	1830	9	28	3000	510
PZG650SPK	650	1200	1830	9	28	3000	555
PZG1000SPK	1000	1200	2190	9	28	3000	635

SCOPE OF DELIVERY: Clamshell bucket (without bolt-on teeth) with welded hooks, flange rotator PZR450GF, connecting hoses BL462 and BL463, upper suspension UL045, welded hooks PZZG002-AH, pressure relief valve and non-return valve

TECHNICAL SPECIFICATIONS

PZG300S	300	500	1830	5	28	3000	370
PZG400S	400	800	1830	9	28	3000	430
PZG500S	500	1000	1830	9	28	3000	475
PZG650S	650	1200	1830	9	28	3000	515
PZG1000S	1000	1200	2190	9	28	3000	595

SCOPE OF DELIVERY: Clamshell bucket (without bolt-on teeth) with welded hooks, pressure relief valve and non-return valve

ACCESSORIES

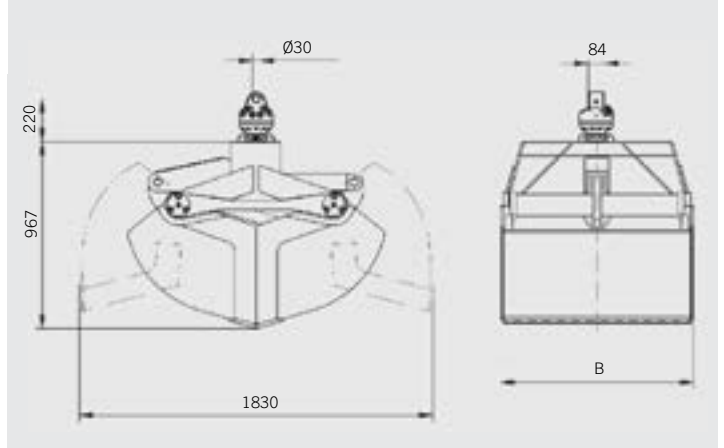
Type	Description
PZR450GF	Recommended flange rotator – load capacity 4500 kg
PZR450G-XX*	Shaft rotator – load capacity 4500 kg
PZZR450SV-PK	Quick change system for shaft rotators
PZZR450R-XX*	Reduction link between rotator and grapple
PZZG002-AH	Welded hooks
PZZG-VK	Wear plates to protect the horizontal cutting edges (2 pcs.)
PZ102-8000	Bolt-on tooth cpl. incl. screws and nuts

* please specify \varnothing shaft when ordering

TRUCK CRANE REQUIREMENTS

Operating pressure: 260 – 320 bar
 Pump capacity: 35 – 75 l/min
 Two hydraulic functions on the crane

TECHNICAL DRAWING



WOOD CHIPS GRAPPLE



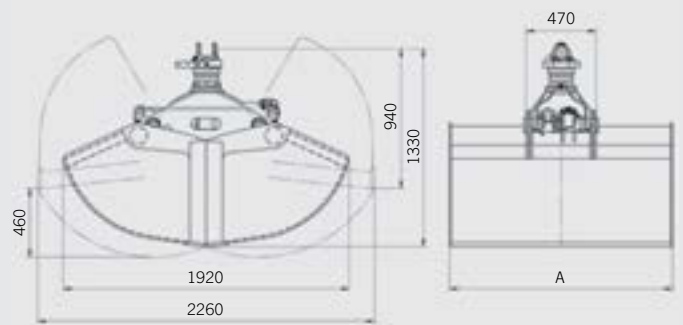
- The wood chips grapple is the ideal tool for loading and handling wood chips or light bulk cargo
- Large volume with a low self weight
- Precise positioning of the load with the mounted flange rotator
- An integrated counter-balance valve guarantees a secure retention of loads and increases the working security
- The mounted rotator with a 6 t load capacity is developed especially for logging
- The hose protection shields the hydraulic connections and avoids ruptured hoses and the risk of machinery failures

TECHNICAL SPECIFICATIONS: COMPLETE PACKAGE

Type	Volume (litre)	Width A (mm)	Opening max. (mm)	Closing force (kN)	Load capacity (kg)	Self weight (kg)
PZG1500SL	1500	1500	2260	23	2000	550

SCOPE OF DELIVERY: Wood chips grapple, flange rotator PZR601GF-35, connecting hoses BL462 and BL463, upper suspension UL045, pressure relief valve, counterbalance valve and non-return valve

TECHNICAL DRAWING



TRUCK CRANE REQUIREMENTS

Operating pressure: max. 260 bar
 Pump capacity: 40 – 75 l/min
 Two hydraulic functions on the crane

UNIVERSAL BUCKETS WITH HORIZONTAL HYDRAULIC CYLINDER FOR HEAVY DUTY



- The universal bucket is a robust clamshell bucket with laterally open shells and a tool for versatile uses such as light digging tasks in earth and gravel and the handling of bulky goods such as refuse material
- The compact design with a horizontal hydraulic cylinder achieves a maximum loading height
- Long service life due to the use of 500 HB steel in the manufacture of the cutting edges and a generously dimensioned bearing system
- Synchronised opening and closing through a sturdy compensation rod
- A high level of security is assured in case of an unexpected pressure drop due to the integrated non-return valve, which maintains a constant closing force
- Bolt-on side plates make easy digging tasks possible
- Additional wear plates (useable on both sides) and welded hooks are delivered with each grapple
- Powerful operation due to the high closing force of 28 kN at 260 bar operating pressure

TECHNICAL SPECIFICATIONS

Type	Volume (litre)	Width B (mm)	Opening max. (mm)	Number of teeth	Closing force (kN)	Load capacity (kg)	Self weight (kg)
PZG250U	250	570	1545	5	28	3000	340
PZG300U	300	670	1545	5	28	3000	355
PZG400U	400	820	1545	7	28	3000	380
PZG450U	450	920	1545	7	28	3000	390
PZG500U	500	1020	1545	9	28	3000	410
PZG600U	600	1220	1545	9	28	3000	440

SCOPE OF DELIVERY: Universal bucket and non-return valve

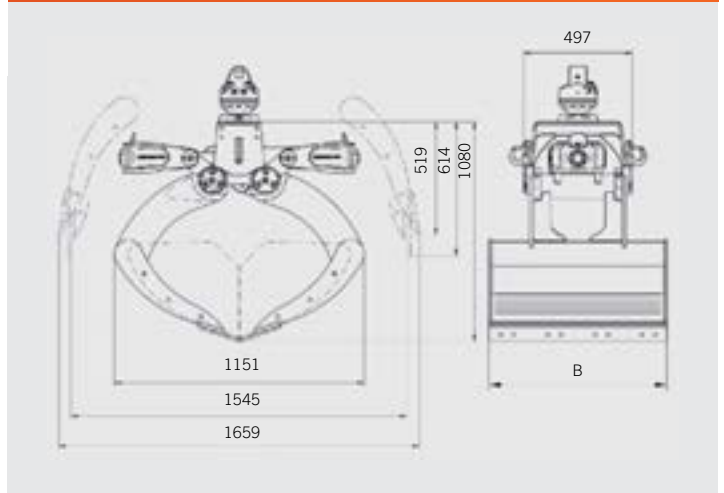
NOTE: Complete packages with flange rotators are listed on page 11.

ACCESSORIES

Type	Description
PZR450GF	Recommended flange rotator – load capacity 4500 kg
PZR450G-XX*	Shaft rotator – load capacity 4500 kg
PZZR450SV-PK	Quick change system for shaft rotators
PZZR450R-XX*	Reduction link between rotator and grapple
PZZG-AV/AS	Adapters for mounting compression rails
PZZS072A-09	Compression rails – length 720 mm (2 pcs.)
PZZS100A-09	Compression rails – length 1000 mm (2 pcs.)
PZZU008-SW	Side plates, 8 mm, bolted, for easy digging tasks (4 pcs.)
PZZU010-SW	Side plates, 10 mm, bolted, for easy digging tasks (4 pcs.)

* please specify Ø shaft when ordering

TECHNICAL DRAWING



TRUCK CRANE REQUIREMENTS

Operating pressure: 260 – 320 bar
 Pressure limitation: 320 bar
 Pump capacity: 25 – 75 l/min
 Two hydraulic functions on the crane

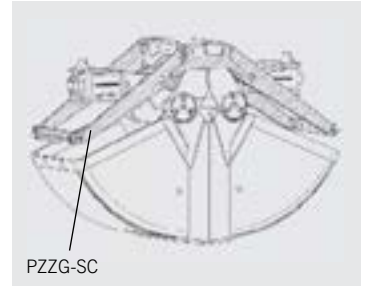
ACCESSORIES FOR CLAMSHELL BUCKETS



- The scraper is for clamshell buckets with narrow widths
- During opening the scraper clears the inside of the shells of sticky materials such as clay
- The design varies depending on the shape of the grapple
- The adapter enables the mounting of compression rails or the support for concrete rings for handling paving slabs, curbstones, concrete rings, etc.
- The adapter can only be used with a non-return valve, simultaneous usage with a scraper is not possible
- The central lifting device for the HPXdrive, welded eyes or welded hooks serve for lifting chains or slings
- The maximum capacity per eye or hook is 1000 kg
- The wear plates serve to protect the horizontal cutting edges

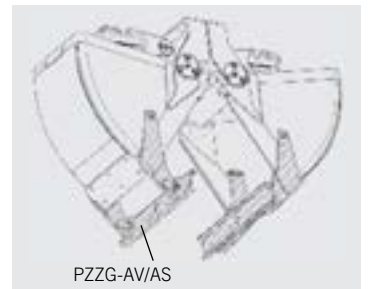
SCRAPER

Type	Description
PZZG-SC	For HPXdrive- and clamshell buckets (please indicate the type of bucket when ordering)



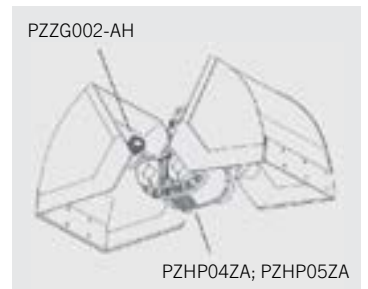
ADAPTER FOR COMPRESSION RAILS

PZZG-AV/AS	Adapter for compression rails
PZZS072A-09	Compression rails – length 720 mm (2 pcs.)
PZZS100A-09	Compression rails – length 1000 mm (2 pcs.)



CENTRAL LIFTING DEVICE, WELDED HOOKS

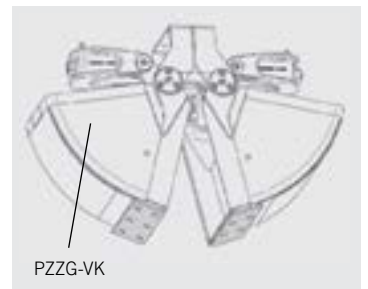
PZHP04ZA	Central lifting device for HPXdrive standard
PZHP05ZA	Central lifting device for HPXdrive heavy duty
PZZG002-AH	Welded hooks, 2 pcs.



WEAR PLATES

PZZG-VK	650 mm, 2 pcs. (please indicate the type of bucket when ordering)
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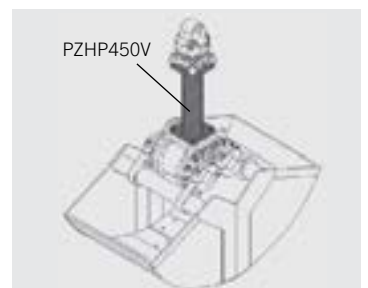
NOTE: Other widths are available on request.



EXTENSION FOR EXCAVATING WITH THE HPX DRIVE

PZHP450V	Extension for excavating – for canal construction and civil engineering – 450 mm, 30 kg
PZHP2000V	Extension for excavating – for canal construction and civil engineering – 2000 mm, 97 kg

NOTE: Other lengths are available on request.



GRAPPLES FOR SMALL CRANES

PK 3400 – PK 4200

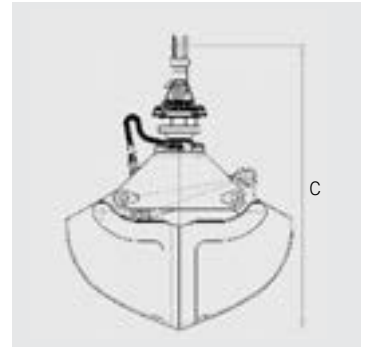


- Ideal for gardening or for tasks in the municipal sector
- For small excavation works
- Compact design
- Efficient usability
- Universal grapple is ideal for digging tasks and handling bulky material
- Universal grapple with perforated shells is ideal for works in wet areas or in the water
- Maximum operating pressure 200 bar
- Complete solution with rotator, suspension and hoses

TECHNICAL SPECIFICATIONS: COMPLETE PACKAGE HIGH VOLUME CLAMSHELL BUCKET

Type	Volume (litre)	Width L (mm)	Opening max. B (mm)	Height C with rotator (mm)	Self weight (kg)
PZG050P	50	330	894	880	52
PZG095P	90	350	1100	960	85
PZG125P	125	450	1200	1060	134

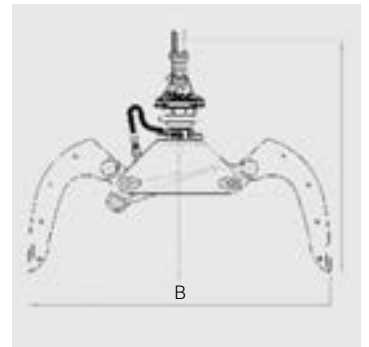
SCOPE OF DELIVERY: Clamshell bucket, 3.5 t rotator, suspension and connecting hoses



TECHNICAL SPECIFICATIONS: COMPLETE PACKAGE UNIVERSAL BUCKET

PZG095UP	90	350	1100	1006	85
PZG125UP	125	450	1200	1105	134

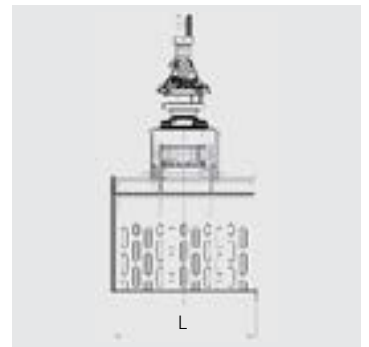
SCOPE OF DELIVERY: Universal bucket, 3.5 t rotator, suspension and connecting hoses



TECHNICAL SPECIFICATIONS: COMPLETE PACKAGE UNIVERSAL BUCKET WITH PERFORATED SHELLS

PZG095UPP	90	350	1100	1006	81
PZG125UPP	125	450	1200	1105	130

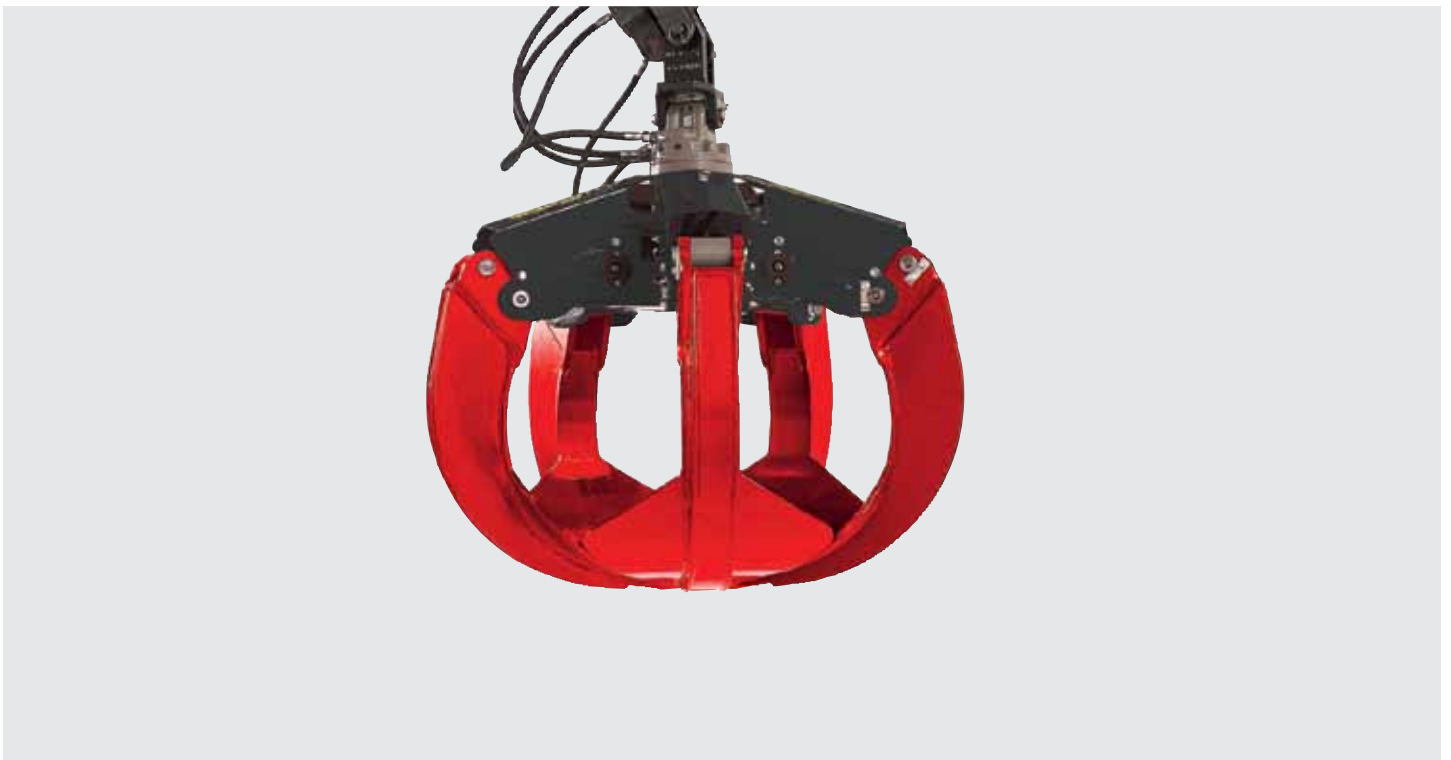
SCOPE OF DELIVERY: Universal bucket, 3.5 t rotator, suspension and connecting hoses



ACCESSORIES

Type	Description
PZZU125-SW	Side plates for PZG125U

ORANGE PEEL GRAPPLES STANDARD



- The robust orange peel grapple standard, flanged to the extension boom of the crane with a pull-in part, is used for handling bulky scrap, building materials and handling facilities
- Versatility: 3 different tine shapes of the PZG-P light duty series with 4 or 5 tines to accommodate handling a variety of materials
- PZG-PV: fully closing tines for handling swarf, loose waste, soil, gravel, etc.
- PZG-PH: half closing tines – closing at the lower part of the segments for handling swarf, scrap, rubbish, waste paper, etc.
- PZG-PS: pointed tines for bulky scrap, car bodies, bundled waste paper, etc.
- A lifting-eye on the centre section acts as an additional stop
- Long service life due to a solid design: the oil distributor and connections are positioned in the robust centre section
- Generously dimensioned bearing system
- Special wear-resistant material of 400HB Brinell used in the production of the gripping arms
- Hydraulic cylinders with piston rod protection and stops for both final positions
- Powerful operation with a high closing force of 11 – 13 kN at 260 bar operating pressure

TECHNICAL SPECIFICATIONS

Type	Number of tines	Volume (litre)	Opening max. A (mm)	Width D closed (mm)	Height B with rotator (mm)	Load capacity (kg)	Closing force (kN)	Self weight w/o rotator (kg)
PZG120PV4	4	120	1360	1065	800	2000	13	330
PZG180PV4	4	180	1450	1070	850	2000	12	345
PZG240PV4	4	240	1720	1125	985	2000	11	380
PZG120PV5	5	120	1360	1065	800	2000	13	350
PZG180PV5	5	180	1450	1070	850	2000	12	365
PZG240PV5	5	240	1720	1125	985	2000	11	415
PZG120PH4	4	120	1360	1065	800	2000	13	260
PZG180PH4	4	180	1450	1070	850	2000	12	270
PZG240PH4	4	240	1720	1125	985	2000	11	300
PZG120PH5	5	120	1360	1065	800	2000	13	300
PZG180PH5	5	180	1450	1070	850	2000	12	305
PZG240PH5	5	240	1720	1125	985	2000	11	340
PZG120PS4	4	120	1360	1065	800	2000	13	230
PZG180PS4	4	180	1450	1070	850	2000	12	235
PZG240PS4	4	240	1720	1125	985	2000	11	250
PZG120PS5	5	120	1360	1065	800	2000	13	275
PZG180PS5	5	180	1450	1070	850	2000	12	285
PZG240PS5	5	240	1720	1125	985	2000	11	300

SCOPE OF DELIVERY: Orange peel grapple, connecting hoses BL463 and non-return valve

NOTE: Complete packages for orange peel grapples – half closing tines with flange rotators are listed on page 10.

ACCESSORIES

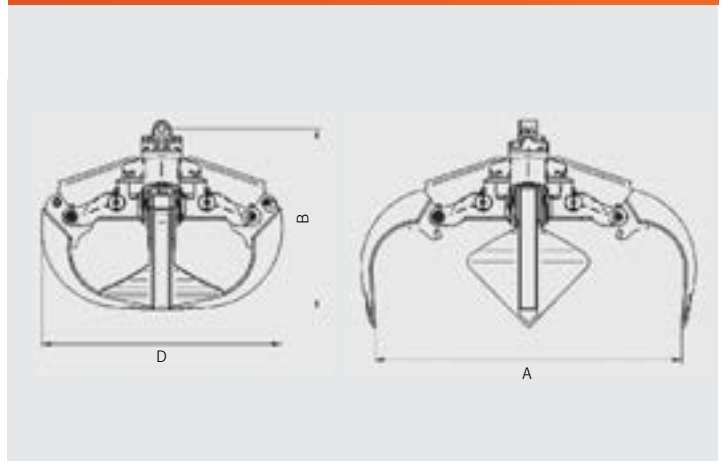
Type	Description
PZR450GF	Recommended flange rotator – load capacity 4500 kg
PZR601GF	Flange rotator – load capacity 6000 kg
PZZGP-DBV	Valve plate, pressure relief valve for shaft rotators
PZR450G-XX*	Shaft rotator – load capacity 4500 kg
PZR601G	Shaft rotator – load capacity 6000 kg

* please specify \varnothing shaft when ordering

TRUCK CRANE REQUIREMENTS

Operating pressure: max. 260 bar
 Pressure limitation: 260 bar
 Pump capacity: 30 – 75 l/min
 Two hydraulic functions on the crane

TECHNICAL DRAWING



ORANGE PEEL GRAPPLES HEAVY DUTY



- The robust orange peel grapple is used for handling bulky scrap, building materials and handling facilities
- Versatility: 3 different tine shapes with 4 or 5 tines to accommodate handling a variety of materials are available
- PZG-PV: fully closing tines for handling swarf, loose waste, soil, gravel, etc.
- PZG-PH: half closing tines – closing at the lower part of the segments for handling swarf, scrap, rubbish, waste paper, etc.
- PZG-PS: pointed tines for bulky scrap, car bodies, bundled waste paper, etc.
- A lifting-eye on the centre section acts as an additional stop
- Long service life due to a solid design: the oil distributor and connections are positioned in the robust centre section
- Generously dimensioned bearing system
- Special wear-resistant material of 400HB Brinell used in the production of the gripping arms
- Hydraulic cylinders with piston rod protection and stops for both final positions
- Powerful operation with a high closing force of 13 – 18 kN at 260 bar operating pressure

TECHNICAL SPECIFICATIONS

Type	Number of tines	Volume (litre)	Opening max. A (mm)	Width D closed (mm)	Height B with rotator (mm)	Load capacity (kg)	Closing force (kN)	Self weight w/o rotator (kg)
PZG250PV4	4	250	1550	1285	1015	2500	18	445
PZG350PV4	4	350	1720	1260	1100	3000	16	470
PZG500PV4	4	500	2155	1320	1350	3000	13	555
PZG250PV5	5	250	1550	1285	1015	2500	18	520
PZG350PV5	5	350	1720	1260	1100	3000	16	545
PZG500PV5	5	500	2155	1320	1350	3000	13	635
PZG250PH4	4	250	1550	1285	1015	2500	18	425
PZG350PH4	4	350	1720	1260	1100	3000	16	440
PZG500PH4	4	500	2155	1320	1350	3000	13	505
PZG250PH5	5	250	1550	1285	1015	2500	18	505
PZG350PH5	5	350	1720	1260	1100	3000	16	520
PZG500PH5	5	500	2155	1320	1350	3000	13	595
PZG250PS4	4	250	1550	1285	1015	2500	18	390
PZG350PS4	4	350	1720	1260	1100	3000	16	395
PZG500PS4	4	500	2155	1320	1350	3000	13	435
PZG250PS5	5	250	1550	1285	1015	2500	18	470
PZG350PS5	5	350	1720	1260	1100	3000	16	480
PZG500PS5	5	500	2155	1320	1350	3000	13	525

SCOPE OF DELIVERY: Orange peel grapple, connecting hoses BL463 and non-return valve

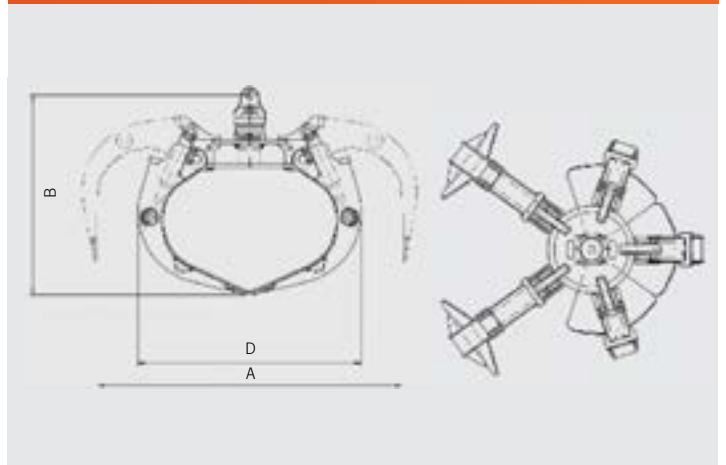
ACCESSORIES

Type	Description
PZR450GF	Recommended flange rotator – load capacity 4500 kg
PZR601GF	Flange rotator – load capacity 6000 kg
PZZGP-DBV	Valve plate, pressure relief valve for shaft rotators
PZR450G-XX	Shaft rotator – load capacity 4500 kg
PZR601G	Shaft rotator – load capacity 6000 kg

TRUCK CRANE REQUIREMENTS

Operating pressure: 260 bar
 Pressure limitation: 260 bar
 Pump capacity: 30 – 80 l/min
 Two hydraulic functions on the crane

TECHNICAL DRAWING



ASYMMETRICAL ORANGE PEEL GRAPPLES



- The asymmetric orange peel grapple with half closing tines allows an unproblematic transport on the Z-crane arm, as the grapple does not project beyond the width of the carrier vehicle (2.5 m)
- It is mainly used for handling scrap, waste and construction materials, and depending on the task it is available with 5 or 6 tines
- Asymmetric construction: the grapple rests flat against the crane arm in its transport position
- A special slot on the main carrier allows the transport of a big orange peel grapple
- Half closing tines as standard – closing at the lower part of the segments for handling waste, scrap, loose materials, etc.
- An integrated counter-balance valve guarantees secure retention of loads even at pressure drops
- Long service life due to a solid design: the oil distributor and connections are positioned in the robust centre section
- Generously dimensioned bearing system
- Special wear-resistant material of 400HB Brinell used in the production of the gripping arms
- Hydraulic cylinders with piston rod protection
- Stops for both final positions
- Powerful operation with a high closing force of 13 kN at 260 bar operating pressure

TECHNICAL SPECIFICATIONS

Type	Number of tines	Volume (litre)	Opening max. A (mm)	Width D closed (mm)	Height B with rotator (mm)	Load capacity (kg)	Closing force (kN)	Self weight w/o rotator (kg)
PZG240PH5-A	5	240	1790	1065	1110	2500	13	350
PZG240PH6-A	6	240	1790	1065	1110	2500	13	410

SCOPE OF DELIVERY: Orange peel grapple and load holding valve

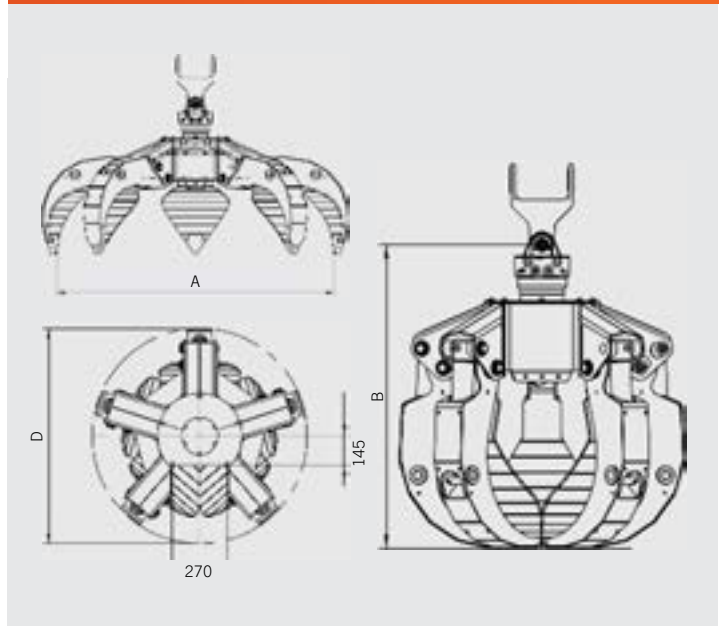
ACCESSORIES

Type	Description
PZR601GF-35	Recommended flange rotator – load capacity 6000 kg

TRUCK CRANE REQUIREMENTS

Operating pressure: max. 260 bar
 Pressure limitation: 260 bar
 Pump capacity: 25 – 75 l/min
 Two hydraulic functions on the crane

TECHNICAL DRAWING



BRICK STACK GRAPPLES



BRICK STACK GRAPPLES WITH PARALLEL SQUEEZE



- The sophisticated brick stack grapple is a versatile tool for palletted and non-palletted materials
- Rigid or adjustable plunge depth with parallel opening and closing clamping arms – hydraulically operated
- Versatile tool through opening ranges of 400 – 1400 mm, i.e. for handling single concrete products like curbstones, or handling brick packs
- Easy operation due to durable and replaceable rubber inserts in the compression rails
- Adjustable plunge depth of PZSV-1 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 the pressure relief valve integrated in the hydraulic system which protects against overload
- The non-return valve prevents the release of the gripped package even in case of pressure drops in the carrier unit
- Long service life due to generously dimensioned bearings, the integrated grease reservoir, automatic wear compensation of the main bearing and the spherical central bearing of the cylinders

TECHNICAL SPECIFICATIONS

Type	Plunge depth A (mm)	Load capacity at min./max. plunge depth (kg)	Gripping min./max. (mm)	Height B with rotator (mm)	Self weight (kg)
PZS085-1	850	2200	400 – 1400	1065	240
PZS100-1	1000	2000	400 – 1400	1215	250
PZS130-1	1300	1600	400 – 1400	1515	260
PZS110V-1	1100 – 1650	1900 / 1350	400 – 1400	1315 – 1865	295

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. Wider opening ranges from 400 – 1800 mm are available on request.

Complete packages with rotators are listed on page 13.

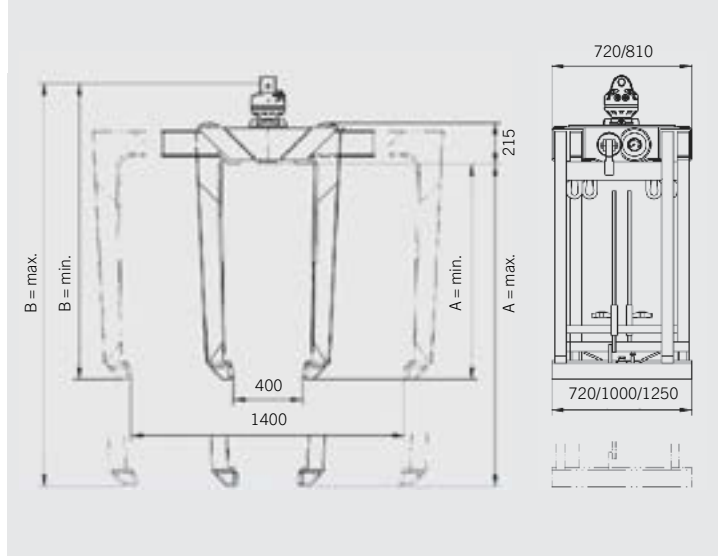
ACCESSORIES

Type	Description
PZR450GF	Recommended flange rotator – load capacity 4500 kg
PZS-OW1800	Opening width 400 – 1800 mm

TRUCK CRANE REQUIREMENTS

Operating pressure: 200 – 320 bar
 Pump capacity: 25 – 75 l/min
 Two hydraulic functions on the crane

TECHNICAL DRAWING



BRICK STACK GRAPPLES WITH SCISSOR GRAB



- The robust brick stack grapple handles loads up to 2000 kg
- Fixed plunge depth with pivoting clamping arms – hydraulically operated
- Versatile tool due to opening ranges from 40 – 1500 mm, i.e. for handling single concrete products like curbstones, or handling brick packs
- Synchronised function of the clamping arms due to sturdy gear-toothed quadrants
- High level of security due to the integrated pressure relief valve and non-return valve, keeping the closing force constant even in case pressure drops
- Reduced overall height in comparison to the plunge depth due to the lower rotator position
- Compression rails with durable and replaceable rubber inserts

TECHNICAL SPECIFICATIONS: COMPLETE PACKAGE

Type	Plunge depth A (mm)	Load capacity (kg)	Gripping G (mm)	Height B (mm)	Self weight (kg)
PZS100SP	1000	2000	220 – 1420	1565	315
PZS110SP	1100	2000	160 – 1450	1665	320
PZS120SP	1200	1800	98 – 1475	1765	325
PZS130SP	1300	1600	40 – 1500	1865	330
PZS100SHP with 12 hooks	1000	2000	220 – 1420	1565	333

SCOPE OF DELIVERY: Brick stack grapple, flange rotator PZR450GF, connecting hoses BL462 and BL463, upper suspension UL045K, compression rails PZZS100A-40 (length 1000 mm), pressure relief valve and non-return valve

ACCESSORIES

Type	Description	Self weight (kg)
UL192-PB	Upper suspension with pendulum brake	15
PZZS100A-40	Compression rails – 1000 mm (2 pcs.)	40
PZZS125A-40	Compression rails – 1250 mm (2 pcs.)	52
PZZG004-AH	Welded hooks (4 pcs.)	

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 bundling). The capacity listed does not apply to stacks of low-profile and unbundled items.

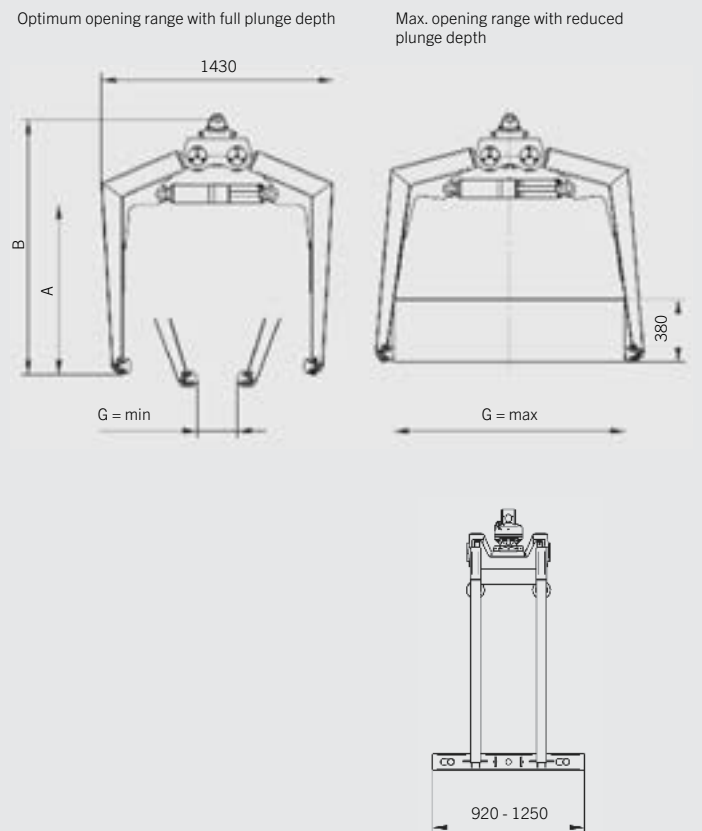
The maximum plunge depth A decreases with opening ranges over 1100 mm (see technical drawings).

Non-standard compression rails with length not listed are available on request. Non-standard plunge depths not listed are available on request. Alternatively with shaft rotator and reduction link.

TRUCK CRANE REQUIREMENTS

Operating pressure: 200 – 320 bar
 Pump capacity: 25 – 75 l/min
 Two hydraulic functions on the crane

TECHNICAL DRAWING



BRICK STACK GRAPPLE PARALLEL OPENING FOR NON-CE COUNTRIES ONLY



- The technically sophisticated brick stack grapple is a versatile tool for palletised materials
- The parallel opening and closing clamping arms are operated hydraulically
- Thanks to the opening range from 780 – 1400 mm single concrete products like curb stones or complete brick packs can be handled with ease
- Safe and unhindered operation is possible due to the integrated pressure relief valve that provides protection from overload and the non-return valve as a protection against uncontrolled opening of the grapple
- Versatility because of the adjustable plunge depth
- The hydraulically operated tines move completely synchronously due to a mechanical compensation with compensation rods
- Exact height adjustment by the use of two adjustable stop bars
- Special, exchangeable slide bearings provide a high degree of efficiency
- Long service life due to generously dimensioned bearings
- Compression rails with exchangeable, wear-resistant rubber inserts

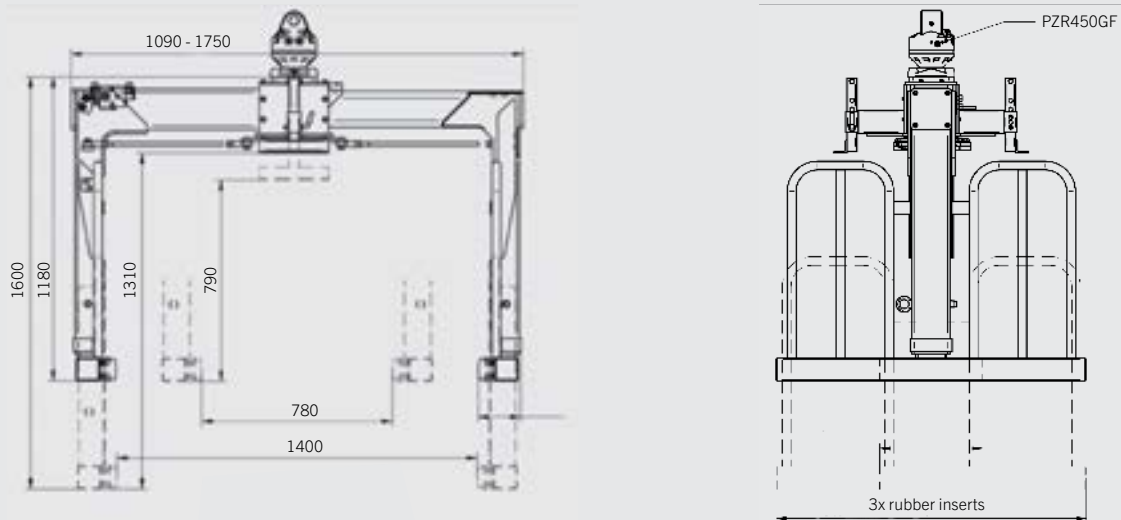
TECHNICAL SPECIFICATIONS: COMPLETE PACKAGE

Type	Plunge depth (mm)	Load capacity at min./max. plunge depth (kg)	Gripping (mm)	Self weight (kg)
PZS321-PK	790 – 1310	2000 / 1500	780 – 1400	401

SCOPE OF DELIVERY: Brick stack grapple, flange rotator PZR450GF, upper suspension UL045, connecting hoses BL463, compression rails (1200 mm), pressure relief valve and non-return valve

NOTE: The brick stack grapple is not CE conform. The load capacity listed in the table depends on the load (the surface conditions, the size of individual stones, stack size and type of bundling). The capacity listed does not apply to stacks of low profile and unbundled items.

