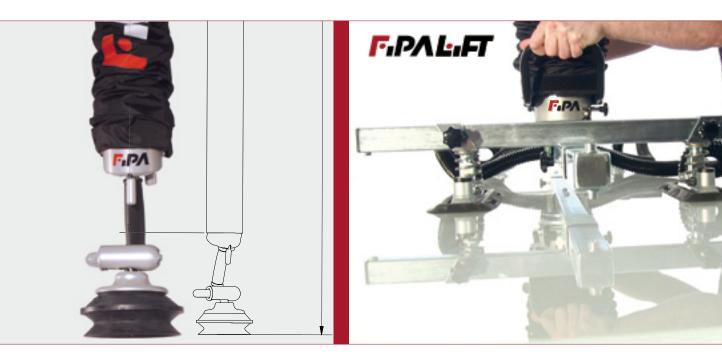
# **FIPA** Lifting Technology



www.fipa.com



### **Lifting technology - FIPALIFT and FIPA Crane systems**

Our contribution to high efficiency and health preservation in the movement of loads



For the past 30 years, FIPA GmbH has been regarded as the innovative partner in vacuum and gripper technology for the handling of various types of goods.

Using this rich vein of experience, we can now also offer solutions for lifting small and large loads in all sectors of internal logistics and production - from heavy cartons to bags and components made of wood and glass.

Our FIPALIFT tube lifters offer manually directed lifting that can be individually matched to the requirements of your sector. These permit efficient, rapid working and also provide physical relief for your employees.

An additional characteristic aspect of FIPALIFT tube lifters is their compatibility with components in the entire range of FIPA vacuum and gripper technology.

Our service provision is just as individual as our tube lifters: Take advantage of our competence from the planning phase to installation or simply buy the components required and install them using your own resources.

However you decide to proceed, and whatever your requirement may be, any tailored solution can be realised using FIPALIFT and FIPA crane systems.

In this regard, we look forward to providing you and your employees with problem-free work solutions.

Best regards, Rainer Mehrer

CEO of FIPA GmbH



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# **FIPA Service**

Notes:

#### **FIPA Service**





#### Personal advice

We are pleased to visit and advise you on which lifting solution is best suited for your specific application. We can perform an onsite evaluation to gather technical details or you may submit our application questionnaire (page 142) to help expedite the quoting process. Our friendly staff will be able to provide technical advice via email or phone regarding your application.



#### Planning and design

Our Technical Sales and Design Team will execute the design and layout of your lifting solution. All systems are designed in compliance with specified customer requirements and in accordance with legal regulations.



#### Installation and maintenance

We offer complete system installations for turn-key applications. Our team will deliver, setup, install and verify the operation of your lifting device. Should you choose to outsource the installation; we can collaborate with experienced partners to assist in completing your system installation. Please contact us regarding maintenance and service of your lifting system. We can provide detailed views, part lists and troubleshooting for your lifting solution.

**Please note:** This service is only available in Germany, Austria, Switzerland and Hungary. Other countries will follow as soon as possible, please contact us.



#### **Instruction and training courses**

Our experienced staff has a vast knowledge of vacuum lifting technology. We are pleased to offer instructial seminars and training courses regarding system maintenance, operation and safety. Re-occurring annual seminars of lifting safety are available. Well-trained employees are the best guarantee to avoid injuries.

#### **FIPALIFT Tube lifters**



FIPALIFT Expert	FIPALIFT Smart	FIPALIFT Basic		
FAM				
	Weight ranges			
30 to 230 kg	5 to 65 kg	5 to 55 kg		
	Application ranges			
The expert in heavy and awkward loads  Suitable for: > Wood or plastic panels > Glass panels and metal sheets	The smart solution for logistics processes  Suitable for: > Cartons and boxes > Food products, e.g. wheels of cheese	The versatile one among the tube lifters  Suitable for: > Cartons and boxes > Food products, e.g. wheels of cheese		
> Overweight bags and containers > and much more	<ul> <li>Lighter bags</li> <li>Containers in shrink-wrap packaging</li> <li>and much more</li> </ul>	<ul> <li>Lighter bags</li> <li>Containers in shrink-wrap packaging</li> <li>Open storage boxes, canisters, small barrels</li> <li>and much more</li> </ul>		
	Frequent application fields	<u> </u>		
> Carpentry	> Storage and logistics	> Storage and logistics		
> Joinery	> Intralogistics	> Intralogistics		
> Glazing	> Chemical industry	> Chemical industry		
> Window manufacture	> Food production etc.	> Food production etc.		
> Sheet metal working				
> Chemical industry > Food production etc.				
Details starting from page				
5	23	33		

# FIPALIFT Expert | Content

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Cardan joint and release valves	20
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#### **FIPALIFT Expert**

The FIPALIFT Expert, with a lifting force of 30 kg to 230 kg is particularly suited for handling heavy work loads such as: metal sheets, ceramic slabs, wood materials, overweight sacks and containers.

The rigid design permits heavy-duty use in a production environment which makes the unit versatile and desired in industries such as: carpentry, sheet metal working, bakeries and logistics where heavy loads are involved.

The innovative design and use of special adapters allow us to design customised load-carrying systems with the integration of FIPA End of Arm Tooling components. Take advantage of our experience in EOAT design and adapt the unit to your individual needs without adding a lot of extra cost.

The basic models are equipped with an easy-to-operate controller. Pulling the operating lever lifts the load and pushing it down moves the tube down again.

