

# stabau

# PRICE LIST

PRODUCT OVERVIEW  
09/2025



FORKLIFT ATTACHMENTS  
AND SPECIAL SOLUTIONS



[stabau.com](https://www.stabau.com)

**stabau**   
we create new levels

**stabau** 

# **High quality standards – made in Germany.**

**SERIES AND SPECIAL SOLUTIONS  
FOR ATTACHMENTS AND  
STATIONARY EQUIPMENT**

# stabau PRICE LIST

**PRODUCT OVERVIEW**  
**09/2025**

This price list 09/2025 replaces all previous versions. With the publication of a new price list, this version will lose its validity. Information on this subject can be found on [www.stabau.com](http://www.stabau.com).

**stabau** 



Through pioneering spirit, experience and innovative strength, we continually bring functionality and quality to a new level.

We create both standard and bespoke solutions for forklift attachments – from simple to complex and go beyond the limits of what is currently feasible.

We also supply stationary equipment, covering everything from planning to the implementation of a well-thought-out safety concept, all from a single source.

Our products are developed, designed and manufactured exclusively in Germany – with an exceptional level of vertical integration and variety. First-class quality, comprehensive service and durable products come as standard.

Our attachments continually set the bar in efficient material handling. Our ambition is to not only meet our customers' expectations but to exceed them.



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# We prioritise innovation and are pioneers by nature

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## WE TAKE PRIDE IN THE DURABILITY OF OUR PRODUCTS AND PARTNERSHIPS

Thanks to our many years of expertise and the trust that our customers place in us, we guarantee the quality and reliability of our products. These enduring relationships make us proud and form the foundation of our shared success.



## OUR COMMITMENT TO GUARANTEE

- Comprehensive customer advice and solution development provided by skilled employees
- Conscientious and flexible handling of individual client requests
- Ensuring quality and reliability throughout the entire stabau team
- Transparent and straightforward presentation of our services and prices



# Strong together in an international alliance.

## MEMBER OF HUBTEX GROUP

As part of the HUBTEX Group, we are part of a strong network with extensive expertise and specialist knowledge, which supplies customers all over the world with outstanding products and customised solutions.

With a clear international vision, we aim to grow healthily and sustainably, always thinking and acting in a future-oriented and forward-looking manner.

**stabau**   
member of HUBTEX group

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# All-round service for our attachments

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## FOR US, SERVICE BEGINS LONG BEFORE THE DELIVERY OF THE ATTACHMENTS.

Solution-focused advice and skilled service is offered from the very first meeting, whether it involves standard attachments or special solutions. This high standard continues in the support we provide to our customers after the attachments have been delivered. Our experienced stabau team members also provide expertise and prompt assistance when managing your transportation tasks.



### OUR COMMITMENT TO SERVICE

- Comprehensive customer advice and solution development provided by skilled employees
- Conscientious and flexible handling of individual client requests
- The highest standards of quality and reliability throughout the entire stabau team
- Transparent and straightforward presentation of our services and prices

## RENTING ATTACHMENTS IN THE EXPECTED STABAU QUALITY STANDARDS

Short-term supply can bridge repair times, cover production peaks or solve one-off handling tasks. Our clients can rely on knowledgeable contacts for individual, application-specific advice.

### PRE-OWNED ATTACHMENTS

With our pre-owned attachments, you can still be sure that you are purchasing attachments of the highest stabau quality. We clean and thoroughly test the attachments for functionality. Where necessary, attachments are repainted and worn parts are replaced. We offer up to a 12-month warranty on pre-owned attachments.



# We guarantee quality

## WE IMPRESS WORLDWIDE WITH OUR 'MADE IN GERMANY' QUALITY PROMISE

All processes are subject to continuous process and quality monitoring in accordance with DIN EN ISO 9001:2015 and the welding quality requirements of DIN EN ISO 3834-2. Standard attachments are regularly redesigned, and new series are developed as part of ongoing product improvement.

stabau holds DIN EN ISO 14001:2015 certification, meeting globally recognised requirements for an effective environmental management system.

Due to our engineers' extensive experience, stabau has become the go-to name for special designs in the forklift truck industry.

In various industrial sectors, including the wood, beverage and metal industries, stabau attachments are often considered essential equipment.



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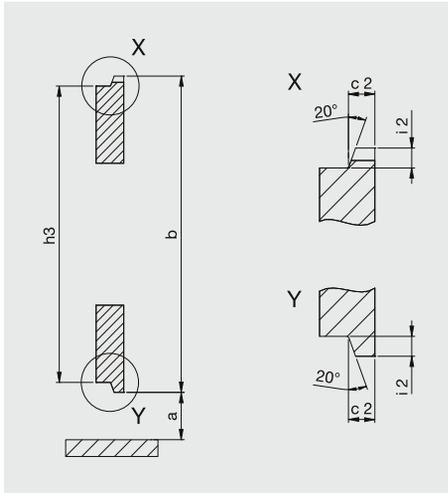
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## FORK CARRIAGE SPECIFICATIONS ACCORDING TO ISO 2328



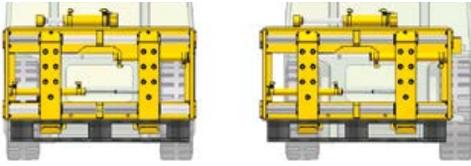
All attachments are designed for fork carriages as per ISO 2328. Deviating mounting specifications are special designs and are only available on request.

## FORK CARRIAGE DIMENSIONS

Class	Load capacity lift truck	LC	Type	a	b	c2	i2	h3
	kg			mm	mm	mm	mm	mm
1	up to 999	400	A	76	331	16	13	305
			B	114				
2	1000 - 2500	500	A	76	407	16	13	381
			B	152				
3	2501 - 4999	500	A	76	508	21.5	16	476
			B	203				
4	5000 - 8000	600	A	127	635	25.5	19	597
			B	254				
5	8001 - 10999	600	A	127	728	34	25	678
			B	257				

# SIDESHIFT

## SEPARATE SIDESHIFT (-S)



Sideshift is available in any fork or arm position at the respective size. By means of an additional cylinder, the mounted attachment is shifted to the right or to the left. These attachments have a greater lost load center and weight.

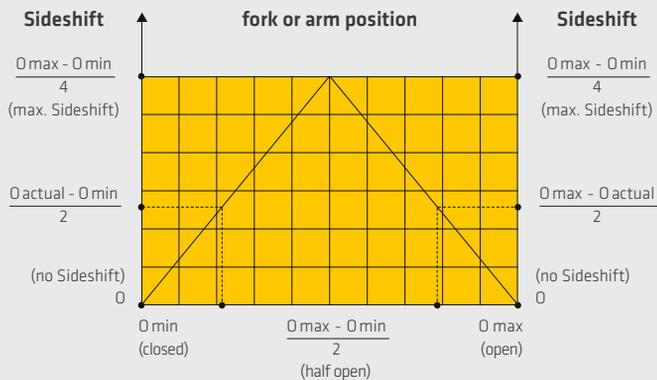
**Advantage:** Sideshifting is available in any fork or arm position.

## SIDESHIFT VALVE (-SV)



When using a sideshift valve, sideshifting is adjusted by means of the clamp's or the fork positioner's adjusting cylinders. In this case, there is no shifting in the end positions any more. When the arms or forks are in their central position, the fourth part of their adjusting/opening range is the possible sideshift to the right and to the left. The diagram below explains the size of the sideshift in the respective fork or arm position.

**Advantage:** No additional weight and lost load center.



### Example:

Attachment: S 11-ZV 30-SV  
Opening Range: 400 - 1,200 mm OKO

Max. sideshift with central position  
800 mm OKO:

$$\frac{O_{max} - O_{min}}{4} = \frac{1,200 \text{ mm} - 400 \text{ mm}}{4} = 200 \text{ mm}$$

Sideshift with fork distance 560 mm OKO  
(Lengthwise handling of Euro pallets):

$$\frac{O_{actual} - O_{min}}{2} = \frac{560 \text{ mm} - 400 \text{ mm}}{2} = 80 \text{ mm}$$

## SOLENOID VALVE

The solenoid valve redirects the oil flow into one or the other function. In general, this feature is used for attachments with three functions. Each of the first two functions is controlled by the control valve, the third function by the solenoid valve. The combination of the solenoid valve with a clamping function is not admissible. In the case of a sideshiftable, rotatable fork

clamp, for example, the clamping function will thus get its own control circuit. The second control circuit is connected to the solenoid valve so that either the rotation or the sideshift can be controlled. The lift truck must have a power lead for the supply of the solenoid valve. It is important that the coil of the solenoid valve has the same voltage as the forklift truck.

### ONLINE-CALCULATOR

Calculation of the Residual Load Capacity for Fork Lift Trucks in Combination with an Attachment  
[www.stabau.com/en-gb/info-center/downloads](http://www.stabau.com/en-gb/info-center/downloads)



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# Information

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## GENERAL TERMS AND CONDITIONS

Our General Terms and Conditions shall apply. These can be viewed on [www.stabau.com](http://www.stabau.com). We will also be happy to send them to you on request.

## ORDER DETAILS

For fast order processing, we need you to indicate model and type designation. Any deviations from the standard design must also be indicated. Likewise, we need all relevant lift truck details (lift truck model, mounting of fork carriage, type of lift mast, number of rollers for integral attachments if required). For spare part orders, please specify model, attachment number and year of manufacture (on name plate) or article numbers.

## WARRANTY

The warranty period for material and legal defects in stabau attachments and spare parts is 12 months or 1,800 operating hours. Exempt from this liability are wear parts, impact damage and damage due to improper use of the attachments.

## DIMENSIONS AND WEIGHTS

Dimensions, weights and pictures are approximate and non-binding and are subject to the commonly accepted tolerances. The technical data for modified positioning and opening ranges, arm lengths, etc. may be subject to change. The final weight, the center of gravity and the lost load center are indicated on the name plate. Within the scope of our continuous improvement measures we reserve the right to change specifications and designs without notice.

## RESIDUAL LOAD CAPACITIES

Details about residual load capacities of forklift trucks are always to be understood as reference values and without obligation. The binding calculation of the residual load capacity of the combination of a forklift truck and an attachment must be carried out by the manufacturer of the forklift truck.

## **HYDRAULIC PRESSURE AND VOLUME FLOW**

The majority of the attachments in this price list are operated hydraulically. The number of the necessary hydraulic functions is indicated with the respective model. To ensure proper functioning of the attachments, sufficient oil pressure and volume flow from the vehicle is necessary.

Please observe the values recommended on:  
[www.stabau.com/en-gb/info-center/downloads/](http://www.stabau.com/en-gb/info-center/downloads/)

Excessively high values can damage the attachment.

## **PAINTING**

By standard, all of our attachments are painted in the color RAL 7021 (dark gray).

## **ATTACHMENTS FOR EXPLOSIVE AREAS**



Customers have the option to have stabau attachments modified according to the ATEX directive 94/9/EC for the application in explosive areas. For further information, please contact our sales department indicating the attachment category or zone as well as the temperature class.

## **PRICES**

The prices indicated are ex works Meschede and do not include packing and transport insurance or statutory value-added tax; prices are subject to change without notice. In the case of integral attachments, the manufacture of side brackets is included in the price; roller studs and chain anchors have to be provided by the customer. Rollers are not included in the delivery.

**Forks** are the combining element between the load and forklift truck. They are the most stressed segments of an attachment and should thus meet the highest quality standard.

**On folding forks**, the fork blade can be folded up to the fork back manually or hydraulically. Very often such forks are used in locations with a limited amount of space, in lifts or similar applications.

**With hydraulic lifting forks**, additional lifting height can be achieved. In combination with a standard fork, hydraulic lifting forks are used for leveling. In this case, the hydraulic lifting fork is equipped with positive and negative lift in comparison to the standard fork. Hydraulic lifting forks are also available in combination with other attachments, such as telescopic forks and/or fork positioners.

**The manually adjustable fork extension** is a combination of a fork and a fork extension. The shoe can be manually locked in its final position.

**Fork extensions** are available as open-base extensions (open version) or as closed-base extensions (closed version). The fork length must be at least 60% of the length of the fork extension. Fork extensions are also available with a coating or in special designs.

# S1

## FORKS

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### FOLDING FORKS

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### HYDRAULIC LIFTING FORKS

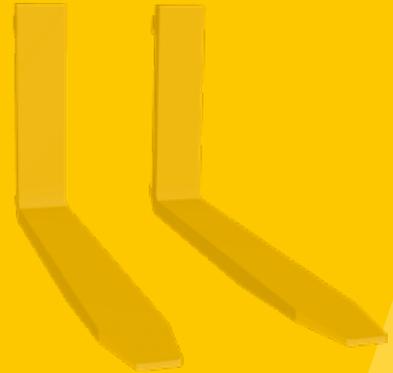
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### MANUALLY ADJUSTABLE FORK EXTENSIONS

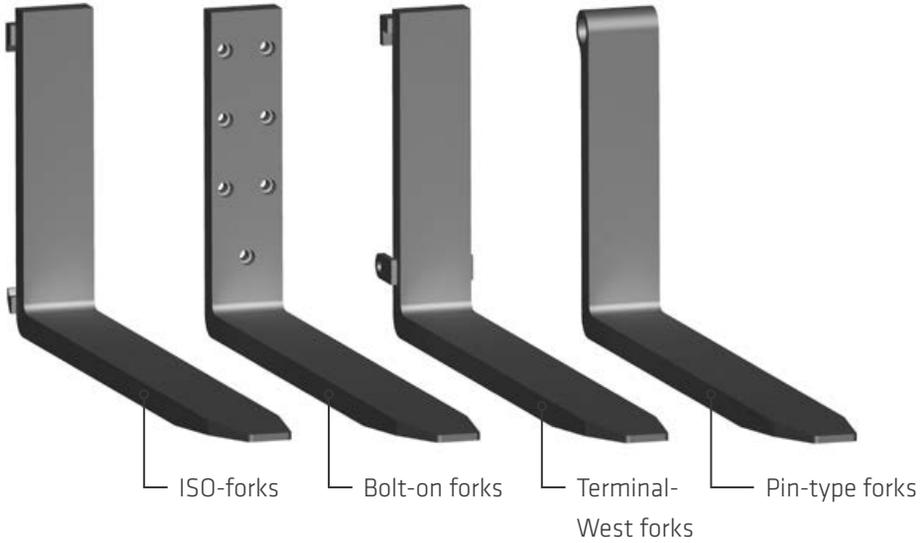
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### FORK EXTENSIONS

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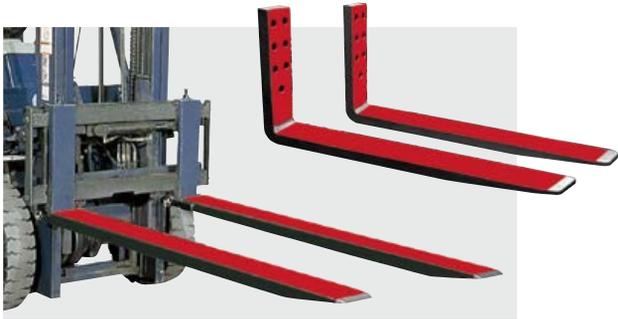


# FORKS



## FORK EXTENSIONS AND FORKS with polyurethane coating (5 mm)

are suited for the transportation of delicate goods – slip resistant and noise reducing. (On request)

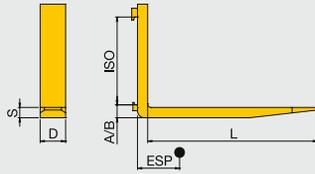


## COIL SHOES

for the transportation of sheet metal coils and wire coils. The coating prevents material damage and keeps the coils from slipping off. (On request)



## FORKS



Model	Load capacity / pair	LC (LSP)	ISO	L	Cross section D × S		CoG (ESP)	Weight per pair	Additional weight per pair per 100 mm add. length	Price per pair	Surcharge per pair per 100 mm add. length
	kg	mm		mm	mm	mm	mm	kg	kg	€	€
S 1-GZ 15	1500	500	2	1200	100	40	370	100	6.3		
S 1-GZ 20	2000	500	2	1200	120	40	370	120	7.5		
S 1-GZ 25	2500	500	2	1200	125	45	370	140	8.8		
S 1-GZ 30	3000	500	3	1200	140	50	350	180	11.0		
S 1-GZ 40	4000	500	3	1200	150	50	350	195	11.8		
S 1-GZ 48	5000	600	3	1200	150	60	350	235	14.1		
S 1-GZ 50	5000	600	4	1200	150	60	320	260	14.1		
S 1-GZ 60	6000	600	4	1200	150	65	320	280	15.3		
S 1-GZ 70	7000	600	4	1200	150	70	325	300	16.5		
S 1-GZ 70	7000	600	4	1200	200	60	320	345	18.9		
S 1-GZ 80	8000	600	4	1200	200	70	325	405	22.0		
S 1-GZ 120	12000	600	4	1200	200	80	330	460	25.1		

Surcharge for bolt-on forks

Surcharge for long tapered forks

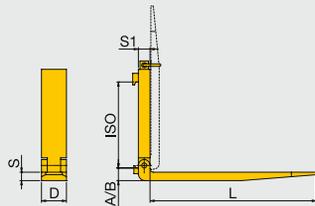
Surcharge for harbor fork design up to GZ 30

Surcharge for reinforced lower hooks (for rotators)

Surcharge for QD hooks on request.

Ex-protection forks available on request. 

## FOLDING FORKS



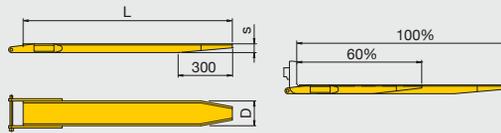
Model	Load capacity / pair	LC (LSP)	ISO	L	Cross section D × S / S 1		Weight per pair	Additional weight per pair per 100 mm add. length	Price per pair	Surcharge per pair per 100 mm add. length
	kg	mm		mm	mm	mm	kg	kg	€	€
S 1-KGZ 15	1500	500	2	1200	120	40/60	155	7.5		
S 1-KGZ 25	2500	500	2	1200	140	50/70	210	11.0		
S 1-KGZ 35	3500	500	3	1200	150	60/80	280	14.1		

Hydraulic folding forks available on request.

Folding forks with higher load capacity available on request.

## FORK EXTENSIONS

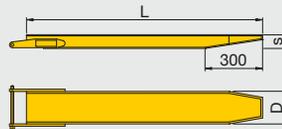
### OPEN-BASE EXTENSIONS



Model	Load capacity on lift truck	L	Max. fork cross section	D	S	Weight per pair at L = 1200 mm	Additional weight per pair per 100 mm add. length	Price per pair	Surcharge per pair per 100 mm add. length
	kg	mm	mm	mm	mm	kg	kg	€	€
S 1-CVU 15	1500	1200	120 × 40	146	46	31	2.6		
S 1-CVU 25	2500	1200	125 × 45	155	51	36	3.0		
S 1-CVU 30	3000	1200	140 × 50	170	56	41	3.4		
S 1-CVU 40	4000	1200	150 × 50	184	56	46	3.8		
S 1-CVU 50	5000	1200	150 × 65	190	71	62	5.2		

The fork length must be at least 60% of the length of the fork extension, the LC must be within the length of the forks.

### CLOSED-BASE EXTENSIONS

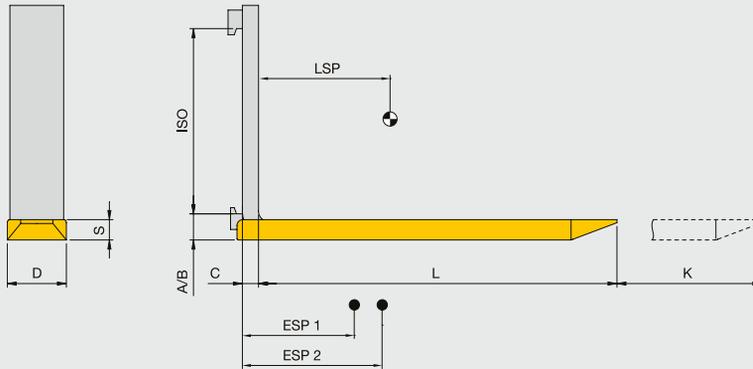


Model	Load capacity on lift truck	L	Max. fork cross section	D	S	Weight per pair at L = 1200 mm	Additional weight per pair per 100 mm add. length	Price per pair	Surcharge per pair per 100 mm add. length
	kg	mm	mm	mm	mm	kg	kg	€	€
S 1-CVK 15	1500	1200	120 × 40	146	62	48	4.0		
S 1-CVK 25	2500	1200	125 × 45	155	67	58	4.8		
S 1-CVK 30	3000	1200	140 × 50	170	72	62	5.2		
S 1-CVK 40	4000	1200	150 × 50	184	72	70	5.8		
S 1-CVK 50	5000	1200	150 × 65	190	87	91	7.6		
S 1-CVK 60	6000	1200	150 × 70	190	96	103	8.6		
S 1-CVK 80	8000	1200	200 × 70	255	96	137	11.4		
S 1-CVK 100	10000	1200	200 × 80	265	106	166	13.8		
S 1-CVK 120	12000	1200	250 × 80	315	106	180	15.0		

The fork length must be at least 60% of the length of the fork extension. If the fork length is shorter, a special construction can be offered subject to an examination of the load conditions. Please indicate fork cross section and length when ordering.

Ex-protection version on request.   
Higher load capacities on request.

# MANUALLY ADJUSTABLE FORK EXTENSIONS



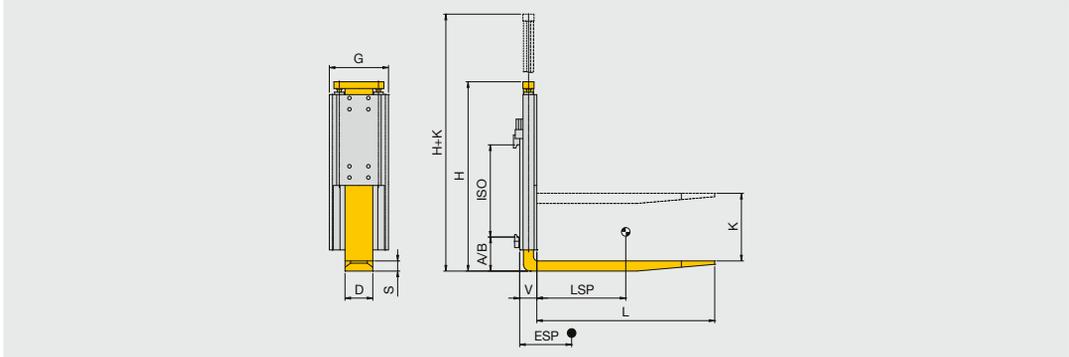
Model	Load capacity / pair	LC (LSP)	ISO	Cross section *		L	K	C	CoG (ESP 1)	CoG (ESP 2)	Weight per pair	Price per pair	
				mm	mm								
S 1-MVG 16	800/400	1600	500	2	115	50	800	400	35	255	340	95	
S 1-MVG 16	1000/600	1600	500	2	115	50	1000	600	35	340	485	110	
S 1-MVG 16	1200/600	1600	500	2	115	50	1200	600	35	435	585	130	
S 1-MVG 16	1200/800	1600	500	2	115	50	1200	800	35	435	635	130	
S 1-MVG 25	800/400	2500	500	2	135	55	800	400	40	250	330	130	
S 1-MVG 25	1000/600	2500	500	2	135	55	1000	600	40	340	465	150	
S 1-MVG 25	1200/600	2500	500	2	135	55	1200	600	40	430	565	170	
S 1-MVG 25	1200/800	2500	500	2	135	55	1200	800	40	430	610	170	
S 1-MVG 25	1400/1000	2500	500	2	135	55	1400	1000	40	525	755	190	
S 1-MVG 35	800/400	3500	500	3	140	60	800	400	45	230	295	160	
S 1-MVG 35	1000/600	3500	500	3	140	60	1000	600	45	310	420	185	
S 1-MVG 35	1200/600	3500	500	3	140	60	1200	600	45	400	515	210	
S 1-MVG 35	1200/800	3500	500	3	140	60	1200	800	45	400	555	210	
S 1-MVG 35	1400/1000	3500	500	3	140	60	1400	1000	45	490	690	235	
S 1-MVG 45	1000/600	5000	500	3	165	65	1000	600	50	330	435	230	
S 1-MVG 45	1200/600	5000	500	3	165	65	1200	600	50	420	530	260	
S 1-MVG 45	1200/800	5000	500	3	165	65	1200	800	50	420	565	260	
S 1-MVG 45	1400/1000	5000	500	3	165	65	1400	1000	50	510	705	290	

\* Fork shoe reinforced in the rear area (10 mm wider/5 mm thicker)  
Surcharge for additional locking positions

Higher load capacities and lengths available on request.  
For hydraulically adjustable fork extensions see page 44

# HYDRAULIC LIFTING FORKS

## 1 HYDRAULIC FUNCTION

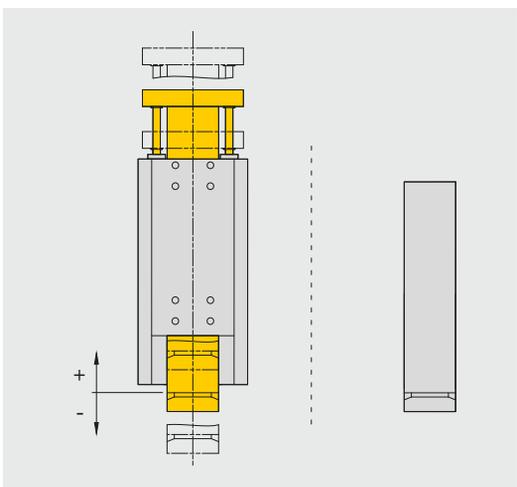


Model	Load capacity / pair	LC (LSP)	ISO	L	Cross section D x S			K	H	G	V	CoG (ESP)	Weight per pair	Price per pair	Surcharge per pair per 100 mm add. Length
	kg	mm			mm	mm	mm								
S 1-HGZ 15 200	1500	500	2	1200	100	45	200	820	240	80	200	245			
S 1-HGZ 15 300	1500	500	2	1200	100	45	300	840	240	80	190	260			
S 1-HGZ 15 500	1500	500	2	1200	100	45	500	1090	240	80	165	310			
S 1-HGZ 25 200	2500	500	2	1200	125	45	200	820	265	80	200	280			
S 1-HGZ 25 300	2500	500	2	1200	125	45	300	840	265	80	190	300			
S 1-HGZ 25 500	2500	500	2	1200	125	45	500	1090	265	80	170	370			

Also available with a fixed fork distance.  
 Different lifting heights and load capacities available on request.

## LEVELING FORKS NGZ

Model with one adjustable and one fixed fork is available on request.



**Carpet Poles.** Carpet poles with small diameters made of solid material are used for handling carpet rolls. Two different materials are processed here (42CrMo4 or 30CrNiMo8) in order to obtain equal load capacities with different diameters. When choosing a carpet pole, it should be kept in mind that the deflection will be greater if the carpet pole is made thinner.

We recommend a carpet pole length of 3000 mm for rolls of 4000 mm length. For rolls of 5000 m length, the carpet pole should be at least 3500 mm long.

As a special design, carpet poles are also available with pockets to be slipped onto forks.

**Coil Booms.** Coil booms are used for handling wire or steel coils, tubes or goods of a similar geometry. In general, coil booms are made of tube material. Depending on the load capacity, diameter and load, these attachments can also be made of solid material. Conical or square shapes are also possible.

There are several types of coating for the protection of the transported goods available.

# S 2

## CARPET POLES

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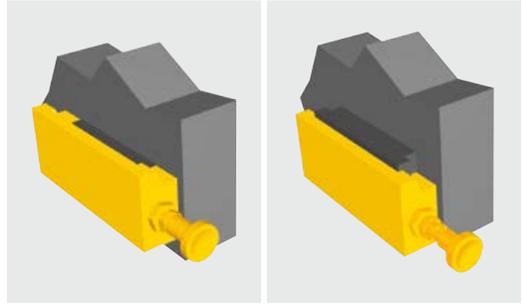
## COIL BOOMS

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## QUICK-COUPLING HOOKS

At a surcharge, we can also provide the lower hooks as QD hooks to enable quick mounting without the use of tools.



## CARPET POLES/COIL BOOMS, SLIP-ON TYPE

For an occasional transportation of rolls the conversion to boom handling is too time-consuming so that it is advisable to use a slip-on version.



## PROTECTIVE MODULES (SLIP-ON TYPE)

These modules provide optimal protection for delicate round loads. They are extremely wear resistant, highly slip resistant and easy to replace. Simply slide onto the existing boom and secure with the end cap.



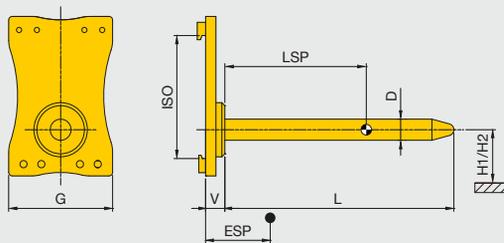
## COIL SHOES

The radius of the supporting surface is precisely adapted to the coil inner diameter; material damage is thus reliably prevented. Due to the high friction of the coating the coil rests securely, slipping off is almost impossible. The chamfered tip enters easily into the coil.



# CARPET POLES

## MATERIAL 42CrMo4



Model	Load capacity kg at ... mm LC (LSP)							D	G	H1/H2	ISO	V	CoG (ESP) at L = 2000 mm	Weight at L = 2000 mm	Additional weight per 100 mm add. length	Price up to length 2000 mm	Surcharge per 100 mm add. length
	500	1000	1250	1500	1750	2000	2500										
S 2-TD 010-50	500	250	200	165	140	125	100	50	350	170/250	2	60	405	80	1.5		
S 2-TD 015-55	700	350	280	230	200	175	140	55	350	170/250	2	60	450	85	1.9		
S 2-TD 020-60	950	475	380	315	270	235	190	60	350	170/250	2	60	495	95	2.2		
S 2-TD 025-65	1250	625	500	415	355	310	250	65	350	170/250	2	65	505	110	2.6		
S 2-TD 030-70	1500	750	600	500	425	375	300	70	350	170/250	2	65	540	115	3.0		
S 2-TD 040-75	1900	950	760	630	540	475	380	75	350	170/250	2	65	570	125	3.5		
S 2-TD 050-80	2400	1200	960	800	680	600	500	80	400	170/250	2	80	525	160	3.9		
S 2-TD 055-85	2750	1375	1100	915	785	685	550	85	400	170/250	2	80	550	170	4.5		
S 2-TD 060-90	3000	1500	1200	1000	855	750	600	90	400	170/300 <sup>1</sup>	2/3	85	515	205	5.0		
S 2-TD 070-95	3600	1800	1440	1200	1030	900	720	95	400	170/300 <sup>1</sup>	2/3	85	540	215	5.6		
S 2-TD 085-100	4200	2100	1680	1400	1200	1050	840	100	400	170/300	3	95	530	245	6.2		
S 2-TD 105-110	5250	2625	2100	1750	1500	1310	1050	110	400	170/300	3	95	575	270	7.5		
S 2-TD 140-120	7000	3500	2800	2350	2000	1750	1400	120	500	300/430 <sup>2</sup>	3/4	105	500	370	8.9		

H1 applies to ISO A / H2 applies to ISO B

<sup>1)</sup> applies to ISO 3, in the case of ISO 2 170/250

<sup>2)</sup> applies to ISO 4, in the case of ISO 3 170/300

Pole lengths exceeding 4000 mm on request.

Surcharge for QD hooks

Surcharge for slip-on version (please indicate max. outer diameter)

Surcharge for the next larger mounting class

### Standard values for residual load capacity of lift trucks \*\*

Carpet Poles	S 2 -	TD 025 -65	TD 030 -70	TD 040 -75	TD 050 -80	TD 070 -95	TD 085 -100	TD 105 -110	TD 105 -110	TD 140 -120	TD 140 -120
Load capacity lift truck	kg	1000	1200	1500	2000	2500	3000	3500	4000	4500	5000/500
X*	mm	300	350	350	450	450	450	500	500	500	500
LC (LSP) = 2000 mm	kg	290	370	465	600	870	1000	1210	1310	1550	1750
LC (LSP) = 2500 mm	kg	220	285	360	500	700	800	970	1050	1240	1400

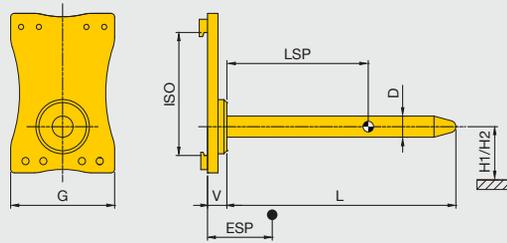
\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

For greater load centers, where the lift truck has a higher residual load capacity than the attachment, those values, upon the exceedance of which the attachment would be overloaded, are indicated in brackets ( ).

# CARPET POLES

## MATERIAL 30CrNiMo8



Model	Load capacity kg at ... mm LC (LSP)						D	G	H1/H2	ISO	V	CoG (ESP) at L = 2000 mm	Weight at L = 2000 mm	Additional weight per 100 mm add. length	Price up to length 2000 mm	Surcharge per 100 mm add. Length	
	500	1000	1250	1500	1750	2000											2500
S 2-TD 015-50	650	325	260	215	185	160	130	50	350	170/250	2	60	405	80	1.5		
S 2-TD 020-55	900	450	360	300	255	225	180	55	350	170/250	2	60	450	85	1.9		
S 2-TD 025-60	1200	600	480	400	340	300	240	60	350	170/250	2	60	495	95	2.2		
S 2-TD 030-65	1500	750	600	500	430	375	300	65	350	170/250	2	65	505	110	2.6		
S 2-TD 040-70	2000	1000	800	665	570	500	400	70	350	170/250	2	65	540	115	3.0		
S 2-TD 050-75	2450	1225	980	815	700	610	490	75	350	170/250	2	65	570	125	3.5		
S 2-TD 060-80	3000	1500	1200	1000	855	750	600	80	400	170/300 <sup>1</sup>	2/3	80	485	175	3.9		
S 2-TD 070-85	3600	1800	1440	1200	1025	900	720	85	400	170/300 <sup>1</sup>	2/3	80	510	185	4.5		
S 2-TD 085-90	4300	2150	1720	1435	1230	1075	860	90	400	170/250	3	85	515	205	5.0		
S 2-TD 100-95	5000	2500	2000	1665	1430	1250	1000	95	400	170/250	3	85	540	215	5.6		
S 2-TD 120-100	5500	2950	2360	1965	1685	1475	1180	100	400	170/300	3	95	530	245	6.2		
S 2-TD 140-110	7000	3500	2800	2330	2000	1750	1400	110	500	300/430 <sup>2</sup>	3/4	95	465	340	7.5		
S 2-TD 180-120	9000	4500	3600	3000	2570	2250	1800	120	500	300/430	4	105	500	370	8.9		

H1 applies to ISO A / H2 applies to ISO B

<sup>1</sup>) applies to ISO 3, in the case of ISO 2 170/250

<sup>2</sup>) applies to ISO 4, in the case of ISO 3 170/300

Pole lengths exceeding 4000 mm on request.

Surcharge for QD hooks

Surcharge for slip-on version (please indicate max. outer diameter)

Surcharge for the next larger mounting class

### Standard values for residual load capacity of lift trucks \*\*

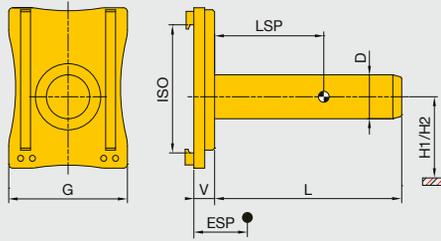
Carpet Poles	S 2 -	TD 025 -60	TD 030 -65	TD 040 -70	TD 060 -80	TD 070 -85	TD 085 -90	TD 110 -100	TD 120 -100	TD 140 -110	TD 140 -110	TD 180 -120
Load capacity lift truck	kg	1000	1200	1500	2000	2500	3000	3500	4000	4500	5000/500	5000
X*	mm	300	350	350	450	450	450	500	500	500	500	560
LC (LSP) = 2000 mm	kg	300	375	475	680	870	(1050)	1245	(1475)	1610	(1750)	2035
LC (LSP) = 2500 mm	kg	230	295	375	540	700	(860)	1005	(1180)	1300	(1400)	1650

\*\* The load capacity applies to lifting heights up to 3300 mm;

specifications for greater lifting heights on request.

\* Assumed dimensions

For greater load centers, where the lift truck has a higher residual load capacity than the attachment, those values, upon the exceedance of which the attachment would be overloaded, are indicated in brackets ( ).



Model	Load capacity kg at ... mm LC (LSP)				D	L	G	H1/H2	ISO	V	CoG (ESP)	Weight	Additional weight per 100 mm add. length	Price up to length 2000 mm	Surcharge per 100 mm add. length	
	500	600	800	1000												mm
S 2-D 15	1500	1300	1050	900	750	115	1000	450	190/265	2	60	160	95	2.1		
S 2-D 25	2500	2200	1850	1550	1350	155	1000	450	190/265	2	65	205	115	3.2		
S 2-D 30	3000	2600	2150	1850	1600	155	1000	450	190/320	3	75	190	140	3.6		
S 2-D 40	4000	3500	2950	2550	2200	180	1000	500	220/350	3	80	200	170	4.2		
S 2-D 48		5000	4100	3550	3100	195	1000	600	220/350	3	95	235	240	6.3		
S 2-D 50		5000	4100	3550	3100	195	1000	600	295/420	4	95	230	295	6.3		
S 2-D 60		6000	4850	4200	3700	220	1000	600	295/420	4	105	235	330	6.5		
S 2-D 70		7000	5800	5100	4500	220	1000	600	295/420	4	105	245	340	7.2		
S 2-D 80		8000	6600	5800	5100	220	1000	800	380	4	105	220	420	8.1		
S 2-D 100		10000	8350	7400	6600	245	1000	800	405	4	120	235	480	9.1		
S 2-D 120		12000	10050	8900	8000	245	1000	800	405	4	120	255	510	11.1		

H1 applies to ISO A / H2 applies to ISO B  
Higher load capacities on request.

Surcharge for QD hooks  
Surcharge for integral design see page 217

Surcharge for slip-on version on request.  
Surcharge for protective modules on request.

## Standard values for residual load capacity of lift trucks\*\*

Coil Boom	S 2 -	D 15	D 25	D 25	D 30	D 40	D 40	D 50	D 60	D 70	D 80	D 100	D 120
Load capacity lift truck	kg	1500	2000	2500	3000	3500	4000	5000	6000	7000	8000	10000	12000
X*	mm	350	450	450	450	500	500	560	560	650	650	750	800
LC (LSP) = 500 mm	kg	1460	1960	2450	2900	3390	3880						
LC (LSP) = 600 mm	kg	1300	1760	2210	2620	3070	3520	4830	5730	6800	7730	9640	11560
LC (LSP) = 800 mm	kg	1060	1460	1840	2190	2580	2960	4100	4870	5840	6640	8380	10090
LC (LSP) = 1000 mm	kg	890	1240	1570	1870	2220	2550	3540	4220	5100	5800	7390	8930
LC (LSP) = 1200 mm	kg							3110	3710	4510	5130	6600	7990
LC (LSP) = 1500 mm	kg							2600	3120	3820	4350	5650	6870

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

The additional weight of the poles/booms with the higher CoG is already taken into account in the residual load centres (effective length = 2 x LSP).

\* Assumed dimensions

# SPECIAL PRODUCTS



FOUR-BOOM HYDRAULIC POSITIONER



SINGLE BOOMS FOR FORK POSITIONERS



COIL BOOMS WITH TERMINAL-WEST MOUNTING



SQUARE BOOM WITH SEPARATE SIDESHIFT



SLIP-ON CARPET POLE



HYDRAULICALLY TELESCOPABLE BOOM

**Crane jibs** are designed for handling suspended loads. The telescopic version can be used for many different applications, even in locations with a limited amount of space.

In general, a crane jib is mounted directly onto the fork carriage; a version with QD hooks is available. Crane jibs with pockets to be slipped onto forks are quite popular. The telescopic version is also available with hydraulics.

# S 3

## CRANE JIBS

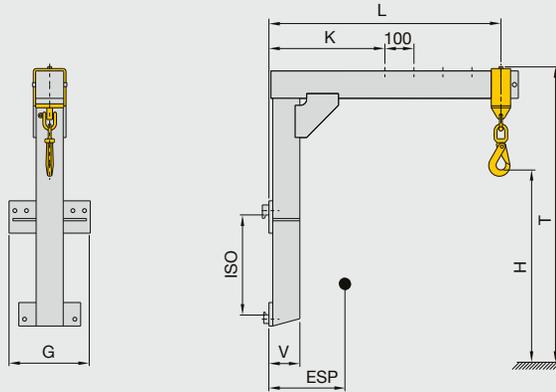
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# CRANE JIBS

## FIXED

S3



Model	Load capacity	LC (LSP)	L	H	T	ISO	K	G	V	CoG (ESP)	Weight	Additional weight per 100 mm add. jib length	Price	Surcharge per 100 mm add. jib length
	kg													
S 3-KR 15	1500	500	1200	1000	1460	2	500	440	130	315	115	2.5		
S 3-KR 25	2500	500	1200	1000	1565	2	500	440	160	355	155	4.0		
S 3-KR 40	4000	500	1200	1000	1640	3	500	540	190	345	225	5.7		
S 3-KR 48	5000	600	1200	1200	1870	3	600	600	210	350	255	6.4		
S 3-KR 60	6000	600	1200	1200	1940	4	600	650	210	330	300	6.4		
S 3-KR 80	8000	600	1200	1200	1970	4	600	700	230	345	330	7.2		
S 3-KR 100	10000	600	1200	1200	2055	4	600	850	250	345	415	9.0		

Surcharge for QD hooks

Greater hook height (H) on request.

Hook rotatable under load.

### Standard values for residual load capacity of lift trucks\*\*

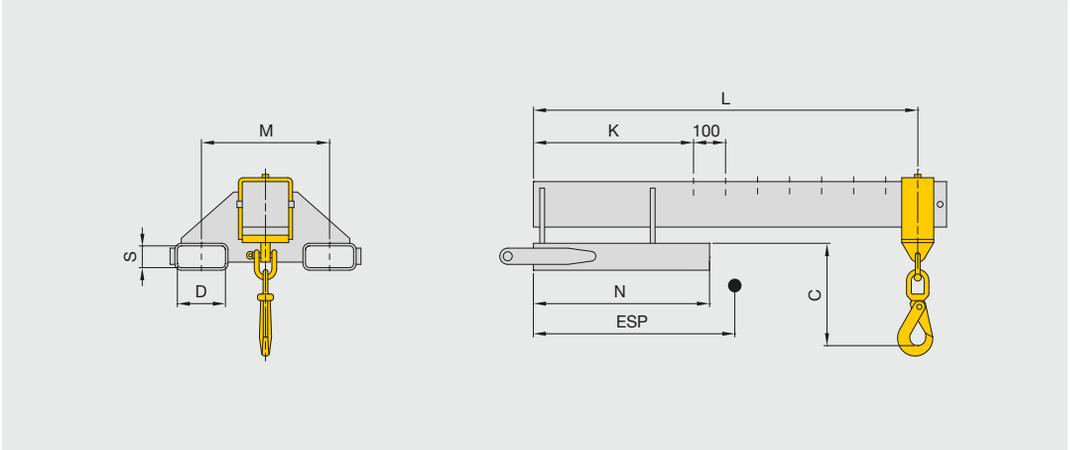
Crane jibs	S3 -	KR 15	KR 15	KR 25	KR 25	KR 40	KR 40	KR 40	KR 48	KR 48	KR 48/60	KR 60	KR 80	KR 80	KR 100
Load capacity lift truck	kg	1000	1500	2000	2500	3000	3500	4000	4500	5000/500	5000	6000	7000	8000	10000
X*	mm	300	350	450	450	450	500	500	500	500	560	560	650	650	750
LC (LSP) = 500 mm	kg	865	1320	1740	2190	2515	3010	3440							
LC (LSP) = 600 mm	kg	775	1200	1590	2000	2305	2760	3165	3490	3945	4380	5270	6190	7070	8830
LC (LSP) = 800 mm	kg	650	1000	1360	1710	1975	2380	2730	3015	3400	3800	4570	5420	6200	7820
LC (LSP) = 1000 mm	kg	555	865	1190	1490	1730	2090	2400	2650	2990	3360	4040	4820	5520	7000
LC (LSP) = 1200 mm	kg	485	760	1050	1320	1540	1860	2135	2370	2670	3010	3610	4340	4960	6350

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

# CRANE JIBS

## SLIP-ON TYPE



Model	Load capacity	LC (LSP)	L	C	K	N	M	Max. Fork cross section D x S*		CoG (ESP)	Weight	Add. weight per 100 mm jib length	Price	Surcharge per 100 mm add. jib length
								mm	mm					
S 3-KRSCH 15	1500	500	1200	250	500	800	445	125	50	510	110	2.5		
S 3-KRSCH 25	2500	500	1200	345	500	800	445	125	50	550	130	4.0		
S 3-KRSCH 40	4000	500	1200	380	500	800	470	150	70	555	170	5.7		
S 3-KRSCH 48	5000	600	1200	410	600	800	570	150	70	555	190	6.4		
S 3-KRSCH 60	6000	600	1200	480	600	800	570	150	70	570	195	6.4		
S 3-KRSCH 80	8000	600	1200	480	600	800	570	200	80	530	290	7.2		

**\* Important! Please indicate fork cross section (D x S) when ordering.**

Greater hook height on request.

Hook rotatable under load.

### Standard values for residual load capacity of lift trucks\*\*

Crane jibs	S 3 -	KRSCH 15	KRSCH 15	KRSCH 25	KRSCH 25	KRSCH 40	KRSCH 40	KRSCH 40	KRSCH 48	KRSCH 48	KRSCH 48/60	KRSCH 60	KRSCH 80	KRSCH 80
Load capacity lift truck	kg	1000	1500	2000	2500	3000	3500	4000	4500	5000/500	5000	6000	7000	8000
X*	mm	300	350	450	450	450	500	500	500	500	560	560	650	650
LC (LSP) = 500 mm	kg	890	1390	1865	2365	2820	3325	3825	4300	4800				
LC (LSP) = 600 mm	kg	790	1245	1690	2140	2560	3020	3475	3910	4365	4810	5810	6730	7730
LC (LSP) = 800 mm	kg	650	1030	1420	1800	2150	2560	2940	3310	3700	4110	4960	5800	6665
LC (LSP) = 1000 mm	kg	550	880	1225	1550	1850	2220	2550	2870	3200	3580	4320	5100	5855
LC (LSP) = 1200 mm	kg	480	765	1075	1365	1630	1960	2250	2530	2825	3170	3830	4550	5220

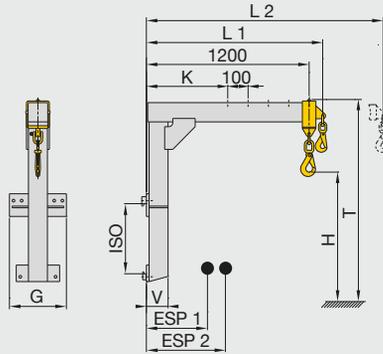
\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

# CRANE JIBS

## TELESCOPABLE

JIB LENGTH 1300 – 2200 mm (L1 – L2)



Model	Load capacity	LC (LSP)	H	T	ISO	K	G	V	CoG (ESP) 1	CoG (ESP) 2	Weight	Price manually	Surcharge hydraulically telescopic jib	Surcharge per 100 mm add. jib length	
														man.	hydr.
	kg	mm	mm	mm		mm	mm	mm	mm	mm	kg	€	€	€	€
S 3-KRT 15	1500	500	1000	1460	2	500	440	130	340	560	140				
S 3-KRT 25	2500	500	1000	1565	2	500	440	160	365	580	190				
S 3-KRT 40	4000	500	1000	1640	3	500	540	190	355	535	270				
S 3-KRT 48	5000	600	1200	1870	3	600	600	210	375	575	315				
S 3-KRT 60	6000	600	1200	1940	4	600	650	210	350	540	360				
S 3-KRT 80	8000	600	1200	1970	4	600	700	230	355	530	385				
S 3-KRT 100	10000	600	1200	2055	4	600	850	250	370	555	495				

Surcharge for QD hooks

Greater hook height (H) on request.

Hooks rotatable under load.

Telescopic under load on request.

### Standard values for residual load capacity of lift trucks \*\*

Crane jibs	S 3 -	KRT 15	KRT 15	KRT 25	KRT 25	KRT 40	KRT 40	KRT 40	KRT 48	KRT 48	KRT 48/60	KRT 60	KRT 80	KRT 80	KRT 100
Load capacity lift truck	kg	1000	1500	2000	2500	3000	3500	4000	4500	5000/500	5000	6000	7000	8000	10000
X*	mm	300	350	450	450	450	500	500	500	500	560	560	650	650	750
LC (LSP) = 500 mm	kg	845	1300	1715	2160	2480	2970	3410							
LC (LSP) = 600 mm	kg	760	1175	1570	1975	2275	2730	3135	3450	3900	4340	5220	6150	7030	8770
LC (LSP) = 900 mm	kg	580	915	1250	1570	1820	2200	2525	2785	3145	3530	4250	5070	5800	7330
LC (LSP) = 1200 mm	kg	475	750	1035	1305	1515	1840	2115	2340	2635	2980	3580	4310	4940	6300
LC (LSP) = 1300 mm	kg	445	705	980	1235	1435	1750	2005	2220	2500	2830	3410	4110	4700	6020
LC (LSP) = 1600 mm	kg	365	585	825	1045	1220	1490	1715	1900	2140	2430	2935	3570	4100	5270
LC (LSP) = 1900 mm	kg	320	510	725	920	1070	1315	1510	1675	1890	2150	2600	3180	3640	4720
LC (LSP) = 2200 mm	kg	280	450	650	820	960	1180	1350	1500	1690	1930	2330	2860	3270	4260

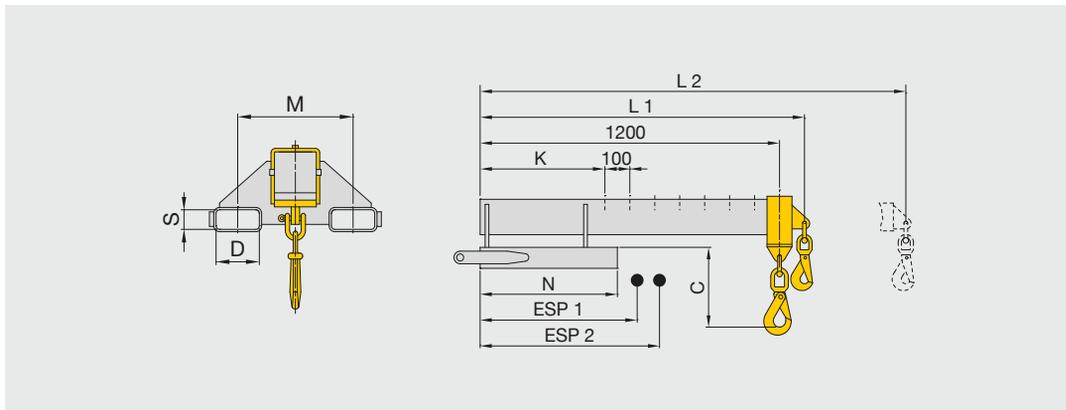
\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

# CRANE JIBS

## SLIP-ON, TELESCOPABLE TYPE

JIB LENGTH 1300 - 2200 mm (L1 - L2)



Model	Load capacity	LC (LSP)	C	K	N	M	Max. fork cross section D x S*		CoG (ESP) 1	CoG (ESP) 2	Weight	Price	Surcharge per 100 mm add. jib length
	kg						mm	mm					
S 3-KRSCHT 15	1500	500	250	500	800	445	125	50	500	725	135		
S 3-KRSCHT 25	2500	500	345	500	800	445	125	50	575	770	165		
S 3-KRSCHT 40	4000	500	380	500	800	470	150	70	530	755	215		
S 3-KRSCHT 48	5000	600	410	600	800	570	150	70	530	790	250		
S 3-KRSCHT 60	6000	600	480	600	800	570	150	70	535	805	255		
S 3-KRSCHT 80	8000	600	480	600	800	570	200	80	505	710	345		

\* Important! Please indicate fork cross section (D x S) when ordering.

Greater hook height on request.

Hooks rotatable under load.

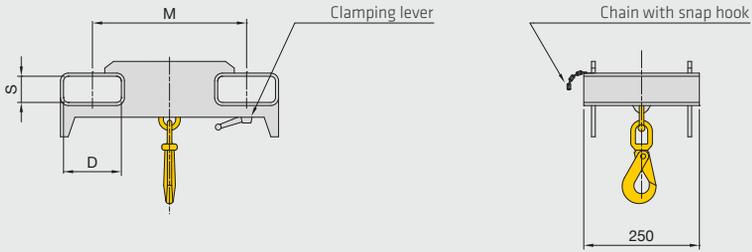
### Standard values for residual load capacity of lift trucks \*\*

Crane jibs	S 3 -	KRSCHT 15	KRSCHT 15	KRSCHT 25	KRSCHT 25	KRSCHT 40	KRSCHT 40	KRSCHT 40	KRSCHT 48	KRSCHT 48	KRSCHT 48/60	KRSCHT 60	KRSCHT 80	KRSCHT 80
Load capacity lift truck	kg	1000	1500	2000	2500	3000	3500	4000	4500	5000/500	5000	6000	7000	8000
X*	mm	300	350	450	450	450	500	500	500	500	560	560	650	650
LC (LSP) = 500 mm	kg	865	1365	1825	2325	2780	3280	3780	4245	4750				
LC (LSP) = 600 mm	kg	770	1225	1650	2105	2515	2985	3440	3860	4315	4760	5760	6685	7685
LC (LSP) = 900 mm	kg	580	930	1285	1635	1960	2345	2700	3030	3390	3785	4580	5390	6200
LC (LSP) = 1200 mm	kg	465	750	1050	1340	1600	1930	2225	2500	2790	3140	3800	4520	5190
LC (LSP) = 1300 mm	kg	435	705	990	1265	1510	1825	2100	2360	2640	2970	3600	4285	4930
LC (LSP) = 1600 mm	kg	350	580	830	1060	1265	1540	1780	1990	2230	2530	3065	3680	4240
LC (LSP) = 1900 mm	kg	305	505	725	925	1105	1350	1560	1745	1950	2220	2690	3250	3740
LC (LSP) = 2200 mm	kg	270	445	645	820	980	1200	1390	1550	1735	1980	2400	2910	3350

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

# CRANE HOOKS



Model	Load capacity	M	Max. fork cross section D x S*		Weight	Price
	kg		mm	mm	mm	kg
S 3-KT 15	1500	445	125	50	25	
S 3-KT 30	3000	470	150	70	40	
S 3-KT 50	5000	470	150	70	50	
S 3-KT 80	8000	470	200	80	70	

**\* Important! Please indicate fork cross section (D x S) when ordering.**

Consider load capacity or residual load capacity of the forklift in case of greater load center!

Hook rotatable under load



**CRANE JIBS  
OSCILLATING  
ON REQUEST**

**Bulk buckets** are used for handling and transporting bulk goods such as sand, grain, fertilizer, potatoes or similar goods. The goods may not be picked up below floor level.

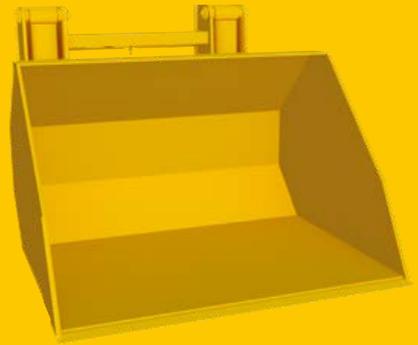
The bucket should always be wider than the lift truck in order to ensure smooth operation.

Bulk buckets are mounted directly onto the fork carriage; a version with QD hooks is available.

# S 4

## **BULK BUCKETS**

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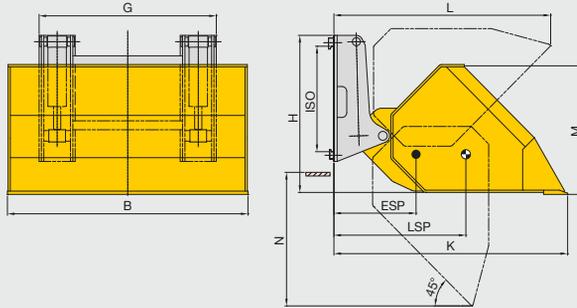


# BULK BUCKETS

1 HYDRAULIC FUNCTION

2-CYLINDER DESIGN (BULK WEIGHT MAX. 2500 KG/CBM)

S 4



Model	Vol*	ISO	B	G	K	L	M	N*	H	LC (LSP)	CoG (ESP)	Weight	Price
	cbm		mm	mm	mm	mm	mm	mm	mm	mm	mm	kg	€
S 4-SCH 0.8	0.8	2/3	1000	905	1625	1495	875	1010	980	900	530	490	
	0.8	2/3	1200	1105	1460	1375	795	895	980	820	475	485	
	0.8	2/3	1300	1105	1460	1375	795	895	980	820	485	500	
	0.8	2/3	1600	1105	1310	1270	720	790	980	755	450	495	
S 4-SCH 1.0	1.0	2/3	1200	1105	1625	1495	875	1015	980	900	540	525	
	1.0	2/3	1300	1105	1570	1455	845	975	980	870	525	525	
	1.0	2/3	1600	1105	1460	1375	795	895	980	820	505	535	
	1.0	2/3	1900	1105	1310	1270	715	790	980	750	470	525	
S 4-SCH 1.2	1.2	2/3	1300	1105	1700	1550	915	1070	980	935	580	555	
	1.2	2/3	1500	1105	1625	1495	875	1015	980	900	565	565	
	1.2	2/3	1800	1105	1460	1375	790	895	980	820	520	555	
S 4-SCH 1.5	1.5	2/3	1300	1105	1900	1690	1015	1215	980	1030	660	610	
	1.5	2/3	1500	1105	1765	1595	945	1115	980	965	620	600	
	1.5	2/3	1600	1105	1700	1550	915	1070	980	935	605	600	
	1.5	2/3	1800	1105	1625	1495	875	1015	980	900	585	605	

\* The volume specification refers to heaped filling, level filling × 0.8.

\*\* Dimension N applies to mounting class A, for mounting class B the dimension is reduced correspondingly.

Specific weights of bulk goods (kg/cbm)	
Sand, gravel (wet):	2000
Cement:	1800
Grain, legumes:	800
Bark mulch:	400
Concrete:	2200
Fertilizer:	1200
Potatoes, turnips:	750



Model	Vol*	ISO	B	G	K	L	M	N*	H	LC (LSP)	CoG (ESP)	Weight	Price
	cbm		mm	mm	mm	mm	mm	mm	mm	mm	mm	kg	€
S 4-SCH 1.6	1.6	2/3	1500	1105	1830	1640	980	1235	980	995	645	620	
	1.6	2/3	1600	1105	1765	1590	945	1115	980	965	630	615	
	1.6	2/3	1800	1105	1700	1550	915	1070	980	935	615	625	
S 4-SCH 1.8	1.8	2/3	1500	1105	1900	1690	1015	1200	980	1030	675	640	
	1.8	2/3	1800	1105	1765	1595	945	1115	980	965	630	640	
	1.8	2/3	2000	1105	1700	1550	915	1070	980	935	620	650	
S 4-SCH 2.0	2.0	3/4	1500	1105	2005	1760	1065	1280	980	1080	710	665	
	2.0	3/4	1800	1105	1830	1640	980	1160	980	995	660	660	
	2.0	3/4	1900	1105	1830	1640	980	1160	980	995	665	675	
	2.0	3/4	2000	1105	1765	1595	980	1115	980	965	645	670	
S 4-SCH 2.2	2.2	3/4	1800	1105	1905	1690	1015	1110	980	1030	690	680	
	2.2	3/4	2000	1105	1830	1640	980	1160	980	995	670	690	
	2.2	3/4	2200	1105	1765	1590	945	1190	980	940	660	695	
S 4-SCH 2.5	2.5	3/4	1900	1225	2005	1760	1065	1235	980	1080	730	735	
	2.5	3/4	2000	1225	2000	1760	1065	1235	980	1080	735	750	
	2.5	3/4	2200	1225	1900	1690	1015	1170	980	1030	710	750	
S 4-SCH 3.0	3.0	3/4	2200	1225	2040	1785	1080	1260	980	1095	765	795	
	3.0	3/4	2500	1225	1900	1690	1015	1170	980	1030	725	795	

Surcharge for QD hooks

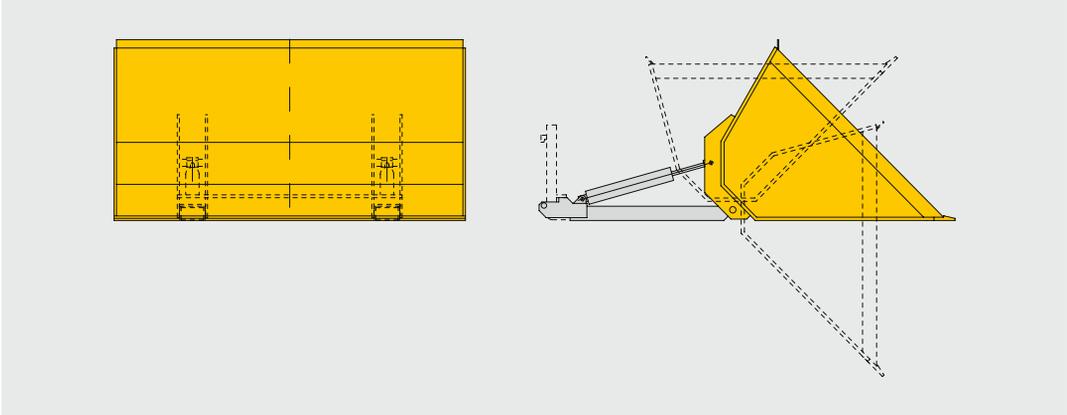
Price for reinforced design on request.