TECHNICAL DRAWING



TRUCK CRANE REQUIREMENTS

Operating pressure: 200 – 260 bar
 Pump capacity: 25 – 75 l/min
 Two hydraulic functions on the crane

ACCESSORIES FOR BRICK STACK GRAPPLES



COMPRESSION RAILS

Type	Description	Length (mm)	Self weight (kg)
PZZS072A-29	With smooth rubber inserts (2 pcs.)	720	17
PZZS100A-29	With smooth rubber inserts (2 pcs.)	1000	24
PZZS125A-29	With smooth rubber inserts (2 pcs.)	1250	28
PZZS072A-39	With two rubber inserts, upper insert contoured, lower insert smooth (2 pcs.)	720	24
PZZS100A-39	With two rubber inserts, upper insert contoured, lower insert smooth (2 pcs.)	1000	33
PZZS125A-39	With two rubber inserts, upper insert contoured, lower insert smooth (2 pcs.)	1250	40
PZZS100A-32	Spring loaded rails with parallel-action teeth (2 pcs.) - fitted in seconds by a locking lever	1000	62
PZZS125A-32		1250	76
PZZS072A-09	Compression rails for adapter (2 pcs.)	720	17
PZZS100A-09	Compression rails for adapter (2 pcs.)	1000	23
PZZS125A-09	Compression rails for adapter (2 pcs.)	1250	28
PZZS-GA-38	Adapter for clamping arms to take compression rails		40

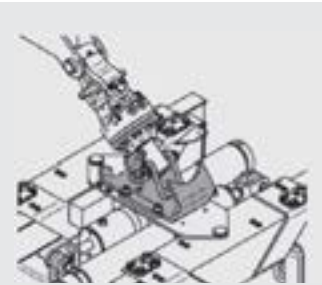
QUICK CHANGE SYSTEM AND OTHER ACCESSORIES



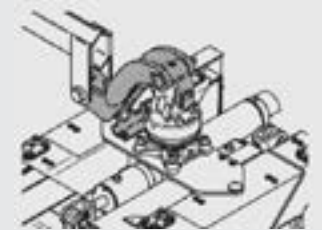
Type	Description	Self weight (kg)
PZZR450SV-PK	Quick change system	12
UL192-PB	Suspension with pendulum brake – up to 4500 kg load capacity	15
PZZR450SV-OT	Upper element fitted to rotator	4
PZZR450SV-UT	Lower element mounted onto attachment	8
PZZR450-A/LH	Rigid suspension link with non-rotating hook	5

OTHER OPTIONS

Type	Description	Self weight (kg)
PZSUKVW	Tilting device to reduce the overall height of the equipment in transport for shaft rotators	12
PZSUKVF	Tilting device to reduce the overall height of the equipment in transport for flange rotators	18
PZSKAF	Height reduction link to reduce the overall height of the equipment in transport, for flange rotators	15
PZSKAW	Height reduction link to reduce the overall height of the equipment in transport, for shaft rotators	15
PZZS-FS	Spring-loaded guide rails for stabilising the top layer of the stack	-
PZZS200V-GV	Adapter to reduce gripping range by 200 mm	16
PZZS-SE	Adapter for concrete pipes with diameters from 800 – 1350 mm	60



PZSUKVW



PZSKAF

CRANE FORKS



PALLET FORKS WITH HYDRAULIC CENTRE OF GRAVITY COMPENSATION



- The efficient pallet fork with a hydraulically compensating centre of gravity can easily be adapted to different loads due to the adjustable plunge depth and tine spread
- Efficient handling of many different kinds of loads such as stone or brick packs, skeleton boxes and other packaged goods is made possible by the hydraulic shifting
- Economic one-man operation saves both time and money
- Precise positioning of the loads in combination with the rotator – continuous rotation, precise start and stop behaviour
- Versatile height from 1000 – 1600 mm, adjustable in three steps
- Versatile width of tines from approx. 475 – 815 mm, adjustable with a smooth running, stainless spindle
- Easy to use due to the dimensions of the pallet fork, as no part of the pallet fork is wider than a standard pallet, a second row can be loaded
- Furthermore, the outer edge of the pallet fork tines meets the overall width of the fork as to enable the gripping of loads close to walls without difficulty

TECHNICAL SPECIFICATIONS

Type	Load capacity (kg)	Throat height A (mm)	Tine length (mm)	Tine spread Z (mm)	Tine dimensions* (mm)	Centre of gravity (mm)	Self weight** (kg)
PZP150H	1500	1050 – 1650	980	475 – 815	80 x 35	500	150
PZP200H	2000	1050 – 1650	980	495 – 835	100 x 35	500	175
PZP250H	2500	1050 – 1650	980	490 – 830	90 x 40	500	230
PZP150HL	1500	1050 – 1650	1150	495 – 835	100 x 35	600	180
PZP200HL	2000	1050 – 1650	1150	500 – 840	90 x 40	600	230
PZP250HL	2500	1050 – 1650	1150	510 – 850	100 x 45	600	250

* width x height ** weight without rotator and protection chain

SCOPE OF DELIVERY: Pallet fork with protection chain PZP-SK

NOTE: A protection trellis or net is mandatory for loose material (EN 13155).

Complete packages with flange rotators are listed on page 14.

ACCESSORIES

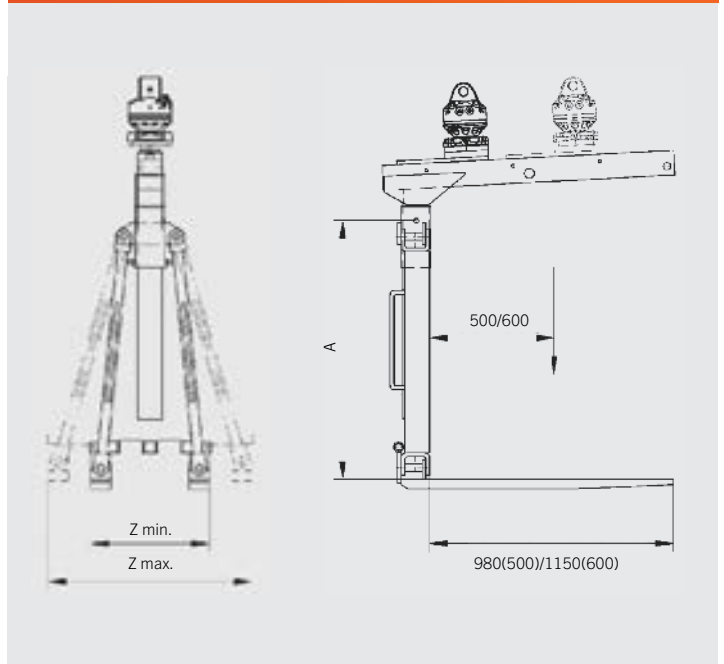
Type	Description
PZR450GF	Recommended flange rotator – load capacity 4500 kg
PZR450G-XX*	Shaft rotator – load capacity 4500 kg
PZZR450SV-PK	Quick change system for shaft rotators
PZZR450R-XX*	Reduction link between rotator and grapple
PZZR450LH-XX*	Non-rotating hook for shaft rotators
PZPEX750-1	Extension of the effective height by 750 mm up to 2 t, tine length 980 mm
PZPEX750	Extension of the effective height by 750 mm from 2 t, tine length 1150 mm

* please specify Ø shaft when ordering

TRUCK CRANE REQUIREMENTS

Operating pressure: max. 200 bar
 Pressure limitation: 200 bar
 Pump capacity: 20 – 40 l/min
 Two hydraulic functions on the crane

TECHNICAL DRAWING



TELESCOPIC PALLET FORKS WITH HYDRAULIC CENTRE OF GRAVITY COMPENSATION



- Thanks to the integrated extension the telescopic pallet fork can be adjusted in steps to an effective height of up to 2400 mm
- Simple handling of insulation material
- With the hydraulic compensation of the centre of gravity different loads such as stone or brick packs, skeleton boxes and other packaged goods can be handled efficiently
- Economic one-man operation saves both time and money
- Precise positioning of the loads in combination with the rotator – continuous rotation, precise start and stop behaviour
- Versatile width of tines adjustable with a smooth running, stainless spindle
- Easy to use due to the dimensions of the pallet fork, as no part of the pallet fork is wider than a standard pallet, a second row can be loaded
- In addition, the outer edge of the pallet fork tines meets the overall width of the fork as to enable the gripping of loads close to walls without difficulty
- Working time savings on the basis of the rapid and simple adjustability of the pallet fork
- Safe working conditions through the optimised design
- Due to the 15 kg lightweight extension the pallet fork can be used for a variety of building materials

TECHNICAL SPECIFICATIONS

Type	Load capacity (kg)	Throat height A (mm)	Tine length (mm)	Centre of gravity (mm)	Tine spread Z (mm)	Tine dimensions* (mm)	Self weight** (kg)
PZP150H-T	1500	1200 – 2400	980	500	475 – 815	80 x 35	165
PZP200H-T	2000	1200 – 2400	980	500	495 – 835	100 x 35	190
PZP250H-T	2500	1200 – 2400	980	500	490 – 830	90 x 40	250
PZP150HL-T	1500	1200 – 2400	1150	600	495 – 835	100 x 35	195
PZP200HL-T	2000	1200 – 2400	1150	600	500 – 840	90 x 40	250
PZP250HL-T	2500	1200 – 2400	1150	600	510 – 850	100 x 45	270

* width x height ** weight without rotator and protection chain

SCOPE OF DELIVERY: Pallet fork with protection chain PZP-SK

NOTE: A protection trellis or net is mandatory for loose material (EN 13155).

ACCESSORIES

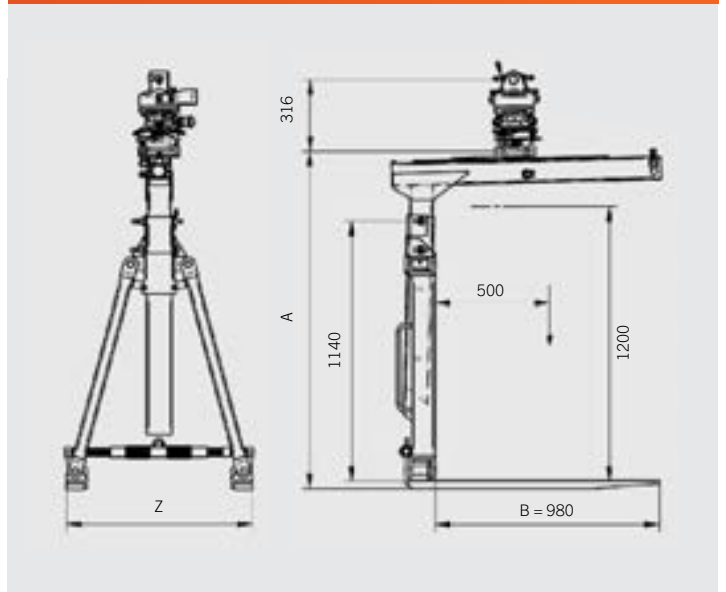
Type	Description
PZR450GF	Recommended flange rotator – load capacity 4500 kg
PZR450G-XX*	Shaft rotator – load capacity 4500 kg
PZZR450SV-PK	Quick change system for shaft rotators
PZZR450R-XX*	Reduction link between rotator and grapple
PZZR450LH-XX*	Non-rotating hook for shaft rotators

* please specify Ø shaft when ordering

TRUCK CRANE REQUIREMENTS

Operating pressure: 200 bar
 Pressure limitation: 200 bar
 Pump capacity: 20 – 40 l/min
 Two hydraulic functions on the crane

TECHNICAL DRAWING



PALLET FORKS SELF BALANCING



- Efficient handling of many different kinds of loads, for example stone or brick packs, crates or other parcelled goods is enabled by the simple weight compensation
- Variable height from 1050 – 1650 mm, adjustable in three steps with a lock pin
- Variable tine spread from approx. 475 – 815 mm, adjustable with a smooth running, stainless spindle
- Easy to use due to the dimensions of the pallet fork, as no part of the pallet fork is wider than a standard pallet, a second row can be loaded
- The outer edge of the pallet fork tines meets the overall width of the fork and loads close to walls can be handled without problems
- Optimised in terms of maintenance by the stainless steel-synthetic sliding guide in the upper part

TECHNICAL SPECIFICATIONS

Type	Load capacity (kg)	Throat height A (mm)	Tine length (mm)	Tine-spread Z (mm)	Tine-dimensions* (mm)	Centre of gravity (mm)	Self weight** (kg)
PZP150V	1500	1050 – 1650	980	475 – 815	80 x 35	500	130
PZP200V	2000	1050 – 1650	980	495 – 835	100 x 35	500	150
PZP250V	2500	1050 – 1650	980	490 – 830	90 x 40	500	210
PZP300V	3000	1050 – 1650	980	510 – 850	100 x 45	500	225
PZP150VL	1500	1050 – 1650	1150	495 – 835	100 x 35	600	165
PZP200VL	2000	1050 – 1650	1150	500 – 840	90 x 40	600	205
PZP250VL	2500	1050 – 1650	1150	510 – 850	100 x 45	600	230

* width x height ** without rotator and protection chain

SCOPE OF DELIVERY: Pallet fork with protection chain PZP-SK, 2 chain elements for suspension

NOTE: Protection trellis or net is mandatory for handling loose material (EN 13155). Automatic compensation of the centre of gravity functions with a min. package weight of approx. 250 – 500 kg. Extension of the effective height is possible up to 3000 mm.

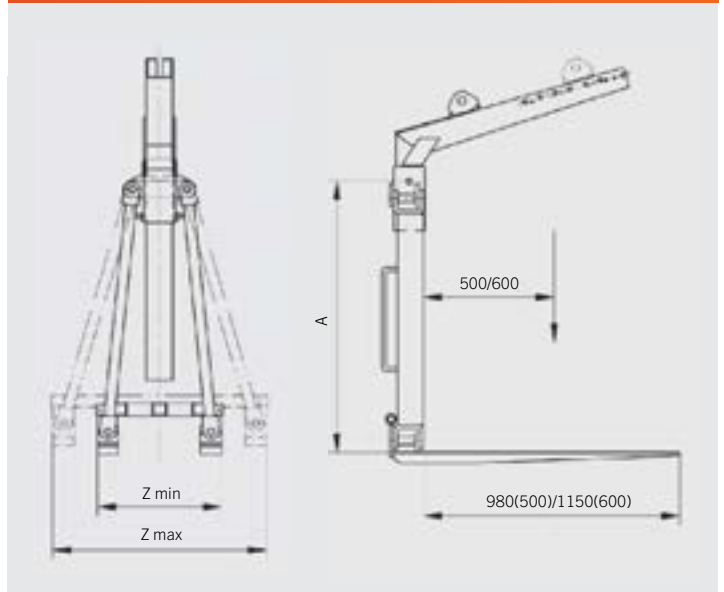
ACCESSORIES

Type	Description
PZR450G-XX*	Shaft rotator up to 4500 kg load capacity for precise positioning of the load
PZZR450-A**	Rigid suspension link with pin for shaft rotators
PZZR450LH-XX*	Rigid hook for shaft rotators
PZPEX750-1	Extension of the effective height by 750 mm up to 2 t load capacity, tine length 980 mm
PZPEX750	Extension of the effective height by 750 mm from 2 t load capacity, tine length 1150 mm

* please specify \emptyset shaft when ordering

** please specify the type of crane fork when ordering

TECHNICAL DRAWING



TELESCOPIC PALLET FORKS WITH SPRING SUPPORTED CENTRE OF GRAVITY COMPENSATION



- Thanks to the new telescopic-pallet fork with integrated extension the effective height can be adjusted up to 2400 mm
- Efficient handling of different loads such as stone or brick packs, skeleton boxes and other packaged goods is facilitated by the simple weight compensation with the stainless steel-synthetic sliding guide in the upper part
- Variable tine spread, adjustable with a smooth running, stainless spindle
- Easy to use due to the dimensions of the pallet fork, as no part of the pallet fork is wider than a standard pallet, a second row can be loaded
- The outer edge of the pallet fork tines meets the overall width of the fork and loads close to walls can be gripped without difficulties
- Working time savings on the basis of the rapid and simple adjustability of the pallet fork
- Safe working conditions through the optimised design

TECHNICAL SPECIFICATIONS

Type	Load capacity (kg)	Throat height (mm)	Tine length (mm)	Centre of gravity (mm)	Tine spread (mm)	Tine dimensions* (mm)	Self weight** (kg)
PZP150V-T	1500	1200 – 2400	980	500	475 – 815	80 x 35	145
PZP200V-T	2000	1200 – 2400	980	500	495 – 835	100 x 35	165
PZP250V-T	2500	1200 – 2400	980	500	490 – 830	90 x 40	230
PZP150VL-T	1500	1200 – 2400	1150	600	495 – 835	100 x 35	180
PZP200VL-T	2000	1200 – 2400	1150	600	500 – 840	90 x 40	225
PZP250VL-T	2500	1200 – 2400	1150	600	510 – 850	100 x 45	250

* width x height ** weight without rotator and protection chain

SCOPE OF DELIVERY: Pallet fork with protection chain PZP-SK and 2 chain elements for suspension

NOTE: A protection trellis or net is mandatory for handling loose material (EN 13155). Spring-supported compensation of the centre of gravity functions with a minimum package weight of approx. 250 – 500 kg.

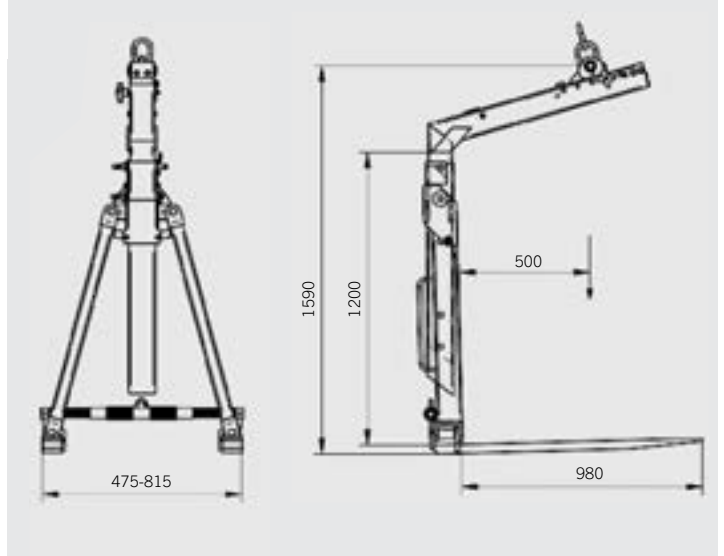
ACCESSORIES

Type	Description
PZR450G-XX*	Recommended shaft rotator – load capacity 4500 kg for precise positioning of the load
PZZR450-A**	Rigid suspension link with pin for shaft rotators
PZZR450LH-XX*	Non-rotating hook for shaft rotators

* please specify \varnothing shaft when ordering

** please specify model of pallet fork when ordering

TECHNICAL DRAWING



PALLET FORKS WITH SPRING SUPPORTED CENTRE OF GRAVITY COMPENSATION AND LOCK PIN ADJUSTMENT



- Efficient handling of different loads such as stone or brick packs, skeleton boxes and other packaged goods is facilitated by the simple weight compensation with the stainless steel-synthetic sliding guide in the upper part
- Throat height adjustable in steps from 1050 – 1650 mm with a lock pin
- Tine spread adjustable in steps from approx. 320 – 930 mm with an easy-to-use locking lever
- Forged, tapered prongs that easily slide under each pallet
- For precise positioning a shaft rotator can be mounted

TECHNICAL SPECIFICATIONS

Type	Load capacity (kg)	Throat height A (mm)	Tine length (mm)	Tine spread Z (mm)	Tine dimensions* (mm)	Centre of gravity (mm)	Self weight** (kg)
PZP150VS	1500	1050 – 1650	980	325 – 920	80 x 35	500	135
PZP200VS	2000	1050 – 1650	980	345 – 940	100 x 35	500	155
PZP250VS	2500	1050 – 1650	980	355 – 945	90 x 40	500	180
PZP300VS	3000	1050 – 1650	980	385 – 975	100 x 45	500	215
PZP150VSL	1500	1050 – 1650	1150	345 – 940	100 x 35	600	170
PZP200VSL	2000	1050 – 1650	1150	355 – 945	90 x 40	600	200
PZP250VSL	2500	1050 – 1650	1150	385 – 975	100 x 45	600	225
PZP300VSL	3000	1050 – 1650	1150	385 – 975	100 x 45	600	250

* width x height ** weight without rotator and protection chain

SCOPE OF DELIVERY: Pallet fork with protection chain PZP-SK and 2 chain elements for suspension

NOTE: A protection trellis or net is mandatory for handling loose material (EN 13155). Spring-supported compensation of the centre of gravity functions with a minimum package weight of approx. 250 – 500 kg. An extension of the effective height up to 3000 mm is possible.

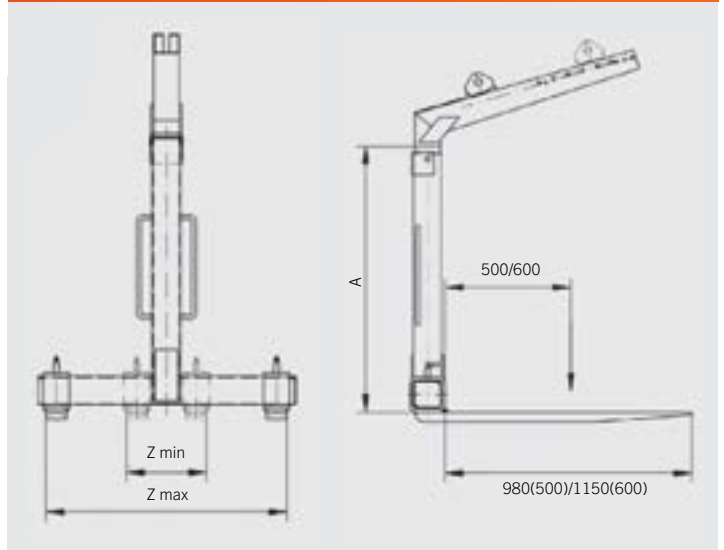
ACCESSORIES

Type	Description
PZR450G-XX*	Recommended shaft rotator – load capacity 4500 kg for precise positioning of the load
PZZR450-A**	Rigid suspension link with pin for shaft rotators
PZZR450LH-XX*	Non-rotating hook for shaft rotators
PZPEX750-1	Extension of the effective height by 750 mm up to 2 t load capacity, tine length 980 mm
PZPEX750	Extension of the effective height by 750 mm from 2 t load capacity, tine length 1150 mm

* please specify \emptyset shaft when ordering

** please specify model of pallet fork when ordering

TECHNICAL DRAWING



PALLET FORKS WITH MECHANICAL ADJUSTMENT OF THE CENTRE OF GRAVITY AND TINES WITH LOCK PIN ADJUSTMENT



- The robust pallet fork with a manual centre of gravity compensation is an economic alternative because of its versatile useability
- Manual change of position of the shifting collar by the operator enables the handling of different loads such as stone or brick packs, skeleton boxes and other packaged goods
- Throat height adjustable in steps from 1050 – 1650 mm with a lock pin in the beam
- Tine spread adjustable in steps from approx. 320 – 930 mm through the easy-to-use locking lever

TECHNICAL SPECIFICATIONS

Type	Load capacity (kg)	Throat height A (mm)	Tine length (mm)	Tine spread Z (mm)	Tine dimensions* (mm)	Centre of gravity (mm)	Self weight** (kg)
PZP150	1500	1050 – 1650	980	325 – 920	80 x 35	500	120
PZP200	2000	1050 – 1650	980	345 – 940	100 x 35	500	130

* width x height ** weight without rotator and protection chain

SCOPE OF DELIVERY: Pallet fork with protection chain PZP-SK

NOTE: A protection trellis or net is mandatory for handling loose material (EN 13155). An extension of the effective height up to 3000 mm is possible.

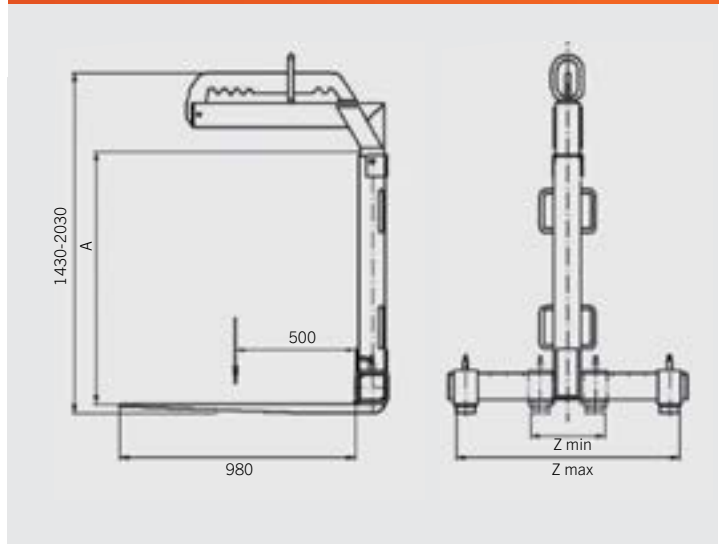
ACCESSORIES

Type	Description
PZR450GF	Recommended flange rotator – load capacity 4500 kg for precise positioning of the load
PZR450G -XX*	Shaft rotator – load capacity 4500 kg for precise positioning of the load
PZZR450SV-PK	Quick change system for shaft rotators
PZZR450R-XX*	Reduction link between rotator and grapple
PZZR450-A**	Rigid suspension link with pin for shaft rotators
PZZR450LH-XX*	Non-rotating hook for shaft rotators
PZPEX750-1	Extension of the effective height by 750 mm up to 2 t load capacity, tine length 980 mm
PZPEX750	Extension of the effective height by 750 mm from 2 t load capacity, tine length 1150 mm

* please specify \emptyset shaft when ordering

** please specify model of pallet fork when ordering

TECHNICAL DRAWING



PALLET FORKS WITH MECHANICAL ADJUSTMENT OF THE CENTRE OF GRAVITY



- Continuously variable, manually controlled centre of gravity compensation enables handling of different loads such as stone or brick packs, skeleton boxes and other packaged goods
- The clamping bracket fixed on the upper beam can be placed stepless in the centre of gravity
- A connection plate for a flange rotator, a shaft rotator or for a crane hook is included in the package
- Throat height adjustable in steps from 1050 – 1650 mm with a lock pin in the beam
- Tine spread adjustable in steps from approx. 320 – 930 mm through the easy-to-use locking lever

TECHNICAL SPECIFICATIONS

Type***	Load capacity (kg)	Throat height A (mm)	Tine length (mm)	Tine spread Z (mm)	Tine dimensions* (mm)	Centre of gravity (mm)	Self weight** (kg)
PZP150M	1500	1050 – 1650	980	325 – 920	80 x 35	500	125
PZP200M	2000	1050 – 1650	980	345 – 940	100 x 35	500	140
PZP250M	2500	1050 – 1650	980	355 – 945	90 x 40	500	165
PZP300M	3000	1050 – 1650	980	385 – 975	100 x 45	500	200
PZP150ML	1500	1050 – 1650	1150	345 – 940	100 x 35	600	150
PZP200ML	2000	1050 – 1650	1150	355 – 945	90 x 40	600	195
PZP250ML	2500	1050 – 1650	1150	385 – 975	100 x 45	600	210
PZP300ML	3000	1050 – 1650	1150	385 – 975	100 x 45	600	225

* width x height ** weight without rotator and protection chain *** please specify type of connecting plate when ordering

SCOPE OF DELIVERY: Pallet fork with protection chain PZP-SK

NOTE: A protection trellis or net is mandatory for handling loose material (EN 13155). An extension of the effective height up to 3000 mm is possible.

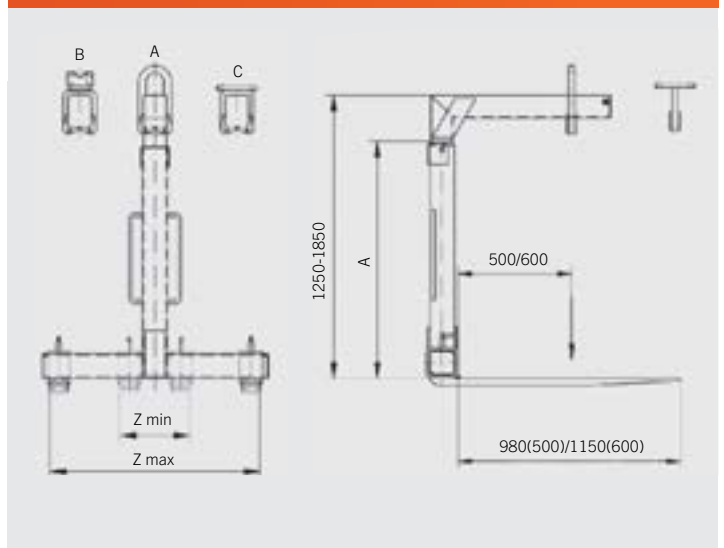
ACCESSORIES

Type	Description
PZR450GF	Recommended flange rotator – load capacity 4500 kg for precise positioning of the load
PZR450G-XX*	Shaft rotator – load capacity 4500 kg for precise positioning of the load
PZZR450SV-PK	Quick change system for shaft rotators
PZZR450R-XX*	Reduction link between rotator and grapple
PZZR450-A**	Rigid suspension link with pin for shaft rotators
PZZR450LH-XX*	Non-rotating hook for shaft rotators
PZPEX750-1	Extension of the effective height by 750 mm up to 2 t load capacity, tine length 980 mm
PZPEX750	Extension of the effective height by 750 mm from 2 t load capacity, tine length 1150 mm

* please specify \emptyset shaft when ordering

** please specify model of pallet fork when ordering

TECHNICAL DRAWING



CONNECTING PLATE FOR:

Crane hook A*

Shaft rotator B*

Flange rotator C*

* please specify the type of connecting plate when ordering

PALLET FORKS WITH MECHANICAL ADJUSTMENT OF THE CENTRE OF GRAVITY SPECIAL DESIGN



- The easy and infinitely variable change of position of the shifting collar enables the handling of different loads
- Multi-functional application due to the simple adjustment of the effective height as well as the tine spread
- Easy positioning of the load due to the included rotator
- Upper part of the pallet fork with a terminal end plate

TECHNICAL SPECIFICATIONS: COMPLETE PACKAGE

Type	Load capacity (kg)	Throat height (mm)	Tine spread (mm)	Self weight (kg)
PZP200MF-FP incl. shaft rotator PZR450G-68 and quick change system PZZR450SV-PK	2000	1050 – 1820	330 – 930	189
PZP200MF-WP incl. shaft rotator PZR450G-68	2000	1050 – 1820	330 – 930	189
PZP200MF-HP incl. shaft rotator PZR450G-68 and non-rotating hook PZZR450LH-68	2000	1050 – 1820	330 – 930	150
PZP250MF-WP incl. shaft rotator PZR450G-68	2500	1050 – 1820	330 – 930	219

SCOPE OF DELIVERY: Pallet fork, rotator, upper suspension UL045K and connecting hoses BL462-R

TECHNICAL SPECIFICATIONS

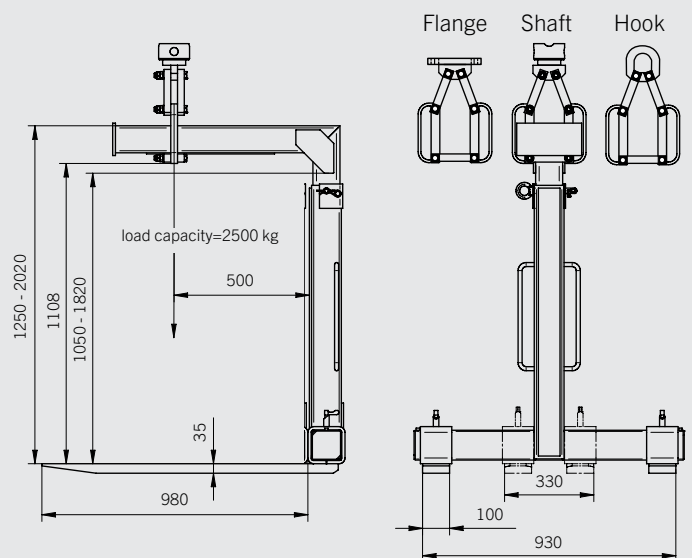
PZP200MF-F incl. connecting plate for flange	2000	1050 – 1820	330 – 930	150
PZP200MF incl. connecting plate for shaft	2000	1050 – 1820	330 – 930	150
PZP200MF-H incl. connecting plate for hook	2000	1050 – 1820	330 – 930	150
PZP250MF incl. connecting plate for shaft	2500	1050 – 1820	330 – 930	180

ACCESSORIES

Type	Description
PZR450GF	Flange rotator – load capacity 4500 kg
PZR450G-XX*	Shaft rotator – load capacity 4500 kg
PZZR450SV-PK	Quick change system for shaft rotators
PZZR450R-XX*	Reduction link between rotator and grapple
PZZR450LH-XX*	Non-rotating hook for shaft rotators
PZPEX750-1	Extension of the effective height by 750 mm up to 2 t load capacity, tine length 980 mm
PZPEX750	Extension of the effective height by 750 mm from 2 t load capacity, tine length 1150 mm

* please specify \emptyset shaft when ordering

TECHNICAL DRAWING



TRUCK CRANE REQUIREMENTS

One hydraulic function on the crane

UNIVERSAL FORKS WITH SQUARE BEAM



- Suitable for feeding old and new buildings with wallboards and building materials supplied in a lying position up to a size of 1250 mm height and 460 mm depth
- Variable tine spreads provide an adjustment to the panels to be transported
- In addition to the standard settings from 640 – 1600 mm there are also settings up to 1830 mm or 2130 mm
- Safe transport of plates and sheets due to the possibility of clamping with the swivelling lower part of the fork
- For strongly different packet sizes an adjustable clamping device is available
- Protection of the sheets through semi-tapered forged tines equipped with rollers and pads
- 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
- Higher structural stiffness with a lower self weight due to the design with a single square beam

TECHNICAL SPECIFICATIONS

Type	Load capacity (kg)	Tine spread A (mm)	Height of load max. (mm)	Depth of load max. (mm)	Self weight (kg)
PZP150W	1500	640 – 1600	1250	460	345
PZP200W	2000	640 – 1600	1250	460	360
PZP250W	2500	640 – 1600	1250	460	380

NOTE: Complete packages are listed on page 16.

ACCESSORIES

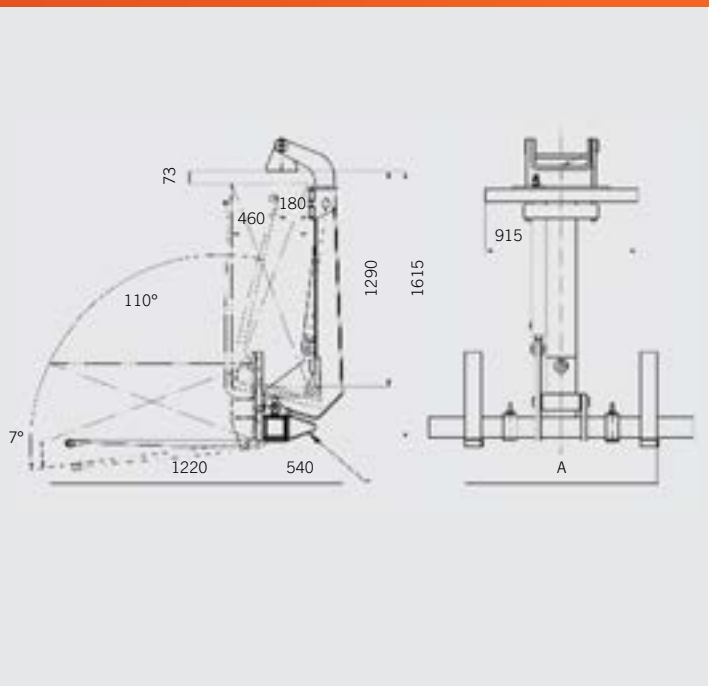
Type	Description	Weight (kg)
PZR450GF	Recommended flange rotator – load capacity 4500 kg	26
PZR450G-XX*	Shaft rotator – load capacity 4500 kg	26
PZZR450SV-PK	Quick change system for shaft rotators	12
PZZR450R-XX*	Reduction link between rotator and fork	3
PZP001	Adjustable clamping device to secure single sheets of smaller packs	14
PZP002	Rack for safe and easy handling of folded universal fork	5
PZZR450-W/SV	Intermediary between PZP-W and PZZR450SV-PK	

* please specify Ø shaft when ordering

TRUCK CRANE REQUIREMENTS

Operating pressure: 200 – 320 bar
 Pump capacity: 40 – 75 l/min
 Two hydraulic functions on the crane

TECHNICAL DRAWING



UNIVERSAL FORK WITH DOUBLE BEAM



- Variable tine spreads enable adjustments to the panels to be transported
- In addition to standard settings from 640 – 1600 mm there are also settings up to 1830 mm or 2130 mm
- Safe transport of plates and sheets due to the possibility of clamping with the swivelling lower part of the fork
- For strongly different packet sizes an adjustable clamping device is available
- Protection of the sheets through semi-tapered forged tines equipped with rollers and pads
- 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 tilting cylinder and the rotator
- The tilting cylinder is better protected against damage due to the double beam
- Robust construction
- The special version of the universal fork PZP150WA-K with a second suspension point on the main beam enables the unloading of lying boards through narrow openings in the wall

TECHNICAL SPECIFICATIONS

Type	Load capacity (kg)	Tine spread A* (mm)	Height of load max. (mm)	Depth of load max. (mm)	Self weight (kg)
PZP150WP-K	1500	640 – 1830	1250	460	410

* please specify tine spread when ordering

SCOPE OF DELIVERY: Universal fork, flange rotator PZR450GF, connecting hoses BL463, upper suspension UL045, pressure relief valve and counterbalance valve

TECHNICAL SPECIFICATIONS

PZP080W-K	800	600 – 1000	1250	460	280
PZP100W-K	1000	640 – 1600	1250	460	340
PZP150W-K	1500	640 – 1600	1250	460	380
PZP200W-K	2000	640 – 1600	1250	460	420
PZP250W-K	2500	640 – 1600	1250	460	390
PZP150WA-K	1500	640 – 1600	1250	460	390

NOTE: The maximum dimensions of the load are 1250 x 460 mm (height x depth). The maximum width of the load depends on the tine spread.
The universal fork PZP080W-K is delivered with an integrated rack, adjustable clamping device and an upper suspension for a shaft rotator.
PZP150WA-K: the universal fork PZP150W-K is delivered with a second suspension point on the main beam.

ACCESSORIES

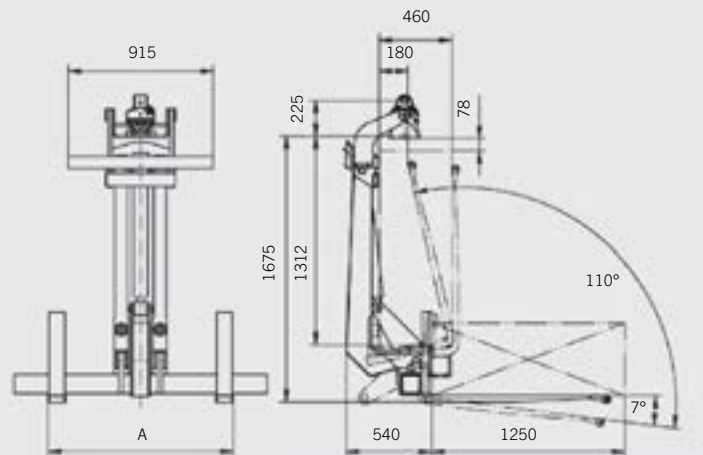
Type	Description	Weight (kg)
PZR450GF	Recommended flange rotator – load capacity 4500 kg	26
PZR450G-XX*	Shaft rotator – load capacity 4500 kg	26
PZZR450SV-PK	Quick change system for shaft rotators	12
PZZR450R-XX*	Reduction link between rotator and fork	3
PZP001	Adjustable clamping device to secure single sheets of smaller packs	14
PZP002	Rack for safe and easy handling of folded universal forks	5
PZZR450-W/SV	Intermediary between PZP-W-K and PZZR450SV-PK	

* please specify \varnothing shaft when ordering

TRUCK CRANE REQUIREMENTS

Operating pressure: 200 – 320 bar
Pump capacity: 40 – 75 l/min
Two hydraulic functions on the crane

TECHNICAL DRAWING



BOTTLE BANK DISCHARGE UNITS



BOTTLE BANK DISCHARGE UNIT FOR RING SYSTEM AND A LOW OVERALL HEIGHT



- Extended service life and a high stability due to the compact design combined with the rugged rope construction
- Precise positioning with the rotator, safely integrated in the device
- An integrated pendulum brake provides additional security and accuracy
- The automatic lift stop protects the container from damage
- The integrated non-return valve guarantees secure operation, short cycle times and an attractive acquisition price

TECHNICAL SPECIFICATIONS

Type	Lift of the hook max. (mm)	Load capacity (kg)	Height with rotator (mm)	Operating pressure max. (bar)	Pump capacity max. (l/min)	Self weight (kg)
PZC220R	500	2200	955	210	60	170

SCOPE OF DELIVERY: Bottle bank discharge unit, flange rotator PZR450GF, upper suspension with pendulum brake UL192-PB, connecting hoses BL463, non-return valve and pressure relief valve

ACCESSORIES

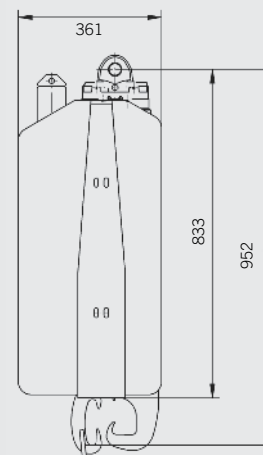
Type	Description	Tilting angle (degree)	Weight (kg)
PZCDD	Docking device allows the discharge unit to be hydraulically docked and locked onto the crane extension. When unlocked, it acts as a hydraulic pendulum brake. A solenoid valve for the switch-over between the hydraulic circuits is included. Operating pressure 280 bar	90	70

NOTE: Please indicate crane model when ordering.

TRUCK CRANE REQUIREMENTS

Operating pressure: max. 210 bar
 Pump capacity: 25 – 60 l/min
 Two hydraulic functions on the crane

TECHNICAL DRAWING



BOTTLE BANK DISCHARGE UNIT WITH RING SYSTEM



- The robust mechanics with few moving parts and a guided lifting hook guarantee a long service life
- Thanks to the automatic lift stop the container is optimally protected against damage
- The integrated pressure relief valve guarantees a safe operation
- Due to the use of a rotator with vertical oil ducts no externally installed hydraulic hoses are necessary
- Independent from the operating pressure of the carrier unit because of the integrated pressure relief valve

TECHNICAL SPECIFICATIONS

Type	Lift of the hook max. (mm)	Load capacity (kg)	Height with rotator (mm)	Operating pressure max. (bar)	Pump capacity max. (l/min)	Self weight (kg)
PZC250R	500	2500	1400	320	60	175

SCOPE OF DELIVERY: Bottle bank discharge unit, flange rotator PZR450GF, upper suspension with pendulum brake UL192-PB, connecting hoses BL463, pressure relief valve and non-return valve

ACCESSORIES

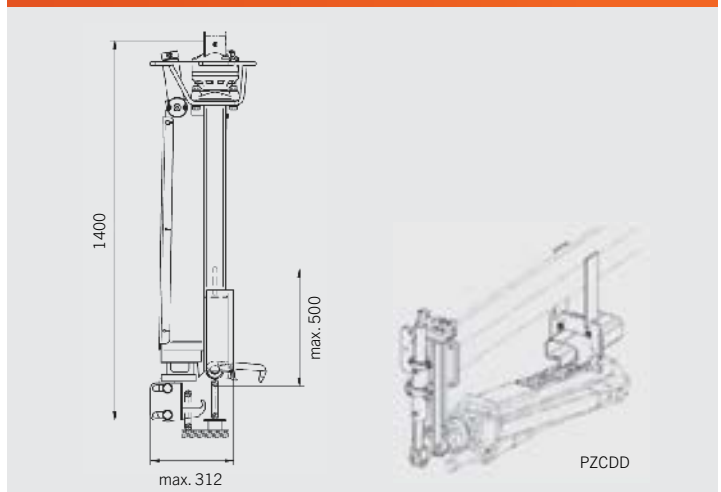
Type	Description	Tilting angle (degree)	Weight (kg)
PZCDD	Docking device allows the discharge unit to be hydraulically docked and locked onto the crane extension. When unlocked, it acts as a hydraulic pendulum brake. A solenoid valve for the switch-over between the hydraulic circuits is included. Operating pressure 280 bar	90	70

NOTE: Please indicate crane model when ordering.