# BULK BUCKET

## SLIP-ON TYPE

### 1 HYDRAULIC FUNCTION

54



The slip-on type is intended for occasional use with lightweight goods. Please indicate fork dimensions and application for inquiries.



BULK BUCKET



BULK BUCKET, 2-CYLINDER DESIGN

In many areas of logistics and warehousing technology, **telescopic forks** are used in order to facilitate one-sided loading of trucks or storage in double-deep racks. Furthermore, these forks can be used as extensions for the adjustment of load depth. Telescopic forks are equipped with two-cylinder forced hydraulic synchronism. The residual load capacity of the lift truck and driver visibility are far superior to reach forks and load extenders.

**Load extenders** are applied where telescopic forks cannot be used due to a low ground clearance of the load or where loads picked up by clamps are to be telescoped.

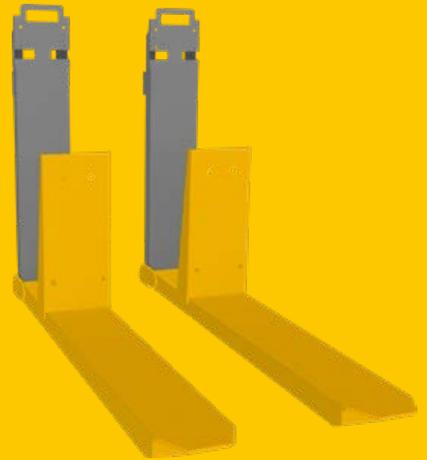
# S 5

## TELESCOPIC FORKS

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## LOAD EXTENDERS

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# HYDRAULIC TELESCOPIC FORKS OVERVIEW

S 5

Protective plate with optimal accessibility of hydraulic fittings

Fully tempered base fork with triple safety

Reinforced fork heel with consistent material thickness

Two integrated cylinders in each telescopic fork ensure high retraction forces

Deep-bored cylinders

Base made from 6 mm thick wear-resistant steel

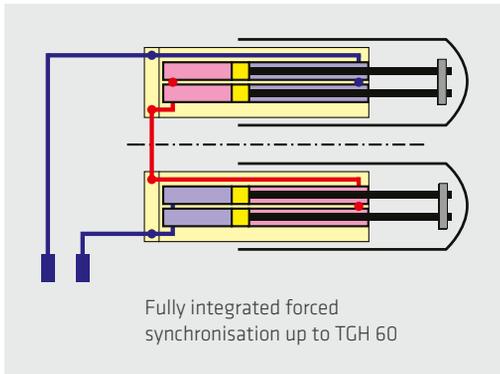


Cylinder end easily removable with a standard ring spanner

High-quality double sealing

Replaceable wear part in the front shoe

Reinforced tip



# APPLICATIONS OF TELESCOPIC FORK

TRUCK LOADING WITH RETRACTED FORKS



TRUCK LOADING WITH EXTENDED FORKS



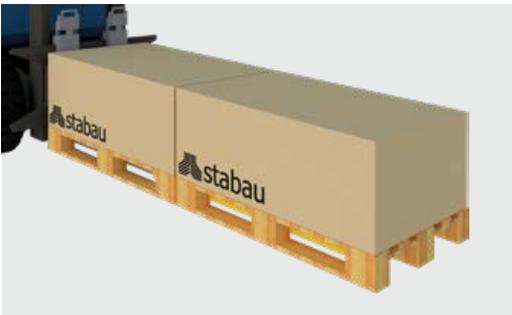
DOUBLE-DEEP STORAGE RETRACTED



DOUBLE-DEEP STORAGE EXTENDED



HANDLING OF 2 PALLETS



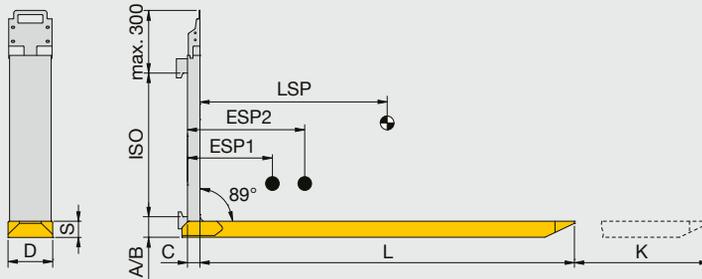
EX-PROTECTION VERSION



55

# TELESCOPIC FORKS (RETRACTABLE AND EXTENDABLE WITH LOAD)

1 HYDRAULIC FUNCTION · INTEGRAL SYNCHRONOUS SYSTEM UP TO AND INCLUDING TGH 60



Model	Load capacity/pair at ... mm LC (LSP)			for lift trucks up to	ISO	Cross section* D x S	C	L	K	CoG (ESP) 1/2	Weight per pair	Price per pair	Surcharge per 100 mm add. fork length
	600	1450	1750										
	kg	kg	kg										

## 1-cylinder version

S 5-TGHS 20	1200/850	2000	960	800	2.0/600	2	133 x 58	45	1200	850	420/625	160		
S 5-TGHS 20	1350/1000								1350	1000	490/735	175		
S 5-TGHS 25	1200/850	2500	1450	1200	2.5/600	2	133 x 63	50	1200	850	425/610	175		
S 5-TGHS 25	1350/1000								1350	1000	495/720	195		
S 5-TGHS 30	1200/850	3000	1450	1200	3.0/500	3	133 x 63	50	1200	850	405/585	185		
S 5-TGHS 30	1350/1000								1350	1000	475/690	200		

## 2-cylinder version

S 5-TGH 25	1200/850	2500	1450	1200	2.5/600	2	163 x 58	45	1200	850	415/625	195		
S 5-TGH 25	1350/1000								1350	1000	485/740	210		
S 5-TGH 30	1200/850	3000	1450	1200	3.0/500	3	163 x 58	45	1200	850	400/600	205		
S 5-TGH 30	1350/1000								1350	1000	465/710	220		
S 5-TGH 40	1200/850	4000	1850	1550	3.5/600	3	163 x 58	45	1200	850	400/600	205		
S 5-TGH 40	1350/1000				4.0/500				1350	1000	465/710	220		
S 5-TGH 48	1200/850	5000	2310	1920	5.0/600	3	165 x 64	50	1200	850	405/605	230		
S 5-TGH 48	1350/1000								1350	1000	475/715	250		
S 5-TGH 50	1200/850	5000	2310	1920	5.0/600	4	165 x 64	50	1200	850	370/550	255		
S 5-TGH 50	1350/1000								1350	1000	430/655	275		
S 5-TGH 60	1200/850	6000	3100	2560	6.0/600	4	217 x 67	50	1200	850	380/570	350		
S 5-TGH 60	1350/1000								1350	1000	445/680	380		
S 5-TGH 80	1200/850	8000	4300	3600	8.0/600	4	217 x 77	60	1200	850	380/550	415		
S 5-TGH 80	1350/1000								1350	1000	445/650	450		

One-sided loading and unloading of trucks requires a usable length of 1350 mm with 1000 mm stroke.

\* Fork shoe reinforced in the rear area (10 mm wider)

Surcharges:

\* Wear resistant strips of manganese steel on bottom surface of outer forks, dimension S increases by 5 mm

Pallet stops A1 (located on both sides of the fork back) or A2 (400 mm high)

Pallet stops A3 (reinforced and 850 mm high)

Load backrest (width 750 mm, height 1200 mm) incl. A2 pallet stops

Bolt-on telescopic forks for e.g. fork positioner

Camera systems on request.

Cold store version on request.

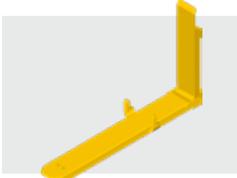
Ex-protection version on request. 

Higher load capacity and other cross sections on request.

Max. stroke range 1200 mm, fork length max. 2000 mm

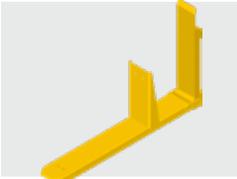
For hydraulic fork positioners with telescopic forks see pages 117 - 131

## ACCESSORIES



### Pallet Stops Type A1:

Move next to the fork back when the forks are retracted.  
50 mm wide, 90 mm high



### Pallet Stops Type A2:

Are used to limit the fork length to the desired usable fork length.  
Minimum distance to the fork back is 75 mm.  
400 mm high



### Pallet Stops Type A3:

Are used to limit the fork length to the desired usable fork length.  
High pallet stop A3 supports the load.  
Minimum distance to the fork back is 125 mm.  
850 mm high (reinforced)



### Load Backrest Type LG:

Is mounted on pallet stop A2 (supplied with the product) and moves forward together with the outer forks. Forks are adjustable within the backrest width.  
Minimum distance to the fork back is 100 mm.  
750 mm wide, 1200 mm high



### Camera Systems:

The design depends on the application.

Standard values for residual load capacity of lift trucks \*\*

Telescopic Forks	S 5 -	TGHS 20	TGHS 20	TGH 25 TGHS 25	TGH 30 TGHS 30	TGH 40	TGH 40	TGH 48	TGH 48	TGH 48 TGH 50	TGH 60	TGH 80
Load capacity lift truck	kg/mm	1800/500	2000/500	2500/500	3000/500	3500/500	4000/500	4500/500	5000/500	5000/600	6000/600	8000/600
X*	mm	400	450	450	450	500	500	500	500	560	560	650
LC (LSP) = 600 mm	kg	1570	1720	2170	2620	3130	3550	4000	4540	4940	5950	7900
LC (LSP) = 750 mm	kg	1360	1510	1900	2300	2760	3120	3520	3950	4370	5260	7050
LC (LSP) = 1200 mm	kg	940	1050	1330	1620	1980	2250	2530	2800 <sup>1</sup>	2800 <sup>1</sup>	3830	5250 <sup>1</sup>
LC (LSP) = 1450 mm	kg	810	910	1160	1410	1720	1850 <sup>1</sup>	2210	2310 <sup>1</sup>	2310 <sup>1</sup>	3200 <sup>1</sup>	4300 <sup>1</sup>
LC (LSP) = 1750 mm	kg	700	790	1000	1200	1500	1550 <sup>1</sup>	1910	1920 <sup>1</sup>	1920 <sup>1</sup>	2650 <sup>1</sup>	3600 <sup>1</sup>

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

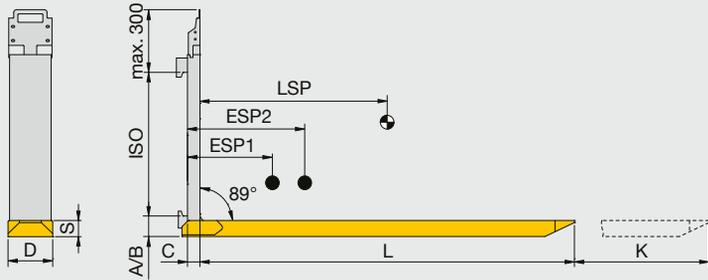
\* Assumed dimensions

<sup>1</sup> Load capacity of lift truck may be higher

# HYDRAULICALLY ADJUSTABLE FORK EXTENSIONS (RETRACTABLE AND EXTENDABLE WITHOUT LOAD)

## 1 HYDRAULIC FUNCTION

S 5



Model	Load capacity per pair		LC (LSP)	for lift trucks up to	ISO	L	K	Cross section* D × S	C	CoG (ESP) 1/2	Weight per pair	Price per pair	Surcharge per 100 mm add. fork length
	kg	mm				mm	mm						
S 5-VGH 20 800/400	2000	600	2.0/600	2	800	400	133 × 58	45	245/330	120			
					1200	400			425/520	165			
S 5-VGH 25 800/400	2500	600	2.5/600	2	800	400	163 × 58	45	245/330	145			
					1200	400			425/520	205			
S 5-VGH 35 800/400	3500	600	3.5/600	3	800	400	163 × 58	45	230/310	155			
					1200	400			405/495	215			

Surcharge for wear resistant manganese steel strips on underside of outer forks (5 mm thick)

\* When using wear resistant strips of manganese steel, dimension S increases by 5 mm

\* Fork shoe reinforced in the rear area (10 mm wider)

## APPLICATION WITH DIFFERENT LOAD DEPTHS, E. G. 1× EURO-PALLET LENGTHWISE, 2× EURO-PALLETS ACROSS



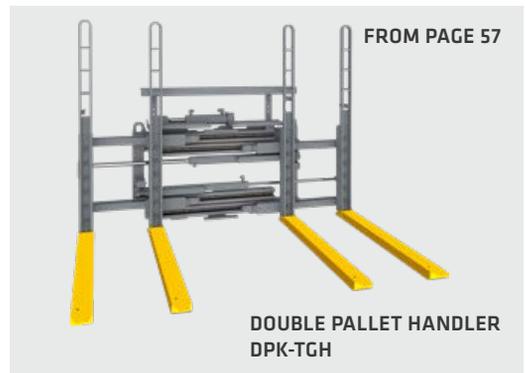
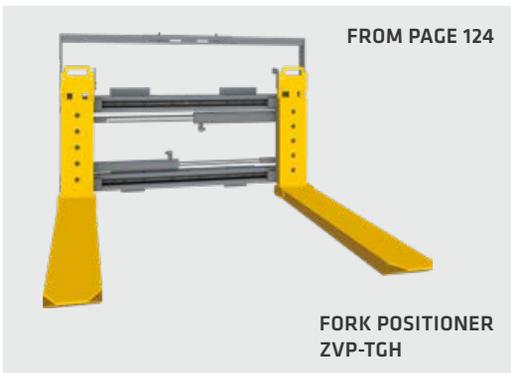
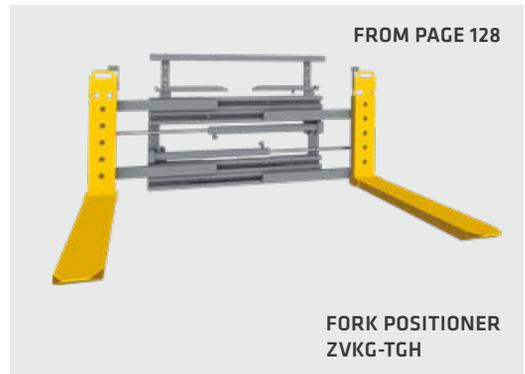
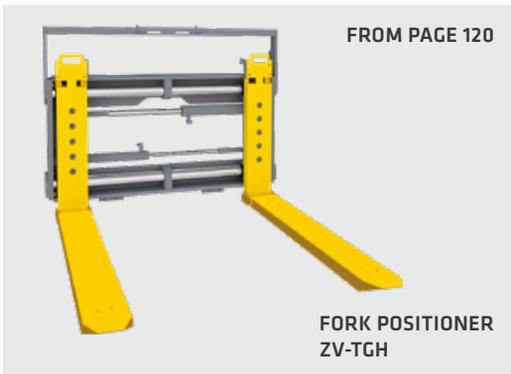
## TELESCOPIC FORKS IN COMBINATION

**Telescopic forks are commonly combined with other attachments.**

Standard features include hydraulic fork positioners and double pallet handler, coupled with the advantages of telescopic forks.

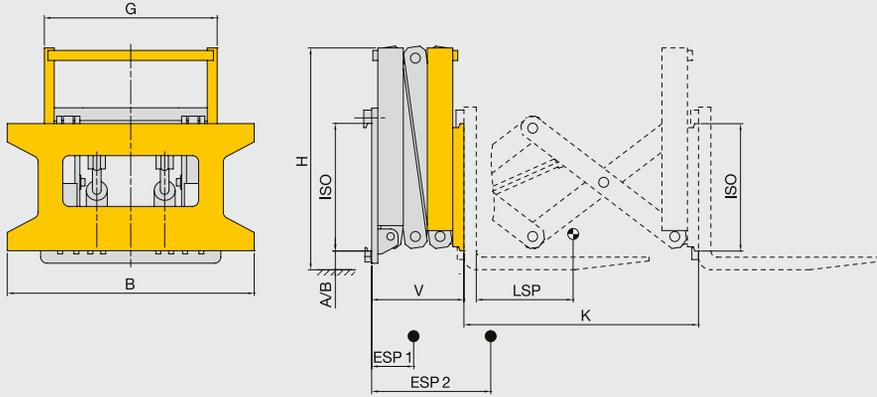
The ZV shaft-guided fork positioner is the first choice for demanding applications in challenging working environments. The ZVP profile-guided fork positioner is ideal for light to medium duties in logistics. A large space is opened up with the ZVKG model and is mainly used to pick up wide goods.

For all fork positioners, when selecting the basic length and stroke of the telescopic fork, it is possible to use the effective thickness of the device in order to be able to reach the goods easily when loading and unloading from one side. When combined with fork positioners, all telescopic forks are securely bolted, and are therefore connected to the guide elements without play.



# LOAD EXTENDERS

## 1 HYDRAULIC FUNCTION



Model	Load capacity*	LC (LSP)	ISO	B	G	H***	K	V	V**	CoG (ESP) 1/2	CoG (ESP) 1/2**	Weight	Weight**	Price without sideshift	Price with sideshift
	kg														
S 5-VSCHGT 10	1000	600	2	1000	750	900	950	315	365	150/630	180/570	325	375		
S 5-VSCHGT 15	1500	600	2	1000	750	900	950	330	380	160/650	185/590	360	410		
S 5-VSCHGT 25	2500	600	3	1000	750	900	950	380	440	185/695	220/665	470	535		

\* Load capacity of retracted attachment

\*\* With integral sideshifter ± 100 mm

\*\*\* For ISO A mounting

Surcharge for forks, see page 19

Load pusher on request.

### Standard values for residual load capacity of lift trucks \*\*

Load Extenders	S 5 -	Without separate sideshift				With separate sideshift			
		VSCHGT 10	VSCHGT 15	VSCHGT 25	VSCHGT 25	VSCHGT 10-S	VSCHGT 15-S	VSCHGT 25-S	VSCHGT 25-S
Load capacity lift truck	kg	2000	2500	3000	3500	2000	2500	3000	3500
X*	mm	450	450	450	500	450	450	450	500
LC (LSP) = 500 mm	kg	1340	1670	1900	2290	1260	1580	1780	2150
LC (LSP) = 600 mm	kg	1240	1550	1770	2130	1170	1470	1660	2010
LC (LSP) = 1450 mm	kg	660	840	960	1200	630	800	910	1150
LC (LSP) = 1550 mm	kg	630	800	920	1150	600	760	870	1100

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

**Snow plows** are used for removing snow from large areas and paths.

They are mounted by means of fork pockets that are secured with clamping screws.

The shields are available in different widths; however, the effective plowing width (inclination - G-measure) must be greater than the width of the forklift.

Due to the swiveling angle to the right or to the left the snow will slide to the side.

# S 6

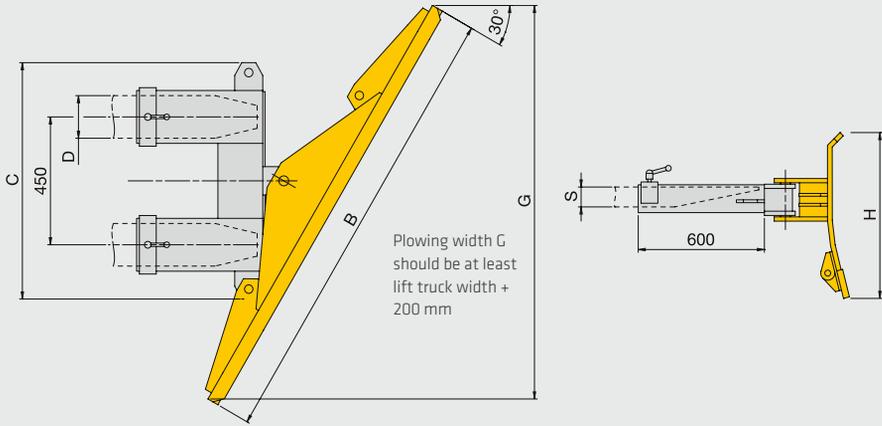
## SNOW PLOWS

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# SNOW PLOWS

MANUAL SWIVEL RANGE OF 30° TO THE LEFT AND TO THE RIGHT



Model	B	G	C	D	S	H	Weight	Price incl. steel shield trim	Price incl. polyurethane shield trim
	mm	mm	mm	mm	mm	mm			
<b>Snow plow with continuous steel or polyurethane shield trim</b>									
S 6-R 160	1600	1400	900	max. 150*	max. 70*	480	150		
S 6-R 200	2000	1700	900	max. 150*	max. 70*	480	180		
<b>Snow plow with spring-loaded shield trim - wear element steel or polyurethane plates</b>									
S 6-RKS 160	1600	1400	900	max. 150*	max. 70*	540	170		
S 6-RKS 200	2000	1700	900	max. 150*	max. 70*	540	210		
S 6-RKSV 280	2800	2400	900	Fork width*	Fork thickness*	560	330		

\* Please indicate the respective fork cross section when ordering.  
Surcharge for shield locking mechanism in D° position



**SPRING-LOADED SHIELD TRIM**



**SWIVEL RANGE OF 30° TO THE RIGHT OR TO THE LEFT**

**Double pallet handlers.** With the double pallet handlers, the fork opening ranges can be adjusted hydraulically, so that alternatively 1 or 2 and 2 or 4 pallets can be handled.

To achieve load stability, the outer forks are mounted higher so that the load gets a slight drop inwards.

For one-sided loading and unloading of trucks, **double pallet handlers with telescopic forks** or a load extender are used, an ideal solution for locations with limited space.

Multiple pallet handlers can flexibly and efficiently handle various numbers of pallets.

# S 7

## MULTIPLE LOAD HANDLERS

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## DOUBLE PALLET HANDLERS

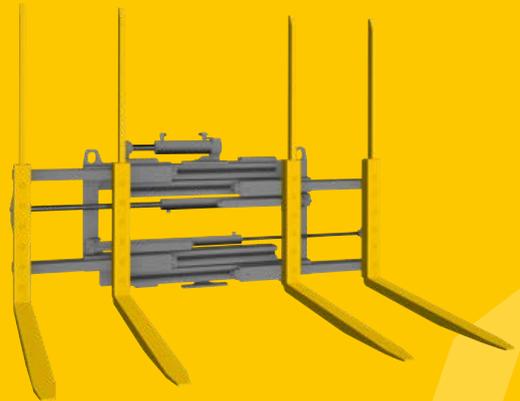
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## DOUBLE PALLET HANDLERS WITH TELESCOPIC FORKS

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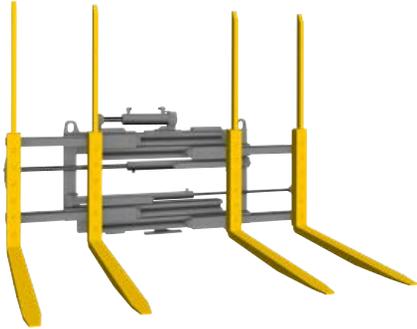
## SIDESHIFTERS

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## MULTIPLE LOAD HANDLERS

### DOUBLE PALLET HANDLERS - 600 MM LC



ONE OR TWO PALLETS



### DOUBLE PALLET HANDLERS - 1,200 MM LC



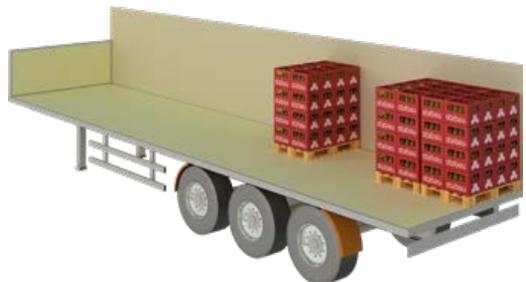
TWO OR FOUR PALLETS



### DOUBLE PALLET HANDLERS WITH TELESCOPIC FORKS OR LOAD EXTENDERS



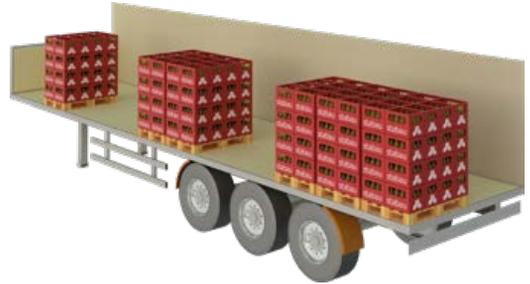
ONE OR TWO PALLETS



**TRIPLE PALLET HANDLERS**



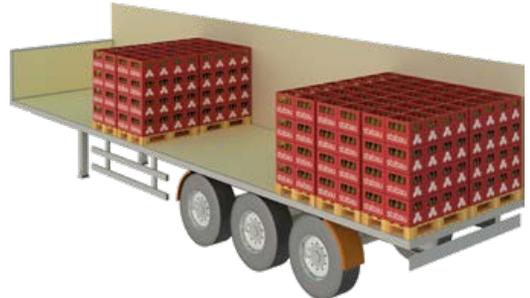
ONE, TWO OR THREE PALLETS



**4-6 PALLET HANDLERS**



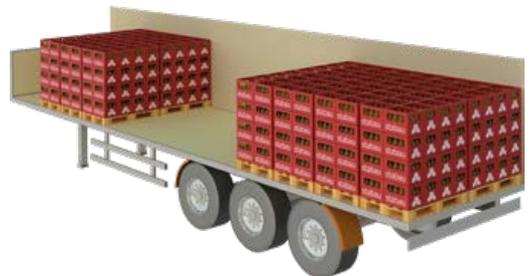
FOUR OR SIX PALLETS



**6-8 PALLET HANDLERS**



SIX OR EIGHT PALLETS



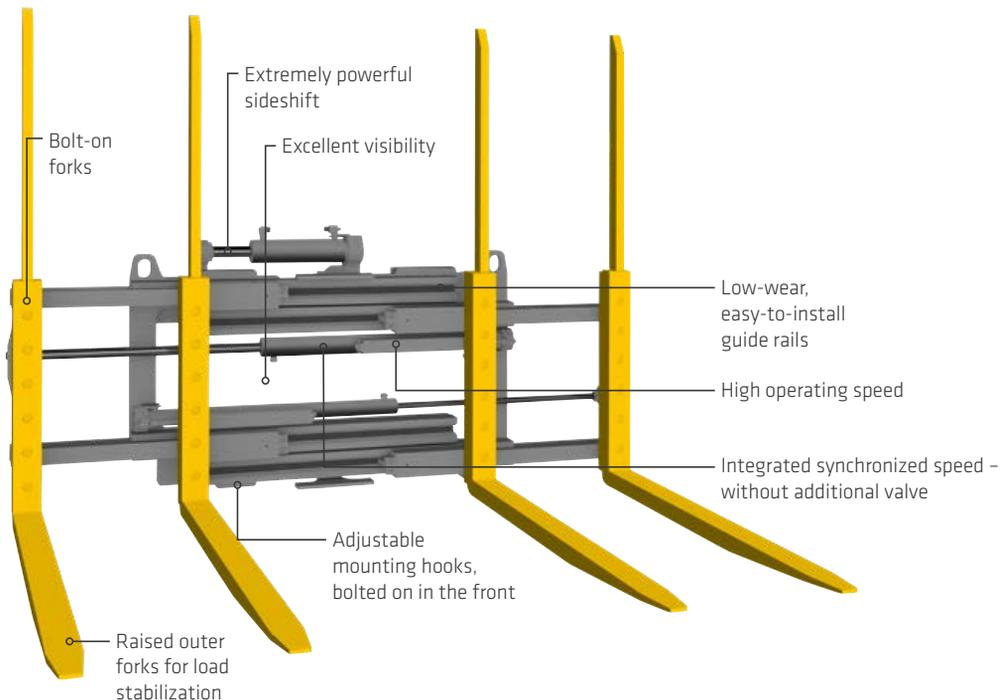
## MULTIPLE LOAD HANDLERS

Multiple load handlers allow simultaneous handling of several pallets, which, in comparison to the common handling of one pallet, makes transportation operations more economical and more efficient. Typical applications can be found in the food and beverage industry as well as in the construction materials industry.

**Double pallet handlers** have two pairs of forks, the opening ranges of which can be hydraulically adjusted to the different handling operations of pallets. In addition to the handling of single pallets, they also allow the handling of two pallets next to each other **(1-2)**

with short forks and with long forks the handling of two pallets in front of one another as well as two pallets in front of and next to each other **(2-4)**.

Besides the simultaneous handling of two pallets next to each other **(1-2)**, **double pallet handlers with telescopic forks** enable one-sided loading and unloading of trucks. Having reached the edge of the loading platform, the pallets that have been picked up can be telescoped to the back space of the loading platform or they can be picked up from there.



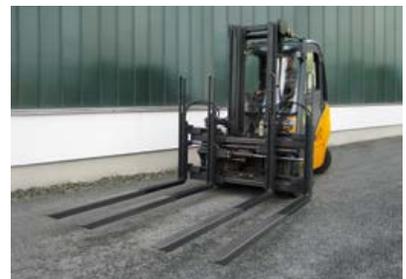
Thus, time can be saved even in locations with a limited amount of space by approaching the truck from one side only.

**Double pallet handlers with load extender** enable the picking up or positioning of pallets **(1-2)** in the back rows by using the load extender of the double pallet handler. This attachment is also used in locations with a limited amount of space where the use of long forks or telescopic forks is not possible.

**Triple pallet handlers** allow the handling of up to three pallets next to each other **(1-2-3)**. For this purpose, the forks can be hydraulically adjusted to the respective handling situation of one, two or three pallets.

All attachments are serially equipped with separate sidsheft, bolt-on forks and a patented synchronization system.

Mechanically or hydraulically collapsible load stops to adjust the usable fork length to different load depths are optionally available. Load stabilizers for the stabilization of unstable loads are available on request.

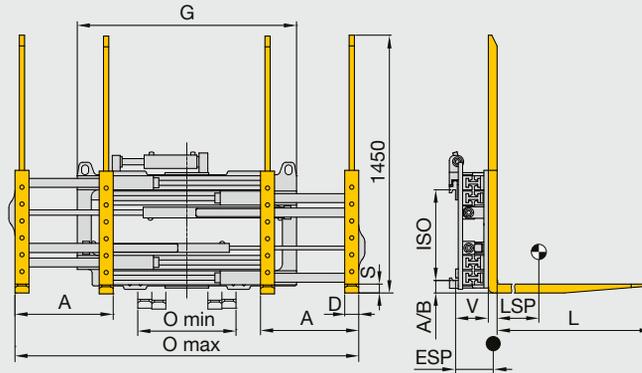


# DOUBLE PALLET HANDLERS

## WITH SIDESHIFT

2 HYDRAULIC FUNCTIONS

INTEGRAL SYNCHRONOUS TRAVEL SYSTEM · FORKS SERIALLY BOLTED ON



Model	Load capacity kg	LC (LSP) mm	ISO	Omin - Omax	G mm	Side-shift mm	A mm	D mm	S mm	L mm	V mm	CoG (ESP) mm	Weight kg	Price €
				mm										

### 1-2 Pallet Handlers

S 7-DPK 18-S	1800	600	2	560-1660	980	± 100	560*	80	40	1200	175	225	490	
S 7-DPK 20-S	2000	600	2	560-1960	1250	± 100	560*	80	40	1200	175	215	520	
S 7-DPK 22-S	2200	600	2	560-1960	1250	± 100	560*	80	50	1200	175	235	555	
S 7-DPK 25-S	2500	600	3	560-1960	1250	± 100	560*	80	50	1200	180	230	590	
S 7-DPK 35-S	3500	600	3	560-1960	1250	± 100	560*	80	50	1200	185	235	630	
S 7-DPK 45-S	4500	600	3	560-1940	1350	± 100	560*	80	60	1200	210	250	725	
S 7-DPK 50 k-S	5000	600	4	560-1940	1400	± 100	560	80	60	1200	220	215	880	

### 2-4 Pallet Handlers

S 7-DPK 48-S	2800	1200	3	560-1940	1350	± 100	560*	80	60	2400	210	555	905	
S 7-DPK 50-S	3200	1200	4	560-1940	1400	± 100	560	80	60	2400	220	485	1070	
S 7-DPK 60-S	4500	1200	4	560-1940	1400	± 150	560	80	70	2400	220	500	1210	

\* Fork distance adjustable to 505 mm

## Standard values for residual load capacity of lift trucks \*\*

Double Pallet Handlers	S 7 -	DPK 20-S	DPK 20-S	DPK 25-S	DPK 25-S	DPK 35-S	DPK 35/48-S	DPK 45/48-S	DPK 45/48/50-S	DPK 50-S	DPK 60-S	DPK 60-S
Load capacity lift truck	kg	2000	2500	3000	3500	4000	4500	5000/500	5000	6000	7000	8000
X*	mm	450	450	450	500	500	500	500	560	560	650	650
LC (LSP) = 500 mm	kg	1470	1900	2250	2720	3100	3520	3820				
LC (LSP) = 600 mm	kg	1350	1740	2060	2500	2860	3250	3540	3950			
LC (LSP) = 1200 mm	kg						1920	2220	2530	3120	3750	4350

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

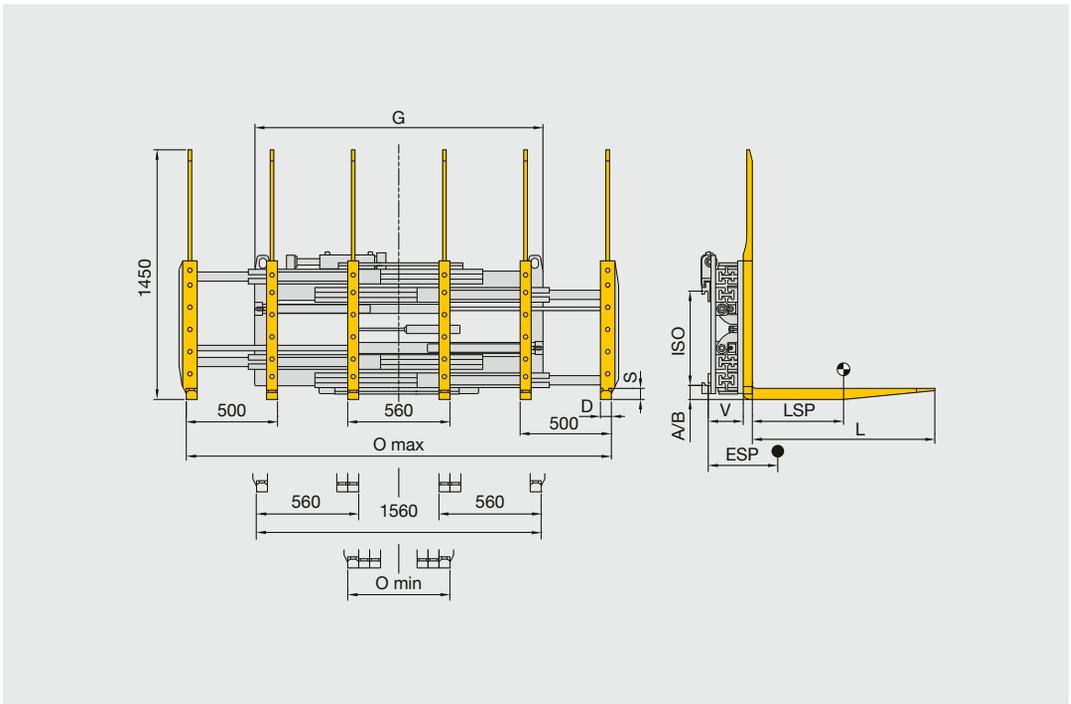
\* Assumed dimensions

# TRIPLE PALLET HANDLERS

## WITH SIDESHIFT

2 HYDRAULIC FUNCTIONS

INTEGRAL SYNCHRONOUS TRAVEL SYSTEM · FORKS SERIALLY BOLTED ON



Model	Load capacity		ISO	Omin - Omax		Fork cross section D x S		L	Side-shift	V	CoG (ESP)	Weight	Price
	kg	mm		mm	mm	(outer) mm	(inner) mm						
S 7-3-PK 30-S	3200	600	3	560-2330	1580	60 x 60	60 x 50	1200	± 100	190	235	780	
S 7-3-PK 30-S	3200	600	3	560-2530	1780	60 x 60	60 x 50	1200	± 100	190	230	820	

Standard values for residual load capacity of lift trucks \*\*

Triple Pallet Handlers	S 7-	3- PK 30-S	3- PK 30-S	3- PK 30-S
Load capacity	kg	3500	4000	4500
X*	mm	500	500	500
LC (LSP) = 600 mm	kg	2390	2840	3160

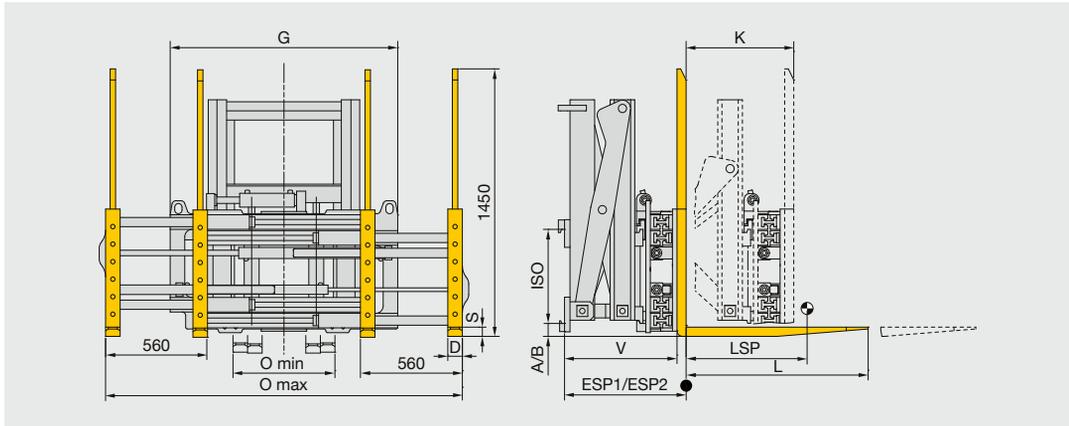
\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

# DOUBLE PALLET HANDLERS WITH LOAD EXTENDER AND SIDESHIFT

2 HYDRAULIC FUNCTIONS · SOLENOID VALVE

INTEGRAL SYNCHRONOUS TRAVEL SYSTEM · FORKS SERIALLY BOLTED ON



Model	Load capacity		LC (LSP)	ISO	Omin - Omax	G	Side-shift	D	S	L	K	V	CoG (ESP) 1/2	Weight	Price
	re-tracted	ex-tended													
	kg	kg	mm		mm	mm	mm	mm	mm	mm	mm	mm	mm	kg	€
S 7-DPK 25 VSCHGT-S	2500	1650	600	3	560-1960	1250	± 100	80	50	1200	590	610	440/900	1180	

Price reduction without solenoid valve

## Standard values for residual load capacity of lift trucks \*\*

Double Pallet Handlers with Load Extender	S 7 -	DPK 25 VSCHGT-S	DPK 25 VSCHGT-S	DPK 25 VSCHGT-S
Load capacity lift truck	kg	4000	4500	5000/500
X*	mm	500	500	500
LC (LSP) = 600 mm; retracted	kg	1790	2100	2450
LC (LSP) = 600 mm; extended	kg	1100	1320	1560

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

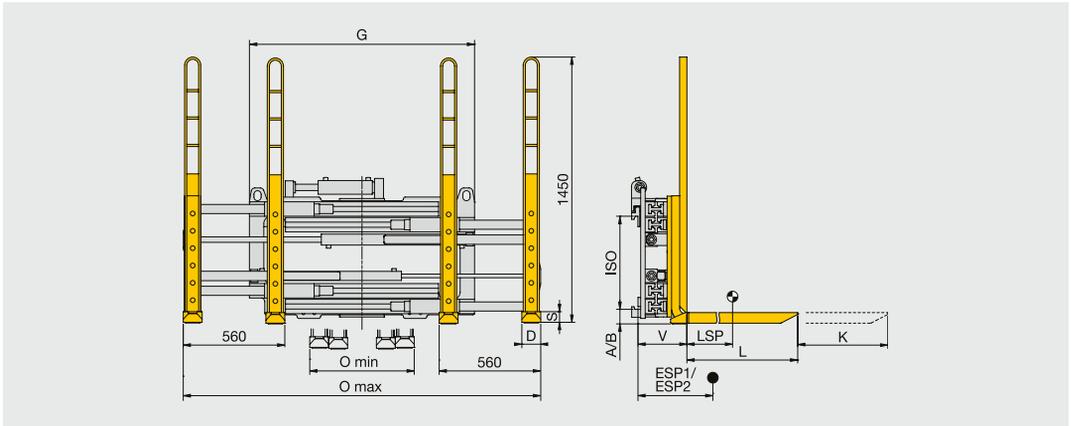
\* Assumed dimensions

# DOUBLE PALLET HANDLERS

## WITH TELESCOPIC FORKS AND SIDESHIFT

2 HYDRAULIC FUNCTIONS · SOLENOID VALVE

INTEGRAL SYNCHRONOUS TRAVEL SYSTEM · TELESCOPIC FORKS SERIALLY BOLTED ON



Model	Load capacity (kg) at LC (LSP)			ISO	Omin - Omax	G	Side-shift	D	S	L	K	V	CoG (ESP) 1/2	Weight	Price
	600	1200	1500												
	mm	mm	mm												
S 7-DPK 30-TGH-S	3000	1500	1350*	3	580-1960	1250	± 100	101	58	1300	900	270	305/385	710	
S 7-DPK 48-TGH-S	4800	2400	2000*	3	580-1860	1400	± 100	101	63	1300	900	300	310/380	870	

\* Under static load, for one-sided loading and unloading  
Price reduction without solenoid valve

### Standard values for residual load capacity of lift trucks \*\*

Double Pallet Handlers with Telescopic Forks	S 7 -	DPK 30-TGH-S	DPK 30-TGH-S	DPK 48-TGH-S	DPK 48-TGH-S	DPK 48-TGH-S	DPK 48-TGH-S
Load capacity lift truck	kg	3000	3500	4000	4500	5000/500	5000/600 (ISO3)
X*	mm	450	500	500	500	500	500
LC (LSP) = 600 mm	kg	1890	2320	2560	2930	3350	3720
LC (LSP) = 700 mm	kg	1750	2150	2380	2730	3120	3460
LC (LSP) = 1200 mm	kg	1250	1560	1760	2020	2300	(2400)
LC (LSP) = 1500 mm	kg	1080	1350	1510	1740	1980	(2000)
LC (LSP) = 1600 mm	kg	1030	1290	1450	1660	(1875)	(1875)

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

For greater load centers, where the lift truck has a higher residual load capacity than the attachment, those values, upon the exceedance of which the attachment would be overloaded, are indicated in brackets ( ).

## 4-6 PALLET HANDLERS

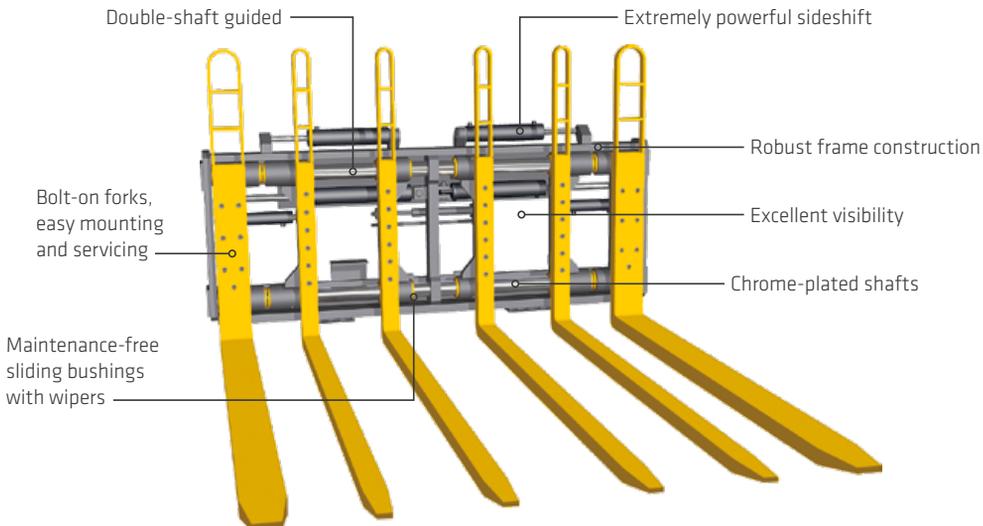
4-6 pallet handlers are used to increase the handling capacity. In comparison to double pallet handlers this attachment can handle up to 6 Euro-pallets simultaneously. This can be done lengthwise (3 next to each other – 2 in front of each other) or across (2 next to each other – 3 in front of each other). With the minimum fork distance (Omin) 4 Euro-pallets can be handled lengthwise.

The design of the attachment is based on a frame construction with double-shaft guide. Chrome-plated shafts and maintenance-free sliding bushings ensure extremely low wear and low maintenance. The closed guides are factory pre-filled with lubricant and enable maintenancefree application of the shaft-guide. Compared to permanent interval lubrication, no excessive grease can accumulate which

could soil the handled goods. The maintenance costs of this attachment are very low. The construction provides excellent visibility in all handling operations, which enables safe pallet handling and an accelerated loading process.

Optionally, the 4-6 pallet handler can be equipped with a central lubrication system, by means of which lubrication cycles and amounts of grease can be individually adjusted.

4-6 pallet handlers are mainly used in the beverage industry and are mostly combined with an 8-10 ton forklift truck. In this case, the integral design is recommended in order to achieve the best possible residual load capacity of the lift truck.

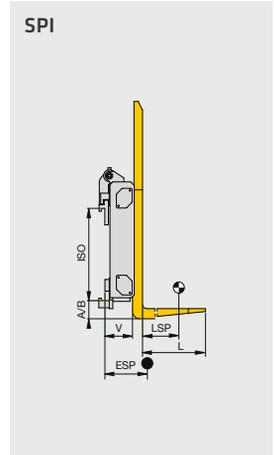
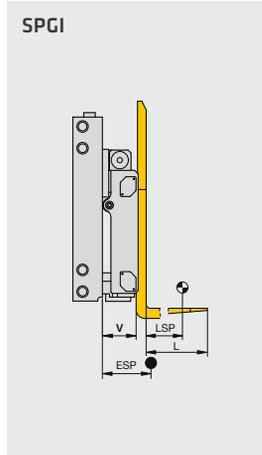
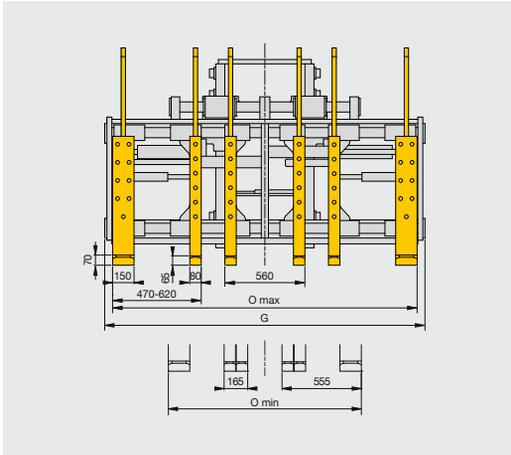


# 4-6-PALLET HANDLERS

## WITH SIDESHIFT

2 HYDRAULIC FUNCTIONS · SOLENOID VALVE ·

OUTER FORK DISTANCE HYDRAULICALLY ADJUSTABLE · FORKS SERIALLY BOLTED ON



Model	Load capacity kg	LC (LSP) mm	Omin - Omax mm	G mm	Fork cross section D × S		L mm	Side-shift mm	V mm	CoG (ESP) mm	Weight kg	Price €
					(outer) mm	(inner) mm						
S 7-SPGI 80-S	6000	1200	1350-2130	2235	150 × 70	80 × 65	2400	± 150	235	530	2240	
S 7-SPG 80-S	6000	1200	1350-2130	2235	150 × 70	80 × 65	2400	± 150	185	610	1920	

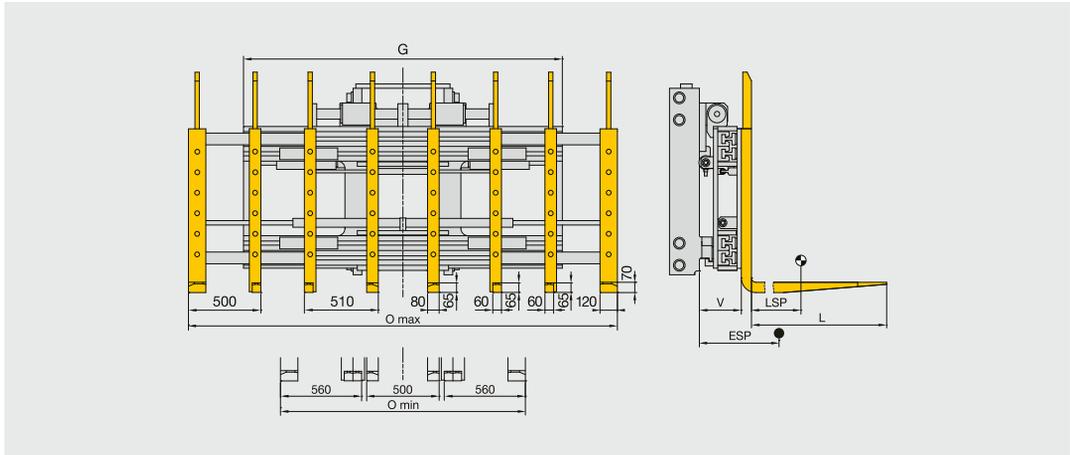
Lost load center, center of gravity and weight from front edge of side brackets (for SPGI).  
 Detail drawings of fork carriage, roller studs and chain anchors or the fork carriage have to be provided by the customer.  
 Maintenance-free sliding bushings serially  
 Central lubrication working automatically at adjustable intervals on request.  
 Without hydraulic adjustment of outer fork pair's opening range available.  
 Other opening ranges and designs on request.  
 Price reduction without solenoid valve



# 6-8-PALLET HANDLERS (INTEGRAL)

## WITH SIDESHIFT

2 HYDRAULIC FUNCTIONS · FORKS SERIALLY BOLTED ON



Model	Load capacity	LC (LSP)	Omin - Omax	G	Fork cross section D x S		L	Side-shift	V	CoG (ESP)	Weight	Price
					(outer)	(inner)						
	kg	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg	€
S 7-APGI 80-S	6000	1200	1760-2960	2200	120 x 70	80/60 x 65	2400	± 150	290	495	2730	

Lost load center, center of gravity and weight from front edge of side brackets.

Detail drawings of fork carriage, roller studs and chain anchors or the fork carriage have to be provided by the customer.

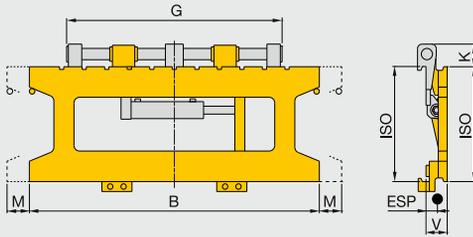
### HANDLING OF 8 PALLETS WITH EMPTIES OR 6 PALLETS WITH FULL PRODUCTS

LIFT TRUCK: 8.0 to/900 mm LC OR 9.0 -10.0 to/600 mm LC



# SIDESHIFTERS (HEAVY-DUTY)

## 1 HYDRAULIC FUNCTION



With this heavy-duty sideshifter, shifting is effected via chrome-plated shafts.

Model	Load capacity	LC (LSP)	ISO	M	B	G	K	V	CoG (ESP)	Weight	Add. weight per 100 mm width of fork carriage	Price
	kg	mm		mm	mm	mm	mm	mm	mm	mm	kg	kg
S 7-SW 16	1600	500	2	100	950	890	90	80	40	120	6.3	
S 7-SW 25	2500	600	2	100	1050	890	90	80	40	125	6.3	
S 7-SW 30	3000	500	3	100	1100	990	100	95	50	180	9.2	
S 7-SW 40	4000	500	3	100	1200	990	100	95	50	190	9.2	
S 7-SW 45	4500	600	3	100	1200	1100	110	105	55	235	11.0	
S 7-SW 48	5000	600	3	100	1300	1100	110	105	55	245	11.0	
S 7-SW 50	5000	600	4	100	1400	1100	110	115	65	355	13.5	
S 7-SW 60	6000	600	4	150	1500	1280	110	115	65	375	13.5	
S 7-SW 70	7000	600	4	150	1500	1350	120	125	70	425	15.3	
S 7-SW 80	8000	600	4	150	1600	1350	120	125	70	440	15.3	
S 7-SW 80/900	8000	900	4	150	1800	1830	120	130	70	535	16.8	
S 7-SW 100	10000	600	4	150	1800	1830	120	130	70	535	16.8	
S 7-SW 80/1100	8000	1100	4	150	2000	1830	120	130	70	550	16.8	

Ex-protection version on request. 

### Standard values for residual load capacity of lift trucks \*\*

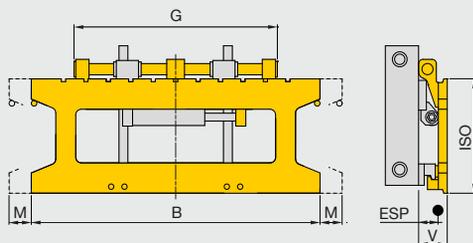
Sideshifters	S 7 -	SW 16	SW 25	SW 25	SW 30	SW 40	SW 40	SW 45	SW 45	SW 48/50	SW 60	SW 70	SW 80	SW 100
Load capacity lift truck	kg	1500	2000	2500	3000	3500	4000	4500	5000/500	5000	6000	7000	8000	10000
X*	mm	350	450	450	450	500	500	500	500	560	560	650	650	750
LC (LSP) = 500 mm	kg	1320	1780	2250	2640	3100	3560	3950	4400					
LC (LSP) = 600 mm	kg	1200	1630	2050	2410	2840	3260	3630	4040	4370	5270	6140	7040	8820
LC (LSP) = 700 mm	kg	1090	1500	1880	2220	2620	3010	3350	3730	4060	4890	5720	6560	8260
LC (LSP) = 800 mm	kg	1000	1380	1740	2050	2430	2790	3110	3460	3780	4560	5360	6150	7770

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

# SIDESHIFTERS (HEAVY-DUTY), INTEGRAL DESIGN

## 1 HYDRAULIC FUNCTION



Model	Load capacity	LC (LSP)	ISO	M	B	G	V	CoG (ESP)	Weight	Add. weight per 100 mm width of fork carriage	Price
	kg										
S 7-SWI 16	1600	500	2	100	950	900	115	60	145	6.3	
S 7-SWI 25	2500	600	2	100	1050	900	115	60	150	6.3	
S 7-SWI 30	3000	500	3	100	1100	930	130	75	215	9.2	
S 7-SWI 40	4000	500	3	100	1200	930	130	75	225	9.2	
S 7-SWI 45	4500	600	3	100	1200	950	140	80	260	11.0	
S 7-SWI 48	5000	600	3	100	1300	950	140	80	270	11.0	
S 7-SWI 50	5000	600	4	100	1400	1100	155	90	400	13.5	
S 7-SWI 60	6000	600	4	150	1500	1200	155	90	420	13.5	
S 7-SWI 70	7000	600	4	150	1500	1250	165	95	500	15.3	
S 7-SWI 80	8000	600	4	150	1600	1250	165	95	515	15.3	
S 7-SWI 80/900	8000	900	4	150	1800	1380	190	105	690	16.8	
S 7-SWI 100	10000	600	4	150	1800	1380	190	105	690	16.8	
S 7-SWI 80/1100	8000	1100	4	150	2000	1380	190	110	720	16.8	

Lost load center, center of gravity and weight from front edge of side brackets.  
Detail drawings of fork carriage, roller studs and chain anchors or the fork carriage have to be provided by the customer.

Ex-protection version on request. 

## Standard values for residual load capacity of lift trucks \*\*

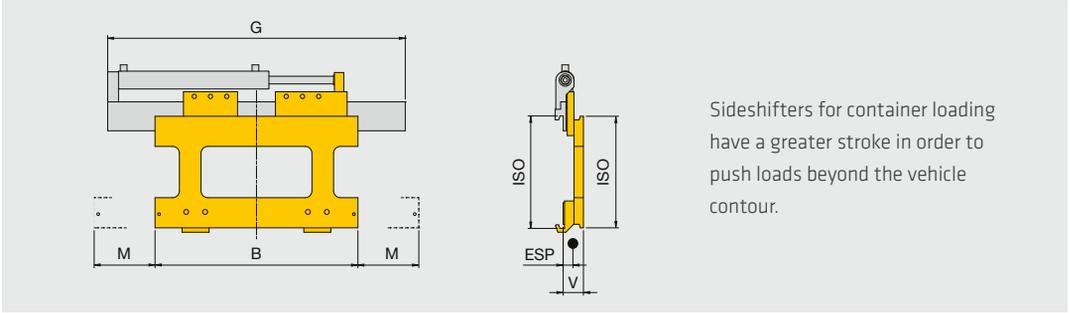
Sideshifters, Integral Design	S 7 -	SWI 16	SWI 25	SWI 25	SWI 30	SWI 40	SWI 40	SWI 45	SWI 45	SWI 48/50	SWI 60	SWI 70	SWI 80	SWI 100
load capacity lift truck	kg	1500	2000	2500	3000	3500	4000	4500	5000/500	5000	6000	7000	8000	10000
X*	mm	350	450	450	450	500	500	500	500	560	560	650	650	750
LC (LSP) = 500 mm	kg	1340	1800	2260	2700	3170	3630	4030	4490					
LC (LSP) = 600 mm	kg	1210	1640	2060	2470	2900	3320	3700	4110	4520	5480	6330	7240	9230
LC (LSP) = 700 mm	kg	1100	1510	1900	2270	2680	3060	3410	3800	4180	5030	5890	6740	8630
LC (LSP) = 800 mm	kg	1010	1400	1750	2100	2480	2840	3170	3520	3900	4690	5510	6310	8110

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

# SIDESHIFTERS FOR CONTAINER LOADING

## 1 HYDRAULIC FUNCTION



Sideshifters for container loading have a greater stroke in order to push loads beyond the vehicle contour.

Model	Load capacity	LC (LSP)	ISO	M	B	G	V	CoG (ESP)	Weight	Price
	kg	mm		mm	mm	mm	mm	mm	mm	kg
S 7-CS 16	1600	500	2	200	750	970	70	28	80	
S 7-CS 25	2500	600	2	225	750	1100	75	30	90	
S 7-CS 30	3000	500	3	250	750	1180	80	33	130	

Other designs on request.

Standard values for residual load capacity of lift trucks

see page 61 – SW 16, SW 25, SW 30

## SIDESHIFTER FOR CONTAINER LOADING COMBINED WITH SPECIAL FORK POSITIONER



## MULTIPLE SIDESHIFTERS (HEAVY-DUTY)

Multiple sidershifters allow several pallets to be picked up side by side simultaneously. The adjustability of the fork carriages to each other enables the loads to be pushed apart and together. A basic sideshift allows the entire attachment to be moved sideways independently of the individual adjustment. The multiple sidershifters require an even load on all fork

carriages, i.e., all fork carriages must always be loaded evenly.

All multiple sidershifters are equipped with a shaft-guided basic sideshift and profile-guided welded fork carriages. They can also be fitted with bolt-on fork carriages on request.

### **DOUBLE SIDESHIFTER WITH TWO FORK CARRIAGES**

The attachment has one rigid fork carriage and one adjustable fork carriage.



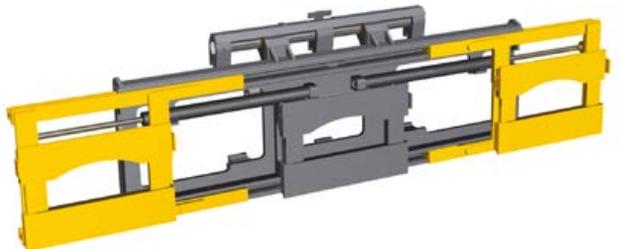
### **TRIPLE SIDESHIFTER WITH TWO FORK CARRIAGES**

The attachment has two adjustable fork carriages. The adjustment is synchronous and is available with single adjustment on request.