TRUCK CRANE REQUIREMENTS

Operating pressure: max. 320 bar
 Pump capacity: 25 – 60 l/min
 Two hydraulic functions on the crane

TECHNICAL DRAWING



BOTTLE BANK DISCHARGE UNIT WITH MUSHROOM SYSTEM



- Robust mechanics with self-acting centering and hydraulic interlocking
- A pendulum brake provides additional safety and precision
- An integrated pressure relief valve guarantees secure operation and ensures independence from the operating pressure of the carrier unit
- Thanks to the mounted rotator precise positioning of the tool is enabled without difficulties

TECHNICAL SPECIFICATIONS

Type	Lift of the hook max. (mm)	Load capacity (kg)	Height with rotator (mm)	Operating pressure max. (bar)	Pump capacity max. (l/min)	Self weight (kg)
PZC250P	500	2500	1490	320	60	175

SCOPE OF DELIVERY: Bottle bank discharge unit, flange rotator PZR450GF, upper suspension with pendulum brake UL192-PB, connecting hoses BL463, pressure relief valve and non-return valve

ACCESSORIES

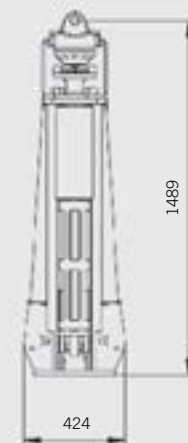
Type	Description	Tilting angle (degree)	Weight (kg)
PZCDD	Docking device Operating pressure 280 bar	90	70
PZZC-HS-250P	Ring hook and support		

NOTE: Safe operation can only be guaranteed in combination with the original fixed and hoist discs on the container with the specified distance dimensions.

TRUCK CRANE REQUIREMENTS

Operating pressure: max. 320 bar
 Pump capacity: 25 – 60 l/min
 Two hydraulic functions on the crane

TECHNICAL DRAWING



BOTTLE BANK DISCHARGE UNIT WITH MUSHROOM AND RING SYSTEM



- Easy manipulation of containers with mushroom or ring systems
- Robust mechanics and a low overall height due to the compact construction
- Precise positioning with the mounted rotator
- The pressure relief valve ensures independence from the operating pressure of the crane
- Protection against damage to the container through the automatic lift stop and an additional height control system

TECHNICAL SPECIFICATIONS

Type	Lift of the hook max. (mm)	Load capacity (kg)	Height with rotator (mm)	Operating pressure max. (bar)	Pump capacity max. (l/min)	Self weight (kg)
PZC250PR	500	2500	1055	320	60	170

SCOPE OF DELIVERY: Bottle bank discharge unit, flange rotator PZR450GF, upper suspension with pendulum brake UL192-PB, connecting hoses BL463, pressure relief valve and non-return valve

ACCESSORIES

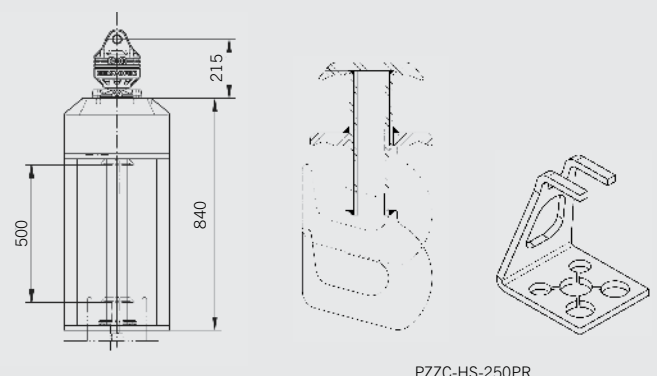
Type	Description	Tilting angle (degree)	Weight (kg)
PZCDD	Docking device Operating pressure 280 bar	90	70
PZZC-HS-250PR	Ring hook and support		

NOTE: Safe operation can only be guaranteed in combination with the original fixed and hoist discs on the container with the specified distance dimensions.

TRUCK CRANE REQUIREMENTS

Operating pressure: max. 320 bar
Pump capacity: 25 – 60 l/min
Two hydraulic functions on the crane

TECHNICAL DRAWING



PZZC-HS-250PR

HYDRAULIC HOOK FOR CONTAINERS



- Rapid and accurate attachment and detachment of containers or loads with a ring system
- Due to the compact design, a low overall height is achieved
- The robust mechanics with a hydraulic cylinder enable the hook to open and close
- The V-shaped section on the device facilitates the ring suspension
- The hydraulic cylinder is located within the tool and therefore completely protected

TECHNICAL SPECIFICATIONS

Type	Width (mm)	Load capacity max. (kg)	Height with rotator (mm)	Ring-Ø max. (mm)	Operating pressure max. (bar)	Self weight with rotator (kg)
PZC250CH	264	2500	592	38	200	46

SCOPE OF DELIVERY: Hydraulic hook, flange rotator PZR450GF-30V and non-return valve

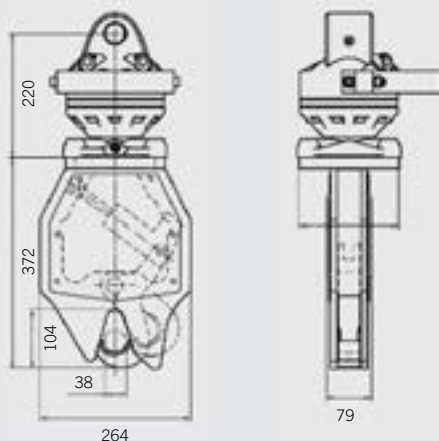
ACCESSORIES

Type	Description
UL045	Upper suspension
PZZR450S	Hose protection

TRUCK CRANE REQUIREMENTS

Operating pressure: max. 200 bar
 Pressure limitation: 200 bar
 Pump capacity: 2 – 10 l/min
 Two hydraulic functions on the crane

TECHNICAL DRAWING



MANIPULATORS



MANIPULATORS



- For lifting, positioning and setting poles, pipes or barrels that are flange-mounted to the extension of the crane
- The manipulator offers optimum assistance for handling and positioning pipes, regardless of whether they are made of concrete or steel
- Mobility through three hydraulic functions: gripping, turning and tilting (three hydraulic circuits are necessary)
- Unlimited angle of rotation
- High load capacities of 500 – 3000 kg
- Precise positioning due to the rotator with a mechanically operated, hydraulic pilot-controlled brake for the turning motion
- Tubes or poles always have to be grabbed in the centre of gravity
- Special manipulators with different gripper attachments and an additional motion axis are available on request
- A solenoid valve set, complete including mounting parts, hose protection and hoses to change over to 3 circuits when only 2 circuits exist is available

TECHNICAL SPECIFICATIONS

Type	Load capacity (kg)	Gripping-Ø min. – max. (mm)	Width B (mm)	Number of tines	Closing force (kN)	Self weight (kg)
PZM0500	500	100 / 300	785	1	11	235
PZM1000	1000	100 / 300	1275	2	23	310
PZM2000	2000	250 / 600	1365	4	25	865
PZM3000	3000	250 / 600	1630	6	39	1085

SCOPE OF DELIVERY: Manipulator, hydraulic pilot-controlled brake and non-return valve

NOTE: The breaking torque for PZM0500 and PZM1000 is 1000 Nm, and for PZM2000 and PZM3000 it is 1500 Nm. Higher breaking torques are available on request. When choosing the correct manipulator suited to the respective application the load capacity as well as the generated breaking torques have to be considered. The pull-in part must be carefully coordinated with the particular crane and the manipulator. Pull-in parts for manipulators with load capacities of 2000 – 3000 kg are available on request.

ACCESSORIES

Type	Description
PZMMV	Solenoid valve set, 12 V / 24 V, operating pressure max. 250 bar, oil flow 60 l/min
PZMA45-2	45° adapter for PZM2000
PZMA45	45° adapter for PZM0500, PZM1000
HXE5063	Pull-in part for PZM2000, crane PK18000B, necessary positioning pin HIS 073A + EQ 042
HXE5064	Pull-in part for PZM2000, crane PK23000C, necessary positioning pin HIS 040A + EQ 042
HXE4792	Pull-in part for PZM1000, crane PK18500B, necessary positioning pin HIS 073A + EQ 042
HXE4748	Pull-in part for PZM1000, crane PK23000C, necessary positioning pin HIS 073A + EQ 042

PULL-IN PART FOR PZM0500, PZM1000

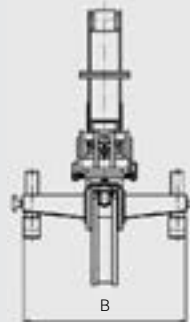
BB013-5V1	Dimensions: 123 x 62 mm, weight: 22.4 kg
BB013-6V1	Dimensions: 155 x 79 mm, weight: 20.3 kg
BB013-7V1	Dimensions: 188 x 96 mm, weight: 23.0 kg
BB013-8V1	Dimensions: 224 x 116 mm, weight: 26.6 kg
BB013-9V1	Dimensions: 260 x 136 mm, weight: 29.3 kg
BB013-20V1	Dimensions: 296 x 156 mm, weight: 47.6 kg
BB013-24V1	Dimensions: 335 x 176 mm, weight: 57.3 kg
BB013-3	Dimensions: 150 – 221 x 63 – 97 mm, weight: 20.4 kg
BB013-4	Dimensions: 259 – 295 x 115 mm, weight: 25.8 kg

TRUCK CRANE REQUIREMENTS

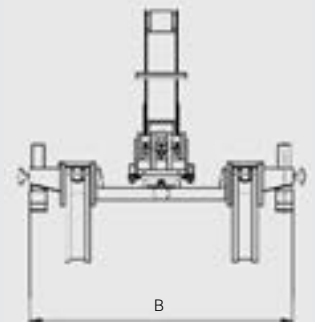
Operating pressure: max. 200 bar
 Pump capacity: 20 – 40 l/min
 Two hydraulic functions on the crane

TECHNICAL DRAWING

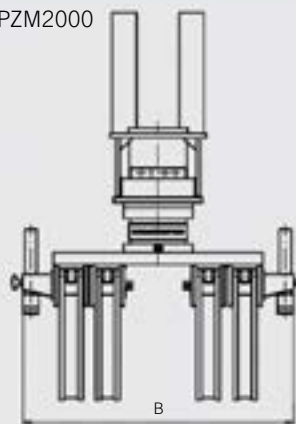
PZM0500



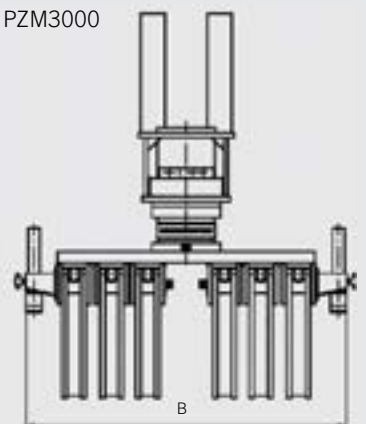
PZM1000



PZM2000



PZM3000



BARRIER LIFTERS

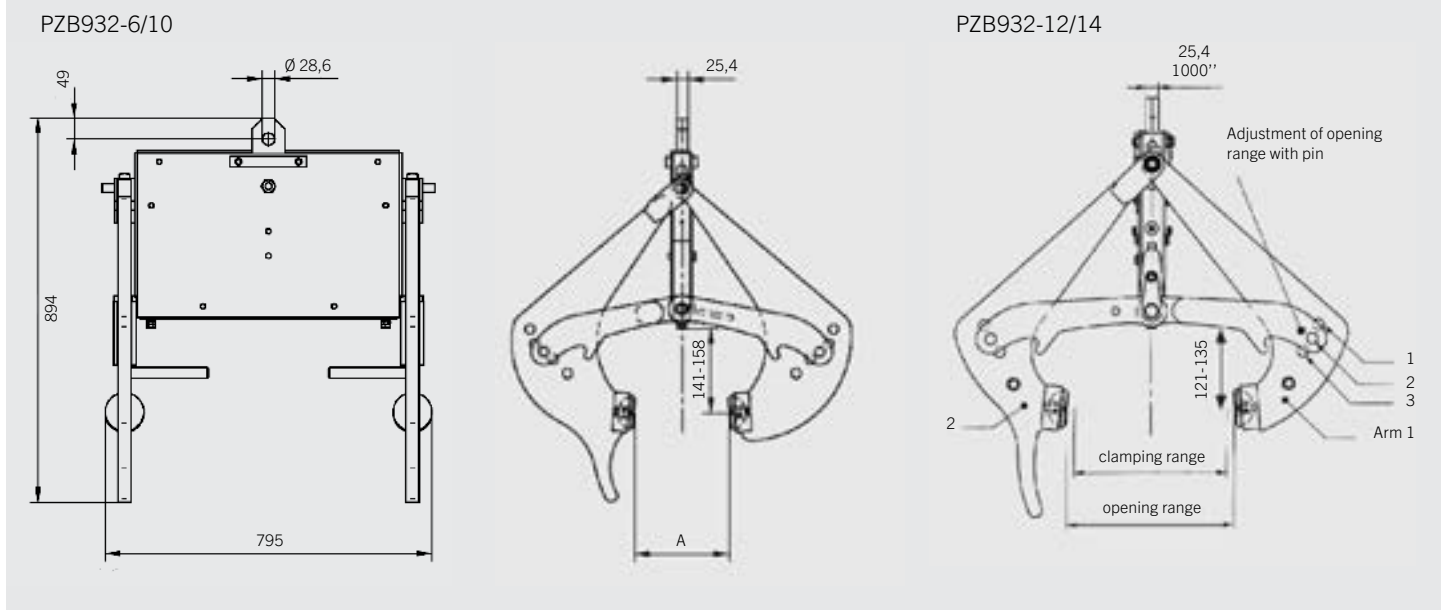


- With the barrier lifter, the handling of concrete barriers, concrete crash barriers and other large concrete elements can be performed conveniently and economically
- Thanks to the pulling kinematics, the gripping arms are moved into the clamped position, after depositing the load the clamping is released when placing the gripping arm frame
- Considerable time savings compared to the manipulation with slings
- The switchover holds the gripping arms in the open position and moves them into their clamping position automatically after touching down
- Gripping pads made of diamond-hard metal and with high closing pressures ensure the efficient handling of concrete components even with wet or coated surfaces
- Due to the large gripping range a variety of different concrete elements can be moved

TECHNICAL SPECIFICATIONS

Type	Gripping A min. – max. (mm)	Load capacity max. (kg)	Self weight (kg)
PZB932-6/10	100 – 310	6580	165
PZB932-12/14	285 – 400	6580	152

TECHNICAL DRAWING



NOTE: The positioning pins have to be plugged on the same level on both arms. Hydraulic connections are not required, the system works without oil supply.

WORKMAN BASKETS



WORKMAN BASKETS ALUMINIUM EN280



- The workman baskets are developed specially for corresponding to the demanding market requirements and are ready to fulfil the EN280 workman basket standard
- Low self weight for maximum operating distance with maximum permissible floor space
- Smooth levelling due to the optimised recirculation ball steering
- Slewing angle 360°
- Emergency switch in the basket, freely accessible and clearly visible
- All around protected handrail in order to prevent injuries
- Equipped with retaining rings for hooking the safety harness to ensure optimum personal security
- Integrated tool box for safe storage of the tools
- The quick change system enables a fast and simple mounting on the crane
- Optionally available in the desired colour

TECHNICAL SPECIFICATIONS

Type	Load capacity (kg)	Floor space (m ²)	Width / Depth / Height (mm)	Self weight (kg)
BB040	200 (2 persons and tools)	0.98	1400 x 700 x 1160	200
BB041	120 (1 person and tools)	0.60	850 x 700 x 1160	172

DIMENSIONS

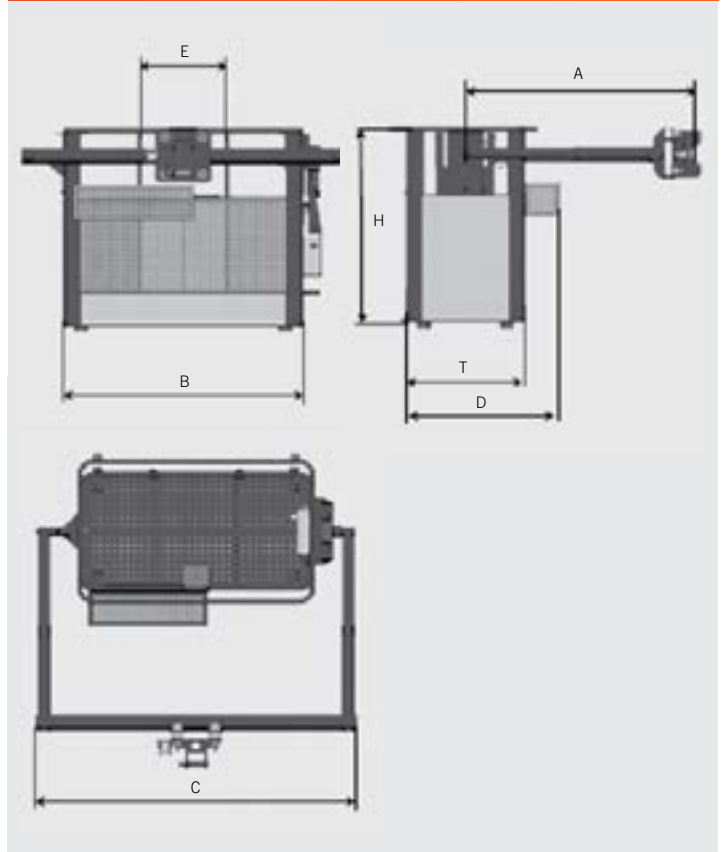
Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	T (mm)	H (mm)
BB040	1375	1400	1890	940	480	700	1180
BB041	1375	850	1340	940	480	700	1180

ACCESSORIES

Type	Description
PZBB01	Safety belt 1.5 m with automatic snap hook and shock absorber
PZBB02	Safety harness (EN361)
KSS001B03	Bracket for big Scanreco radio remote control
HXE3003	Bracket for small Scanreco radio remote control
HXE3004	Bracket for Hetronic radio remote control

NOTE: Conformity with the EN280 is only given with the appropriate workman basket preparation of the crane. PALFINGER SH-cranes feature the workman basket preparation according to EN280 as standard.

TECHNICAL DRAWING



WORKMAN BASKETS STEEL



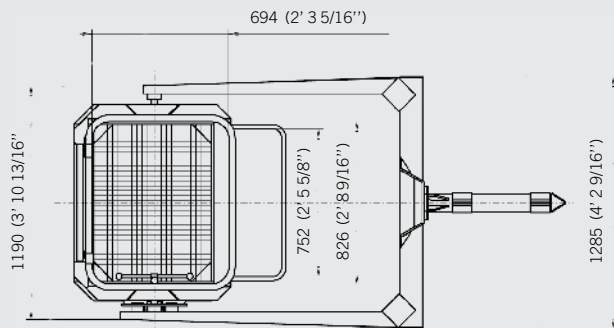
- The workman baskets have been developed as an additional tool for hydraulic loader cranes
- Aerial platforms are subject to different safety regulations and instructions depending on the country, and these have to be considered for the equipment of a crane with a workman basket
- Higher capacity for greater loads
- Robust construction
- Optionally available in the desired colour
- Integrated tool box for safe storage of the tools
- Protected handrail
- The quick change system enables a fast and simple mounting on the crane

TECHNICAL SPECIFICATIONS

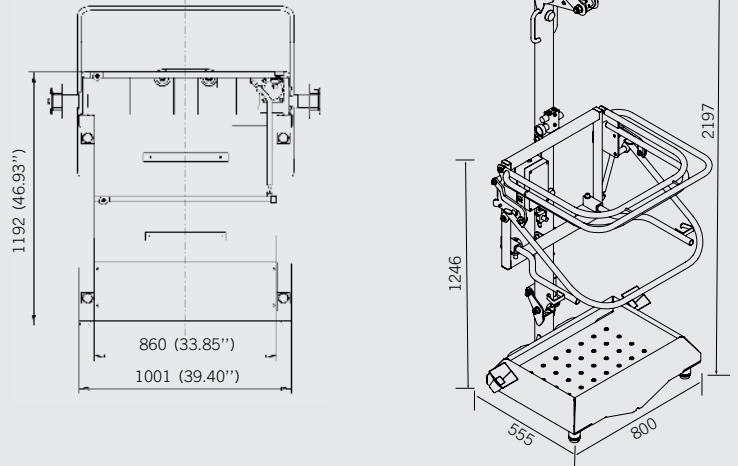
Type	Description	Load capacity (kg)	Entry width (mm)	Electr.hydr. device (V)	Self weight (kg)
BB014A	Automatically performed according to machine guideline, positively controlled, incl. aggregate, and emergency stop switch, coded plug, connected at the basket, according to EN280	300 (2 persons and tools)	830	24	272
BB030	1 person workman basket, fold-away, according to EN280, incl. emergency stop switch, coded plug, connected at the basket	150 (1 person and tools)	800	24	116
BB004B	With weight levelling performed according to machine guideline, incl. emergency stop switch, coded plug, disc brake, connected at the basket, not according to EN280	280 (2 persons and tools)	520	24	190
BB004	With weight levelling, no CE-version, without electrical parts at the basket, not according to EN280	280 (2 persons and tools)	520	—	188

TECHNICAL DRAWING

BB014A, BB004B

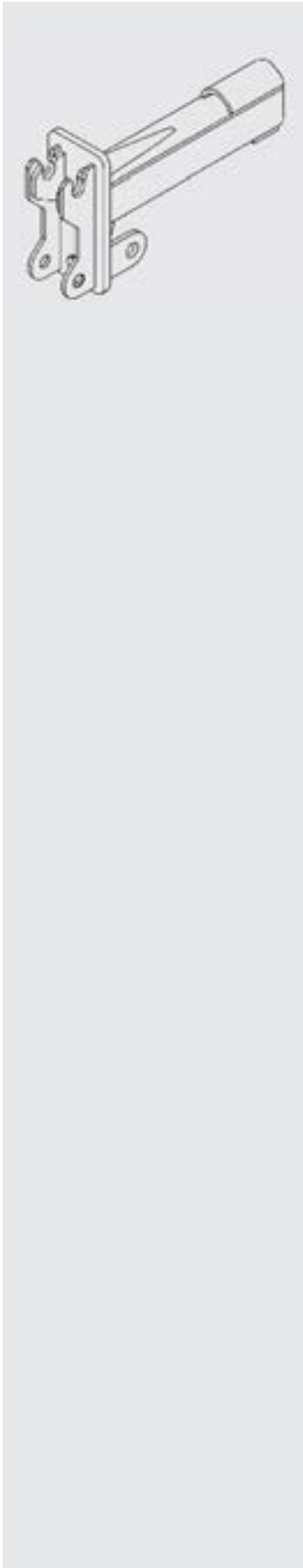


BB030



PULL-IN PARTS

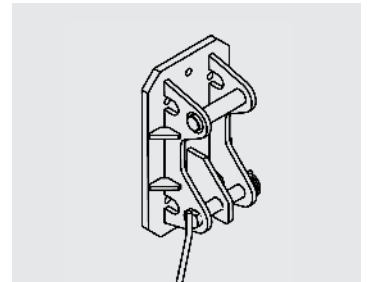
OVERVIEW PULL-IN PARTS FOR WORKMAN BASKETS BB040, BB041, BB014A



Type	Crane model	Extension	Extension boom	Weight (kg)
BB040ES01AU	PK10002-SH	D	S106T25-B	23
	PK12502-SH	D	S106T25-B	
	PJ 100	D	J203T05-B	
BB040ES02AU	PK10002-SH	C	S105T04-B	26
	PK12502-SH	C	S106T24-B	
	PK14502-SH	E	S204T06-C	
	PK18502-SH	E	S205T06-C	
	PK23002-SH	E	S304T06-C	
	PJ 060	B	J103T03-C	
	PJ 080	C	J104T04-B	
	PJ 100	C	J203T04-B	
BB040ES03AU	PK10002-SH	B	S105T03-B	26
	PK12502-SH	B	S106T23-B	
	PK14502-SH	D	S204T05-C	
	PK18502-SH	D	S205T05-C	
	PK23002-SH	D	S304T05-C	
	PJ 060	A	J103T02-C	
	PJ 080	B	J104T03-B	
BB040ES04AU	PK42002-SH	G	S410T38-A	26
	PK53002-SH	G	S411T38-A	
BB040ES05AU	PK14502-SH	C	S204T04-C	29
	PK18502-SH	C	S205T04-C	
	PK23002-SH	C	S304T04-C	
	PK34002-SH	E	S407T09-C	
	PK65002-SH	G	S509T38-A	
	PK78002-SH	G	S510T38-A	
	PK92002-SH	H	S511T39-A	
BB040ES13AU	PK42002-SH	F	S411T47-A	42
	PK53002-SH	F	S411T47-A	
BB040ES06AU	PJ 125	C	J202T04-B	30
	PK27002-SH	D	S405T05-C	
	PK34002-SH	D	S407T05-C	
	PK42002-SH	E	S410T46-A	
	PK53002-SH	E	S411T46-A	
	PK65002-SH	F	S510T37-A	
	PK78002-SH	F	S510T47-A	
BB040ES14AU	PK92002-SH	G	S511T38-A	43
	PJ 170	C	J302T04-B	
BB040ES08AU	PK42002-SH	D	S410T35-A	34
	PK53002-SH	D	S411T35-A	
	PK65002-SH	E	S509T36-A	
	PK78002-SH	E	S510T36-A	
	PK92002-SH	F	S511T47-A	
BB040ES51AU	PK200002L-SH	G	S601T08-A	37
BB040ES52AU	PK200002L-SH	E	S601T06-A	40
BB040ES53AU	PJ 300L	C	J401T04-A	28
BB040ES50AU	PJ 300L	F	J401T07-A	25
BB040ES09AU	PK110002-SH	H	S503T09-A	38
BB040ES15AU	PK110002-SH	G	S503T18-B	41
BB040ES16AU	PK110002-SH	F	S503T07-A	43
BB040ES10AU	150 mm extension			13

QUICK CHANGE FLANGE

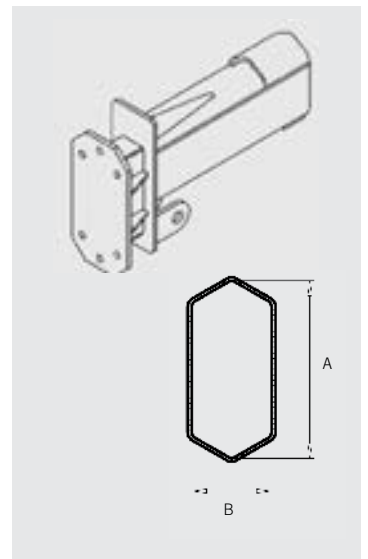
Type	Suitable for
BZ456	BB004, BB004B



PULL-IN PARTS FOR WORKMAN BASKETS BB004, BB004B

Type	Inner dimensions – extension booms A x B (mm)	Weight (kg)
BB013-10V1	123 x 62	21.9
BB013-15V1	155 x 79	21.3
BB013-16V1	188 x 96	28.0
BB013-17AV1	224 x 116	30.3
BB013-18V1	260 x 136	3

Type	Inner dimensions – extension booms A x B (mm)	Weight (kg)
BB004-3	221 x 97	21.4
BB007-3	150 x 63	21.0
BB009-3	185 x 80	17.0
BB011-3	259 x 115	26.6
C016	117 x 48	17.2



EARTH AUGERS



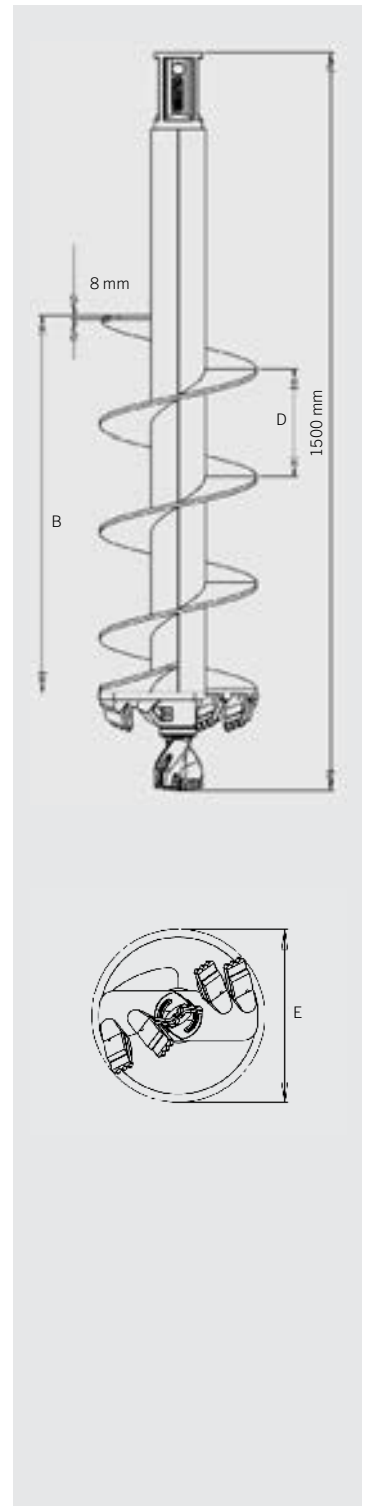
EARTH AUGERS



- The PALFINGER augers provide the highest drilling performance and durability - the PALFINGER crane therefore becomes a multipurpose tool
- The accordingly optimised teeth and centering tips are suitable for earth and gravel layers as well as for soft rock
- The "shock-lock" system that is used for earth and Tungsten augers guarantees that the teeth do not get lost during drilling thanks to a locking bolt
- The cushioning rubber ensures that the Tungsten tooth will not break, even under the harshest conditions
- The teeth of the rock augers are fixed with a taper lock and are suitable for drilling in stony soil or soft rock
- The drive units feature high-strength forged hood ears and a unique hood pin
- High quality of the planetary gearbox and NDS – Non-Dislodgement Shaft – as a result there is no rip away of the shaft
- Integrated service bungs for quick and easy oil changes
- Overflow oil line is not necessary
- The rope wind hitch was designed specially for PALFINGER cranes – it simplifies the secure storage and reduces down times of removal and reinstallation of the auger at the beginning and completion of the work

TECHNICAL SPECIFICATIONS

Type	Number of teeth	Height of slope gradient B (mm)	Distance between spirals D (mm)	Diameter E (mm)	Recommended drive unit	Self weight (kg)
EBG 150E	0	1080	120	150	BEG30	36
EBG 150R		+/- 10				36
EBG 200E	2	975	150	200	BEG30	42
EBG 200T	2					+/- 10
EBG 200R	3					44
EBG 225E	2	975	150	225	BEG30	46
EBG 225T	2					+/- 10
EBG 225R	4					47
EBG 250E	2	965	175	250	BEG50	47
EBG 250T	2					+/- 10
EBG 250R	4					49
EBG 300E	4	900	200	300	BEG50	53
EBG 300T	4					+/- 10
EBG 300R	5					54
EBG 350E	4	900	225	350	BEG50	58
EBG 350T	4					+/- 10
EBG 350R	6					59
EBG 400E	5	875	250	400	BEG50	63
EBG 400T	5					+/- 10
EBG 400R	7					63
EBG 450E	6	750	250	450	BEG50	68
EBG 450T	6					+/- 10
EBG 450R	8					67
EBG 500E	6	750	250	500	BEG80	75
EBG 500T	6					+/- 10
EBG 500R	9					76
EBG 600E	8	750	300	600	BEG80	86
EBG 600T	8					+/- 10
EBG 600R	11					86
EBG 750E	9	700 +/- 10	350	750	BEG80	103
EBG 800E	9	700	350	800	BEG80	118
EBG 800T	9					+/- 10
EBG 800R	15					118
EBG 900E	10	700	350	900	BEG80	138
EBG 900T	10					+/- 10
EBG 900R	17					138

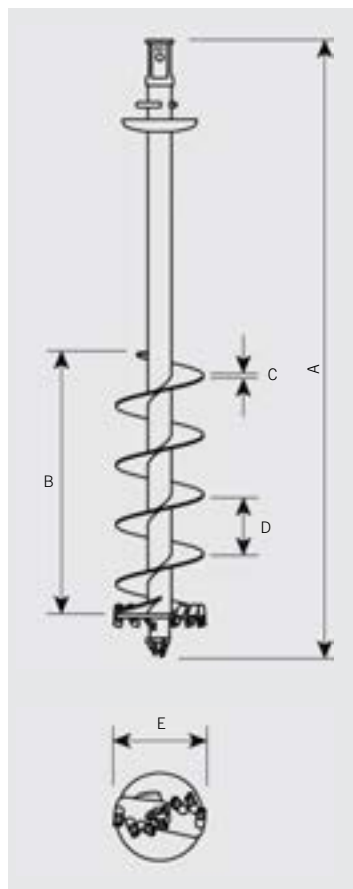


NOTE: Other dimensions are available on request.

E Auger for earth and clay
T Auger for dry and hard surfaces, gravel layers, best universal tooth
R Auger for soft rock

EARTH AUGERS

TECHNICAL SPECIFICATIONS: FOR ROPE WIND HITCH

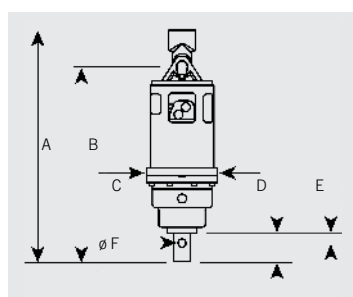


Type	Number of teeth	Height of slope gradient B (mm)	Material thickness C (mm)	Distance between spirals D (mm)	Diameter E (mm)	Self weight (kg)
EBG 150E-RW	0	1000 +/- 10	6 - 8	120	150	50
EBG 150R-RW	0	1000 +/- 10	6 - 8	120	150	50
EBG 200E-RW	2	1000 +/- 10	6 - 8	150	200	54
EBG 200R-RW	3	1000 +/- 10	6 - 8	150	200	54
EBG 225E-RW	2	1000 +/- 10	6 - 8	150	225	58
EBG 225R-RW	4	1000 +/- 10	6 - 8	150	225	58
EBG 250E-RW	2	1000 +/- 10	6 - 8	175	250	63
EBG 250R-RW	4	1000 +/- 10	6 - 8	175	250	63
EBG 300E-RW	4	1000 +/- 10	6 - 8	200	300	68
EBG 300R-RW	5	1000 +/- 10	6 - 8	200	300	69
EBG 350E-RW	4	1000 +/- 10	6 - 8	225	350	73
EBG 350R-RW	6	1000 +/- 10	6 - 8	225	350	74
EBG 400E-RW	5	1000 +/- 10	6 - 8	250	400	79
EBG 400R-RW	7	1000 +/- 10	6 - 8	250	400	79
EBG 450E-RW	6	1000 +/- 10	6 - 8	250	450	85
EBG 450R-RW	8	1000 +/- 10	6 - 8	250	450	85
EBG 500E-RW	6	1000 +/- 10	6 - 8	250	500	92
EBG 500R-RW	9	1000 +/- 10	6 - 8	250	500	93
EBG 600E-RW	8	1000 +/- 10	6 - 8	300	600	99
EBG 600R-RW	11	1000 +/- 10	6 - 8	300	600	100

DRIVE UNITS

Type	Range of drilling (mm)	Operating pressure (bar)	Torque of drive unit (Nm)	Oil flow (l/min)	Speed of turn (U/min)	Self weight (kg)
BEG30	150 – 600	80 – 260	925 – 3007	20 – 50	27 – 68	73
BEG50	150 – 800	80 – 260	1542 – 5012	20 – 50	16 – 41	94
BEG80	150 – 1000	80 – 260	2313 – 7517	20 – 50	11 – 27	97

DIMENSIONS

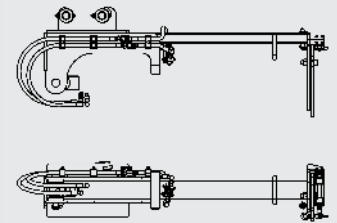


Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
BEG30	755	629	244	66	100	23.5
BEG50	800	674	245	35	100	23.5
BEG80	800	674	245	35	100	23.5

ROPE WIND HITCH

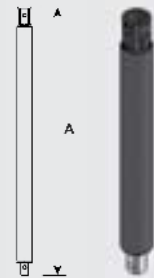
Type	Description	Weight (kg)
BEGAV20*	Suitable for cranes up to 20 mt	140

* please specify the model of the crane and the dimensions of the extension boom when ordering



AUGER EXTENSIONS

Type	Length A (mm)	Pole length (mm)	Shaft exit (mm)	Self weight (kg)
BEG12-500	500	114	57 – square	18
BEG12-1000	1000	114	57 – square	25
BEG12-1500	1500	114	57 – square	26
BEG12-2000	2000	114	57 – square	30



DRILLING TEETH AND DRILLING HEADS

Type	Description
EBG 077E	Drilling tooth for earth auger
EBG 077R	Drilling tooth for rock auger
EBG 077T	Drilling tooth for Tungsten auger
EBG 077EH	Drilling head for earth auger
EBG 077R	Drilling head for rock auger
EBG 077T	Drilling head for Tungsten auger

ADAPTERS

Type	Description
BEG-ADAP	Adapter for hexagonal shaft – 57 mm – 2.5 "
BEG-ADAP-A	Adapter for drill anchor angle

PULL-IN PARTS

Type	Inner dimensions of extension boom (mm)	Weight (kg)
UL025	296 x 133	49.3
UL026	259 x 115	44.1
UL027	221 x 97	39.5
UL028	185 x 80	34.7
UL146	123 x 62	31.8
UL147	155 x 79	34.2
UL148	188 x 96	36.9
UL149	224 x 116	41.6
UL150	260 x 136	45.9

EARTH AUGERS

CHOICE OF THE EQUIPMENT

- » For the proper selection of the correct earth auger with equipment the following specifications are very important: model of the crane the earth drill will be fitted to, diameter of the hole to be drilled, depth of the hole to be drilled, ground type
- » Chart explanation: once the model of the crane is established, use a straight edge to trace a line from the required drilling depth, then trace a line from the required drilling diameter. If the lines cross in the yellow area then the equipment is available for the application

TECHNICAL SPECIFICATIONS: DRILLING RANGE DIAGRAM

BEG30

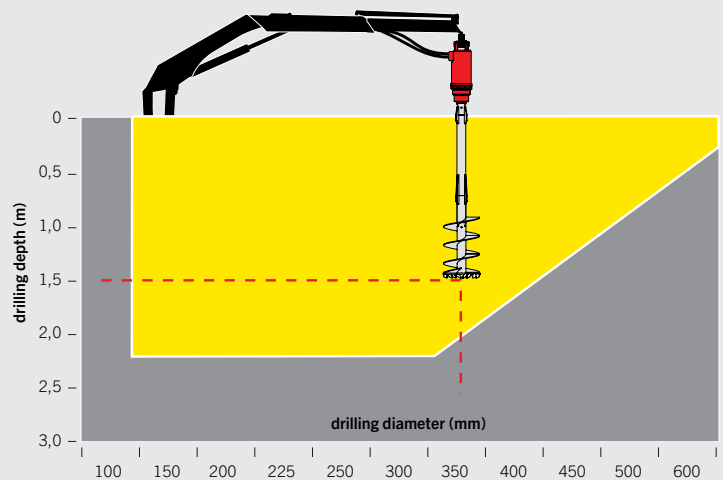
Suitable for cranes from 9 mt

Example of customer requirements:

Crane: PK 9001
 Drilling diameter: 350 mm
 Drilling depth: 1.5 m
 Soil type: earth, soft soil

Suitable product:

1x BEG30, 1x EBG 350E, 1x BEG12-0500



BEG50

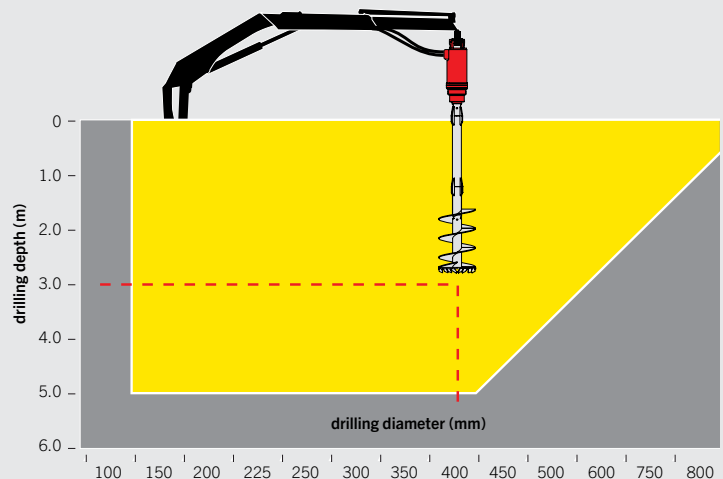
Suitable for cranes from 15 mt

Example of customer requirements:

Crane: PK14001 EH
 Drilling diameter: 400 mm
 Drilling depth: 3.0 m
 Soil type: fractured rock

Suitable product:

1x BEG50, 1x EBG 400R, 1x BEG12-3000



BEG80

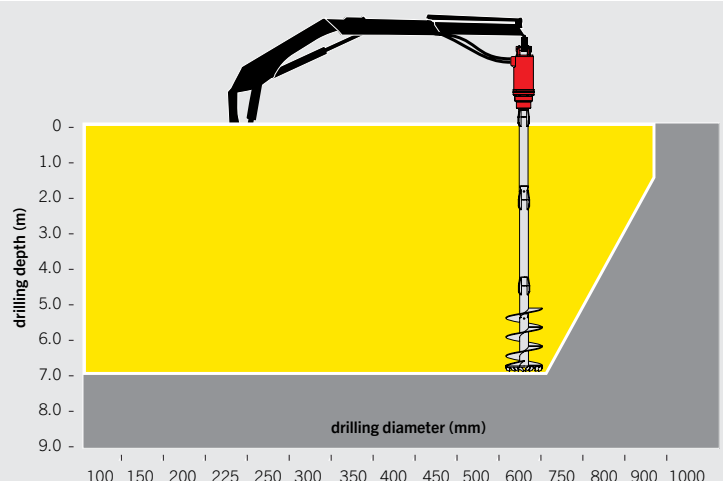
Suitable for cranes from 18 mt

Example of customer requirements:

Crane: PK 18001 EH
 Drilling diameter: 600 mm
 Drilling depth: 7.0 m
 Soil type: earth, soft soil

Suitable product:

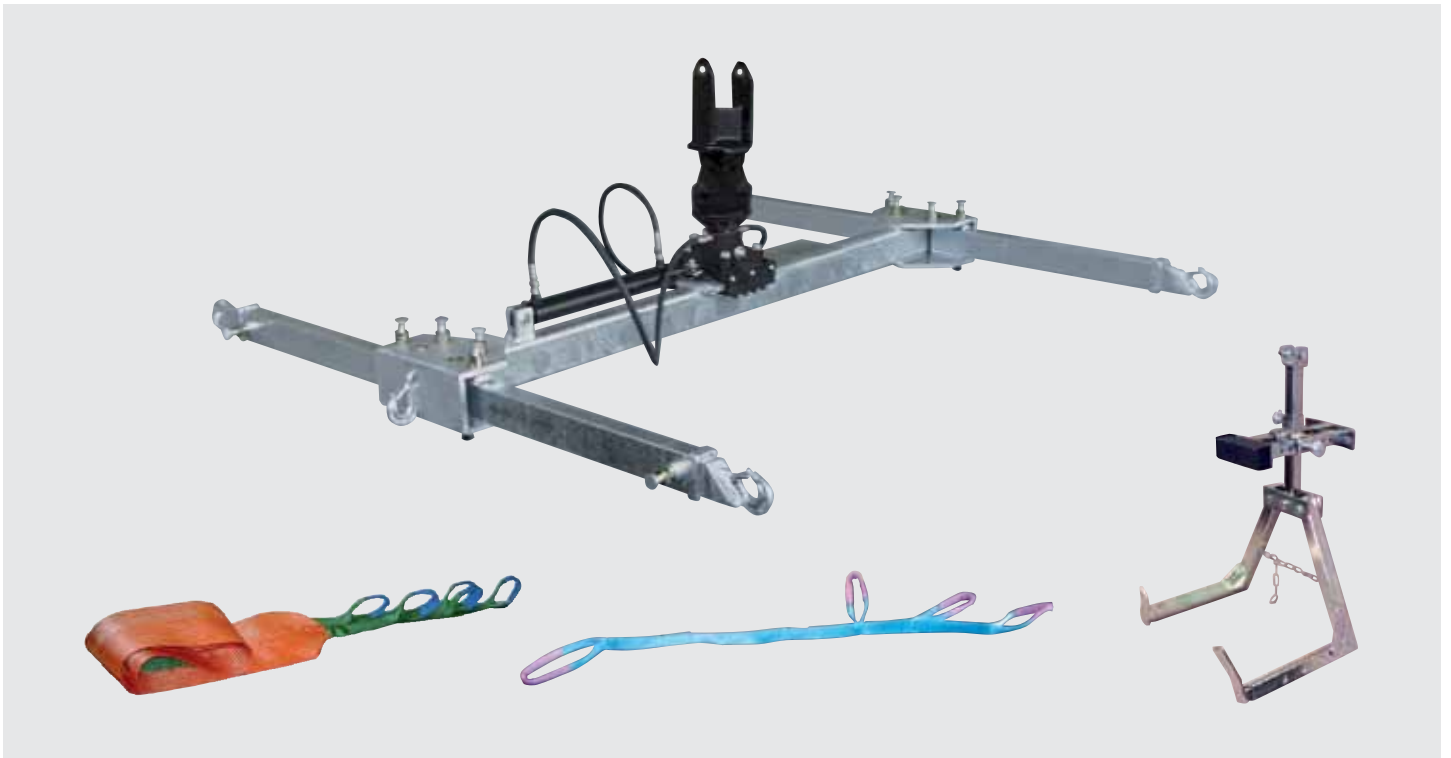
1x BEG80, 1x EBG 600E, 1x EBG12-3000



ACCESSORY EQUIPMENT



CAR LIFTING DEVICE 3.5 T



- 3.5 t car lifting device with rotary servo- or hook connection for daily use, hydraulically adjustable from 400 – 700 mm
- Torsion-resistant construction
- Easy handling due to the spring locking bolt with a draw button
- Galvanised surface
- Easy and quick loading and unloading procedure thanks to the perfectly coordinated overall system
- High level of protection against damage to the vehicles due to the various possibilities of adjustment
- Easy balance of the centre of gravity with the compensating cylinder

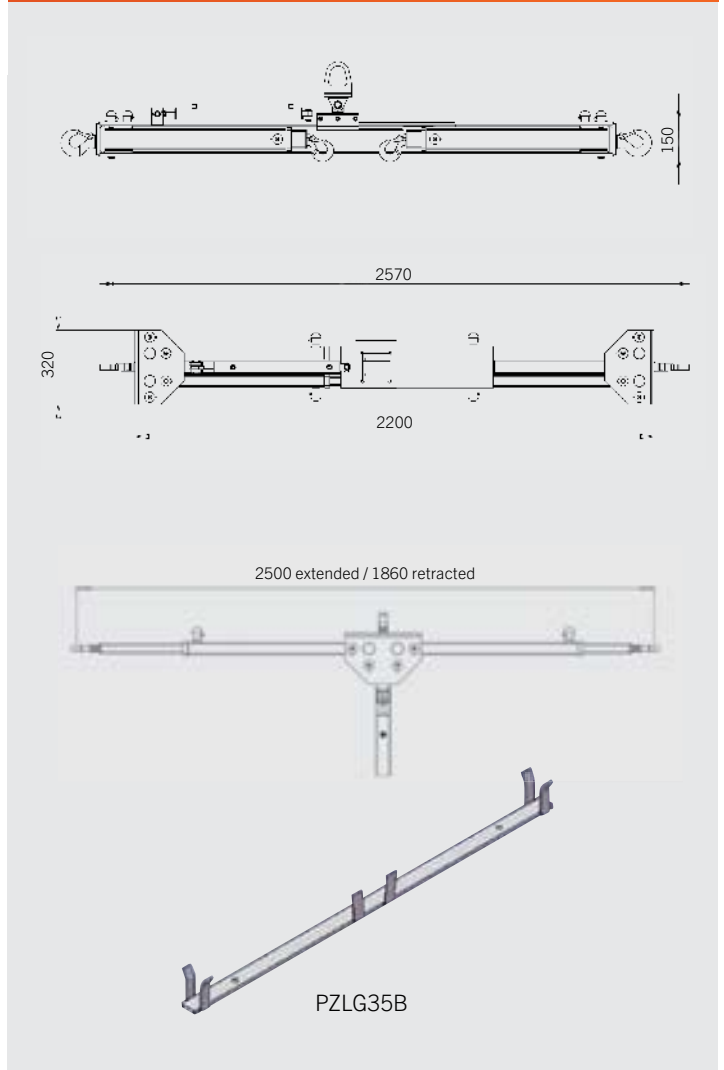
TECHNICAL SPECIFICATIONS

Type	Description	Length (mm)	Width (mm)	Height (mm)	Self weight (kg)
PZLG35	with rotator connection	2570	320	150	185
PZLG35H	with hook connection	2570	320	150	185

ACCESSORIES

Type	Description
PZLG35B	Bearing for mounting on the carrier unit
PZTC01	Wheel clamps, set with 4 pcs., load capacity 900 kg per wheel clamp, wheel width 295 mm, wheel size 12 – 19 inches, weight 16 kg, torsion resistant
PZTC01-1	Wheel clamps, set with 4 pcs., load capacity 900 kg per wheel clamp, wheel width 355 mm, wheel size 12 – 19 inches, weight 16 kg, torsion resistant
PZLS01	Wheel clamp straps, set with 4 pcs., adjustable length 1.3; 1.5; 1.7 m, load capacity 2500 kg per pc., width 50 mm
PZLS02	Wheel clamp straps, set with 4 pcs., adjustable length 4.2 – 5.1 m, load capacity 892 kg per pc., width 300 mm
PZ0001	Roller window, window aperture 210 x 20 mm, hole pattern 365 mm, usage: rope guidance
PZ0002	Recovery kit, usage: rear side mounting on plateaus for better recovery possibility
PZ0003	Deflection pulley, roll diameter 100 mm, rope diameter 12 mm, usage: additional switching point for recovery of cars
PZ0004	Deflection pulley, roll diameter 50 – 100 mm, rope diameter 10 – 12 mm, load capacity 2000 – 4000 kg, usage: better recovery possibilities, not adapted for winch ropes made of synthetic fibre
PZR450GF	4.5 t flange rotator
UL045	Upper suspension
BL462	Connecting hoses
BL463	Connecting hoses

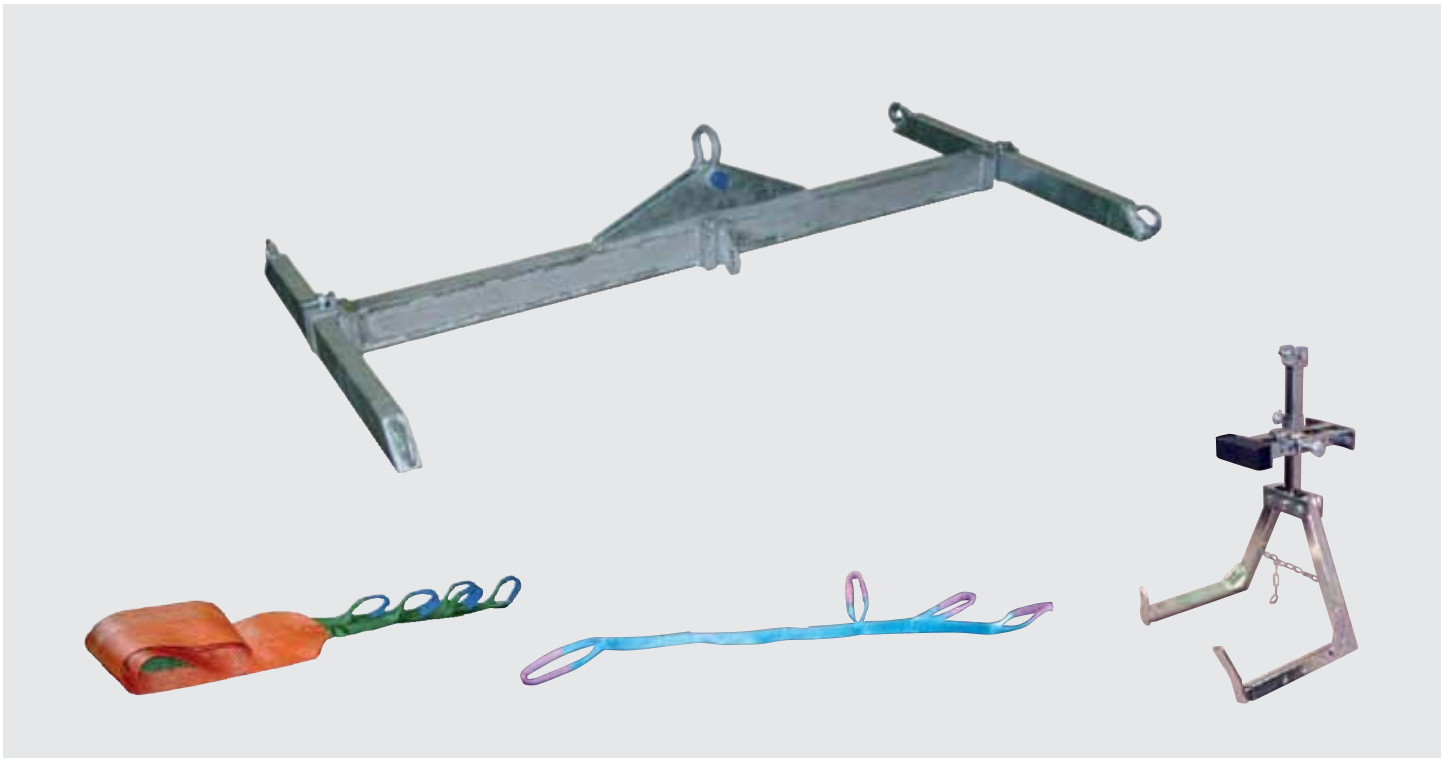
TECHNICAL DRAWING



NOTE:

A complete package for the car lifting device with flange rotator is listed on page 21.

CAR LIFTING DEVICES 2 T



- 2 t car lifting device – mechanical for occasional use
- Torsion resistant construction
- Convenient handling
- Galvanised surface
- Appropriate for hook operation only

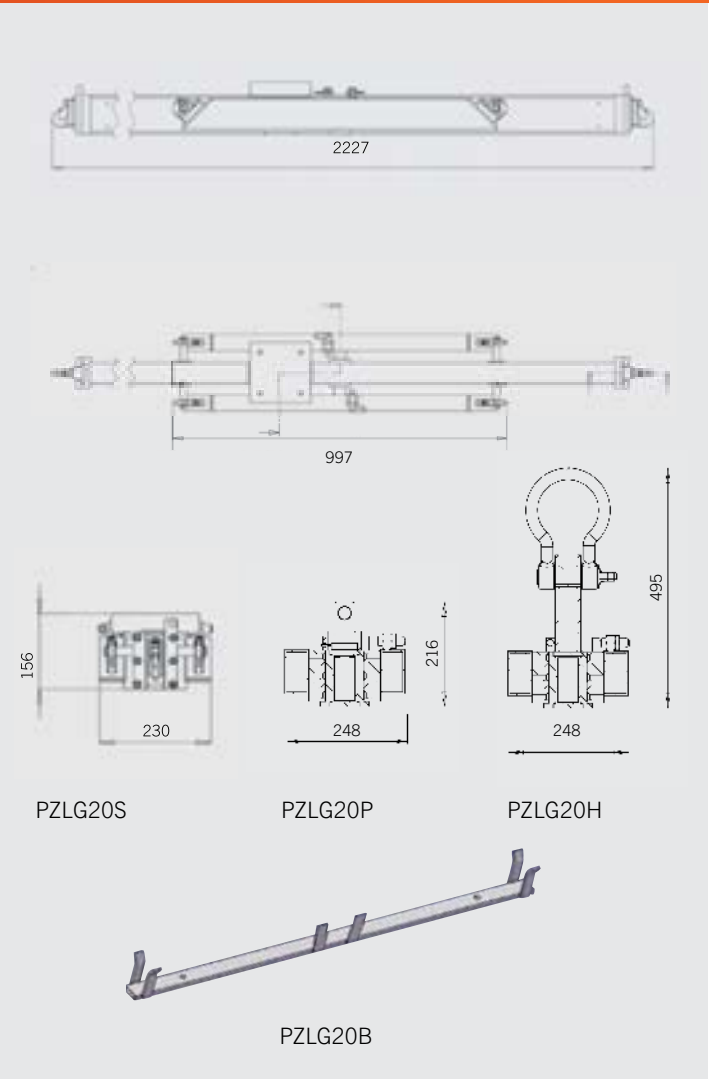
TECHNICAL SPECIFICATIONS

Type	Description	Length (mm)	Width (mm)	Height (mm)	Self weight (kg)
PZLG20H	with ring connection	2227	997	495	85
PZLG20S	with welded plate	2227	997	156	85
PZLG20P	with bolted plate	2227	997	216	85

ACCESSORIES

Type	Description
PZLG20B	Bearing for mounting on the carrier unit
PZTC01	Wheel clamps, set with 4 pcs., load capacity 900 kg per wheel clamp, wheel width 295 mm, wheel size 12 – 19 inches, weight 16 kg, torsion resistant
PZTC01-1	Wheel clamps, set with 4 pcs., load capacity 900 kg per wheel clamp, wheel width 355 mm, wheel size 12 – 19 inches, weight 16 kg, torsion resistant
PZLS01	Wheel clamp straps, set with 4 pcs., adjustable length 1.3; 1.5; 1.7 m, load capacity 2500 kg per pc., width 50 mm
PZLS02	Wheel clamp straps, set with 4 pcs., adjustable length 4.2 – 5.1 m, load capacity 892 kg per pc., width 300 mm
PZ0001	Roller window, window aperture 210 x 20 mm, hole pattern 365 mm, usage: rope guidance
PZ0002	Recovery kit, usage: rear side mounting on plateaus for better recovery possibility
PZ0003	Deflection pulley, roll diameter 100 mm, rope diameter 12 mm, usage: additional switching point for recovery of cars
PZ0004	Deflection pulley, roll diameter 50 – 100 mm, rope diameter 10 – 12 mm, load capacity 2000 – 4000 kg, usage: better recovery possibilities, not adapted for winch ropes made of synthetic fibre

TECHNICAL DRAWING



WEIGHT MEASURING SYSTEMS FOR HOOK OPERATION



- This extremely robust version is adapted specially for tasks in difficult environments, where a cable connection to the data transmission is not possible
- The easily exchangeable battery is situated within the cage for the transmission, mounted laterally to the measuring axis
- On the opposite side an additionally installed counterbalance provides an optimum shackle position even in case of a low load
- Accuracy $\pm 1\%$ based on the final value
- Not calibratable
- Transmission from the emitter to the separate hand receiver
- Battery conditions shown in the display of the receiver
- This receiver consists of a waterproof case with a big, well legible LCD display
- Tare and weight calibration
- Stable weight measuring (display)

TECHNICAL SPECIFICATIONS

Type	Load capacity (kg)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	H (mm)	Self weight (kg)
EZ2631-03	3000	37	58	22	25	55	97	2.8
EZ2631-06	6300	37	58	22	25	55	97	2.8
EZ2631	8500	43	68	26	28	61	109	3.8
EZ2631-13	13500	57	92	35	38	84	153	8.2
EZ2631-17	17000	60	98	38	41	92	166	10.5
EZ2631-BOX	Transport box							

NOTE: Measurements of the emitter are identical for all versions.

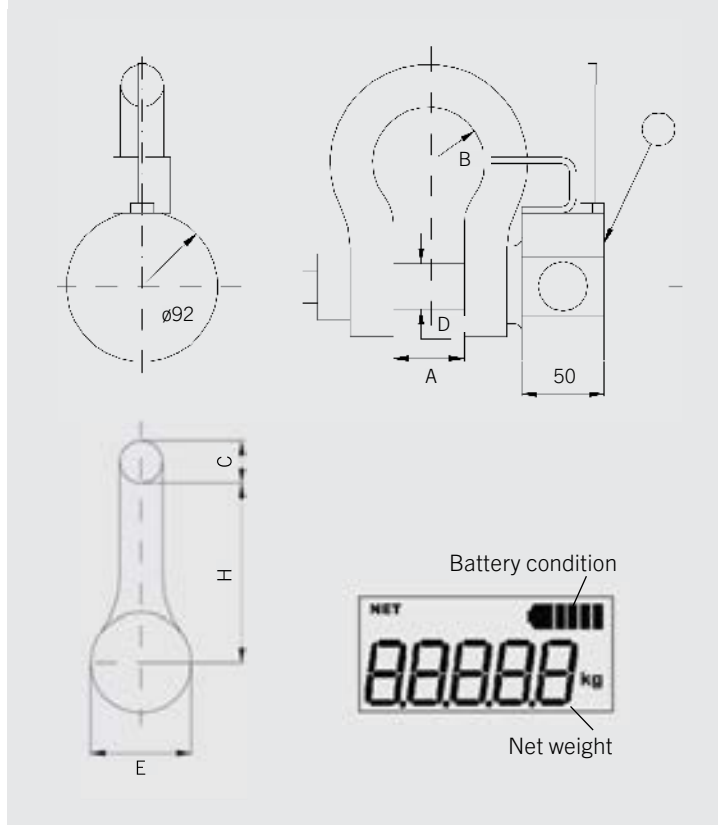
TECHNICAL SPECIFICATIONS: RECEIVER UNIT

- » Receiver frequency: 868.3 MHz
- » Data display: 7 segment display, 5 signs, height 12 mm
- » Keypad: 2 push- and 1 on-button
- » Display resolution: step size 1-2-5 / 10-20-50 kg
- » Operating temperature: -10 to +50°C
- » Stock temperature: -20 to +70°C
- » Protection class: IP 65
- » Number of transmissions: 2 / second
- » Dimensions: 110 x 68 x 31 mm
- » Power supply: 3 batteries 1.5 V type "AA"

KEY FUNCTIONS:

- ON/OFF: switch on/off receiver
- TARE: tare load display
- MODE: switch on/off of LCD display

TECHNICAL DRAWING



WEIGHT MEASURING SYSTEM WITH INTEGRATED PRINTER



- The compact, precise and robust wireless-weight measuring system is equipped with a shackle and a hook and can be operated for 30 – 40 hours in continuous duty application
- Depending on the requirements, the IHG wireless-weighing system is available with different capacities and for various applications like dynamic weighing or check weighing
- Display of cross- and net weight
- Auto-stop function
- Calibration possible
- Integrated micro-printer
- Weighing unit kg/lb
- Weight accumulation function 3000 data
- Easy insertion of the battery
- Taring function over the entire weight range
- Rechargeable battery / auto-sleep

TECHNICAL SPECIFICATIONS

Type	Load capacity / partition (kg)	A (mm)	B (mm)	C (mm)	Ø D (mm)	E (mm)	Self weight (kg)
PZWMS-05	5000 / 2	680	210	170	270	240	30
PZWMS-10	10000 / 5	840	230	200	270	320	35

TECHNICAL SPECIFICATIONS

- » Accuracy: +/- 0.03% based on final value
- » Continuous operation: 60 hours
- » Max. load: 120% F.S.
- » Operating temperature: -10°C - +40°C
- » Operating humidity: 90° relative humidity
- » Frequency: 433 MHz
- » Protection class: IP54

TECHNICAL DRAWING



AUTOMATIC HOOKS



- The automatic hook with remote control docks on the load by itself, it can be opened without manual intervention of the crane operator
- The hook generates a magnetic field, which attracts the coupling ring and is closed by remote control
- The radio remote control requires a combination of key strokes to avoid an unintentional action
- An unintended drop or release of the load is not possible
- Maximum weight to release the load: PZAH05: 20 kg, PZAH10: 10 kg, PZAH20: 10 kg
- Coefficient of safety 4:1
- IP65 resistance to water, dust and oil
- Tiltable pivot joint
- Flexible antenna with a reach of up to 100 m
- Housing made of high-tensile steel
- Aluminium frame for highest stability
- Forged steel hook
- Spring loaded safety striker
- Plastic coating

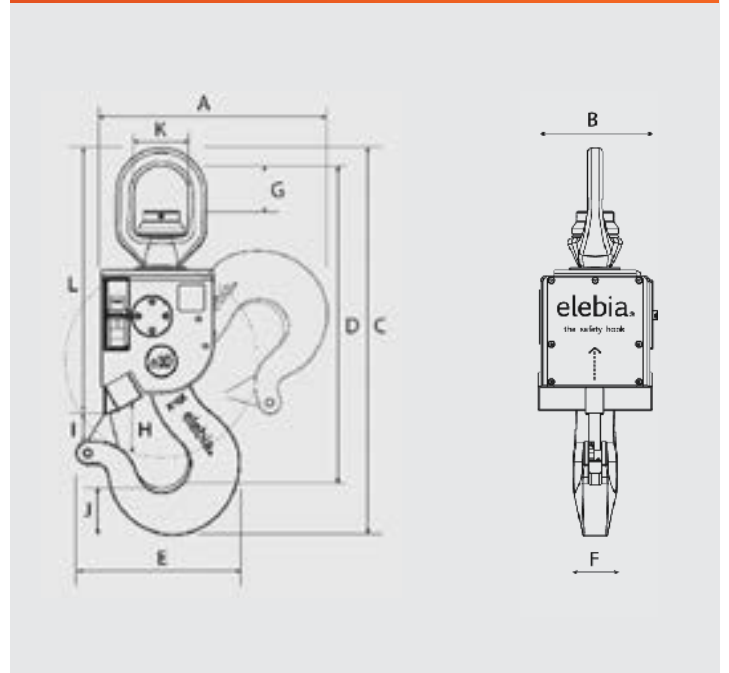
TECHNICAL SPECIFICATIONS: DIMENSIONS

Type	Load capacity (kg)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	I (mm)	J (mm)	K (mm)	L (mm)	Self weight (kg)
PZAH05	5000	276	172.5	469	409	194	43	48.5	48.5	24.2	41.4	58	351	27
PZAH10	10000	342	172.5	584	485	246	66	67.8	73	41.1	72	82	401	35
PZAH20	20000	342	172.5	663	553	246	66	105	73	41.1	72	115	480	40

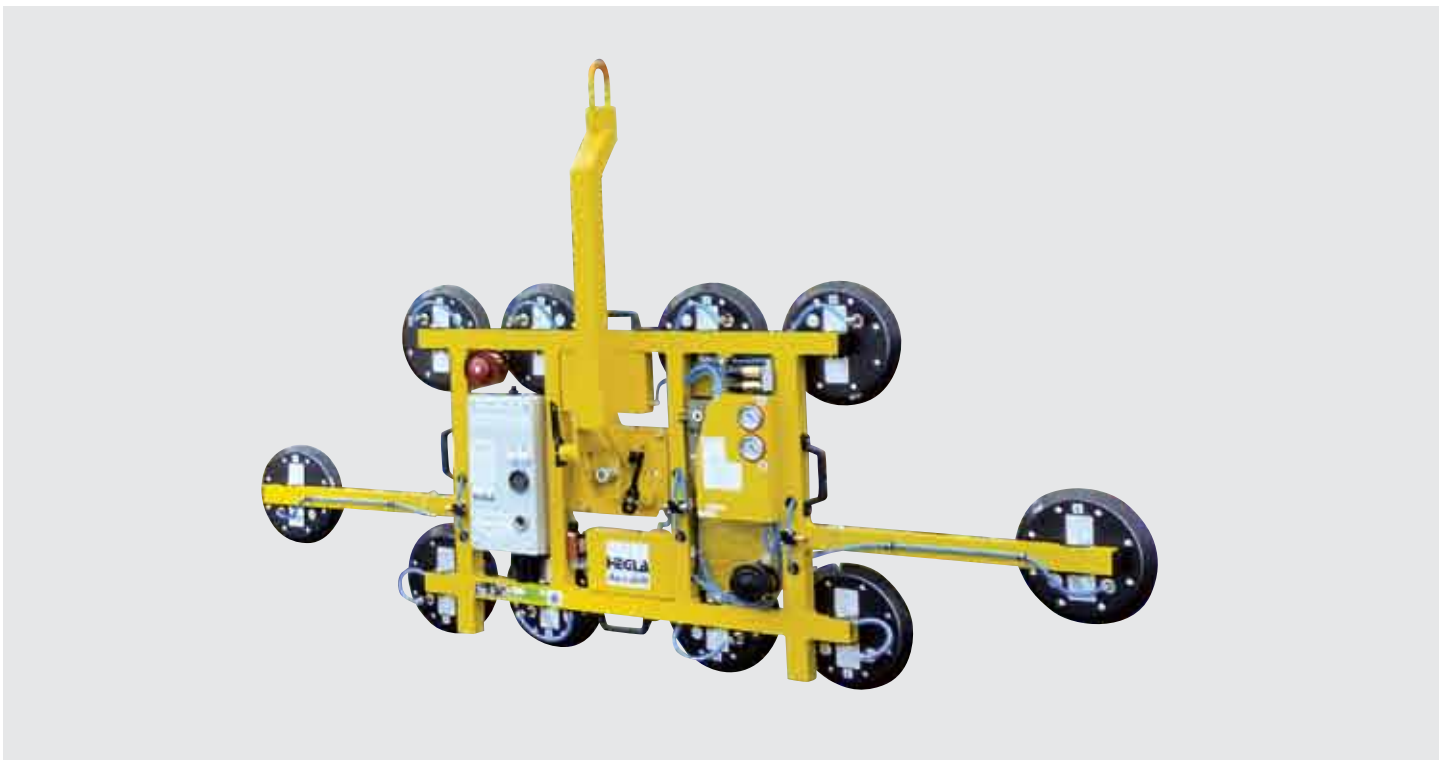
TECHNICAL SPECIFICATIONS

- » Operating temperature range: -20 to +85°C
- » Minimum load: 4 kg
- » Operating time: 1 to 3 days
- » Transmitting frequency: 868 MHz
- » Power supply: 13 V Lithium battery
- » Dimensions remote control: Minitel box 68 x 52 x 17 mm
- » Charging time: 3 hours

TECHNICAL DRAWING



VACUUM LIFTING DEVICES



- Vacuum lifting tool according to EN/DIN 13155 for construction site operation
- Finish in welded aluminium construction, total construction depth just 200 mm
- Two integrated, maintenance-free 12 volt dry-cell batteries provide the energy centrally
- Separate charger with automatic charge rate control and connecting cable
- Permanent display of state of charge of the batteries via voltmeter
- Vacuum pump with vacuum control
- Two vacuum circles with twofold security per lift pump respectively
- Two vacuum meters and two control lights for operational vacuum
- The eight lifting pads are arranged in double rows on the suction frame
- The suction frame can be turned endlessly by hand (arrested every 45°) and 0 – 90° tiltable
- Pivot bearing alignment near the load centre
- Connector for suction extension (plug on suction)
- Painting: RAL 1023 – yellow

TECHNICAL SPECIFICATIONS

Type	Suction diameter (mm)	Suction external distance* (mm)	Number of suctions (pcs.)	Charging voltage/ frequency/ pre-fuse (V)	Voltage vacuum pump (V)	Load capacity (kg)	Self weight (kg)
PZA500	290	1390 x 950	8	220	12	500	82
PZA700	290	1390 x 950	10	220	12	700	100

* width x height

NOTE: Other versions are available on request.

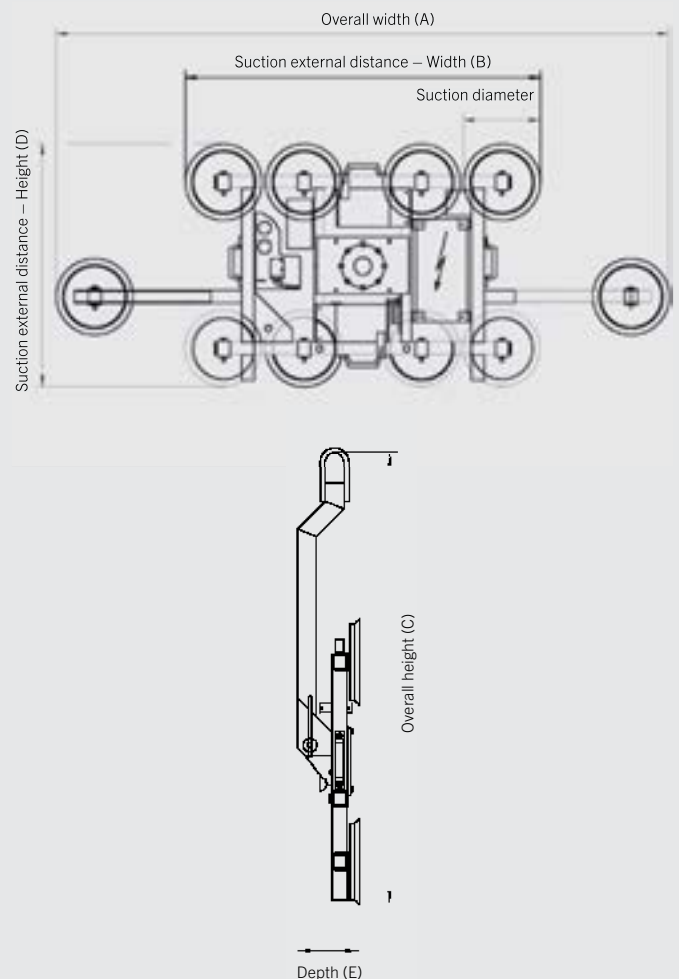
DIMENSIONS

Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
PZA700	2400	1390	1475	950	200	290

ACCESSORIES

Type	Description
PZAAV	Cut off valves at each suction cup, 8 pcs., (reduction of load capacity)
PZAST	2 plugs on suctions with extensions, connection via quick couplings (basic tool steel version for carrying suspensions of the plug on suctions)
PZATW	Transport cart to support the device

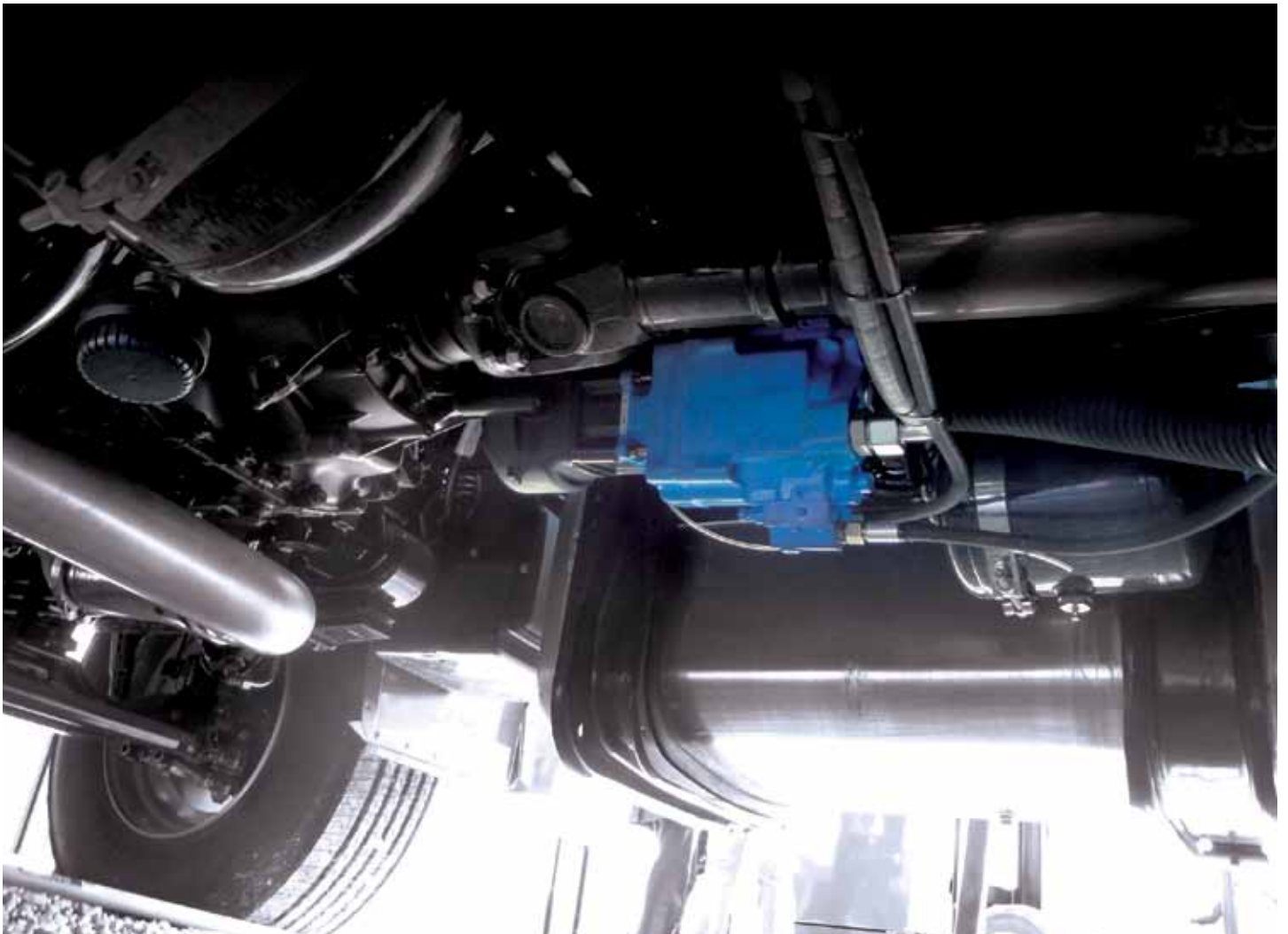
TECHNICAL DRAWING



TRUCK CRANE REQUIREMENTS

Charging voltage 12 V

AXIAL PISTON PUMPS



AXIAL PISTON FIXED PUMPS

BOSCH REXROTH



- The fixed pump with axial conical piston driving gear in bent axis design with special features and dimensions is meant for use in commercial vehicles
- The volume flow is proportional to the drive speed and the displacement volume
- Large angle machine with 40° tilt angle, i.e. high performance density, small dimensions, optimum degrees of efficiency, economic conception
- Change of rotating direction: By changing the pressure socket, the operational and suction connection is switched and the pump can be driven in the opposite direction of rotation
- Self-aspirating, for open circuit
- No overflow oil line is necessary
- Flange and shaft for the direct mounting on the truck's power take-off
- Noise-optimised
- The rotating direction of the fixed pump is determined by a pressure socket, screwed into the operational connection
- The pump is delivered with pressure sockets in connection A

TECHNICAL SPECIFICATIONS

Type	Displacement volume* (cm ³)	Speed max.** (min ⁻¹)	Volume flow max.*** (l/min)	Power Δp 300 bar (kW)	Torque		Torsion rigidity (Nm/rad)	Self weight (kg)
					Δp 300 bar (Nm)	Δp 350 bar (Nm)		
EP 340	22.9	2920	67	33	109	128	304	5.8
EP 341	32	2900	93	46	153	178	304	5.8
EP 342	45.6	2560	117	58	218	254	435	8.0
EP 344	63	2300	145	72	301	351	520	9.0
EP 345	80.4	2130	171	86	384	448	711	11.6
EP 346	106.7	1860	198	99	509	594	806	14.5

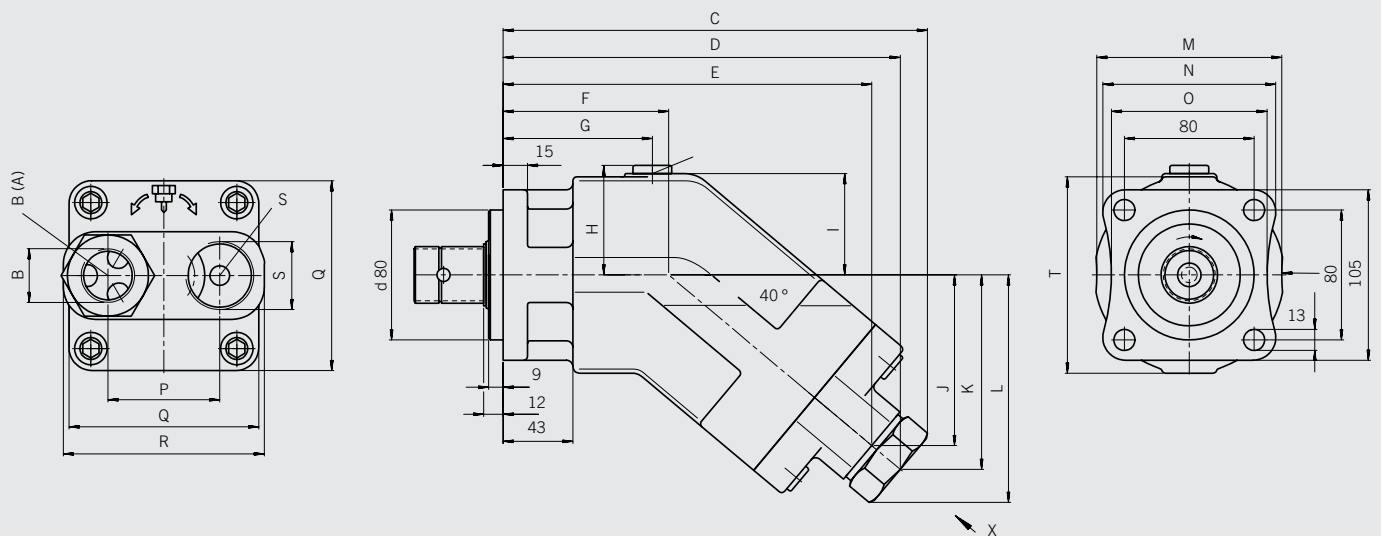
* at 1000 rpm ** valid for absolute pressure at suction opening "S" and mineral bonds *** 3% delivery volume leakage included

SCOPE OF DELIVERY: Axial piston fixed pump and straight suction connection

DIMENSIONS (MM)

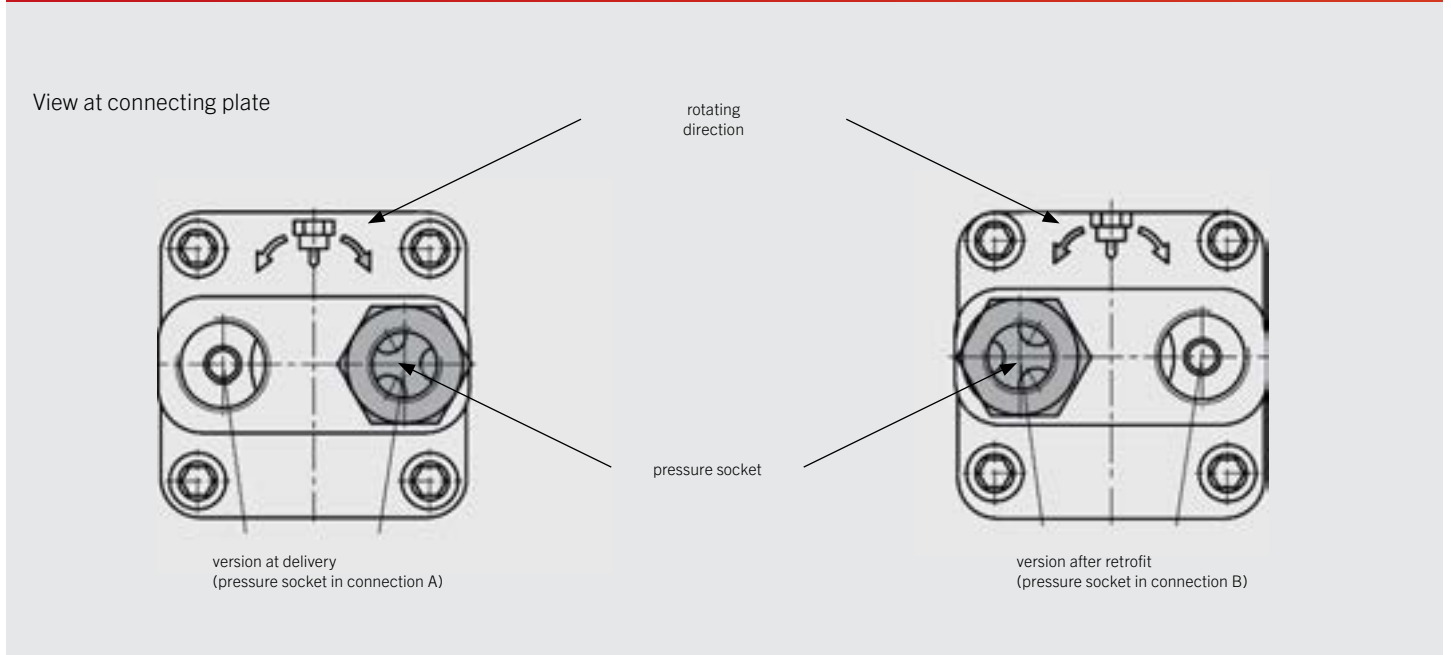
Type	B(A)	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
EP 340	G 1/2"	185	173	159	68.5	61	53	58	76	88	103	108	-	98	51.8	88	91	G 3/4"	-
EP 341	G 1/2"	185	173	159	68.5	61	53	58	76	88	103	108	-	98	51.8	88	91	G 3/4"	-
EP 342	G 3/4"	223	210	194	88	78	58	63	89	102	119	108	103	98	58.8	108	-	G 1"	108
EP 344	G 3/4"	232	219	203	88	78	58	63	96	110	126	108	103	98	64	108	-	G 1"	108
EP 345	G 1"	261	245	227	102	92	67.5	62.5	105	120	140	114	107	96	69	117	124	G 1 1/4"	121
EP 346	G 1"	272	256	238	102	92	73.5	68.5	114	129	149	120	107	96	77	129	-	G 1 1/4"	133