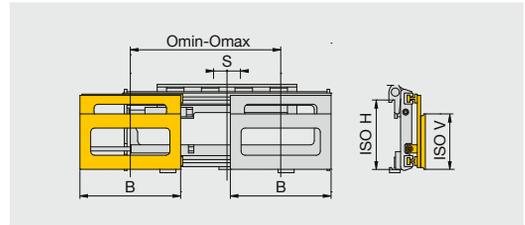
### **TRIPLE SIDESHIFTER WITH THREE FORK CARRIAGES**

The attachment has one central rigid fork carriage and two independently adjustable fork carriages.



## DOUBLE SIDESHIFTER WITH TWO FORK CARRIAGES

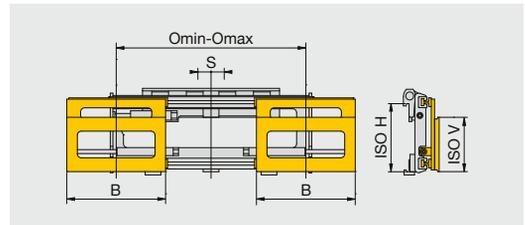
2 HYDRAULIC FUNCTIONS



Model	Load capacity attachment	Load capacity per fork carriage	LC (LSP)	ISO H	Sideshift	Frame width	Omin - Omax	B	ISO V	Price
	kg	kg	mm		mm	mm	mm	mm		
S 7-2S 25	2500	1250	600	3	± 100	1550	950-1150	850	2	
S 7-2S 35	3500	1750	600	3	± 100	1550	800-1120	800	2	

## TRIPLE SIDESHIFTER WITH TWO FORK CARRIAGES

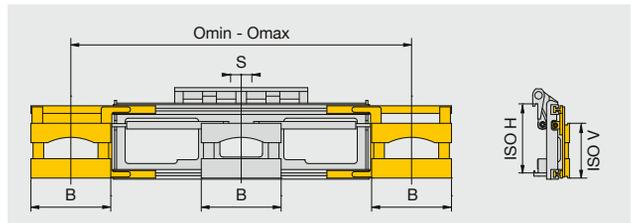
2 HYDRAULIC FUNCTIONS



Model	Load capacity attachment	Load capacity per fork carriage	LC (LSP)	ISO H	Sideshift	Frame width	Omin - Omax	B	ISO V	Price
	kg	kg	mm		mm	mm	mm	mm		
S 7-3S 35-2	2600	1300	600	3	± 100	1550	950-1250	720	2	
S 7-2S 35-2	3500	1750	500	3	± 100	1550	800-1440	800	2	
S 7-3S 40-2	3600	1800	500	3	± 100	1900	1100-1800	800	2	
S 7-3S 40-2	3600	1800	500	3	± 100	2200	1200-2200	1000	2	
S 7-3S 100-2	8000	4000	600	4	± 150	1850	800-1500	800	4	

## TRIPLE SIDESHIFTER WITH THREE FORK CARRIAGES

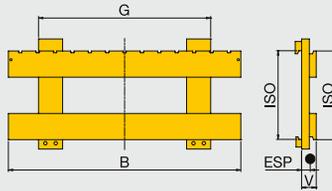
2 HYDRAULIC FUNCTIONS +  
SOLENOID VALVE



Model	Load capacity attachment	Load capacity per fork carriage	LC (LSP)	ISO H	Sideshift	Frame width	Omin - Omax	B	ISO V	Price
	kg	kg	mm		mm	mm	mm	mm		
S 7-3S 45-3	4500	1500	600	4	± 150	2550	1600-2800	770	3/So	
S 7-3S 55-3	5400	1800	600	4	± 150	2100	1600-2400	720	3/So	

All designs listed in the tables are examples. Other designs on request.

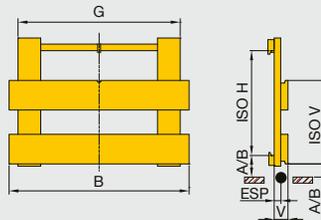
## FRONT CARRIAGES



Model	Load capacity	LC (LSP)	ISO	B	G	V	CoG (ESP)	Weight	Add. weight per 100 mm width of fork carriage	Price	Surcharge per 100 mm add. width
	kg	mm		mm	mm	mm	mm	kg	kg	€	€
S 7-VGT 15	1500	500	2	1040	960	60	30	115	8.3		
S 7-VGT 25	2500	600	2	1150	1070	60	30	125	8.3		
S 7-VGT 30	3000	500	3	1150	1070	80	45	190	12.0		
S 7-VGT 40	4000	500	3	1200	1070	80	45	200	12.0		
S 7-VGT 45	4500	600	3	1200	1070	85	50	220	12.0		
S 7-VGT 48	5000	600	3	1300	1150	85	50	235	12.0		
S 7-VGT 50	5000	600	4	1400	1200	95	55	330	15.2		
S 7-VGT 60	6000	600	4	1800	1600	95	55	420	15.2		
S 7-VGT 70	7000	600	4	1800	1600	100	60	430	15.2		

Surcharge for QD hooks

## FRONT CARRIAGES AS ADAPTERS



Model	Load capacity	LC (LSP)	ISO H	ISO V	B	G	V	CoG (ESP)	Weight	Add. weight per 100 mm	Price	Surcharge per 100 mm add. width
	kg	mm			mm	mm	mm	mm	mm	kg	kg	€
S 7-VGTA 25	2500	600	2	3	1050	960	80	45	170	12.0		
S 7-VGTA 28	2500	600	3	2	1050	960	70	35	130	8.3		
S 7-VGTA 48	5000	600	3	4	1350	1150	100	60	305	15.2		
S 7-VGTA 50	5000	600	4	3	1350	1150	90	50	260	12.0		

Surcharge for QD hooks

Please indicate ground clearance when ordering.

**Hydraulic rotators** are used for sideward emptying in all areas of industry.

The continuous rotation range is 360°.

The attachment is driven by means of a worm gear with three to five teeth being constantly in mesh. This results in low strain on the teeth and quiet running of the gear.

On the fork carriage, which is mounted to the front of the attachment, forks can be manually adjusted and locked. The large opening in the center provides excellent visibility to the forks.

In addition, there is the option to equip the attachment with a separate sideshift. For the foundry version we recommend bolt-on forks.

In addition to the foundry version, we also offer special designs tailored to your particular application.

# S 8

## ROTATORS

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## ROTATORS 360°

The attachment is driven by means of a worm gear with three to five teeth being constantly in mesh. The worm gear shaft is made of hardened steel and the worm wheel is made of bronze. This results in low strain on the teeth and quiet running of the gear.

When standing still the worm gear is self-inhibiting. The rotary joint and the worm wheel are individual components, which, in the case of service, can be replaced independently of each other.

A load stop valve is included serially. This valve generates a counter pressure to the drawing loads in order to prevent spinning. Thus, the rotation process is controllable even with unfavorable loads.

The attachment is provided with a central greasing point for the lubrication of the rotary joint. The drive system is self-contained and thus dustproof.

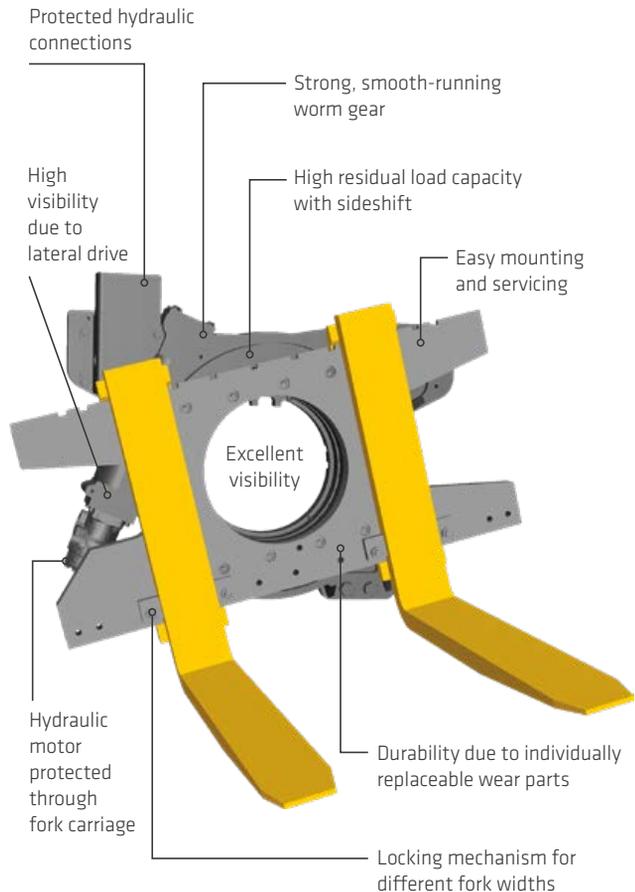
The attachment with separate sideshift is designed in such a manner that the loss in load capacity is kept extremely low.

For the use of hook-type forks we recommend reinforced lower hooks. The forks can be adjusted to any position on the fork carriage. They are secured by means of eccentrically drilled stop blocks, which are screwed to the boreholes in the lower carriage bar.

The rotator is designed for optimal visibility. The construction has been adapted to the

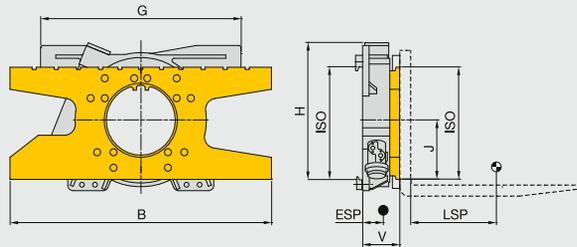
requirements of ISO classes. The tunnel for the worm gear shaft is located on the side of the attachment and thus offers optimal visibility over the rotator and an extremely high residual load capacity. The big, centered opening provides the driver with maximum visibility and thus enhances secure handling of his load.

For easy mounting, the clamping hooks are serially bolted on from the front.



# ROTATORS 360°

## 1 HYDRAULIC FUNCTION



Model	Load capacity	LC (LSP)	ISO	B	G	J	H	Torque at $\Delta p = 140$ bar	Required oil volume per revolution	V	CoG (ESP)	Weight	Add. weight per 100 mm width of fork carriage	Price	Surcharge per 100 mm width of fork carriage
S 8-DE 18	1800	500	2	1000	900	225	500	6300	5.5	150	72	260	6.3		
S 8-DE 25	2500	600	2	1000	900	225	500	6900	7.0	155	75	270	6.3		
S 8-DE 28	2800	500	3	1100	1080	270	610	7300	7.5	165	82	340	9.2		
S 8-DE 35	3500	500	3	1100	1080	270	610	8500	9.0	170	85	350	9.2		
S 8-DE 45	4500	600	3	1200	1080	270	610	11500	14.0	180	90	400	11.0		
S 8-DE 50	5000	600	4	1300	1220	325	760	11500	15.5	190	95	660	15.3		
S 8-DE 60	6000	600	4	1400	1220	325	760	14600	17.0	195	100	695	15.3		
S 8-DE 80	8000	600	4	1400	1200	380	910	19200	21.0	220	115	840	16.8		
S 8-DE 100	10000	600	4	1500	1200	380	910	21700	23.0	225	120	880	16.8		
S 8-DE 120	12000	600	Pint.	1500	1320	535	1180	27600	32.0	245	135	1440	35.0		
S 8-DE 160	16000	600	Pint.	1600	1320	535	1180	37500	40.0	255	145	1530	42.0		
S 8-DE 200	20000	600	Pint.	1800	1500	640	1380	51000	55.0	285	165	2250	55.0		

We recommend forks with reinforced lower hooks, see page 19

Surcharge for foundry version see page 71

Surcharge for bolt-on forks on request.

Surcharge for fish-industry version on request.

Surcharge for integral design, see page 217

Surcharge for rotary oil feedthrough on request.

Weighing system as optional feature.

Ex-protection version on request.



### Standard values for residual load capacity of lift trucks \*\*

Rotators	S 8 -	DE 18	DE 18	DE 25	DE 28	DE 35	DE 35	DE 45	DE 45	DE 45/50	DE 50	DE 60	DE 80	DE 100	DE 120
Load capacity lift truck	kg	1500	2000	2500	3000	3500	4000	4500	5000/ 500	5000	6000	7000	8000	10000	12000
X*	mm	350	450	450	450	500	500	500	500	560	560	650	650	750	800
LC (LSP) = 500 mm	kg	1170	1600	2020	2400	2820	3250	3620	4030						
LC (LSP) = 600 mm	kg	1060	1470	1850	2200	2600	3000	3340	3720	3980	4840	5700	6370	8070	9400
LC (LSP) = 700 mm	kg	980	1360	1710	2030	2410	2770	3100	3450	3700	4500	5320	5960	7580	8860

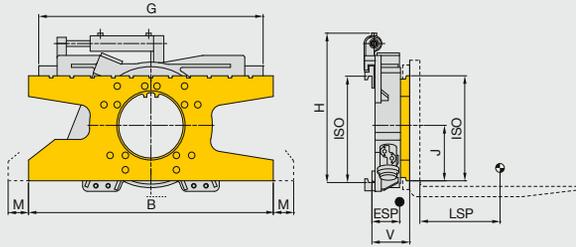
\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

# ROTATORS 360°

## WITH SIDESHIFT

### 2 HYDRAULIC FUNCTIONS



Model	Load capacity	LC (LSP)	ISO	B	G	M	J	H	Torque at $\Delta\rho = 140$ bar	Required oil volume per revolution	V	CoG (ESP)	Weight	Add. weight per 100 mm width of fork carriage	Price	Surcharge per 100 mm width of fork carriage
	kg	mm		mm	mm	mm	mm	mm	Nm	Litre	mm	mm	kg	kg	€	€
S 8-DE 18-S	1800	500	2	1000	1000	100	225	650	6300	5.5	165	78	295	6.3		
S 8-DE 25-S	2500	600	2	1000	1000	100	225	650	6900	7.0	170	80	305	6.3		
S 8-DE 28-S	2800	500	3	1100	1100	100	270	705	7300	7.5	180	88	380	9.2		
S 8-DE 35-S	3500	500	3	1100	1100	100	270	705	8500	9.0	185	90	390	9.2		
S 8-DE 45-S	4500	600	3	1200	1100	100	270	705	11500	14.0	195	95	440	11.0		
S 8-DE 50-S	5000	600	4	1300	1280	100	325	870	11500	15.5	205	100	730	15.3		
S 8-DE 60-S	6000	600	4	1400	1400	150	325	870	14600	17.0	210	105	770	15.3		
S 8-DE 80-S	8000	600	4	1400	1300	150	380	910	19200	21.0	300	165	1030	16.8		

We recommend forks with reinforced lower hooks, see page 19

Surcharge for foundry version see page 71

Surcharge for bolt-on forks on request.

Surcharge for fish-industry version on request.

Surcharge for integral design, see page 217

Surcharge for rotary oil feedthrough on request.

Weighing system as optional feature.

Ex-protection version on request.



### Standard values for residual load capacity of lift trucks \*\*

Rotators with Sideshift	S 8 -	DE 18-S	DE 18-S	DE 25-S	DE 28-S	DE 35-S	DE 35-S	DE 45-S	DE 45-S	DE 45/50-S	DE 50-S	DE 60-S	DE 80-S
Load capacity	kg	1500	2000	2500	3000	3500	4000	4500	5000/500	5000	6000	7000	8000
X*	mm	350	450	450	450	500	500	500	500	560	560	650	650
LC (LSP) = 500 mm	kg	1140	1570	1980	2350	2760	3185	3550	3960				
LC (LSP) = 600 mm	kg	1040	1440	1820	2160	2550	2940	3280	3660	3900	4750	5600	5900
LC (LSP) = 700 mm	kg	950	1330	1680	2000	2360	2725	3040	3370	3630	4420	5230	5550

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimension

# ROTATORS FOR FOUNDRIES



## ROTATORS WITH FULL PROTECTION

Rotators with full protection (see photo) on request.  
Special designs on request.  
Bins with liquid metal must be secured during transportation.  
A locking device is not included in the foundry version. On request.

Surcharge for foundry version of rotators without sideshift		up to DE 45	up to DE 100
G1	Closed front plate, motor protection, valve protection, heat-protected hydraulic hoses, heat-resistant grease		
G2	As foundry version G1, but with high-visibility protection tube		
G3	As foundry version G1, plus splash guard with additional sealing, rear opening closed		
G4	As foundry version G3, but with high-visibility protection tube		

Surcharge for foundry version of rotators with sideshift		up to DE 45-S	up to DE 80-S
GS1	Closed front plate, motor protection, valve protection, heat-protected hydraulic hoses, heat-resistant grease, shaft-guided sideshift with bronze guides		
GS2	As foundry version GS1, but with high-visibility protection tube		
GS3	As foundry version GS1, plus splash guard with additional sealing, rear opening closed		
GS4	As foundry version GS3, but with high-visibility protection tube		



**ROTATOR WITH FULL PROTECTION AND  
CONVERTER HANDLING ARMS**



**S 8-DE 80 WITH SIDESHIFT AND  
WEIGHING SYSTEM**

## ROTATORS WITH LATERAL SUPPORT ARM

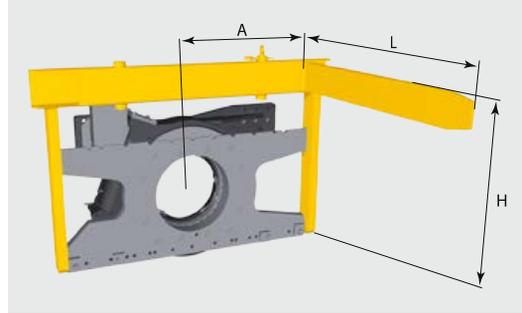
### **SURCHARGE FOR LATERAL SUPPORT ARM; MANUALLY ADJUSTABLE AND MOUNTABLE ON EITHER SIDE**

For DE 18 to DE 25:

A: 500/600 mm, L: 1,000 mm, H: 700 mm

For DE 28 to DE 45:

A: 500/600 mm, L: 1,000 mm, H: 775 mm



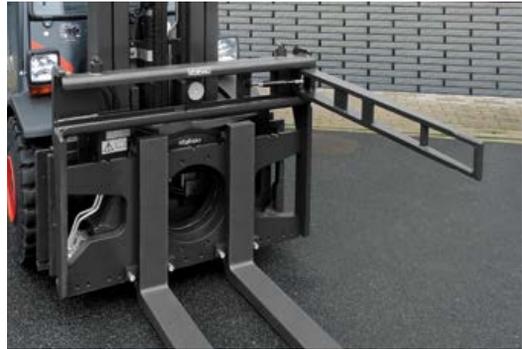
### **SURCHARGE FOR LATERAL SUPPORT ARM; MANUALLY ADJUSTABLE, FOLDABLE AND MOUNTABLE ON EITHER SIDE**

For DE 18 to DE 25:

A: 500/600 mm, L: 1,000 mm, H: 770 mm

For DE 28 to DE 45:

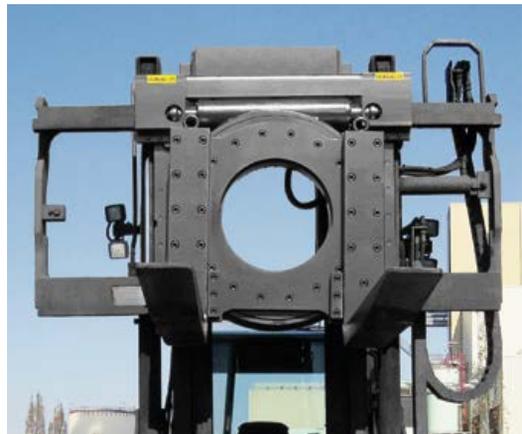
A: 500/600 mm, L: 1,000 mm, H: 805 mm



## ROTATOR IN OPERATION



S 8-DE 18



S 8-DE 160 WITH BOLT-ON FORKS

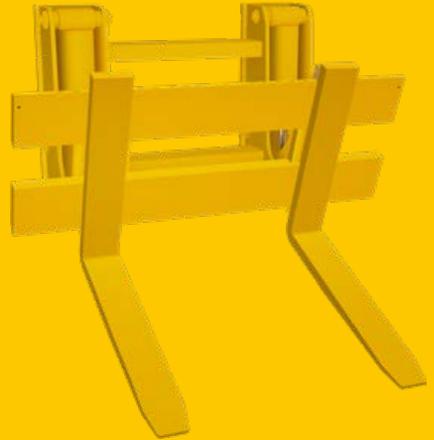
**Tilting carriages** can also be seen as tiltable front carriages. By means of cylinders, the fork carriage is tilted forward 45°. The fork carriage allows mounting of the existing standard truck forks.

The tilting carriage is used when the mast tilt is not sufficient and the application requires a greater tilting angle. A modification of the tilting angle is available on request. The basic construction can also be combined with other attachments in order to achieve a tilting function.

# S 9

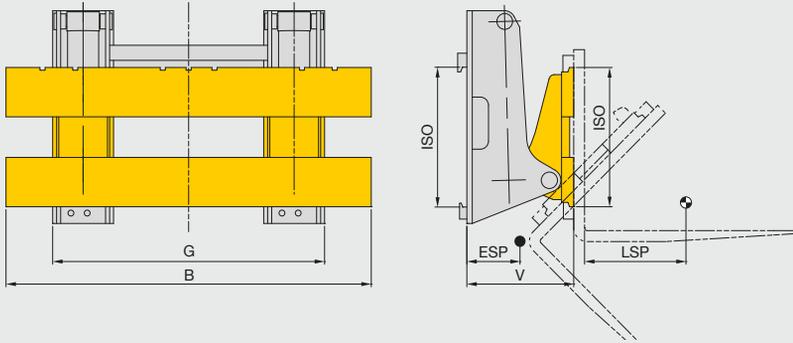
## TILTING CARRIAGES

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# TILTING CARRIAGES

## 1 HYDRAULIC FUNCTION



Model	Load capacity	LC (LSP)	ISO	Tilting angle	B	G	V	CoG (ESP)	Weight	Add. weight per 100 mm width of fork carriage	Price	Surcharge per 100 mm width of fork carriage
S 9-KSCH 15	1500	500	2	45	1050	905	380	175	280	6		
S 9-KSCH 25	2500	500	2	45	1150	905	385	180	295	8		
S 9-KSCH 28	2800	500	3	45	1150	1105	400	220	375	13		
S 9-KSCH 35	3500	500	3	45	1250	1105	400	225	390	13		
S 9-KSCH 45	4500	500	3	45	1350	1105	400	230	405	13		
S 9-KSCH 50	5000	600	4	45	1350	1105	410	255	475	15		

Different tilting angles on request.

### Standard values for residual load capacity of lift trucks \*\*

Tilting Carriages	S 9 -	KSCH 15	KSCH 15	KSCH 25	KSCH 28	KSCH 35	KSCH 35	KSCH 35	KSCH 45	KSCH 50	KSCH 50
Load capacity lift truck	kg	1500	2000	2500	3000	3500	4000	4500	5000/500	5000	6000
X*	mm	350	450	450	450	500	500	500	500	560	560
LC (LSP) = 500 mm	kg	910	1280	1620	1910	2270	2630	2990	3360		
LC (LSP) = 600 mm	kg	840	1190	1510	1780	2120	2460	2790	3140	3410	4150
LC (LSP) = 800 mm	kg	730	1050	1330	1560	1870	2170	2460	2770	3020	3680
LC (LSP) = 1000 mm	kg									2720	3310

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

**Drop-Bottom Box Dumpers.** This attachment has been constructed for bulk boxes with frontal bottom discharge. The drop-bottom box dumper is installed on the fork carrier between the existing forks.

The special boxes have a drop bottom, which opens like a jaw when the attachment lifts the box hydraulically by means of the lifting hook.

In the metal industry, a typical application is the handling of stamping parts and screws. The drop-bottom box dumper is also often used in combination with a fork positioner.

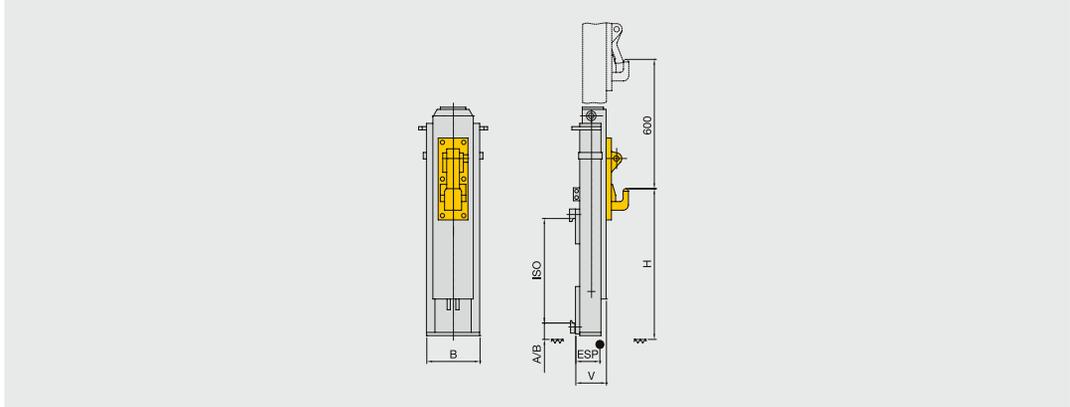
# S 10

## DROP-BOTTOM BOX DUMPERS



# DROP-BOTTOM BOX DUMPERS WITH SAFETY LATCH

## 1 HYDRAULIC FUNCTION



Model	Lifting force	ISO	Lift	B	H	V	CoG (ESP)	Weight	Price
	kg								
S 10-BEV 20	2000	2	600	250	▲ Box	145	75	160	
S 10-BEV 30	3000	3	600	300	▲ Box	165	80	220	
S 10-BEV 40	4000	3/4	600	300	▲ Box	180	85	260	

Please indicate the following details when ordering:

1. Measurement from the ground to the center of the box's mounting fixture
2. Box's ground clearance (foot height)

Fork positioner with integral drop-bottom box dumper (S 11-ZVBEV) on request.

### FORK POSITIONER WITH INTEGRATED DROP-BOTTOM BOX DUMPER



### Standard values for residual load capacity of lift trucks \*\*

Drop-Bottom Box Dumpers	S 10 -	BEV 20	BEV 20	BEV 20	BEV 20	BEV 30	BEV 30	BEV 40	BEV 40	BEV 40
Load capacity lift truck	kg	1000	1500	2000	2500	3000	3500	4000	4500	5000
X*	mm	300	350	450	450	450	500	500	500	560
LC (LSP) = 500 mm	kg	850	1300	1750	2200	2600	3050	3450	3900	4800
LC (LSP) = 600 mm	kg	750	1150	1600	2000	2350	2800	3150	3550	4450

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

# S 11

## FORK POSITIONERS

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**Fork positioners.** Fork positioners enable hydraulic positioning of forks. These attachments are used in particular for frequently changing load widths.

Due to the sturdy frame construction, the heavy-duty version is even suited for the toughest applications. A great deal of spreading stress can be absorbed due to the double-shaft guide and the bolt-on forks. When handling round goods, we recommend chamfering the inner and outer edges of the forks in order to avoid damage to the goods. For the emptying of boxes, the attachment is available as a rotatable version.

If a wide opening range is required, hydraulic fork spreaders should be used. With hydraulic fork spreaders and a frame width corresponding to the vehicle, the opening range of the forks can be adjusted beyond the width of the vehicle. Loads cannot be clamped with this attachment. Both attachments can be equipped with telescopic forks, which are serially provided as bolt-on forks.

Fork positioners can be equipped with a separate sideshifter or a sideshift valve. With the integral version, the attachment and not the fork carrier is mounted directly into the mast. This keeps the loss in load capacity to a minimum and enhances driver visibility.

Fork positioners ZVP/ZVPV allow mounting the truck's forks. Due to the profile guide, the opening range of the forks can be adjusted in accordance with the width of the attachment.



S 11

## FORK POSITIONERS AT A GLANCE

### FORK POSITIONERS (HEAVY-DUTY)

FROM PAGE 80

#### MODEL S 11 - ZV

- Frame construction
- Double-shaft guided
- Forks adjustable to any position inside the frame
- Forks serially bolted on

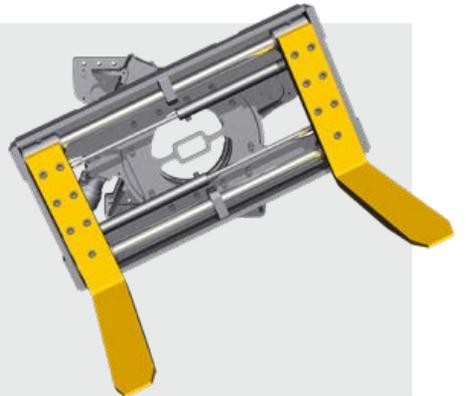


### FORK POSITIONERS, ROTATABLE

FROM PAGE 86

#### MODEL S 11 - ZV-360°

- Rotation range 360°
- Large, central opening allows good visibility
- Frame construction
- Double-shaft guided
- Forks adjustable to any position inside the frame
- Forks serially bolted on



### FORK POSITIONERS, PROFILE-GUIDED

FROM PAGE 88

#### MODEL S 11 - ZVP / ZVPV

- Forks can be hooked on
- ZVP for ISO classes 2 and 3 with forced hydraulic synchronism (not for version -SV)
- ZVPV for ISO class 4
- Forks adjustable to any position inside the frame



## FORK POSITIONERS WITH LARGE OPENING RANGE

FROM PAGE 112

### MODEL S 11 – ZVKG

- Profile-guided
- Opening range of the forks beyond the attachment width
- Forks serially welded on, surcharge for bolt-on forks



## FORK POSITIONERS FOR REACH TRUCKS

FROM PAGE 115

### MODEL S 11 – ZVKGS, S 11 – ZVKGS-H

- Profile-guided
- Opening range beyond the attachment width (ZVKGS), opening range within the attachment contours (ZVPS)
- Various designs for reach trucks
- With/without forks/telescopic forks



## FORK POSITIONERS WITH TELESCOPIC FORKS

FROM PAGE 117

### MODEL S 11 – ZV-TGH

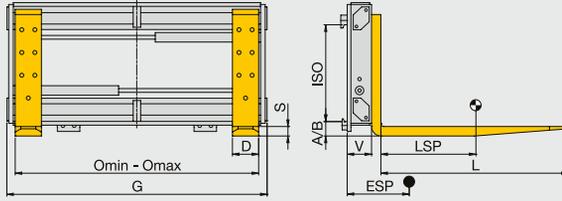
- Bolt-on telescopic forks serially
- ZV-TGH shaft-guided – Forks adjustable to any position inside the frame
- ZVPV/ZVPV-TGH profile-guided – opening range corresponding to attachment width
- ZVKG-TGH profile-guided – opening range of forks beyond the attachment width



# FORK POSITIONERS ZV-SERIES (HEAVY-DUTY)

1 HYDRAULIC FUNCTION

SHAFT-GUIDED · FORKS SERIALLY BOLTED ON



Model	Load capacity	LC (LSP)	ISO	Omin - Omax	G	D	S	L	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. fork length	Surcharge per 100 mm add. opening range
S 11-ZV 20	2000	500	2	400-1000	1090	120	40	1200	120	235	280			
S 11-ZV 25	2500	600	2	400-1100	1190	125	45	1200	125	245	320			
S 11-ZV 30	3000	500	3	400-1200	1300	140	50	1200	130	240	430			
S 11-ZV 40	4000	500	3	400-1300	1400	140	50	1200	135	230	455			
S 11-ZV 45	4500	600	3	400-1300	1400	150	60	1200	150	255	550			
S 11-ZV 48	5000	600	3	400-1300	1400	150	60	1200	150	245	570			
S 11-ZV 50	5000	600	4	400-1400	1500	150	60	1200	150	235	640			
S 11-ZV 60	6000	600	4	400-1700	1800	150	65	1200	155	230	730			
S 11-ZV 70	7000	600	4	400-1900	2010	150	70	1200	170	220	910			
S 11-ZV 80	8000	600	4	500-1900	2010	200	70	1200	175	245	1055			
S 11-ZV 80/900	8000	900	4	500-2100	2220	200	70	1200	185	210	1385			
S 11-ZV 100	10000	600	4	500-2100	2220	200	70	1200	185	210	1385			

Surcharge for chamfer on fork inner edge 25x45°, up to 1,500 mm length, from 1,600 mm length

Fork positioners with ISO fork carriage plates for mounting the truck's forks on request.

Inner opening range = 0, on request.

Ex-protection version on request. 

## Standard values for residual load capacity of lift trucks \*\*

Fork Positioners	S 11 -	ZV 20	ZV 20	ZV 25	ZV 30	ZV 30	ZV 40	ZV 40	ZV 45	ZV 48/50	ZV 60	ZV 70	ZV 80	ZV 100
Load capacity lift truck	kg	1500	2000	2500	3000	3500	4000	4500	5000/500	5000	6000	7000	8000	10000
X*	mm	350	450	450	450	500	500	500	500	560	560	650	650	750
LC (LSP) = 500 mm	kg	1220	1710	2110	2480	2960	3380	3820	4190					
LC (LSP) = 600 mm	kg	1110	1560	1930	2270	2720	3100	3510	3850	4250	5050	5900	6660	8350
LC (LSP) = 700 mm	kg	1010	1440	1780	2100	(2360)	2870	(3150)	3560	3950	4690	5500	6220	7850
LC (LSP) = 800 mm	kg	940	1330	1650	1940	(2060)	2670	(2750)	3310	3690	4380	5160	5850	7400

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

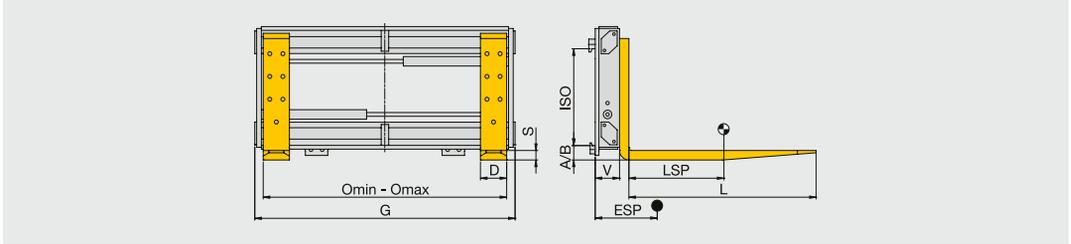
\* Assumed dimensions

For greater load centers, where the lift truck has a higher residual load capacity than the attachment, those values, upon the exceedance of which the attachment would be overloaded, are indicated in brackets ( ).

# FORK POSITIONERS ZV-SERIES (HEAVY-DUTY)

## WITH SIDESHIFT VALVE

2 HYDRAULIC FUNCTIONS · SHAFT-GUIDED · FORKS SERIALLY BOLTED ON



Model	Load capacity	LC (LSP)	ISO	Omin - Omax	G	D	S	L	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. fork length	Surcharge per 100 mm add. opening range
S 11-ZV 20-SV	2000	500	2	400-1000	1090	120	40	1200	120	235	285			
S 11-ZV 25-SV	2500	600	2	400-1100	1190	125	45	1200	125	245	325			
S 11-ZV 30-SV	3000	500	3	400-1200	1300	140	50	1200	130	235	440			
S 11-ZV 40-SV	4000	500	3	400-1300	1400	140	50	1200	135	225	470			
S 11-ZV 45-SV	4500	600	3	400-1300	1400	150	60	1200	150	250	570			
S 11-ZV 48-SV	5000	600	3	400-1300	1400	150	60	1200	150	240	580			
S 11-ZV 50-SV	5000	600	4	400-1400	1500	150	60	1200	150	230	650			
S 11-ZV 60-SV	6000	600	4	400-1700	1800	150	65	1200	155	230	740			
S 11-ZV 70-SV	7000	600	4	400-1900	2010	150	70	1200	170	215	930			
S 11-ZV 80-SV	8000	600	4	500-1900	2010	200	70	1200	175	245	1075			
S 11-ZV 80/900-SV	8000	900	4	500-2100	2220	200	70	1200	190	210	1405			
S 11-ZV 100-SV	10000	600	4	500-2100	2220	200	70	1200	190	210	1405			

Surcharge for chamfer on fork inner edge 25x45°, up to 1,500 mm length, from 1,600 mm length

Fork positioners with ISO fork carriage plates for mounting the truck's forks on request.

No sideshifting when forks are in their end positions! Also see page 13.

Inner opening range = 0 on request.

Ex-protection version on request.

## Standard values for residual load capacity of lift trucks \*\*

Fork Positioners	S 11 -	ZV 20-SV	ZV 20-SV	ZV 25-SV	ZV 30-SV	ZV 30-SV	ZV 40-SV	ZV 40-SV	ZV 45-SV	ZV 48/50-SV	ZV 60-SV	ZV 70-SV	ZV 80-SV	ZV 100-SV
Load capacity lift truck	kg	1500	2000	2500	3000	3500	4000	4500	5000/500	5000	6000	7000	8000	10000
X*	mm	350	450	450	450	500	500	500	500	560	560	650	650	750
LC (LSP) = 500 mm	kg	1220	1710	2110	2480	2960	3380	3820	4190					
LC (LSP) = 600 mm	kg	1110	1560	1920	2270	2720	3100	3510	3850	4250	5050	5900	6660	8300
LC (LSP) = 700 mm	kg	1010	1440	1760	2100	(2360)	2870	(3150)	3560	3950	4690	5500	6220	7800
LC (LSP) = 800 mm	kg	940	1330	1650	1940	(2060)	2670	(2750)	3310	3690	4380	5160	5850	7350

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

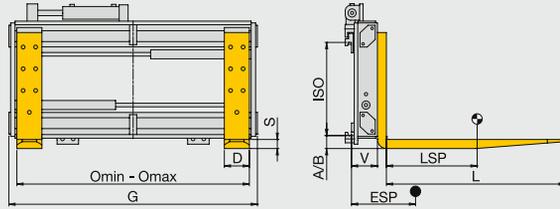
\* Assumed dimensions

For greater load centers, where the lift truck has a higher residual load capacity than the attachment, those values, upon the exceedance of which the attachment would be overloaded, are indicated in brackets ( ).

# FORK POSITIONERS ZV-SERIES (HEAVY-DUTY)

## WITH SEPARATE SIDESHIFT

2 HYDRAULIC FUNCTIONS · SHAFT-GUIDED · FORKS SERIALLY BOLTED ON



Model	Load capacity	LC (LSP)	ISO	Omin - Omax	G	Side-shift	D	S	L	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. fork length	Surcharge per 100 mm add. opening range
S 11-ZV 20-S	2000	500	2	400-1000	1090	± 100	120	40	1200	135	225	310			
S 11-ZV 25-S	2500	600	2	400-1100	1190	± 100	125	45	1200	140	235	350			
S 11-ZV 30-S	3000	500	3	400-1200	1300	± 100	140	50	1200	145	235	465			
S 11-ZV 40-S	4000	500	3	400-1300	1400	± 100	140	50	1200	150	220	495			
S 11-ZV 45-S	4500	600	3	400-1300	1400	± 100	150	60	1200	165	255	590			
S 11-ZV 48-S	5000	600	3	400-1300	1400	± 100	150	60	1200	165	245	610			
S 11-ZV 50-S	5000	600	4	400-1400	1500	± 100	150	60	1200	165	230	695			
S 11-ZV 60-S	6000	600	4	400-1700	1800	± 150	150	65	1200	170	225	785			
S 11-ZV 70-S	7000	600	4	400-1900	2010	± 150	150	70	1200	190	220	985			
S 11-ZV 80-S	8000	600	4	500-1900	2010	± 150	200	70	1200	195	245	1130			
S 11-ZV 80/900-S	8000	900	4	500-2100	2220	± 150	200	70	1200	215	225	1485			
S 11-ZV 100-S	10000	600	4	500-2100	2220	± 150	200	70	1200	215	225	1485			

Surcharge for chamfer on fork inner edge 25x45°, up to 1,500 mm length, from 1,600 mm length

Fork positioners with ISO fork carriage plates for mounting the truck's forks on request.

Inner opening range = 0, on request.

Ex-protection version on request. 

### Standard values for residual load capacity of lift trucks \*\*

Fork Positioners	S 11 -	ZV 20-S	ZV 20-S	ZV 25-S	ZV 30-S	ZV 30-S	ZV 40-S	ZV 40-S	ZV 45-S	ZV 48/50-S	ZV 60-S	ZV 70-S	ZV 80-S	ZV 100-S
Load capacity lift truck	kg	1500	2000	2500	3000	3500	4000	4500	5000/500	5000	6000	7000	8000	10000
X*	mm	350	450	450	450	500	500	500	500	560	560	650	650	750
LC (LSP) = 500 mm	kg	1200	1670	2070	2420	2900	3310	3750	4110					
LC (LSP) = 600 mm	kg	1090	1530	1900	2220	2670	3050	3450	3790	4170	4960	5760	6530	8100
LC (LSP) = 700 mm	kg	1000	1410	1750	2050	(2360)	2820	(3150)	3510	3880	4620	5400	6110	7650
LC (LSP) = 800 mm	kg	920	1310	1620	1900	(2060)	2630	(2750)	3270	3630	4320	5060	5740	7200

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

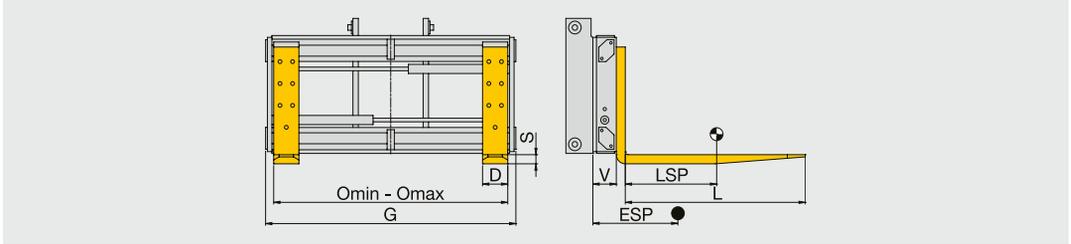
\* Assumed dimensions

For greater load centers, where the lift truck has a higher residual load capacity than the attachment, those values, upon the exceedance of which the attachment would be overloaded, are indicated in brackets ( ).

# FORK POSITIONERS ZVI-SERIES, INTEGRAL (HEAVY-DUTY)

1 HYDRAULIC FUNCTION

SHAFT-GUIDED · FORKS SERIALLY BOLTED ON



Model	Load capacity	LC (LSP)	Omin - Omax	G	D	S	L	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. fork length	Surcharge per 100 mm add. opening range
	kg	mm	mm	mm	mm	mm	mm	mm	mm	kg	€	€	€
S 11-ZVI 20	2000	500	400-1000	1090	120	40	1200	120	240	280			
S 11-ZVI 25	2500	600	400-1100	1190	125	45	1200	125	245	320			
S 11-ZVI 30	3000	500	400-1200	1300	140	50	1200	130	240	430			
S 11-ZVI 40	4000	500	400-1300	1400	140	50	1200	135	230	455			
S 11-ZVI 45	4500	600	400-1300	1400	150	60	1200	150	255	550			
S 11-ZVI 48*	5000	600	400-1300	1400	150	60	1200	150	250	570			
S 11-ZVI 50	5000	600	400-1400	1500	150	60	1200	150	235	640			
S 11-ZVI 60	6000	600	400-1700	1800	150	65	1200	155	230	730			
S 11-ZVI 70	7000	600	400-1900	2010	150	70	1200	170	220	910			
S 11-ZVI 80	8000	600	500-1900	2010	200	70	1200	175	245	1055			
S 11-ZVI 80/900	8000	900	500-2100	2220	200	70	1200	185	225	1285			
S 11-ZVI 100	10000	600	500-2100	2220	200	70	1200	185	225	1285			
S 11-ZVI 80/1100	8000	1100	500-2100	2220	200	80	1200	190	240	1410			
S 11-ZVI 120	12000	600	500-2100	2220	200	80	1200	190	240	1410			

\* For vehicles of ISO class 3

Lost load center, center of gravity and weight from front edge of side brackets. Detail drawings of fork carriage, roller studs and chain anchors or the fork carriage have to be provided by the customer. Price includes side brackets.

Surcharge for chamfer on fork inner edge 25x45°.

up to 1,500 mm length, from 1,600 mm length Fork positioners with ISO fork carriage plates for mounting the truck's forks on request.

Inner opening range = 0, on request.

Ex-protection version on request. 

## Standard values for residual load capacity of lift trucks \*\*

Fork Positioners Integral	S 11 -	ZVI 20	ZVI 20	ZVI 25	ZVI 30	ZVI 30	ZVI 40	ZVI 40	ZVI 45	ZVI 48/50	ZVI 60	ZVI 70	ZVI 80	ZVI 1800	ZVI 120
Load capacity lift truck	kg	1500	2000	2500	3000	3500	4000	4500	5000/500	5000	6000	7000	8000	10000	12000
X*	mm	350	450	450	450	500	500	500	500	560	560	650	650	750	800
LC (LSP) = 500 mm	kg	1300	1800	2220	2640	3160	3590	4050	4420						
LC (LSP) = 600 mm	kg	1180	1640	2030	2410	(2750)	3290	(3670)	4060	4560	5400	6310	7120	9300	11100
LC (LSP) = 700 mm	kg	1070	1510	1860	2220	(2360)	3030	(3150)	3750	4230	5000	5880	6640	8690	10400
LC (LSP) = 800 mm	kg	990	1400	1720	2050	(2060)	2810	(2750)	3480	3930	4660	5500	6210	8150	9800

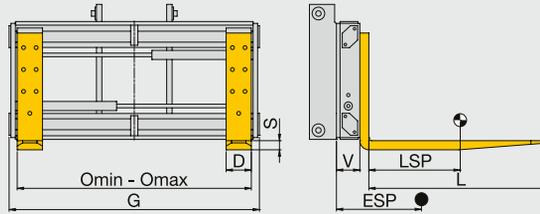
\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

For greater load centers, where the lift truck has a higher residual load capacity than the attachment, those values, upon the exceedance of which the attachment would be overloaded, are indicated in brackets ( ).

# FORK POSITIONERS ZVI-SERIES, INTEGRAL (HEAVY-DUTY) WITH SIDESHIFT VALVE

2 HYDRAULIC FUNCTIONS · SHAFT-GUIDED · FORKS SERIALLY BOLTED ON



Model	Load capacity	LC (LSP)	Omin - Omax	G	D	S	L	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. fork length	Surcharge per 100 mm add. opening range
S 11-ZVI 20-SV	2000	500	400-1000	1090	120	40	1200	120	235	285			
S 11-ZVI 25-SV	2500	600	400-1100	1190	125	45	1200	125	245	325			
S 11-ZVI 30-SV	3000	500	400-1200	1300	140	50	1200	130	235	440			
S 11-ZVI 40-SV	4000	500	400-1300	1400	140	50	1200	135	225	470			
S 11-ZVI 45-SV	4500	600	400-1300	1400	150	60	1200	150	250	570			
S 11-ZVI 48-SV*	5000	600	400-1300	1400	150	60	1200	150	240	580			
S 11-ZVI 50-SV	5000	600	400-1400	1500	150	60	1200	150	230	650			
S 11-ZVI 60-SV	6000	600	400-1700	1800	150	65	1200	155	230	740			
S 11-ZVI 70-SV	7000	600	400-1900	2010	150	70	1200	170	215	930			
S 11-ZVI 80-SV	8000	600	500-1900	2010	200	70	1200	175	245	1075			
S 11-ZVI 80/900-SV	8000	900	500-2100	2220	200	70	1200	190	225	1305			
S 11-ZVI 100-SV	10000	600	500-2100	2220	200	70	1200	190	225	1305			
S 11-ZVI 80/1100-SV	8000	1100	500-2100	2220	200	80	1200	195	225	1480			
S 11-ZVI 120-SV	12000	600	500-2100	2220	200	80	1200	195	225	1480			

\* For vehicles of ISO class 3

Lost load center, center of gravity and weight from front edge of side brackets.

Detail drawings of fork carriage, roller studs and chain anchors or the fork carriage have to be provided by the customer.

Price includes side brackets.

Surcharge for chamfer on fork inner edge 25x45°, up to 1,500 mm length, from 1,600 mm length

Fork positioners with ISO fork carriage plates for mounting the truck's forks on request.

No sideshifting when forks are in their end positions! Also see page 13.

Inner opening range = 0, on request.

Ex-protection version on request.



## Standard values for residual load capacity of lift trucks \*\*

Fork Positioners Integral	S 11 -	ZVI 20-SV	ZVI 25-SV	ZVI 30-SV	ZVI 30-SV	ZVI 40-SV	ZVI 40-SV	ZVI 45-SV	ZVI 48/50-SV	ZVI 60-SV	ZVI 70-SV	ZVI 80-SV	ZVI 100-SV	ZVI 120-SV	
Load capacity lift truck	kg	1500	2000	2500	3000	3500	4000	4500	5000/500	5000	6000	7000	8000	10000	12000
X*	mm	350	450	450	450	500	500	500	500	560	560	650	650	750	800
LC (LSP) = 500 mm	kg	1300	1800	2220	2640	3150	3580	4040	4420						
LC (LSP) = 600 mm	kg	1170	1640	2020	2410	(2750)	3280	3670	4060	4560	5400	6310	7120	9220	11000
LC (LSP) = 700 mm	kg	1070	1510	1860	2220	(2360)	3020	(3150)	3740	4230	5000	5880	6640	8630	10350
LC (LSP) = 800 mm	kg	990	1400	1720	2050	(2060)	2820	(2750)	3480	3930	4660	5500	6210	8100	9750

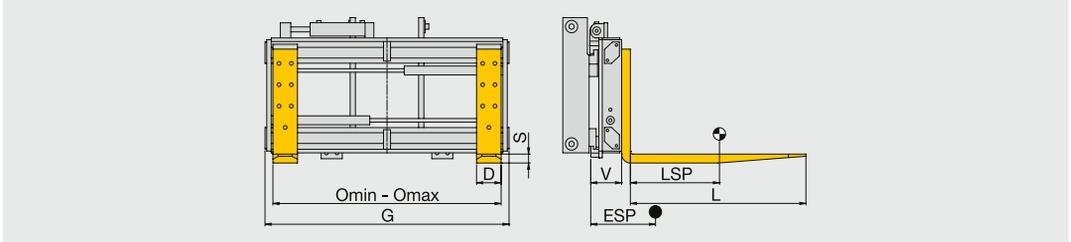
\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

For greater load centers, where the lift truck has a higher residual load capacity than the attachment, those values, upon the exceedance of which the attachment would be overloaded, are indicated in brackets ( ).

# FORK POSITIONERS ZVI-SERIES, INTEGRAL (HEAVY-DUTY) WITH SEPARATE SIDESHIFT

2 HYDRAULIC FUNCTIONS · SHAFT-GUIDED · FORKS SERIALLY BOLTED ON



Model	Load capacity	LC (LSP)	Omin - Omax	G	Side-shift	D	S	L	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. fork length	Surcharge per 100 mm add. opening range
S 11-ZVI 20-S	2000	500	400-1000	1090	± 100	120	40	1200	170	225	360			
S 11-ZVI 25-S	2500	600	400-1100	1190	± 100	125	45	1200	175	235	400			
S 11-ZVI 30-S	3000	500	400-1200	1300	± 100	140	50	1200	185	240	530			
S 11-ZVI 40-S	4000	500	400-1300	1400	± 100	140	50	1200	190	235	560			
S 11-ZVI 45-S	4500	600	400-1300	1400	± 100	150	60	1200	200	260	660			
S 11-ZVI 48-S*	5000	600	400-1300	1400	± 100	150	60	1200	205	265	680			
S 11-ZVI 50-S	5000	600	400-1400	1500	± 100	150	60	1200	225	240	850			
S 11-ZVI 60-S	6000	600	400-1700	1800	± 150	150	65	1200	230	240	940			
S 11-ZVI 70-S	7000	600	400-1900	2010	± 150	150	70	1200	245	245	1135			
S 11-ZVI 80-S	8000	600	500-1900	2010	± 150	200	70	1200	250	275	1275			
S 11-ZVI 80/900-S	8000	900	500-2100	2220	± 150	200	70	1200	260	250	1635			
S 11-ZVI 100-S	10000	600	500-2100	2220	± 150	200	70	1200	260	250	1635			
S 11-ZVI 80/1100-S	8000	1100	500-2100	2220	± 150	200	80	1200	265	260	1770			
S 11-ZVI 120-S	12000	600	500-2100	2220	± 150	200	80	1200	265	260	1770			

\* For vehicles of ISO class 3

Lost load center, center of gravity and weight from front edge of side brackets.

Detail drawings of fork carriage, roller studs and chain anchors or the fork carriage have to be provided by the customer.

Price includes side brackets.

Surcharge for chamfer on fork inner edge 25x45°, up to 1.500 mm length, from 1.600 mm length

Fork positioners with ISO fork carriage plates for mounting the truck's forks on request. Inner opening range = 0, on request.

Ex-protection version on request.



## Standard values for residual load capacity of lift trucks \*\*

Fork Positioners Integral	S 11 -	ZVI 20-S	ZVI 25-S	ZVI 30-S	ZVI 30-S	ZVI 40-S	ZVI 40-S	ZVI 45-S	ZVI 48/50-S	ZVI 60-S	ZVI 70-S	ZVI 80-S	ZVI 100-S	ZVI 120-S	
Load capacity lift truck	kg	1500	2000	2500	3000	3500	4000	4500	5000/500	5000	6000	7000	8000	10000	12000
X*	mm	350	450	450	450	500	500	500	500	560	560	650	650	750	800
LC (LSP) = 500 mm	kg	1200	1680	2080	2460	2940	3350	3790	4150						
LC (LSP) = 600 mm	kg	1090	1540	1900	2250	2710	3080	3480	3820	4200	5000	5850	6610	8600	10350
LC (LSP) = 700 mm	kg	1000	1420	1760	2080	(2360)	2850	(3150)	3540	3900	4650	5470	6180	8070	9730
LC (LSP) = 800 mm	kg	920	1320	1630	1930	(2060)	2650	(2750)	3300	3640	4350	5140	5810	7600	9180

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

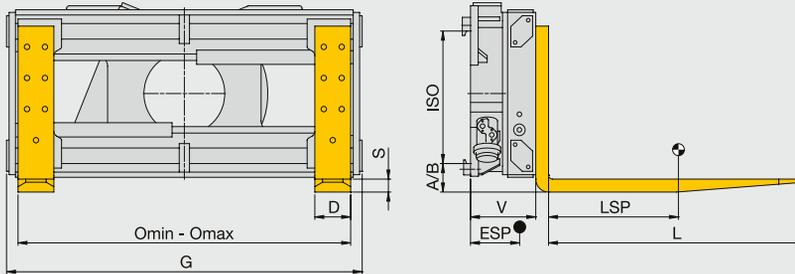
\* Assumed dimensions

For greater load centers, where the lift truck has a higher residual load capacity than the attachment, those values, upon the exceedance of which the attachment would be overloaded, are indicated in brackets ( ).

# FORK POSITIONERS ZV-SERIES, ROTATABLE

## 2 HYDRAULIC FUNCTIONS

SHAFT-GUIDED · FORKS SERIALLY BOLTED ON · ROTATION RANGE 360°



Model	Load capacity kg	LC (LSP) mm	ISO	Omin - Omax mm	G mm	D mm	S mm	L mm	V mm	CoG (ESP) mm	Weight kg	Price €	Surcharge per 100 mm add. fork length €	Surcharge per 100 mm add. opening range €	Surcharge for sep. Sideshift €
S 11-ZV 12-360°	1200	500	2	500-1000	1090	100	40	1200	230	215	465				
S 11-ZV 20-360°	2000	500	2	500-1000	1090	120	40	1200	240	230	495				
S 11-ZV 22-360°	2200	500	2	500-1000	1090	125	45	1200	245	245	525				
S 11-ZV 25-360°	2500	500	3	500-1100	1190	125	45	1200	250	245	560				
S 11-ZV 30-360°	3000	500	3	500-1200	1300	140	50	1200	255	260	675				
S 11-ZV 40-360°	4000	500	3	500-1300	1400	140	50	1200	265	245	755				
S 11-ZV 45-360°	4500	600	3	500-1300	1400	150	60	1200	280	275	845				
S 11-ZV 50-360°	5000	600	4	500-1400	1500	150	60	1200	290	245	1090				
S 11-ZV 60-360°	6000	600	4	500-1700	1800	150	65	1200	295	255	1220				

Surcharge for solenoid valve, incl. hydraulics safety bar  
Fork positioner with higher load capacity on request.  
Surcharge for forndry version on request.

Surcharge for integral design, see accessories, page 217  
Ex-protection version on request.

## Standard values for residual load capacity of lift trucks \*\*

Fork Positioners rotatable	S 11 -	ZV 12 -360°	ZV 20 -360°	ZV 20 -360°	ZV 25 -360°	ZV 30 -360°	ZV 30 -360°	ZV 40 -360°	ZV 45 -360°	ZV 45/50 -360°	ZV 50 -360°	ZV 60 -360°
Load capacity lift truck	kg	1500	2000	2500	3000	3500	4000	4500	5000/500	5000	6000	7000
X*	mm	350	450	450	450	500	500	500	500	560	560	650
LC (LSP) = 500 mm	kg	1010	1420	1820	2160	2520	2920	3270	3600			
LC (LSP) = 600 mm	kg	930	1310	1680	2000	2340	2700	3030	3350	3560	4370	5200
LC (LSP) = 700 mm	kg	850	1220	1560	1850	2180	(2360)	2820	3120	3330	4090	4890
LC (LSP) = 800 mm	kg	790	1140	(1375)	1730	2040	(2060)	2640	2920	3130	3840	4600

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

For greater load centers, where the lift truck has a higher residual load capacity than the attachment, those values, upon the exceedance of which the attachment would be overloaded, are indicated in brackets ( ).

# SHAFT-GUIDED FORK POSITIONER IN OPERATION

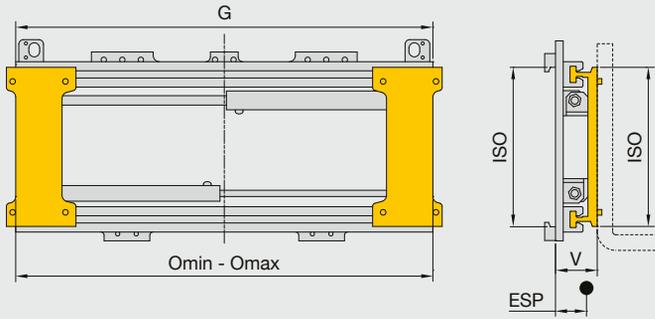


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# FORK POSITIONERS ZVP-SERIES

1 HYDRAULIC FUNCTION · FOR FORKS ACCORDING TO ISO 2328



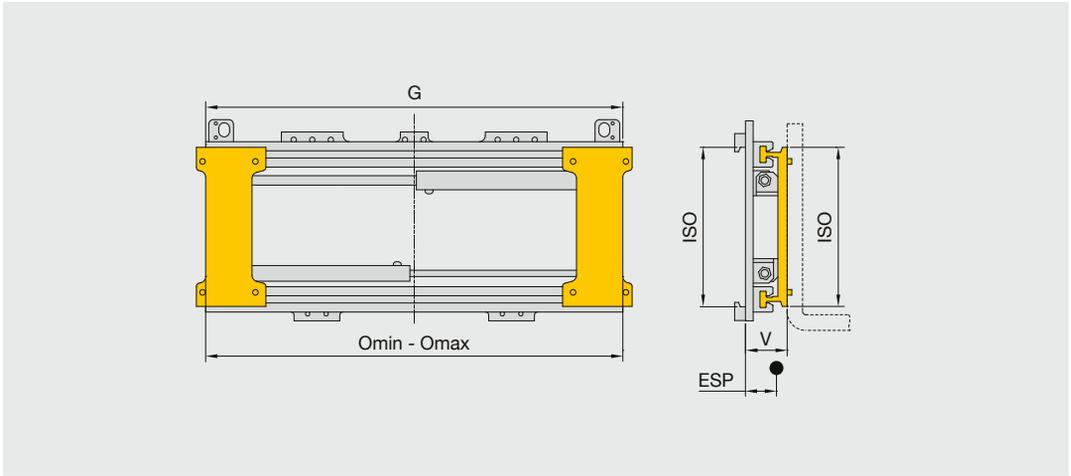
Model	Load capacity	LC (LSP)	ISO	Omin - Omax	G	V	CoG (ESP)	Weight	Price
	kg	mm		mm	mm	mm	mm	kg	€
S 11-ZVP 20	2000	500	2	400-980	980	118	45	120	
				500-1080	980	118	45	120	
				400-1050	1050	118	45	125	
				500-1150	1050	118	45	125	
				400-1150	1150	118	45	130	
S 11-ZVP 25	2500	600	2	500-1250	1150	118	45	130	
				400-1050	1050	118	45	125	
				500-1150	1050	118	45	125	
				400-1150	1150	118	45	130	
				500-1250	1250	118	45	135	
S 11-ZVP 35	3500	500	3	500-1350	1250	118	45	135	
				400-1050	1050	128	52	135	
				500-1150	1050	128	52	135	
				400-1150	1150	128	52	140	
				500-1250	1150	128	52	140	
				400-1250	1250	128	52	145	
				500-1350	1250	128	52	145	
400-1350	1350	128	52	150					
500-1450	1350	128	52	150					

For load backrests see page 219

Ex-protection version on request. 