TECHNICAL DRAWING



AXIAL PISTON FIXED PUMPS BOSCH REXROTH

TECHNICAL DRAWING



CONNECTIONS

A or B	Working connection
S	Suction connection for operational liquids

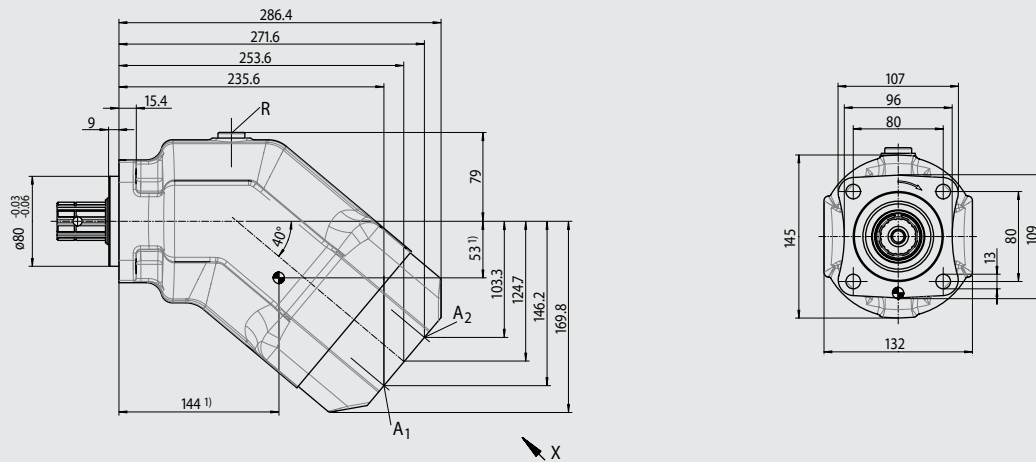
TECHNICAL SPECIFICATIONS: DOUBLE FLOW MODELS

Type	Displacement volume* (cm ³)	Speed max.** (min ⁻¹)	Volume flow max.*** (l/min)	Power Δp 350 bar (kW)	Torque Δp 350 bar (Nm)	Operating pressure max. (bar)	Self weight (kg)
EP 347R	2 x 63	1700	2 x 107	125	702	400	20.9
EP 347L	2 x 63	1700	2 x 107	125	702	400	20.9
EP 348R	2 x 80	1500	2 x 120	140	891	400	24.8
EP 348L	2 x 80	1500	2 x 120	140	891	400	24.8

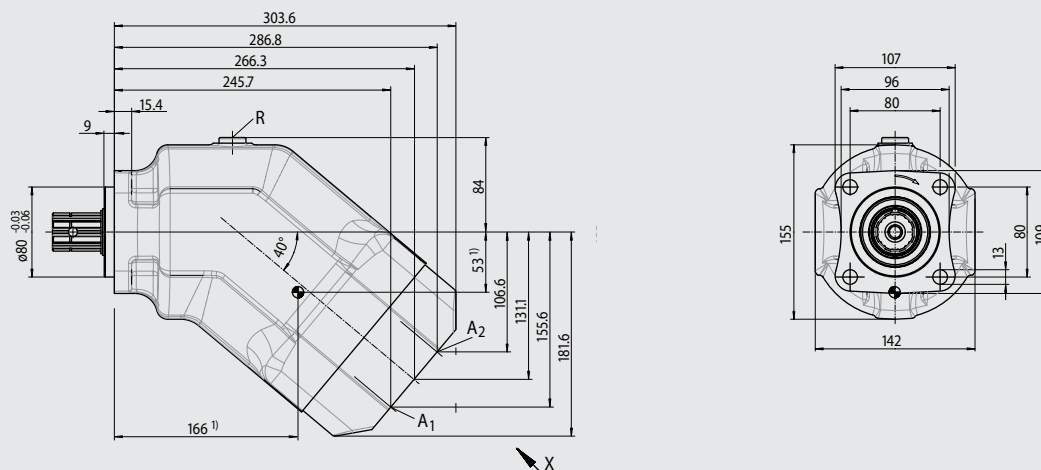
* at 1000 rpm ** valid for absolute pressure at suction opening "S" and mineral bonds *** 3% delivery volume leakage included

TECHNICAL DRAWING

EP 347R/L



EP 348R/L

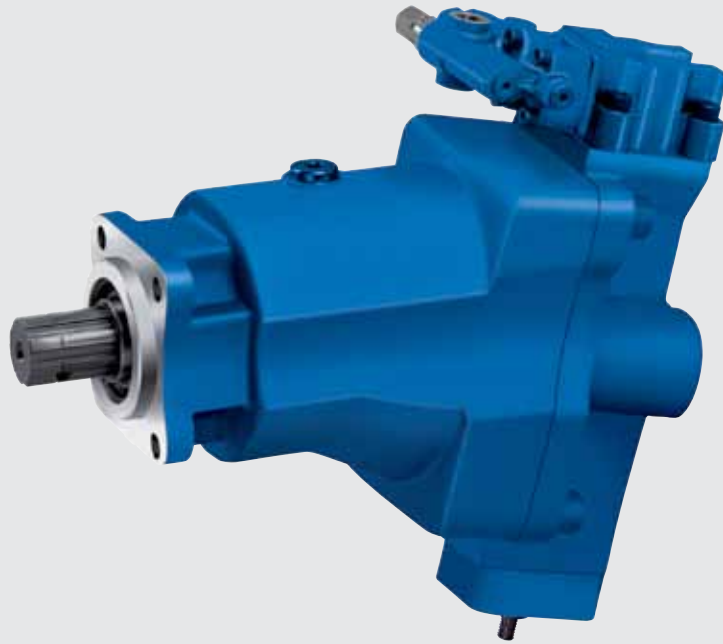


CONNECTIONS

Description	Connection for	Norm	Size EP 347R/L	Size EP 348R/L	Pressure (bar)
A1, A2	Performance	DIN ISO 228	G 3/4; 16 deep	G 1; 18 deep	400
S	Suction	DIN 13	M 12 x 175; 20 deep	M 12 x 175; 17 deep	2
R	Ventilation	DIN 3852	M 18 x 1.5; 12 deep	M 18 x 1.5; 12 deep	2

AXIAL PISTON LOAD SENSING PUMPS

BOSCH REXROTH



- Load sensing pump with axial conical piston driving gear in bent axis design with special features and dimensions meant for use in commercial vehicles
- The volume flow is proportional to the drive speed and the displacement volume and continuously adjustable from maximum value to 0
- Favourable power to weight ratio, small dimensions, optimum degrees of efficiency, economic conception
- Self-aspirating, for open circuit
- Flange and shaft for the direct mounting on the truck's power take-off
- DRS – pressure control with load sensing: the pressure control maintains the pressure in a hydraulic system on a constant level within its normal range, even when the volume flow changes
- The load sensing pump only carries as much pressure fluid as needed by the end user
- In case the operational pressure exceeds the setpoint adjusted at the integrated pressure control valve, the pump is turned back and the deviation from the norm is reduced

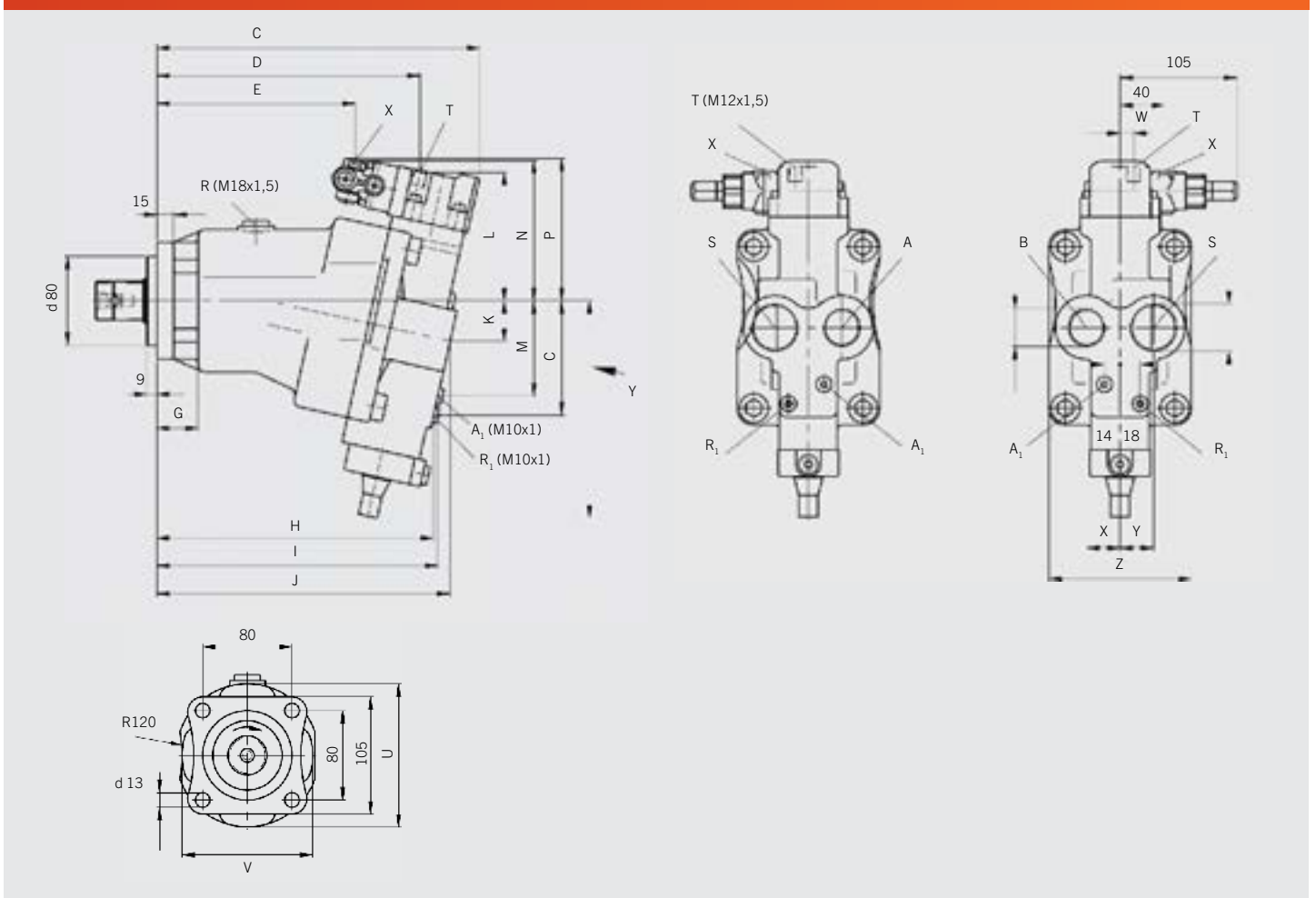
TECHNICAL SPECIFICATIONS

Type	Displacement volume* (cm ³)	Speed max.** (min ⁻¹)	Volume flow max.*** (l/min)	Power max. at $\Delta p = 300$ bar (kW)	Torque Δp 300 bar (Nm)	Operating pressure max. (bar)	Self weight (kg)
EP 653HD (R) EP 654HD (L)	54,8	2500	137	69	262	400	16
EP 651HD (R) EP 652HD (L)	80	2240	179	90	382	400	20
EP 649HD (R) EP 650HD (L)	107	2150	230	115	511	400	24

* at 1000 rpm ** valid for absolute pressure at suction opening "S"

SCOPE OF DELIVERY: Axial piston load sensing pump, suction connection and adapter EA1863

TECHNICAL DRAWING



AXIAL PISTON LOAD SENSING PUMPS

BOSCH REXROTH

DIMENSIONS (MM)

Type	B(A)	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	U	V	W	Y	Z	S
EP 653 EP 654	G 3/4"	267	214	156	130	39	229	232	242	32	110	76	120	91	122	180	113	110	12	27.5	118	G 1"
EP 651 EP 652	G 1"	289	236	178	142	37	248	252	263	36	116	86	126	103	128	195	128	117	12	30	128	G 1 1/4"
EP 649 EP 650	G 3/4"	307	250	191	172	43	259	264	282	40	124	91	132	110	134	206	138	124	13	31.5	139	G 1"

CONNECTIONS

A, B	Operational connections (high pressure range)
S	Suction connection
T	Leakage fluid (only DRS)
A1	Measuring connection for high pressure
R1	Measuring connection for suction pressure
R	Ventilation
X	Connection for Δp - control (load sensing)

ACCESSORIES FOR PUMPS

TECHNICAL SPECIFICATIONS

Type	Suitable for	Description	Dimensions
EA1287			G 3/4" – 38 mm = 1 1/2"
EA1287-45	EP 340	Suction connection	G 3/4" – 38 mm = 1 1/2" – 45°
EA1287-90	EP 341		G 3/4" – 38 mm = 1 1/2" – 90°
EA1288			G 1" – 38 mm = 1 1/2"
EA1288-45	EP 342	Suction connection	G 1" – 38 mm = 1 1/2" – 45°
EA1288-90	EP 344		G 1" – 38 mm = 1 1/2" – 90°
EA2111	EP 342, EP 344		G 1" – 50 mm = 2"
EA1290			G 1 1/4" – 50 mm = 2"
EA1290-45	EP 345	Suction connection	G 1 1/4" – 50 mm = 2" – 45°
EA1290-90	EP 346		G 1 1/4" – 50 mm = 2" – 90°
EA1710	> 80 l		Suction connection
EA1986	EP 347R, EP 347L	Suction connection	G 2"
EA1985	EP 348R, EP 348L	Suction connection	G 2 1/2"
EH4720	EP 340, EP 341, EP 342, EP 344, EP 653HD, EP 654HD	Suction hose	NW 38 x 1700
EH4721	EP 345, EP 346, EP 649HD, EP 650HD, EP 651HD, EP 652HD	Suction hose	NW 50 x 170
EH4722	> 80 l	Suction hose	NW 60 x 1700
EH4560	EP 340, EP 341	Pressure hose	NW 60 x 1700
EH1469	EP 345, EP 346, EP 649HD, EP 650HD, >80 l	Pressure hose	NW 20 x 850
EA1597	EP 340, EP 341,	Pressure fitting	R 1/2" – R 3/4"
EA1354	EP 342, EP 344, EP 653HD, EP 654HD	Pressure fitting	R 3/4" – R 3/4"
EA 085	EP 345, EP 346, EP 649HD, EP 650HD, >80 l	Pressure fitting	GE 25S R 1"
ED1131	EP 340, EP 341	Sealing	
ED1132	EP 342, EP 344, EP 653HD, EP 654HD	Sealing	
ED1133	EP 345, EP 346, EP 649HD, EP 650HD, EP 651HD, EP 652HD, >80 l	Sealing	
EP 678	The intermediate plate (Smart-plate) is mounted between pump housing and control (DFR1) when using the Smart-plate, the control can be turned 180°, use: load sensing pumps		
EA1863	UNF-adapter		

AXIAL PISTON FIXED PUMPS

XPi HYDRO LEDUC



- The XPi pumps are basically constructed with reinforced sealings, two radial seals provide an optimum sealing in the direction of the gear unit as well as the pump
- A transparent plastic pipe in the vent hole prevents the ingress of dirt and high pressure water and should simply be mounted on the suction hose
- Use of high-class, mechanically resistant materials
- Compact design at maximum displacement volume
- High pump speed and performance at high pressure demands
- 7 piston technologies
- Optimised synchronisation between disc and drum
- Dual direction of rotation without any modification – no more displacement setting screw
- The inlet port must be connected correctly
- Reinforced sealings
- Reduced noise levels
- User-friendly operation
- Long service life
- Suction connection is included in the delivery
- Overflow oil line is not required

TECHNICAL SPECIFICATIONS

Type	Displacement volume* (cm ³)	Pressure max.		Drive max. (turns/min)	Performance intake max. at 350 bar (Nm)	Breakdown torque (Nm)	Self weight (kg)
		duration (bar)	peak <5 s (bar)				
EP1394A	12	350	400	3150	71	9.17	9.65
EP1395A	18	350	400	2900	107	9.21	9.70
EP1396A	25	350	400	2750	148	9.26	9.75
EP1397A	32	350	400	2700	190	11.55	11.55
EP1398A	41	350	400	2550	243	11.60	11.60
EP1399A	50.3	350	400	2450	292	12.23	11.65
EP1400A	63	350	400	2300	362	12.28	11.70
EP1401A	80.4	350	400	2150	460	18.36	15.30
EP1402A	108.3	350	400	1900	619	18.48	15.40
EP1403A	129.8	350	400	1750	730	19.28	15.80

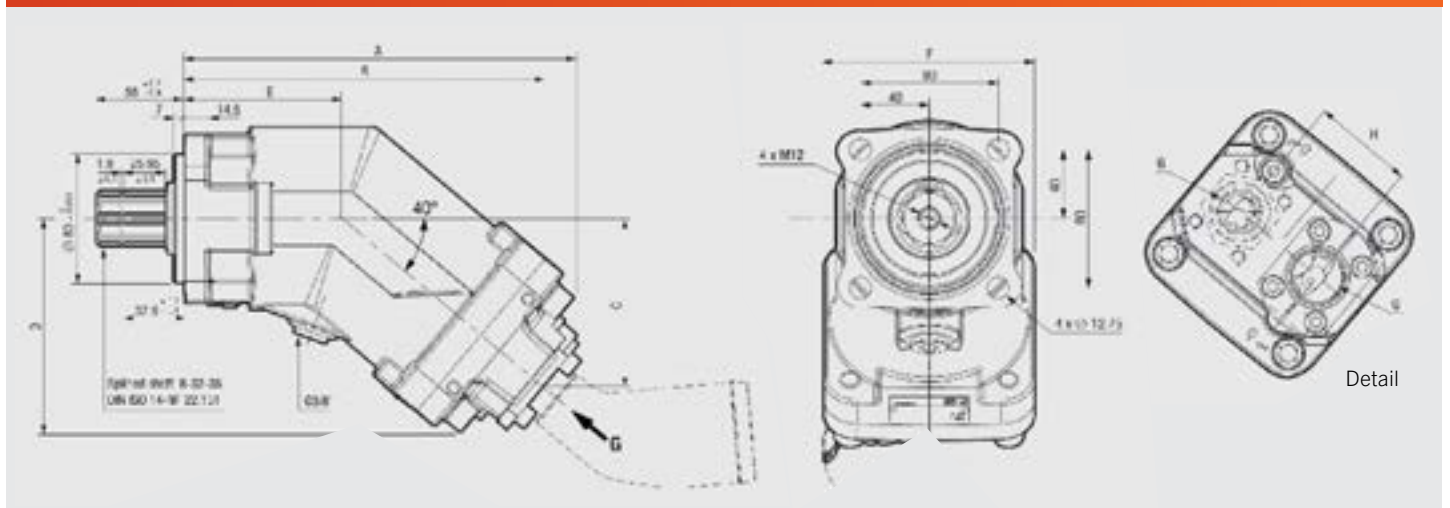
* at 1000 rpm

SCOPE OF DELIVERY: Axial piston fixed pump with straight suction connection

DIMENSIONS

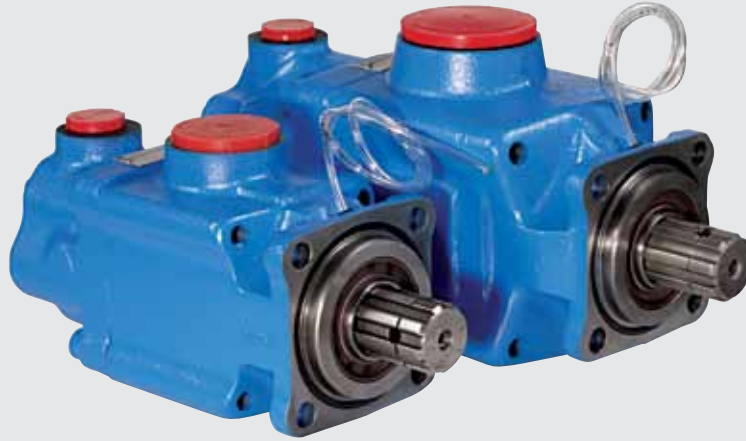
Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (inch)	H (mm)
EP1394A	196.7	177.8	77.1	103.9	85.7	108	3/4	54
EP1395A	196.7	177.8	77.1	103.9	85.7	108	3/4	54
EP1396A	196.7	177.8	77.1	103.9	85.7	108	3/4	54
EP1397A	202.8	184	82.3	109.1	85.7	108	3/4	54
EP1398A	202.8	184	82.3	109.1	85.7	108	3/4	54
EP1399A	214.4	195.6	92.0	118.9	85.7	108	3/4	54
EP1400A	214.4	195.6	92.0	118.9	85.7	108	3/4	54
EP1401A	241.7	220.9	103.5	133.3	97.4	123	1	60
EP1402A	241.7	222.5	104.8	133.3	97.4	123	1	60
EP1403A	244	224.8	106.7	135.2	97.4	123	1	60

TECHNICAL DRAWING



FIXED PUMPS SINGLE FLOW MODELS

PA AND PAC HYDRO LEDUC



- Optimum adaption to the rugged environmental conditions – extremely resistant to contaminations in the oil
- Easy handling
- Ideal for difficult demands:
 - » pressure peaks
 - » slightly degraded fluids
 - » most difficult working conditions
- Double shaft sealing
- Robust solution for a long service life
- Arbitrary rotating direction
- Overflow oil line is not required

TECHNICAL SPECIFICATIONS

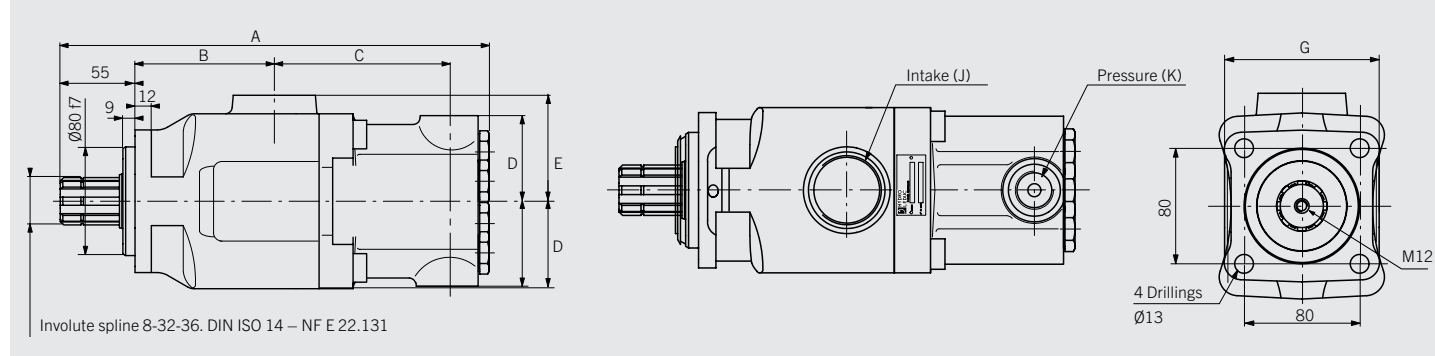
Type	Displacement volume* (cm ³)	Pressure max.		Drive max. (turns/min)	Self weight (kg)
		duration (bar)	peak <5 s (bar)		
EP 547(PA)	12	350	500	2500	12.5
EP 548(PA)	18	350	500	2000	12.5
EP 549(PA)	28	350	500	2200	15
EP 550(PA)	34	350	500	2000	15
EP 551(PA)	43	350	500	1750	15
EP 552(PA)	50	350	500	1650	15
EP 555(PA)	114	350	500	1350	23.5
EP 553(PAC)	65	350	500	1500	16
EP 554(PAC)	78	350	500	1350	17

* at 1000 rpm

DIMENSIONS

Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	G (mm)	J (inch)	K (inch)
EP 547	281	94.9	103.3	62	73.2	98	G 1½	G ¾
EP 548	281	94.9	103.3	62	73.2	98	G 1½	G ¾
EP 549	315	102	126	47	78	107	G 1½	G ¾
EP 550	315	102	126	47	78	107	G 1½	G ¾
EP 551	315	102	126	47	78	107	G 1½	G ¾
EP 552	315	102	126	47	78	107	G 1½	G ¾
EP 555	345	123	138	69	90	124	G 2	G ¾
EP 553	299	102.5	112.8	63	78	107	G 1½	G ¾
EP 554	302.5	102.5	116.3	63	78	107	G 1½	G ¾

TECHNICAL DRAWING



FIXED PUMPS DOUBLE FLOW MODELS PA, PAC AND PAD HYDRO LEDUC



- Optimum adaption to the rugged environmental conditions – extremely resistant to contaminations in the oil
- Ideal for difficult demands:
 - » pressure peaks
 - » slightly degraded fluids
 - » most difficult working conditions
- Double shaft sealing
- Robust solution for a long service life
- Arbitrary rotating direction
- Overflow oil line is not required
- The new double flow series (PAD) with 5 pistons per circuit offers an optimum flow regularity as well as pulsation behaviour with reduced installation sizes
- Reduced noise emissions with the pump series PAD

TECHNICAL SPECIFICATIONS

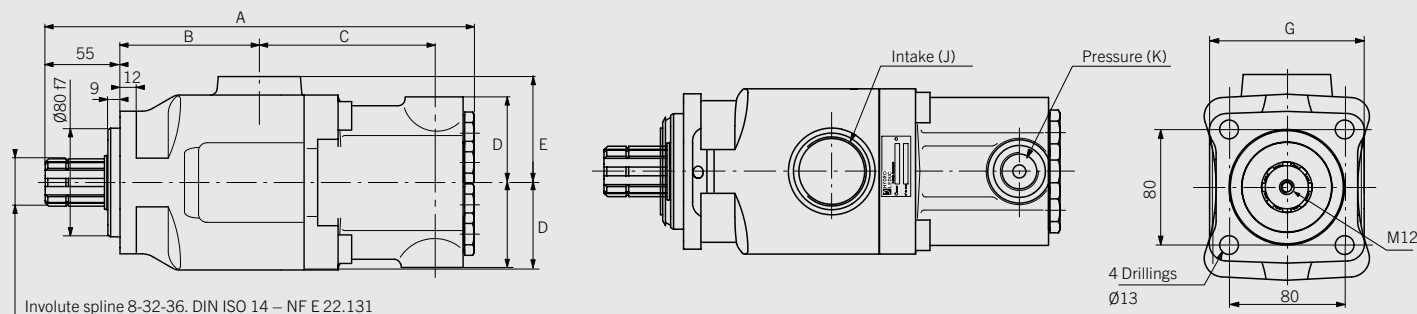
Type	Displacement volume* (cm ³)	Pressure max.		Drive max. (turns/min)	Self weight (kg)
		duration (bar)	peak <5 s (bar)		
EP 589(PAC)	2 x 25	350	500	1800	16
EP 582(PA)	2 x 39	350	500	1700	23.5
EP 583(PA)	2 x 52	350	500	1500	23.5
EP 556(PA)	2 x 57	350	500	1310	23.5
EP 502(PA)	2 x 75	350	500	1200	26.8
EP1158(PA)	75/40	350	500	1500	27.4
EP1415(PAD)	2 x 67	350	500	1400	24.6
EP1999(PAD)	2 x 32	350	500	2200	24.6
EP2000(PAD)	2 x 40	350	500 <td 2000	24.6	
EP2001(PAD)	2 x 57	350	500	1550	24.6

* at 1000 rpm

DIMENSIONS

Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	G (mm)	J (inch)	K (inch)
EP 582	345	123	138	69	90	124	G 2	G ¾
EP 583	345	123	138	69	90	124	G 2	G ¾
EP 556	345	123	138	69	90	124	G 2	G ¾
EP 502	302	126	147.8	72.5	90	124	G 2	G ¾
EP 589	243	102.5	112.8	63	78	107	G 1½	G ¾
EP1415	287	123	133.8	77.5	90	124	G 2	G ¾
EP1999	287	123	133.8	77.5	90	124	G 2	G ¾
EP2000	287	123	133.8	77.5	90	124	G 2	G ¾
EP2001	287	123	133.8	77.5	90	124	G 2	G ¾

TECHNICAL DRAWING



AXIAL PISTON LOAD SENSING PUMPS

TXV HYDRO LEDUC



- The pump possesses an integrated displacement flow and pressure control system “load sensing”
- This control system is influenced by a proportional valve – which circularises the necessary displacement flow for the circuits, according to the needed drive speed in a load-independent way directly from the pump
- Low energy consumption: fuel reduction of up to 22% possible during crane operation
- Precise control of the action to be accomplished due to the continuous adapted flow rate
- Multi-functional: simultaneous and load-independent action
- Reduced heating of the fluid
- With an adjusting screw the volume flow can be adapted to the needs of the crane

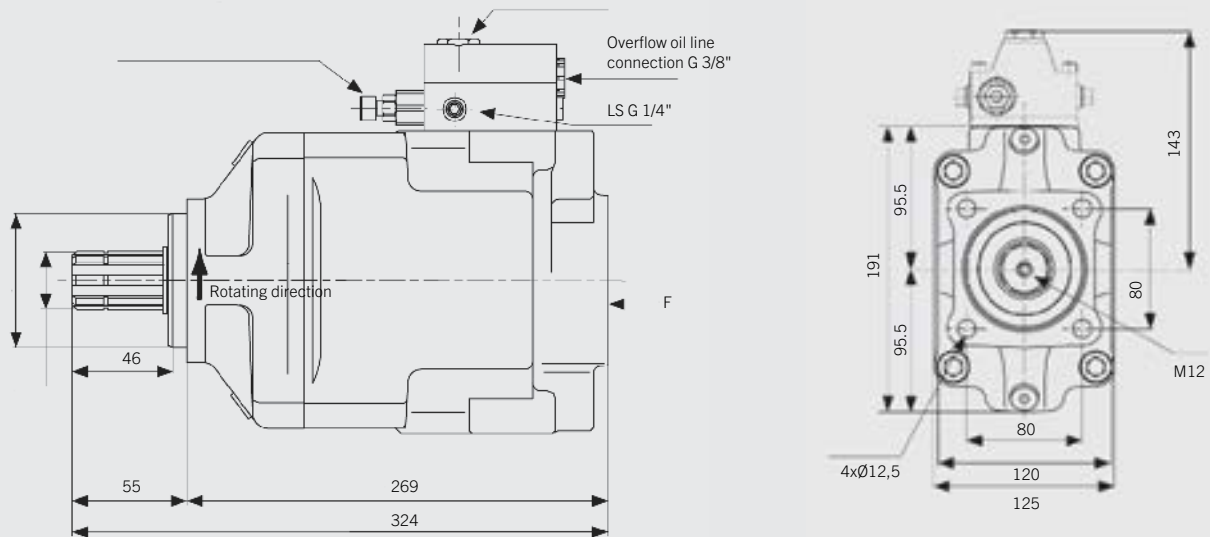
TECHNICAL SPECIFICATIONS

Type	Displacement volume** (cm ³)	Pressure max.		Drive max. (turns/min)	Performance intake max. at 300 bar (Nm)	Self weight (kg)
		duration (bar)	peak <5 s (bar)			
EP1923R	40	400	420	3000	220	27
EP1923L	40	400	420	3000	220	27
EP 768R	60	400	420	2600	295	27
EP 768L	60	400	420	2600	295	27
EP 769R	75	400	420	2000	410	27
EP 769L	75	400	420	2000	410	27
EP 770R	92	380	400	1900	483	27
EP 770L	92	380	400	1900	483	27
EP 945R***	120	365	380	2100	680	27
EP 945L***	120	365	380	2100	680	27
EP1926R	130	365	380	2100	730	28
EP1926L	130	365	380	2100	730	28
EP 150R*	150	310	330	2000	840	27.2
EP 150L*	150	310	330	2000	840	27.2

* for wood application ** at 1000 rpm *** the volume flow can not be adapted

SCOPE OF DELIVERY: Load sensing pump and suction connection

TECHNICAL DRAWING



LOAD SENSING PUMPS DUAL DIRECTION TXVi HYDRO LEDUC

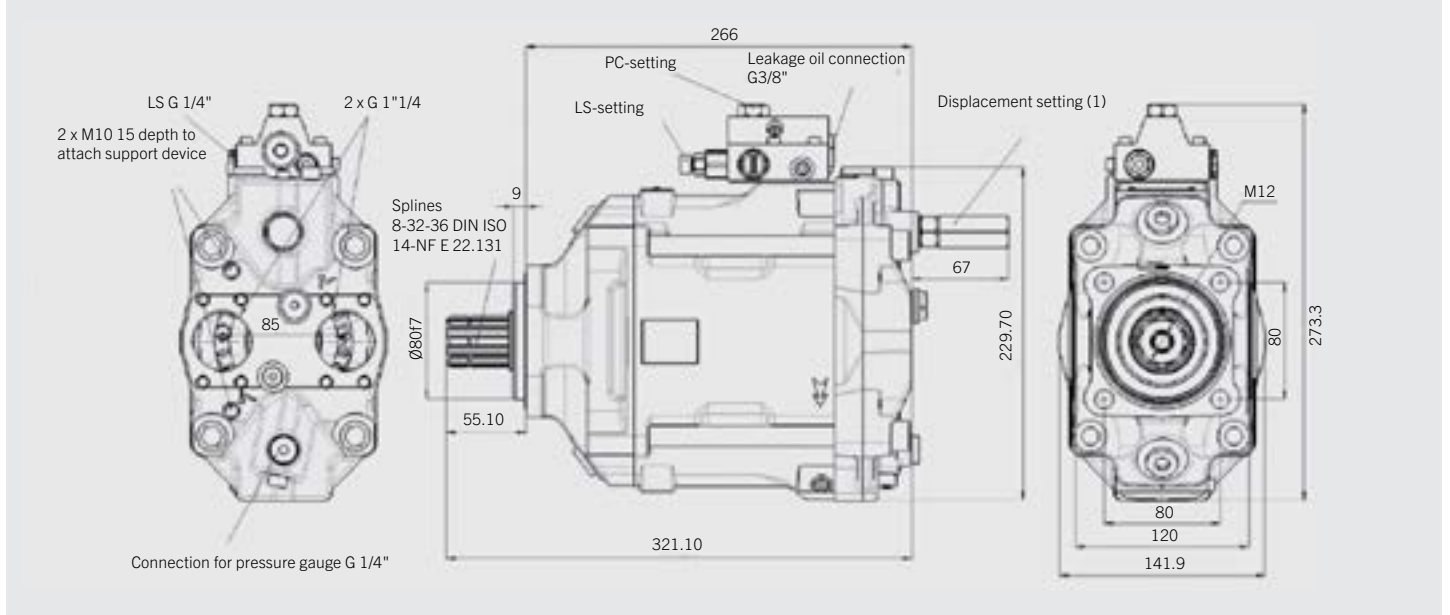


- Revolutionary system, which PALFINGER developed together with the French hydraulic specialist Hydro Leduc
- The changeable direction enables a reduced and optimised storage space
- Accurate control of the movements to be performed
- The included suction connection enables a quick and error-free change of the rotating direction
- Accustomed compact installation dimensions for the simple mounting on the carrier vehicle
- The pump will be delivered with clockwise rotation
- Due to the simple change of the suction connection and the adjusting screws, the rotating direction can be adapted to the rotation of the auxiliary drive
- With an adjusting screw the volume flow can be adapted to the needs of the crane

TECHNICAL SPECIFICATIONS

Type	Displacement volume (cm ³)	Operating pressure max. (bar)	Peak pressure max. (5%) (bar)	Torque max. at 300 bar (Nm)	Speed max. (min ⁻¹)	Overhang torque (Nm)	Self weight (kg)
EP1926U	130	360	380	730	1900	35	27.2

TECHNICAL DRAWING



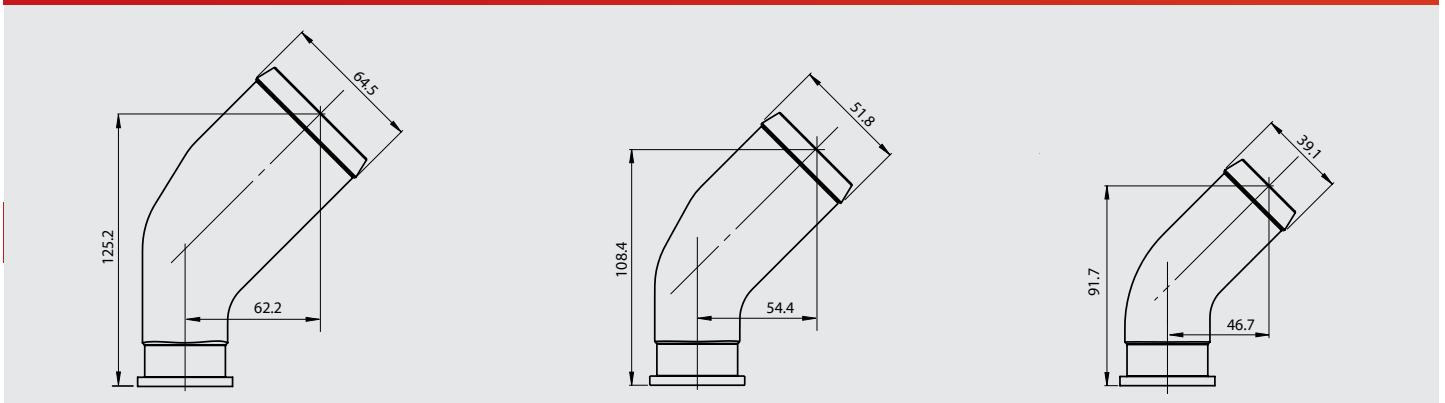
ACCESSORIES FOR PUMPS

HYDRO LEDUC

TECHNICAL SPECIFICATIONS: FOR EP1396A – EP1403A

Type	Description	Dimensions	Displacement volume (litre)
EA1993	Suction connection	G 2 ½" = 64.5 mm	12 – 32
EA1992	Suction connection	G 2" = 51.8 mm	12 – 80
EA1991	Suction connection	G 1 ½"	80 – 130
EA1993-90	Suction connection	G 2 1/2" = 64.5 mm, 90°	12 – 32
EA1992-90	Suction connection	G 2" = 51.8 mm, 90°	12 – 80
EA1991-90	Suction connection	G 1 1/2", 90°	80 – 130

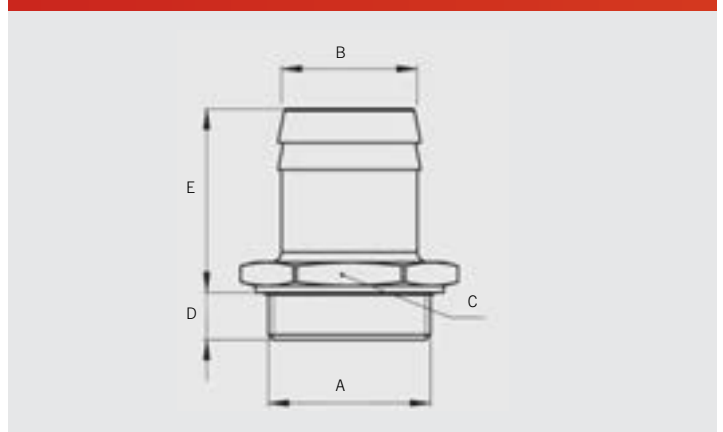
TECHNICAL DRAWING



TECHNICAL SPECIFICATIONS: FOR PA, PAC, PAD AND TXV PUMPS

Type	Description	Dimension A (inch)	Ø B (mm)	C (mm)	D (mm)	E (mm)	For model
EA1731	Suction connection	G 1 ½"	40	56	14	54	PA, PAC, TXV
EA1867	Suction connection	G 1 ½"	50	52	14	66	PA, PAC, TXV
EA1867-60	Suction connection	G 1 ½"	60	64	14	69	PA, PAC, TXV
EA1867-63	Suction connection	G 1 ½"	63.5	64	14	69	PA, PAC, TXV
EA2148	Suction connection	G 2"	50	66	14	54	PA, PAC
EA1987	Suction connection	G 1 ½"	76.2	80	14	89	PA, PAC

TECHNICAL DRAWING

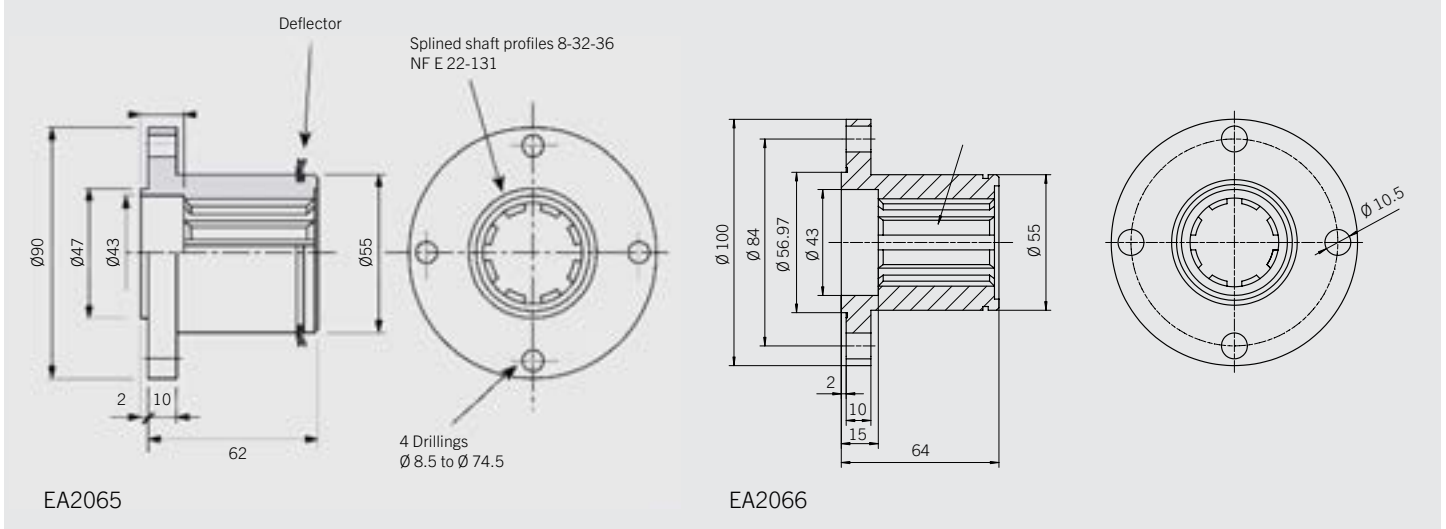


OTHER ACCESSORIES

Type	Description	Self weight (kg)
EA2065	Cardan plate for direct mounting of the pump to the cardan shaft	1.06
EA2066	Cardan plate for direct mounting of the pump to the cardan shaft	1.18

Type	Description	Dimensions (mm)
EH4937	Suction hose	NW 40 x 1700
EH4721	Suction hose	NW 50 x 1700
EH4560	Pressure hose	NW 16 x 550
EA1354	Pressure fitting	R 3/4" – R 3/4"
ED1132	Sealing	
ES2546	Adjusting screw for TXV and TXVi pumps to limit the angle of pivoting, adaptable to the desired delivery volume of the pump	
EEA6388	LS sensor for EP1926L	

TECHNICAL DRAWING



ACCESSORIES FOR PUMPS

HYDRO LEDUC

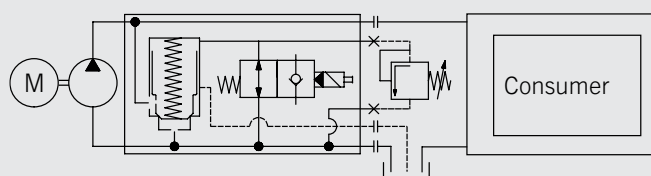
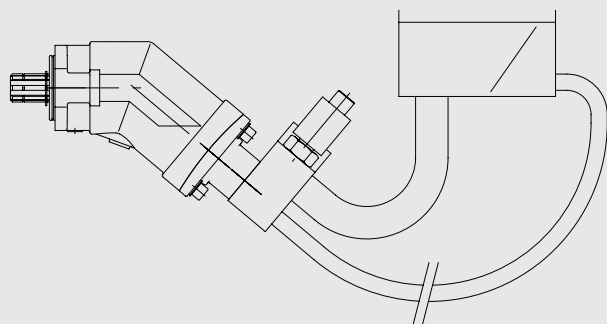


- By-pass valve for certain XPi-pump applications with a continuous, not disconnectable secondary drive rate
- Mounted directly at the end of the pump body
- Allowing a continuous pumping rotation speed with the following advantages:
 - » no heat development within the hydraulic circuit
 - » no negative detraction of the pumps' service life
 - » no further necessary modifications at the hydraulic system of the vehicle
- The by-pass valve is a connectable solenoid valve (24 V)
- Without flow, the by-pass valve is open and connects the pressure side with the suction side
- Charged with electric flow, the by-pass valve is closed and an operating pressure is built up

TECHNICAL SPECIFICATIONS

Type	For model	Self weight (kg)
EV5183	EP1394A – EP1400A	3.6
EV5184B	EP1401A – EP1403A	3.6

TECHNICAL DRAWING



AXIAL PISTON FIXED PUMPS SINGLE FLOW MODELS SUNFAB



- The Sunfab SC is a series of piston pumps with a constant delivery flow for challenging mobile hydraulics, mounted either directly on the secondary drive or via an intermediary shaft in a frame fastening
- In case the hydraulics of an attachment is used when the vehicle is in motion, a by-pass valve supplements the SC pump
- The high reliability is based on the choice of materials, the curing procedure, the surface structure and the quality secured production process
- High delivery volumes at high operating pressures
- Extremely good efficiency at low mounting measurements
- High maximum speed while maintaining low noise levels
- Smooth operation over the entire speed range
- Long service life due to an optimised choice and dimensioning of bearings, sealings, etc.
- O-rings on all contact surfaces as well as double shaft seals eliminate oil leakage from the pump and power take-off
- The stop shoulder on the angle housing allows the pumps direction of rotation to be changed without the risk of altering the gear meshing

TECHNICAL SPECIFICATIONS

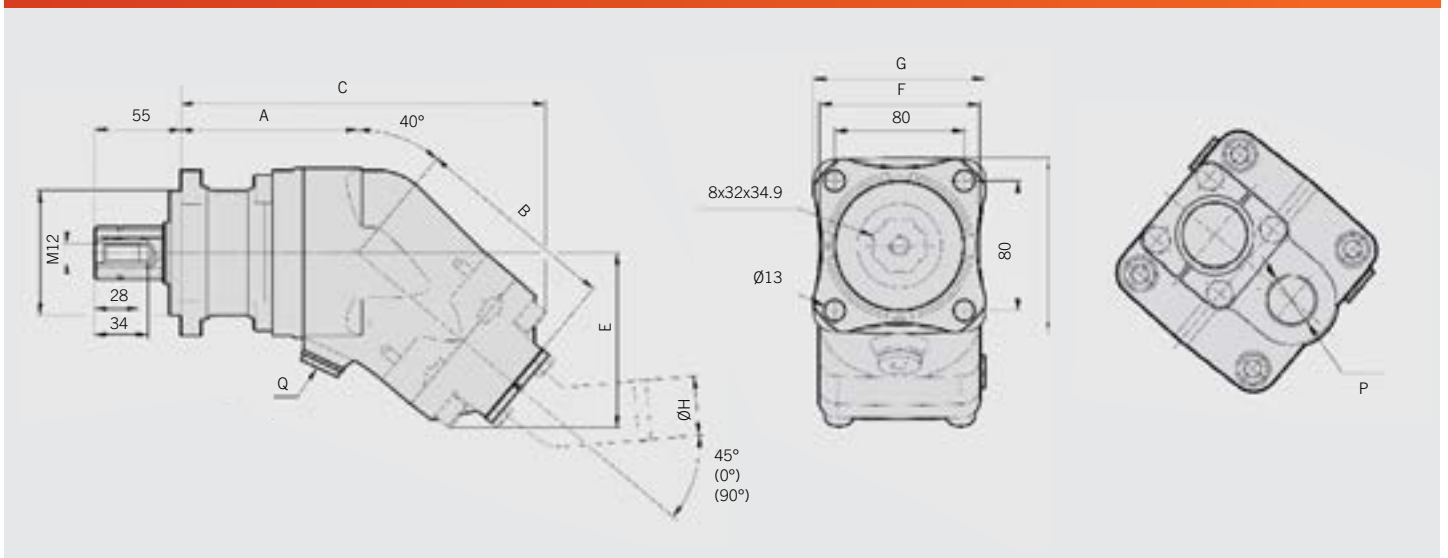
Type	Displacement volume* (cm ³)	Pressure max. (bar)	Drive max. continuous / short time (turns/min)		Torque max. (Nm)	Self weight (kg)
EP 703	16.2	400	2300	3000	6.9	8.3
EP 374	25	400	2300	3000	7.4	8.5
EP 373	34	400	2300	3000	7.4	8.5
EP 367	47	400	1900	2500	13	11.7
EP1150	56	400	1900	2500	13	11.7
EP 368	63.5	400	1900	2500	13	11.7
EP 369	83.5	400	1500	2000	21	17
EP 370	108	400	1500	2000	21	17

* at 1000 rpm

DIMENSIONS

Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	P (inch)	Q (inch)
EP 703	97	112	202	99	97	89	97	38	¾	½
EP 374	97	112	202	99	97	89	97	38	¾	½
EP 373	97	112	202	99	97	89	97	38	¾	½
EP 367	113	130	228	109	109	99	106	38	¾	½
EP 1150	113	130	228	109	109	99	106	38	¾	½
EP 368	113	130	228	109	109	99	106	38	¾	½
EP 369	123	147	259	126	126	115	123	50	1	½
EP 370	123	147	259	126	126	115	123	50	1	½

TECHNICAL DRAWING



AXIAL PISTON FIXED PUMPS DOUBLE FLOW MODELS SUNFAB



- Sunfab SL is a series of direct double pumps with an extremely low noise level
- Pumps with differentiated volume flow broaden the application area as they can provide 3 different delivery flows: a small, a big and an added up delivery flow
- Due to the slim pump housing, direct mounting on the secondary drive in narrow spaces is enabled
- The SL pump with a Savtec valve allows the constant displacement to be switched off, as a consequence the pump delivers oil when it is needed
- When the Savtec-valve is closed, the secondary drive is not loaded, which saves energy
- The Savtec pump can be updated with a switch in the control panel or automatically with the hand brake or a pressure sensor

TECHNICAL SPECIFICATIONS

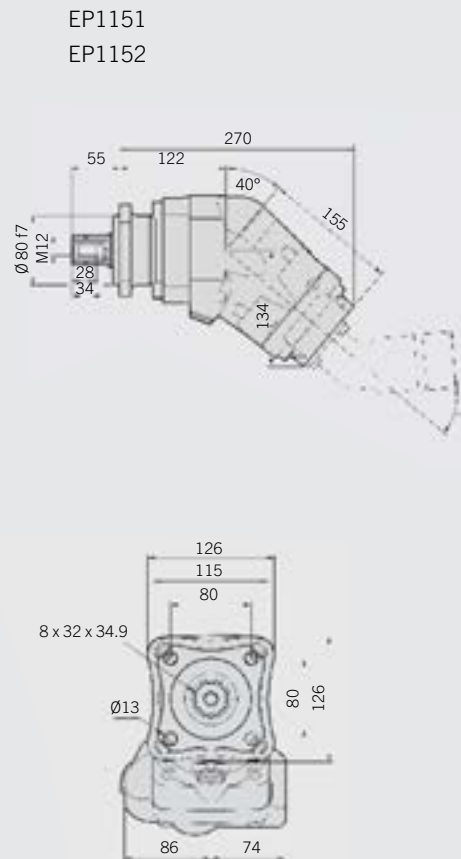
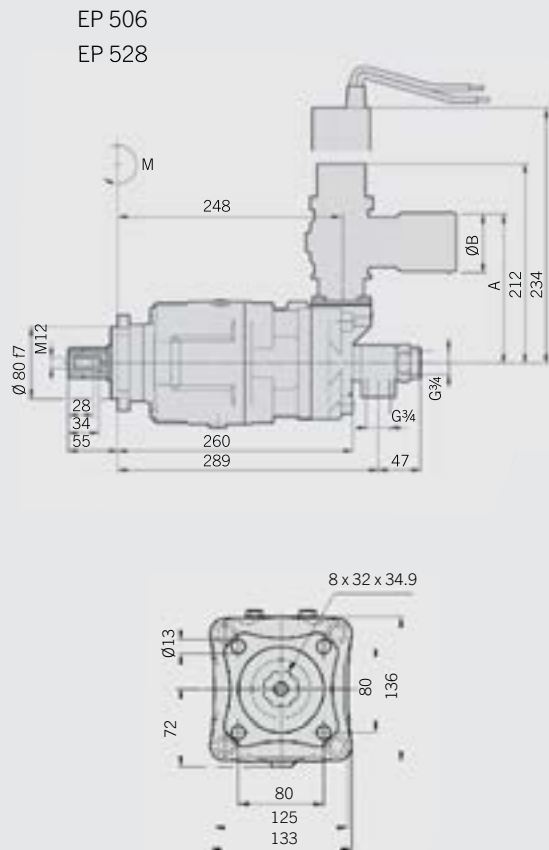
Type	Displacement volume* (cm ³)	Pressure max. (bar)	Drive max. (turns/min)	Torque max. (Nm)	Self weight (kg)
EP 528 (SL)	46 + 46	330	1800	26.5	22
EP 506 (SL)	53 + 53	330	1600	26.5	22
EP1151 (R) (SC)	56 + 26	400	1850	21	18
EP1152 (L) (SC)	56 + 26	400	1850	21	18

* at 1000 rpm ** electric / pneumatic

DIMENSIONS

Type	A (mm)	B (mm)
EP 506	166	64 without Savtec valve
EP 528	166	64

TECHNICAL DRAWING



AXIAL PISTON LOAD SENSING PUMPS

SUNFAB



- The Sunfab SVH is ideal for the challenging operation of forestry cranes, general cargo cranes, suction vehicles, refuse collection vehicles, etc.
- Short reaction times when resetting the flow
- Compact installation dimensions
- High operating pressures
- Externally drained for best possible cooling
- Robust design and a long service life
- Low noise level
- Low performance weight

TECHNICAL SPECIFICATIONS

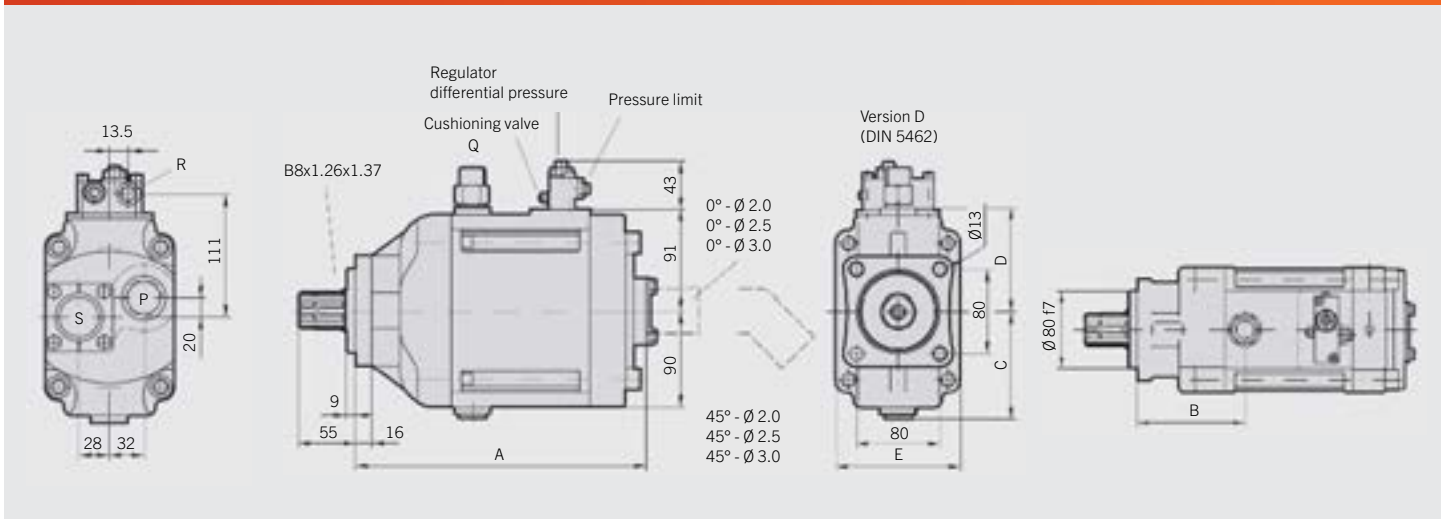
Type	Displacement volume* (cm ³)	Drive max. (turns/min)	Pressure max. continuous / short time (bar)		Torque max. (Nm)	Self weight (kg)
EP 850R	92	2400	350	400	530	26
EP 850L	92	2400	350	400	530	26
EP 851R	112	2200	350	400	600	28
EP 851L	112	2200	350	400	600	28

* at 1000 rpm

DIMENSIONS

Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	S (mm)	P (inch)	Q (inch)	R (inch)
EP 850R/L	277	110	105	100	120	50 – 75	1	3/4	1/4
EP 851R/L	279	115	107	102	125	50 – 75	1	3/4	1/4

TECHNICAL DRAWING



ZUBEHÖR

Type	Description	Dimensions
EA1851	Suction connection	G 1 ½" – 38 mm
EA1852	Suction connection	G 2" – 50 mm
EA2361	Suction connection	G 2 ½" – 64 mm, 45°
EH4720	Suction hose	NW 38 x 1700
EH4721	Suction hose	NW 50 x 1700
EH4560	Pressure hose	NW 16 x 550
EA1354	Pressure fitting	R 3/4" – R 3/4"
ED1132	Sealing	
EP 421	Mounting accessories for EP 368, EP 369, EP 370 consisting of 1 pc. each: Cardan shaft, spline shaft carrier, adapter flange, frame bracket, pump support	

HYDRAULIC AGGREGATES



HYDRAULIC AGGREGATES FOR PC-CRANES



- The requirements of the PC-crane range as well as the emergency aggregates for workman basket operation are completely covered
- High performance at low energy demand
- Compact design protected in a robust box (IP54)
- Easy and cost-effective “plug & play“ assembling
- High quality multi-layer coating (Zn-Mn phosphating)
- Low noise emissions
- Chromium VI-free coating
- Connecting cable kit available for all models
- The cable kits include the complete wiring necessary for the electrical connection as well as a salt water-resistant 1000 A battery switch

TECHNICAL SPECIFICATIONS

Type	Power	PC 1500	PC 2700	PC 3800	Flow rate		Tank (litre)
					100 bar (l/min)	200 bar	
EP1980B	12 V 1.5 kW	•	•		6.3	4.6	6
EP1981B	24 V 1.5 kW	•	•		6.5	5.0	6
EP1983B	12 V 3 kW		•	•	10.4	9.0	11
EP1984B	24 V 3 kW		•	•	10.9	9.9	11

Max. pressure 200 - 230 bar for hydraulic aggregate

Type	Description
EP1982	24 V emergency aggregate 3.0 kW for workman basket operation, flow rate (l/min) at 100/200 bar: 6.5/5.8, 270 bar peak pressure, without tank
KMG00210A	Emergency aggregate kit for fixed pump operation 3 kW
KMG00211A	Emergency aggregate kit for load sensing pump operation 3 kW

DIMENSIONS

Type	B (mm)	H (mm)	T (mm)	Self weight (kg)
EP1980B	400	231	280	18.7
EP1981B	400	231	280	18.7
EP1983B	445	233	335	24.5
EP1984B	445	233	335	24.5
EP1982	454	264	273	20.0

ACCESSORIES

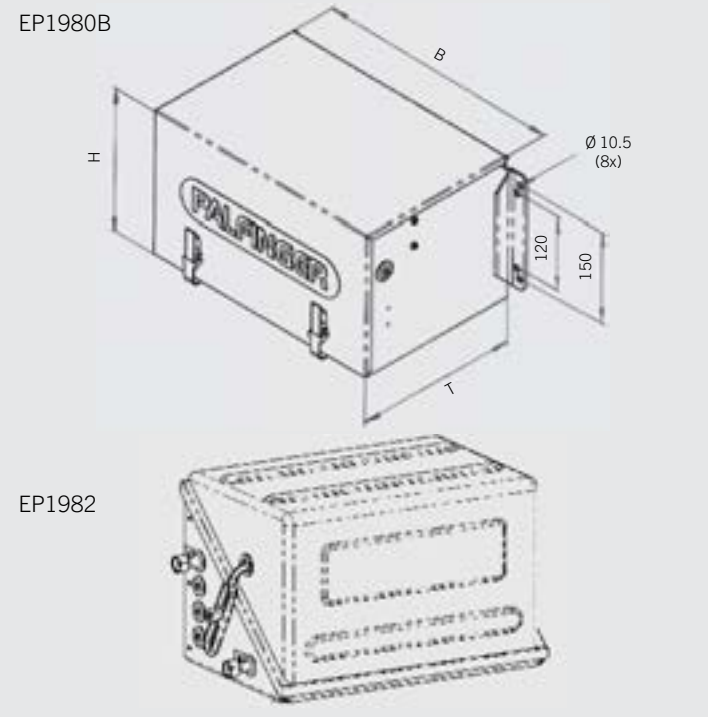
Type	Description	Appropriate for
EEA9835	Cable kit 4 m	EP1980B and EP1981B
EEA9836	Cable kit 6 m	EP1980B and EP1981B
EEA9847	Cable kit 4 m	EP1982; EP 1983B and EP1984B
EEA9848	Cable kit 6 m	EP1982; EP 1983B and EP1984B

NOTE: To ensure a long term provision of electricity of the 3 kW aggregates, a strong generator on the vehicle as well as a battery aligned to the application is needed.

With these aggregates it is advantageous to open the covering when in operation to avoid an exceeded working temperature (motor overload switch).

The aggregates are not suitable for permanent operation.

TECHNICAL DRAWING



PALFINGER HYBRID



- Due to the adjustment of those units to the specific needs of our cranes, a smooth and efficient electro-hydraulic drive of the crane can be ensured
- Quick and effective operation in noise- and pollution-sensitive areas by the simple connection to the power grid
- Environmentally friendly concept with power control and the use of engines of the highest energy efficiency class (IE03)
- The aggregate enables operations with the crane in enclosed spaces
- Savings of up to 80% of the operating costs during crane operation
- Easily switch between motor- and electro drive on the control box
- The perfectly coordinated overall concept guarantees a simple and quick setup
- Motor protection class: IP55
- Control boxes EP1499 (for EP1498) and EP1501 (for EP1500):
 - » 600 mm x 600 mm x 250 mm wired
 - » Connector plug for the connection to the electricity grid
 - » Illuminated push button "pump on", indication lamp "pump off/fault", emergency stop button
 - » Change-over switch from motorhydraulic to electrohydraulic
 - » Exits for PALTRONIC, spotlight, oil cooler, LS-switch
 - » Regulated power supply unit 3 x 400 VAC / 24 VDC / 40 A
 - » Energy meter for billing (not calibratable)
 - » Control box protection class: IP65

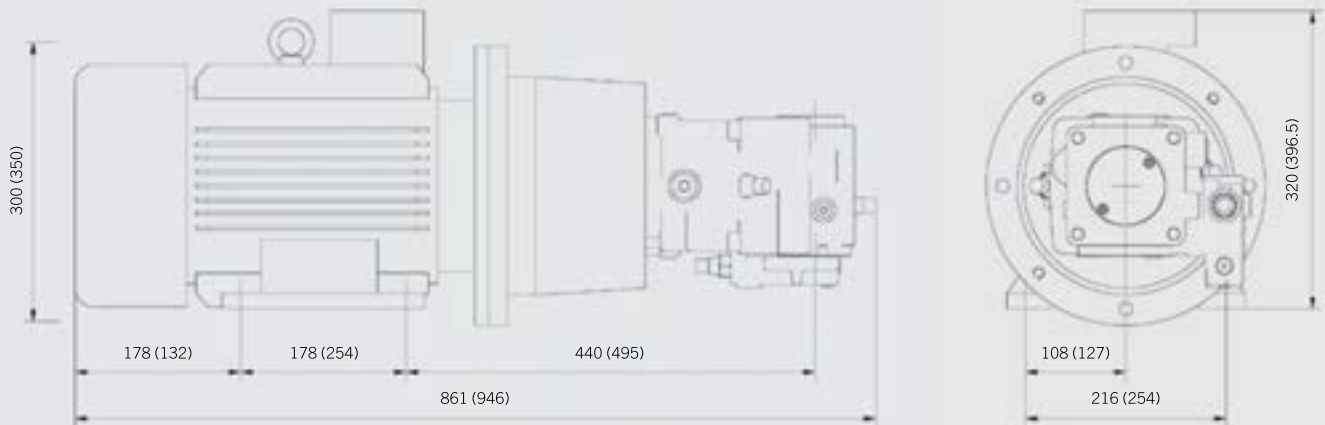
TECHNICAL SPECIFICATIONS

Type	Power max. (kW)	Pressure max. (bar)	Volume flow max.* (l/min)	Voltage required (V)	Frequency required (Hz)	Speed of engine (min ⁻¹)	Electr. connection required (A)
EP1498	7.5	365	58	3 x 400	50	1500	16
EP1500	15	365	58	3 x 400	50	1500	32

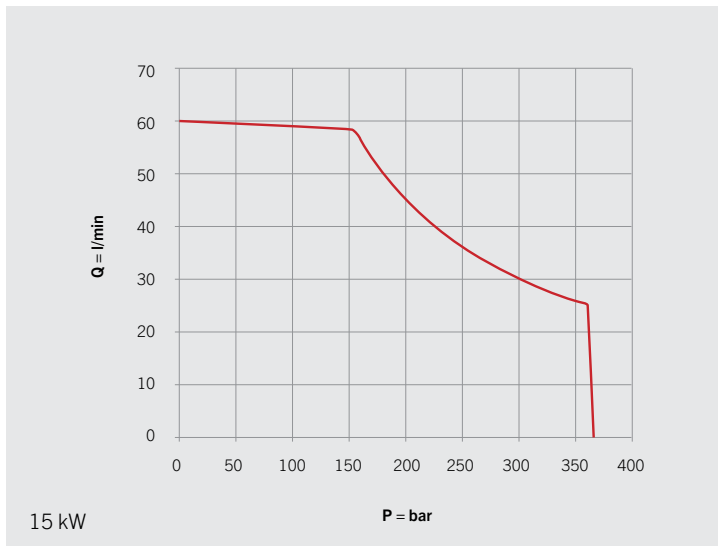
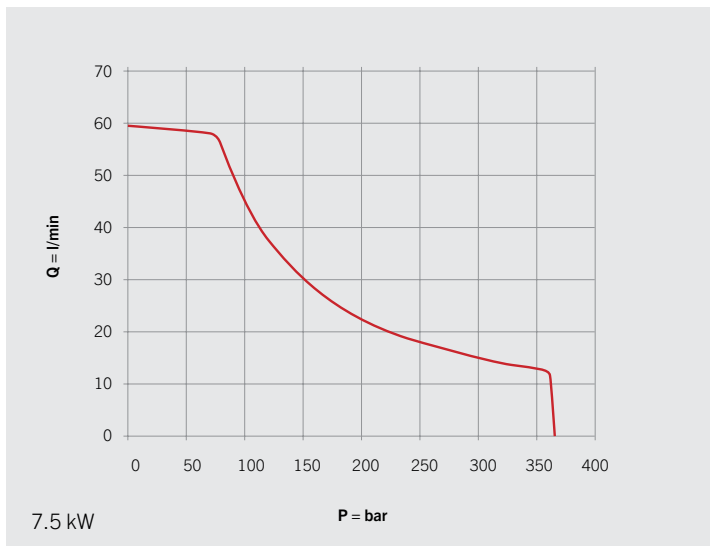
SCOPE OF DELIVERY: Motor, load sensing pump, power regulator, damping rods, assembly instructions and documentation

TECHNICAL DRAWING

EP1498 (EP1500)



POWER REGULATION



HYDRAULIC AGGREGATES FOR STATIONARY CRANES



- The integrated power control allows both high operating pressures (up to 365 bar) and high flow rates (up to 195 l/min)
- Quick and efficient operation resulting from the power control of the aggregate
- High energy efficiency through the utilisation of engines with premium energy efficiency (IE03) and load sensing pumps with power regulators
- The perfectly coordinated overall concept guarantees a simple and quick setup
- High level of operational safety by providing equipment such as the oil pan or the optional tank heater
- Required power frequency: 50 Hz
- Required voltage: 3 x 400 V
- Motor protection class: IP55
- Control box protection class: IP65
- Oil pan made of painted sheet steel consistent with the respective hydraulic aggregate – in accordance with WHG
- Tank heater incl. electric control on the control box and an indication lamp "failure tank heater"

TECHNICAL SPECIFICATIONS

Type	Power max. (kW)	Pressure max.* (bar)	Volume flow max.* (l/min)	Volume of tank (litre)	for Crane** (mt)
EP1901	15	365	60	250	~ 9
EP1902	30	365	90	400	~ 23
EP1903	55	365	142	400	~ 50
EP1904	75	365	195	630	~ 150

* the power regulator of the pump controls those values according to the power requirements ** basic dimensioning, for precise dimensioning please take account of the power regulation

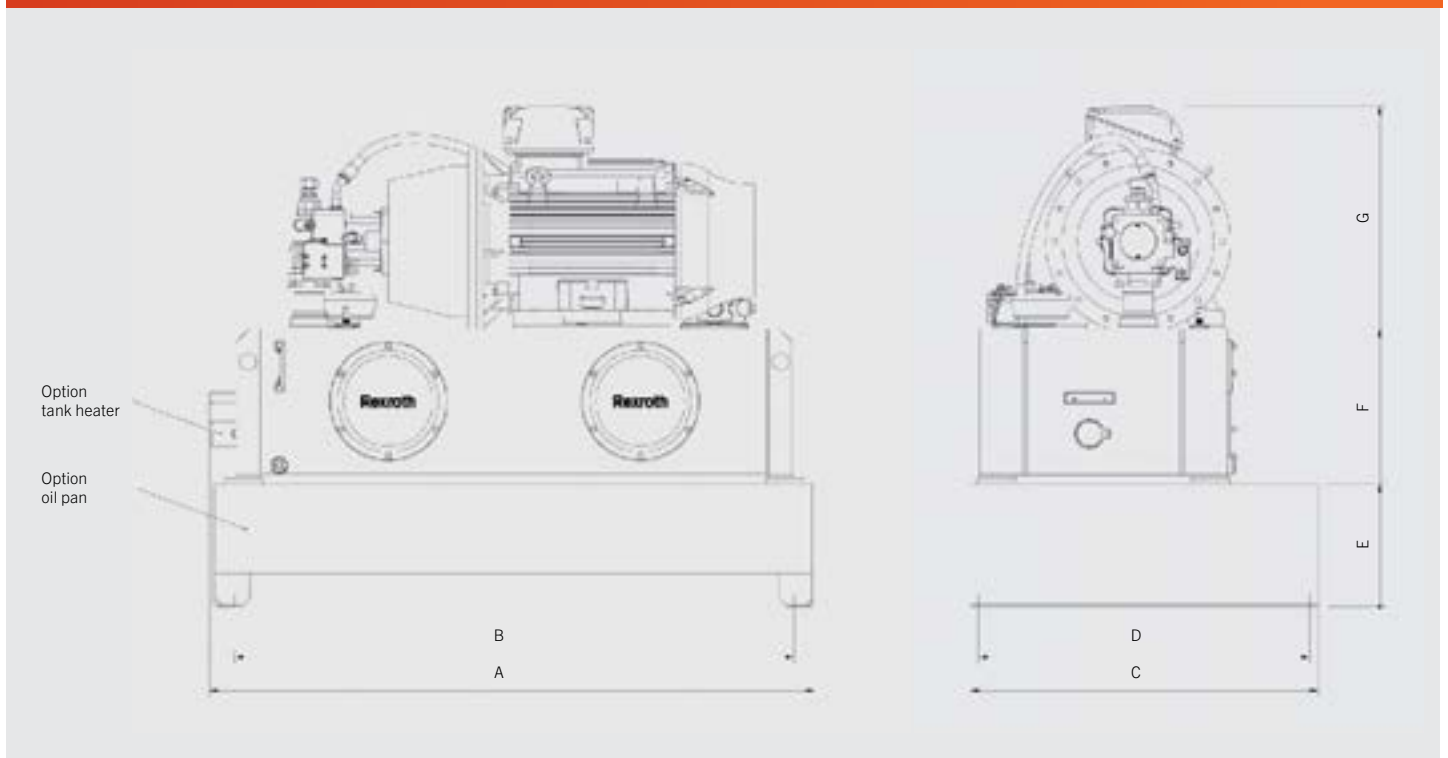
SCOPE OF DELIVERY: Electric motor, load sensing pump, power regulator, pressure and flow compensator, damping rods, hydraulic tank (incl. air filter, oil gauge glass, non-return filter, float switch), assembly instructions and documentation

NOTE: Please pay attention to the current directives for the stationary crane operation.

DIMENSIONS

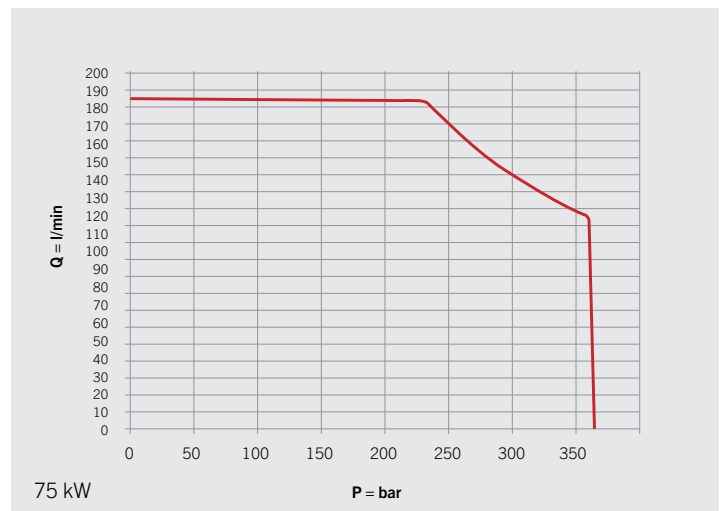
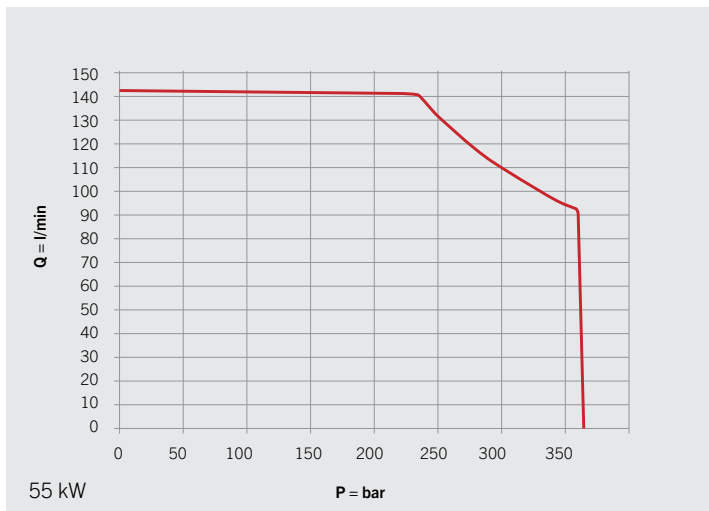
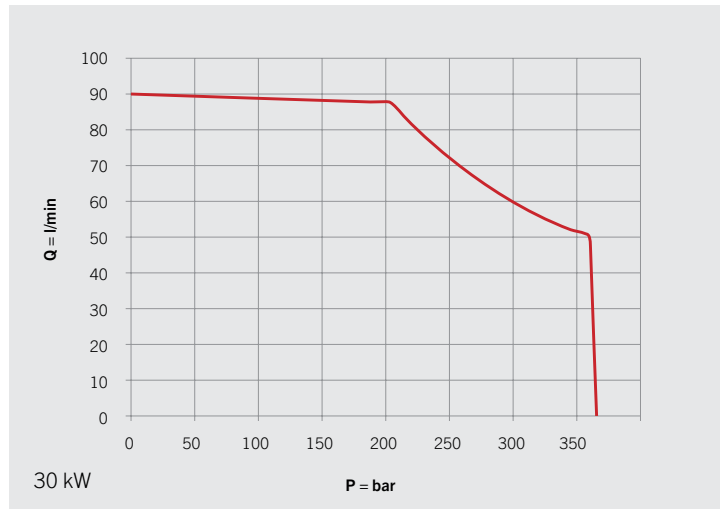
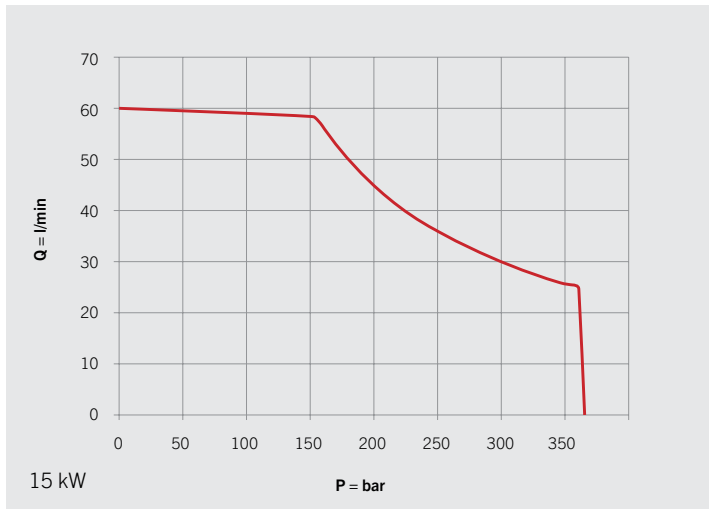
Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)
EP1901	1259	1090	970	920	356	791	1225
EP1902	1798	1664	1035	985	366	826	1355
EP1903	1798	1664	1035	985	366	826	1488
EP1904	1798	1664	1245	1195	438	1018	1780

TECHNICAL DRAWING



HYDRAULIC AGGREGATES FOR STATIONARY CRANES

POWER REGULATION



TECHNICAL SPECIFICATIONS: CONTROL BOX

- » Control box wired
- » 600 x 600 x 250 mm for EP1901 and EP1902
- » 760 x 760 x 300 mm for EP1903 and EP1904
- » Motor feeder, exits for PALTRONIC, spotlight, oil cooler, LS-switch
- » Emergency stop button
- » Illuminated push button "pump on"
- » Indication lamps: "pump off/failure", "oil level minimum", "oil temperature maximum"
- » Regulated power supply unit 3 x 400 VAC / 24 VDC / 40 A
- » Energy meter for billing (not calibratable)

NOTE: The connections to the pump, the tank and the tank heater, respectively, have to be mounted by the body builder.

ACCESSORIES

Type	Description
EEA11010	Control box for EP1901
EEA11011	Control box for EP1902
EEA11012	Control box for EP1903
EEA11013	Control box for EP1904
HXE4940	Oil pan for EP1901
HXE4941	Oil pan for EP1902 and EP1903
HXE4942	Oil pan for EP1904
EEA11014	Tank heater for all hydraulic aggregates

HYDRAULIC COMPONENTS



OIL TANKS ALUMINIUM



- Equipped with a return filter, an oil gauge glass as well as a funnel and a ventilation filter
- Corrosion-resistant without surface coating
- A self weight reduced by up to 40% saves fuel
- 1:1 exchangeability with the steel tanks guaranteed
- Longer service life compared to the steel tank
- Made of high quality aluminium (AlMg3)
- Maximum savings potential of the mounting costs
- No additional braces on the bracket needed

TECHNICAL SPECIFICATIONS

Type	Tank volume (litre)	Length A (mm)	Width B (mm)	Height C (mm)	Self weight* (kg)
KTK001-CB	75	607	400	430	13
KTK021-CB	100	727	440	555	17
KTK002-CB	140	564	670	575	20
KTK003-CB	200	769	670	575	23
KTK004-CB	300	1109	670	575	31
KTK005-CB	425	1524	670	575	38

* oil box weight without bracket, return filter, oil gauge glass, funnel and ventilation filter

SCOPE OF DELIVERY: Oil tank without brackets

NOTE: Mounting of the tensioning belts only with pad rubbers.