# FORK POSITIONERS ZVP-SERIES

1 HYDRAULIC FUNCTION · FOR FORKS ACCORDING TO ISO 2328



Model	Load capacity	LC (LSP)	ISO	Omin - Omax	G	V	CoG (ESP)	Weight	Price	
	kg	mm		mm	mm					
S 11-ZVP 48	4800	600	3	400-1250	1250	135	55	190		
				500-1350	1250					
				400-1350	1350					195
				500-1450	1350					195
				400-1450	1450					200
				500-1550	1450					200
				400-1550	1550					205
				500-1650	1550					205

For load backrests see page 219

Ex-protection version on request.

## Standard values for residual load capacity of lift trucks \*\*

Fork Positioners	S 11 -	ZVP 20	ZVP 20	ZVP 25	ZVP 35	ZVP 35	ZVP 48	ZVP 48	ZVP 48
Load capacity lift truck	kg	1500	2000	2500	3000	3500	4000	4500	5000/500
X*	mm	350	450	450	450	500	500	500	500
LC (LSP) = 500 mm	kg	1265	1715	2160	2575	3025	3420	3860	4300
LC (LSP) = 600 mm	kg	1145	1570	1975	2355	2780	3145	3550	3950
LC (LSP) = 700 mm	kg	1045	1445	1820	2170	2570	2910	3285	3655
LC (LSP) = 800 mm	kg	965	1340	1685	2015	2390	2710	3055	3400

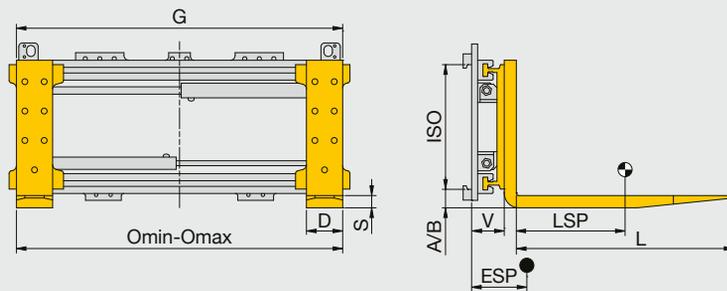
\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

# FORK POSITIONERS ZVP-SERIES

## WITH FORKS

1 HYDRAULIC FUNCTION · FORKS SERIALLY BOLTED ON



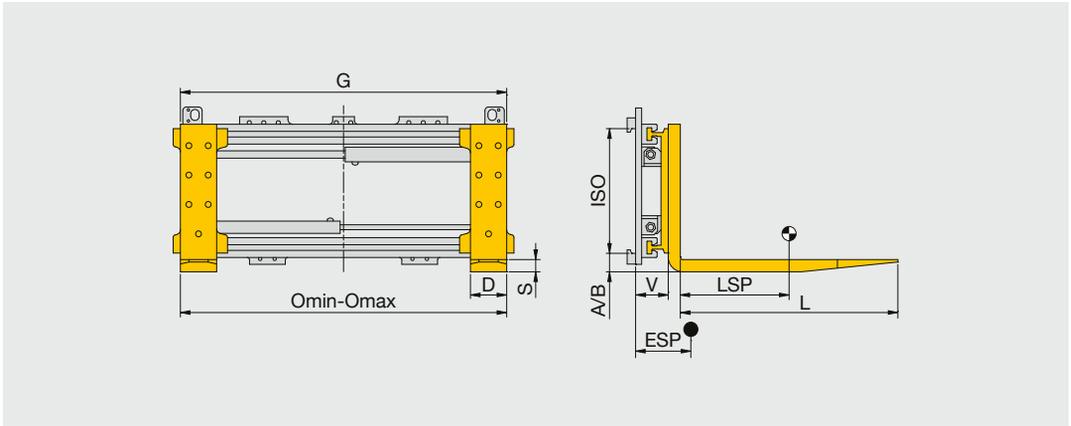
Model	Load capacity	LC (LSP)	ISO	Omin - Omax	G	D	S	L	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. fork length
				mm	mm	mm	mm	mm	mm	mm			
S 11-ZVP 20-Z	2000	500	2	400-980	980	120	40	1200	118	260	235	€	€
				500-1080	980	120	40	1200	118	260	235		
				400-1050	1050	120	40	1200	118	258	240		
				500-1150	1050	120	40	1200	118	258	240		
				400-1150	1150	120	40	1200	118	255	245		
S 11-ZVP 25-Z	2500	600	2	400-1050	1050	125	45	1200	118	275	260		
				500-1150	1050	125	45	1200	118	275	260		
				400-1150	1150	125	45	1200	118	273	265		
				500-1250	1150	125	45	1200	118	273	265		
				400-1250	1250	125	45	1200	118	270	270		
S 11-ZVP 35-Z	3500	500	3	400-1050	1050	140	50	1200	128	275	320		
				500-1150	1050	140	50	1200	128	275	320		
				400-1150	1150	140	50	1200	128	272	325		
				500-1250	1150	140	50	1200	128	272	325		
				400-1250	1250	140	50	1200	128	270	330		
				500-1350	1250	140	50	1200	128	270	330		
				400-1350	1350	140	50	1200	128	268	335		
500-1450	1350	140	50	1200	128	268	335						

For load backrests see page 219

Ex-protection version on request

# FORK POSITIONERS ZVP-SERIES WITH FORKS

1 HYDRAULIC FUNCTION · FORKS SERIALLY BOLTED ON



Model	Load capacity kg	LC (LSP) mm	ISO	Omin - Omax	G	D	S	L	V	CoG (ESP)	Weight kg	Price €	Surcharge per 100 mm add. fork length €
				mm	mm	mm	mm	mm	mm	mm			
S 11-ZVP 48-Z	4800	600	3	400-1250	1250	150	60	1200	135	292	425	€	€
				500-1350	1250	150	60	1200	135	292	425		
				400-1350	1350	150	60	1200	135	289	430		
				500-1450	1350	150	60	1200	135	289	430		
				400-1450	1450	150	60	1200	135	286	435		
				500-1550	1450	150	60	1200	135	286	435		
				400-1550	1550	150	60	1200	135	284	440		
				500-1650	1550	150	60	1200	135	284	440		

For load backrests see page 219

Ex-protection version on request.

## Standard values for residual load capacity of lift trucks \*\*

Fork Positioners	S 11 -	ZVP 20-Z	ZVP 20-Z	ZVP 25-Z	ZVP 35-Z	ZVP 35-Z	ZVP 48-Z	ZVP 48-Z	ZVP 48-Z
Load capacity lift truck	kg	1500	2000	2500	3000	3500	4000	4500	5000/500
X*	mm	350	450	450	450	500	500	500	500
LC (LSP) = 500 mm	kg	1210	1700	2120	2495	2990	3305	3740	4240
LC (LSP) = 600 mm	kg	1100	1555	1940	2285	2745	3040	3440	3900
LC (LSP) = 700 mm	kg	1005	1430	1785	2105	2540	2810	3185	3610
LC (LSP) = 800 mm	kg	925	1325	1655	1955	2360	2620	2965	3355

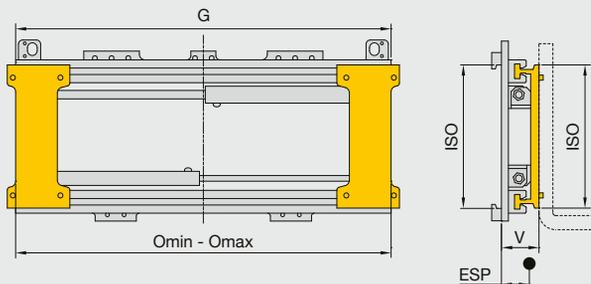
\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

# FORK POSITIONERS ZVP-SERIES

## WITH SIDESHIFT VALVE

2 HYDRAULIC FUNCTIONS · FOR FORKS ACCORDING TO ISO 2328



Model	Load capacity kg	LC (LSP) mm	ISO	Omin - Omax	G	V	CoG (ESP)	Weight kg	Price €
				mm	mm	mm	mm		
S 11-ZVP 20-SV	2000	500	2	400-980	980	118	45	125	
				400-1050	1050	118	45	130	
				400-1150	1150	118	45	135	
S 11-ZVP 25-SV	2500	600	2	400-1050	1050	118	45	130	
				400-1150	1150	118	45	135	
				400-1250	1250	118	45	140	
S 11-ZVP 35-SV	3500	500	3	400-1050	1050	128	52	140	
				400-1150	1150	128	52	145	
				400-1250	1250	128	52	150	
S 11-ZVP 48-SV	4800	600	3	400-1250	1250	135	55	195	
				400-1350	1350	135	55	200	
				400-1450	1450	135	55	205	
				400-1550	1550	135	55	210	

No sideshifting when forks are in their end positions! Also see page 13.

For load backrests see page 219

Ex-protection version on request.

### Standard values for residual load capacity of lift trucks \*\*

Fork Positioners	S 11 -	ZVP 20-SV	ZVP 20-SV	ZVP 25-SV	ZVP 35-SV	ZVP 35-SV	ZVP 48-SV	ZVP 48-SV	ZVP 48-SV
Load capacity	kg	1500	2000	2500	3000	3500	4000	4500	5000/500
X*	mm	350	450	450	450	500	500	500	500
LC (LSP) = 500 mm	kg	1265	1715	2160	2570	3025	3420	3860	4300
LC (LSP) = 600 mm	kg	1145	1570	1975	2355	2780	3145	3550	3950
LC (LSP) = 700 mm	kg	1050	1445	1820	2170	2570	2910	3285	3655
LC (LSP) = 800 mm	kg	965	1340	1685	2015	2390	2710	3055	3400

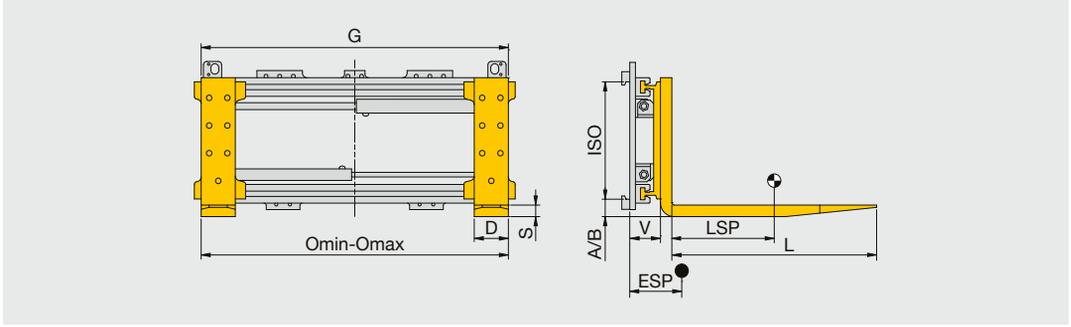
\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

# FORK POSITIONERS ZVP-SERIES

## WITH SIDESHIFT VALVE AND FORKS

2 HYDRAULIC FUNCTIONS · FORKS SERIALLY BOLTED ON



Model	Load capacity	LC (LSP)	ISO	Omin - Omax	G	D	S	L	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. fork length
	kg			mm									
S 11-ZVP 20-SV-Z	2000	500	2	400-980	980	120	40	1200	118	260	240		
				400-1050	1050	120	40	1200	118	258	245		
				400-1150	1150	120	40	1200	118	255	250		
S 11-ZVP 25-SV-Z	2500	600	2	400-1050	1050	125	45	1200	118	275	265		
				400-1150	1150	125	45	1200	118	273	270		
				400-1250	1250	125	45	1200	118	270	275		
S 11-ZVP 35-SV-Z	3500	500	3	400-1050	1050	140	50	1200	128	275	325		
				400-1150	1150	140	50	1200	128	272	330		
				400-1250	1250	140	50	1200	128	270	335		
				400-1350	1350	140	50	1200	128	268	340		
S 11-ZVP 48-SV-Z	4800	600	3	400-1250	1250	150	60	1200	135	292	430		
				400-1350	1350	150	60	1200	135	289	435		
				400-1450	1450	150	60	1200	135	286	440		
				400-1550	1550	150	60	1200	135	284	445		

No sideshifting when forks are in their end positions! Also see page 13.  
For load backrests see page 219

Ex-protection version on request.

### Standard values for residual load capacity of lift trucks \*\*

Fork Positioners	S 11 -	ZVP 20-SV-Z	ZVP 20-SV-Z	ZVP 25-SV-Z	ZVP 35-SV-Z	ZVP 35-SV-Z	ZVP 48-SV-Z	ZVP 48-SV-Z	ZVP 48-SV-Z
Load capacity lift truck	kg	1500	2000	2500	3000	3500	4000	4500	5000/500
X*	mm	350	450	450	450	500	500	500	500
LC (LSP) = 500 mm	kg	1210	1700	2120	2495	2985	3305	3740	4240
LC (LSP) = 600 mm	kg	1100	1555	1940	2280	2740	3040	3440	3900
LC (LSP) = 700 mm	kg	1005	1430	1785	2105	2535	2815	3185	3610
LC (LSP) = 800 mm	kg	925	1330	1655	1955	2360	2620	2965	3360

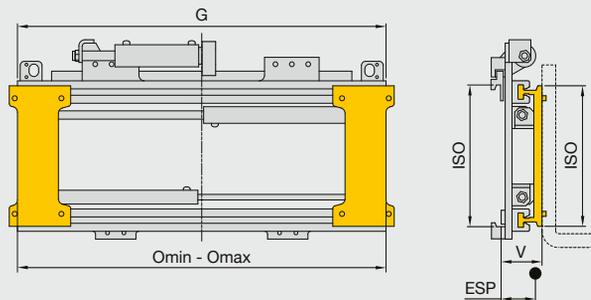
\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

# FORK POSITIONERS ZVP-SERIES

## WITH SEPARATE SIDESHIFT

2 HYDRAULIC FUNCTIONS · FOR FORKS ACCORDING TO ISO 2328



S 11

Model	Load capacity	LC (LSP)	ISO	Omin - Omax	G	Side-shift	V	CoG (ESP)	Weight	Price	
	kg	mm		mm	mm						mm
S 11 - ZVP 20-S	2000	500	2	400-980	980	± 100	133	50	145		
				500-1080	980						145
				400-1050	1050						150
				500-1150	1050						150
				400-1150	1150						155
				500-1250	1150						155
S 11 - ZVP 25-S	2500	600	2	400-1050	1050	± 100	133	50	150		
				500-1150	1050						150
				400-1150	1150						155
				500-1250	1150						155
				400-1250	1250						160
				500-1350	1250						160
S 11 - ZVP 35-S	3500	500	3	400-1050	1050	± 100	143	58	180		
				500-1150	1050						180
				400-1150	1150						185
				500-1250	1150						185
				400-1250	1250						190
				500-1350	1250						190
				400-1350	1350						195
				500-1450	1350						195

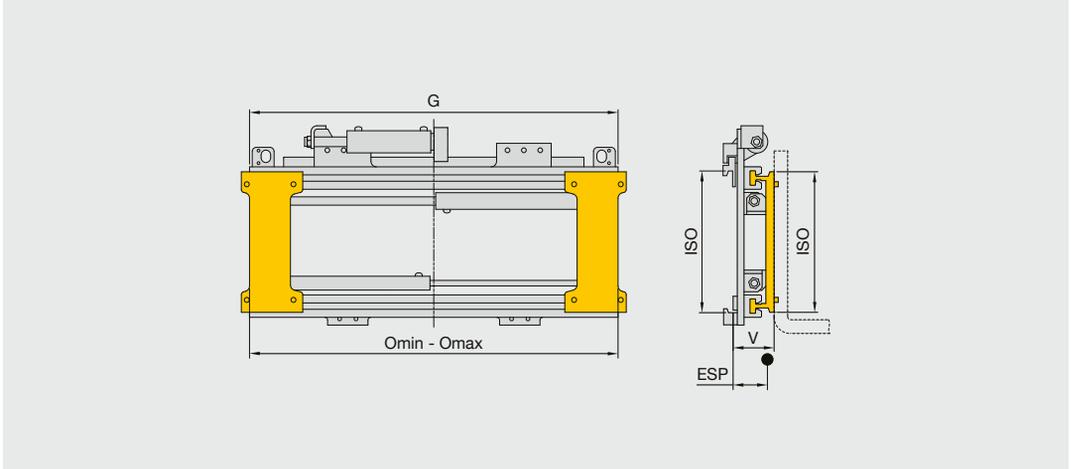
For load backrests see page 219

Ex-protection version on request. 

# FORK POSITIONERS ZVP-SERIES

## WITH SEPARATE SIDESHIFT

2 HYDRAULIC FUNCTIONS · FOR FORKS ACCORDING TO ISO 2328



S 11

Model	Load capacity	LC (LSP)	ISO	Omin - Omax	G	Side-shift	V	CoG (ESP)	Weight	Price	
	kg			mm	mm						mm
S 11 - ZVP 48-S	4800	600	3	400-1250	1250	± 100	150	63	220		
				500-1350	1250						220
				400-1350	1350						225
				500-1450	1350						225
				400-1450	1450						230
				500-1550	1450						230
				400-1550	1550						235
				500-1650	1550						235

For load backrests see page 219

Ex-protection version on request.

### Standard values for residual load capacity of lift trucks \*\*

Fork Positioners	S 11 -	ZVP 20-S	ZVP 20-S	ZVP 25-S	ZVP 35-S	ZVP 35-S	ZVP 48-S	ZVP 48-S	ZVP 48-S
Load capacity lift truck	kg	1500	2000	2500	3000	3500	4000	4500	5000/500
X*	mm	350	450	450	450	500	500	500	500
LC (LSP) = 500 mm	kg	1235	1680	2120	2515	2960	3355	3790	4220
LC (LSP) = 600 mm	kg	1120	1540	1940	2300	2720	3085	3485	3880
LC (LSP) = 700 mm	kg	1025	1420	1790	2125	2520	2855	3230	3595
LC (LSP) = 800 mm	kg	945	1315	1660	1970	2345	2660	3005	3350

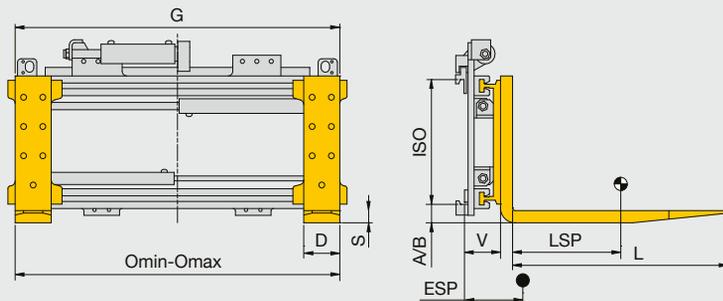
\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

# FORK POSITIONERS ZVP-SERIES

## WITH SEPARATE SIDESHIFT AND FORKS

2 HYDRAULIC FUNCTIONS · FORKS SERIALLY BOLTED ON



Model	Load capacity		LC (LSP)	ISO	Omin - Omax		G	Side-shift	D	S	L	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. fork length
	kg	mm			mm	mm										
S 11-ZVP 20-S-Z	2000	500	2		400-980	980	± 100	120	40	1200	133	247	265	€	€	
					500-1080	980		120	40	1200	133	247	265			
					400-1050	1050		120	40	1200	133	245	270			
					500-1150	1050		120	40	1200	133	245	270			
					400-1150	1150		120	40	1200	133	242	275			
					500-1250	1150		120	40	1200	133	242	275			
S 11-ZVP 25-S-Z	2500	600	2		400-1050	1050	± 100	125	45	1200	133	263	290			
					500-1150	1050		125	45	1200	133	263	290			
					400-1150	1150		125	45	1200	133	260	295			
					500-1250	1150		125	45	1200	133	260	295			
					400-1250	1250		125	45	1200	133	258	300			
					500-1350	1250		125	45	1200	133	258	300			
S 11-ZVP 35-S-Z	3500	500	3		400-1050	1050	± 100	140	50	1200	143	261	360			
					500-1150	1050		140	50	1200	143	261	360			
					400-1150	1150		140	50	1200	143	259	365			
					500-1250	1150		140	50	1200	143	259	365			
					400-1250	1250		140	50	1200	143	256	370			
					500-1350	1250		140	50	1200	143	256	370			
					400-1350	1350		140	50	1200	143	255	375			
					500-1450	1350		140	50	1200	143	255	375			

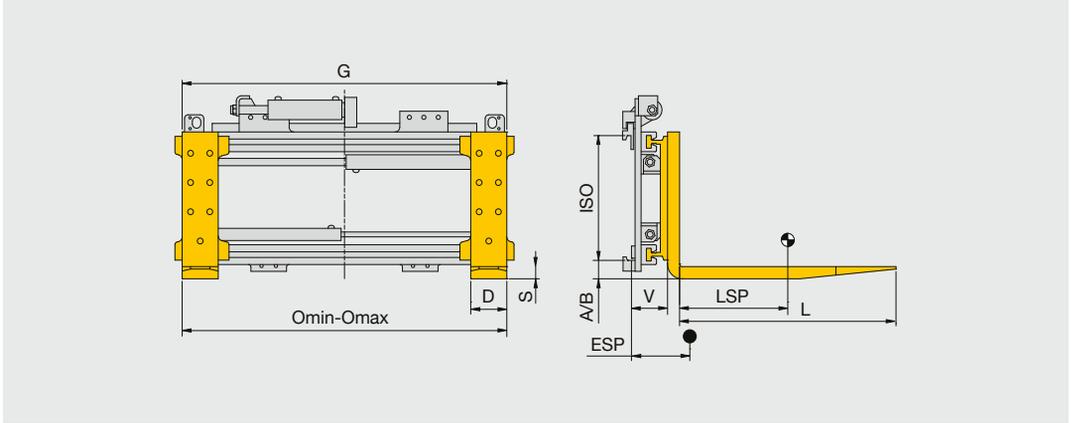
For load backrests see page 219

Ex-protection version on request. 

# FORK POSITIONERS ZVP-SERIES

## WITH SEPARATE SIDESHIFT AND FORKS

2 HYDRAULIC FUNCTIONS · FORKS SERIALLY BOLTED ON



Model	Load capacity kg	LC (LSP) mm	ISO	Omin - Omax	G	Side-shift mm	D mm	S mm	L mm	V mm	CoG (ESP) mm	Weight kg	Price €	Surcharge per 100 mm add. fork length €
				mm	mm									
S 11-ZVP 48-S-Z	4800	600	3	400-1250	1250	± 100	150	60	1200	150	287	455		
				500-1350	1250		150	60	1200	150	287	455		
				400-1350	1350		150	60	1200	150	285	460		
				500-1450	1350		150	60	1200	150	285	460		
				400-1450	1450		150	60	1200	150	283	465		
				500-1550	1450		150	60	1200	150	283	465		
				400-1550	1550		150	60	1200	150	281	470		
				500-1650	1550		150	60	1200	150	281	470		

For load backrests see page 219

Ex-protection version on request.

### Standard values for residual load capacity of lift trucks \*\*

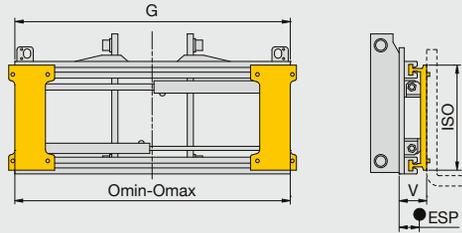
Fork Positioners	S 11 -	ZVP 20-S-Z	ZVP 20-S-Z	ZVP 25-S-Z	ZVP 35-S-Z	ZVP 35-S-Z	ZVP 48-S-Z	ZVP 48-S-Z	ZVP 48-S-Z
Load capacity lift truck	kg	1500	2000	2500	3000	3500	4000	4500	5000/500
X*	mm	350	450	450	450	500	500	500	500
LC (LSP) = 500 mm	kg	1185	1665	2080	2435	2920	3240	3670	4160
LC (LSP) = 600 mm	kg	1075	1525	1905	2235	2685	2980	3380	3830
LC (LSP) = 700 mm	kg	985	1405	1755	2060	2485	2760	3130	3545
LC (LSP) = 800 mm	kg	910	1305	1625	1915	2315	2575	2915	3300

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

# FORK POSITIONERS ZVPI-SERIES, INTEGRAL WITH SIDESHIFT VALVE

2 HYDRAULIC FUNCTIONS · FOR FORKS ACCORDING TO ISO 2328



Model	Load capacity	LC (LSP)	ISO	Omin – Omax	G	V	CoG (ESP)	Weight	Price
	kg			mm					
S 11-ZVPI 20-SV	2000	500	2	400-980	980	118	45	125	
				400-1050	1050	118	45	130	
				400-1150	1150	118	45	135	
S 11-ZVPI 25-SV	2500	600	2	400-1050	1050	118	45	130	
				400-1150	1150	118	45	135	
				400-1250	1250	118	45	140	
S 11-ZVPI 35-SV	3500	500	3	400-1050	1050	128	52	140	
				400-1150	1150	128	52	145	
				400-1250	1250	128	52	150	
				400-1350	1350	128	52	155	
S 11-ZVPI 48-SV*	4800	600	3	400-1250	1250	135	55	195	
				400-1350	1350	135	55	200	
				400-1450	1450	135	55	205	
				400-1550	1550	135	55	210	

\* For vehicles of ISO class 3  
Lost load center, center of gravity and weight from front edge of side brackets.  
Detail drawings of fork carriage, roller studs and chain anchors or the fork carriage have to be provided by the customer.  
No sideshifting when forks are in their end positions! Also see page 13.

Price includes side brackets.  
For load backrests see page 219  
Ex-protection version on request.

## Standard values for residual load capacity of lift trucks \*\*

Fork Positioners	S 11 -	ZVPI 20-SV	ZVPI 20-SV	ZVPI 25-SV	ZVPI 35-SV	ZVPI 35-SV	ZVPI 48-SV	ZVPI 48-SV	ZVPI 48-SV
Load capacity lift truck	kg	1500	2000	2500	3000	3500	4000	4500	5000/500
X*	mm	350	450	450	450	500	500	500	500
LC (LSP) = 500 mm	kg	1340	1810	2270	2750	3215	3625	4085	4540
LC (LSP) = 600 mm	kg	1210	1650	2070	2500	2940	3320	3740	4160
LC (LSP) = 700 mm	kg	1105	1515	1900	2300	2710	3065	2450	3840
LC (LSP) = 800 mm	kg	1015	(1375)	1760	2125	(2410)	2845	3205	3560

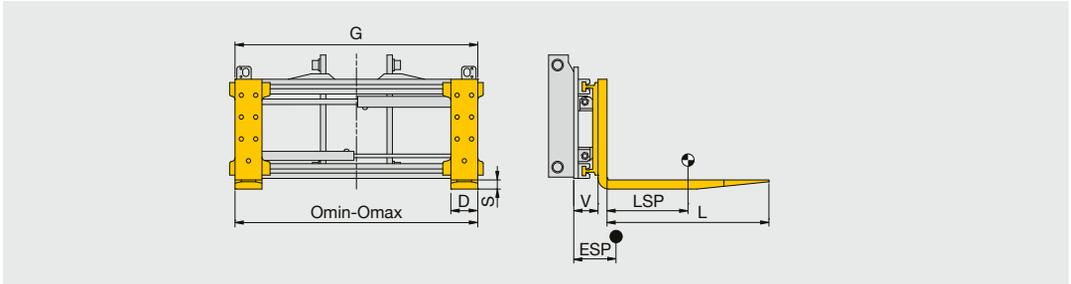
\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

For greater load centers, where the lift truck has a higher residual load capacity than the attachment, those values, upon the exceedance of which the attachment would be overloaded, are indicated in brackets ( ).

\* Assumed dimensions

# FORK POSITIONERS ZVPI-SERIES, INTEGRAL WITH SIDESHIFT VALVE AND FORKS

2 HYDRAULIC FUNCTIONS · FORKS SERIALLY BOLTED ON



Model	Load capacity	LC (LSP)	Omin - Omax	G	D	S	L	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. fork length
	kg	mm	mm	mm	mm	mm	mm	mm	mm	kg	€	€
S 11-ZVPI 20-SV-Z	2000	500	400-980	980	120	40	1200	118	260	240		
			400-1050	1050	120	40	1200	118	258	245		
			400-1150	1150	120	40	1200	118	255	250		
S 11-ZVPI 25-SV-Z	2500	600	400-1050	1050	125	45	1200	118	276	265		
			400-1150	1150	125	45	1200	118	273	270		
			400-1250	1250	125	45	1200	118	270	275		
S 11-ZVPI 35-SV-Z	3500	500	400-1050	1050	140	50	1200	128	275	320		
			400-1150	1150	140	50	1200	128	272	325		
			400-1250	1250	140	50	1200	128	270	330		
			400-1350	1350	140	50	1200	128	268	335		
S 11-ZVPI 48-SV-Z*	4800	600	400-1250	1250	150	60	1200	135	292	430		
			400-1350	1350	150	60	1200	135	289	435		
			400-1450	1450	150	60	1200	135	286	440		
			400-1550	1550	150	60	1200	135	284	445		

\* For vehicles of ISO class 3  
Lost load center, center of gravity and weight from front edge of side brackets.  
Detail drawings of fork carriage, roller studs and chain anchors or the fork carriage have to be provided by the customer.  
No sideshifting when forks are in their end positions! Also see page 13.

Price includes side brackets.  
For load backrests see page 219  
Ex-protection version on request.



## Standard values for residual load capacity of lift trucks \*\*

Fork Positioners	S 11 -	ZVPI 20-SV-Z	ZVPI 20-SV-Z	ZVPI 25-SV-Z	ZVPI 35-SV-Z	ZVPI 35-SV-Z	ZVPI 48-SV-Z	ZVPI 48-SV-Z	ZVPI 48-SV-Z
Load capacity lift truck	kg	1500	2000	2500	3000	3500	4000	4500	5000/500
X*	mm	350	450	450	450	500	500	500	500
LC (LSP) = 500 mm	kg	1290	1785	2230	2665	3175	3510	3960	4485
LC (LSP) = 600 mm	kg	1165	1630	2030	2430	2905	3215	3630	4110
LC (LSP) = 700 mm	kg	1065	1495	1865	2235	2680	2970	3350	3790
LC (LSP) = 800 mm	kg	975	(1375)	1725	2065	(2410)	2755	3115	3515

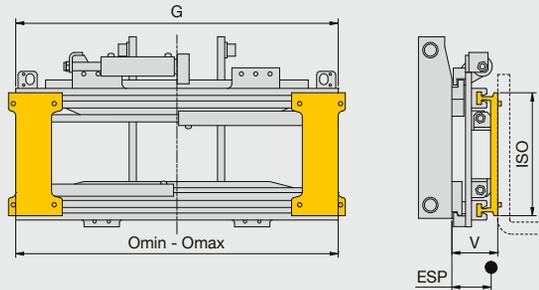
\*\* The load capacity applies to lifting heights up to 3300 mm;  
specifications for greater lifting heights on request.

For greater load centers, where the lift truck has a higher residual load capacity than the attachment, those values, upon the exceedance of which the attachment would be overloaded, are indicated in brackets ( ).

\* Assumed dimensions

# FORK POSITIONERS ZVPI-SERIES, INTEGRAL WITH SEPARATE SIDESHIFT

2 HYDRAULIC FUNCTIONS · FOR FORKS ACCORDING TO ISO 2328



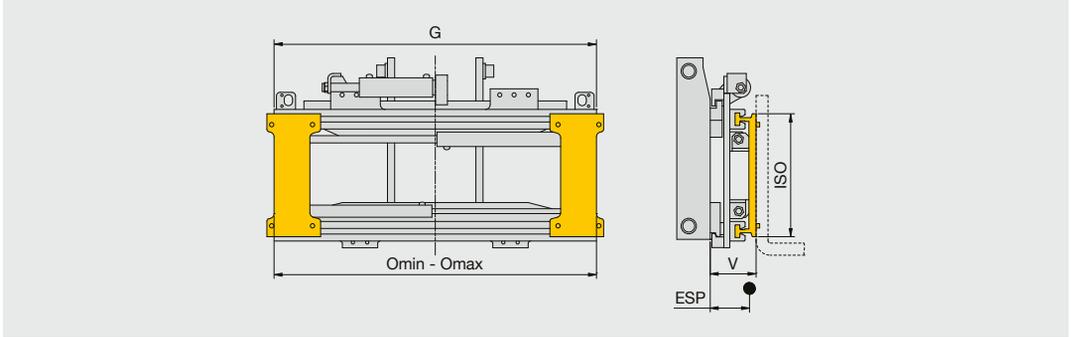
Model	Load capacity	LC (LSP) mm	ISO	Omin - Omax	G mm	Side-shift mm	V mm	CoG (ESP) mm	Weight kg	Price €
	kg			mm						
S 11-ZVPI 20-S	2000	500	2	400-980	980	± 100	168	68	200	
				500-1080	980		168	68	200	
				400-1050	1050		168	69	205	
				500-1150	1050		168	69	205	
				400-1150	1150		168	69	210	
S 11-ZVPI 25-S	2500	600	2	400-1050	1050	± 100	168	69	205	
				500-1150	1050		168	69	205	
				400-1150	1150		168	69	210	
				500-1250	1150		168	69	210	
				400-1250	1250		168	70	215	
S 11-ZVPI 35-S	3500	500	3	400-1050	1050	± 100	183	77	240	
				500-1150	1050		183	77	240	
				400-1150	1150		183	77	245	
				500-1250	1150		183	77	245	
				400-1250	1250		183	78	250	
				500-1350	1250		183	78	250	
				400-1250	1250		183	78	250	
				400-1350	1350		183	78	255	
				500-1450	1350		183	78	255	

Lost load center, center of gravity and weight from front edge of side brackets.  
Detail drawings of fork carriage, roller studs and chain anchors or the fork carriage  
have to be provided by the customer.

Price includes side brackets.  
For load backrests see page 219  
Ex-protection version on request. 

# FORK POSITIONERS ZVPI-SERIES, INTEGRAL WITH SEPARATE SIDESHIFT

2 HYDRAULIC FUNCTIONS · FOR FORKS ACCORDING TO ISO 2328



Model	Load capacity	LC (LSP)	ISO	Omin - Omax	G	Side-shift	V	CoG (ESP)	Weight	Price	
	kg	mm		mm	mm						mm
S 11-ZVPI 48-S*	4800	600	3	400-1250	1250	± 100	190	81	295		
				500-1350	1250						295
				400-1350	1350						300
				500-1450	1350						300
				400-1450	1450						305
				500-1550	1450						305
				400-1550	1550						310
				500-1650	1550						310

\* For vehicles of ISO class 3

Lost load center, center of gravity and weight from front edge of side brackets.  
Detail drawings of fork carriage, roller studs and chain anchors or the fork carriage have to be provided by the customer.

Price includes side brackets.

For load backrests see page 219

Ex-protection version on request. 

## Standard values for residual load capacity of lift trucks \*\*

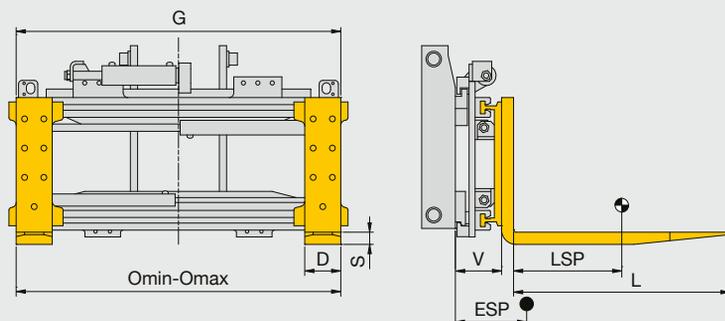
Fork Positioners	S 11 -	ZVPI 20-S	ZVPI 20-S	ZVPI 25-S	ZVPI 35-S	ZVPI 35-S	ZVPI 48-S	ZVPI 48-S	ZVPI 48-S
Load capacity lift truck	kg	1500	2000	2500	3000	3500	4000	4500	5000/500
X*	mm	350	450	450	450	500	500	500	500
LC (LSP) = 500 mm	kg	1240	1685	2125	2555	3005	3400	3835	4295
LC (LSP) = 600 mm	kg	1125	1545	1945	2340	2760	3125	3525	3950
LC (LSP) = 700 mm	kg	1030	1425	1795	2160	2555	2895	3265	3655
LC (LSP) = 800 mm	kg	950	1320	1665	2000	2375	2695	3040	3405

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

# FORK POSITIONERS ZVPI-SERIES, INTEGRAL WITH SEPARATE SIDESHIFT AND FORKS

2 HYDRAULIC FUNCTIONS · FORKS SERIALLY BOLTED ON



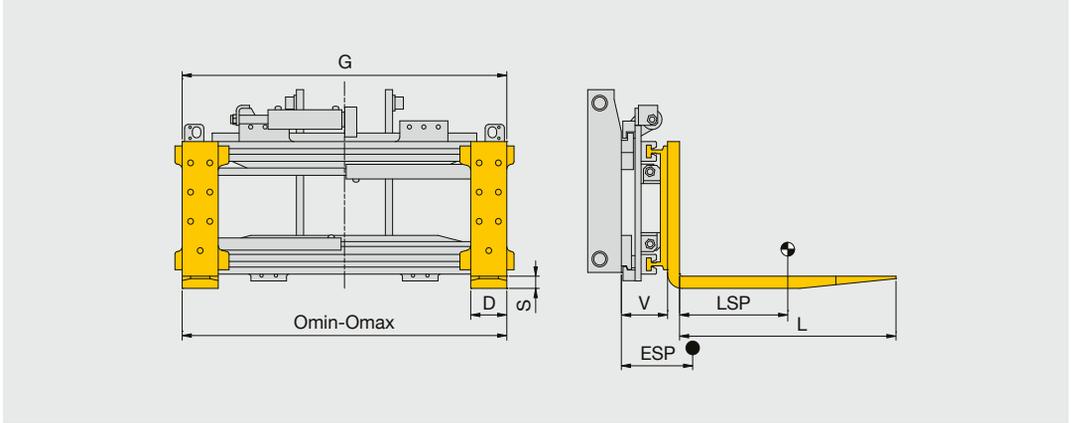
Model	Load capacity	LC (LSP)	Omin - Omax	G	Side-shift	D	S	L	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. fork length
	kg										mm	mm	mm
S 11-ZVPI 20-S-Z	2000	500	400-980	980	± 100	120	40	1200	168	240	315		
			500-1080	980		120	40	1200	168	240	315		
			400-1050	1050		120	40	1200	168	238	320		
			500-1150	1050		120	40	1200	168	238	320		
			400-1150	1150		120	40	1200	168	237	325		
S 11-ZVPI 25-S-Z	2500	600	400-1050	1050	± 100	125	45	1200	168	260	340		
			500-1150	1050		125	45	1200	168	260	340		
			400-1150	1150		125	45	1200	168	257	345		
			500-1250	1150		125	45	1200	168	257	345		
			400-1250	1250		125	45	1200	168	255	350		
S 11-ZVPI 35-S-Z	3500	500	400-1050	1050	± 100	140	50	1200	183	260	425		
			500-1150	1050		140	50	1200	183	260	425		
			400-1150	1150		140	50	1200	183	258	430		
			500-1250	1150		140	50	1200	183	258	430		
			400-1250	1250		140	50	1200	183	257	435		
			500-1350	1250		140	50	1200	183	257	435		
			400-1350	1350		140	50	1200	183	255	440		
			500-1450	1350		140	50	1200	183	255	440		

Lost load center, center of gravity and weight from front edge of side brackets.  
Detail drawings of fork carriage, roller studs and chain anchors or the fork carriage have to be provided by the customer.

Price includes side brackets.  
For load backrests see page 219  
Ex-protection version on request. 

# FORK POSITIONERS ZVPI-SERIES, INTEGRAL WITH SEPARATE SIDESHIFT AND FORKS

2 HYDRAULIC FUNCTIONS · FORKS SERIALLY BOLTED ON



Model	Load capacity	LC (LSP)	Omin - Omax	G	Side-shift	D	S	L	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. fork length
	kg	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg	€	€
S 11-ZVPI 48-S-Z*	4800	600	400-1250	1250	± 100	150	60	1200	190	284	530		
			500-1350	1250		150	60	1200	190	284	530		
			400-1350	1350		150	60	1200	190	282	535		
			500-1450	1350		150	60	1200	190	282	535		
			400-1450	1450		150	60	1200	190	280	540		
			500-1550	1450		150	60	1200	190	280	540		
			400-1550	1550		150	60	1200	190	279	545		
			500-1650	1550		150	60	1200	190	279	545		

\* For vehicles of ISO class 3

Lost load center, center of gravity and weight from front edge of side brackets.  
Detail drawings of fork carriage, roller studs and chain anchors or the fork carriage have to be provided by the customer.

Price includes side brackets.

For load backrests see page 219

Ex-protection version on request.

## Standard values for residual load capacity of lift trucks \*\*

Fork Positioners	S 11 -	ZVPI 20-S-Z	ZVPI 20-S-Z	ZVPI 25-S-Z	ZVPI 35-S-Z	ZVPI 35-S-Z	ZVPI 48-S-Z	ZVPI 48-S-Z	ZVPI 48-S-Z
Load capacity lift truck	kg	1500	2000	2500	3000	3500	4000	4500	5000/500
X*	mm	350	450	450	450	500	500	500	500
LC (LSP) = 500 mm	kg	1190	1670	2085	2490	2965	3280	3715	4210
LC (LSP) = 600 mm	kg	1080	1530	1910	2280	2725	3020	3415	3870
LC (LSP) = 700 mm	kg	990	1410	1760	2100	2520	2795	3165	3585
LC (LSP) = 800 mm	kg	910	1310	1635	1950	2345	2605	2950	3335

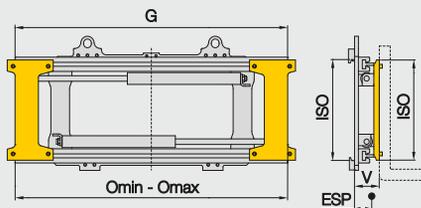
\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

# FORK POSITIONERS ZVPV-SERIES

## WITH SIDESHIFT VALVE

2 HYDRAULIC FUNCTIONS · FOR FORKS ACCORDING TO ISO 2328



Model	Load capacity	LC (LSP)	ISO	Omin – Omax	G	V	CoG (ESP)	Weight	Price
	kg								
S 11-ZVPV 60-SV	6000	600	4	500-1450	1450	159	60	290	
				500-1550	1550	159	60	305	
				500-1750	1750	159	60	325	
				500-1850	1850	159	60	340	
S 11-ZVPV 70-SV	7000	600	4	500-1750	1750	171	65	370	
				500-1950	1950	171	65	400	
				500-2050	2050	171	65	415	
S 11-ZVPV 80-SV	8000	600	4	500-1950	1950	171	65	410	
				500-2100	2100	171	65	430	
				500-2200	2200	171	65	440	
S 11-ZVPV 80/900-SV	8000	900	4	500-1950	1950	184	65	520	
				500-2100	2100	184	65	550	
				500-2200	2200	184	65	565	
S 11-ZVPV 100-SV	10000	600	4	500-1950	1950	184	65	520	
				500-2100	2100	184	65	550	
				500-2200	2200	184	65	565	
S 11-ZVPV 80/1100-SV	8000	1100	4	500-2000	2100	184	70	570	
				500-2100	2200	184	70	590	
				500-2300	2400	184	70	625	

Available without sideshift

No sideshifting when forks are in their end positions! Also see page 13.

For load backrests see page 219.

### Standard values for residual load capacity of lift trucks \*\*

Fork Positioners	S 11 -	ZVPV 60-SV	ZVPV 60-SV	ZVPV 70-SV	ZVPV 80-SV	ZVPV 100-SV
Load capacity lift truck	kg	5000	6000	7000	8000	10000
X*	mm	560	560	650	650	750
LC (LSP) = 600 mm	kg	4270	5150	5960	6820	8500
LC (LSP) = 700 mm	kg	3970	4780	5570	6370	7980
LC (LSP) = 800 mm	kg	3710	4470	5220	5980	7520

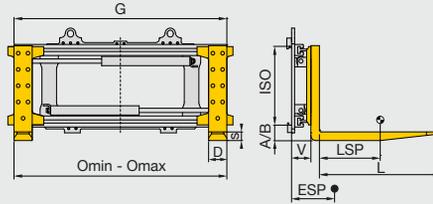
\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

# FORK POSITIONERS ZVPV-SERIES

## WITH SIDESHIFT VALVE AND FORKS

2 HYDRAULIC FUNCTIONS · FORKS SERIALLY BOLTED ON



Model	Load capacity kg	LC (LSP) mm	ISO	Omin - Omax	G mm	D mm	S mm	L mm	V mm	CoG (ESP) mm	Weight kg	Price €	Surcharge per 100 mm add. fork length €
				mm									
S 11-ZVPV 60-SV-Z	6000	600	4	500-1450	1450	150	65	1200	159	270	570		
				500-1550	1550	150	65	1200	159	260	585		
				500-1750	1750	150	65	1200	159	255	605		
				500-1850	1850	150	65	1200	159	250	620		
S 11-ZVPV 70-SV-Z	7000	600	4	500-1750	1750	150	70	1200	171	260	675		
				500-1950	1950	150	70	1200	171	255	705		
				500-2050	2050	150	70	1200	171	245	720		
S 11-ZVPV 80-SV-Z	8000	600	4	500-1950	1950	200	70	1200	171	280	815		
				500-2100	2100	200	70	1200	171	275	835		
				500-2200	2200	200	70	1200	171	270	845		
S 11-ZVPV 80/900-SV-Z	8000	900	4	500-1950	1950	200	70	1200	184	260	925		
				500-2100	2100	200	70	1200	184	255	955		
				500-2200	2200	200	70	1200	184	245	970		
S 11-ZVPV 100-SV-Z	10000	600	4	500-1950	1950	200	70	1200	184	260	925		
				500-2100	2100	200	70	1200	184	255	955		
				500-2200	2200	200	70	1200	184	245	970		
S 11-ZVPV 80/1100-SV-Z	8000	1100	4	500-2000	2100	200	80	1200	184	270	1030		
				500-2100	2200	200	80	1200	184	265	1050		
				500-2300	2400	200	80	1200	184	260	1085		

Available without sideshift

No sideshifting when forks are in their end positions! Also see page 13.

For load backrests see page 219.

### Standard values for residual load capacity of lift trucks \*\*

Fork Positioners	S 11 -	ZVPV 60-SV-Z	ZVPV 60-SV-Z	ZVPV 70-SV-Z	ZVPV 80-SV-Z	ZVPV 100-SV-Z
Load capacity lift truck	kg	5000	6000	7000	8000	10000
X*	mm	560	560	650	650	750
LC (LSP) = 600 mm	kg	4230	5110	6000	6790	8570
LC (LSP) = 700 mm	kg	3930	4750	5600	6350	8050
LC (LSP) = 800 mm	kg	3680	4440	5260	5960	7590

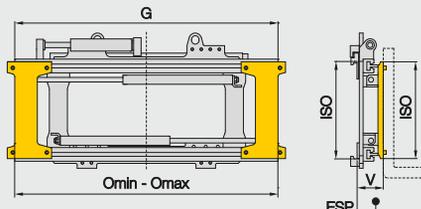
\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

# FORK POSITIONERS ZVPV-SERIES

## WITH SEPARATE SIDESHIFT

2 HYDRAULIC FUNCTIONS · FOR FORKS ACCORDING TO ISO 2328



Model	Load capacity	LC (LSP)	ISO	Omin - Omax	G	Side-shift	V	CoG (ESP)	Weight	Price
S 11-ZVPV 60-S	6000	600	4	500-1450	1450	± 150	174	65	350	
				500-1550	1550		174	65	365	
				500-1750	1750		174	65	390	
				500-1850	1850		174	65	405	
S 11-ZVPV 70-S	7000	600	4	500-1750	1750	± 150	190	70	430	
				500-1950	1950		190	70	460	
				500-2050	2050		190	70	475	
S 11-ZVPV 80-S	8000	600	4	500-1950	1950	± 150	190	70	470	
				500-2100	2100		190	70	490	
				500-2200	2200		190	70	500	
S 11-ZVPV 80/900-S	8000	900	4	500-1950	1950	± 150	214	85	595	
				500-2100	2100		214	85	625	
				500-2200	2200		214	85	640	
S 11-ZVPV 100-S	10000	600	4	500-1950	1950	± 150	214	85	595	
				500-2100	2100		214	85	625	
				500-2200	2200		214	85	640	
S 11-ZVPV 80/1100-S	8000	1100	4	500-2000	2100	± 150	214	90	645	
				500-2100	2200		214	90	665	
				500-2300	2400		214	90	700	

For load backrests see page 219

### Standard values for residual load capacity of lift trucks \*\*

Fork Positioners	S 11 -	ZVPV 60-S	ZVPV 60-S	ZVPV 70-S	ZVPV 80-S	ZVPV 100-S
Load capacity lift truck	kg	5000	6000	7000	8000	10000
X*	mm	560	560	650	650	750
LC (LSP) = 600 mm	kg	4170	5040	5850	6700	8280
LC (LSP) = 700 mm	kg	3880	4690	5470	6260	7790
LC (LSP) = 800 mm	kg	3630	4390	5130	5880	7350

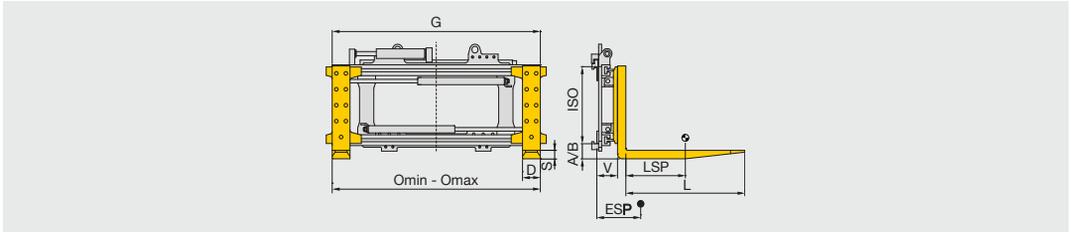
\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

# FORK POSITIONERS ZVPV-SERIES

## WITH SEPARATE SIDESHIFT AND FORKS

2 HYDRAULIC FUNCTIONS · FORKS SERIALLY BOLTED ON



Model	Load capacity	LC (LSP)	ISO	Omin - Omax	G	Side-shift	D	S	L	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. fork length
				mm	mm									
S 11-ZVPV 60-S-Z	6000	600	4	500-1450	1450	± 150	150	65	1200	174	260	630		
				500-1550	1550		150	65	1200	174	255	645		
				500-1750	1750		150	65	1200	174	245	670		
				500-1850	1850		150	65	1200	174	240	685		
S 11-ZVPV 70-S-Z	7000	600	4	500-1750	1750	± 150	150	70	1200	190	250	735		
				500-1950	1950		150	70	1200	190	245	765		
				500-2050	2050		150	70	1200	190	240	780		
S 11-ZVPV 80-S-Z	8000	600	4	500-1950	1950	± 150	200	70	1200	190	275	875		
				500-2100	2100		200	70	1200	190	270	895		
				500-2200	2200		200	70	1200	190	265	905		
S 11-ZVPV 80/900-S-Z	8000	900	4	500-1950	1950	± 150	200	70	1200	214	270	1000		
				500-2100	2100		200	70	1200	214	265	1030		
				500-2200	2200		200	70	1200	214	260	1045		
S 11-ZVPV 100-S-Z	10000	600	4	500-1950	1950	± 150	200	70	1200	214	270	1000		
				500-2100	2100		200	70	1200	214	265	1030		
				500-2200	2200		200	70	1200	214	260	1045		
S 11-ZVPV 80/1100-S-Z	8000	1100	4	500-2000	2100	± 150	200	80	1200	214	285	1105		
				500-2100	2200		200	80	1200	214	275	1125		
				500-2300	2400		200	80	1200	214	270	1160		

For load backrests see page 219

Standard values for residual load capacity of lift trucks \*\*

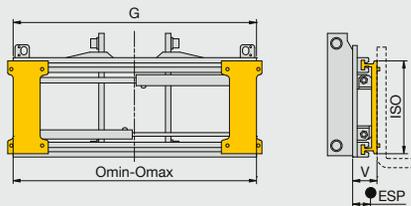
Fork Positioners	S 11 -	ZVPV 60-S-Z	ZVPV 60-S-Z	ZVPV 70-S-Z	ZVPV 80-S-Z	ZVPV 100-S-Z
Load capacity lift truck	kg	5000	6000	7000	8000	10000
X*	mm	560	560	650	650	750
LC (LSP) = 600 mm	kg	4150	5020	5890	6670	8360
LC (LSP) = 700 mm	kg	3870	4670	5500	6240	7860
LC (LSP) = 800 mm	kg	3610	4370	5170	5860	7410

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

# FORK POSITIONERS ZVPVI-SERIES, INTEGRAL WITH SIDESHIFT VALVE

2 HYDRAULIC FUNCTIONS · FOR FORKS ACCORDING TO ISO 2328



Model	Load capacity	LC (LSP)	ISO	Omin – Omax	G	V	CoG (ESP)	Weight	Price
	kg			mm					
S 11-ZVPVI 60-SV	6000	600	4	500-1450	1450	164	70	280	
				500-1550	1550	164	70	295	
				500-1750	1750	164	70	320	
				500-1850	1850	164	70	335	
S 11-ZVPVI 70-SV	7000	600	4	500-1750	1750	185	75	400	
				500-1950	1950	185	75	430	
				500-2050	2050	185	75	450	
S 11-ZVPVI 80-SV	8000	600	4	500-1950	1950	185	75	435	
				500-2100	2100	185	75	460	
				500-2200	2200	185	75	480	
S 11-ZVPVI 80/900-SV	8000	900	4	500-1950	1950	194	75	530	
				500-2100	2100	194	75	565	
				500-2200	2200	194	75	590	
S 11-ZVPVI 100-SV	10000	600	4	500-1950	1950	194	75	530	
				500-2100	2100	194	75	565	
				500-2200	2200	194	75	590	
S 11-ZVPVI 80/1100-SV	8000	1100	4	500-2000	2100	204	80	640	
				500-2100	2200	204	80	665	
				500-2300	2400	204	80	710	

Lost load center, center of gravity and weight from front edge of side brackets.

Detail drawings of fork carriage, roller studs and chain anchors or the fork carriage have to be provided by the customer.

No sideshifting when forks are in their end positions! Also see page 13.

Available without sideshift.

Price includes side brackets.

For load backrests see page 219

## Standard values for residual load capacity of lift trucks \*\*

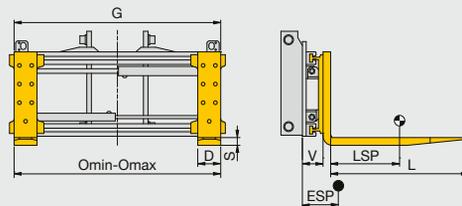
Fork Positioners	S 11 -	ZVPVI 60-SV	ZVPVI 60-SV	ZVPVI 70-SV	ZVPVI 80-SV	ZVPVI 100-SV
Load capacity lift trucks	kg	5000	6000	7000	8000	10000
X*	mm	560	560	650	650	750
LC (LSP) = 600 mm	kg	4540	5460	6280	7170	9290
LC (LSP) = 700 mm	kg	4210	5060	5860	6690	8700
LC (LSP) = 800 mm	kg	3920	4710	5490	6270	8170

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

# FORK POSITIONERS ZVPVI-SERIES, INTEGRAL WITH SIDESHIFT VALVE AND FORKS

2 HYDRAULIC FUNCTIONS · FORKS SERIALLY BOLTED ON



Model	Load capacity	LC (LSP)	Omin – Omax	G	D	S	L	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. fork length
S 11-ZVPVI 60-SV-Z	6000	600	500-1450	1450	150	65	1200	164	280	560		
			500-1550	1550	150	65	1200	164	270	575		
			500-1750	1750	150	65	1200	164	265	600		
			500-1850	1850	150	65	1200	164	260	615		
S 11-ZVPVI 70-SV-Z	7000	600	500-1750	1750	150	70	1200	185	265	705		
			500-1950	1950	150	70	1200	185	255	735		
			500-2050	2050	150	70	1200	185	250	755		
S 11-ZVPVI 80-SV-Z	8000	600	500-1950	1950	200	70	1200	185	285	840		
			500-2100	2100	200	70	1200	185	275	865		
			500-2200	2200	200	70	1200	185	275	885		
S 11-ZVPVI 80/900-SV-Z	8000	900	500-1950	1950	200	70	1200	194	270	935		
			500-2100	2100	200	70	1200	194	260	970		
			500-2200	2200	200	70	1200	194	255	995		
S 11-ZVPVI 100-SV-Z	10000	600	500-1950	1950	200	70	1200	194	270	935		
			500-2100	2100	200	70	1200	194	260	970		
			500-2200	2200	200	70	1200	194	255	995		
S 11-ZVPVI 80/1100-SV-Z	8000	1100	500-2000	2100	200	80	1200	204	275	1100		
			500-2100	2200	200	80	1200	204	265	1125		
			500-2300	2400	200	80	1200	204	260	1170		
S 11-ZVPVI 120-SV-Z	12000	600	500-2000	2100	200	80	1200	204	275	1100		
			500-2100	2200	200	80	1200	204	265	1125		
			500-2300	2400	200	80	1200	204	260	1170		

Lost load center, center of gravity and weight from front edge of side brackets.

Detail drawings of fork carriage, roller studs and chain anchors or the fork carriage have to be provided by the customer.

No sideshifting when forks are in their end positions! Also see page 13.

Available without sideshift.

Price includes side brackets.

For load backrests see page 219

## Standard values for residual load capacity of lift trucks \*\*

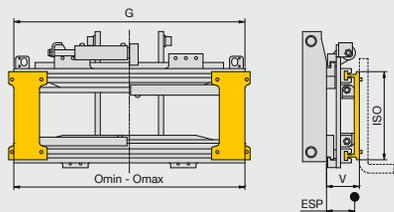
Fork Positioners	S 11 -	ZVPVI 60-SV-Z	ZVPVI 60-SV-Z	ZVPVI 70-SV-Z	ZVPVI 80-SV-Z	ZVPVI 100-SV-Z	ZVPVI 120-SV-Z
Load capacity lift truck	kg	5000	6000	7000	8000	10000	12000
X*	mm	560	560	650	650	750	800
LC (LSP) = 600 mm	kg	4520	5430	6320	7150	9370	11120
LC (LSP) = 700 mm	kg	4190	5030	5890	6670	8760	10430
LC (LSP) = 800 mm	kg	3910	4690	5520	6240	8230	9820

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

# FORK POSITIONERS ZVPVI-SERIES, INTEGRAL WITH SEPARATE SIDESHIFT

2 HYDRAULIC FUNCTIONS · FOR FORKS ACCORDING TO ISO 2328



Model	Load capacity	LC (LSP)	ISO	Omin - Omax	G	Sideshift	V	CoG (ESP)	Weight	Price
	kg			mm						
S 11-ZVPVI 60-S	6000	600	4	500-1450	1450	± 150	235	95	505	
				500-1550	1550		235	95	515	
				500-1750	1750		235	95	540	
				500-1850	1850		235	95	550	
S 11-ZVPVI 70-S	7000	600	4	500-1750	1750	± 150	246	100	580	
				500-1950	1950		246	100	610	
				500-2050	2050		246	100	630	
S 11-ZVPVI 80-S	8000	600	4	500-1950	1950	± 150	246	105	615	
				500-2100	2100		246	105	635	
				500-2200	2200		246	105	650	
S 11-ZVPVI 80/900-S	8000	900	4	500-1950	1950	± 150	270	115	770	
				500-2100	2100		270	115	800	
				500-2200	2200		270	115	820	
S 11-ZVPVI 100-S	10000	600	4	500-1950	1950	± 150	270	115	770	
				500-2100	2100		270	115	800	
				500-2200	2200		270	115	820	
S 11-ZVPVI 80/1100-S	8000	1100	4	500-2000	2100	± 150	270	120	815	
				500-2100	2200		270	120	835	
				500-2300	2400		270	120	875	

Lost load center, center of gravity and weight from front edge of side brackets

Detail drawings of fork carriage, roller studs and chain anchors or the fork carriage have to be provided by the customer.

Price includes side brackets.