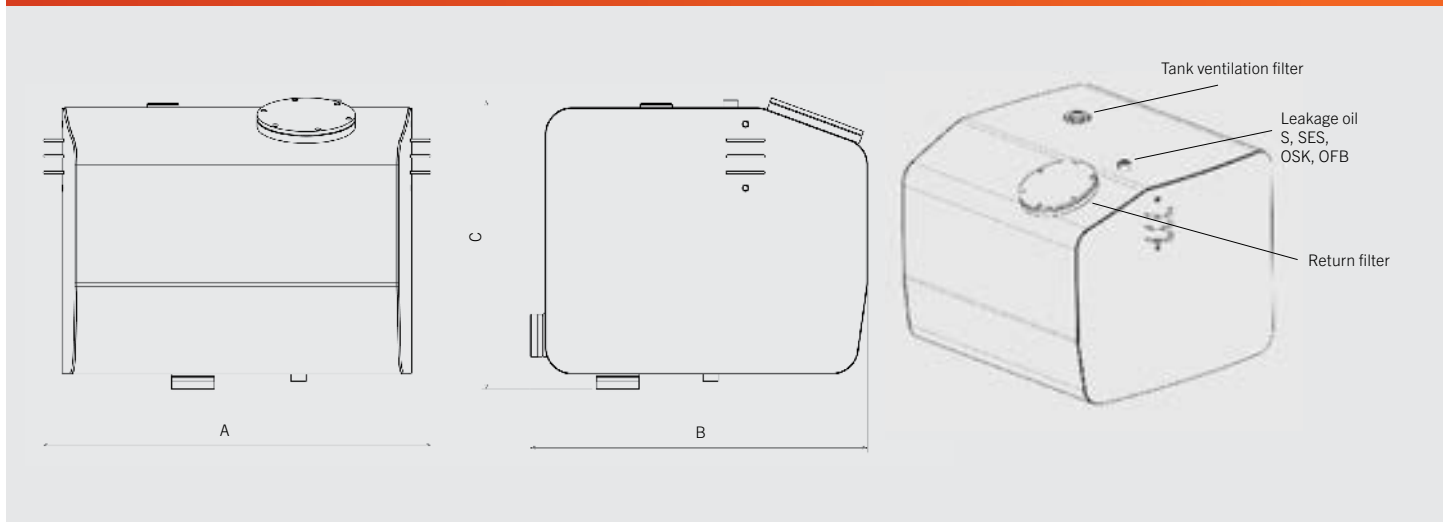
TECHNICAL SPECIFICATIONS: WITH ALUMINIUM BRACKETS

KTK001-BB	75	607	400	430	17
KTK021-BB	100	727	440	555	21
KTK002-BB	140	564	670	575	24
KTK003-BB	200	769	670	575	27
KTK004-BB	300	1109	670	575	35
KTK005-BB	425	1524	670	575	42

* oil box weight without bracket, return filter, oil gauge glass, funnel and ventilation filter

SCOPE OF DELIVERY: Oil tank with brackets

TECHNICAL DRAWING



OIL TANKS STEEL

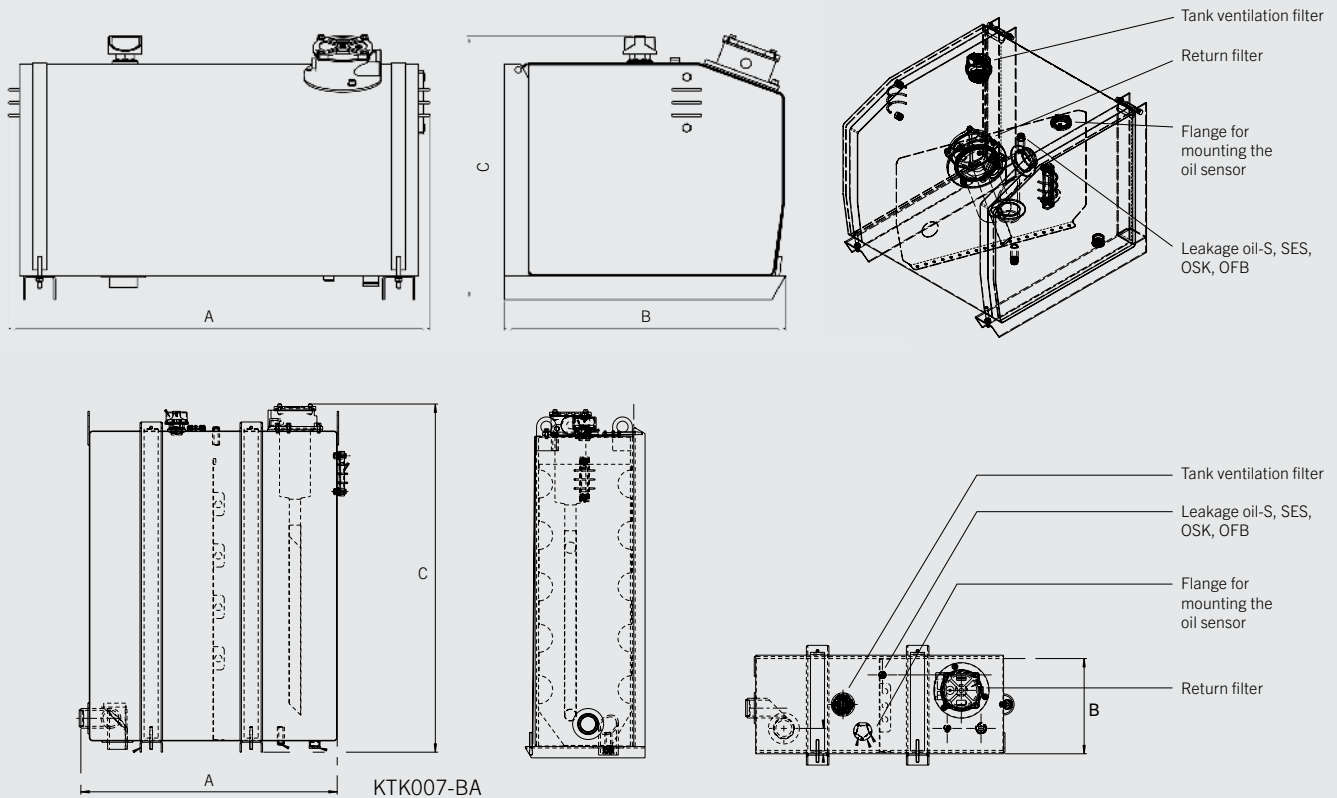


- The PALFINGER additional oil tanks are available with a volume of 45 to 400 litres
- The dimensions are chosen such way that an easy mounting on the vehicle is guaranteed
- All oil tanks are equipped with an oil gauge glass, a flange for an oil sensor and a return filter to minimise the danger of contamination within the hydraulic system

TECHNICAL SPECIFICATIONS

Type	Tank volume (litre)	Length A (mm)	Width B (mm)	Height C (mm)	Self weight (kg)
UT032	20	474	250	255	10
KTK017-BA	45	528	435	429	23.07
KTK001-BA	75	567	440	555	38.7
KTK021-BA	100	727	440	555	45
KTK002-BA	140	554	702	660	81.2
KTK003-BA	200	749	702	660	87.3
KTK004-BA	300	1054	702	660	98
KTK005-BA	400	1477	702	660	98
KTK007-BA	300	952	385	1318	166.6

TECHNICAL DRAWING



OIL TANKS

ACCESSORIES

Type	Description	Dimensions
KTK-BFS	Compensating element tank bracket, cranking	St37
KTK-BF04	Compensating element tank bracket, straight	ST37, 4 mm
KTK-BF10	Compensating element tank bracket, straight	ST37, 10 mm
KTK-BF25	Compensating element tank bracket, straight	ST37, 25 mm

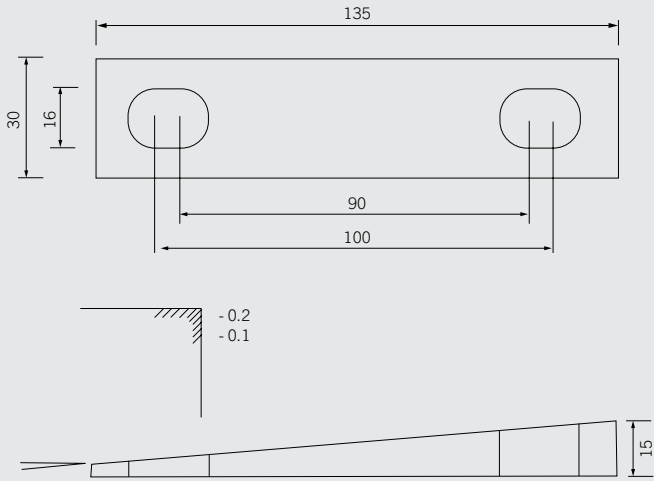
Type	Description	For oil tank
KTK001-DA	Steel brackets	KTK001-XX and KTK021-XX
KTK002-DA	Steel brackets	KTK002-XX – KTK005-XX
KTK001-DB	Aluminium brackets	KTK001-XX and KTK021-XX
KTK002-DB	Aluminium brackets	KTK002-XX – KTK005-XX

Type	Description	Dimensions	For oil tank
EA2102	Suction connection for the modification of a shut-off cock NW 50 to 60 mm	G 2" - 60 mm	
EA1390	Shut-off cock	NW 38	KTK001-XX
EA1818	Angle piece	1 1/4"	KTK001-XX
EV4512	Shut-off cock	2"	KTK002-XX – KTK005-XX
EA1817	Angle piece	2"	KTK002-XX – KTK005-XX
EV4512	Shut-off cock	2"	KTK007-BA
EA1901	Adapter	2"	KTK007-BA
EEA6330	Oil sensor (PALTRONIC 150)		

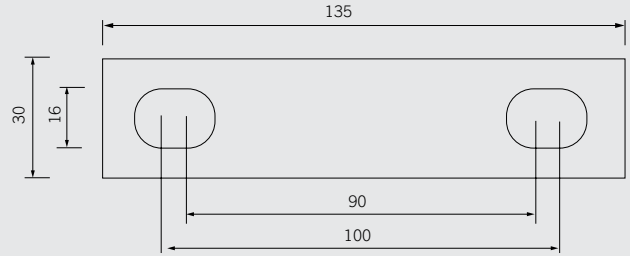
NOTE: Please be advised that PALFINGER rejects a compounded installation of steel and aluminium components owing to the electrochemical corrosion.

TECHNICAL DRAWING

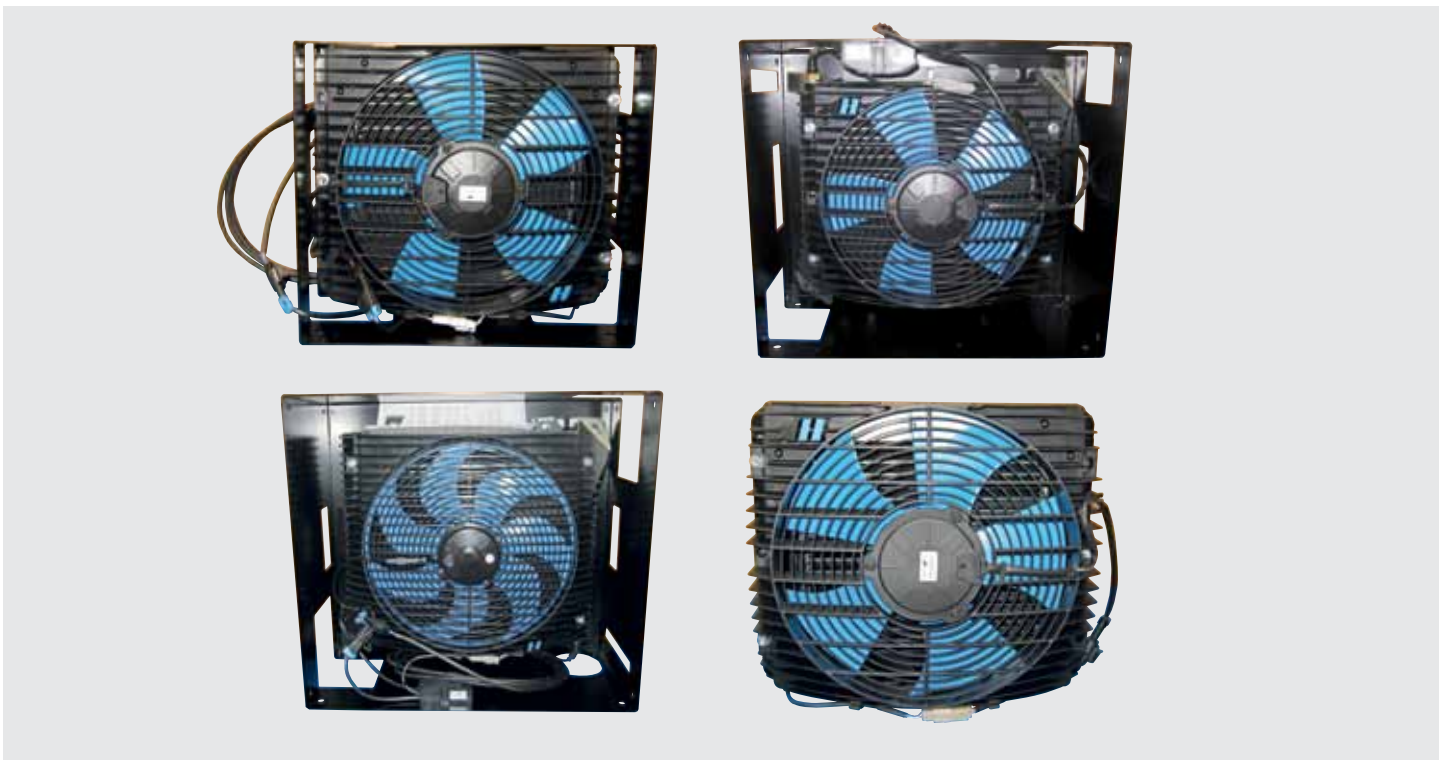
Compensating element tank bracket, cranking



Compensating element tank bracket, straight
thickness: 4 mm, 10 mm, 25 mm



OIL COOLERS

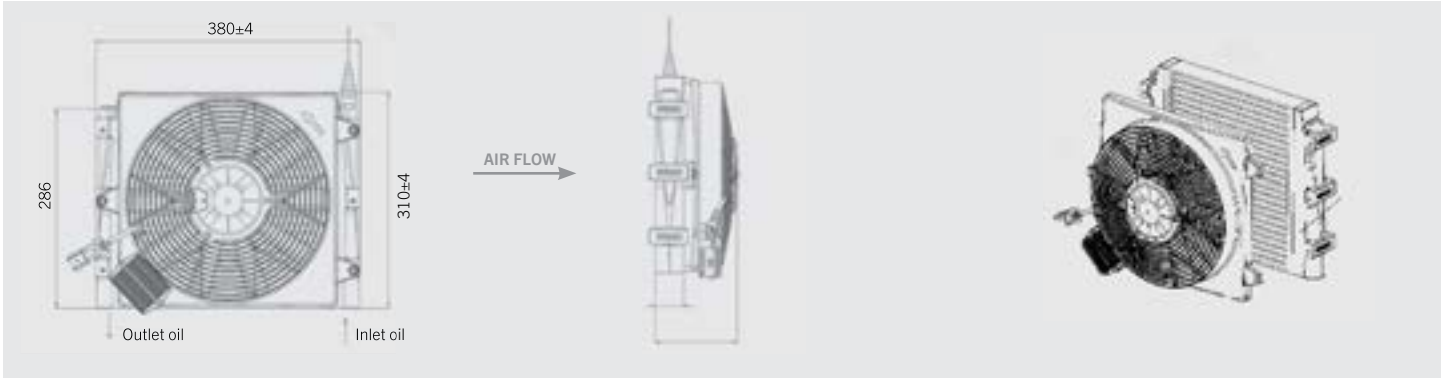


- ↗ Continuous speed regulation adapted to the temperature range of 45 – 55°C
- ↗ Protection class ventilator: IP68
- ↗ Temperature sensor to direct variable speed regulation of the cooler
- ↗ Clamping box with integrated relay
- ↗ Cooler protecting case made of 3 mm steel sheet, double powder-coated
- ↗ Wiring of all components
- ↗ Cooler suspension with rubber-metal-elements
- ↗ Construction: aluminium oil air cooler in modular circuit board design

TECHNICAL SPECIFICATIONS

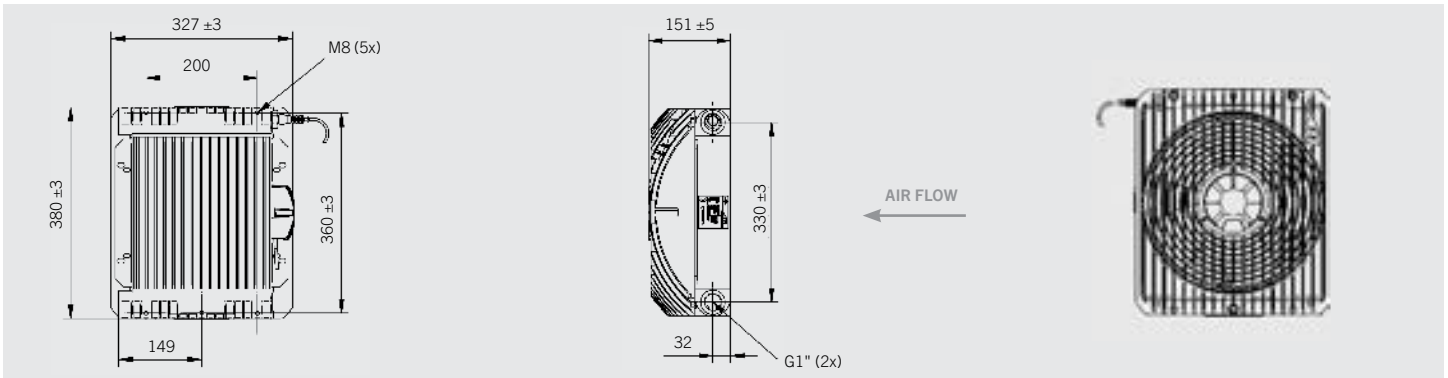
Type	Operating pressure max. (bar)	Flux range (l/min)	Cooling capacity (kW)	Voltage (V)	Current consumption (A)	Sound level dB (A)	Self weight (kg)
BKA62-12V	26	10 – 150	6.5	12	8	70	11
BKA62-24V	26	10 – 150	6.5	24	4	70	11

without protection case



EP 629-12V	26	20 – 150	8.5	12	8.4	71	10.5
EP 629-24V	26	20 – 150	8.5	24	4.2	71	10.5

without protection case

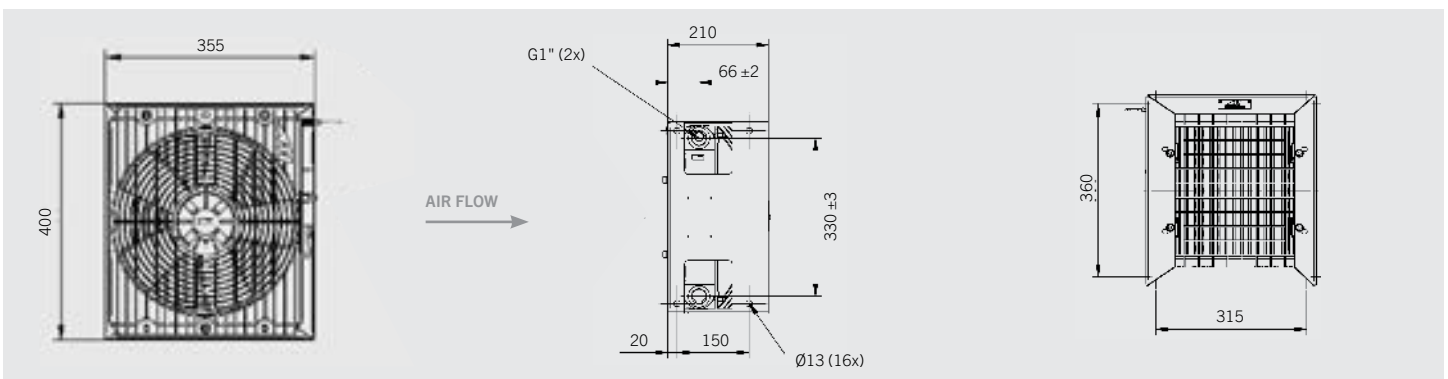


BKA27-24VS Kit for mounting the oil cooler on the crane incl. EP 629-24 V and fixing material for mounting on the tilting cylinder

BKA31-24VS Kit for mounting the oil cooler on the truck incl. EP 629-24 V and fixing material for mounting on the vehicle frame

BKA21	26	20 – 150	8.5	12	19.4	78	22.5
BKA24	26	20 – 150	8.5	24	9.7	78	22.5

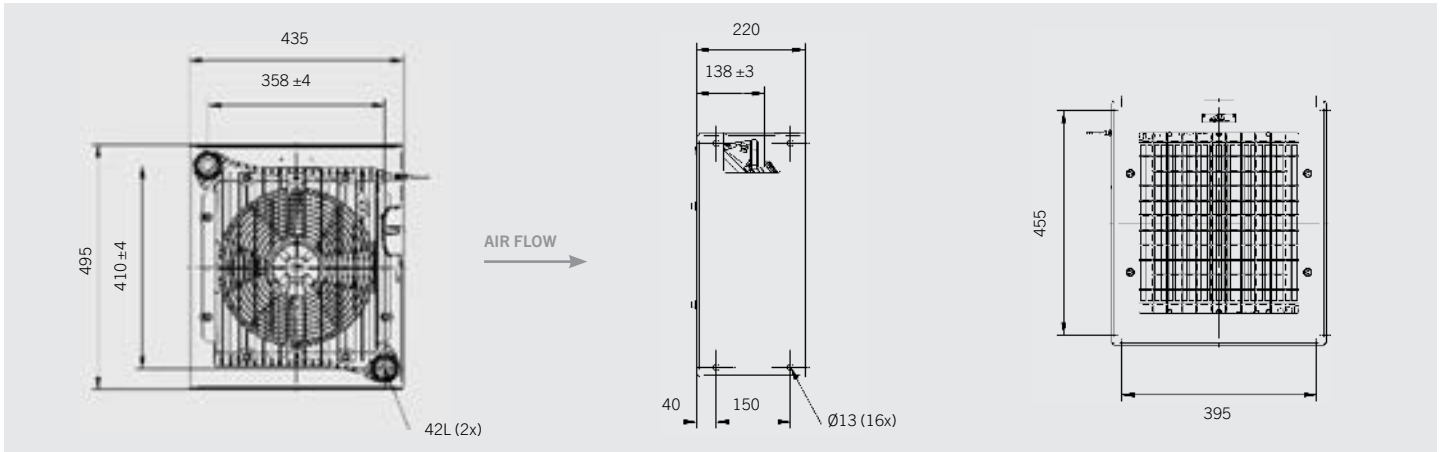
incl. protection case



OIL COOLERS

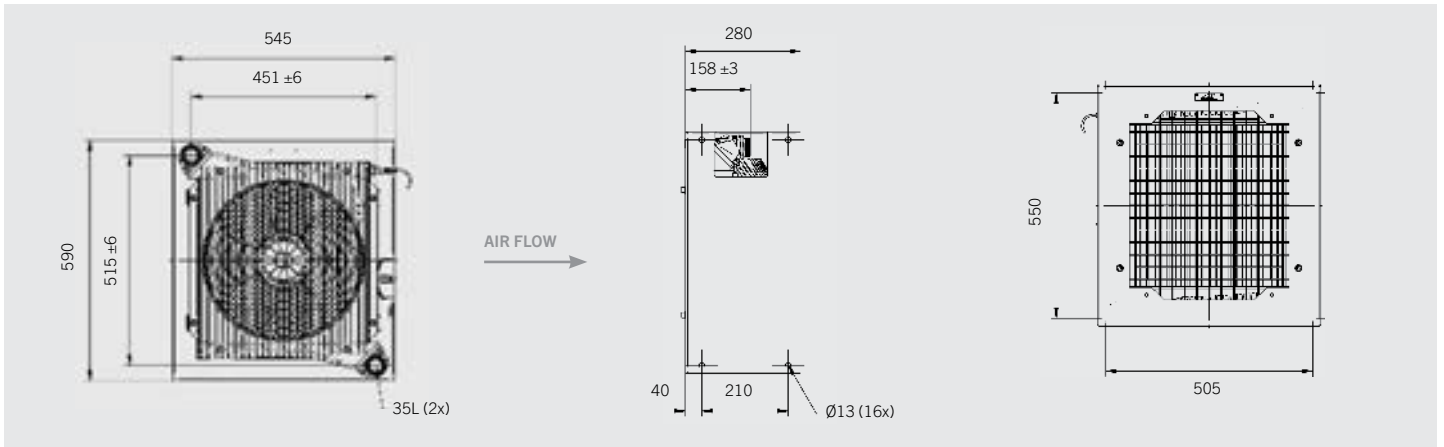
Type	Operating pressure max. (bar)	Flux range (l/min)	Cooling capacity (kW)	Voltage (V)	Current consumption (A)	Sound level dB (A)	Self weight (kg)
BKA29	26	20 – 200	10.5	12	19.4	79	24.5
BKA30	26	20 – 200	10.5	24	9.7	79	24.5

ASA universal connection system, incl. protection case



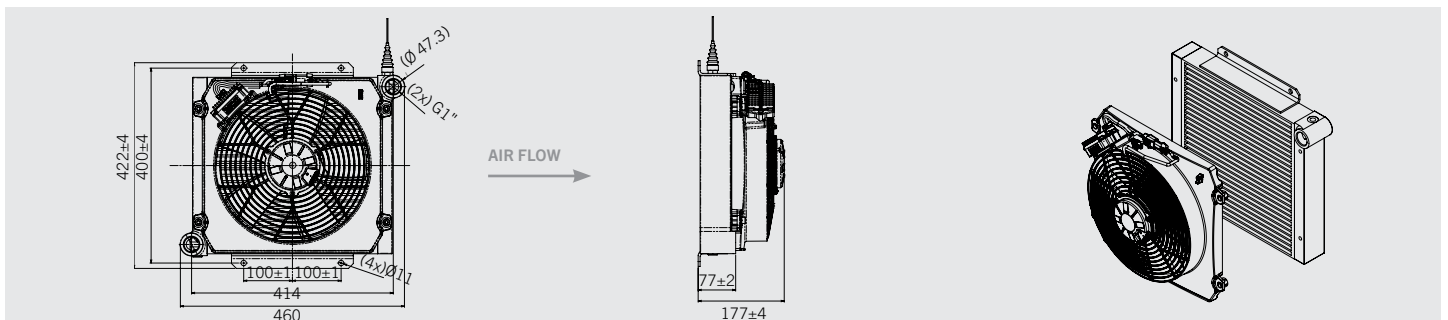
BKA40	26	50 – 250	20	12	19.3	79	36
BKA41	26	50 – 250	20	24	9.7	79	36
BKA34*	26	50 – 250	20	24	9.7	79	23

ASA universal connection system, incl. protection case *without protection case, no ASA universal connection system



BKA57	26	80	11	12	15.3	79	12
BKA56	26	80	11	24	8.5	79	12

without protection case



BODY SECTIONS



REAR DEMOUNTABLE CONSOLES



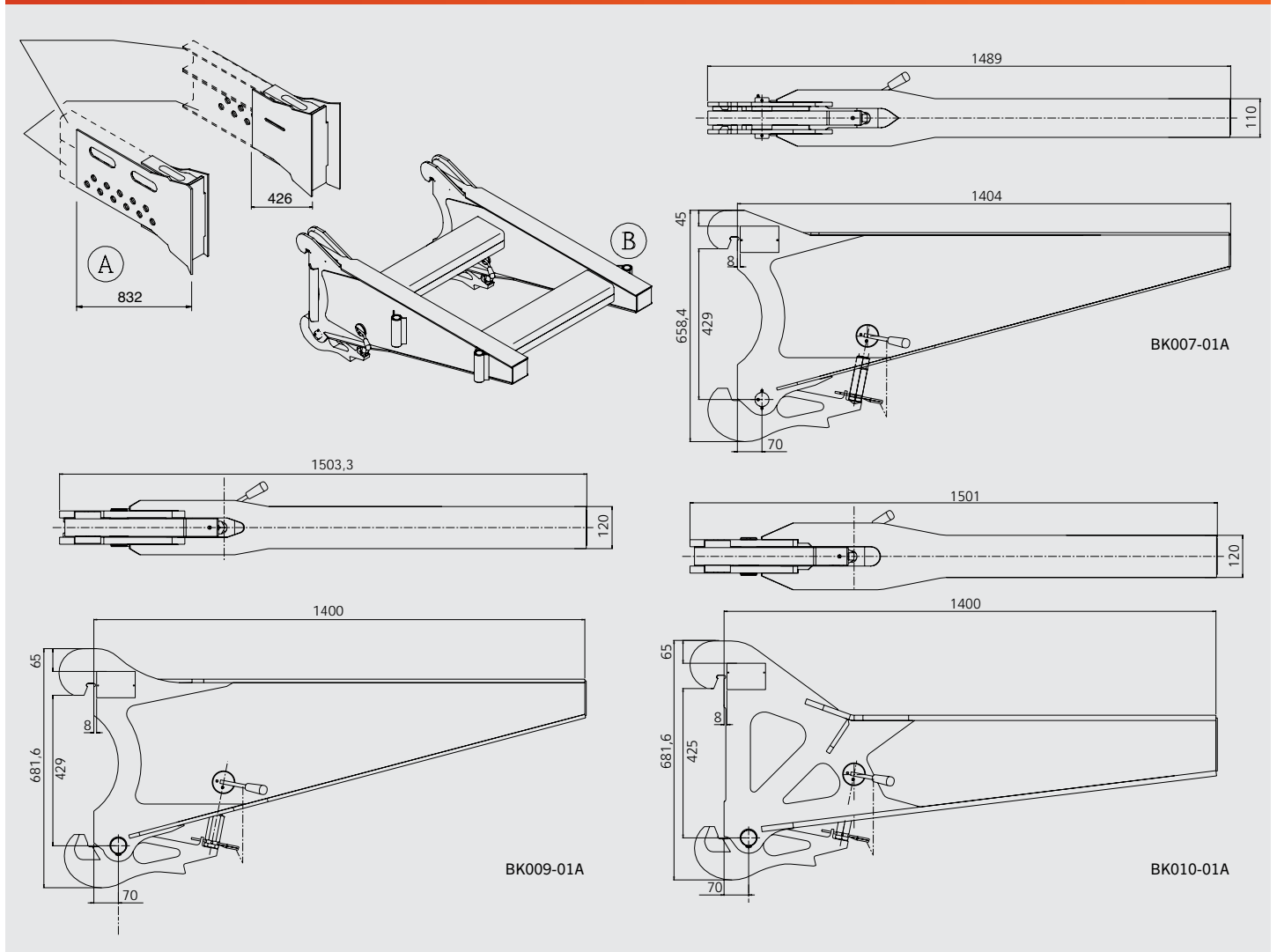
- PALFINGER provides a range of manually releasable rear demountable consoles that can be mounted to all kinds of vehicles
- The loader crane can be separated from the vehicle in no time
- By separating the loader crane from the vehicle, the loading capacity can be increased by the entire weight of the crane and the console
- A docking or decoupling of the crane from the carrier unit can be performed within a few minutes

TECHNICAL SPECIFICATIONS

Type	Console	Number (pcs.)	Crane lift moment max.	Self weight (kg)
BK007A	BK007-01A	2	119 kNm 12.1 mt	(A) 120 (B) 200
BK008A*	BK007-01A BK009-01A	1 1	244 kNm 24.9 mt	(A) 120 (B) 260
BK009A	BK009-01A	2	244 kNm 24.9 mt	(A) 120 (B) 260
BK010A	BK010-01A	2	244 kNm 24.9 mt	(A) 120 (B) 320

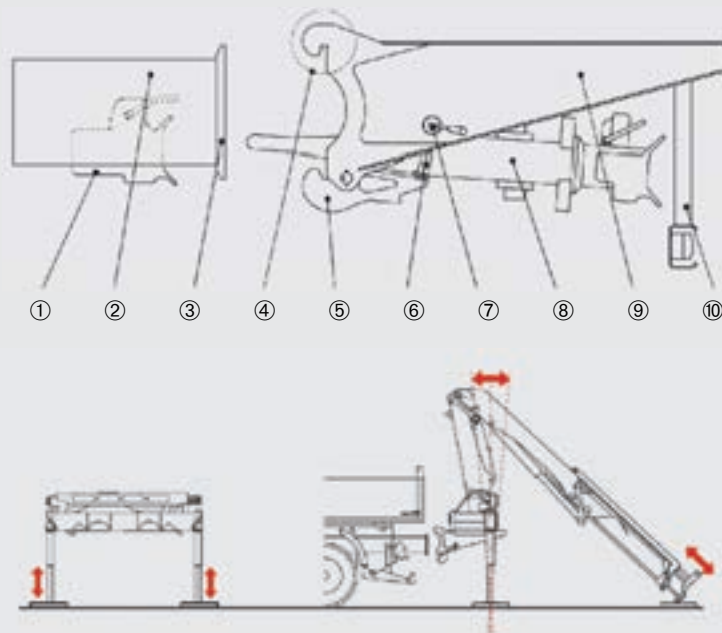
* for crane constructional systems with the centre of gravity outside the centre ** with bearing load the max. crane lift moment will be reduced by the value of the bearing load

TECHNICAL DRAWING



REAR DEMOUNTABLE CONSOLES

ASSEMBLY OF THE SYSTEM



- Trailer hitch - vehicle ①
- Supporting frame (vehicle frame) ②
- Retaining plate ③
- Holding clip ④
- Clamping claw ⑤
- Expander bolt ⑥
- Swivel pin ⑦
- Trailer hitch - demountable console ⑧
- Bracket carrier ⑨
- Underride protection ⑩

DECOUPLING OF THE CONSOLE



Stabilizing



Pivoting



Stabilize over the tip of the crane boom



Remove trailer hitch



Release holding clip and clamping claw



Raise the stabilizer further



Deactivate the secondary drive



Disconnect hydraulic power supply



Move away the truck

EXTENSION COUPLINGS

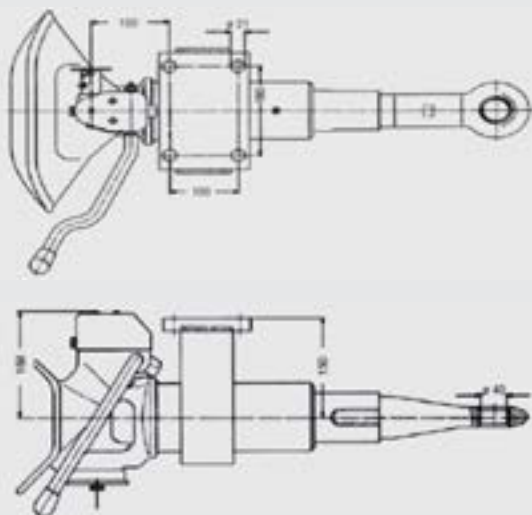


- The high quality extension coupling is used for the mounting on a rear demountable console
- The extension coupling is easy to mount
- Components from a modular construction extensively tested
- Extremely durable dome muzzle
- D-value: 120 kN
- Synergies at the vehicle operator through identical spare parts as with standard products
- With 1000 kg bearing load – the maximum permissible crane lift moment of the rear demountable console is to be reduced by the value of the bearing load

TECHNICAL SPECIFICATIONS

Type	Distance between centre of the towing eye and the centre of the coupling bolt (mm)	Self weight (kg)
PZBK02-A	750	56.5
PZBK02-B	875	61.5
PZBK02-C	1000	65.5
PZBK02-D	1150	70.5
PZBK02-E	1300	76.0

TECHNICAL DRAWING



UNDERRIDE PROTECTION AND CRANE LIGHTING SYSTEM



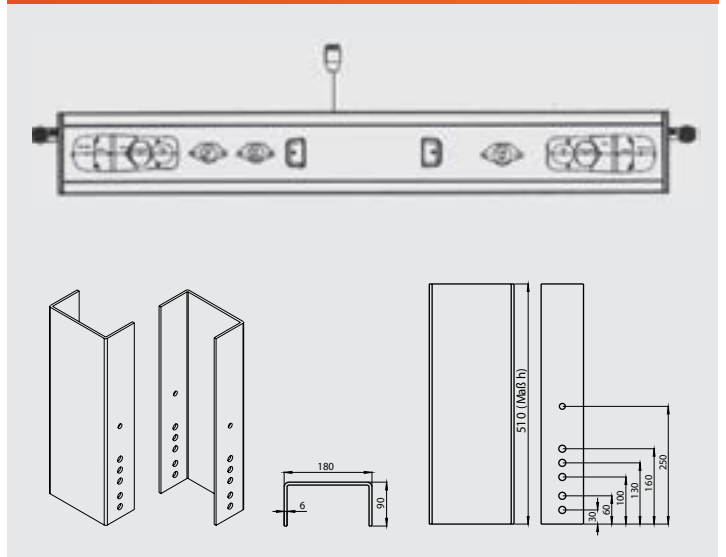
- The under-ride protection is made of high quality aluminium with pre-assembled lights and connections and is ideal for mounting on a rear demountable console
- The crane lighting system consists of tail lights, number plate lamps, rubber arm lamps and distributor and is mounted on the under-ride protection
- Suitable brackets for the rear demountable console are available as well
- The crane lighting system is available in two different designs
- Permissible total weight without limitation
- Horizontal difference between the trailing edge of the under-ride protection and the rear of the vehicle is max. 363 mm
- Vertical difference between the trailing edge of the under-ride protection and the trailing edge of the vehicle is max. 350 mm

TECHNICAL SPECIFICATIONS

Type	Description
PZBK01-A	Aspöck EuroFab tail lights, supply 1 x 15p socket, supply 1 x 15p plug, extension EBS 3 m, UFS Aluminium silver anodised
PZBK01-B	Aspöck EuroFab tail lights, supply 2 x 7p socket, supply 2 x 7p plug, extension EBS 3 m, UFS Aluminium silver anodised
PZBK01-C	Bracket - for chassis frame width between 700 - 1400 mm

NOTE: The bracket is applicable on both sides. Due to the hole pattern, the under-ride protection panel can be mounted at different heights.

TECHNICAL DRAWING



SUBFRAMES



- PALFINGER provides frame modules that allow a more economic mounting of the crane
- Improved mounting quality due to the use of these prefabricated modules
- All the frames are delivered with a transport primer
- The material is a fine grain construction steel S690
- Side plates in L-shape enable a rigid connection to the frame of the truck
- Buckle bushes for welding to the subframe
- Advantages of the system:
 - » Optimised weight
 - » Fast mounting
 - » Lower mounting costs
 - » Lower mounting height
 - » Torsion-free construction

TECHNICAL SPECIFICATIONS

Type	Height (mm)	Length (mm)	Weight (kg)
PZH0809410+4000	80	4000	684
PZH0809410+6000	80	6000	1026
PZH0809412+4000	80	4000	808
PZH0808510+4000	80	4000	624
PZH0808510+6000	80	6000	936
PZH0808512+4000	80	4000	740
PZH1209410+4000	120	4000	808
PZH1209410+6000	120	6000	1212
PZH1209412+4000	120	4000	956
PZH1208510+4000	120	4000	716
PZH1208510+6000	120	6000	1074
PZH1208512+4000	120	4000	852
PZH1609410+4000	160	4000	868
PZH1609410+6000	160	6000	1302
PZH1609412+4000	160	4000	1024
PZH1608510+4000	160	4000	808
PZH1608510+6000	160	6000	1215
PZH1608512+4000	160	4000	952
PZH1608512+6000	160	6000	1428
PZH2009410+4000	200	4000	924
PZH2009410+6000	200	6000	1386
PZH2008510+4000	200	4000	864
PZH2008510+6000	200	6000	1296
PZH2509410+4000	250	4000	996
PZH2509410+6000	250	6000	1494
PZH2508510+4000	250	4000	936
PZH2508510+6000	250	6000	1404

NOTE: Other lengths up to 8000 mm are available on request.

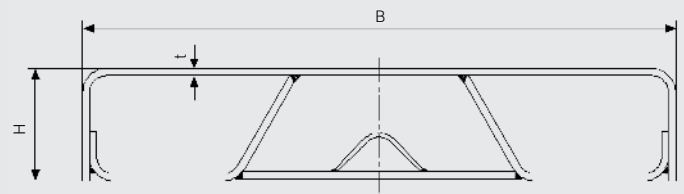
ACCESSORIES

Type	Description	Length (mm)	Weight (kg)
HA8063	Side plate	4000	56

Type	Description	For buckles	Weight (kg)
HXE2527	Buckle bushing	M 20	1.1
HXE3144	Buckle bushing	M 24	2.0
HXE3145	Buckle bushing	M 30	2.3
HXE9084	Buckle bushing	M 36	4.2
HXE2527	Buckle bushing	M 42	7.8
HXE4514	Buckle bushing	M 48	15.8



TECHNICAL DRAWING



DESCRIPTION OF PART NUMBER

PZH 080 94 10 4000

Height H
80 mm

Width B
940 mm

Thickness t
10 mm

Length
4000 mm

ADDITIONAL STABILIZERS



MOUNTING FRAMES FOR PC 1500, PC 2700 AND PC 3800



- All mounting frames delivered in EU countries have to correspond to EN12999:2010
- Cranes with a load capacity below 1000 kg or a lifting capacity below 40 kNm (PC 1500) do not need the integrated stability control, a transport position monitoring (AUSVW) is obligatory
- For Non-EU countries versions without CE conformity are still available and permitted
- Safety equipment:
 - » ISC-S: Integrated stability control: The outriggers as well as the stabilizer rams have to be fully extended to be able to lift loads. The position of the stabilizer is determined by a roller switch at the rams and at the outrigger. Secure and flexible crane operation is only possible with fully extracted outrigger and stabilizer rams.
 - » AUSVW: Transport position monitoring of the outrigger: By means of end-position-switches, the system detects whether the outrigger is in transport position and if the lock is closed. If this is not the case a signal is sent to an optical and acoustic warning in the driver cabin.
- Tilttable stabilizer pads: 10° tilttable stabilizer pads adapt optimally to the corresponding incline of the surface
- Due to the big stabilizer pads the ground pressure is always below the mandatory limiting value

BS008-SA-A: MOUNTING FRAME WITH ONE-SIDED EXTENDABLE OUTRIGGER

- » **AUSVW***: Transport position monitoring
- » **STZH***: Preparation for hydraulic cylinder
- » **ISC-S**: Integrated stability control: ATTENTION: only possible in combination with the CE and the hydraulic stabilizer ram
- » **KRANK**: Conservation of the stabilizer as transport protection
- » **M - JIC**: A 37° flare type fitting (JIC) is optionally available
- » **EKAT**: Printed spare part catalogue

BS009-SA-A: MOUNTING FRAME WITH SINGLE OUTRIGGER

- » **AUSVW***: Transport position monitoring
- » **ISC-S***: Integrated stability control
- » **R0**: Outrigger extendable on one side
- » **BRI-6**: Mounting parts (6x bride screws, 3x retaining plates)
- » **RAL**: Optionally, the mounting frame can be delivered in other colours

BS0010-SA-A: MOUNTING FRAME WITH DOUBLE OUTRIGGERS

- » **AUSVW***: Transport position monitoring
- » **ISC-S***: Integrated stability control
- » **R0**: Outrigger extendable on one side
- » **R1**: Outrigger extendable on both sides
- » **BRI-8**: Mounting parts (8x bride screws, 4x retaining plates)
- » **RAL**: Optionally, the mounting frame can be delivered in other colours

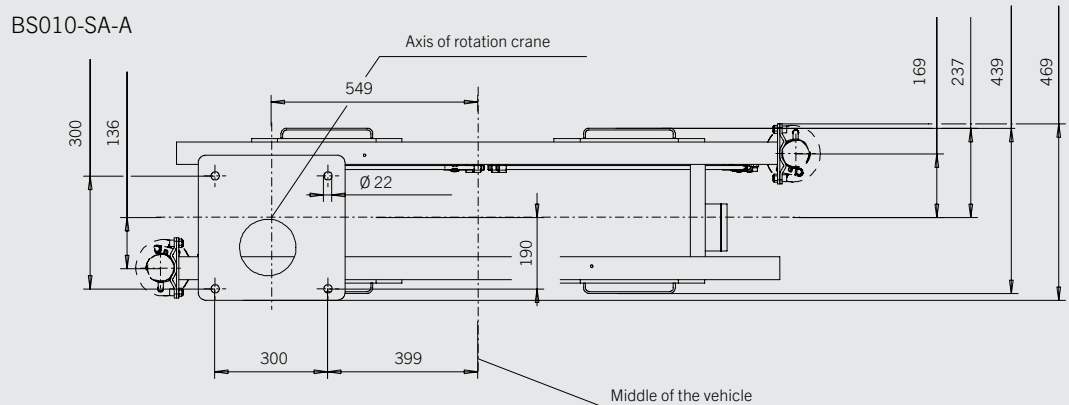
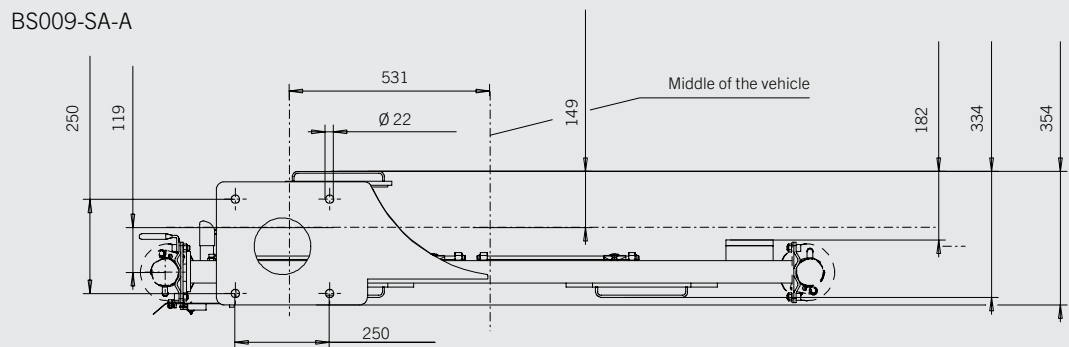
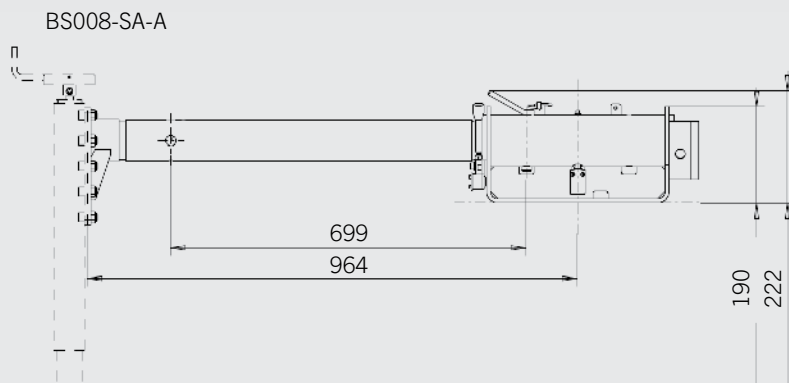
* in order to meet the requirements of the directive EN12999, the options AUSVW, ISC-S (with the exception of BS008-SA-A and BS009-SA-A for PC 1500) and STZH for BS008-SA-A as well as the specification of the electronics are obligatory