For load backrests see page 219

## Standard values for residual load capacity of lift trucks \*\*

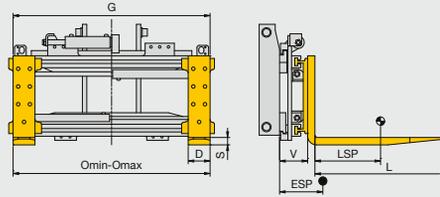
Fork Positioners	S 11 -	ZVPVI 60-S	ZVPVI 60-S	ZVPVI 70-S	ZVPVI 80-S	ZVPVI 100-S
Load capacity lift truck	kg	5000	6000	7000	8000	10000
X*	mm	560	560	650	650	750
LC (LSP) = 600 mm	kg	4190	5060	5920	6770	8690
LC (LSP) = 700 mm	kg	3900	4710	5530	6330	8150
LC (LSP) = 800 mm	kg	3650	4400	5200	5940	7680

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

# FORK POSITIONERS ZVPVI-SERIES, INTEGRAL WITH SEPARATE SIDESHIFT AND FORKS

2 HYDRAULIC FUNCTIONS · FORKS SERIALLY BOLTED ON



Model	Load capacity	LC (LSP)	Omin - Omax	G	Side-shift	D	S	L	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. fork length
	kg												
S 11-ZVPVI 60-S-Z	6000	600	500-1450	1450	± 150	150	65	1200	235	265	785		
			500-1550	1550		150	65	1200	235	255	795		
			500-1750	1750		150	65	1200	235	250	820		
			500-1850	1850		150	65	1200	235	250	830		
S 11-ZVPVI 70-S-Z	7000	600	500-1750	1750	± 150	150	70	1200	246	260	885		
			500-1950	1950		150	70	1200	246	255	915		
			500-2050	2050		150	70	1200	246	250	935		
S 11-ZVPVI 80-S-Z	8000	600	500-1950	1950	± 150	200	70	1200	246	290	1020		
			500-2100	2100		200	70	1200	246	285	1040		
			500-2200	2200		200	70	1200	246	280	1055		
S 11-ZVPVI 80/900-S-Z	8000	900	500-1950	1950	± 150	200	70	1200	270	280	1175		
			500-2100	2100		200	70	1200	270	275	1205		
			500-2200	2200		200	70	1200	270	270	1225		
S 11-ZVPVI 100-S-Z	10000	600	500-1950	1950	± 150	200	70	1200	270	280	1175		
			500-2100	2100		200	70	1200	270	275	1205		
			500-2200	2200		200	70	1200	270	270	1225		
S 11-ZVPVI 80/1100-S-Z	8000	1100	500-2000	2100	± 150	200	80	1200	270	295	1275		
			500-2100	2200		200	80	1200	270	290	1295		
			500-2300	2400		200	80	1200	270	285	1335		
S 11-ZVPVI 120-S-Z	12000	600	500-2000	2100	± 150	200	80	1200	270	295	1275		
			500-2100	2200		200	80	1200	270	290	1295		
			500-2300	2400		200	80	1200	270	285	1335		

Lost load center, center of gravity and weight from front edge of side brackets.

Detail drawings of fork carriage, roller studs and chain anchors or the fork carriage have to be provided by the customer.

Price includes side brackets

For load backrests see page 219

## Standard values for residual load capacity of lift trucks \*\*

Fork Positioners	S 11 -	ZVPVI 60-S-Z	ZVPVI 60-S-Z	ZVPVI 70-S-Z	ZVPVI 80-S-Z	ZVPVI 100-S-Z	ZVPVI 120-S-Z
Load capacity lift truck	kg	5000	6000	7000	8000	10000	12000
X*	mm	560	560	650	650	750	800
LC (LSP) = 600 mm	kg	4170	5030	5960	6740	8760	10540
LC (LSP) = 700 mm	kg	3880	4690	5570	6300	8220	9920
LC (LSP) = 800 mm	kg	3630	4380	5230	5920	7750	9360

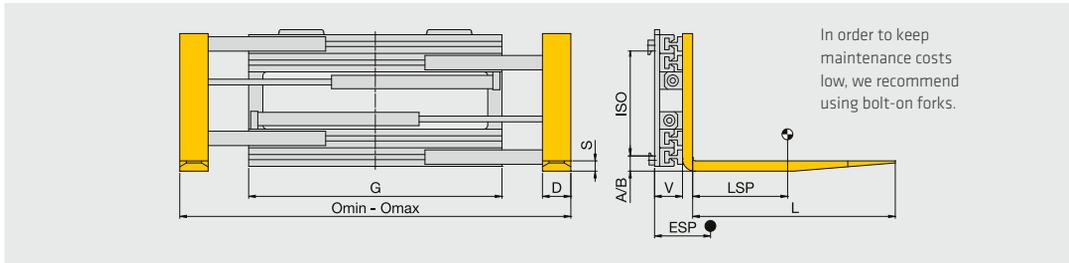
\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

# FORK POSITIONERS ZVKG-SERIES WITH LARGE OPENING RANGE

## 1 HYDRAULIC FUNCTION

### FORKS SERIALLY WELDED ON



Model	Load capacity	LC (LSP)	ISO	Omin - Omax	G	D	S	L	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. fork length	Surcharge per 100 mm add. opening range
	kg													
S 11-ZVKG 18	1800	500	2	560-1640	950	120	40	1200	130	205	355			
S 11-ZVKG 25	2500	500	2	560-1740	1050	125	45	1200	130	215	395			
S 11-ZVKG 25/600	2500	600	2	560-1740	1050	125	45	1200	130	210	415			
S 11-ZVKG 30	3000	500	3	560-1840	1150	140	50	1200	130	230	455			
S 11-ZVKG 40	4000	500	3	560-1940	1250	140	50	1200	140	205	540			
S 11-ZVKG 45	4500	600	3	560-2040	1350	150	60	1200	140	225	610			
S 11-ZVKG 48	5000	600	3	560-2040	1350	150	60	1200	140	220	630			
S 11-ZVKG 50	5000	600	4	560-2140	1450	150	60	1200	155	210	745			
S 11-ZVKG 60	6000	600	4	560-2280	1600	150	65	1200	155	210	790			
S 11-ZVKG 70	7000	600	4	560-2410	1750	150	70	1200	155	215	835			
S 11-ZVKG 80	8000	600	4	560-2410	1750	200	70	1200	170	215	1155			
S 11-ZVKG 80/900	8000	900	4	560-2650	2000	200	70	1200	170	210	1235			
S 11-ZVKG 100	10000	600	4	560-2650	2000	200	70	1200	170	210	1235			

#### Not suited for clamping applications

Surcharge for bolt-on forks

Surcharge for integral design, see page 217

Surcharge for sideshift valve, see page 217

Please note: No sideshifting when handling Euro pallets lengthwise.

Version for reach trucks see page 115/116

## Standard values for residual load capacity of lift trucks \*\*

Fork Positioners	S 11 -	ZVKG 18	ZVKG 18	ZVKG 25	ZVKG 30	ZVKG 30	ZVKG 40	ZVKG 40	ZVKG 45	ZVKG 48/50	ZVKG 60	ZVKG 70	ZVKG 80	ZVKG 100
Load capacity lift truck	kg	1500	2000	2500	3000	3500	4000	4500	5000/500	5000	6000	7000	8000	10000
X*	mm	350	450	450	450	500	500	500	500	560	560	650	650	750
LC (LSP) = 500 mm	kg	1180	1650	2060	2460	2940	3320	3760	4180					
LC (LSP) = 600 mm	kg	1070	1510	1890	2250	2710	3050	3450	3840	4190	5030	6000	6640	8500
LC (LSP) = 700 mm	kg	980	1400	1740	2080	(2360)	2820	(3150)	3560	3890	4670	5600	6210	7980
LC (LSP) = 800 mm	kg	900	(1240)	1620	1930	(2060)	2630	(2750)	3310	3630	4370	5250	5820	7510

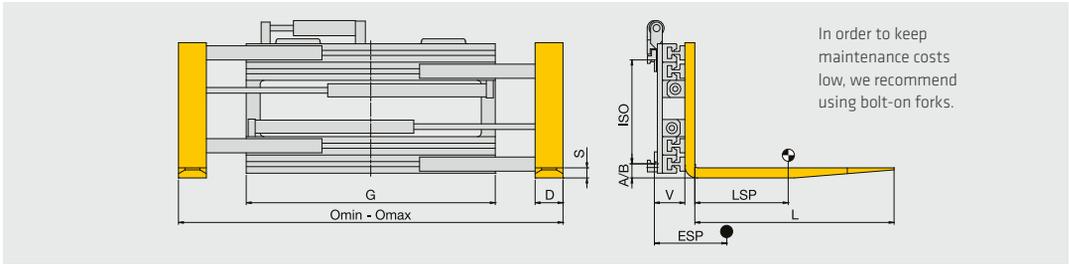
\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

For greater load centers, where the lift truck has a higher residual load capacity than the attachment, those values, upon the exceedance of which the attachment would be overloaded, are indicated in brackets ( ).

# FORK POSITIONERS ZVKG-SERIES WITH LARGE OPENING RANGE WITH SEPARATE SIDESHIFT

2 HYDRAULIC FUNCTIONS · FORKS SERIALLY WELDED ON



Model	Load capacity	LC (LSP)	ISO	Omin - Omax	G	Side-shift	D	S	L	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. fork length	Surcharge per 100 mm add. opening range
S 11-ZVKG 18-S	1800	500	2	560-1640	950	± 100	120	40	1200	145	200	390			
S 11-ZVKG 25-S	2500	500	2	560-1740	1050	± 100	125	45	1200	145	215	430			
S 11-ZVKG 25/600-S	2500	600	2	560-1740	1050	± 100	125	45	1200	145	205	450			
S 11-ZVKG 30-S	3000	500	3	560-1840	1150	± 100	140	50	1200	145	225	500			
S 11-ZVKG 40-S	4000	500	3	560-1940	1250	± 100	140	50	1200	155	205	580			
S 11-ZVKG 45-S	4500	600	3	560-2040	1350	± 100	150	60	1200	155	230	650			
S 11-ZVKG 48-S	5000	600	3	560-2040	1350	± 100	150	60	1200	155	225	670			
S 11-ZVKG 50-S	5000	600	4	560-2140	1450	± 100	150	60	1200	170	210	805			
S 11-ZVKG 60-S	6000	600	4	560-2280	1600	± 150	150	65	1200	170	210	850			
S 11-ZVKG 70-S	7000	600	4	560-2410	1750	± 150	150	70	1200	175	215	920			
S 11-ZVKG 80-S	8000	600	4	560-2410	1750	± 150	200	70	1200	190	225	1235			
S 11-ZVKG 80/900-S	8000	900	4	560-2650	2000	± 150	200	70	1200	190	215	1315			
S 11-ZVKG 100-S	10000	600	4	560-2650	2000	± 150	200	70	1200	190	215	1315			

**Not suited for clamping applications**

Surcharge for bolt-on forks

Surcharge for integral design, see page 217

Version for reach trucks see page 115/116

Standard values for residual load capacity of lift trucks \*\*

Fork Positioners	S 11 -	ZVKG 18-S	ZVKG 18-S	ZVKG 25-S	ZVKG 30-S	ZVKG 30-S	ZVKG 40-S	ZVKG 40-S	ZVKG 45-S	ZVKG 48/50-S	ZVKG 60-S	ZVKG 70-S	ZVKG 80-S	ZVKG 100-S
Load capacity lift truck	kg	1500	2000	2500	3000	3500	4000	4500	5000/500	5000	6000	7000	8000	10000
X*	mm	350	450	450	450	500	500	500	500	560	560	650	650	750
LC (LSP) = 500 mm	kg	1140	1610	2020	2400	2880	3250	3680	4100					
LC (LSP) = 600 mm	kg	1040	1480	1850	2200	2650	3000	3400	3780	4110	4940	5860	6500	8340
LC (LSP) = 700 mm	kg	950	1360	1710	2030	(2360)	2770	3140	3500	3830	4600	5480	6090	7830
LC (LSP) = 800 mm	kg	880	(1240)	1590	1900	(2060)	2580	(2750)	3260	3580	4300	5140	5720	7380

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

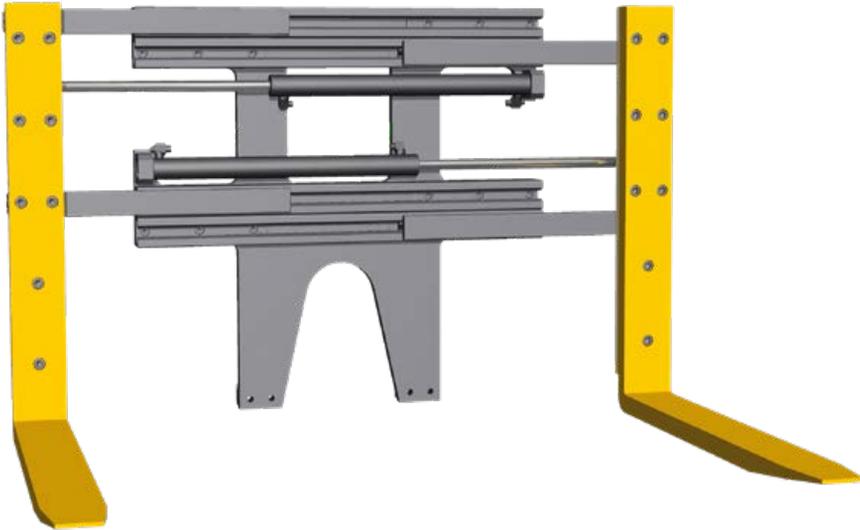
\* Assumed dimensions

For greater load centers, where the lift truck has a higher residual load capacity than the attachment, those values, upon the exceedance of which the attachment would be overloaded, are indicated in brackets ( ).

## FORK POSITIONERS FOR REACH TRUCKS

For reach trucks, we recommend using hydraulic fork spreaders of a body width corresponding to the inner width of the truck's support arms. If, due to a greater opening range, a wider frame should be required, we recommend positioning

the frame above the support arms. For this purpose, the forks and the mounting are extended downwards by the height of the support arms.



**ZVKGS, NARROW DESIGN  
FOR REACH TRUCKS  
ZVPS FOR REACH TRUCKS**

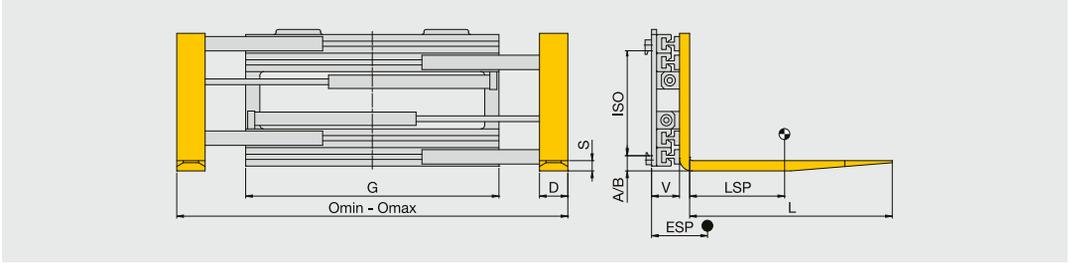


**ZVKGS-H, EXTENDED HEIGHT  
FOR REACH TRUCKS**

# FORK POSITIONERS ZVKG-SERIES FOR REACH TRUCKS

1 HYDRAULIC FUNCTION · LARGE OPENING RANGE

FORKS SERIALLY WELDED ON



Model	Load capacity	LC (LSP)	ISO	Omin - Omax	G	D	S	L	V*	CoG (ESP)*	Weight*	Price	Surcharge per 100 mm add. fork length
	kg	mm		mm	mm	mm	mm	mm	mm	mm	kg	€	€
S 11-ZVKG 18	1500	600	2	560-1560	880	120	40	1200	130	210	350		
S 11-ZVKG 25	2200	600	2	560-1560	880	125	45	1200	130	225	370		

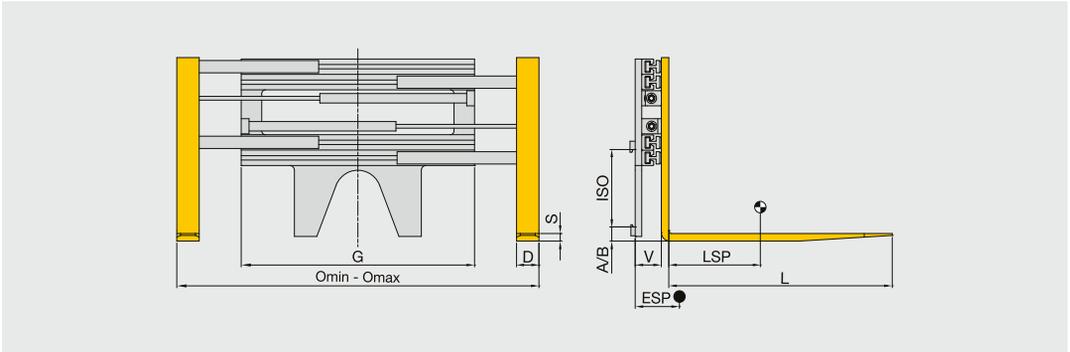
**Not suited for clamping applications**

Surcharge for bolt-on forks  
Surcharge for separate sideshift

\* Can vary depending on the vehicle type.  
Surcharge for forced hydraulic synchronism on request.  
Camera systems on request.

S 11

## EXTENDED HEIGHT



Model	Load capacity	LC (LSP)	ISO	Omin - Omax	G	D	S	L	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. fork length	Surcharge per 100 mm add. opening range
	kg	mm		mm	mm	mm	mm	mm	mm	mm	kg	€	€	€
S 11-ZVKG 18-H	1500	600	2	560-1840	1150	120	40	1200	140	165	495			
S 11-ZVKG 25-H	2200	600	2	560-1840	1150	125	45	1200	140	175	550			

**Not suited for clamping applications**

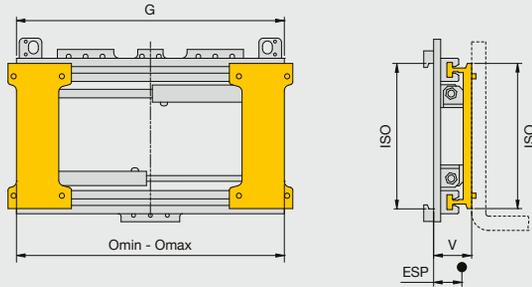
Surcharge for bolt-on forks  
Surcharge for separate sideshift

Surcharge for forced hydraulic synchronism on request.  
Camera systems on request.

# FORK POSITIONERS ZVPS-SERIES FOR REACH TRUCKS

1 HYDRAULIC FUNCTION

FOR FORKS ACCORDING TO ISO 2328

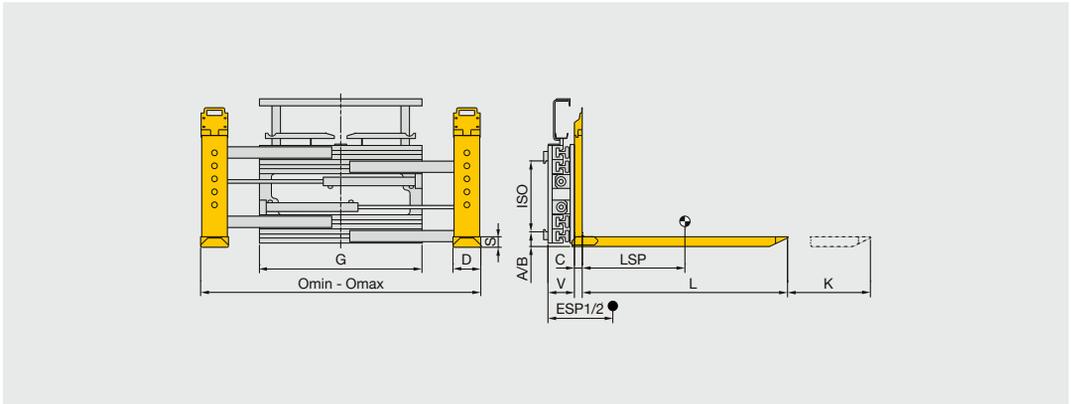


Model	Load capacity	LC (LSP) mm	ISO	Omin - Omax	G mm	V* mm	CoG (ESP)* mm	Weight* kg	Price €
	kg			mm					
S 11-ZVPS 20	1800	600	2	400-690	750	118	47	110	
				400-740	800	118	47	112	
				400-790	850	118	47	114	
S 11-ZVPS 25	2500	600	2	400-690	750	118	47	112	
				400-740	800	118	47	114	
				400-790	850	118	47	116	

\* Can vary depending on the vehicle type.

# FORK POSITIONERS ZVKGs-SERIES FOR REACH TRUCKS WITH TELESCOPIC FORKS

2 HYDRAULIC FUNCTIONS · LARGE OPENING RANGE  
FORKS SERIALLY BOLTED ON



Model	Load capacity	LC (LSP)	I S O	Omin - Omax	G	Cross section * D x S	C	L	K	V **	CoG (ESP) 1/2 **	Weight **	Price	Surcharge per 100 mm add. fork length
	kg	mm		mm	mm	mm	mm	mm	mm	mm	mm	kg	€	€
S 11-ZVKGs 18/TGHS 20 1200/850	1800	600	2	560-1560	880	133 x 58	45	1200	850	155	280/340	425		
S 11 ZVKGs 18/TGHS 20 1350/1000	1800	600	2	560-1560	880	133 x 58	45	1350	1000	155	320/395	445		
S 11-ZVKGs 25/TGH 25 1200/850	2500	600	2	560-1560	880	163 x 58	45	1200	850	155	305/370	475		
S 11 ZVKGs 25/TGH 25 1350/1000	2500	600	2	560-1560	880	163 x 58	45	1350	1000	155	350/430	495		

**Not suited for clamping applications.**

Camera systems on request.

\*\* Can vary depending on the vehicle type.

Surcharge for sep. sideshift

Surcharge for forced hydraulic synchronism on request.

\* Fork shoe reinforced in the rear area (10 mm wider)

\* Surcharge for wear-resistant manganese steel strips on underside of outer forks, dimension S increases by 5 mm

Surcharge for pallet stops A1 (located on each side of the fork shoe) or pallet stops A2 (height 400 mm)

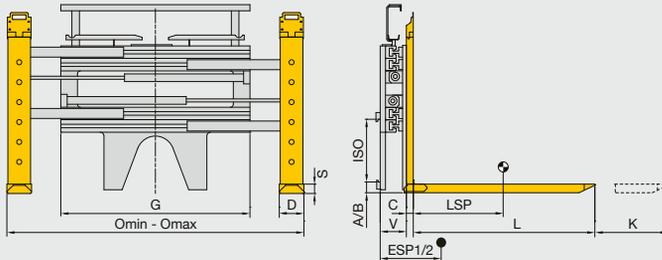
Surcharge for pallet stops A3 (height 850 mm)

Surcharge for solenoid valve

S 11

# FORK POSITIONERS ZVKGS-H-SERIES FOR REACH TRUCKS WITH TELESCOPIC FORK

2 HYDRAULIC FUNCTIONS · LARGE OPENING RANGE  
FORKS SERIALLY BOLTED ON



Model	Load capacity kg	LC (LSP) mm	I S O	Omin - Omax mm	G mm	Cross section* D x S mm	C mm	L mm	K mm	V** mm	CoG (ESP) 1/2 ** mm	Weight** kg	Price €	Surcharge per 100 mm	
														add. fork length €	add. opening range €
S 11-ZVKGS 18-H/TGHS 20 1200/850	1800	600	2	560-1840	1150	133 x 58	45	1200	850	165	220/265	590			
S 11 ZVKGS 18-H/TGHS 20 1350/1000	1800	600	2	560-1840	1150	133 x 58	45	1350	1000	165	255/310	605			
S 11-ZVKGS 25-H/TGH 25 1200/850	2500	600	2	560-1840	1150	163 x 58	45	1200	850	165	240/290	660			
S 11 ZVKGS 25-H/TGH 25 1350/1000	2500	600	2	560-1840	1150	163 x 58	45	1350	1000	165	275/335	680			

### Not suited for clamping applications

Camera systems on request.

\*\* Can vary depending on the vehicle type.

Surcharge for sep. sideshift

Surcharge for forced hydraulic synchronism on request.

\* Fork shoe reinforced in the rear area (10 mm wider)

\* Surcharge for wear-resistant manganese steel strips on underside of outer forks, dimension S increases by 5 mm

Surcharge for pallet stops A1 (located on each side of the fork shoe) or pallet stops A2 (height 400 mm)

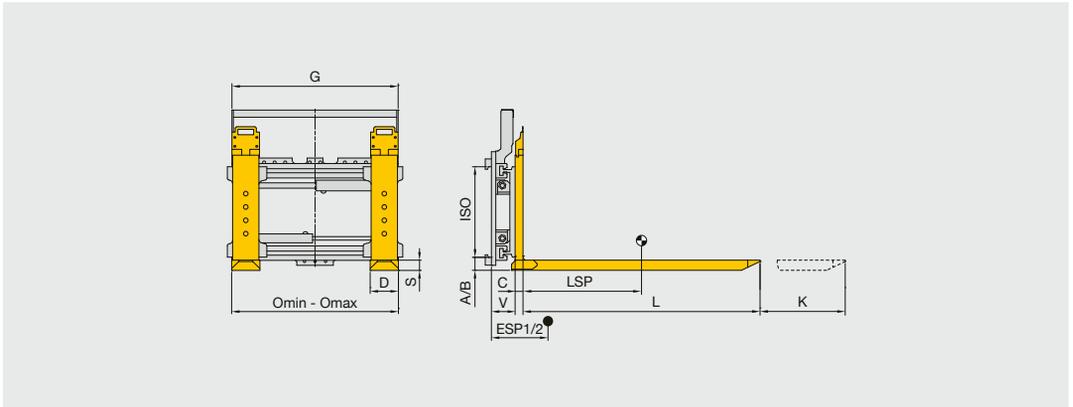
Surcharge for pallet stops A3 (height 850 mm)

Surcharge for solenoid valve

# FORK POSITIONERS ZVPS-SERIES FOR REACH TRUCKS WITH TELESCOPIC FORK

2 HYDRAULIC FUNCTIONS

FORKS SERIALLY BOLTED ON



Model	Load capacity	LC (LSP)	I S O	Omin - Omax	G	Cross section* D x S	C	L	K	V**	CoG (ESP) 1/2 **	Weight **	Price
													kg
S 11-ZVPS 20/TGHS 20 1200/850	2000	600	2	400-750	750	133 x 58	45	1200	850	118	350/440	280	
				400-800	800	133 x 58	45	1200	850	118	345/440	282	
				400-850	850	133 x 58	45	1200	850	118	345/435	284	
S 11-ZVPS 20/TGHS 20 1350/1000	2000	600	2	400-750	750	133 x 58	45	1350	1000	118	400/515	300	
				400-800	800	133 x 58	45	1350	1000	118	400/510	302	
				400-850	850	133 x 58	45	1350	1000	118	400/505	304	
S 11-ZVPS 25/TGH 25 1200/850	2500	600	2	400-750	750	163 x 58	45	1200	850	118	370/470	322	
				400-800	800	163 x 58	45	1200	850	118	370/470	324	
				400-850	850	163 x 58	45	1200	850	118	370/465	326	
S 11-ZVPS 25/TGH 25 1350/1000	2500	600	2	400-750	750	163 x 58	45	1350	1000	118	430/550	342	
				400-800	800	163 x 58	45	1350	1000	118	425/550	344	
				400-850	850	163 x 58	45	1350	1000	118	425/545	346	

\*\* Can vary depending on the vehicle type.

Camera systems on request.

\* Fork shoe reinforced in the rear area (10 mm wider)

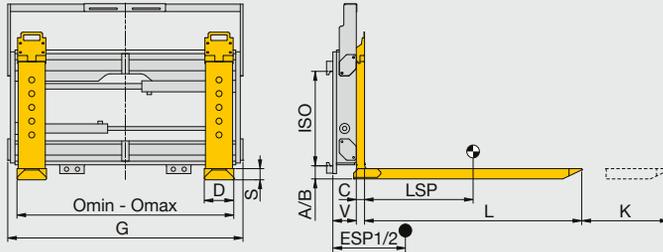
\* Surcharge for wear-resistant manganese steel strips on underside of outer forks, dimension S increases by 5 mm  
 Surcharge for pallet stops A1 (located on each side of the fork shoe)  
 or pallet stops A2 (height 400 mm)  
 Surcharge for pallet stops A3 (height 850 mm)

S 11

# FORK POSITIONERS ZV-SERIES

## WITH TELESCOPIC FORKS

2 HYDRAULIC FUNCTIONS · LC = 600 mm · FORKS SERIALLY BOLTED ON

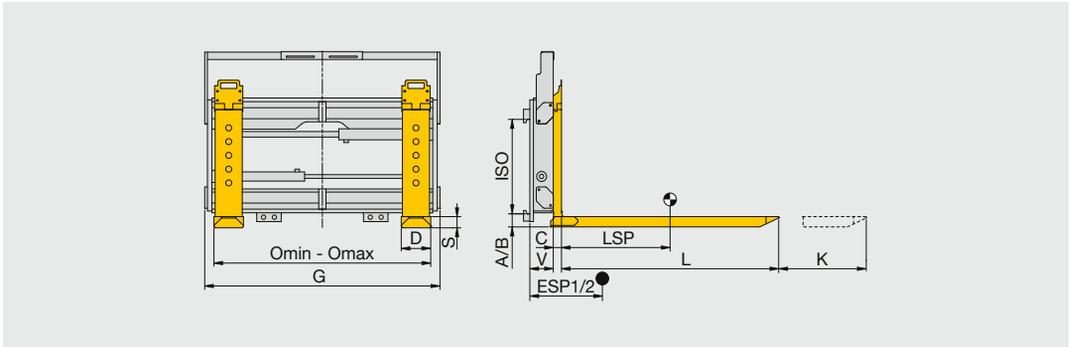


Model	Load capacity kg	for lift trucks up to to	ISO	Omin - Omax mm	G mm	Cross section* D x S mm	C mm	L mm	K mm	V mm	CoG (ESP) 1/2 mm	Weight kg	Price €	Surcharge per 100 mm	
														add. fork length €	add. opening range €
S 11-ZV 20/TGHS 20 1200/850	2000	2.0	2	400-1000	1090	133 x 58	45	1200	850	120	305/385	335			
S 11-ZV 20/TGHS 20 1300/950				400-1000	1090	133 x 58	45	1300	950	120	335/425	350			
S 11-ZV 25/TGH 25 1200/850	2500	2.5	2	400-1100	1190	163 x 58	45	1200	850	125	320/405	395			
S 11-ZV 25/TGH 25 1300/950				400-1100	1190	163 x 58	45	1300	950	125	355/445	410			
S 11-ZV 30/TGH 30 1200/850	3000	3.0	3	400-1200	1300	163 x 58	45	1200	850	130	280/350	475			
S 11-ZV 30/TGH 30 1300/950				400-1200	1300	163 x 58	45	1300	950	130	310/385	490			
S 11-ZV 40/TGH 40 1200/850	4000	3.5	3	400-1300	1400	163 x 58	45	1200	850	135	275/340	500			
S 11-ZV 40/TGH 40 1300/950				400-1300	1400	163 x 58	45	1300	950	135	305/375	515			
S 11-ZV 45/TGH 40 1200/850	4500	4.0	3	400-1300	1400	163 x 58	45	1200	850	150	270/330	540			
S 11-ZV 45/TGH 40 1300/950				400-1300	1400	163 x 58	45	1300	950	150	300/365	555			
S 11-ZV 45/TGH 48 1200/850	4500	4.5	3	400-1300	1400	165 x 64	50	1200	850	150	290/365	575			
S 11-ZV 45/TGH 48 1300/950				400-1300	1400	165 x 64	50	1300	950	150	320/400	590			
S 11-ZV 48/TGH 48 1200/850	5000	5.0	3	400-1300	1400	165 x 64	50	1200	850	150	280/355	595			
S 11-ZV 48/TGH 48 1300/950				400-1300	1400	165 x 64	50	1300	950	150	310/390	610			

# FORK POSITIONERS ZV-SERIES

## WITH TELESCOPIC FORKS

2 HYDRAULIC FUNCTIONS · LC = 600 mm · FORKS SERIALLY BOLTED ON



Model	Load capacity kg	for lift trucks up to to	ISO	Omin - Omax	G	Cross section* D × S	C	L	K	V	CoG (ESP) 1/2	Weight kg	Price €	Surcharge per 100 mm	
				mm	mm		mm	mm	mm	mm				mm	add. fork length €
S 11-ZV 60/TGH 50 1200/850	6000	5.0	4	400-1400	1500	165 × 64	50	1200	850	155	265/330	660			
S 11-ZV 60/TGH 50 1300/950				400-1400	1500	165 × 64	50	1300	950	155	290/365	675			
S 11-ZV 70/TGH 60 1200/850	7000	6.0	4	500-1700	1810	217 × 67	50	1200	850	170	265/325	900			
S 11-ZV 70/TGH 60 1300/950				500-1700	1810	217 × 67	50	1300	950	170	290/360	920			

One-sided loading of trucks requires a usable length of 1300 mm with 950 mm stroke.

Camera systems on request.

The handling of 2 Euro pallets lengthwise requires a usable length of 1350 mm with 1000 mm stroke.

\* Fork shoe reinforced in the rear area (10 mm wider)

\* Surcharge for wear-resistant manganese steel strips on underside of outer forks, dimension S increases by 5 mm

Surcharge for pallet stops A1 (located on each side of the fork shoe) or pallet stops A2 (height 400 mm)

Surcharge for pallet stops A3 (height 850 mm)

Surcharge for integral design, see page 217

Different load capacities and versions available on request.

### Standard values for residual load capacity of lift trucks \*\*

Fork Positioners ZV-Series with Telescopic Forks	S 11 -	ZV 20/ TGH S 20	ZV 20/ TGH S 20	ZV 25/ TGH 25	ZV 30/ TGH 30	ZV 40/ TGH 40	ZV 45/ TGH 40	ZV 45/ TGH 48	ZV 48/ TGH 48	ZV 60/ TGH 50	ZV 70/ TGH 60
Load capacity lift truck	kg	1800	2000	2500	3000	3500	4000	4500	5000/500	5000	6000
X*	mm	370	450	450	450	500	500	500	500	560	560
LC (LSP) = 600 mm	kg	1290	1480	1850	2200	2650	3000	3340	3800	4200	4890
LC (LSP) = 1200 mm	kg	820	970	1210	1450	1770	2000	2240	2530	2860	3340
LC (LSP) = 1450 mm	kg	710	830	1040	1270	1550	1770	1970	2280	(2320)	2950
LC (LSP) = 1650 mm	kg	640	740	920	1140	1420	1610	1790	(2000)	(2040)	2700

\*\* The load capacity applies to lifting heights up to 3300 mm; For greater load centers, where the lift truck has a higher residual load capacity than the attachment, those values, upon the exceedance of which the attachment would be overloaded, are indicated in brackets ( ).

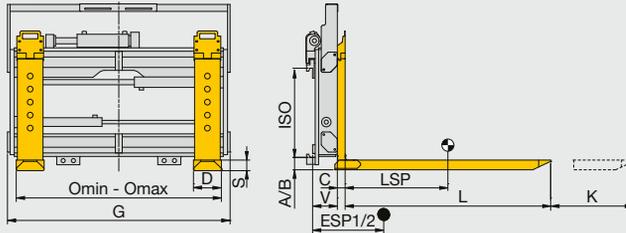
\* Assumed dimensions

# FORK POSITIONERS ZV-SERIES

## WITH TELESCOPIC FORKS AND SEPARATE SIDESHIFT

2 HYDRAULIC FUNCTIONS · LC = 600 mm

FORKS SERIALLY BOLTED ON · INCL. SOLENOID VALVE



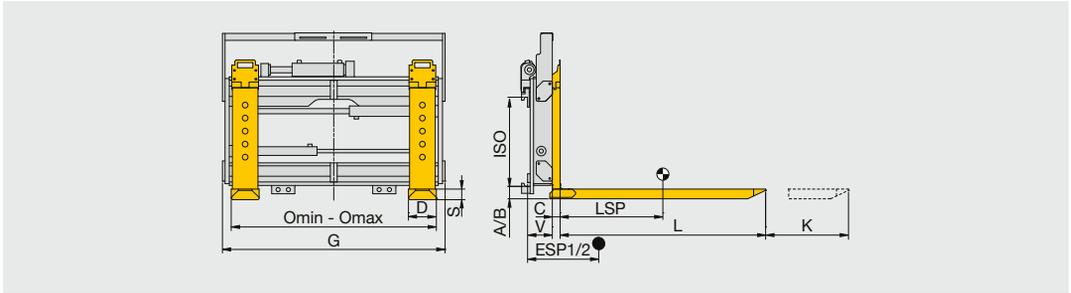
Model	Load capacity	for lift trucks up to	ISO	Omin - Omax	G	Side-shift	Cross section * D x S	C	L	K	V	CoG (ESP) 1/2	Weight	Price	Surcharge per 100 mm	
				mm											mm	mm
	kg	to												€	€	€
S 11-ZV 20/TGHS 20 1200/850-S	2000	2.0	2	400-1000	1090	±100	133 x 58	45	1200	850	135	295/370	365			
S 11-ZV 20/TGHS 20 1300/950-S				400-1000	1090	±100	133 x 58	45	1300	950	135	325/405	380			
S 11-ZV 25/TGH 25 1200/850-S	2500	2.5	2	400-1100	1190	±100	163 x 58	45	1200	850	140	315/390	420			
S 11-ZV 25/TGH 25 1300/950-S				400-1100	1190	±100	163 x 58	45	1300	950	140	345/430	435			
S 11-ZV 30/TGH 30 1200/850-S	3000	3.0	3	400-1200	1300	±100	163 x 58	45	1200	850	145	275/335	515			
S 11-ZV 30/TGH 30 1300/950-S				400-1200	1300	±100	163 x 58	45	1300	950	145	300/370	530			
S 11-ZV 40/TGH 40 1200/850-S	4000	3.5	3	400-1300	1400	±100	163 x 58	45	1200	850	150	270/330	540			
S 11-ZV 40/TGH 40 1300/950-S				400-1300	1400	±100	163 x 58	45	1300	950	150	295/360	555			
S 11-ZV 45/TGH 40 1200/850-S	4500	4.0	3	400-1300	1400	±100	163 x 58	45	1200	850	165	265/320	580			
S 11-ZV 45/TGH 40 1300/950-S				400-1300	1400	±100	163 x 58	45	1300	950	165	290/355	595			
S 11-ZV 45/TGH 48 1200/850-S	4500	4.5	3	400-1300	1400	±100	165 x 64	50	1200	850	165	285/355	615			
S 11-ZV 45/TGH 48 1300/950-S				400-1300	1400	±100	165 x 64	50	1300	950	165	310/390	630			
S 11-ZV 48/TGH 48 1200/850-S	5000	5.0	3	400-1300	1400	±100	165 x 64	50	1200	850	165	280/345	635			
S 11-ZV 48/TGH 48 1300/950-S				400-1300	1400	±100	165 x 64	50	1300	950	165	305/380	650			

# FORK POSITIONERS ZV-SERIES

## WITH TELESCOPIC FORKS AND SEPARATE SIDESHIFT

2 HYDRAULIC FUNCTIONS · LC = 600 mm

FORKS SERIALLY BOLTED ON · INCL. SOLENOID VALVE



Model	Load capacity kg	for lift trucks up to to	ISO	Omin - Omax	G	Side-shift mm	Cross section * D x S mm	C mm	L mm	K mm	V mm	CoG (ESP) 1/2 mm	Weight kg	Price €	Surcharge per 100 mm	
				mm	mm										add. fork length €	add. opening range €
S 11-ZV 60/TGH 50 1200/850-S	6000	5.0	4	400-1400	1500	±150	165 x 64	50	1200	850	170	255/315	715			
S 11-ZV 60/TGH 50 1300/950-S				400-1400	1500	±150	165 x 64	50	1300	950	170	280/350	730			
S 11-ZV 70/TGH 60 1200/850-S	7000	6.0	4	500-1700	1810	±150	217 x 67	50	1200	850	190	260/315	995			
S 11-ZV 70/TGH 60 1300/950-S				500-1700	1810	±150	217 x 67	50	1300	950	190	285/350	1015			

One-sided loading of trucks requires a usable length of 1300 mm with 950 mm stroke.

Camera systems on request.

The handling of 2 Euro pallets lengthwise requires a usable length of 1350 mm with 1000 mm stroke.

\* Fork shoe reinforced in the rear area (10 mm wider)

\* Surcharge for wear-resistant manganese steel strips on underside of outer forks, dimension S increases by 5 mm

Surcharge for pallet stops A1 (located on each side of the fork shoe) or pallet stops A2 (height 400 mm)

Surcharge for pallet stops A3 (height 850 mm)

Surcharge for integral design, see page 217

Different load capacities and versions available on request.

Price reduction without solenoid valve

### Standard values for residual load capacity of lift trucks \*\*

Fork Positioners ZV-Series with Telescopic Forks and Separate Sideshift	S 11 -	ZV 20/ TGH 20-S	ZV 20/ TGH 20-S	ZV 25/ TGH 25-S	ZV 30/ TGH 30-S	ZV 40/ TGH 40-S	ZV 45/ TGH 40-S	ZV 45/ TGH 48-S	ZV 48/ TGH 48-S	ZV 60/ TGH 50-S	ZV 70/ TGH 60-S
Load capacity lift truck	kg	1800	2000	2500	3000	3500	4000	4500	5000/500	5000	6000
X*	mm	370	450	450	450	500	500	500	500	560	560
LC (LSP) = 600 mm	kg	1260	1440	1800	2160	2600	2940	3280	3720	4130	4770
LC (LSP) = 1200 mm	kg	810	950	1180	1420	1730	1970	2200	2500	2820	3270
LC (LSP) = 1450 mm	kg	700	820	1030	1240	1520	1730	1940	2200	(2320)	2900
LC (LSP) = 1650 mm	kg	630	730	910	1120	1380	1570	1760	(2000)	(2040)	2650

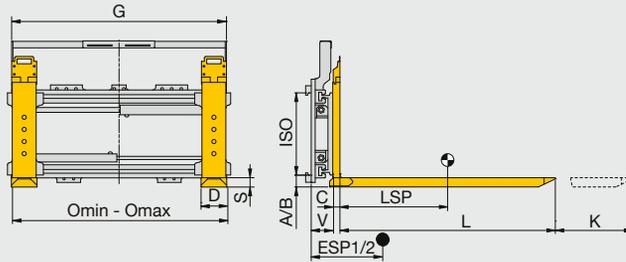
\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

For greater load centers, where the lift truck has a higher residual load capacity than the attachment, those values, upon the exceedance of which the attachment would be overloaded, are indicated in brackets ( ).

\* Assumed dimensions

# FORK POSITIONER ZVP-SERIES WITH TELESCOPIC FORKS

2 HYDRAULIC FUNCTIONS · LC = 600 mm  
FORKS SERIALLY BOLTED ON



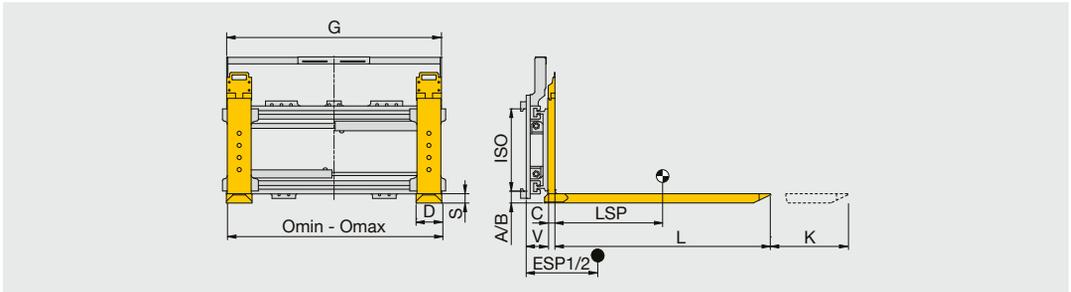
Model	Load capacity kg	for lift trucks up to to	ISO	Omin - Omax	G	Cross section * D x S	C	L	K	V	CoG (ESP) 1/2	Weight kg	Price €
				mm	mm								
S 11-ZVP 20/TGHS 20 1200/850	2000	1.8	2	400-980	980	133 x 58	45	1200	850	118	335/420	295	
				400-1050	1050	133 x 58	45	1200	850	118	330/415	300	
				400-1150	1150	133 x 58	45	1200	850	118	325/410	305	
S 11-ZVP 20/TGHS 20 1300/950	2000	1.8	2	400-980	980	133 x 58	45	1300	950	118	365/465	310	
				400-1050	1050	133 x 58	45	1300	950	118	360/460	315	
				400-1150	1150	133 x 58	45	1300	950	118	355/450	320	
S 11-ZVP 25/TGH 25 1200/850	2500	2.5	2	400-1050	1050	163 x 58	45	1200	850	118	355/450	340	
				400-1150	1150	163 x 58	45	1200	850	118	350/445	345	
				400-1250	1250	163 x 58	45	1200	850	118	345/435	350	
S 11-ZVP 25/TGH 25 1300/950	2500	2.5	2	400-1050	1050	163 x 58	45	1300	950	118	390/495	355	
				400-1150	1150	163 x 58	45	1300	950	118	385/490	360	
				400-1250	1250	163 x 58	45	1300	950	118	380/485	365	
S 11-ZVP 35/TGH 30 1200/850	3500	3.0	3	400-1050	1050	163 x 58	45	1200	850	128	350/440	360	
				400-1150	1150	163 x 58	45	1200	850	128	345/435	365	
				400-1250	1250	163 x 58	45	1200	850	128	340/430	370	
				400-1350	1350	163 x 58	45	1200	850	128	335/425	375	
S 11-ZVP 35/TGH 30 1300/950	3500	3.0	3	400-1050	1050	163 x 58	45	1300	950	128	385/485	375	
				400-1150	1150	163 x 58	45	1300	950	128	380/475	380	
				400-1250	1250	163 x 58	45	1300	950	128	375/470	385	
				400-1350	1350	163 x 58	45	1300	950	128	370/465	390	
S 11-ZVP 48/TGH 40 1200/850	4500	4.0	3	400-1250	1250	163 x 58	45	1200	850	135	310/390	420	
				400-1350	1350	163 x 58	45	1200	850	135	310/385	425	
				400-1450	1450	163 x 58	45	1200	850	135	305/385	430	
				400-1550	1550	163 x 58	45	1200	850	135	305/380	435	
S 11-ZVP 48/TGH 40 1300/950	4500	4.0	3	400-1250	1250	163 x 58	45	1300	950	135	345/430	435	
				400-1350	1350	163 x 58	45	1300	950	135	340/425	440	
				400-1450	1450	163 x 58	45	1300	950	135	340/420	445	
				400-1550	1550	163 x 58	45	1300	950	135	335/415	450	

# FORK POSITIONER ZVP-SERIES

## WITH TELESCOPIC FORKS

2 HYDRAULIC FUNCTIONS · LC = 600 mm

FORKS SERIALLY BOLTED ON



Model	Load capacity kg	for lift trucks up to to	ISO	Omin - Omax	G	Cross section * D x S	C	L	K	V	CoG (ESP) 1/2	Weight kg	Price €
				mm	mm								
S 11-ZVP 48/TGH 48 1200/850	4800	4.5	3	400-1250	1250	165 x 64	50	1200	850	135	335/425	455	
				400-1350	1350								
				400-1450	1450								
				400-1550	1550								
S 11-ZVP 48/TGH 48 1300/950	4800	4.5	3	400-1250	1250	165 x 64	50	1300	950	135	365/470	470	
				400-1350	1350								
				400-1450	1450								
				400-1550	1550								

One-sided loading of trucks requires a usable length of 1300 mm with 950 mm stroke.

Camera systems on request.

The handling of 2 Euro pallets lengthwise requires a usable length of 1350 mm with 1000 mm stroke.

\* Fork shoe reinforced in the rear area (10 mm wider)

\* Surcharge for wear-resistant manganese steel strips on underside of outer forks, dimension S increases by 5 mm

Surcharge for pallet stops A1 (located on each side of the fork shoe) or pallet stops A2 (height 400 mm)

Surcharge for pallet stops A3 (height 850 mm)

Surcharge for integral design, see page 217

## Standard values for residual load capacity of lift trucks \*\*

Fork Positioners with Telescopic Forks	S 11 -	ZVP 20/ TGH S 20	ZVP 25/ TGH 25	ZVP 25/ TGH 25	ZVP 35/ TGH 30	ZVP 35/ TG 45	ZVP 48/ TGH 40	ZVP 48/ TGH 40	ZVP 48/ TGH 48	ZVP 48/ TG 60	ZVP 48/ TG 60
Load capacity lift truck	kg	1800	2000	2500	3000	3500	3500	4000	4500	5000/500	5000/600
X*	mm	370	450	450	450	500	500	500	500	500	560
LC (LSP) = 600 mm	kg	1290	1470	1880	2250	2710	2670	3080	3440	3870	4330
LC (LSP) = 1200 mm	kg	820	950	1220	1480	(1750)	1780	2050	2290	(2400)	(2400)
LC (LSP) = 1450 mm	kg	720	840	1070	1290	(1450)	1570	1810	2020	(1990)	(1990)
LC (LSP) = 1650 mm	kg	640	760	980	1180	(1280)	1430	1650	1840	(1750)	(1750)

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

For greater load centers, where the lift truck has a higher residual load capacity than the attachment, those values, upon the exceedance of which the attachment would be overloaded, are indicated in brackets ( ).

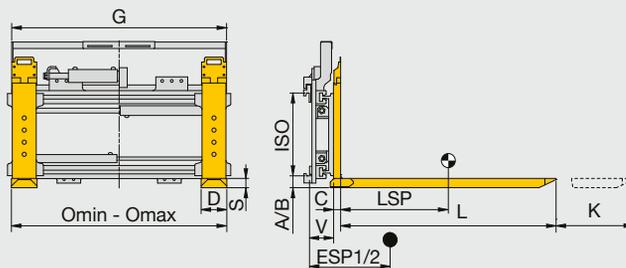
\* Assumed dimensions

# FORK POSITIONERS ZVP-SERIES

## WITH TELESCOPIC FORKS AND SEPARATE SIDESHIFT

2 HYDRAULIC FUNCTIONS · LC = 600 mm

FORKS SERIALLY BOLTED ON · INCL. SOLENOID VALVE



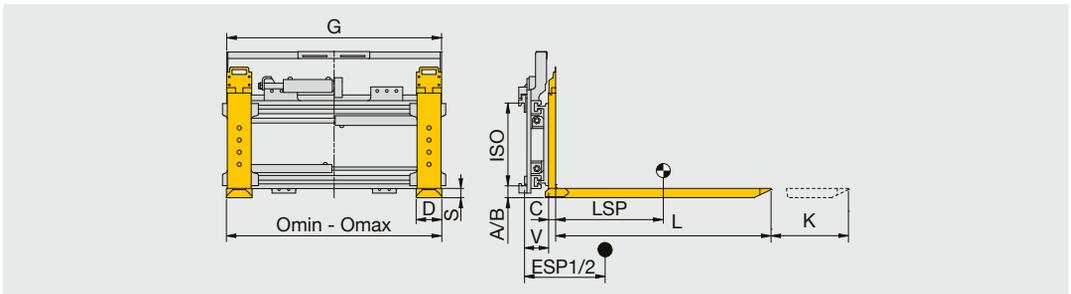
Model	Load capacity kg	for lift trucks up to to	ISO	Omin - Omax	G	Side-shift	Cross section * D×S	C	L	K	V	CoG (ESP) 1/2	Weight kg	Price €
				mm										
S 11-ZVP 20/TGHS 20 1200/850-S	2000	1.8	2	400-980	980	±100	133 × 58	45	1200	850	133	320/405	320	
				400-1050	1050	±100	133 × 58	45	1200	850	133	315/400	325	
				400-1150	1150	±100	133 × 58	45	1200	850	133	315/395	330	
S 11-ZVP 20/TGHS 20 1300/950-S	2000	1.8	2	400-980	980	±100	133 × 58	45	1300	950	133	350/445	335	
				400-1050	1050	±100	133 × 58	45	1300	950	133	345/440	340	
				400-1150	1150	±100	133 × 58	45	1300	950	133	340/435	345	
S 11-ZVP 25/TGH 25 1200/850-S	2500	2.5	2	400-1050	1050	±100	163 × 58	45	1200	850	133	345/430	365	
				400-1150	1150	±100	163 × 58	45	1200	850	133	340/425	370	
				400-1250	1250	±100	163 × 58	45	1200	850	133	335/420	375	
S 11-ZVP 25/TGH 25 1300/950-S	2500	2.5	2	400-1050	1050	±100	163 × 58	45	1300	950	133	380/480	380	
				400-1150	1150	±100	163 × 58	45	1300	950	133	375/475	385	
				400-1250	1250	±100	163 × 58	45	1300	950	133	370/465	390	
S 11-ZVP 35/TGH 30 1200/850-S	3500	3.0	3	400-1050	1050	±100	163 × 58	45	1200	850	143	325/405	405	
				400-1150	1150	±100	163 × 58	45	1200	850	143	325/400	410	
				400-1250	1250	±100	163 × 58	45	1200	850	143	320/400	415	
				400-1350	1350	±100	163 × 58	45	1200	850	143	315/395	420	
S 11-ZVP 35/TGH 30 1300/950-S	3500	3.0	3	400-1050	1050	±100	163 × 58	45	1300	950	143	360/445	420	
				400-1150	1150	±100	163 × 58	45	1300	950	143	355/445	425	
				400-1250	1250	±100	163 × 58	45	1300	950	143	355/440	430	
				400-1350	1350	±100	163 × 58	45	1300	950	143	350/435	435	
S 11-ZVP 48/TGH 40 1200/850-S	4500	4.0	3	400-1250	1250	±100	163 × 58	45	1200	850	150	305/380	450	
				400-1350	1350	±100	163 × 58	45	1200	850	150	305/375	455	
				400-1450	1450	±100	163 × 58	45	1200	850	150	300/375	460	
				400-1550	1550	±100	163 × 58	45	1200	850	150	300/370	465	
S 11-ZVP 48/TGH 40 1300/950-S	4500	4.0	3	400-1250	1250	±100	163 × 58	45	1300	950	150	340/415	465	
				400-1350	1350	±100	163 × 58	45	1300	950	150	335/410	470	
				400-1450	1450	±100	163 × 58	45	1300	950	150	330/410	475	
				400-1550	1550	±100	163 × 58	45	1300	950	150	330/405	480	

# FORK POSITIONERS ZVP-SERIES

## WITH TELESCOPIC FORKS AND SEPARATE SIDESHIFT

2 HYDRAULIC FUNCTIONS · LC = 600 mm

FORKS SERIALLY BOLTED ON · INCL. SOLENOID VALVE



Model	Load capacity	for lift trucks up to	ISO	Omin - Omax	G	Side-shift	Cross section * D x S	C	L	K	V	CoG (ESP) 1/2	Weight	Price
				mm										
S 11-ZVP 48/TGH 48 1200/850-S	4800	4.5	3	400-1250	1250	±100	165 × 64	50	1200	850	150	330/415	485	
				400-1350	1350	±100	165 × 64	50	1200	850	150	325/410	490	
				400-1450	1450	±100	165 × 64	50	1200	850	150	320/405	495	
				400-1550	1550	±100	165 × 64	50	1200	850	150	320/400	500	
S 11-ZVP 48/TGH 48 1300/950-S	4800	4.5	3	400-1250	1250	±100	165 × 64	50	1300	950	150	360/460	500	
				400-1350	1350	±100	165 × 64	50	1300	950	150	355/455	505	
				400-1450	1450	±100	165 × 64	50	1300	950	150	355/450	510	
				400-1550	1550	±100	165 × 64	50	1300	950	150	350/445	515	

One-sided loading of trucks requires a usable length of 1300 mm with 950 mm stroke.

Camera systems on request.

The handling of 2 Euro pallets lengthwise requires a usable length of 1350 mm with 1000 mm stroke.

\* Fork shoe reinforced in the rear area (10 mm wider)

\* Surcharge for wear-resistant manganese steel strips on underside of outer forks, dimension S increases by 5 mm

Surcharge for pallet stops A1 (located on each side of the fork shoe) or pallet stops A2 (height 400 mm)

Surcharge for pallet stops A3 (height 850 mm)

Price reduction without solenoid valve

### Standard values for residual load capacity of lift trucks \*\*

Fork Positioners with Telescopic Forks and Separate Sideshift	S 11 -	ZVP 20/ TGHs 20-S	ZVP 25/ TGH 25-S	ZVP 25/ TGH 25-S	ZVP 35/ TGH 30-S	ZVP 48/ TGH 40-S	ZVP 48/ TGH 40-S	ZVP 48/ TGH 48-S	ZVP 48/ TG 60-S	ZVP 48/ TG 60-S
Load capacity lift truck	kg	1800	2000	2500	3000	3500	4000	4500	5000/500	5000/600
X*	mm	370	450	450	450	500	500	500	500	560
LC (LSP) = 600 mm	kg	1260	1440	1840	2200	2620	3020	3380	3800	4260
LC (LSP) = 1200 mm	kg	810	940	1200	1450	1750	2020	2260	(2400)	(2400)
LC (LSP) = 1450 mm	kg	700	820	1050	1270	1540	1780	1990	(1990)	(1990)
LC (LSP) = 1650 mm	kg	630	750	960	1160	1410	1630	1820	(1750)	(1750)

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

For greater load centers, where the lift truck has a higher residual load capacity than the attachment, those values, upon the exceedance of which the attachment would be overloaded, are indicated in brackets ( ).

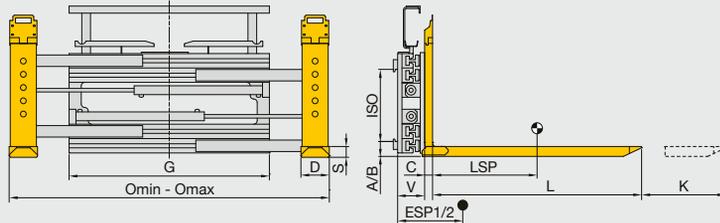
\* Assumed dimensions

# FORK POSITIONER ZVKG-SERIES

## WITH TELESCOPIC FORKS

2 HYDRAULIC FUNCTIONS · LARGE OPENING RANGE

LC = 600 mm · FORKS SERIALLY BOLTED ON



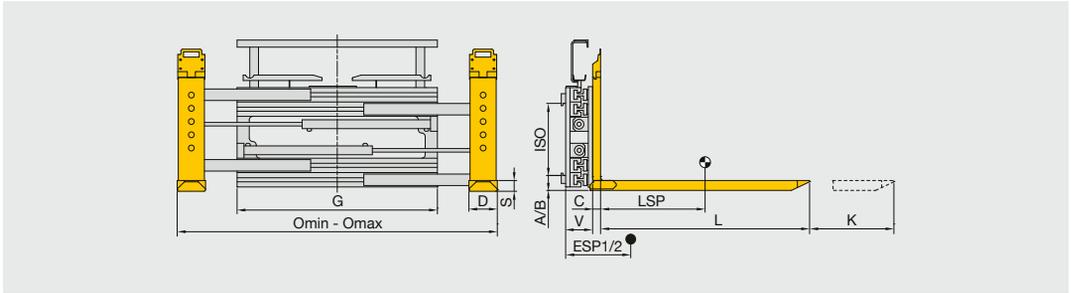
Model	Load capacity kg	for lift trucks up to to	ISO	Omin - Omax mm	G mm	Cross section* D x S mm	C mm	L mm	K mm	V mm	CoG (ESP) 1/2 mm	Weight kg	Price €	Surcharge per 100 mm	
														add. fork length €	add. opening range €
S 11-ZVKG 20/TGHS 20 1200/850	2000	2.0	2	560-1640	950	133 x 58	45	1200	850	155	275/335	435			
S 11-ZVKG 20/TGHS 20 1300/950				560-1640	950	133 x 58	45	1300	950	155	300/370	450			
S 11-ZVKG 25/TGH 25 1200/850	2500	2.5	2	560-1740	1050	163 x 58	45	1200	850	155	285/350	495			
S 11-ZVKG 25/TGH 25 1300/950				560-1740	1050	163 x 58	45	1300	950	155	315/390	510			
S 11-ZVKG 30/TGH 30 1200/850	3000	3.0	3	560-1840	1150	163 x 58	45	1200	850	155	275/340	525			
S 11-ZVKG 30/TGH 30 1300/950				560-1840	1150	163 x 58	45	1300	950	155	305/370	540			
S 11-ZVKG 40/TGH 40 1200/850	4000	3.5	3	560-1940	1250	163 x 58	45	1200	850	170	250/300	625			
S 11-ZVKG 40/TGH 40 1300/950				560-1940	1250	163 x 58	45	1300	950	170	275/330	640			
S 11-ZVKG 45/TGH 40 1200/850	4500	4.0	3	560-2040	1350	163 x 58	45	1200	850	170	245/295	640			
S 11-ZVKG 45/TGH 40 1300/950				560-2040	1350	163 x 58	45	1300	950	170	270/325	655			
S 11-ZVKG 45/TGH 48 1200/850	4500	4.5	3	560-2040	1350	165 x 64	50	1200	850	170	265/325	675			
S 11-ZVKG 45/TGH 48 1300/950				560-2040	1350	165 x 64	50	1300	950	170	290/360	690			
S 11-ZVKG 48/TGH 48 1200/850	5000	5.0	3	560-2040	1350	165 x 64	50	1200	850	170	260/315	695			
S 11-ZVKG 48/TGH 48 1300/950				560-2040	1350	165 x 64	50	1300	950	170	285/350	710			

# FORK POSITIONER ZVKG-SERIES

## WITH TELESCOPIC FORKS

2 HYDRAULIC FUNCTIONS · LARGE OPENING RANGE

LC = 600 mm · FORKS SERIALLY BOLTED ON



Model	Load capacity kg	for lift trucks up to to	ISO	Omin - Omax	G	Cross section* D × S	C	L	K	V	CoG (ESP) 1/2	Weight kg	Price €	Surcharge per 100 mm	
				mm	mm		mm	mm	mm	mm				mm	add. fork length €
S 11-ZVKG 60/TGH 50 1200/850	6000	5.0	4	560-2140	1450	165 × 64	50	1200	850	185	250/300	810			
S 11-ZVKG 60/TGH 50 1300/950				560-2140	1450	165 × 64	50	1300	950	185	275/335	825			
S 11-ZVKG 70/TGH 60 1200/850	7000	6.0	4	560-2410	1750	217 × 67	50	1200	850	185	255/315	980			
S 11-ZVKG 70/TGH 60 1300/950				560-2410	1750	217 × 67	50	1300	950	185	280/345	1000			

One-sided loading of trucks requires a usable length of 1300 mm with 950 mm stroke.