MOUNTING FRAMES FOR PC 1500, PC 2700 AND PC 3800

TECHNICAL SPECIFICATIONS

Type	R (mm)	Self weight (kg)	R0 (mm)	Self weight (kg)	R1 (mm)	Self weight (kg)
BS008-SA-A	–	–	964	60	–	–
BS009-SA-A	1710	70	2711	70	–	–
BS010-SA-A	1688	105	2952	135	4216	164

TECHNICAL DRAWING



VERSIONS OF THE STABILIZER RAMS

- » **STZS5:** Hydraulic rigid stabilizer rams
- » **STÜ07:** 200 mm elongation with rigid stabilizer rams
- » **STZY5:** 60° manually tiltable stabilizer rams
- » **STÜ06:** 160 mm elongation with tiltable stabilizer rams

TECHNICAL SPECIFICATIONS

Type	STZS5	STZY5	STÜ06 STÜ07	CE	Length of ram (mm)	Lift (mm)	Self weight (kg)
KSZ00216A+STD	•		•		792	520	39
KSZ00216A+CE	•		•	•	792	520	39
KSZ00217A+STD		•	•		809	440	30
KSZ00217A+CE		•	•	•	809	440	30
KSZ00218A+STD	•				593	320	27
KSZ00218A+CE	•			•	593	320	27
KSZ00219A+STD		•			650	280	42
KSZ00219A+CE		•		•	650	280	42
BS253		manual, not CE conform			1105	562.5	14
KSZ00269A+STD*	•		•		779	520	22
KSZ00269A+CE*	•		•	•	779	520	22
KSZ00271A+STD*	•				579	320	18
KSZ00271A+CE*	•			•	579	320	18

* scope of delivery 1 piece

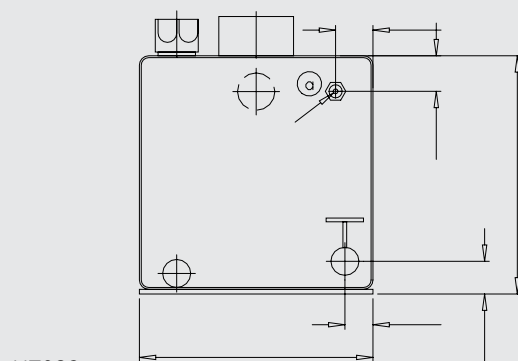
TECHNICAL SPECIFICATIONS



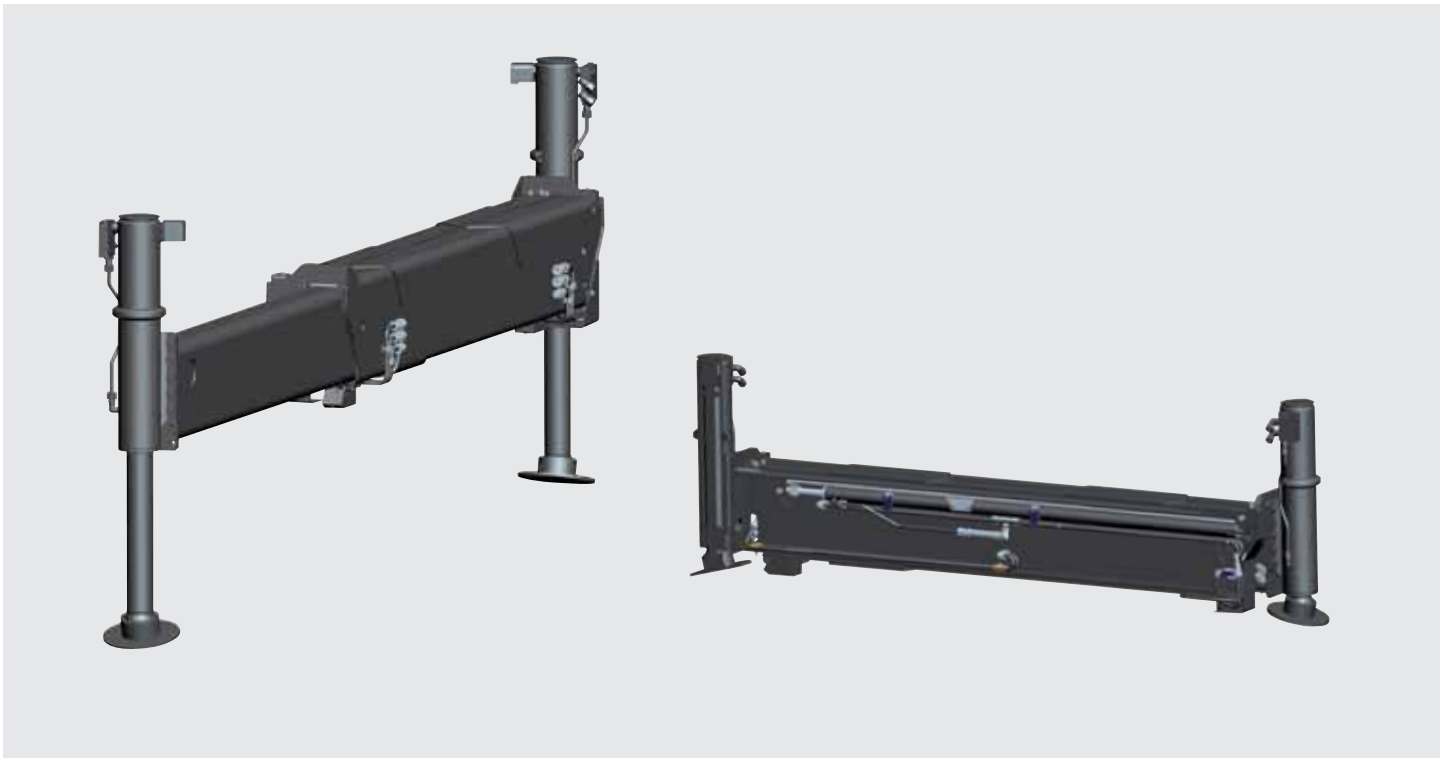
ACCESSORIES

Type	Description	Self weight (kg)
UT032	Oil tank 20 l	10
KTK017-BA	Oil tank 45 l	24
UZ325	Mounting parts for BS009-SA-A	27
UZ336S	Mounting parts for BS010-SA-A	43
EP 209/12V	Gear pump with magnetic coupling 12 V	12
EP 209/24V	Gear pump with magnetic coupling 24 V	12
EP1980B	Hydraulic aggregate 12 V, 1.5 kW	18.7
EP1981B	Hydraulic aggregate 24 V, 1.5 kW	18.7
EP1983B	Hydraulic aggregate 12 V, 3 kW	24.5
EP1984B	Hydraulic aggregate 24 V, 3 kW	24.5

TECHNICAL DRAWING



ADDITIONAL STABILIZERS



- A variety of improvements make the stabilizers an ideal accessory in combination with a PALFINGER crane
- An optimum power to weight ratio due to the finite elements calculation and the use of high quality steel increases the possible pay load and minimises the fuel consumption
- The improved mounting possibility as well as an included terminal box saves assembly times and facilitates installation
- Up to 50% improved support moment
- Protected hoses and cables due to the inside mounting
- Maintenance-free outrigger system
- Integrated return oil utilisation
- High quality KTL coating prevents corrosion
- It is possible to adjust the support height of the stabiliser ram by up to 100 mm
- All the stabilizer rams, fitted with 10° tiltable stabilizer pads, conform to EN12999:2010
- The stabilizer pads adapt optimally to the respective incline of the subsoil
- The following versions are available:
 - » STZS: Stabilizer ram rigid
 - » STZY: Stabilizer ram 180° hydraulically tiltable
 - » STZY3: Stabilizer ram +/- 55° manually tiltable

OPTIONS FOR ADDITIONAL STABILIZERS

Code	Description	BS001-SA-A	BS002-SA-A	BS002-SA-M	BS003-SA-A	BS004-SA-A	BS005-SA-A	BS006-SA-A	BS007-SA-A	BS1003A	BS1242A-1
AUSW / AUSVW *	A limiting switch monitors the fully retracted position of the outrigger. The completely retracted position is indicated by an optical and acoustical signal in the driver's cab (transport position monitoring).		•	•	•	•	•	•	•	•	•
HPSC*	High Performance Stability Control: Depending on the stabilizer and the PALTRONIC (50 / 150) the optimum stability will be recognised by means of wire-actuated encoders or magnetostrictive. Stability is calculated by means of a complex algorithm, supported by proportional sensors, it enables variable positioning. The stability of the vehicle is monitored in a full 360° range.	•	•	•	•	•	•	•	•	•	•
PAL50 / PAL150 *	If you have selected HPSC you have to indicate the type of PALTRONIC on the crane. ATTENTION: the two systems are not interchangeable.				•	•	•	•	•	•	•
ABSTW	Monitors the fully retracted position of the outrigger and the stabilizer ram. The completely retracted position is indicated by an optical and acoustical signal in the driver's cab (transport position monitoring).	•	•	•	•	•	•	•	•	•	•
BEL	LED- warning light on the stabilizer rams for better visibility of the stabilizer ram position and more safety for the crane operator and pedestrians.	•	•	•	•	•	•	•	•	•	•
12V / 24V *	If one of the previous features is selected, the voltage has to be indicated.	•	•	•	•	•	•	•	•	•	•
ADECK *	Additional covering of the outrigger box mounted on both sides to protect the hoses and the electrical wires in the outrigger (included on HPSC at BS1003A and BS1242A-1).				•	•	•	•	•		
JIC	The standard fittings are metric 24°olive tube fittings, the possibility of 37° flare type fitting (JIC) is optional.		•	•	•	•	•	•	•		
RAL	Standard colour of the outrigger is black (KTL painted); optionally, we can deliver the outrigger in a requested colour (RAL). Please note that a colour will extend the delivery time by min. 10 working days.	•	•	•	•	•	•	•	•	•	•
KRANK	Similar to the crane we can deliver the stabilizer system with a washable protection coat.	•	•	•	•	•	•	•	•	•	•
EKAT	A printed spare parts catalogue can be ordered.	•	•	•	•	•	•	•			

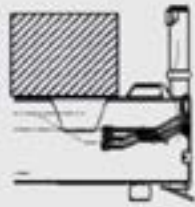
* To fulfil the norm EN12999:2010 the options HPSC with the indication of the PALTRONIC, AUSW, ADECK (with the exception of BS001-SA-A, BS002-SA-A, BS002-SA-M) as well as the specified electronics are obligatory

ADDITIONAL STABILIZERS

X
= Mounting above the vehicle frame



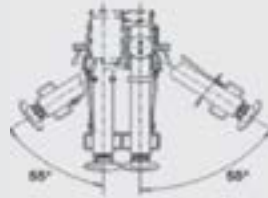
Y
= Mounting below the vehicle frame



STZS
= Rigid stabilizer ram



STZY3
= +/- 55°
Manually tiltable stabilizer ram



STZY
= 180°
Hydraulically tiltable stabilizer ram



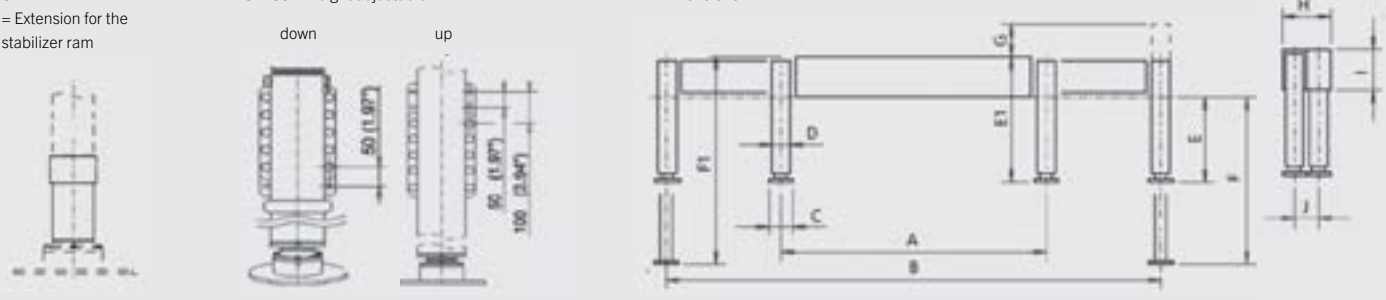
TECHNICAL SPECIFICATIONS

Type	F max. (kN)	Outrigger	Support width B (mm)	X	Y	Stabilizer ram	Stabilizer ram (JIC)	Self weight (kg)		STZS	STZY3 (manual)	STZY (hydr.)	
								1 pcs.	Total				
BS001-SA-A	90	rigid	2100* 2200* 2300*	•		KSZ00233A	KSZ00237A	95	185	short			
						KSZ00234A	KSZ00238A	110	200	long			
						KSZ00243A	KSZ00244A	125	215		•		
						•	KSZ00235A	KSZ00239A	87	177	short		
						•	KSZ00236A	KSZ00240A	95	185	long		
BS002-SA-A	90	hydr.	3400	•		KSZ00233A	KSZ00237A	95	275	short			
						KSZ00234A	KSZ00238A	110	290	long			
						KSZ00243A	KSZ00244A	125	305		•		
						•	KSZ00283A	-	153	333			•
						•	KSZ00235A	KSZ00239A	87	267	short		
•	KSZ00236A	KSZ00240A	95	275	long								
BS002-SA-M	90	manual	3400	•		KSZ00233A	KSZ00237A	95	250	short			
						KSZ00234A	KSZ00238A	110	265	long			
						KSZ00243A	KSZ00244A	125	280		•		
						•	KSZ00283A	-	153	333			•
						•	KSZ00235A	KSZ00239A	87	242	short		
•	KSZ00236A	KSZ00240A	95	250	long								
BS003-SA-A	120	hydr.	4403	•		KSZ00159A	KSZ00174A	124	490	short			
						KSZ00160A	KSZ00175A	144	510	long			
						KSZ00190A	KSZ00210A	148	514		•		
						KSZ00192B	KSZ00211B	172	538			•	
						•	KSZ00161A	KSZ00178A	112	479	short		
•	KSZ00162A	KSZ00180A	127	491	long								
BS004-SA-A	120	hydr.	5200	•		KSZ00159A	KSZ00174A	124	600	short			
						KSZ00160A	KSZ00176A	144	620	long			
						KSZ00190A	KSZ00210A	148	624		•		
						KSZ00192B	KSZ00211B	172	648			•	
BS005-SA-A	140	hydr.	5200	•		KSZ00161A	KSZ00178A	112	540	short			
						•	KSZ00162A	KSZ00180A	127	555	long		
BS006-SA-A	160	hydr.	5900	•		KSZ00167A	KSZ00182A	126	790	short			
						KSZ00168A	KSZ00184A	148	812	long			
						KSZ00193A	KSZ00212A	148	812		•		
						•	KSZ00194B	KSZ00213B	172	836			•
BS007-SA-A	160	hydr.	5900	•		KSZ00169A	KSZ00186A	115	720	short			
						•	KSZ00170A	KSZ00188A	130	735	long		
BS1003A	180	hydr.	7105	•		BS1284	-	160	1270				
						•	BS1285	-	180	1290	long		
						•	BS1321	-	160	1270	short		
BS1242A-1	210	hydr.	8500	•		BS1284	-	160	1840				
						•	BS1285	-	180	1860	long		
						•	BS1321	-	160	1840	short		

STT
= Extension for the
stabilizer ram

STZS3 = Height adjustable

Dimensions



STT	A (mm)	C (mm)	D (mm)	E/E1 (mm)	F/F1 (mm)	G (mm)	H (mm)	I (mm)	J (mm)	STZS3 Height adjustment		Previous model
										down	up	
• • • • •	2100* 2200* 2300*	230	107	E - 716	F - 1236	20	150	130	0		50	BS875
				E - 908	F - 1616	20					50	
				E - 854	F - 1374	20						
				E1 - 401	F1 - 851	380				50		
				E1 - 556	F1 - 1076	330				50		
• • • • •	2300	230	107	E - 686	F - 1206	20	150	180	0		50	BS1296A
				E - 878	F - 1586	20					50	
				E - 824	F - 1344	20						
				E1 - 401	F1 - 851	380				50		
				E1 - 556	F1 - 1076	330				50		
• • • • •	2300	230	107	E - 686	F - 1206	20	150	180	0		50	BS876C
				E - 878	F - 1586	20					50	
				E - 824	F - 1344	20						
				E1 - 401	F1 - 851	380				50		
				E1 - 556	F1 - 1076	330				50		
• • • • •	2323	230	127	E - 675	F - 1255	25	320	200	154		50	BS877A
				E - 874	F - 1629	25					50	
				E - 825	F - 1300	-						
				E - 881	F - 1411	-						
				E1 - 406	F1 - 876	374					50 / 100	
• • • •	2323	230	127	E - 675	F - 1255	25	320	200	154	50		BS877A
				E - 874	F - 1629	25					50	
				E - 825	F - 1300	-						
				E - 881	F - 1411	-						
• •	2323	230	127	E1 - 400	F1 - 870	374	250	335	119		50 / 100	BS877A
				E1 - 570	F1 - 1150	374					50 / 100	
• • • •	2323	230	127	E - 650	F - 1230	55	400	250	234	50		BS446A
				E - 849	F - 1604	55					50	
				E - 800	F - 1275	-						
				E - 856	F - 1386	-						
• •	2323	230	127	E1 - 400	F1 - 870	380	322	354	237		50 / 100	BS423A
				E1 - 570	F1 - 1150	330					50 / 100	
• • •	2106	300	146	E - 677	F - 1287	0	619	337	289			
				E1 - 412	F1 - 936	500						
				E1 - 373	F1 - 752	396						
• • •	2180	300	146	E - 669	F - 1279	0	703	440	340			
				E1 - 452	F1 - 976	459						
				E1 - 414	F1 - 793	355						

ADDITIONAL STABILIZERS

STT
= Extension of the
stabilizer ram



Type	Extension (mm)	Additional stabilizer
HXE9162	100	BS001-SA-A BS002-SA-A BS002-SA-M
HXE3230	200	BS001-SA-A BS002-SA-A BS002-SA-M
HXE7886	100	BS003-SA-A BS004-SA-A BS005-SA-A BS006-SA-A BS007-SA-A
HXE3507	200	BS003-SA-A BS004-SA-A BS005-SA-A BS006-SA-A BS007-SA-A

NOTE: After checking for restrictions, respectively approval of PALFINGER based on the current technical data sheets, the extensions are available as an accessory.

TECHNICAL SPECIFICATIONS

ADDITIONAL STABILIZERS

Type	Outrigger	Support width (mm)	Support force max. (kN)	Self weight (kg)	Stabilizer ram	Feature	A*	B**
BS085A***	Hydraulic, reinforced version	6100	170	950	Incl. height adjustable stabilizer ram	STZS	•	
BS086***	Hydraulic	6100	170	880	Incl. tiltable stabilizer ram	STZY	•	
BS1286***	Hydraulic	8600	200	1435	Incl. tiltable stabilizer ram	STZY	•	
BS1298***	Hydraulic	8600	200	1395	Incl. rigid stabilizer ram	STZS	•	

* mounting above the vehicle frame ** mounting below the vehicle frame *** the CE version is available only via the Tuning Center

STABILIZER RAMS

Type	Description	Lift (mm)	Self weight (kg)
BS1333***	1 pair of stabilizer rams STZS, B**	451	88
BS1334***	1 pair of stabilizer rams STZS, A*	416	88
BS1335***	1 pair of stabilizer rams STZS, A*	632	88

* mounting above the vehicle frame ** mounting below the vehicle frame *** for the rigid attachment to the vehicle frame with connectivity to HPSC

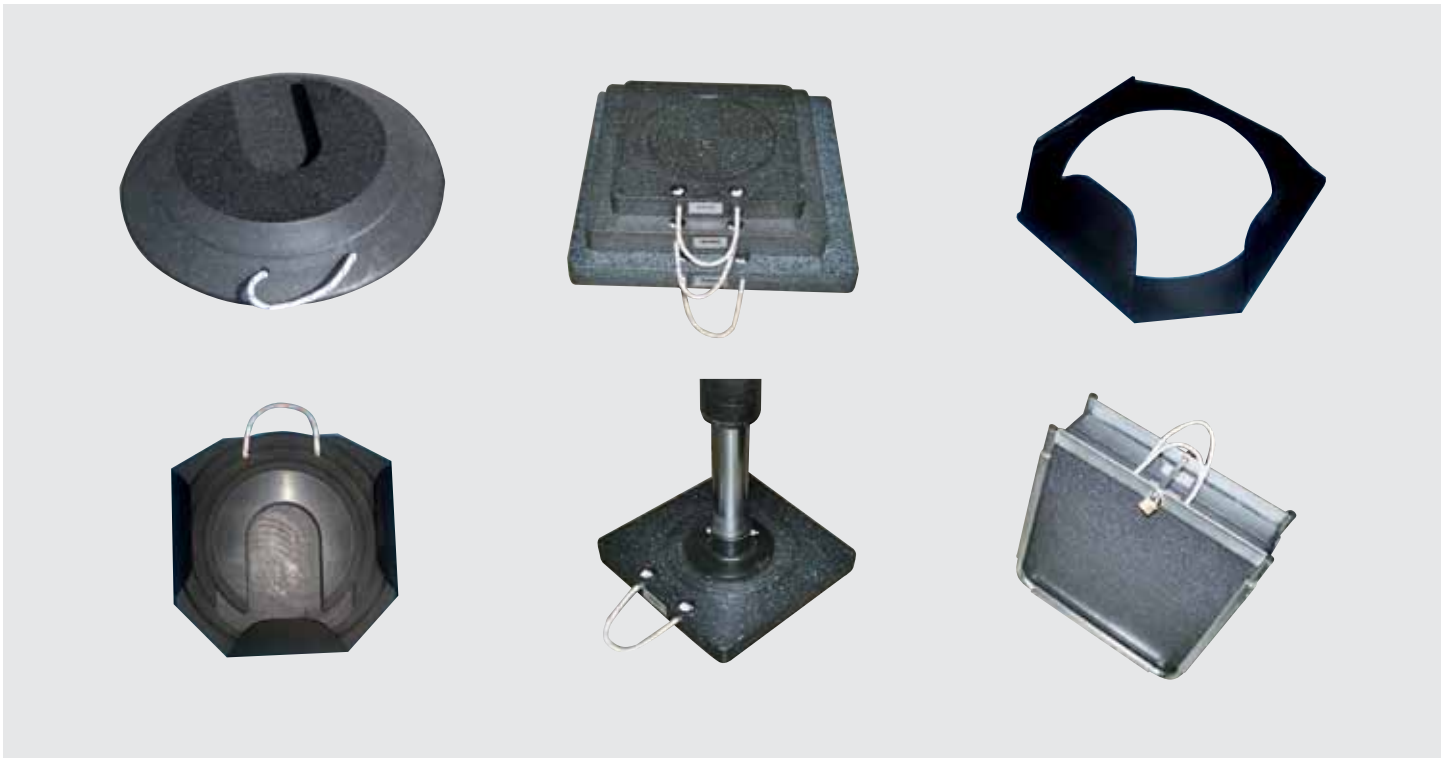
FRONT STABILIZER RAMS

Type	Description	Total length (mm)	Lift (mm)	Self weight (kg)
BS1322B	1 pc. of front stabilizer ram, incl. support control switch, max. 100 kN	728	450	50
BS1323B	1 pc. of front stabilizer ram, incl. support control switch, max. 150 kN	988	655	80
KSZ00284A	1 pc. of front stabilizer ram, incl. support control switch, max. 200 kN	780	450	79

CONTROL VALVES

Type	Description	For additional stabilizer
US1070	2-sections, for additional stabilizers without return oil utilisation	BS1003A, BS1242A-1
US891	4-sections, for additional stabilizers without return oil utilisation	BS1003A, BS1242A-1
KSC00012A	2-sections, for additional stabilizers with return oil utilisation	BS001-SA-A to BS007-SA-A, front stabilizer rams

ACCESSORIES



- The stabilizer pads can be pushed on the stabilizer elements and allow a comfortable handling when the stabilizer position of the vehicle has to be corrected
- Stabilizer plates used as an optimum bed for all stabilizers of small and big cranes as well as additional stabilizers
- Very resistant products such as Polyethylen, also ideal for heavy duty operations
- Easy and fast handling due to the carrying straps as well as the fastening possibilities on the truck
- Transport boxes and brackets for storing the stabilizer plates and easy fastening on the truck

Type	Description	Diameter / Height (mm)	Supporting force max. (t)	Self weight (kg)
EZ2261-400	Stabilizer pad basis made of PA6-plastic	400 x 80	12	5
EZ2261-500	Stabilizer pad basis made of PA6-plastic	500 x 80	16	7

Type	Description	Length / Width / Height (mm)	Supporting force max. (t)	Self weight (kg)
EZ2189-300	Stabilizer plate made of recycling plastic material	300 x 300 x 40	9	3.5
EZ2189-400	Stabilizer plate made of recycling plastic material	400 x 400 x 50	16	8
EZ2189-500	Stabilizer plate made of recycling plastic material	500 x 500 x 60	26	15
EZ2189-600	Stabilizer plate made of recycling plastic material	600 x 600 x 60	36	21
EZ2189-800	Stabilizer plate made of recycling plastic material	800 x 800 x 60	40	35

Type	Description	Suitable for	Self weight (kg)
EZ2262-400	Transport brackets for EZ2261-400 uncoated	1 plate	2.6
EZ2262-500	Transport brackets for EZ2261-500 uncoated	1 plate	3.2
EZ2263-400	Transport brackets for EZ2261-400 KTL-coated	1 plate	2.6
EZ2263-500	Transport brackets for EZ2261-500 KTL-coated	1 plate	3.2
EZ2190-300	Mounting box for EZ2189-300, lockable version, galvanised	2 plates	4.3
EZ2190-400	Mounting box for EZ2189-400, lockable version, galvanised	2 plates	6.3
EZ2190-500	Mounting box for EZ2189-500, lockable version, galvanised	2 plates	8.4
EZ2190-600	Mounting box for EZ2189-600, lockable version, galvanised	2 plates	10.4
EZ2190-800	Mounting box for EZ2189-800, lockable version, galvanised	2 plates	13
EZ2236-300	Mounting box for EZ2189-300, lockable version, galvanised	1 plate	8
EZ2236-400	Mounting box for EZ2189-400, lockable version, galvanised	1 plate	9
EZ2236-500	Mounting box for EZ2189-500, lockable version, galvanised	1 plate	11
EZ2236-600	Mounting box for EZ2189-600, lockable version, galvanised	1 plate	13

OTHER COMPONENTS



ACCESSORIES FOR HIGH STAND

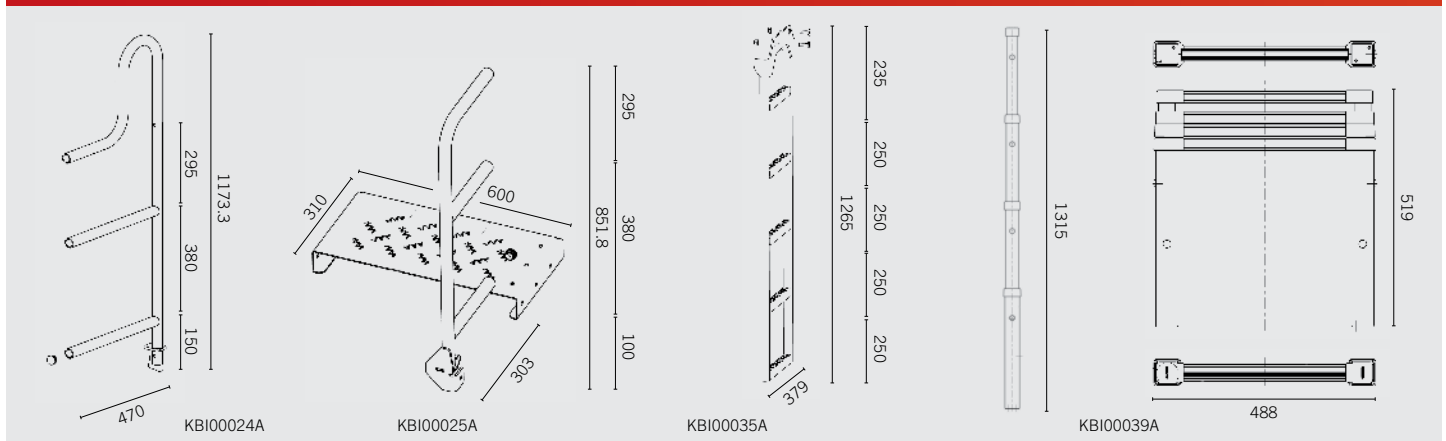


- Guard rails for modification to rear mounting
- To close a possible gap between the crane and the driver's cabin, the standing platform can be extended
- The standing platform and the railing can be individually adapted on-site
- A loose ladder is available for the new high stand, the assembling to the high stand will be done by the body builder using the actual construction situation
- Telescopic rails for easy access and optimum working protection

TECHNICAL SPECIFICATIONS

Type	Description	Self weight (kg)
KBI00024A	Railing	7.70
KBI00025A	Additional platform	15.60
KBI00035A	Access ladder	9.90
KBI00039A	Telescopic railing	4.42

TECHNICAL DRAWING



TOP SEAT COVER HEATED SEAT COVER

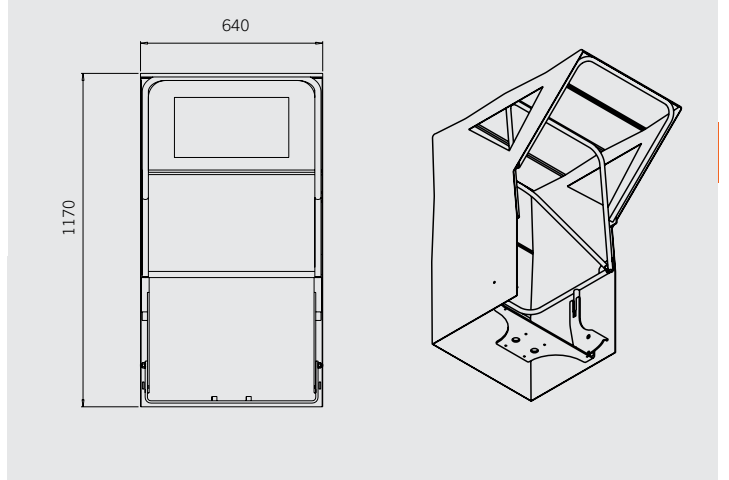


- The PALFINGER top seat cover protects against bad weather, wind or great heat and minimises down times for weather related reasons
- The top seat cover can be folded up with only one hand movement
- Subsequent mounting is possible on almost every crane with a top seat (also from other manufacturers)
- The seat cover is easy to put on, connections take place by means of a Deutsch-Stecker
- The seams on the front are sealed with potting compound
- The seat cover includes a temperature control and a cable with a length of 450 mm
- The seat cover is suitable for seats EZ 525 and EZ1535

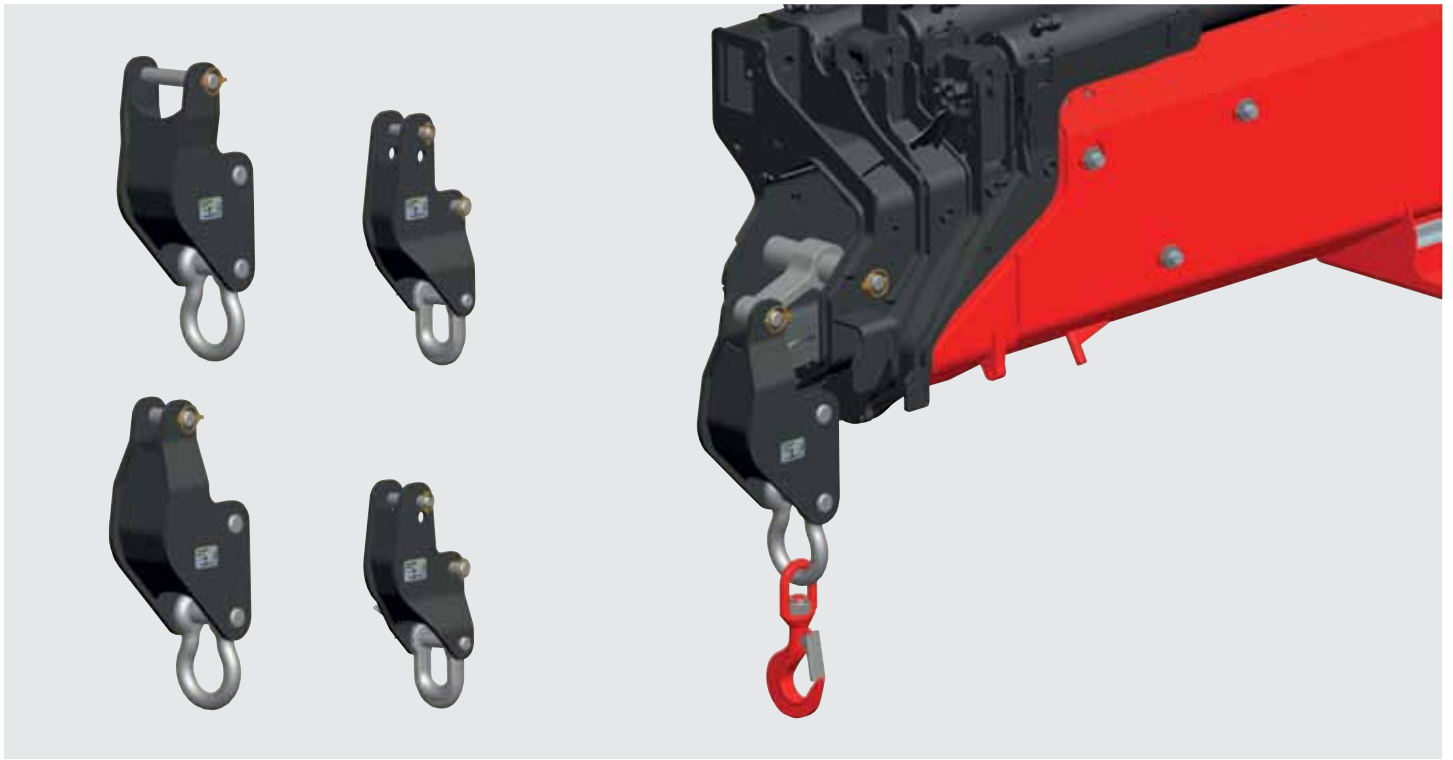
TECHNICAL SPECIFICATIONS

Type	Description	Self weight (kg)
BZ207	Top seat cover	11
BZ457	Protecting sheet for BZ207	2.3
EZ4701-12V	Heated seat cover, 12 V, 60 Watt	
EZ4701-24V	Heated seat cover, 24 V, 60 Watt	

TECHNICAL DRAWING



SPECIAL LOAD ATTACHMENTS

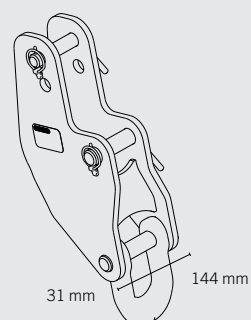
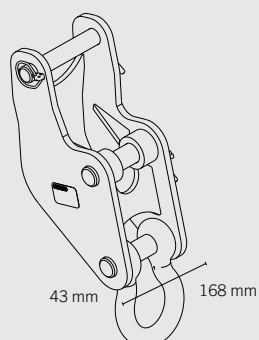


- Special load attachment suitable for a variety of cranes
- Trouble-free operation with the crane with any extension positions
- Simple mounting on the extension of the crane
- Protects the crane against damage
- A shackle is included in the delivery
- The special load attachments are permitted for the crane types listed on the following pages
- According to the needs and technical feasibility the versions of the special load attachment can be broadened

TECHNICAL SPECIFICATIONS

Type	Load capacity max. (kg)	Width below (mm)	Diameter of pin (mm)	Self weight (kg)
KMG03634A	15000	168	43	52.7
KMG03635A	15000	168	43	53.7
KMG03636A	15000	168	43	58.2
KMG03637A	15000	168	43	48.5
KMG03638A	15000	168	43	49
KMG03639A	15000	168	43	49.1
KMG03640A	8000	144	31	28.9
KMG03641A	8000	144	31	27.1
KMG03642A	8000	144	31	27.5
KMG03643A	8000	144	31	25.8
KMG03644A	15000	168	43	52.7
KMG03645A	15000	168	43	56.4
KMG03646A	8000	144	31	25.3
KMG03647A	8000	144	31	28.8
KMG03648A	8000	144	31	30.6
KMG03649A	15000	168	43	52.8
KMG03650A	8000	144	31	28.1
KMG03651A	8000	144	31	27.2
KMG03652A	15000	168	43	51.9
KMG03653A	15000	168	43	50
KMG03654A	15000	168	43	52.1
KMG03655A	15000	168	43	26.6
KMG03656A	8000	144	31	28.4
KMG03657A	8000	144	31	30.3
KMG03658A	8000	144	31	25.4
KMG03659A	8000	144	31	22.9
KMG03660A	8000	144	31	23.4
KMG03661A	8000	144	31	20.9
KMG03662A	8000	144	31	24.6
KMG03663A	8000	144	31	23.1
KMG03664A	8000	144	31	24.9
KMG03665A	15000	168	43	51.1
KMG03666A	15000	168	43	53.9

TECHNICAL DRAWING



SPECIAL LOAD ATTACHMENTS

OVERVIEW

Crane model	Extension A	Extension B	Extension C	Extension D	Extension E	Extension F	Extension G	Extension H
PK8501(K) / PK9001EH	KMG03659A	KMG03661A	KMG03661A	KMG03661A				
PK8002 / PK9002EH	KMG03659A	KMG03661A	KMG03661A	KMG03661A				
PK11001(K) / PK12001EH	KMG03659A	KMG03661A	KMG03661A	KMG03661A				
PK11002 / PK12002EH	KMG03659A	KMG03661A	KMG03661A	KMG03661A				
PK13001(K) / PK14001EH	KMG03664A	KMG03663A	KMG03660A	KMG03661A	KMG03661A			
PK13002 / PK14002EH	KMG03664A	KMG03663A	KMG03660A	KMG03661A	KMG03661A			
PK16001(K) / PK18001EH	KMG03664A	KMG03663A	KMG03660A	KMG03661A	KMG03661A			
PK16002 / PK18002EH	KMG03664A	KMG03663A	KMG03660A	KMG03661A	KMG03661A			
PK19502 / PK22002EH	KMG03664A	KMG03660A	KMG03660A	KMG03661A	KMG03661A			
PK20001(K) / PK23001EH	KMG03664A	KMG03660A	KMG03660A	KMG03661A	KMG03661A			
PK23002SH	KMG03664A	KMG03660A	KMG03660A	KMG03661A	KMG03661A			
PK23502 / PK26002EH	KMG03658A	KMG03657A	KMG03662A	KMG03660A	KMG03660A	KMG03661A	KMG03661A	
PK24001K / PK27001EH / PK27002SH	KMG03658A	KMG03657A	KMG03662A	KMG03660A	KMG03660A	KMG03661A	KMG03661A	
PK30002(K) / PK33002EH	KMG03658A	KMG03657A	KMG03662A	KMG03660A	KMG03660A	KMG03661A	KMG03661A	
PK34002SH	KMG03658A	KMG03657A	KMG03662A	KMG03660A	KMG03660A	KMG03661A	KMG03661A	
PK40002EH / PK42002SH	KMG03645A	KMG03653A	KMG03654A	KMG03656A	KMG03651A	KMG03655A	KMG03643A	
PK50000EH / PK53002SH	KMG03645A	KMG03653A	KMG03654A	KMG03656A	KMG03651A	KMG03655A	KMG03643A	
PK38502 / PK42502			KMG03654A	KMG03656A	KMG03651A			
PK56502 / PK62002EH / PK62002MH	KMG03645A	KMG03653A	KMG03654A	KMG03648A	KMG03647A			
PK60002			KMG03649A	KMG03648A	KMG03647A	KMG03641A	KMG03646A	
PK65002SH			KMG03649A	KMG03648A	KMG03647A	KMG03641A	KMG03646A	
PK74002			KMG03649A	KMG03648A	KMG03647A	KMG03641A	KMG03646A	
PK78002SH			KMG03649A	KMG03648A	KMG03647A	KMG03641A	KMG03646A	
PK85002			KMG03645A		KMG03644A	KMG03642A	KMG03641A	KMG03640A
PK100002			KMG03665A	KMG03666A		KMG03639A	KMG03638A	KMG03637A
PK150002					KMG03636A		KMG03635A	KMG03634A
PJ170					KMG03643A + KLG006-BA			
PJ060B		KMG03661A						

PERFECT TOOL STRONG ARGUMENTS

06 HIGHLIGHTS



DEVELOPMENT
RELIABLE AND SUCCESSFUL

Interest is focused on topics like ergonomics, functionality, weight and material optimisation.



SALES AND PROJECT ENGINEERING
COMPETENCE

Experienced sales experts advise and support you when selecting a product and the configuration so that the solution matches your application conditions exactly.



PRODUCTION TECHNOLOGY
LATEST TECHNOLOGIES

The cornerstone for quality is laid in the production. In the field of steel processing and machining, PALFINGER has the latest cutting-, edging- and welding technologies at its production sites.



QUALITY MANAGEMENT
INTERNAL AND EXTERNAL AUDITING

Our certified quality management system is compliant with ISO 9001 and ensures processreliable production and the high quality of our products.



SERVICE AND TECHNICAL SUPPORT
MORE EFFICIENCY IN USE

PALFINGER provides an extensive service network. The highly trained personnel of our service partners and licensed workshops provide help quickly.



SPARE PARTS SUPPLY
HIGHEST AVAILABILITY

Several spare parts centres worldwide guarantee a seamless supply of spare parts. All original spare parts are tested and comply with the PALFINGER quality standard.

LIFETIME EXCELLENCE

THE **PALFINGER EQUIPMENT CENTER** OFFERS AN EXTENSIVE RANGE OF ATTACHMENTS – EQUIPPED WITH THE APPROPRIATE ATTACHMENT, THE CRANE BECOMES A **MULTI-FUNCTIONAL MACHINE** AND WORKS **COST-EFFECTIVELY**

BETTER
SOLUTIONS

BETTER
EFFICIENCY

BETTER
ERGONOMICS

HIGHER VALUE
RETENTION



HIGHER
AVAILABILITY

HIGHER
SERVICEABILITY

BETTER
ECOLOGY

MORE
RELIABILITY

For further information please visit: www.palfinger.com/thebrand