Camera systems on request.

The handling of 2 Euro pallets lengthwise requires a usable length of 1350 mm with 1000 mm stroke.

\* Fork shoe reinforced in the rear area (10 mm wider)

\* Surcharge for wear-resistant manganese steel strips on underside of outer forks, dimension S increases by 5 mm

Surcharge for pallet stops A1 (located on each side of the fork shoe) or pallet stops A2 (height 400 mm)

Surcharge for pallet stops A3 (height 850 mm)

Surcharge for integral design, see page 217

Different load capacities and versions available on request.

## Standard values for residual load capacity of lift trucks \*\*

Fork Positioners with Telescopic Forks	S 11 -	ZVKG 20/ TGH 20	ZVKG 20/ TGH 20	ZVKG 25/ TGH 25	ZVKG 30/ TGH 30	ZVKG 40/ TGH 40	ZVKG 45/ TGH 40	ZVKG 45/ TGH 48	ZVKG 48/ TGH 48	ZVKG 60/ TGH 50	ZVKG 70/ TGH 60
Load capacity lift truck	kg	1800	2000	2500	3000	3500	4000	4500	5000/500	5000	6000
X*	mm	370	450	450	450	500	500	500	500	560	560
LC (LSP) = 600 mm	kg	1210	1390	1750	2130	2510	2900	3220	3700	4060	4800
LC (LSP) = 1200 mm	kg	780	920	1150	1400	1680	1950	2190	2480	2790	3280
LC (LSP) = 1450 mm	kg	680	810	1010	1230	1480	1710	1930	2180	(2320)	2910
LC (LSP) = 1650 mm	kg	620	730	910	1110	1340	1550	1750	1980	(2040)	2650

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

For greater load centers, where the lift truck has a higher residual load capacity than the attachment, those values, upon the exceedance of which the attachment would be overloaded, are indicated in brackets ( ).

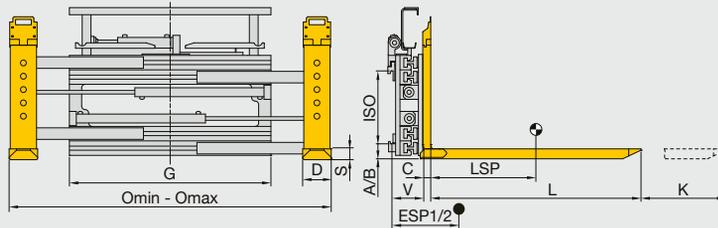
\* Assumed dimensions

# FORK POSITIONERS ZVKG-SERIES

## WITH TELESCOPIC FORKS AND SEPARATE SIDESHIFT

2 HYDRAULIC FUNCTIONS · LARGE OPENING RANGE

LC = 600 mm · FORKS SERIALLY BOLTED ON · INCL. SOLENOID VALVE



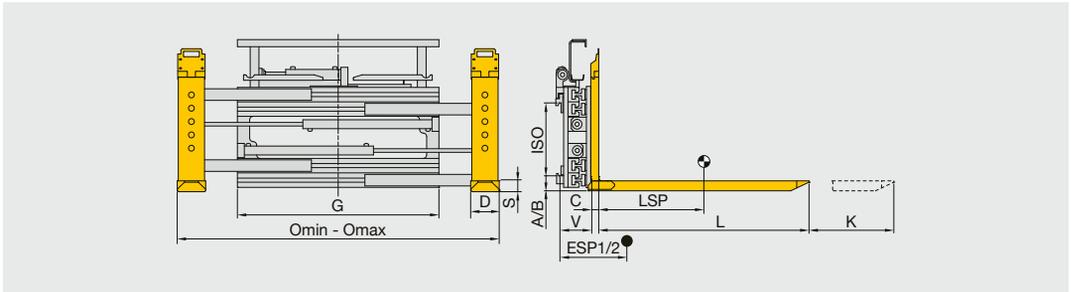
Model	Load capacity kg	for lift trucks up to to	ISO	Omin - Omax mm	G mm	Side-shift mm	Cross section* D x S mm	C mm	L mm	K mm	V mm	CoG (ESP) 1/2 mm	Weight kg	Price €	Surcharge per 100 mm	
															add. fork length €	add. opening range €
S 11-ZVKG 20/TGHS 20 1200/850-S	2000	2.0	2	560-1640	950	±100	133 x 58	45	1200	850	170	270/ 330	465			
S 11-ZVKG 20/TGHS 20 1300/950-S				560-1640	950	±100	133 x 58	45	1300	950	170	295/ 360	480			
S 11-ZVKG 25/TGH 25 1200/850-S	2500	2.5	2	560-1740	1050	±100	163 x 58	45	1200	850	170	285/ 345	525			
S 11-ZVKG 25/TGH 25 1300/950-S				560-1740	1050	±100	163 x 58	45	1300	950	170	310/ 380	540			
S 11-ZVKG 30/TGH 30 1200/850-S	3000	3.0	3	560-1840	1150	±100	163 x 58	45	1200	850	170	270/ 330	565			
S 11-ZVKG 30/TGH 30 1300/950-S				560-1840	1150	±100	163 x 58	45	1300	950	170	295/ 360	580			
S 11-ZVKG 40/TGH 40 1200/850-S	4000	3.5	3	560-1940	1250	±100	163 x 58	45	1200	850	185	250/ 300	665			
S 11-ZVKG 40/TGH 40 1300/950-S				560-1940	1250	±100	163 x 58	45	1300	950	185	275/ 325	680			
S 11-ZVKG 45/TGH 40 1200/850-S	4500	4.0	3	560-2040	1350	±100	163 x 58	45	1200	850	185	245/ 295	680			
S 11-ZVKG 45/TGH 40 1300/950-S				560-2040	1350	±100	163 x 58	45	1300	950	185	270/ 320	695			
S 11-ZVKG 45/TGH 48 1200/850-S	4500	4.5	3	560-2040	1350	±100	165 x 64	50	1200	850	185	265/ 325	715			
S 11-ZVKG 45/TGH 48 1300/950-S				560-2040	1350	±100	165 x 64	50	1300	950	185	290/ 355	730			
S 11-ZVKG 48/TGH 48 1200/850-S	5000	5.0	3	560-2040	1350	±100	165 x 64	50	1200	850	185	260/ 320	735			
S 11-ZVKG 48/TGH 48 1300/950-S				560-2040	1350	±100	165 x 64	50	1300	950	185	285/ 350	750			

# FORK POSITIONERS ZVKG-SERIES

## WITH TELESCOPIC FORKS AND SEPARATE SIDESHIFT

2 HYDRAULIC FUNCTIONS · LARGE OPENING RANGE

LC = 600 mm · FORKS SERIALLY BOLTED ON · INCL. SOLENOID VALVE



Model	Load capacity kg	for lift trucks up to to	ISO	Omin - Omax	G	Side-shift mm	Cross section* D x S mm	C mm	L mm	K mm	V mm	CoG (ESP) 1/2 mm	Weight kg	Price €	Surcharge per 100 mm	
				mm	mm										add. fork length €	add. opening range €
S 11-ZVKG 60/TGH 50 1200/850-S	6000	5.0	4	560-2140	1450	±150	165 x 64	50	1200	850	200	250/295	870			
S 11-ZVKG 60/TGH 50 1300/950-S				560-2140	1450	±150	165 x 64	50	1300	950	200	270/325	885			
S 11-ZVKG 70/TGH 60 1200/850-S	7000	6.0	4	560-2410	1750	±150	217 x 67	50	1200	850	205	255/305	1060			
S 11-ZVKG 70/TGH 60 1300/950-S				560-2410	1750	±150	217 x 67	50	1300	950	205	275/335	1080			

One-sided loading of trucks requires a usable length of 1300 mm with 950 mm stroke.

Camera systems on request.

The handling of 2 Euro pallets lengthwise requires a usable length of 1350 mm with 1000 mm stroke.

\* Fork shoe reinforced in the rear area (10 mm wider)

\* Surcharge for wear-resistant manganese steel strips on underside of outer forks, dimension S increases by 5 mm

Surcharge for pallet stops A1 (located on each side of the fork shoe) or pallet stops A2 (height 400 mm)

Surcharge for pallet stops A3 (height 850 mm)

Surcharge for integral design, see page 217

Different load capacities and versions available on request.

Price reduction without solenoid valve

### Standard values for residual load capacity of lift trucks \*\*

Fork Positioners with Telescopic Forks and Separate Sideshift	S 11 -	ZVKG 20/ TGH S 20 -S	ZVKG 20/ TGH S 20 -S	ZVKG 25/ TGH 25 -S	ZVKG 30/ TGH 30 -S	ZVKG 40/ TGH 40 -S	ZVKG 45/ TGH 40 -S	ZVKG 45/ TGH 48 -S	ZVKG 48/ TGH 48 -S	ZVKG 60/ TGH 50 -S	ZVKG 70/ TGH 60 -S
Load capacity lift truck	kg	1800	2000	2500	3000	3500	4000	4500	5000/500	5000	6000
X*	mm	370	450	450	450	500	500	500	500	560	560
LC (LSP) = 600 mm	kg	1180	1360	1710	2080	2460	2840	3190	3630	3990	4700
LC (LSP) = 1200 mm	kg	770	900	1130	1380	1650	1920	2150	2440	2750	3220
LC (LSP) = 1450 mm	kg	660	790	990	1210	1450	1690	1900	2150	(2320)	2860
LC (LSP) = 1650 mm	kg	600	720	890	1090	1320	1530	1720	1950	(2040)	2600

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

For greater load centers, where the lift truck has a higher residual load capacity than the attachment, those values, upon the exceedance of which the attachment would be overloaded, are indicated in brackets ( ).

\* Assumed dimensions

# FORK POSITIONERS IN OPERATION



**FORK POSITIONERS -  
LOAD CAPACITY 55,000 KG / 1,200 MM**



**FORK POSITIONER WITH LOAD STABILIZER**



**FORK POSITIONER ZVP-SERIES  
WITH TELESCOPIC FORKS**



**FORK POSITIONER WITH LOAD ARM**



**SPECIAL FORK POSITIONER WITH 4 FORKS**



**FORK POSITIONER ZVPV-SERIES**

**Fork clamps.** Fork clamps allow forks to be adjusted beyond the width of the attachment.

Due to their robust construction and appropriate cylinders with check valves, a powerful clamping force can be generated and maintained between the forks. Special slip-on arms enable palletless handling of different goods and versatile load handling, for example block and brick clamp arms for construction material or drum clamp arms for drum handling. By installing an adjustable pressure relief valve the clamping pressure can be changed. Fork clamps can be combined with separate sideshift or a sideshift valve.

With rotatable fork clamps different types of bins can be handled and emptied sideward.

# S 12

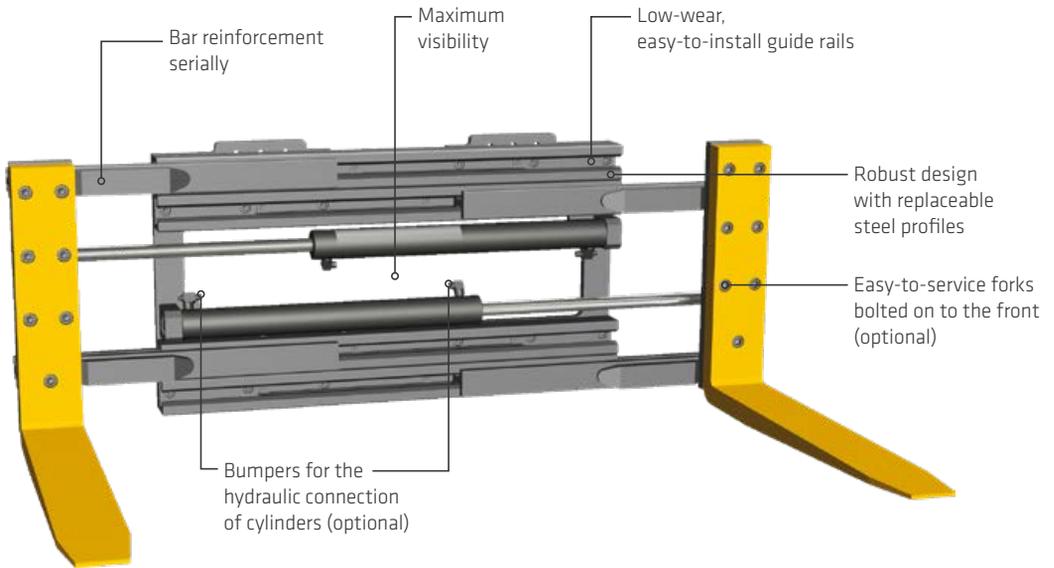
## FORK CLAMPS

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S 12

# FORK CLAMPS



**BUMPERS FOR THE HYDRAULIC CONNECTION OF CYLINDERS OPTIONALLY AVAILABLE**

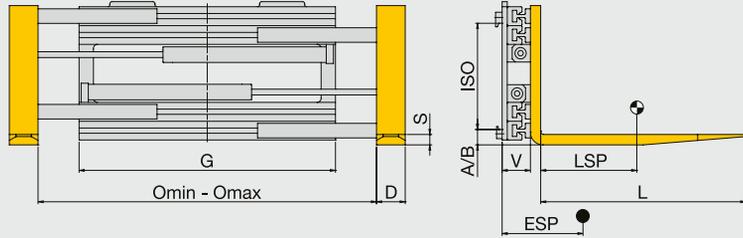


**BOLT-ON FORKS OPTIONALLY AVAILABLE**

# FORK CLAMPS

## 1 HYDRAULIC FUNCTION · FORKS SERIALY WELDED ON

In order to keep maintenance costs low, we recommend using bolt-on forks.



Model	Load capacity clamping function	Load capacity fork function	LC (LSP)	I S O	Omin - Omax ITI	G	D	S	L	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. fork length	Surcharge per 100 mm add. opening range
	kg	kg													
S 12-KG 15	1500	1800	500	2	300-1360	950	120	40	1200	130	200	370			
S 12-KG 22	2200	2500	500	2	300-1460	1050	125	45	1200	130	215	400			
S 12-KG 28	2800	3300	500	3	280-1550	1150	140	50	1200	140	210	540			
S 12-KG 35	3500	4000	500	3	280-1650	1250	140	50	1200	140	205	555			
S 12-KG 45	4500	5000	500	3	260-1700	1350	150	60	1200	155	215	695			
S 12-KG 48	4500	5000	600	3	260-1700	1350	150	60	1200	155	210	710			
S 12-KG 50	5000	6000	600	4	260-1800	1450	150	65	1200	155	215	800			
S 12-KG 60	6000	7000	600	4	260-1950	1600	150	70	1200	175	200	1005			
S 12-KG 70	7000	8000	600	4	260-2100	1750	200	70	1200	175	215	1230			
S 12-KG 80	7200	10000	600	4	260-2100	2000	200	80	1200	175	220	1375			

Surcharge for bolt-on forklifts  
 Surcharge for adjustable pressure relief valve  
 Surcharge for pressure gauge  
 Fork length from 1,600 mm (adapted clamping force) on request.

Surcharge for bumpers in front of the connections of the adjusting cylinders  
 Surcharge for integral design, see page 217  
 For harbor clamp see page 141  
 Ex-protection version on request.

### Standard values for residual load capacity of lift trucks \*\*

Fork Clamps	S 12 -	KG 15	KG 22	KG 28	KG 35	KG 35	KG 45	KG 45	KG 48/50	KG 50	KG 60	KG 60	KG 70	KG 70
Load capacity lift truck	kg	1500	2000	2500	3000	3500	4000	4500	5000/500	5000	6000	6000	7000	8000
X*	mm	350	450	450	450	500	500	500	500	560	560	560	650	650
LC (LSP) = 500 mm	kg	1180	1620	2070	2410	2880	3320	3600	4090					
LC (LSP) = 600 mm	kg	1070	1480	1900	2210	2650	3050	3310	3770	4150	5030	4840	5830	6580
LC (LSP) = 700 mm	kg	980	1370	(1730)	2040	2450	(2750)	3070	3490	3860	4680	4510	5450	6190
LC (LSP) = 800 mm	kg	900	1270	(1510)	1890	2280	(2400)	2860	(3100)	3610	(4130)	4210	(4950)	5000

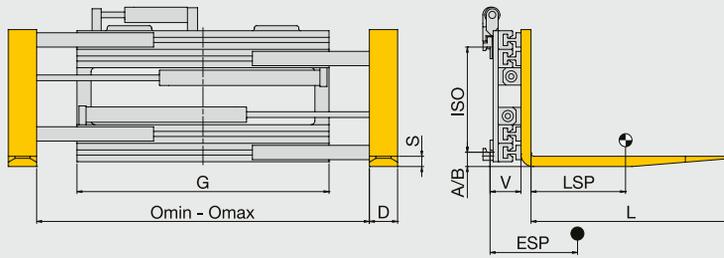
\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.  
 \* Assumed dimensions

For greater load centers, where the lift truck has a higher residual load capacity than the attachment, those values, upon the exceedance of which the attachment would be overloaded, are indicated in brackets ( ).

# FORK CLAMPS WITH SEPARATE SIDESHIFT

## 2 HYDRAULIC FUNCTIONS · FORKS SERIALLY WELDED ON

In order to keep maintenance costs low, we recommend using bolt-on forks.



Model	Load capacity clamping function	Load capacity fork function	LC (LSP)	I S O	Omin - Omax ITI	G	Side-shift	D	S	L	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. fork length	Surcharge per 100 mm add. opening range
	kg	kg														
S 12-KG 15-S	1500	1800	500	2	300-1360	950	±100	120	40	1200	145	200	400			
S 12-KG 22-S	2200	2500	500	2	300-1460	1050	±100	125	45	1200	145	215	430			
S 12-KG 28-S	2800	3300	500	3	280-1550	1150	±100	140	50	1200	155	210	580			
S 12-KG 35-S	3500	4000	500	3	280-1650	1250	±100	140	50	1200	155	205	595			
S 12-KG 45-S	4500	5000	500	3	260-1700	1350	±100	150	60	1200	170	220	735			
S 12-KG 48-S	4500	5000	600	3	260-1700	1350	±100	150	60	1200	170	215	750			
S 12-KG 50-S	5000	6000	600	4	260-1800	1450	±100	150	65	1200	170	215	860			
S 12-KG 60-S	6000	7000	600	4	260-1950	1600	±150	150	70	1200	195	205	1085			
S 12-KG 70-S	7000	8000	600	4	260-2100	1750	±150	200	70	1200	195	220	1310			
S 12-KG 80-S	7200	10000	600	4	260-2100	2000	±150	200	80	1200	195	225	1455			

Surcharge for bolt-on forks

Surcharge for adjustable pressure relief valve

Surcharge for pressure gauge

Fork length from 1,600 mm (adapted clamping force) on request.

Surcharge for bumpers in front of the connections of the adjusting cylinders

Surcharge for integral design, see page 217

For harbor clamp see page 141

Ex-protection version on request.



## Standard values for residual load capacity of lift trucks \*\*

Fork Clamps	S 12 -	KG 15-S	KG 22-S	KG 22-S	KG 28-S	KG 35-S	KG 35-S	KG 45-S	KG 45-S	KG 48/50-S	KG 50-S	KG 60-S	KG 60-S	KG 70-S	KG 70-S
Load capacity lift truck	kg	1500	2000	2500	3000	3500	4000	4500	5000/500	5000	6000	6000	7000	7000	8000
X*	mm	350	450	450	450	500	500	500	500	560	560	560	650	650	650
LC (LSP) = 500 mm	kg	1140	1580	2020	2350	2810	3250	3530	4010						
LC (LSP) = 600 mm	kg	1040	1450	1850	2150	2600	3000	3250	3700	4070	4930	4720	5700	5580	6440
LC (LSP) = 700 mm	kg	950	1340	1700	1990	2400	2770	3020	3430	3780	4600	4400	5340	5220	6030
LC (LSP) = 800 mm	kg	880	1240	(1510)	1850	2230	(2410)	2810	(3100)	3540	(4130)	4120	(4950)	4900	5660

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

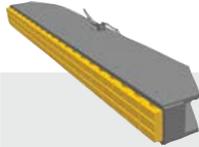
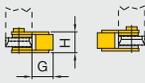
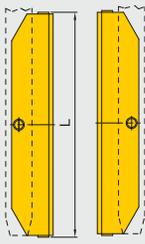
For greater load centers, where the lift truck has a higher residual load capacity than the attachment, those values, upon the exceedance of which the attachment would be overloaded, are indicated in brackets ( ).

# SLIP-ON ARMS FOR FORK CLAMPS



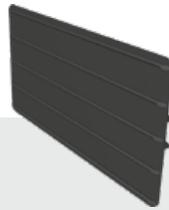
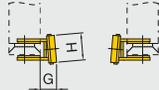
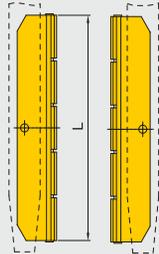
## BLOCK AND BRICK CLAMP ARMS STKA-SERIES

continuous perforated PU strip



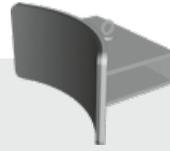
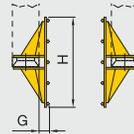
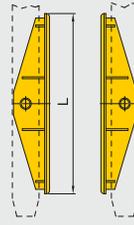
## BLOCK AND BRICK CLAMP ARMS STKA-U SERIES

divided full PU strip



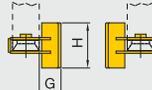
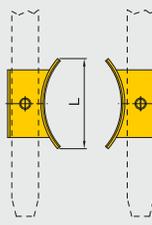
## BALE CLAMP ARMS

continuous profile bars

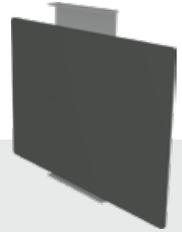


## DRUM CLAMP ARMS FOR 200 L TIGHT HEAD STEEL DRUMS

rubber-coated contact pads

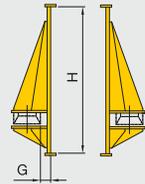
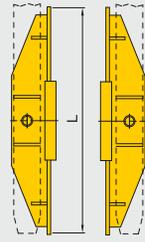


Tipping drum clamp arms FKKA-series on request



## BOX CLAMP ARMS

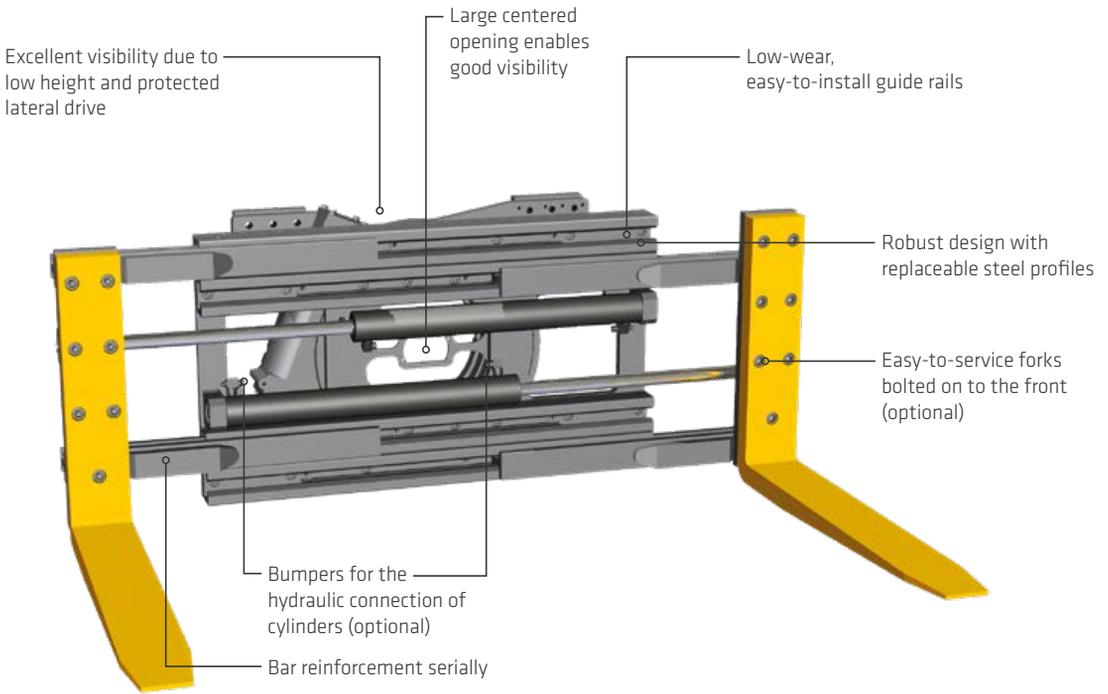
rubber-coated contact pads



Model	Load capacity	L	H	G	Weight per pair	Price per pair	Surcharge per 100 mm height/length
		mm	mm	mm			
S 12-STKA 20	2000	1200	94	95	120		
S 12-STKA 20-U	2000	1200	120	75	120		
S 12-BKA 20	2000	800	400	40	120		
S 12-FKA 20	2000	400	200	100	40		-
S 12-GBA 20	2000	1240	900	35	190		-

Tilting clamp arms and special designs on request.

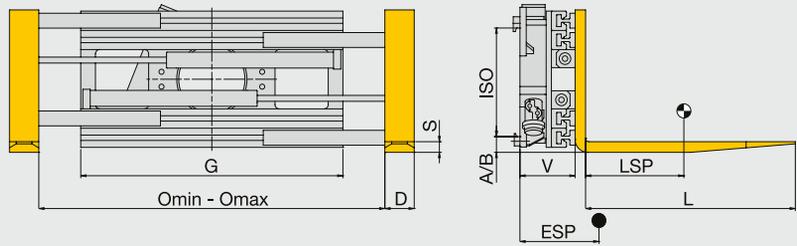
# ROTATABLE FORK CLAMPS



# FORK CLAMPS, ROTATABLE

2 HYDRAULIC FUNCTIONS · FORKS SERIALLY WELDED ON · ROTATION RANGE 360°

In order to keep maintenance costs low, we recommend using bolt-on forks.



Model	Load capacity clamping function	LC (LSP)	ISO	Omin - Omax ITI	G	D	S	L	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. fork length	Surcharge per 100 mm add. opening range	Surcharge for sep. sideshift
S 12-KG 15-360°	1500	500	2	300-1360	950	120	40	1200	250	225	595				
S 12-KG 22-360°	2200	500	2	300-1460	1050	125	45	1200	250	235	635				
S 12-KG 28-360°	2800	500	3	280-1550	1150	140	50	1200	265	245	810				
S 12-KG 35-360°	3500	500	3	280-1650	1250	140	50	1200	275	245	880				
S 12-KG 40-360°	4000	600	3	260-1700	1350	150	60	1200	290	265	1015				
S 12-KG 45-360°	4500	600	4	260-1700	1350	150	60	1200	295	240	1235				
S 12-KG 50-360°	5000	600	4	260-1800	1450	150	65	1200	295	250	1290				
S 12-KG 60-360°	6000	600	4	260-1950	1600	150	70	1200	315	255	1550				
S 12-KG 70-360°	7000	600	4	260-2100	1750	200	70	1200	335	280	1885				
S 12-KG 80-360°	7200	600	4	260-2100	2000	200	80	1200	335	285	2030				

Surcharge for bolt-on forks

Surcharge for adjustable pressure relief valve

Surcharge for pressure gauge

Surcharge for solenoid valve with separate sideshift incl. hydraulics

safety bar (utilization of only rotation/sideshift admissible)

Surcharge for bumpers in front of the connections of the adjusting cylinders

Surcharge for integral design, see page 217

Fork length from 1,600 mm (adapted clamping force) on request.

Ex-protection version on request.

## Standard values for residual load capacity of lift trucks \*\*

Fork Clamps, Rotatable	S 12 -	KG 15-360°	KG 15-360°	KG 22-360°	KG 28-360°	KG 28-360°	KG 35-360°	KG 35-360°	KG 40-360°	KG 45-360°	KG 50-360°	KG 60-360°	KG 70-360°
Load capacity lift truck	kg	1500	2000	2500	3000	3500	4000	4500	5000/500	5000	6000	7000	8000
X*	mm	350	450	450	450	500	500	500	500	560	560	650	650
LC (LSP) = 500 mm	kg	940	1360	1730	2000	2440	2780	3180	3470				
LC (LSP) = 600 mm	kg	860	1260	1600	1850	2260	2580	2940	3220	3520	4260	4980	5520
LC (LSP) = 700 mm	kg	800	1170	1480	1720	2110	2400	2740	3000	3300	3990	4680	5200
LC (LSP) = 800 mm	kg	740	(1030)	1390	1610	(1930)	2250	(2410)	2810	3100	3750	4410	4900

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

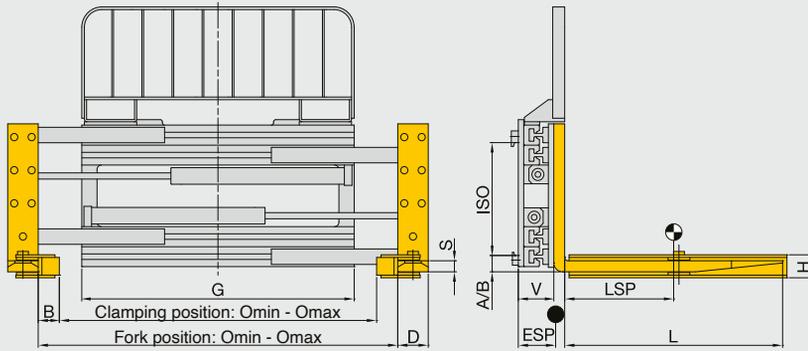
\* Assumed dimensions

For greater load centers, where the lift truck has a higher residual load capacity than the attachment, those values, upon the exceedance of which the attachment would be overloaded, are indicated in brackets ( ).

# BLOCK AND BRICK CLAMPS

1-2 HYDRAULIC FUNCTIONS · FORKS SERIALLY BOLTED ON · L = 1200 mm

INCL. BLOCK AND BRICK CLAMP ARMS STKA-SERIES · INCL. LOAD BACKREST (1200 mm HIGH)



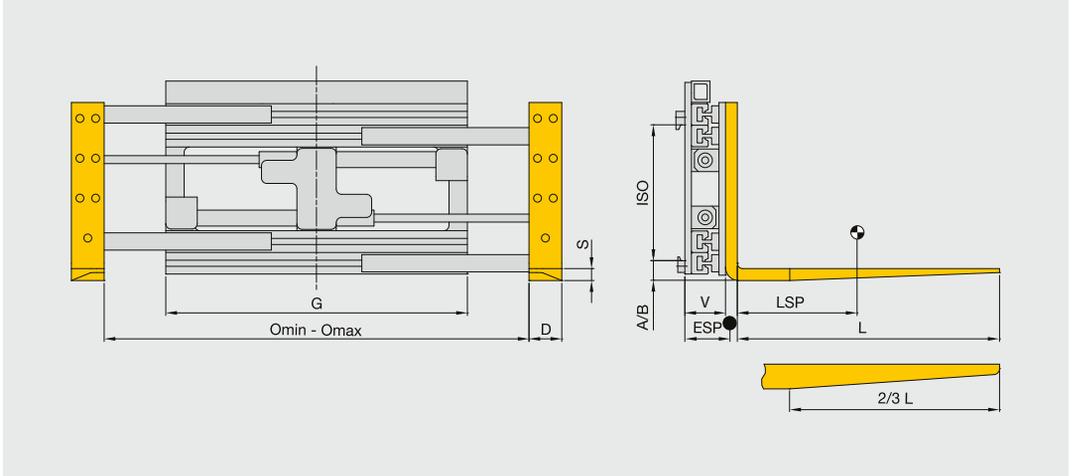
Model	Load capacity clamping function	Load capacity fork function	LC (LSP)	I S O	Omin - Omax ITI		G	Side-shift	D	S	B	H	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. fork length/ arm length
	kg	kg			mm	mm											
S 12-BKG 22	2200	2500	500	2	110-1270	300-1460	1050		125	45	95	94	155	335	575	€	€
S 12-BKG 22-S	2200	2500	500	2	110-1270	300-1460	1050	±100	125	45	95	94	170	335	605		
S 12-BKG 28	2800	3300	500	3	90-1360	280-1550	1150		140	50	95	94	165	310	725		
S 12-BKG 28-S	2800	3300	500	3	90-1360	280-1550	1150	±100	140	50	95	94	180	310	765		
S 12-BKG 35	3500	4000	500	3	90-1460	280-1650	1250		140	50	95	94	165	310	745		
S 12-BKG 35-S	3500	4000	500	3	90-1460	280-1650	1250	±100	140	50	95	94	180	300	785		

Surcharge for bumpers in front of the connections of the adjusting cylinders  
 Surcharge for adjustable pressure relief valve incl. pressure gauge



# HARBOR CLAMPS WITH SIDESHIFT VALVE

2 HYDRAULIC FUNCTIONS · FORKS SERIALLY BOLTED ON  
INCL. BUMPERS IN FRONT OF THE HYDRAULIC CONNECTIONS



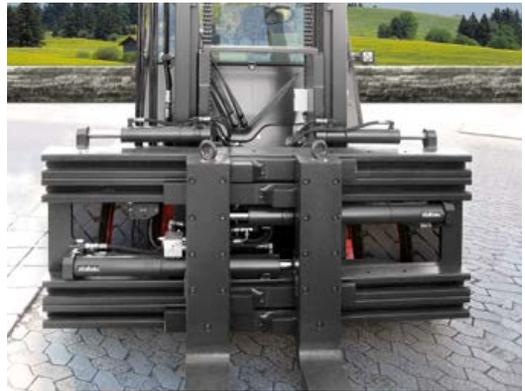
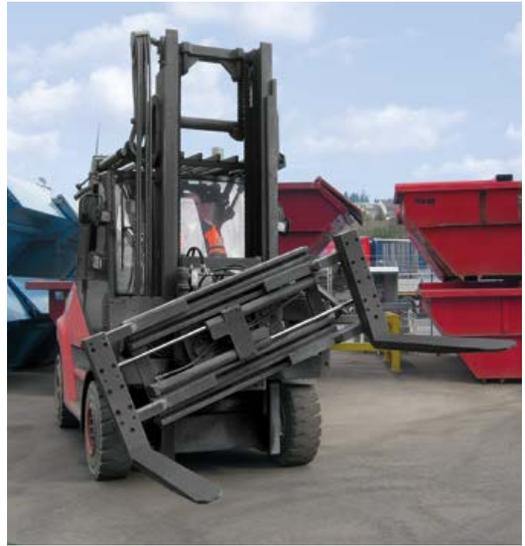
Model	Load capacity clamping function	Load capacity fork function	LC (LSP)	ISO	Omin - Omax ITI	G	D	S	L	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. fork length
	kg	kg												
S 12-HKG 18-SV	1200	1800	500	2	320-1480	1050	100	45	1200	155	160	385		
S 12-HKG 25-SV	1600	2500	500	2	320-1620	1150	125	45	1200	155	170	425		
S 12-HKG 30-SV	1600	3000	500	3	320-1620	1150	125	45	1200	155	165	455		

Surcharge for adjustable pressure relief valve incl. pressure gauge  
Version with separate sideshift on request.



512

# FORK CLAMPS IN OPERATION



512

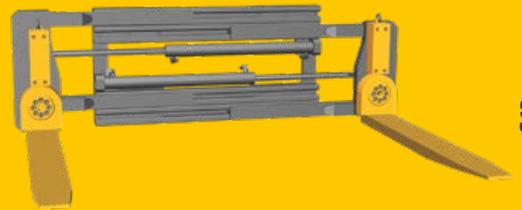
# S 13

## PIVOTING FORK CLAMPS

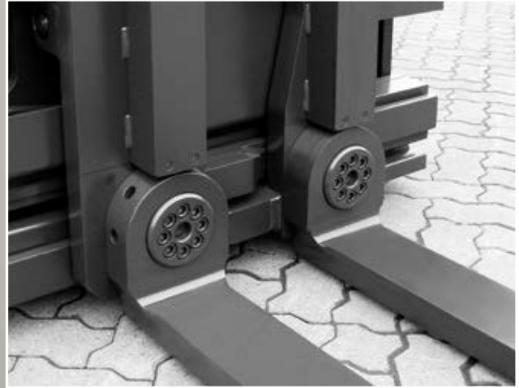
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**Pivoting Fork Clamps.** The blade of a pivoting fork clamp can be manually pivoted by 90°. In the 0° position, the attachment can be used as standard forks, in the 90° position, closely stacked goods can be clamped. The 45° position generates prismatic handling and is used for careful handling of round goods. Clamping in the basic position (0°) is not permissible.

By combining the attachment with a rotator, it can also be used for emptying bins or turning bales.



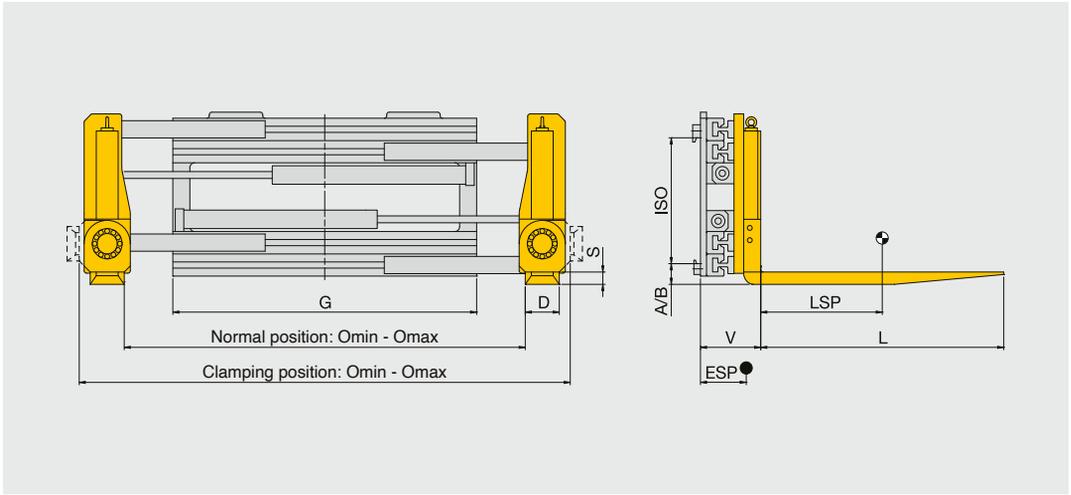
## PIVOTING FORK CLAMPS



513

# PIVOTING FORK CLAMPS

1 HYDRAULIC FUNCTION · LC = 500 mm · L = 1200 mm



Model	Load capacity		ISO	Omin - Omax		G	D	S	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. fork length	Surcharge per 100 mm add. opening range	Surcharge for sep. sideshift
	Normal position	Clamping position		Normal position	Clamping position										
	kg	kg		mm	mm										
S 13-DGK 15	1500	1000	2	280-1440	620-1780	950	125	45	240	230	415				
S 13-DGK 22	2200	1700	2	280-1510	630-1860	1050	140	50	250	230	510				
S 13-DGK 28	2800	2200	3	280-1650	630-2000	1150	140	50	260	220	610				

Max. fork length 1,500 mm

Surcharge for adjustable pressure relief valve

Surcharge for pressure gauge

Hydraulically pivotable forks available on request.

## Standard values for residual load capacity of lift trucks \*\*

Pivoting Fork Clamps	S 13 -	DGK 15	DGK 22	DGK 22	DGK 28	DGK 28
Load capacity lift truck	kg	1500	2000	2500	3000	3500
X*	mm	350	450	450	450	500
LC (LSP) = 500 mm	kg	1060	1450	1870	2220	2670
LC (LSP) = 600 mm	kg	970	1340	1720	2040	2470
LC (LSP) = 700 mm	kg	890	1240	1600	1900	(2200)

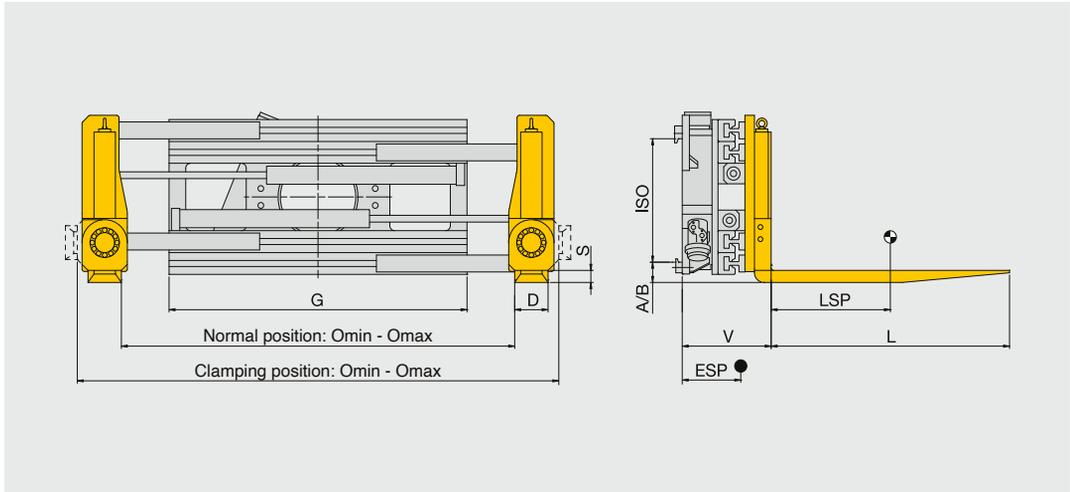
\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

For greater load centers, where the lift truck has a higher residual load capacity than the attachment, those values, upon the exceedance of which the attachment would be overloaded, are indicated in brackets ( ).

# PIVOTING FORK CLAMPS, ROTATABLE

2 HYDRAULIC FUNCTIONS · LC = 500 mm · L = 1200 mm · ROTATION RANGE 360°



Model	Load capacity		ISO	Omin - Omax		G	D	S	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm		
	Normal position	Clamping position		Normal position	Clamping position								add. fork length	add. opening range	Surcharge for sep. sideshift
	kg	kg													
S 13-DGK 15-360°	1500	1000	2	280-1440	620-1780	950	125	45	360	245	640				
S 13-DGK 22-360°	2200	1700	2	280-1510	630-1860	1050	140	50	370	260	745				
S 13-DGK 28-360°	2800	2200	3	280-1650	630-2000	1150	140	50	385	260	845				

Max. fork length 1,500 mm

Surcharge for adjustable pressure relief valve

Surcharge for pressure gauge

Surcharge for solenoid valve with separate sideshift incl. hydraulics

safety bar (utilization of only rotation/sideshift admissible)

## Standard values for residual load capacity of lift trucks \*\*

Pivoting Fork Clamps, Rotatable	S 13 -	DGK 15-360°	DGK 15-360°	DGK 22-360°	DGK 28-360°	DGK 28-360°
Load capacity lift truck	kg	1500	2000	2500	3000	3500
X*	mm	350	450	450	450	500
LC (LSP) = 500 mm	kg	840	1250	1560	1850	2280
LC (LSP) = 600 mm	kg	780	1160	1450	1720	2120
LC (LSP) = 700 mm	kg	720	1080	1350	1610	1980

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

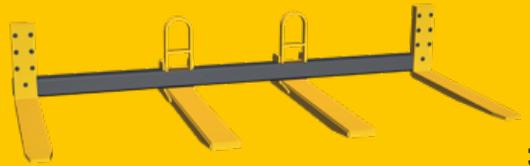
# S 14

## FIXED FORK SPREADERS

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**Fixed Fork Spreaders.** The fixed fork spreader has been designed for the occasional handling of particularly long and instable loads such as plastic tubes, sheet metal board, etc. The fork mounted attachment with slip-on shoes can be slipped onto the truck forks so that the load is distributed on additional forks.

If the load to be handled has a particularly low ground clearance, we recommend using the carriage mounted fixed fork spreader. If combined with QD hooks, the attachment can be mounted without the use of tools.

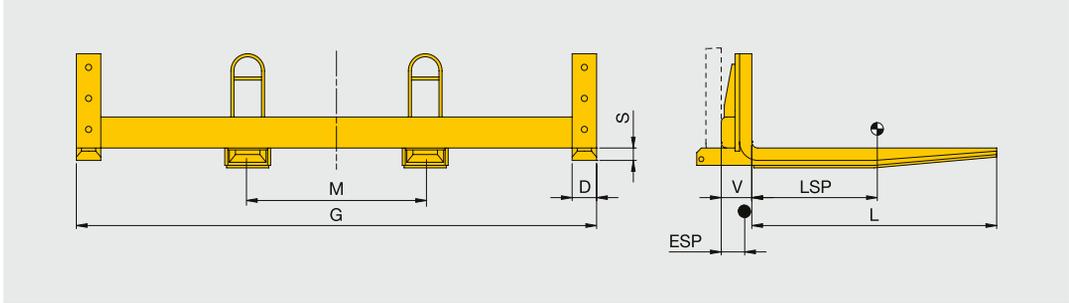


S14

# FIXED FORK SPREADERS

## SLIP-ON TYPE

FORKS SERIALLY BOLTED ON



Model	Load capacity	LC (LSP)	G	D	S	L	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. fork and shoe length
	kg	mm	mm	mm	mm	mm	mm	mm	kg	€	€
S 14-LGTSCH 15	1500	500	2000	80	40	1200	100	360	190		
	1500	500	3000	80	40	1200	100	300	240		
S 14-LGTSCH 25	2500	500	2500	120	40	1200	120	330	305		
	2500	500	3500	120	40	1200	120	285	365		
S 14-LGTSCH 30	3000	500	3000	125	45	1200	140	315	380		
	3000	500	4000	125	45	1200	140	270	480		
S 14-LGTSCH 40	4000	500	3500	125	45	1200	160	320	465		
	4000	500	5000	125	45	1200	180	290	575		
S 14-LGTSCH 45	4500	600	4000	140	50	1200	180	320	550		
	4500	600	5500	140	50	1200	200	275	740		
S 14-LGTSCH 50	5000	500	4000	140	50	1200	180	300	610		
	5000	500	6000	140	50	1200	200	255	830		

Not suited for sidersloaders.

Please indicate fork dimensions and fork distance M (center to center) when ordering.

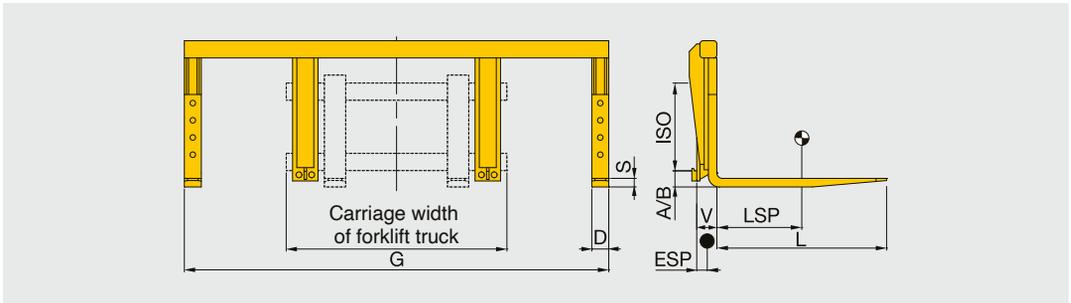


- to be slipped onto forks
- easy mounting
- excellent visibility
- usable length independent of the truck's forks

# FIXED FORK SPREADER

## HOOK-ON TYPE

FORKS SERIALLY BOLTED ON



Model	Load capacity	LC (LSP)	ISO	G	D	S	L	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. fork length
				mm	mm	mm	mm	mm	mm			
S 14-LGT 15	1500	500	2	2000	80	40	1200	100	185	200	€	€
	1500	500	2	3000	80	40	1200	100	160	250		
S 14-LGT 25	2500	500	2	2500	120	40	1200	120	200	305		
	2500	500	2	3500	120	40	1200	120	180	365		
S 14-LGT 30	3000	500	3	3000	125	45	1200	135	190	380		
	3000	500	3	4000	125	45	1200	135	170	460		
S 14-LGT 40	4000	500	3	3500	125	45	1200	145	185	470		
	4000	500	3	5000	125	45	1200	145	160	570		
S 14-LGT 45	4500	600	3	4000	140	50	1200	165	195	570		
	4500	600	3	5500	140	50	1200	165	160	760		
S 14-LGT 50	5000	600	3/4	4000	140	50	1200	170	175	700		
	5000	600	3/4	6000	140	50	1200	170	145	930		

Version with QD hooks incl. support feet on request.  
Design for sideloader can deviate from image.



- to be mounted on fork carriage
- low effective lost load center
- low ground clearance possible
- universal applications

S14

# FIXED FORK SPREADERS IN OPERATION



S14

**Bale clamps enable handling of bales of pulp, paper and textiles.**

**Pulp bale clamps** have solid, slim arms to facilitate handling of extremely tightly stacked goods. For better grip, the contact surfaces are equipped with end-to-end bars. Combining attachments with a rotator allows the inversion of bales.

There are especially profiled handle bars mounted to the slim arms of the **recycling clamp**. This allows different product qualities to be picked up safely in the recycling sector.

The arms of **foam clamps** are made of hoop-shaped tubular material for careful handling of foam bales. The opening range compared to bale clamps is wider.

# S 15

## PULP BALE CLAMPS

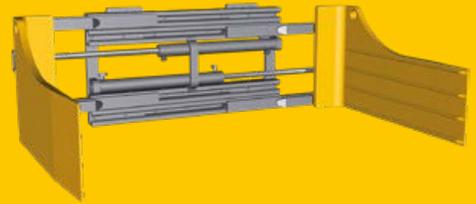
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## RECYCLING CLAMPS

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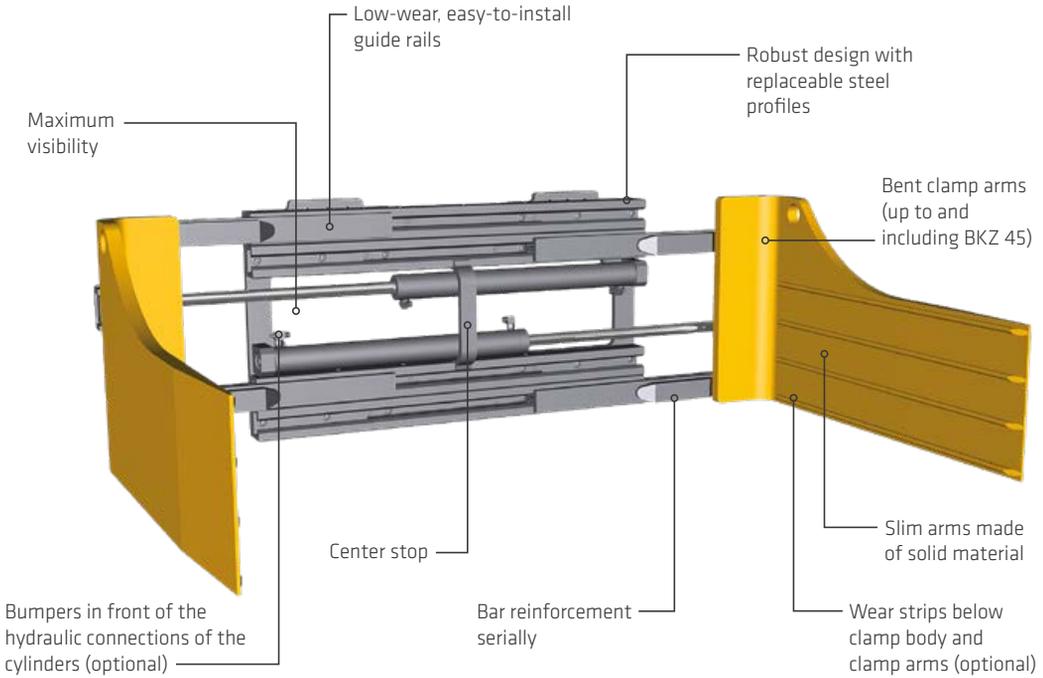
## FOAM CLAMPS

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# PULP BALE CLAMPS

## PULP BALE CLAMPS MODEL S 15 – BKZ



**BUMPERS IN FRONT OF THE HYDRAULIC CONNECTIONS OF THE CYLINDERS (OPTIONAL)**



**WEAR STRIPS BELOW CLAMP BODY AND CLAMP ARMS (OPTIONAL)**

## PULP BALE CLAMPS, ROTATABLE

PAGE 157

### MODEL S 15 – BKZ 360°

- Rotation range of 360° continuous by means of a worm gear
- Protected lateral drive
- Center stop
- Excellent visibility due to low height
- Large centered opening enables good visibility



## RECYCLING CLAMPS

PAGE 158

### MODEL S 15 – BKZR

- Arm with corrugated profile
- Wear strips below clamp body and clamp arms serially
- Center stop
- Bumpers in front of the hydraulic connections of the cylinders serially



S 15

## FOAM CLAMPS

PAGE 160

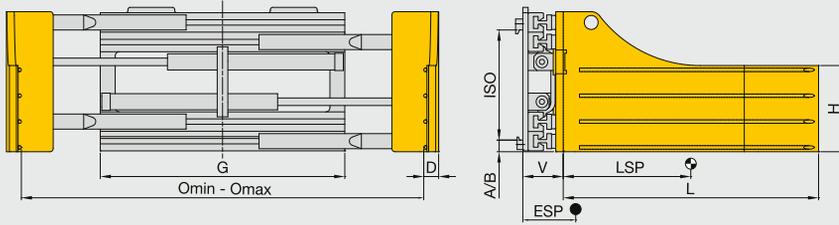
### MODEL S 15 – BKS

- Clamping arms made of hoop-shaped tubular material
- Bolt-on arms
- Bar reinforcement serially
- Damage-free clamping



# PULP BALE CLAMPS WITH SIDESHIFT VALVE

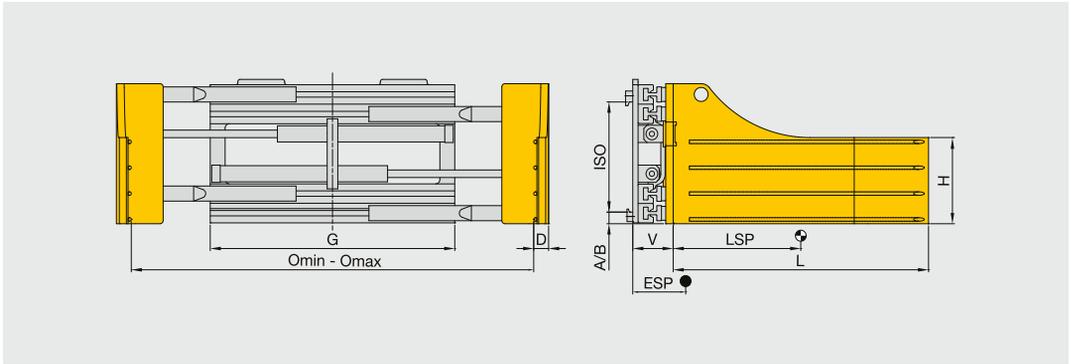
2 HYDRAULIC FUNCTIONS · INCL. CENTER STOP · BENT CLAMP ARMS UP TO BKZ 45-SV



Model	Load capacity	LC (LSP)	ISO	Omin - Omax ITI	G	L	H	D	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. arm length/height
	kg	mm		mm	mm	mm	mm	mm	mm	mm			
S 15-BKZ 15-SV	1500	500	2	500-1560	950	800	400	30	160	195	385		
				560-1720	1050	800	400	30	160	190	395		
				560-1790	1050	800	400	30	160	190	395		
S 15-BKZ 22-SV	2200	500	2	560-1830	1150	1000	400	46	185	255	610		
				560-1890	1150	1000	400	46	185	255	615		
				650-2020	1250	1000	400	46	185	250	625		
				650-2170	1250	1000	400	46	185	250	630		
S 15-BKZ 28-SV	2800	500	3	560-1830	1150	1000	400	51	190	270	670		
				560-1890	1150	1000	400	51	190	270	675		
				650-2020	1250	1000	400	51	190	265	690		
				650-2170	1250	1000	400	51	190	265	705		
S 15-BKZ 35-SV	3000	600	3	560-1900	1250	1200	400	51	200	300	815		
				560-2000	1250	1200	400	51	200	300	820		
				560-2000	1350	1200	400	51	200	295	830		
				560-2100	1350	1200	400	51	200	295	835		
				650-2190	1450	1200	400	51	200	290	860		
S 15-BKZ 40-SV	3900	600	3	560-2380	1450	1200	400	51	200	290	870		
				560-2000	1350	1200	400	56	205	315	885		
				560-2100	1350	1200	400	56	205	315	890		
				650-2190	1450	1200	400	56	205	310	920		
S 15-BKZ 45-SV	4200	600	4	560-2380	1450	1200	400	56	205	305	930		
				560-2000	1350	1200	400	56	205	310	990		
				560-2100	1350	1200	400	56	205	310	995		
				650-2190	1450	1200	400	56	205	305	1035		
				650-2380	1450	1200	400	56	205	300	1045		

# PULP BALE CLAMPS WITH SIDESHIFT VALVE

2 HYDRAULIC FUNCTIONS · INCL. CENTER STOP



Model	Load capacity	LC (LSP)	ISO	Omin - Omax IT1	G	L	H	D	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. arm length/height
	kg	mm		mm	mm	mm	mm	mm	mm	mm	kg	€	€
S 15-BKZ 50-SV	5000	600	4	650-2490	1600	1200	400	61	225	285	1335		
				650-2650	1750	1200	400	61	225	265	1455		
S 15-BKZ 70-SV	5700	700	4	650-2650	1750	1400	500	66	225	355	1665		
				650-2900	2000	1400	500	66	225	340	1745		
S 15-BKZ 80-SV	6500	800	4	670-2800	2000	1600	600	70	260	400	2360		
				670-3000	2200	1600	600	70	260	390	2445		
S 15-BKZ 100-SV	8000	800	4	700-3100	2400	1600	600	80	265	390	2665		

The opening range between the clamp arms is measured on the frame. Due to a prestress (1°) the opening range between the tips is correspondingly smaller. Further opening ranges and higher load capacities on request.

Surcharge for wear strips below clamp body and clamp arms  
 Surcharge for adjustable pressure relief valve  
 Surcharge for pressure gauge  
 Surcharge for load backrest see page 219

Surcharge for bumpers in front of the connections of the adjusting cylinders  
 Version with one oscillating arm on request.  
 Details on sideshift valve, see page 13  
 Available without sideshift

## Standard values for residual load capacity of lift trucks \*\*

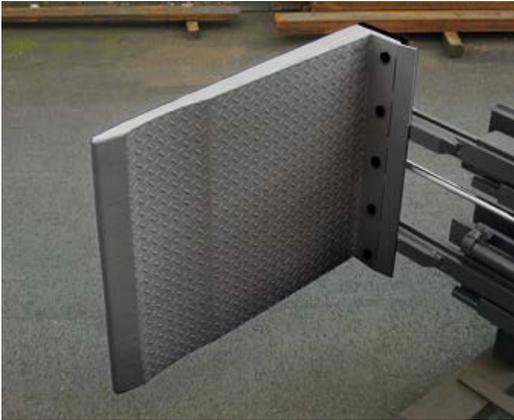
Pulp Bale Clamps with Sideshift Valve	S 15 -	BKZ 15-SV	BKZ 15-SV	BKZ 22-SV	BKZ 22-SV	BKZ 28-SV	BKZ 28-SV	BKZ 35-SV	BKZ 35-SV	BKZ 40-SV	BKZ 40-SV	BKZ 45-SV	BKZ 50-SV	BKZ 70-SV
Load capacity lift truck	kg	1500	2000	2000	2500	3000	3500	4000	4500	4500	5000 / 500	5000	6000	7000
X*	mm	350	450	450	450	450	500	500	500	500	500	560	560	650
LC (LSP) = 500 mm	kg	1150	1635	1440	1875	2255	2735	3035	3470	3400	3895	4300	4980	6030
LC (LSP) = 600 mm	kg	1045	(1380)	1320	1715	2065	2515	2795	3195	3130	3585	3970	4600	5600
LC (LSP) = 800 mm	kg	880	(1030)	1130	1470	1770	(1925)	2410	(2475)	2700	3090	3445	4000	4900

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

For greater load centers, where the lift truck has a higher residual load capacity than the attachment, those values, upon the exceedance of which the attachment would be overloaded, are indicated in brackets ( ).

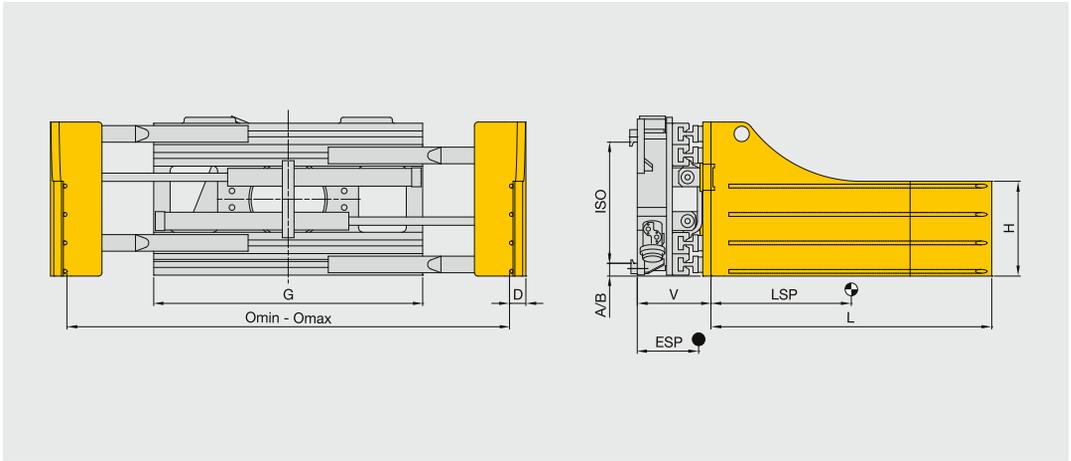
# SPECIAL PRODUCTS



S 15

# PULP BALE CLAMPS, ROTATABLE

2 HYDRAULIC FUNCTIONS INCL. CENTER STOP · BENT CLAMP ARMS · ROTATION RANGE 360°



Model	Load capacity lift truck	LC (LSP)	ISO	Omin - Omax ITI	G	L	H	D	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. arm length/height	Surcharge for sep. sideshift
	kg													
S 15-BKZ 15-360°	1500	500	2	560-1720	1050	800	400	30	280	215	635			
S 15-BKZ 22-360°	2200	500	2	560-1890	1150	1000	400	46	290	280	790			
S 15-BKZ 28-360°	2800	500	3	560-1890	1150	1000	400	51	315	295	930			
S 15-BKZ 35-360°	3000	600	3	560-2100	1350	1200	400	51	335	325	1150			

The opening range between the clamp arms is measured on the frame. Due to a prestress (1°) the opening range between the tips is correspondingly smaller. Further opening ranges and higher load capacities on request.

Surcharge for wear strips under clamp body and arms  
 Surcharge for adjustable pressure relief valve  
 Surcharge for pressure gauge

Surcharge for bumpers in front of the connections of the adjusting cylinders  
 Surcharge for solenoid valve with separate sideshift incl. hydraulics safety bar (utilization of only rotation/sideshift admissible)

## Standard values for residual load capacity of lift trucks \*\*

Pulp Bale Clamps, Rotatable	S 15 -	BKZ 15-360°	BKZ 15-360°	BKZ 22-360°	BKZ 28-360°	BKZ 28-360°	BKZ 35-360°	BKZ 35-360°	BKZ 35-360°
Load capacity lift truck	kg	1500	2000	2500	3000	3500	4000	4500	5000/500
X*	mm	350	450	450	450	500	500	500	500
LC (LSP) = 500 mm	kg	900	1330	1590	1860	2300	2500	2890	3330
LC (LSP) = 600 mm	kg	820	1230	1470	1720	2130	2315	2680	3090
LC (LSP) = 800 mm	kg	710	(1030)	1275	1495	1860	2025	2340	(2480)

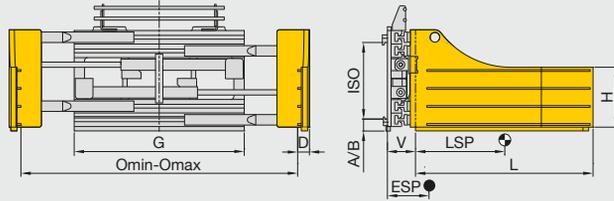
\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

For greater load centers, where the lift truck has a higher residual load capacity than the attachment, those values, upon the exceedance of which the attachment would be overloaded, are indicated in brackets ( ).

# RECYCLING CLAMPS WITH SIDESHIFT VALVE

2 HYDRAULIC FUNCTIONS · WEAR STRIPS SERIALLY BELOW THE CLAMP BODY AND CLAMP ARMS AS WELL AS A CENTER STOP AND BUMPERS IN FRONT OF THE HYDRAULIC CONNECTIONS



Model	Load capacity	LC (LSP)	ISO	Omin - Omax ITI	G	L	H	D	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. arm length/height
	kg	mm		mm	mm	mm	mm	mm	mm	mm	kg	€	€
S 15-BKZR 15-SV	1500	500	2	470-1530	950	1000	400	45	160	250	445		
				530-1690	1050	1000	400	45	160	245	455		
				530-1760	1050	1000	400	45	160	245	455		
S 15-BKZR 22-SV	2200	500	2	530-1800	1150	1000	400	60	185	255	650		
				530-1860	1150	1000	400	60	185	255	655		
				620-1990	1250	1000	400	60	185	250	665		
				620-2140	1250	1000	400	60	185	250	670		
S 15-BKZR 28-SV	2800	500	3	530-1800	1150	1000	400	65	190	270	710		
				530-1860	1150	1000	400	65	190	270	715		
				620-1990	1250	1000	400	65	190	265	730		
				620-2140	1250	1000	400	65	190	265	735		
S 15-BKZR 35-SV	3000	600	3	530-1870	1250	1200	400	65	200	300	865		
				530-1970	1250	1200	400	65	200	300	870		
				530-1970	1350	1200	400	65	200	295	880		
				530-2070	1350	1200	400	65	200	295	885		
				620-2160	1450	1200	400	65	200	290	910		
				620-2350	1450	1200	400	65	200	290	920		
S 15-BKZR 40-SV	3900	600	3	530-1970	1350	1200	400	70	205	315	935		
				530-2070	1350	1200	400	70	205	315	940		
				620-2160	1450	1200	400	70	205	310	970		
				620-2350	1450	1200	400	70	205	305	980		
S 15-BKZR 45-SV	4200	600	4	520-1960	1350	1200	400	75	205	310	1045		
				520-2060	1350	1200	400	75	205	310	1050		
				610-2150	1450	1200	400	75	205	305	1095		
				610-2340	1450	1200	400	75	205	300	1105		

The opening range between the clamp arms is measured on the frame. Due to a prestress (1°) the opening range between the tips is correspondingly smaller.

Surcharge for adjustable pressure relief valve  
Surcharge for pressure gauge

Details on sideshift valve, see page 13  
Available without sideshift  
Model BKR (wide arms with ribbed contact surfaces) on request.

# RECYCLING CLAMPS WITH SIDESHIFT VALVE

Standard values for residual load capacity of lift trucks \*\*

Recycling Clamps with Sideshift Valve	S 15 -	BKZR 15-SV	BKZR 15-SV	BKZR 22-SV	BKZR 22-SV	BKZR 28-SV	BKZR 28-SV	BKZR 35-SV	BKZR 35-SV	BKZR 40-SV	BKZR 40-SV	BKZR 45-SV
Load capacity lift truck	kg	1500	2000	2000	2500	3000	3500	3500	4000	4500	5000 / 500	5000
X*	mm	350	450	450	450	450	500	500	500	500	500	560
LC (LSP) = 500 mm	kg	1100	1580	1415	1850	2230	2710	2570	3005	3365	3865	4265
LC (LSP) = 600 mm	kg	995	(1380)	1300	1695	2045	2495	2365	2765	3100	3555	3940
LC (LSP) = 700 mm	kg	910	(1180)	1200	1565	1890	(2200)	2190	2560	2870	3290	3660

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

For greater load centers, where the lift truck has a higher residual load capacity than the attachment, those values, upon the exceedance of which the attachment would be overloaded, are indicated in brackets ( ).

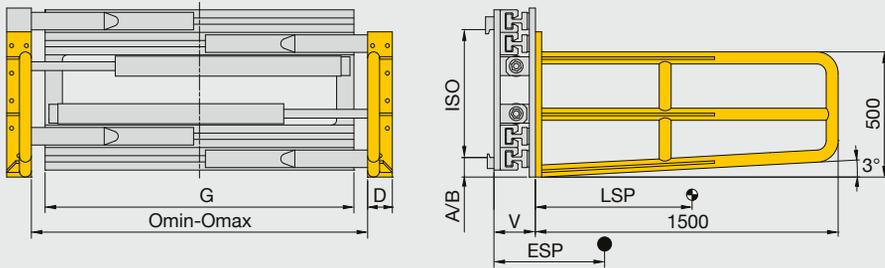
## BALE CLAMPS IN OPERATION



S 15

# FOAM CLAMPS

## 1 HYDRAULIC FUNCTION · CLAMP ARMS SERIALLY BOLTED ON



Model	Load capacity	LC (LSP)	ISO	Omin - Omax ITI	G	D	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. arm length/height
S 15-BKS 10	600	800	2	700-1600	950	100	155	225	385		
S 15-BKS 10	600	800	2	800-2200	1150	100	155	205	440		
S 15-BKS 10	600	800	2	850-2430	1250	100	155	200	465		
S 15-BKS 10	600	800	2	850-2610	1350	100	155	195	490		
S 15-BKS 15	950	800	2	780-2260	1150	100	155	215	445		
S 15-BKS 15	950	800	2	800-2380	1250	100	155	210	470		
S 15-BKS 15	950	800	2	850-2500	1350	100	155	200	510		
S 15-BKS 15	950	800	2	600-2360	1450	100	155	195	535		
S 15-BKS 15	950	800	2	850-2610	1450	100	155	195	540		

The opening range between the clamp arms is measured on the frame. Due to a prestress (1°) the opening range between the tips is correspondingly smaller. Further opening ranges on request.

Surcharge for sideshift valve S 15-BKS ... SV  
 Surcharge for adjustable pressure relief valve  
 Surcharge for pressure gauge

Version with separate sideshift on request.  
 Rotatable version on request.  
 Details on sideshift valve, see page 13

### Standard values for residual load capacity of lift trucks \*\*

Foam Clamps	S 15 -	BKS 10	BKS 10	BKS 15	BKS 15
Load capacity lift truck	kg	1000	1200	1500	2000
X*	mm	300	350	350	450
LC (LSP) = 600 mm	kg	620	800	1020	(1395)
LC (LSP) = 800 mm	kg	520	(660)	860	(950)
LC (LSP) = 1000 mm	kg	450	(530)	740	(835)

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

For greater load centers, where the lift truck has a higher residual load capacity than the attachment, those values, upon the exceedance of which the attachment would be overloaded, are indicated in brackets ( ).

**Box dumpers** are used for sideward emptying of pallet cages and other bins without pockets.

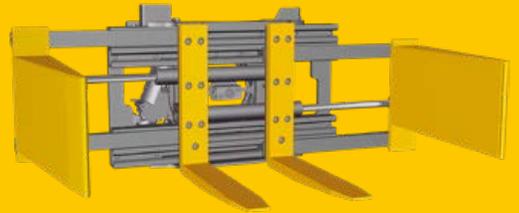
The load is picked up by the forks and also held by the clamp arms during the tilting process.

For delicate bins rubber-coated contact pads are available.

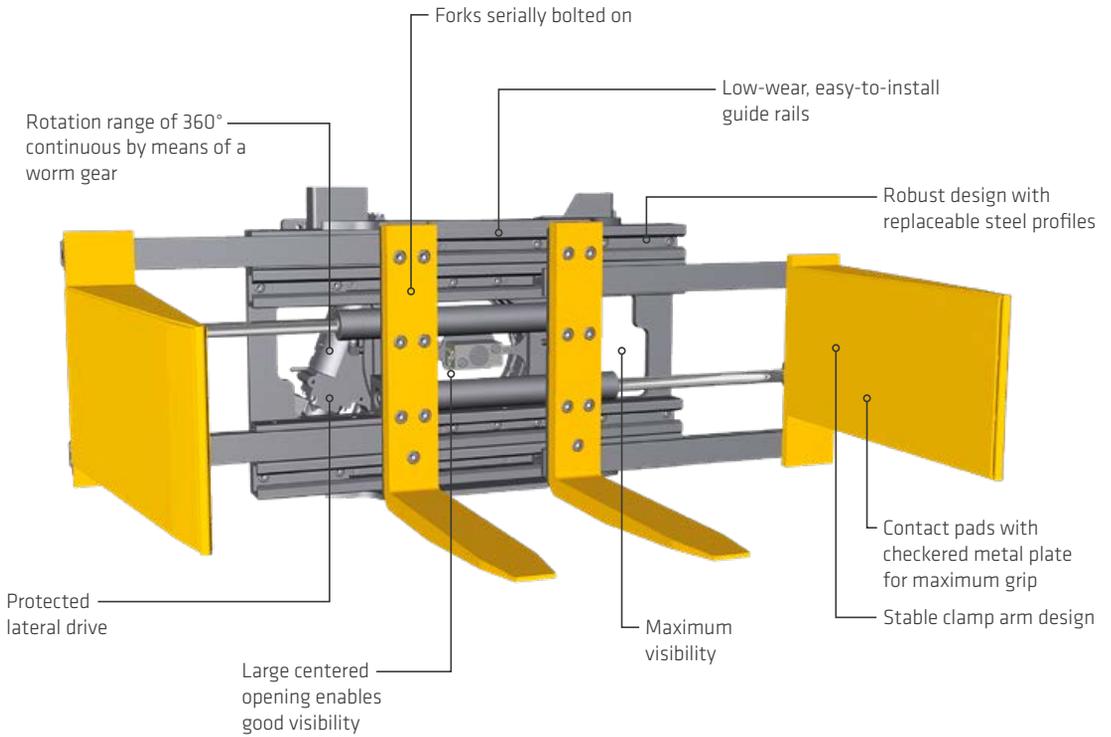
# S 15

## **BOX DUMPERS**

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# BOX DUMPERS



## SPECIAL EQUIPMENT



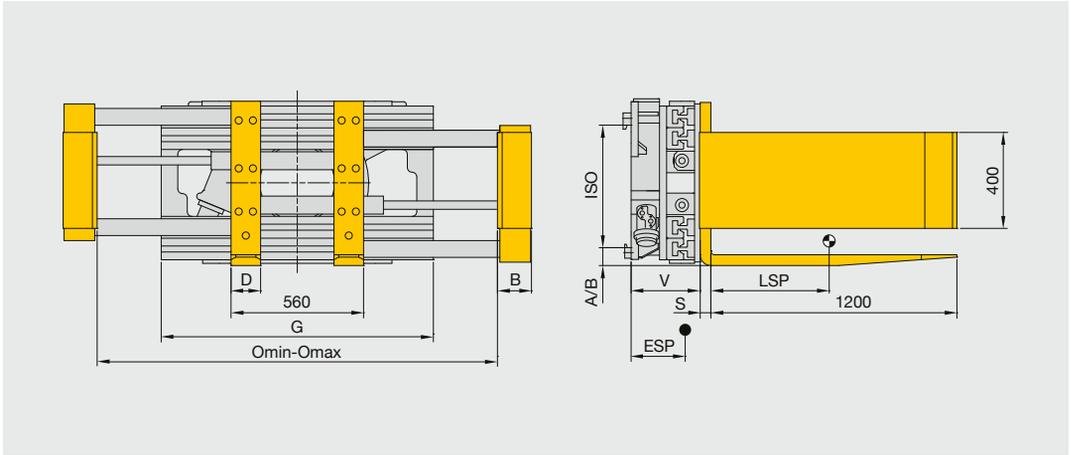
MANUALLY ADJUSTABLE FORKS



CLAMP ARM WITH ADDITIONAL LOAD-SECURING DEVICE

# BOX DUMPERS, ROTATABLE

2 HYDRAULIC FUNCTIONS · FORKS SERIALY BOLTED ON  
ROTATION RANGE 360°



Model	Load capacity	LC (LSP)	ISO	Omin - Omax ITI	G	D	B	S	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. arm length/height
S 15-GBE 15-360°	1500	500	2	700-1700	1050	120	120	40	265	315	815		
S 15-GBE 20-360°	2000	500	2	700-1700	1050	125	125	45	275	320	840		
S 15-GBE 25-360°	2500	500	3	700-1700	1150	150	125	45	285	315	965		

Due to a prestress (0.5°) the opening range between the tips is 20 mm smaller (please note in case of deviating arm lengths).

Surcharge for adjustable pressure relief valve

Surcharge for pressure gauge

Surcharge for rubber coating on the arms' contact pads

Different arm coatings on request.

Version with manually adjustable forks on request.

## Standard values for residual load capacity of lift trucks \*\*

Box Dumpers, Rotatable	S 15 -	GBE 15-360°	GBE 15-360°	GBE 20-360°	GBE 25-360°	GBE 25-360°
Load capacity lift truck	kg	1500	2000	2500	3000	3500
X*	mm	350	450	450	450	500
LC (LSP) = 400 mm	kg	890	1350	1750	2080	2540
LC (LSP) = 500 mm	kg	820	1240	1610	1910	2340
LC (LSP) = 600 mm	kg	750	1150	1490	1770	2170

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

## BOX DUMPERS IN OPERATION



S 15

**Carton and appliance clamps** are used for the palletless handling of pressure-sensitive electrical household appliances and consumer electronic equipment at manufacturing plants and in warehouses.

Depending on the application the arms are rigid, single articulating or double articulating. Interchangeable and rotatable pressure plates ensure uniform wear of the rubber coating. The straight and edge-free front of the attachment body allows damage-free handling of goods. The position of the appliance clamp's pressure plates towards the clamp arm can be adjusted to achieve optimal pressure distribution on the goods.

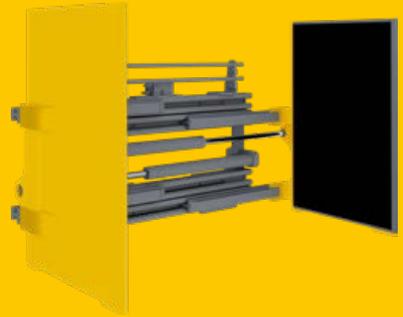
# S 16

## **CARTON CLAMPS**

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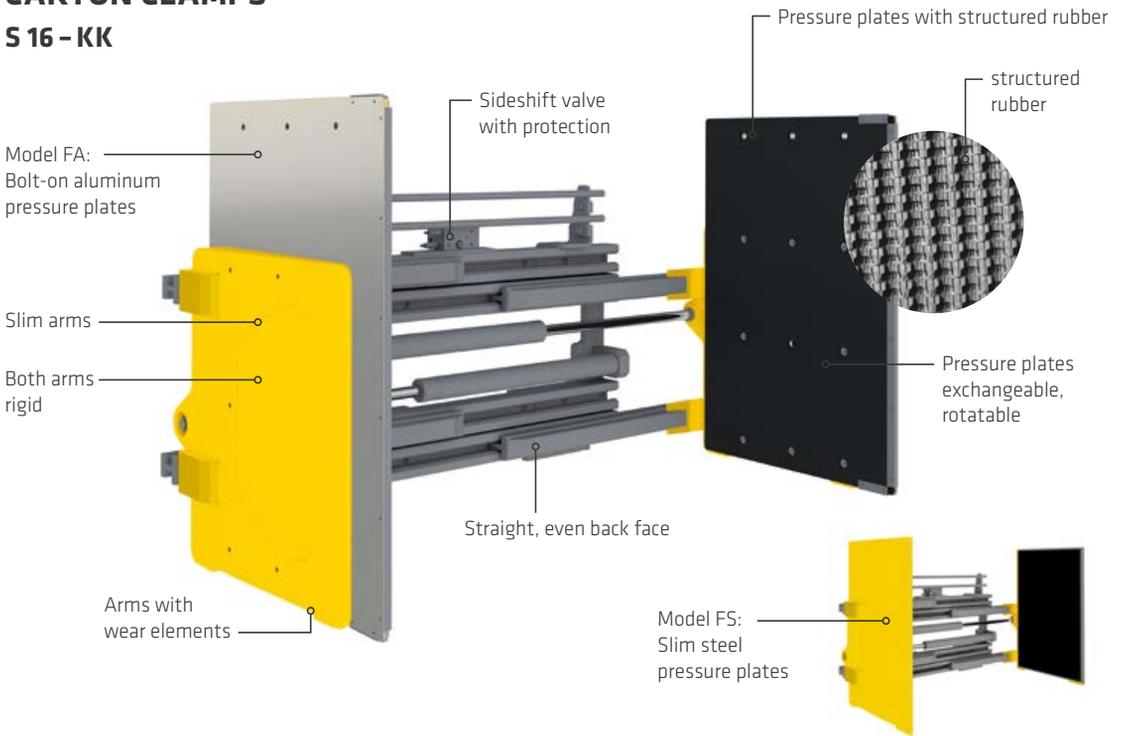
## **APPLIANCE CLAMPS**

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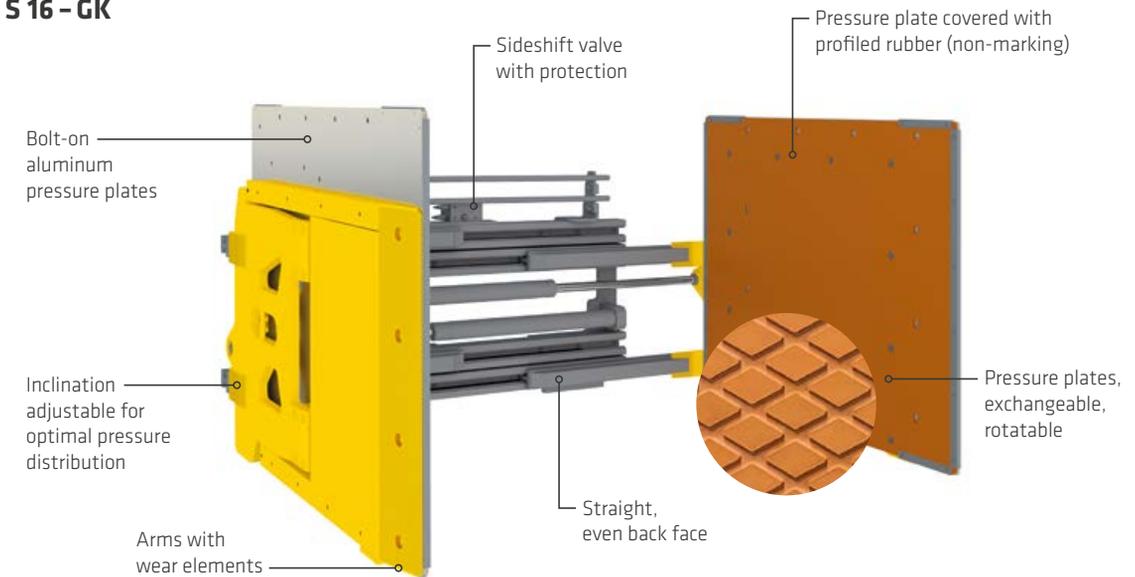
# CARTON CLAMPS

## S 16 - KK

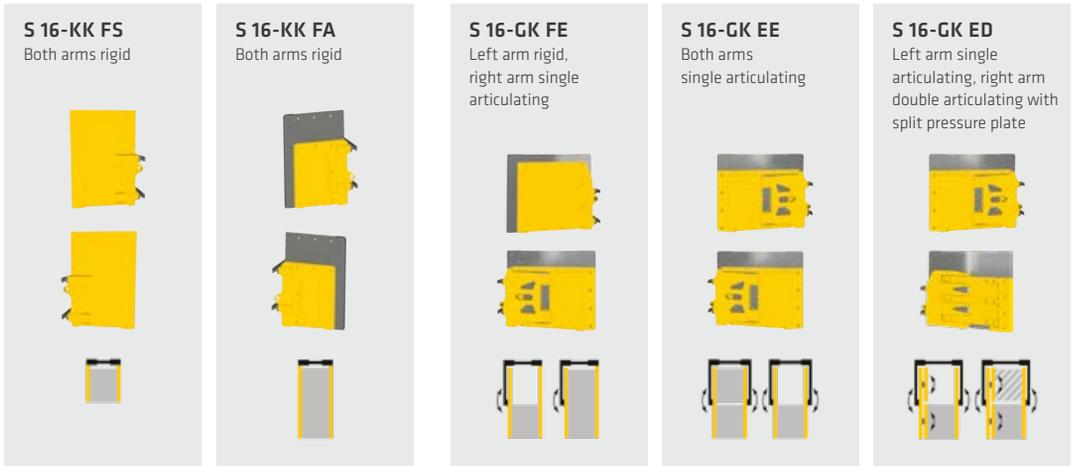


# APPLIANCE CLAMPS

## S 16 - GK



## MODELS



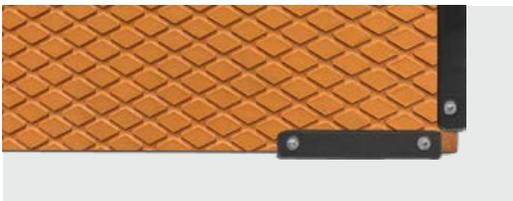
## EQUIPMENT



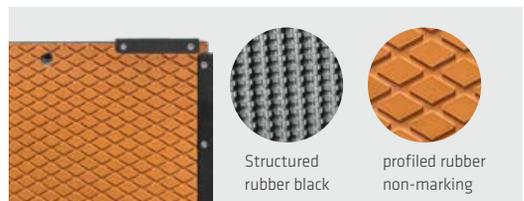
All appliance and carton clamps have a level and long back face.



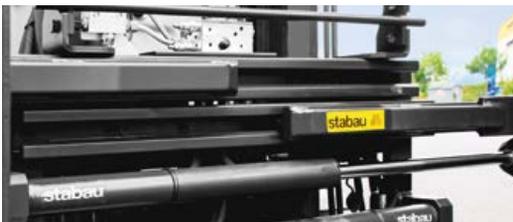
Wear elements on all attachment and arm designs.



Edge protection strips on the corners of all contact plates.



High-quality rubber coating on contact plates.



All serial attachments have visibility-optimized hose and valve protection.

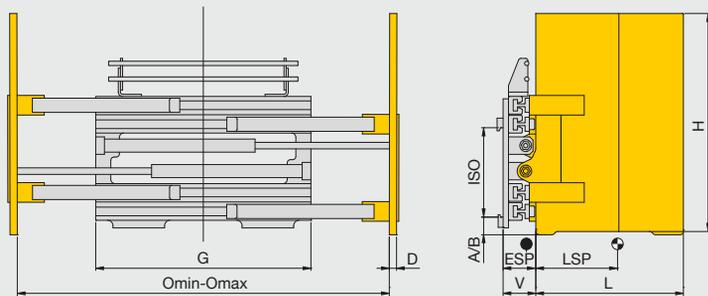


Measuring instrument for setting and checking the clamping force and force distribution.

# CARTON CLAMPS WITH SIDESHIFT VALVE

## BOTH ARMS RIGID · STEEL PRESSURE PLATES WELDED ON

2 HYDRAULIC FUNCTIONS

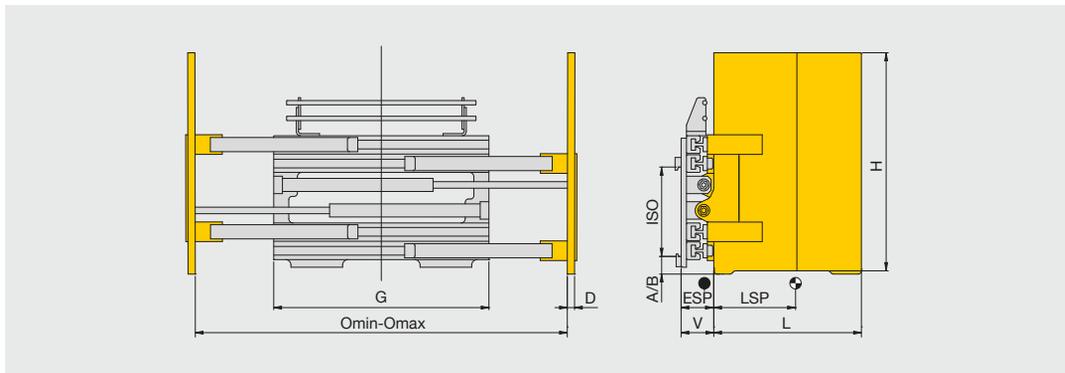


Model	Load capacity	LC (LSP)	ISO	Omin - Omax	G	L	H	D	V	CoG (ESP)	Weight	Price
	kg	mm		mm	mm	mm	mm	mm	mm	mm		
S 16-KK 08-FS-SV	800	500	2	390-1390	950	690	800	28	147	190	455	
				450-1510	950	690	800	28	147	190	455	
				550-1710	950	690	800	28	147	190	455	
S 16-KK 08-FS-SV	800	500	2	390-1390	950	690	1000	28	147	220	490	
				450-1510	950	690	1000	28	147	220	490	
				550-1710	950	690	1000	28	147	220	490	
S 16-KK 08-FS-SV	800	500	2	400-1460	1000	690	800	28	147	190	460	
				440-1540	1000	690	800	28	147	190	460	
				540-1740	1000	690	800	28	147	190	460	
S 16-KK 08-FS-SV	800	500	2	400-1460	1000	690	1000	28	147	220	495	
				440-1540	1000	690	1000	28	147	220	495	
				540-1740	1000	690	1000	28	147	220	495	
S 16-KK 08-FS-SV	800	500	2	390-1490	1050	690	800	28	147	190	465	
				450-1610	1050	690	800	28	147	190	465	
				550-1810	1050	690	800	28	147	190	465	
S 16-KK 08-FS-SV	800	500	2	390-1490	1050	690	1000	28	147	220	500	
				450-1610	1050	690	1000	28	147	220	500	
				550-1810	1050	690	1000	28	147	220	500	
S 16-KK 08-FS-SV	800	500	2	400-1560	1100	690	800	28	147	185	470	
				440-1640	1100	690	800	28	147	185	470	
				540-1840	1100	690	800	28	147	185	470	
S 16-KK 08-FS-SV	800	500	2	400-1560	1100	690	1000	28	147	215	505	
				440-1640	1100	690	1000	28	147	215	505	
				540-1840	1100	690	1000	28	147	215	505	

# CARTON CLAMPS WITH SIDESHIFT VALVE

## BOTH ARMS RIGID · STEEL PRESSURE PLATES WELDED ON

2 HYDRAULIC FUNCTIONS



Model	Load capacity		ISO	Omin - Omax ITI	G	L	H	D	V	CoG (ESP)	Weight	Price
	kg	mm										
S 16-KK 08-FS-SV	800	500	2	390-1590	1150	690	800	28	147	185	475	
				450-1710	1150	690	800	28	147	185	475	
				540-1890	1150	690	800	28	147	185	475	
S 16-KK 08-FS-SV	800	500	2	390-1590	1150	690	1000	28	147	215	510	
				450-1710	1150	690	1000	28	147	215	510	
				540-1890	1150	690	1000	28	147	215	510	
S 16-KK 08-FS-SV	800	500	2	400-1660	1200	690	800	28	147	185	480	
				440-1740	1200	690	800	28	147	185	480	
				540-1940	1200	690	800	28	147	185	480	
S 16-KK 08-FS-SV	800	500	2	400-1660	1200	690	1000	28	147	215	515	
				440-1740	1200	690	1000	28	147	215	515	
				540-1940	1200	690	1000	28	147	215	515	

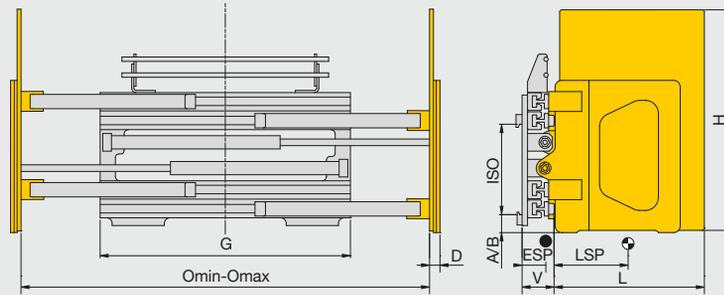
Due to an increased tension towards the front of the arms the opening range between the tips is smaller.  
 Surcharge for adjustable pressure relief valve incl. pressure gauge  
 Further opening ranges on request.  
 Further arm dimensions (H: 1.200 mm) on request.

Available without sideshift valve.  
 Separate sideshift on request.  
 For details on sideshift valve see page 13

# CARTON CLAMPS WITH SIDESHIFT VALVE

## BOTH ARMS RIGID · ALUMINUM PRESSURE PLATES BOLTED ON

2 HYDRAULIC FUNCTIONS



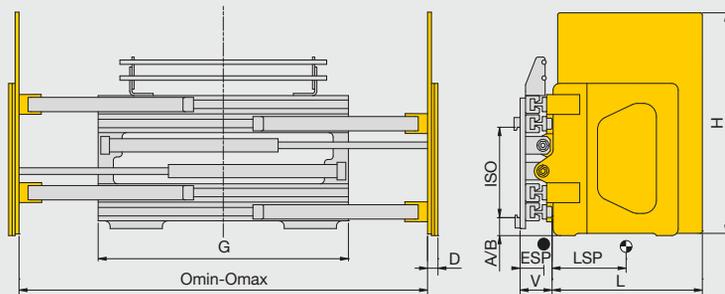
Model	Load capacity	LC (LSP)	ISO	Omin - Omax	G	L	H	D	V	CoG (ESP)	Weight	Price
	kg	mm		mm	mm	mm	mm	mm	mm	mm		
S 16-KK 08-FA-SV	800	500	2	390-1390	950	690	800	48	147	180	440	
				440-1500	950	690	800	48	147	180	440	
				540-1700	950	690	800	48	147	180	440	
S 16-KK 08-FA-SV	800	500	2	390-1450	1000	690	800	48	147	180	445	
				440-1540	1000	690	800	48	147	180	445	
				540-1740	1000	690	800	48	147	180	445	
S 16-KK 08-FA-SV	800	500	2	390-1490	1050	690	800	48	147	175	450	
				440-1600	1050	690	800	48	147	175	450	
				540-1800	1050	690	800	48	147	175	450	
S 16-KK 08-FA-SV	800	500	2	390-1390	950	1200	1000	48	147	315	545	
				440-1500	950	1200	1000	48	147	315	545	
				540-1700	950	1200	1000	48	147	315	545	
S 16-KK 08-FA-SV	800	500	2	390-1450	1000	1200	1000	48	147	315	550	
				440-1540	1000	1200	1000	48	147	315	550	
				540-1740	1000	1200	1000	48	147	315	550	
S 16-KK 08-FA-SV	800	500	2	390-1490	1050	1200	1000	48	147	310	555	
				440-1600	1050	1200	1000	48	147	310	555	
				540-1800	1050	1200	1000	48	147	310	555	
S 16-KK 15-FA-SV	1500	500	2	390-1490	1050	690	1000	48	147	185	460	
				440-1600	1050	690	1000	48	147	185	460	
				540-1800	1050	690	1000	48	147	185	460	
S 16-KK 15-FA-SV	1500	500	2	390-1550	1100	690	1000	48	147	180	465	
				440-1640	1100	690	1000	48	147	180	465	
				540-1840	1100	690	1000	48	147	180	465	

S 16

# CARTON CLAMPS WITH SIDESHIFT VALVE

## BOTH ARMS RIGID · ALUMINUM PRESSURE PLATES BOLTED ON

2 HYDRAULIC FUNCTIONS



Model	Load capacity	LC (LSP)	ISO	Omin - Omax	G	L	H	D	V	CoG (ESP)	Weight	Price
				mm								
S 16-KK 15-FA-SV	1500	500	2	390-1590	1150	690	1000	48	147	180	470	
				440-1700								
				540-1890								
S 16-KK 15-FA-SV	1500	500	2	390-1650	1200	690	1000	48	147	180	475	
				440-1740								
				540-1940								
S 16-KK 15-FA-SV	1500	500	2	390-1490	1050	1200	1000	48	147	310	555	
				440-1600								
				540-1800								
S 16-KK 15-FA-SV	1500	500	2	390-1550	1100	1200	1000	48	147	310	560	
				440-1640								
				540-1840								
S 16-KK 15-FA-SV	1500	500	2	390-1590	1150	1200	1000	48	147	305	565	
				440-1700								
				540-1890								
S 16-KK-FA 15-SV	1500	500	2	390-1650	1200	1200	1000	48	147	305	570	
				440-1740								
				540-1940								

Due to an increased tension towards the front of the arms the opening range between the tips is smaller.

Surcharge for adjustable pressure relief valve incl. pressure gauge

Further opening ranges on request.

Further arm dimensions (L: 690 / 1,000 / 1,200 mm; H: 800 / 1,000 / 1,200 mm) on request.

Available without sideshift valve

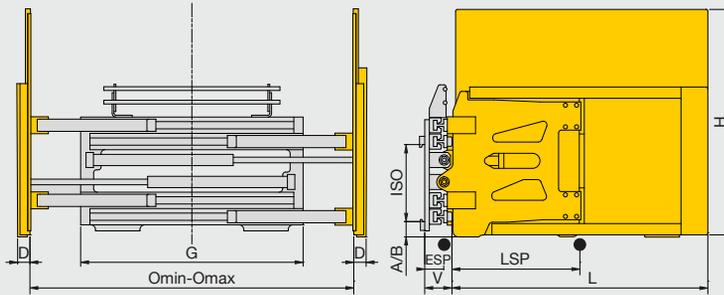
Separate sideshift on request

For details on sideshift valve see page 13

# APPLIANCE CLAMPS WITH SIDESHIFT VALVE

## 1 ARM RIGID · 1 ARM SINGLE ARTICULATING

2 HYDRAULIC FUNCTIONS

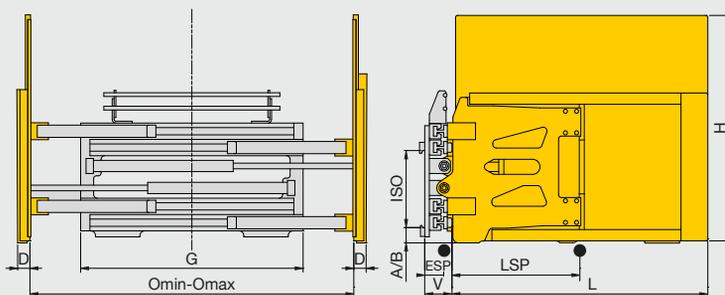


Model	Load capacity	LC (LSP)	ISO	Omin - Omax	G	L	H	D	V	CoG (ESP)	Weight	Price
	kg	mm		mm								
S 16-GK 08-FE-SV	800	600	2	400-1400	950	1200	1000	47/66	147	400	680	
				440-1500	950	1200	1000	47/66	147	400	680	
				460-1520	950	1200	1000	47/66	147	400	680	
S 16-GK 08-FE-SV	800	600	2	400-1460	1000	1200	1000	47/66	147	395	685	
				440-1540	1000	1200	1000	47/66	147	395	685	
				500-1660	1000	1200	1000	47/66	147	395	685	
S 16-GK 08-FE-SV	800	600	2	400-1500	1050	1200	1000	47/66	147	395	690	
				440-1600	1050	1200	1000	47/66	147	395	690	
				460-1620	1050	1200	1000	47/66	147	395	690	
S 16-GK 15-FE-SV	1300	690	2	400-1460	1000	1380	1200	47/66	147	460	750	
				440-1540	1000	1380	1200	47/66	147	460	750	
				500-1660	1000	1380	1200	47/66	147	460	750	
S 16-GK 15-FE-SV	1300	690	2	400-1500	1050	1380	1200	47/66	147	460	755	
				440-1600	1050	1380	1200	47/66	147	460	755	
				460-1620	1050	1380	1200	47/66	147	460	755	
				510-1740	1050	1380	1200	47/66	147	460	755	
S 16-GK 15-FE-SV	1300	690	2	400-1560	1100	1380	1200	47/66	147	455	760	
				440-1640	1100	1380	1200	47/66	147	455	760	
				500-1760	1100	1380	1200	47/66	147	455	760	
S 16-GK 15-FE-SV	1300	690	2	400-1630	1150	1380	1200	47/66	147	455	765	
				440-1700	1150	1380	1200	47/66	147	455	765	
				460-1740	1150	1380	1200	47/66	147	455	765	
S 16-GK 15-FE-SV	1300	690	2	400-1680	1200	1380	1200	47/66	147	450	770	
				440-1740	1200	1380	1200	47/66	147	450	770	
				460-1760	1200	1380	1200	47/66	147	450	770	

# APPLIANCE CLAMPS WITH SIDESHIFT VALVE

## 1 ARM RIGID · 1 ARM SINGLE ARTICULATING

### 2 HYDRAULIC FUNCTIONS



Model	Load capacity	LC (LSP)	ISO	Omin - Omax	G	L	H	D	V	CoG (ESP)	Weight	Price
				ITI								
	kg	mm		mm	mm	mm	mm	mm	mm	mm	kg	€
S 16-GK 15-FE-SV	1300	690	2	500-2080	1400	1380	1200	47/66	147	405	870	
				580-2230								
				650-2370								
S 16-GK 15-FE-SV	1300	690	2	520-2170	1450	1380	1200	47/66	147	400	880	
				580-2290								
				650-2420								
S 16-GK 15-FE-SV	1300	690	2	500-2180	1500	1380	1200	47/66	147	400	885	
				580-2380								
				650-2470								
S 16-GK 15-FE-SV	1300	690	2	500-2220	1550	1380	1200	47/66	147	395	895	
				580-2390								
				650-2530								

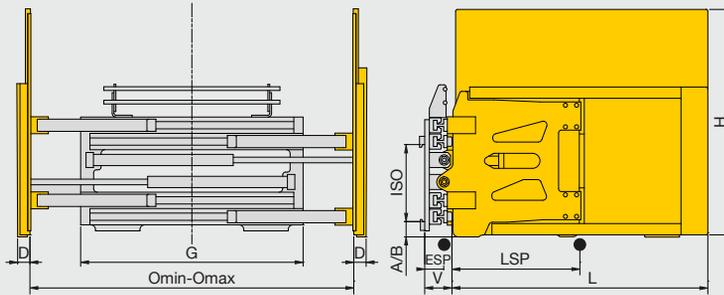
Surcharge for adjustable pressure relief valve incl. pressure gauge  
 Surcharge for multiple pressure relief valves see Accessories see page 217  
 Further opening ranges on request.  
 Further arm dimensions (L: 1,200 / 1,380 mm; H: 1,000 / 1,200 mm) on request.

Available without sideshift valve  
 Separate sideshift on request.  
 Details on sideshift valve, see page 13

# APPLIANCE CLAMPS WITH SIDESHIFT VALVE

## BOTH ARMS SINGLE ARTICULATING

2 HYDRAULIC FUNCTIONS

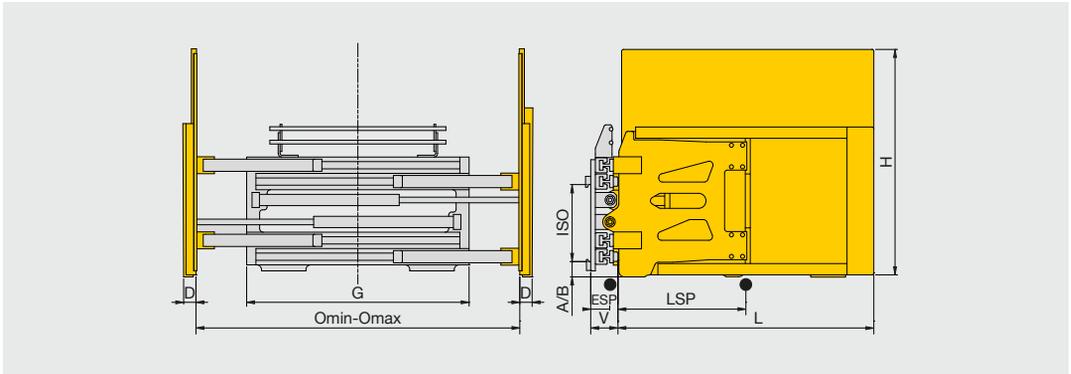


Model	Load capacity	LC (LSP)	ISO	Omin - Omax	G	L	H	D	V	CoG (ESP)	Weight	Price
	kg	mm		mm								
S 16-GK 08-EE-SV	800	600	2	400-1400	950	1200	1000	66/66	147	390	660	
				440-1500	950	1200	1000	66/66	147	390	660	
				460-1520	950	1200	1000	66/66	147	390	660	
S 16-GK 08-EE-SV	800	600	2	400-1460	1000	1200	1000	66/66	147	390	665	
				440-1540	1000	1200	1000	66/66	147	390	665	
				500-1660	1000	1200	1000	66/66	147	390	665	
S 16-GK 08-EE-SV	800	600	2	400-1500	1050	1200	1000	66/66	147	385	670	
				440-1600	1050	1200	1000	66/66	147	385	670	
				460-1620	1050	1200	1000	66/66	147	385	670	
S 16-GK 15-EE-SV	1300	690	2	400-1460	1000	1380	1200	66/66	147	460	740	
				440-1540	1000	1380	1200	66/66	147	460	740	
				500-1660	1000	1380	1200	66/66	147	460	740	
S 16-GK 15-EE-SV	1300	690	2	400-1500	1050	1380	1200	66/66	147	460	745	
				440-1600	1050	1380	1200	66/66	147	460	745	
				460-1620	1050	1380	1200	66/66	147	460	745	
				510-1740	1050	1380	1200	66/66	147	460	745	
S 16-GK 15-EE-SV	1300	690	2	400-1560	1100	1380	1200	66/66	147	455	750	
				440-1640	1100	1380	1200	66/66	147	455	750	
				500-1760	1100	1380	1200	66/66	147	455	750	
S 16-GK 15-EE-SV	1300	690	2	400-1630	1150	1380	1200	66/66	147	455	755	
				440-1700	1150	1380	1200	66/66	147	455	755	
				460-1740	1150	1380	1200	66/66	147	455	755	
S 16-GK 15-EE-SV	1300	690	2	400-1680	1200	1380	1200	66/66	147	450	760	
				440-1740	1200	1380	1200	66/66	147	450	760	
				460-1760	1200	1380	1200	66/66	147	450	760	

# APPLIANCE CLAMPS WITH SIDESHIFT VALVE

## BOTH ARMS SINGLE ARTICULATING

2 HYDRAULIC FUNCTIONS



Model	Load capacity	LC (LSP)	ISO	Omin - Omax	G	L	H	D	V	CoG (ESP)	Weight	Price
	kg	mm		mm								
S 16-GK 15-EE-SV	1300	690	2	500-2080	1400	1380	1200	66/66	147	405	860	
				580-2230								
				650-2370								
S 16-GK 15-EE-SV	1300	690	2	520-2170	1450	1380	1200	66/66	147	400	870	
				580-2290								
				650-2420								
S 16-GK 15-EE-SV	1300	690	2	500-2180	1500	1380	1200	66/66	147	400	875	
				580-2380								
				650-2470								
S 16-GK 15-EE-SV	1300	690	2	500-2220	1550	1380	1200	66/66	147	395	885	
				580-2390								
				650-2530								

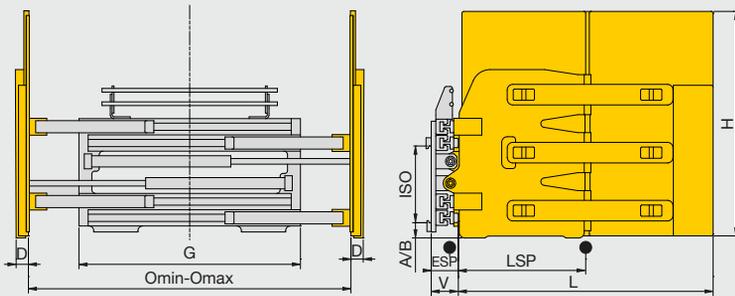
Surcharge for adjustable pressure relief valve incl. pressure gauge  
 Surcharge for multiple pressure relief valves see Accessories see page 217  
 Further opening ranges on request.  
 Further arm dimensions (L: 1,200 / 1,380 mm; H: 1,000 / 1,200 mm) on request.

Available without sideshift valve  
 Separate sideshift on request.  
 Details on sideshift valve, see page 13

# APPLIANCE CLAMPS WITH SIDESHIFT VALVE

## 1 ARM SINGLE ARTICULATING · 1 ARM DOUBLE ARTICULATING

2 HYDRAULIC FUNCTIONS

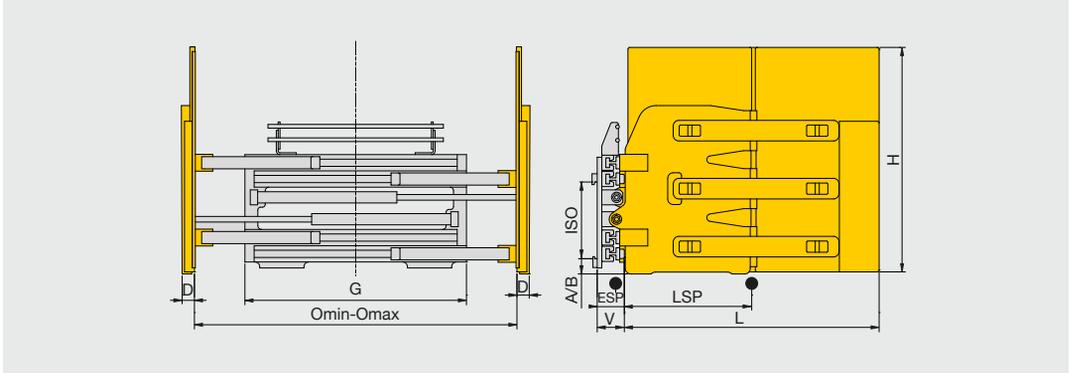


Model	Load capacity	LC (LSP)	ISO	Omin - Omax	G	L	H	D	V	CoG (ESP)	Weight	Price
	kg	mm		mm								
S 16-GK 08-ED-SV	800	600	2	400-1400	950	1200	1000	66/64	147	395	680	
				440-1500	950	1200	1000	66/64	147	395	680	
				460-1520	950	1200	1000	66/64	147	395	680	
S 16-GK 08-ED-SV	800	600	2	400-1460	1000	1200	1000	66/64	147	395	685	
				440-1540	1000	1200	1000	66/64	147	395	685	
				500-1660	1000	1200	1000	66/64	147	395	685	
S 16-GK 08-ED-SV	800	600	2	400-1500	1050	1200	1000	66/64	147	390	690	
				440-1600	1050	1200	1000	66/64	147	390	690	
				460-1620	1050	1200	1000	66/64	147	390	690	
S 16-GK 15-ED-SV	1300	690	2	400-1460	1000	1380	1200	66/64	147	465	760	
				440-1540	1000	1380	1200	66/64	147	465	760	
				500-1660	1000	1380	1200	66/64	147	465	760	
S 16-GK 15-ED-SV	1300	690	2	400-1500	1050	1380	1200	66/64	147	460	765	
				440-1600	1050	1380	1200	66/64	147	460	765	
				460-1620	1050	1380	1200	66/64	147	460	765	
				510-1740	1050	1380	1200	66/64	147	460	765	
S 16-GK 15-ED-SV	1300	690	2	400-1560	1100	1380	1200	66/64	147	460	770	
				440-1640	1100	1380	1200	66/64	147	460	770	
				500-1760	1100	1380	1200	66/64	147	460	770	
S 16-GK 15-ED-SV	1300	690	2	400-1630	1150	1380	1200	66/64	147	455	775	
				440-1700	1150	1380	1200	66/64	147	455	775	
				460-1740	1150	1380	1200	66/64	147	455	775	
S 16-GK 15-ED-SV	1300	690	2	400-1680	1200	1380	1200	66/64	147	455	780	
				440-1740	1200	1380	1200	66/64	147	455	780	
				460-1760	1200	1380	1200	66/64	147	455	780	

# APPLIANCE CLAMPS WITH SIDESHIFT VALVE

## 1 ARM SINGLE ARTICULATING · 1 ARM DOUBLE ARTICULATING

### 2 HYDRAULIC FUNCTIONS



Model	Load capacity	LC (LSP)	ISO	Omin - Omax	G	L	H	D	V	CoG (ESP)	Weight	Price
	kg	mm		mm								
S 16-GK 15-ED-SV	1300	690	2	500-2080	1400	1380	1200	66/64	147	410	880	
				580-2230	1400	1380	1200	66/64	147	410	880	
				650-2370	1400	1380	1200	66/64	147	410	880	
S 16-GK 15-ED-SV	1300	690	2	520-2170	1450	1380	1200	66/64	147	405	890	
				580-2290	1450	1380	1200	66/64	147	405	890	
				650-2420	1450	1380	1200	66/64	147	405	890	
S 16-GK 15-ED-SV	1300	690	2	500-2180	1500	1380	1200	66/64	147	405	895	
				580-2380	1500	1380	1200	66/64	147	405	895	
				650-2470	1500	1380	1200	66/64	147	405	895	
S 16-GK 15-ED-SV	1300	690	2	500-2220	1550	1380	1200	66/64	147	400	905	
				580-2390	1550	1380	1200	66/64	147	400	905	
				650-2530	1550	1380	1200	66/64	147	400	905	

Surcharge for adjustable pressure relief valve incl. pressure gauge  
 Surcharge for multiple pressure relief valves see Accessories see page 217  
 Further opening ranges on request.  
 Further arm dimensions (L: 1,200 / 1,380 mm; H: 1,000 / 1,200 mm) on request.

Available without sideshift valve  
 Separate sideshift on request.  
 Details on sideshift valve, see page 13

S 16

## CARTON CLAMPS S 16-KK IN OPERATION



## APPLIANCE CLAMPS S 16-GK IN OPERATION



S16

# S 17

## DRUM CLAMPS

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**Drum clamps** enable frontal dumping of drums. Depending on the handling application, two different types are used. Type A is used if drums are freely accessible.

If the drums are stored tightly, we recommend using type B. This version has particularly slim arms that are extended towards the front.

**Drum clamps** are intended for palletless handling of drums. Depending on the design of the attachment it can handle one or two drums.

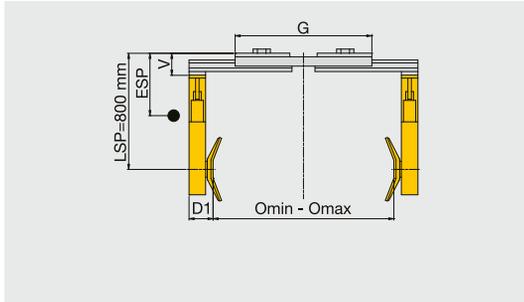
One further option is the rotatable version of this attachment. It enables sideward emptying of drums.



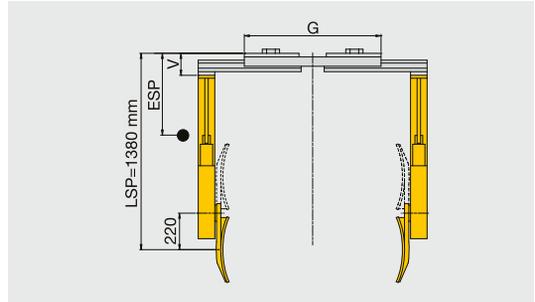
# TIPPING DRUM CLAMPS

## 2 HYDRAULIC FUNCTIONS

### TYPE A



### TYPE B



Model	Load capacity	ISO	Tilting angle	Omin - Omax ITI	D1	G	V	CoG (ESP)	Weight	Price		
										Price type A	Price type B	Surcharge for sep. Sideshift
	kg		Degree	mm	mm	mm	mm	mm	kg	€	€	€
S 17-FKK 08	800	2	180	300-1200	150	950	130	230	420			
S 17-FKK 15	1500	2	180	300-1200	180	1150	135	210	540			

Surcharge for solenoid valve on request.

Surcharge for adjustable pressure relief valve on request.

Surcharge for pressure gauge on request.

Ex-protection version on request.

### Standard values for residual load capacity of lift trucks \*\*

Tipping drum clamps	S 17 -	FKK 08	FKK 08	FKK 15	FKK 15
Load capacity lift truck	kg	1000	1500	2000	2500
X*	mm	300	350	450	450
LC (LSP) = 800 mm	kg	525	860	1200	1525
LC (LSP) = 1380 mm	kg	360	600	825	1075

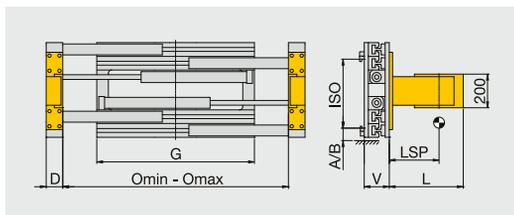
\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

## DRUM CLAMPS

### 1 HYDRAULIC FUNCTION

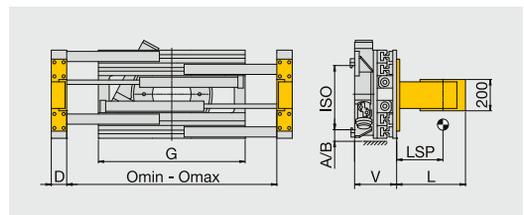
#### S 17-FK ON REQUEST



## DRUM CLAMPS, ROTATABLE

### 2 HYDRAULIC FUNCTIONS

#### S 17-FK-360° ON REQUEST



# S 18

**Roll clamps** are intended for handling cylindrical goods.

**Paper roll clamps** operate with one long hydraulically adjustable arm and one short adjustable arm.

All clamps have a rotation range of 360° continuous in both directions. The contact pads of the arms are serially coated with corundum. There are different types of coating available.

**Concrete pipe clamps** operate with one long hydraulically adjustable arm and one short manually adjustable arm.

The rotation range of 360° is continuous in both directions. All clamps are serially equipped with rubber coated contact pads.

## ROLL CLAMPS

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### CONCRETE PIPE CLAMPS

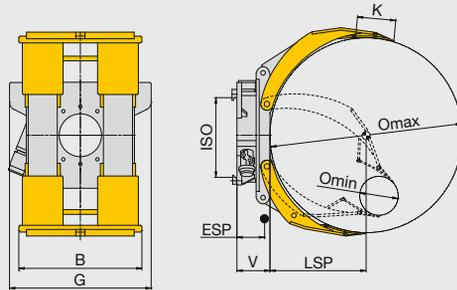
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S 18

# ROLL CLAMPS (PAPER ROLL CLAMPS)

2 HYDRAULIC FUNCTIONS · ROTATION RANGE 360° · SHORT ARM MANUALLY ADJUSTABLE



Model	Load capacity	LC (LSP)	Roll diameter Omin - Omax ITI	ISO	B	K	G	V	CoG (ESP)	Weight	Price	Surcharge for short hydraulic arm
	kg				mm	mm	mm	mm				
S 18-RK 13-360°	1300	550	250-1100	2	720	200	900	205	250	470		
	1100	650	250-1300							280	490	
S 18-RK 16-360°	1600	650	250-1300	2	720	200	900	210	290	550		
	1350	750	250-1500						320	590		
S 18-RK 20-360°	2000	650	250-1300	3	820	230	1080	220	305	650		
	1600	800	250-1600						350	710		
S 18-RK 23-360°	2300	650	250-1300	3	820	230	1080	225	315	690		
	1850	800	250-1600						360	750		
S 18-RK 25-360°	2500	700	250-1400	3	820	230	1080	230	305	740		
	2150	800	250-1600						335	780		
S 18-RK 30-360°	3000	750	250-1500	3	1000	250	1080	250	355	1010		
	2500	900	250-1800						410	1090		
S 18-RK 35-360°	3500	750	250-1500	4	1000	250	1220	260	315	1200		
	2900	900	250-1800						365	1280		
S 18-RK 40-360°	4000	900	350-1800	4	1000	250	1200	285	365	1510		
	3400	1050	350-2100						390	1630		
S 18-RK 50-360°	5000	950	400-1900	4	1200	280	1200	295	395	1840		
	4500	1050	400-2100						410	1890		
S 18-RK 60-360°	6000	1000	450-2000	4	1200	280	1200	300	395	1960		
	5000	1200	450-2400						445	2150		

Contact pads oscillating, incl. corundum coating.  
 Surcharge for PU coating (not for tissue clamps)  
 Other coatings on request.  
 Surcharge for tissue clamping system

Surcharge for two-roll clamping system  
 Surcharge for adjustable pressure relief valve  
 Surcharge for pressure gauge  
 Other clamping ranges on request.  
 Separate sideshift on request.  
 Version of tire clamp on request.



PAPER ROLL CLAMP



TIRE CLAMP

Standard paper roll clamps are provided with a long hydraulically adjustable arm as well as a short, manually adjustable arm. If big and small rolls have to be handled in turns, we recommend one short, hydraulic arm. The simultaneous handling of two rolls with different diameters requires the two-roll clamp system (split arm).

### Standard values for residual load capacity of lift trucks \*\*

Roll Clamps	S 18 -	RK 13-360°	RK 16-360°	RK 16-360°	RK 20-360°	RK 23-360°	RK 25-360°	RK 30-360°	RK 35-360°	RK 40-360°
Load capacity lift truck	kg	1500	2000	2500	3000	3500	4000	5000/500	5000	6000
X*	mm	350	450	450	450	500	500	500	560	560
LC (LSP) = 550 mm	kg	1000								
LC (LSP) = 650 mm	kg	890	1270	1650	1950	2340				
LC (LSP) = 700 mm	kg						2580			
LC (LSP) = 750 mm	kg		1150	1500				3000	3320	
LC (LSP) = 800 mm	kg				1690	2050	2370			
LC (LSP) = 900 mm	kg							2640	2940	3500
LC (LSP) = 1050 mm	kg									3120

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions



ROLL CLAMP FOR WIRE COILS

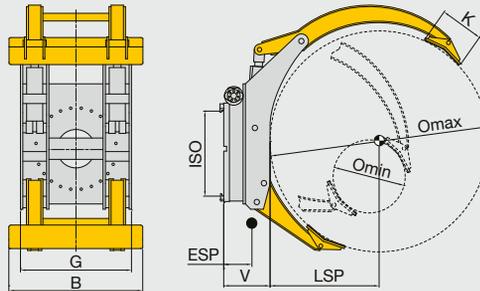


TILTING CONCRETE PIPE CLAMP

# CONCRETE PIPE CLAMPS

2 HYDRAULIC FUNCTIONS · ROTATION RANGE 360°

ONE LONG ARM, HYDRAULICALLY ADJUSTABLE · ONE SHORT ARM, MANUALLY ADJUSTABLE



Model	Load capacity	Roll diameter Omin – Omax ITI	ISO	B	K	G	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. clamping range	Surcharge for short hydraulic arm
	kg			mm	mm	mm	mm	mm				
S 18-BRK 25-360°	2500	400-1300	3	1300	350	1250	235	290	1000			
S 18-BRK 35-360°	3500	400-1500	4	1300	350	1250	300	340	1350			
S 18-BRK 50-360°	5000	500-1580	4	1400	450	1250	380	400	1750			
S 18-BRK 60-360°	6000	760-1940	4/Pint.	1400	450	1250	450	450	2500			
S 18-BRK 80-360°	8000	760-2100	4/Pint.	1400	450	1280	485	480	3000			
S 18-BRK 110-360°	11000	760-2500	Pint.	1400	450	1280	505	555	4350			

Contact pads oscillating, incl. rubber coating.

Surcharge for adjustable pressure relief valve

Surcharge for pressure gauge

## Standard values for residual load capacity of lift trucks \*\*

Concrete Pipe Clamps	S 18 -	BRK 25- 360°	BRK 25- 360°	BRK 35- 360°	BRK 35- 360°	BRK 50- 360°	BRK 60- 360°	BRK 60- 360°	BRK 80- 360°	BRK 110- 360°
Load capacity lift truck	kg	3500	4000	5000	6000	8000	10000	12000	16000	20000
X*	mm	500	500	560	560	650	750	800	850	950
LC (LSP) = 650 mm	kg	2150	2550							
LC (LSP) = 750 mm	kg			3150	(3800)					
LC (LSP) = 800 mm	kg					4850				
LC (LSP) = 950 mm	kg						5350	(6600)		
LC (LSP) = 1100 mm	kg								8650	
LC (LSP) = 1250 mm	kg									10100

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

For greater load centers, where the lift truck has a higher residual load capacity than the attachment, those values, upon the exceedance of which the attachment would be overloaded, are indicated in brackets ( ).

**Load stabilizers** are used to stabilize and secure the goods to be handled, such as cardboard packaging, wood and sheet metal stacks. The pressure frame is mounted in an oscillating manner, the contact surface is rubber coated.

# S 19

## LOAD STABILIZERS

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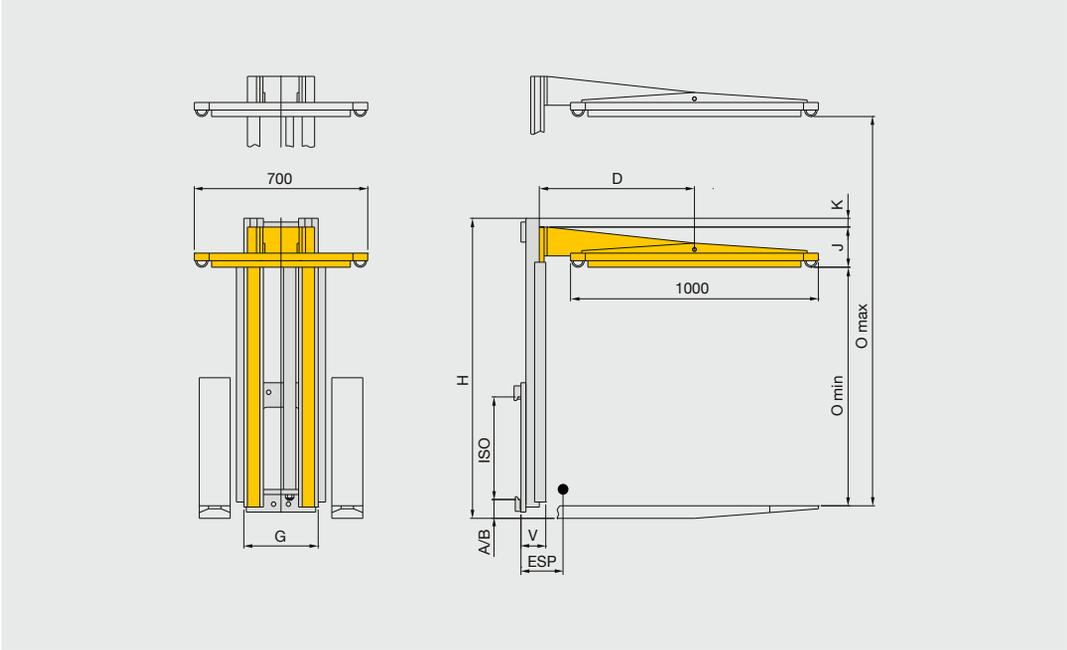


S 19

# LOAD STABILIZERS

1 HYDRAULIC FUNCTION

OSCILLATING PRESSURE FRAME · CONTACT SURFACE WITH FLEXIBLE RUBBER HOSE



Model	Clamping force	ISO	Omin - Omax	J	K	G	H	D	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm larger frame
S 19-L 15	4000	2/3	750-1450	165	110	300	1075	610	100	200	165		
S 19-L 15	4000	2/3	950-1750	165	10	300	1175	610	100	195	175		
S 19-L 15	4000	2/3	950-1950	165	210	300	1375	610	100	185	185		
S 19-L 15	4000	2/3	1050-1950	165	10	300	1275	610	100	190	180		
S 19-L 15	4000	2/3	1150-2150	165	10	300	1375	610	100	185	190		

Surcharge for adjustable pressure relief valve  
 Surcharge for pressure gauge  
 Surcharge for cellular-rubber coating on request.  
 Load stabilizers (telescopic) on request

S 19

# S 20

## SCRAP GRAPPLES

---

**Scrap grapples** are used for handling large-volume bulk goods such as waste paper, waste fabric and remnants of fiber as well as steel, wood and plastic chips.

There are two types of scrap grapples. Voluminous and bulky goods are handled by the version with a fork attachment, which can also be tilted forward 45°. For small bulk goods, the bucket attachment is used, which is tiltable 45° forward and backward. The sidewalls of the bucket are largely cut out in order to keep penetration resistance low.

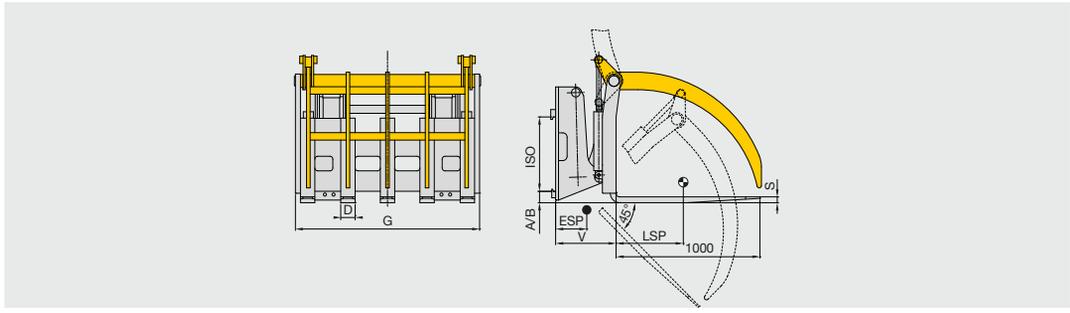
With both versions, the goods to be handled are secured by means of a hydraulic claw, which can be opened wide when goods have to be picked up.



# SCRAP GRAPPLES

## FORK ATTACHMENT

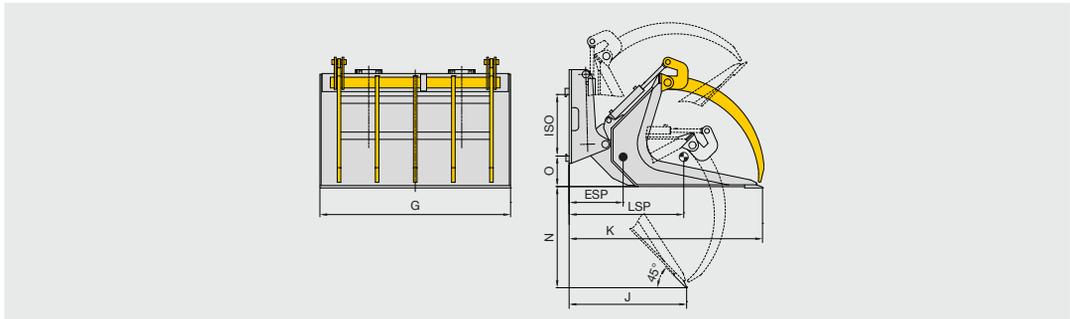
2 HYDRAULIC FUNCTIONS · GRAPPLE TILTABLE 45° · WITH 2 CYLINDERS AND 5 FORKS, 1000 mm LONG



Model	Load capacity	LC (LSP)	ISO	G	D	S	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. fork length	Surcharge per 100 mm add. width
	kg			mm	mm	mm	mm	mm				
S 20-SCHGR 15	1500	500	2	1350	80	40	425	455	760			
S 20-SCHGR 25	2500	500	2/3	1350	100	40	425	470	810			
S 20-SCHGR 30	3000	500	3	1350	120	40	425	480	860			

## BUCKET ATTACHMENT

2 HYDRAULIC FUNCTIONS · BUCKET TILTABLE ± 45° · WITH 2 CYLINDERS AND SUPPORTING ARM WITH 5 INDIVIDUAL ARMS



Model	Volume	LC (LSP)	ISO	G	J	K	N	O	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. width
	cbm			mm	mm	mm	mm	mm	mm			
S 20-SCHGRS 0.6	0.6	700	2	1300	715	1250	560	265	535	610		
S 20-SCHGRS 0.8	0.8	700	2/3	1700	715	1250	560	265	560	700		
S 20-SCHGRS 1.0	1.0	700	3	2100	715	1250	560	265	570	760		

For handling rather small bulk goods, buckets can be provided with closed sidewalls on request.

**Wood grapples** secure logs against rolling off the forks. The arm opens up wide so that the attachment can also carry out fork handling.

The double-arm version with knee-joint facilitates precise positioning of the hydraulic arm.

# S 21

## WOOD GRAPPLES

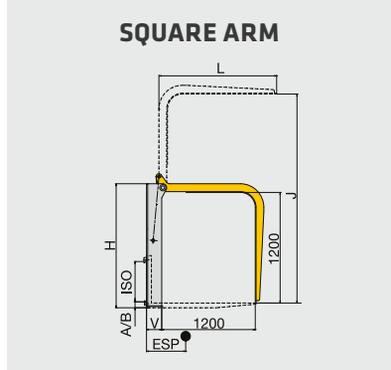
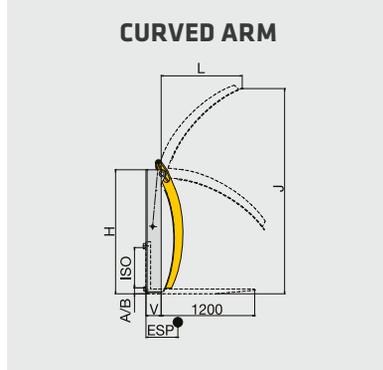
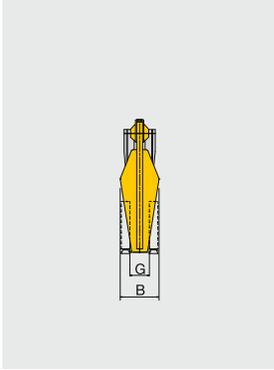
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# WOOD GRAPPLES

## SINGLE ARM

1 HYDRAULIC FUNCTION · ARM LENGTH FOR FORK LENGTH 1200 mm



Model	Load capacity	LC (LSP)	ISO	B	G	H	L	J	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. arm length
	kg	mm		mm	kg	€	€						

### With curved arm

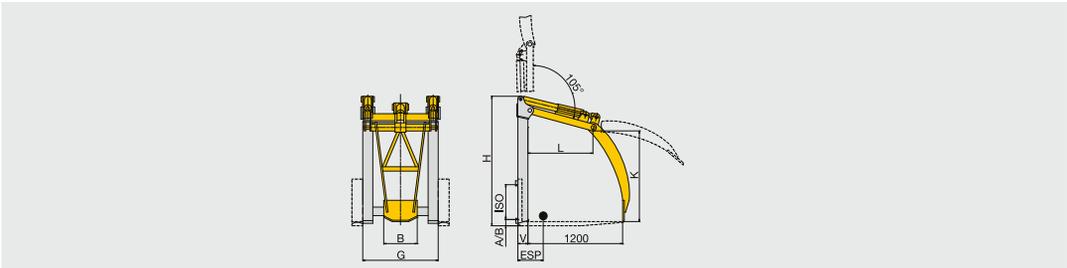
S 21-HG 25 B	2500	500	2	500	250	1570	1200	2400	195	290	230		
S 21-HG 35 B	3500	500	3	500	250	1570	1200	2400	195	280	260		

### With square arm

S 21-HG 25 R	2500	500	2	500	250	1570	1250	2400	195	310	260		
S 21-HG 35 R	3500	500	3	500	250	1570	1250	2400	195	300	290		

## DOUBLE ARM WITH ARTICULATED JOINT

2 HYDRAULIC FUNCTIONS · ARM LENGTH FOR FORK LENGTH 1200 mm



Model	Load capacity	LC (LSP)	ISO	B	G	H	L	J	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. arm length
	kg	mm		mm	mm	mm	mm	mm	mm	mm	kg	€	€
S 21-HGD 35	3500	500	3	500	900	1150	830	1610	150	450	520		
S 21-HGD 50	5000	600	3/4	500	900	1150	830	1610	170	425	620		
S 21-HGD 80	8000	600	4	600	1100	1200	880	1875	200	485	940		

Surcharge for load pusher on request.

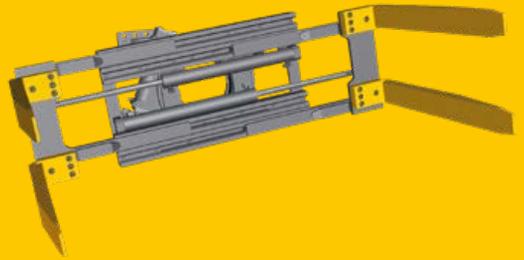
**Pallet inverters** are used for turning goods during the production process, for example, for turning coated boards upside down or for changing pallets. Furthermore, damaged goods in bottom positions can be exchanged without elaborate destacking and upstacking.

For very unstable goods we recommend the use of a lateral support arm. For palletless loading of containers, the pallet inverter can be combined with a load pusher.

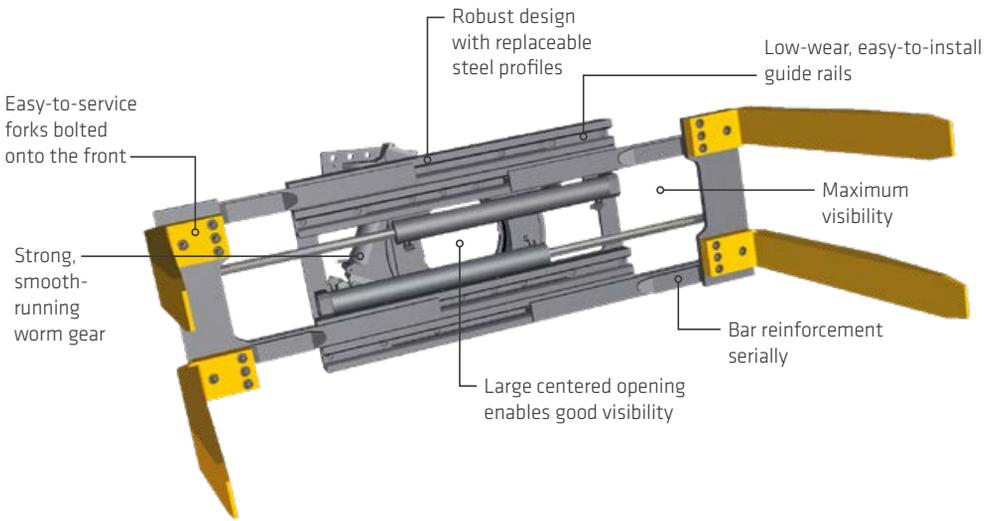
# S 22

## **PALLET INVERTERS**

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# PALLET INVERTERS

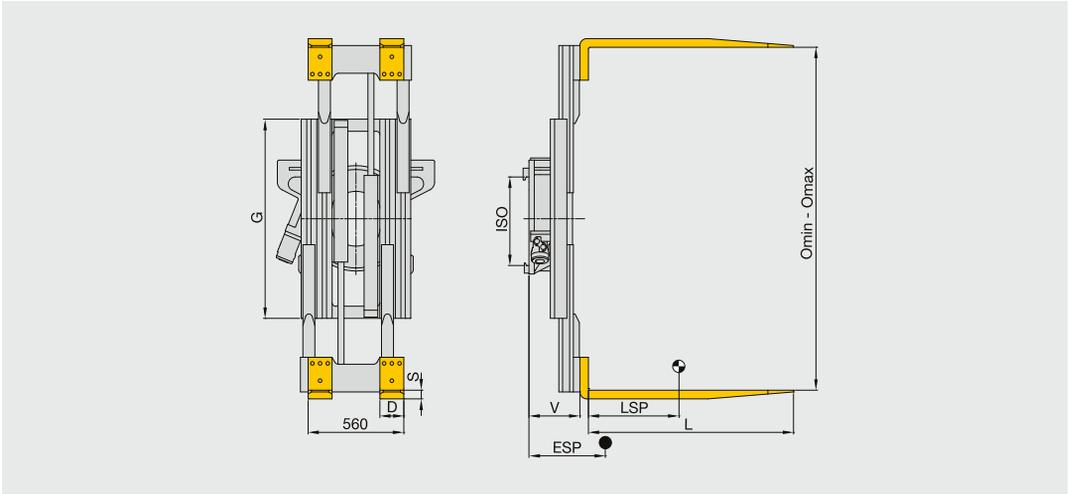


S 22

# PALLET INVERTERS

## 2 HYDRAULIC FUNCTIONS

L = 1200 mm · FORKS SERIALLY BOLTED ON · ROTATION RANGE 360°



Model	Load capacity	LC (LSP)	ISO	Omin - Omax ITI	G	D	S	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. fork length	Surcharge per 100 mm add. opening range	Surcharge for sep. sideshift
	kg													
S 22-PWG 12-360°	1000	600	2	560-1640	950	125	45	275	315	735				
S 22-PWG 18-360°	1500	600	2	600-1800	1050	125	50	275	325	775				
S 22-PWG 25-360°	2100	600	3	640-1980	1150	140	50	295	330	930				
S 22-PWG 35-360°	3000	600	3	650-2100	1350	150	60	330	350	1240				

The opening range is measured at the fork back. Due to a prestress the opening range between the fork tips is correspondingly smaller.

Surcharge for adjustable pressure relief valve

Surcharge for pressure gauge

Surcharge for fixed lateral support arm

Surcharge for solenoid valve

Adjustable lateral support arm on request

## Standard values for residual load capacity of lift trucks \*\*

Pallet Inverters	S 22 -	PWG 12 -360°	PWG 18 -360°	PWG 18 -360°	PWG 25 -360°	PWG 25 -360°	PWG 35 -360°	PWG 35 -360°	PWG 35 -360°
Load capacity lift truck	kg	1500	2000	2500	3000	3500	4000	4500	5000/500
X*	mm	350	450	450	450	500	500	500	560
LC (LSP) = 500 mm	kg	760	1130	(1500)	1800	(2100)	2320	2700	(3000)
LC (LSP) = 600 mm	kg	700	1040	1420	1660	2060	2160	2510	2950

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

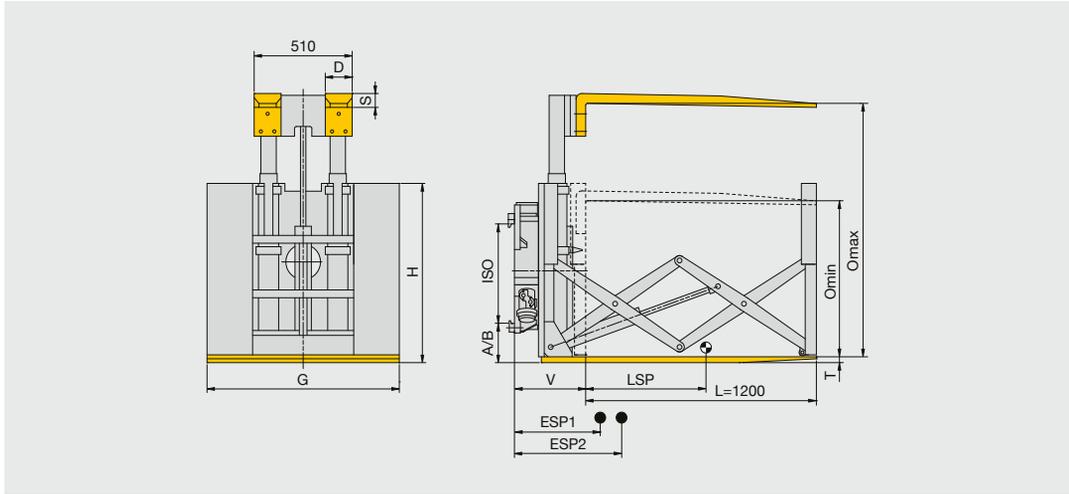
\* Assumed dimensions

For greater load centers, where the lift truck has a higher residual load capacity than the attachment, those values, upon the exceedance of which the attachment would be overloaded, are indicated in brackets ( ).

# PALLET INVERTERS WITH LOAD PUSHER

2 HYDRAULIC FUNCTIONS + SOLENOID VALVE

PUSHING LENGTH 1200 mm · ROTATION RANGE 360°



Model	Load capacity	LC (LSP)	ISO	Omin - Omax ITI	G	D	S	H	T	V	CoG (ESP)		Weight	Price	Surcharge per 100 mm add. opening range
											1	2			
	kg	mm		mm	mm	mm	mm	mm	mm	mm	mm	mm	kg	€	€
S 22-PWG 15-360°-A	1500	500	2/3	800-1300	1000	140	50	920	30	360	380	500	1290		

The opening range is measured at the fork back. Due to a prestress the opening range between the fork tips is correspondingly smaller.

Surcharge for adjustable pressure relief valve on request.

Surcharge for pressure gauge on request.

Surcharge for lateral support plate on request.

## Standard values for residual load capacity of lift trucks \*\*

Pallet Inverters	S 22 -	PWG 15-360°-A	PWG 15-360°-A
Load capacity lift truck	kg	2500	3000
X*	mm	450	450
LC (LSP) = 500 mm	kg	1140	1510
LC (LSP) = 600 mm	kg	1050	(1370)

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

For greater load centers, where the lift truck has a higher residual load capacity than the attachment, those values, upon the exceedance of which the attachment would be overloaded, are indicated in brackets ( ).

# S 23

**Ladle side tippers** are used for pouring liquid metal. The center of rotation is positioned near the ladle's spout ensuring only slight movement of the pouring stream. The offset can be corrected by the sideshift.

**Charging Devices** are used for charging melting furnaces with additives. The attachment consists of a 360° rotator with an attached carrying arm, on which a mechanically or hydraulically lockable box is located.

## LADLE SIDE TIPPERS

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## CHARGING DEVICES

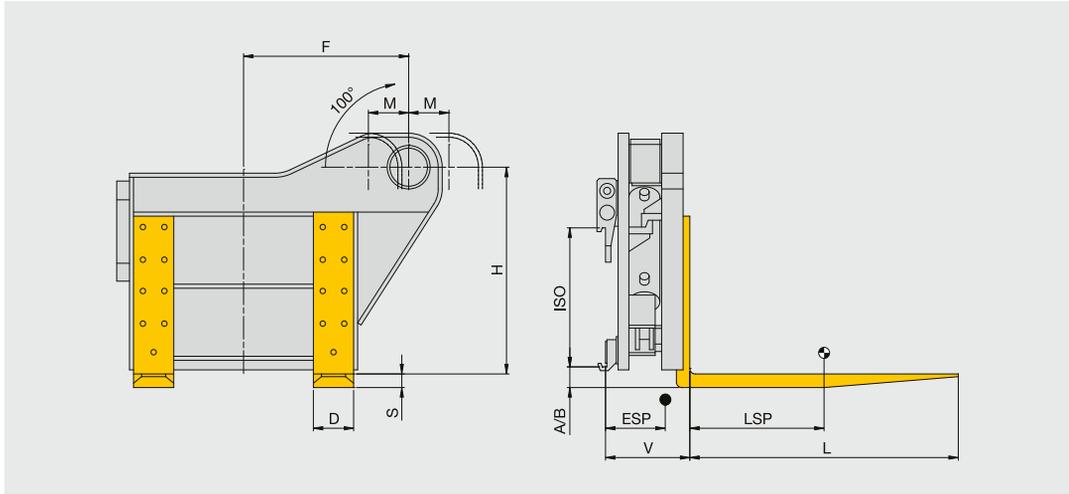
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# LADLE SIDE TIPPERS WITH SIDESHIFT

## 2 HYDRAULIC FUNCTIONS

L = 1000 mm · FORKS SERIALLY BOLTED ON · TILTING ANGLE 100°



Model	Load capacity	LC (LSP)	ISO	D	S	M	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. fork length
	kg	mm		mm	mm	mm	mm	mm	mm	kg	€
S 23-SKV 15-S	1500	500	2	125	45	± 100	285	210	620		
S 23-SKV 25-S	2500	500	2/3	140	50	± 100	300	220	860		
S 23-SKV 30-S	3000	500	3	150	60	± 100	340	245	1020		
S 23-SKV 40-S	4000	600	3/4	150	70	± 100	380	265	1320		
S 23-SKV 60-S	6000	600	4	200	70	± 150	430	290	1750		

Dimensions F and H depend on the ladle  
Alternatively: Also tippable to the right (facing direction of motion)

Bins with liquid metal must be secured during transportation.  
A locking device is not included with the attachment. On request.

## Standard values for residual load capacity of lift trucks \*\*

Ladle Side Tipper	S 23 -	SKV 15	SKV 15	SKV 25	SKV 25	SKV 30	SKV 30	SKV 40	SKV 40	SKV 60
Load capacity lift truck	kg	1500	2000	2500	3000	3500	4000	5000	6000	8000
X*	mm	350	450	450	450	500	500	560	560	650
LC (LSP) = 500 mm	kg	910	1340	1600	2000	2250	2640	3610	4460	5800
LC (LSP) = 600 mm	kg	830	1240	1470	1840	2090	2450	3370	(4150)	5450

\*\* The load capacity applies to lifting heights up to 3300 mm;  
specifications for greater lifting heights on request.

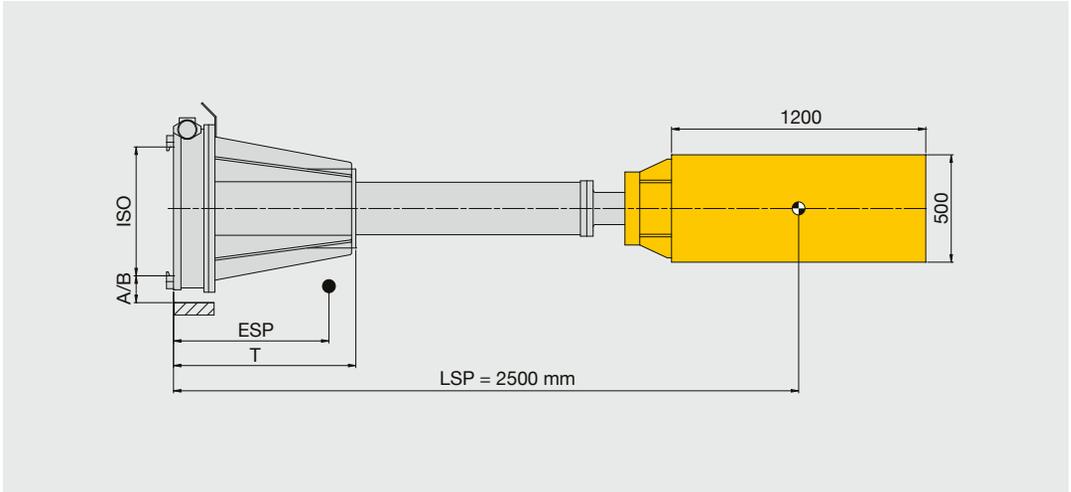
\* Assumed dimensions

For greater load centers, where the lift truck has a higher residual load capacity than the attachment, those values, upon the exceedance of which the attachment would be overloaded, are indicated in brackets ( ).

# CHARGING DEVICES, ROTATABLE

1 HYDRAULIC FUNCTION

ROTATION RANGE 360°



Model	Load capacity	LC (LSP)	ISO	Volume	T	CoG (ESP)	Weight	Add. weight per 500 mm arm length	Price	Surcharge per 500 mm add. arm length	Surcharge for hydraulic locking of bucket	Surcharge for sep. sideshift
	kg			mm								
S 23 - CHV 08	800	2500	3	0.4	860	800	950	25				
S 23 - CHV 15	1500	2500	3/4	0.4	900	850	1450	40				
S 23 - CHV 25	2500	2500	4	0.4	900	780	1920	80				
S 23 - CHV 40	4000	2500	4	0.4	1100	720	2500	130				

Standard values for residual load capacity of lift trucks \*\*

Charging Devices	S 23 -	CHV 08	CHV 15	CHV 15	CHV 25	CHV 25	CHV 40	CHV 40
Load capacity lift truck	kg	3500	4500	5000	7000	8000	10000	12000
X*	mm	500	500	560	560	650	750	800
LC (LSP) = 2500 mm	kg	820	930	1350	2100	2490	3280	4260
LC (LSP) = 3000 mm	kg	650	760	1090	1710	2040	2680	3520
LC (LSP) = 3500 mm	kg	520	630	880	1430	1690	2210	2960

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions



**CHARGING DEVICE WITH  
HYDRAULICALLY LOCKABLE BOX**



**LADLE TIPPER WITH LADLE**



**INTEGRAL SIDE TIPPER  
WITH SIDESHIFT**



**SIDE TIPPER WITH  
SIDESHIFT AND HYDRAULIC LID OPENER**

523

This system has been designed for lift trucks that are used for many different applications. The **quick-coupling system** allows interchanging different attachments quickly and without the use of tools. The additional attachment is mounted to the quick-coupling system by mounting hooks and locked manually or hydraulically by means of a locking pin. With this version, the hydraulic couplings between lift truck and mounted attachment have to be connected manually.

Alternatively, there is a variant available, which hydraulically locks the mounted attachment and the hydraulic couplings fully automatically so that the driver can perform the attachment change without leaving the vehicle.

If a sideshift is installed into the quick-coupling system, it will be available to any mounted attachment.

# S 25

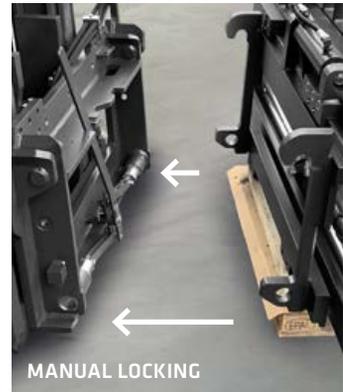
## QUICK-COUPLING SYSTEM



## LOCKING OPTIONS IN DETAIL

### MANUAL LOCKING SYSTEM

The locking mechanism and thus the securing of the attachment is carried out manually using a hand lever. The hydraulic couplings must be connected manually.



### HYDRAULIC LOCKING SYSTEM

In the hydraulic version, the attachments are secured and the pins are locked hydraulically. The hydraulics must be connected manually.



## VERSATILE POSSIBLE COMBINATIONS



## OPTIONS

### **MULTIPLE HYDRAULIC COUPLING SYSTEM**



- Simple handling
- Environmentally friendly

### **PARKING DEVICE**



- Safe parking of the attachment
- Quick attachment change

### **INTEGRAL ATTACHMENT**

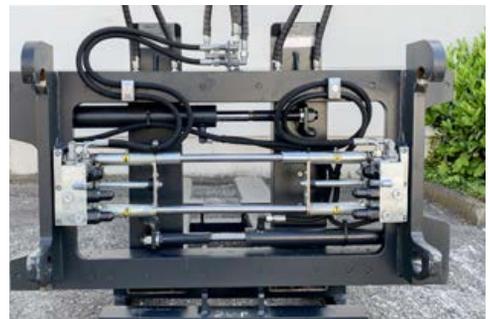


- Higher residual load capacity
- Improved visibility

### **OIL-QUICK® LOCKING SYSTEM (OQ)**

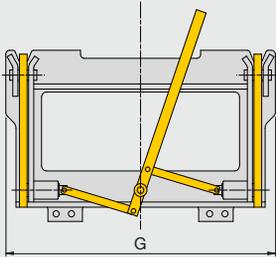
During the hydraulic locking process the hydraulic circuits are connected fully automatically via the Oil-Quick® system. Whereas with conventional quick coupling systems the hydraulic lines have to be connected manually, the Oil-Quick® locking system eliminates the need for this procedure completely. With this technology two additional separate hydraulic circuits can be made available to the mounted attachments.

Additionally, there is the option of connecting an electrical line and an overflow oil line.

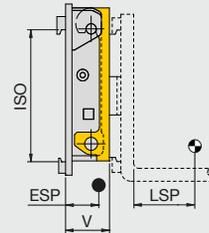
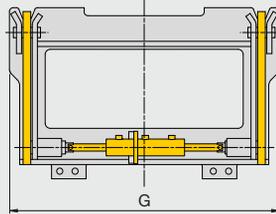


# QUICK-COUPLING SYSTEM

## MANUAL LOCKING SYSTEM



## HYDRAULIC LOCKING SYSTEM



Model	Load capacity	LC (LSP)	ISO	G	V	CoG (ESP)	Weight	Price
	kg			mm	mm			

### M - manual mechanical locking system

S 25-SCHWV 25-M	2500	500	2	955	150	35	85	
S 25-SCHWV 40-M	4000	500	3	1055	165	40	130	
S 25-SCHWV 48-M	5000	600	3	1055	170	40	145	
S 25-SCHWV 60-M	6000	600	4	1170	205	60	250	
S 25-SCHWV 80-M	8000	600	4	1170	215	60	270	
S 25-SCHWV 80/900-M	8000	900	4	1170	215	60	290	

### H - hydraulic locking system, 1 hydraulic function

S 25-SCHWV 25-H	2500	500	2	955	150	35	90	
S 25-SCHWV 40-H	4000	500	3	1055	165	40	135	
S 25-SCHWV 48-H	5000	600	3	1055	170	40	150	
S 25-SCHWV 60-H	6000	600	4	1170	205	60	255	
S 25-SCHWV 80-H	8000	600	4	1170	215	60	275	
S 25-SCHWV 80/900-H	8000	900	4	1170	215	60	295	

When carrying out fork handling, an additional fork carriage is required to mount forks.

Surcharge for fork carriage incl. mounting hooks see page 206

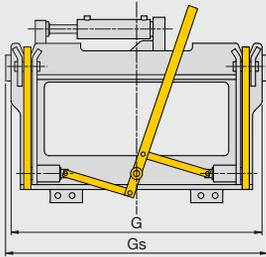
Surcharge for mounting hooks of the stabau attachments to be installed (depending on the type of attachment), see page 206

Surcharge for multiple hydraulic coupling system on request.

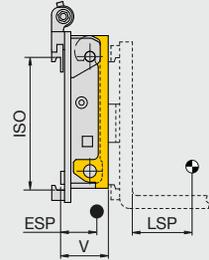
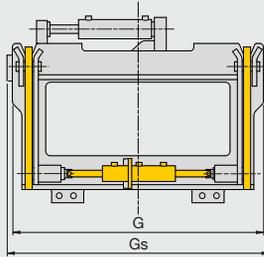
Parking device for attachments on request.

# QUICK-COUPLING SYSTEM WITH SEPARATE SIDESHIFT

## MANUAL LOCKING SYSTEM



## HYDRAULIC LOCKING SYSTEM



Model	Load capacity	LC (LSP)	ISO	G	Gs	Sideshift	V	CoG (ESP)	Weight	Price
	kg			mm	mm					

### M - manual mechanical locking system, 1 hydraulic function

S 25-SCHWV 25-S-M	2500	500	2	955	990	± 100	165	35	115	
S 25-SCHWV 40-S-M	4000	500	3	1055	1100	± 100	180	40	170	
S 25-SCHWV 48-S-M	5000	600	3	1055	1100	± 100	185	40	180	
S 25-SCHWV 60-S-M	6000	600	4	1170	1200	± 150	220	60	305	
S 25-SCHWV 80-S-M	8000	600	4	1170	1200	± 150	225	60	340	

### H - hydraulic locking system, 2 hydraulic functions

S 25-SCHWV 25-S-H	2500	500	2	955	990	± 100	165	35	120	
S 25-SCHWV 40-S-H	4000	500	3	1055	1100	± 100	180	40	175	
S 25-SCHWV 48-S-H	5000	600	3	1055	1100	± 100	185	40	185	
S 25-SCHWV 60-S-H	6000	600	4	1170	1200	± 150	220	60	310	
S 25-SCHWV 80-S-H	8000	600	4	1170	1200	± 150	225	60	345	

When carrying out fork handling, an additional fork carriage is required to mount forks.

Surcharge for fork carriage incl. mounting hooks see page 206

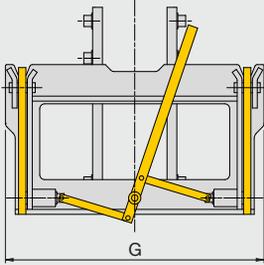
Surcharge for mounting hooks of the stabau attachments to be installed (depending on the type of attachment), see page 206

Surcharge for multiple hydraulic coupling system on request.

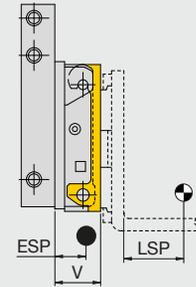
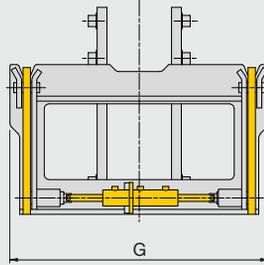
Parking device for attachments on request.

# QUICK-COUPLING SYSTEM (INTEGRAL)

## MANUAL LOCKING SYSTEM



## HYDRAULIC LOCKING SYSTEM



Model	Load capacity	LC (LSP)	G	V	CoG (ESP)	Weight	Price
	kg						

### M - manual mechanical locking system

S 25-SCHWVI 25-M	2500	500	955	165	40	110	
S 25-SCHWVI 40-M	4000	500	1055	180	50	160	
S 25-SCHWVI 48-M*	5000	600	1055	185	50	175	
S 25-SCHWVI 60-M	6000	600	1170	210	60	255	
S 25-SCHWVI 80-M	8000	600	1170	215	60	295	
S 25-SCHWVI 80/900-M	8000	900	1170	220	60	315	

### H - hydraulic locking system, 1 hydraulic function

S 25-SCHWVI 25-H	2500	500	955	165	40	115	
S 25-SCHWVI 40-H	4000	500	1055	180	50	165	
S 25-SCHWVI 48-H*	5000	600	1055	185	50	180	
S 25-SCHWVI 60-H	6000	600	1170	210	60	260	
S 25-SCHWVI 80-H	8000	600	1170	215	60	300	
S 25-SCHWVI 80/900-H	8000	900	1170	220	60	320	

\* For vehicles of ISO class 3

When carrying out fork handling, an additional fork carriage is required to mount forks.

Surcharge for fork carriage incl. mounting hooks see page 206

Surcharge for mounting hooks of the stabau attachments to be installed (depending on the type of attachment), see page 206

Surcharge for multiple hydraulic coupling system on request.

Parking device for attachments on request.

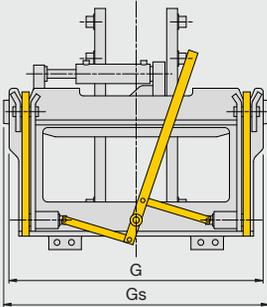
Front-mounting dimensions, center of gravity and weight from leading edge of side plate

Price includes side brackets.

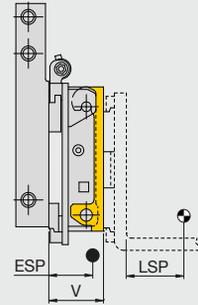
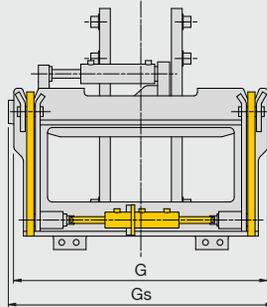
Detail drawings of fork carriage, roller studs and chain anchors or the fork carriage have to be provided by the customer.

# QUICK-COUPLING SYSTEM (INTEGRAL) WITH SEPARATE SIDESHIFT

**MANUAL  
LOCKING SYSTEM**



**HYDRAULIC  
LOCKING SYSTEM**



Model	Load capacity	LC (LSP)	G	Gs	Sideshift	V	CoG (ESP)	Weight	Price
	kg								

**M - manual mechanical locking system, 1 hydraulic function**

S 25-SCHWVI 25-S-M	2500	500	955	990	± 100	200	50	160	
S 25-SCHWVI 40-S-M	4000	500	1055	1100	± 100	220	65	230	
S 25-SCHWVI 48-S-M*	5000	600	1055	1100	± 100	225	65	245	
S 25-SCHWVI 60-S-M	6000	600	1170	1200	± 150	280	85	460	
S 25-SCHWVI 80-S-M	8000	600	1170	1200	± 150	290	90	495	
S 25-SCHWVI 80/900-S-M	8000	900	1170	1400	± 150	290	90	525	

**H - hydraulic locking system, 2 hydraulic functions**

S 25-SCHWVI 25-S-H	2500	500	955	990	± 100	200	50	165	
S 25-SCHWVI 40-S-H	4000	500	1055	1100	± 100	220	65	235	
S 25-SCHWVI 48-S-H*	5000	600	1055	1100	± 100	225	65	250	
S 25-SCHWVI 60-S-H	6000	600	1170	1200	± 150	280	85	465	
S 25-SCHWVI 80-S-H	8000	600	1170	1200	± 150	290	90	500	
S 25-SCHWVI 80/900-S-H	8000	900	1170	1400	± 150	290	90	530	

\* For vehicles of ISO class 3

When carrying out fork handling, an additional fork carriage is required to mount forks.

Surcharge for fork carriage incl. mounting hooks see page 206

Surcharge for mounting hooks of the stabau attachments to be installed (depending on the type of attachment), see page 206

Surcharge for multiple hydraulic coupling system on request.

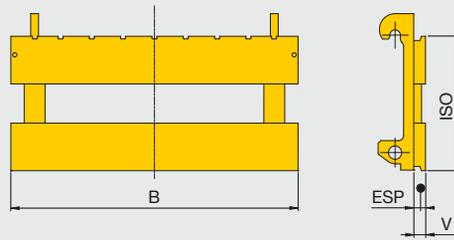
Parking device for attachments on request.

Front-mounting dimensions, center of gravity and weight from leading edge of side plate

Price includes side brackets.

Detail drawings of fork carriage, roller studs and chain anchors or the fork carriage have to be provided by the customer.

## FORK CARRIAGES WITH HOOKS FOR ATTACHMENTS MOUNTED VIA QUICK-COUPLING SYSTEM SCHWV(I)-M/H



Model	Load capacity	LC (LSP)	ISO	B	V	CoG (ESP)	Weight	Price	Surcharge per 100 mm add. fork carriage width
	kg			mm	mm				
S 25-GT 25 M/H	2500	500	2	1100	38	12	110		
S 25-GT 40 M/H	4000	500	3	1150	45	15	160		
S 25-GT 48 M/H	5000	600	3	1300	45	15	185		
S 25-GT 60 M/H	6000	600	4	1500	57	18	295		
S 25-GT 80 M/H	8000	600	4	1600	70	20	360		
S 25-GT 80/900 M/H	8000	900	4	1800	80	25	450		

## QD HOOKS FOR ATTACHMENTS MOUNTED VIA QUICK-COUPLING SYSTEM SCHWV(I)-M/H

Model	Load capacity	LC (LSP)	Price welded version	Price bolt-on version
	kg			
for SCHWV(I) 25-M/H	2500	500		
for SCHWV(I) 40-M/H	4000	500		
for SCHWV(I) 48-M/H	5000	600		
for SCHWV(I) 60-M/H	6000	600		
for SCHWV(I) 80-M/H	8000	600		
for SCHWV(I) 80/900-M/H	8000	900		

Standard values for residual load capacity of lift trucks \*\*

Quick-Coupling System with Fork Carriage and Forks	S 25 -	SCHWV 25	SCHWV 25	SCHWV 40	SCHWV 40	SCHWV 48	SCHWV 48	SCHWV 48/60	SCHWV 60	SCHWV 80	SCHWV 80	SCHWV 80/900
Load capacity lift truck	kg	1500	2500	3000	4000	4500	5000/500	5000	6000	7000	8000	10000
X*	mm	350	450	450	500	500	500	560	560	650	650	750
LC (LSP) = 500 mm	kg	1140	1980	2310	3150	3525	3930					
LC (LSP) = 600 mm	kg	1040	1820	2125	2905	3255	3630	3790	4600	5340	6155	7750
LC (LSP) = 800 mm	kg	880	1565	1835	2520	2825	3155	3320	4040	4725	5450	6900

\*\* The load capacity applies to lifting heights up to 3300 mm; specifications for greater lifting heights on request.

\* Assumed dimensions

Some applications require attachments of different special designs, which are not included in our standard product range.

The requirement can be due to the geometry and the condition of the goods to be handled or the work environment.

These products include particular clamping and handling attachments for bulky and delicate goods, attachments for steel mills and foundries, attachments for special vehicles and for the use in mining and coal-fired power plants, attachments with ex-protection or for food industry applications.

Since the foundation of our company, we have developed attachments for handling and manipulating e.g. ladles and converters, carbon impact wheels, large tires, long goods, concrete elements, glass packages, isolators, steel blocks, anodes, motor and sailing boats, logs and sawn timber, forgings, pipes and drill rods of any tonnage as well as stationary solutions with attachments for the optimization of production processes.

Due to our many years of experience and expertise in this field we are able to find reliable solutions, which are particularly tailored to suit these applications.

# S 26

## SPECIALIZED PRODUCTS

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**BOAT HANDLER**



**DRUM HANDLER**



**TILTING TIRE CLAMP**



**ANODE HANDLERS**



**ROLLER FORK SHOES**



**STATIONARY, ROTATABLE COIL CLAMP**



**SIDESHIFTER WITH  
LOAD STABILIZERS FOLDING UPWARDS**



**FORK POSITIONER WITH LOAD PUSHER**



**BLOCK CLAMP**



**RING CLAMP**



**TIPPING CLAMP**



**OSCILLATING LOAD BEAM**



**ROTATABLE BLOCK CLAMP**



**DOUBLE PALLET HANDLER WITH LOAD STABILIZER**



**CHARGING DEVICE**



**ROTATABLE ROLL CLAMP**



**MULTIPLE LOAD HANDLER ON AGV**



**ROTATABLE GRIPPING DEVICE**



**LOAD ARMS**



**TILTING TIRE CLAMP**



**FIXED FORK SPREADER WITH MULTIPLE FORK POSITIONER**



**GLASS RACK**



**TIPPING DRUM CLAMPS WITH EXCHANGEABLE BRACKETS**



**TIPPING TROUGH**



**CRANE JIB, TELESCOPABLE AND TILTABLE**



**LOAD EXTENDER WITH GRIPPING UNIT**



**FORK POSITIONER WITH MOUNTABLE CENTER FORK**



**FORK POSITIONER WITH FOUR FORKS**



**GRIPPING DEVICE**



**SPECIALIZED CRANE HOOKS**



**STABILIZING DEVICE**



**ROTATABLE FORK CLAMP WITH TENSIONING ARMS**



**FORK POSITIONER WITH LOAD STABILIZER**



**TIPPING CLAMP**



**MILLING ATTACHMENT**



**SPECIAL BALE CLAMP, ROTATABLE**



**FORK POSITIONER WITH  
SPECIAL PROTECTION FOR WHEEL LOADERS**



**ROTATABLE FORK POSITIONER**



**GIANT-ARM CLAMP**



**PULP BALE CLAMP FOR QUICK-COUPLING SYSTEM**

## Accessories for stabau attachments

The attachments can be optimally adapted to your requirements thanks to a wide range of accessories.

An extensive range of accessories is available for this purpose. These include various valves, hydraulic accessories, quick-mounting hooks, slip-on arms and load backrests. Camera systems and electrical kits for operating solenoid valves are also available.

In addition, with SMARTFORKS® we offer different designs for customisation to suit the respective application.

# Z

## ACCESSORIES

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# ACCESSORIES

1



SOLENOID VALVE

2



CABLE DRUM  
WITH ELECTRIC  
CABLE FOR SOLENOID  
VALVE (WITHOUT  
CONTROL  
BUTTON)

3

4



PRESSURE  
RELIEF VALVE

5



THREE-POSITION  
PRESSURE  
RELIEF VALVE

7



PRESSURE GAUGE

8



STOP VALVE

9



REGULATING VALVE

10



FLOW DIVIDER VALVE

11



HOSE DRUM

12

13

14



CLAMPING HOOKS

15

16

17



QD HOOKS

18

19

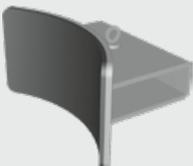
20

21



SIDEShift VALVE

22



SLIP-ON ARMS

23



CAMERA SYSTEMS

## ACCESSORIES IN COMBINATION WITH NEW ATTACHMENTS

	Description	Price
1	Solenoid valve NW 10 (12 V, 24 V, 48 V)	
2	Cable drum with electric cable for solenoid valve (without control button)	
3	Pressure relief valve NW 10 (adjustable on both sides up to 180 bar, incl. pressure gauge)	
4	Pressure relief valve NW 12 (adjustable on both sides up to 180 bar, incl. pressure gauge)	
5	Three-position pressure relief valve NW 8, manually switchable (adjustable to 3 different pressures)	
6	Four-position pressure relief valve NW 10, electrically switchable (without picture) (adjustable to 4 different pressures), incl. four-color signal column	
7	Pressure gauge	
8	Stop valve (double action)	
9	Regulating valve (infinitely variable)	
10	Flow divider valve	
11	Hose drum, double, NW 8, usable hose length 3,600 mm	
12	Clamping hooks ISO 2 (set)	
13	Clamping hooks ISO 3 (set)	
14	Clamping hooks ISO 4 (set)	
15	QD hooks ISO 2	
16	QD hooks ISO 3	
17	QD hooks ISO 4	
18	Sideshift valve, attachment load capacity up to 2500 kg	
19	Sideshift valve, attachment load capacity 3000 - 4500 kg	
20	Sideshift valve, attachment load capacity 5000 - 8000 kg	
21	Sideshift valve, attachment load capacity greater than 8000 kg	

	Description	Price
22	Surcharge for slip-on arms	see page 137
23	Surcharge for camera systems	
	Surcharge for camera preparation	
	Surcharge for wheel loader mounting	

## SURCHARGE FOR INTEGRAL ATTACHMENTS (INCL. SIDE BRACKETS)

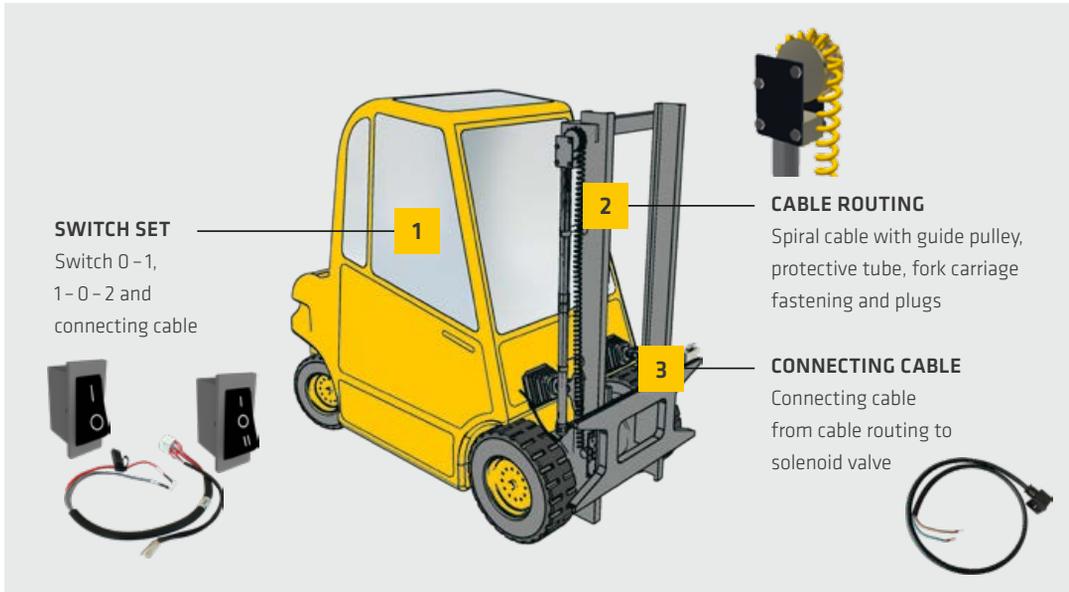
Detail drawings of fork carriage, roller studs and chain anchors or the fork carriage have to be provided by the customer.

Lift truck load capacity	Surcharge for rotators and rotatable attachments	Surcharge for attachments with separate sideshift	Surcharge for other attachments without separate sideshift
	€	€	€
up to 2500 kg			
3000 - 4500 kg			
5000 - 8000 kg @ 600 mm			
greater than 8000 kg @ 600 mm			

# ACCESSORIES IN COMBINATION WITH NEW ATTACHMENTS

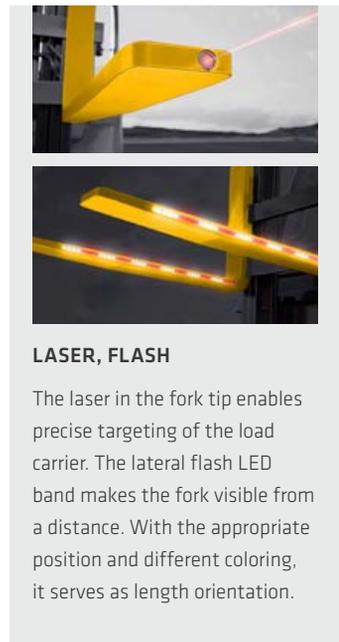
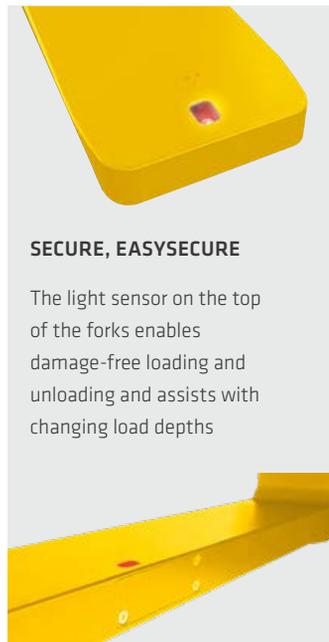
## ELECTRICAL MOUNTING KITS

(on request)



## SMARTFORKS® FOR FORK POSITIONERS WITH BOLT-ON FORKS

(on request)

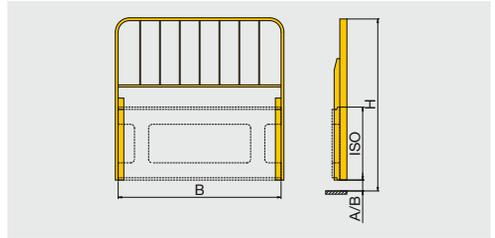


## LOAD BACKRESTS (only in connection with new attachments)

### LOAD BACKRESTS MOUNTABLE ON FORK CARRIAGE AND SIDESHIFTER - only for stabau attachments

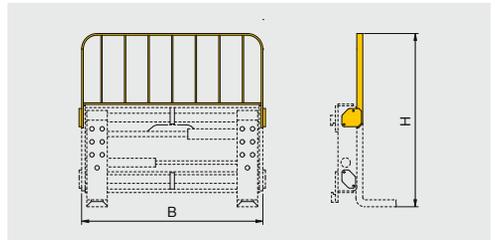
Model	ISO	Width B	Height H*	Price	Surcharge per 100 mm width / height
		mm	mm		
LGG 25	2	1050	1000		
LGG 48	3	1200	1200		
LGG 70	4	1500	1400		
LGG 100	4	1800	1400		

Surcharge for application with telescopic forks



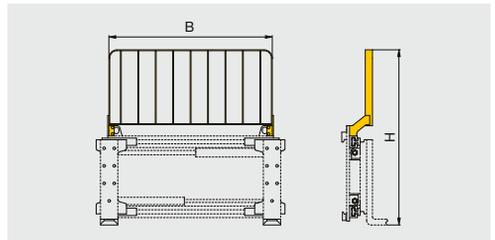
### LOAD BACKRESTS FOR FORK POSITIONERS S 11-ZV

Model		Width B	Height H*	Price	Surcharge per 100 mm width / height
		mm	mm		
LGZ 25	up to ZV 25	1090	1000		
LGZ 48	up to ZV 48	1300	1200		
LGZ 70	up to ZV 70	1500	1400		
LGZ 120	up to ZV 120	2010	1400		



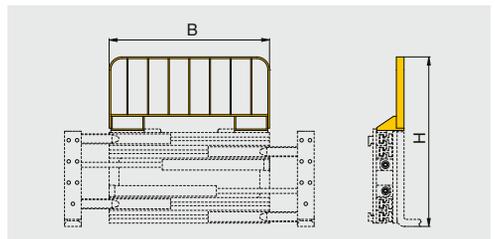
### LOAD BACKRESTS FOR FORK POSITIONERS S 11-ZVP/ZVPV

Model		Width B	Height H*	Price	Surcharge per 100 mm width / height
		mm	mm		
LGP 25	up to ZVP 25	1050	1000		
LGP 48	up to ZVP 48	1050	1200		
LGP 70	up to ZVPV 70	1450	1400		
LGP 120	up to ZVPV 120	1950	1400		



### LOAD BACKREST FOR ALL CLAMPING ATTACHMENTS (e.g. S 11-ZVKG, S 12, S 15)

Model		Width B	Height H*	Price	Surcharge per 100 mm width / height
		mm	mm		
LGK 25	up to 2.5 to	950	1000		
LGK 48	up to 4.8 to	1150	1200		
LGK 70	up to 7.0 to	1450	1400		
LGK 100	up to 10.0 to	1750	1400		



\* Height H measured from top edge of load backrest to bottom edge of fork or floor.

# NOTES

A large grid of small dots arranged in approximately 30 rows and 40 columns, intended for taking notes.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000
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# NOTES

A large grid of dots for taking notes, consisting of 20 columns and 30 rows of small black dots arranged in a regular pattern.





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