The wide range of already installed options allows us to configure the unit to suit your demand:

- > Automatic vacuum shut-off feature. If the system is inactive for an extended period of time, the vacuum supply is interrupted to save energy. An adjustable switch is used in conjunction with th compressor to contol its operation
- > Optional stainless steel construction. Partial or complete stainless steel construction is available for use in the food industry or corrosive environments









FIPALIFT Expert FIPALIFT

#### **Elongated Controller**

- > An elongated controller can be fitted as an optional configuration for handling large or awkward goods
- > These are available as fixed versions in lengths from 500 to 1,200 mm...
- > ... and also as adjustable versions up to a length of 1,600 mm
- > Please see the options on page 11





- > A wide range of vacuum cups, gripper solutions and crossbeams allow the FIPALIFT Expert to be used in an extremely wide range of applications
- > The cross-beams are available both as accessories or, on request, as fitted options
- > For special requirements that cannot be solved using the standard programme, we can offer special solutions



Our full range of vacuum cups can be seen in the FIPA Vacuum Technology catalogue or at www.fipa.com.



FIPALIFT Expert standard versions

#### FIPALIFT Expert standard versions





#### **Product description**

- > The standard versions have the standard controller, a lift height of 2.50 m and a single suspension
- > We can offer a wide variety of factory-made options in addition to the standards. These can be seen below in the "Factory mounted options" table

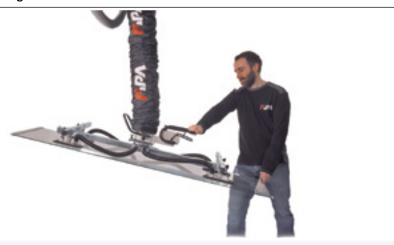
#### **Ordering notes**

- > The side-channel blower (see page 71) required for the supply of vacuum and the vacuum cups are not included in the scope of delivery please order separately
- > Please take note of the combination table "Lifting tube diameter / Pump combination" it can be used to establish the best combination for the lifting force that you need
- > We would be pleased to help you with the design of your system

Item no.	Ø-Lift tube [mm]
SH.BAS.EXP.100/SU	100
SH.BAS.EXP.120/SU	120
SH.BAS.EXP.140/SU	140
SH.BAS.EXP.160/SU	160
SH.BAS.EXP.180/SU	180
SH.BAS.EXP.200/SU	200
SH.BAS.EXP.160/DU	160
SH.BAS.EXP.180/DU	180
SH.BAS.EXP.200/DU	200



#### Application example - Glass handling



#### Application example - Bag handling



Continued on the next page



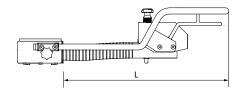
#### FIPALIFT Expert standard versions

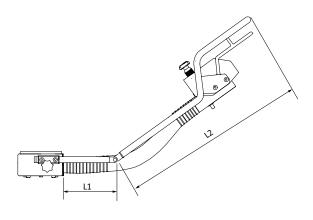
#### Factory mounted options for FIPALIFT Expert

Item no.	Description
SH.OPT.EXP.0010	FIPALIFT Expert metall parts made of stainless steel
SH.OPT.EXP.0011	FIPALIFT Expert controllbox made of stainless steel
SH.OPT.EXP.0012	Lift tube optional in 3 m
SH.OPT.EXP.0013	Lift tube optional in 4 m
SH.OPT.EXP.0014	Protection valve
SH.OPT.EXP.0015	Quick balance device EXPERT, 3 positions
SH.OPT.EXP.0016	Split control handle
SH.OPT.EXP.0017	Release valve for standard handle
SH.OPT.EXP.0018	Release valve for extended handle
SH.OPT.EXP.0019	Cardan joint
SH.OPT.EXP.0022	Grounded lift unit
SH.OPT.EXP.0023	Automatic turn off vacuum pump

#### Factory mounted options for controll-box FIPALIFT Expert

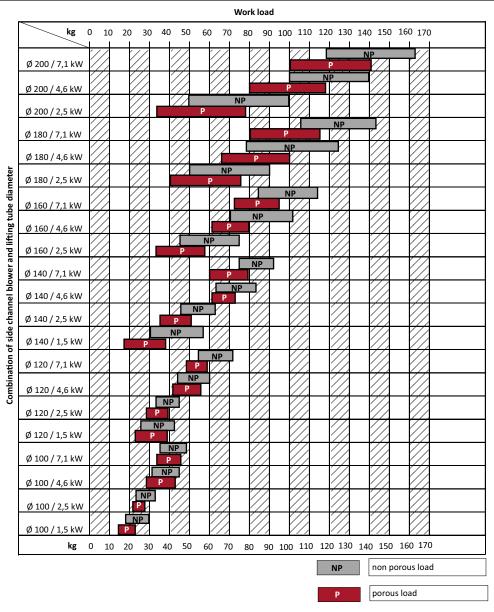
Item no.	Description
SH.OPT.EXP.0024	Rigid extended Controll-Box Expert 500 mm (L)
SH.OPT.EXP.0025	Rigid extended Controll-Box Expert 600 mm (L)
SH.OPT.EXP.0026	Rigid extended Controll-Box Expert 700 mm (L)
SH.OPT.EXP.0027	Rigid extended Controll-Box Expert 900 mm (L)
SH.OPT.EXP.0028	Rigid extended Controll-Box Expert 1200 mm (L)
SH.OPT.EXP.0029	Flexible extended Controll-Box Expert 200/500 (L1/L2)
SH.OPT.EXP.0030	Flexible extended Controll-Box Expert 200/600 (L1/L2)
SH.OPT.EXP.0031	Flexible extended Controll-Box Expert 200/700 (L1/L2)
SH.OPT.EXP.0032	Flexible extended Controll-Box Expert 200/900 (L1/L2)
SH.OPT.EXP.0033	Flexible extended Controll-Box Expert 300/500 (L1/L2)
SH.OPT.EXP.0034	Flexible extended Controll-Box Expert 300/600 (L1/L2)
SH.OPT.EXP.0035	Flexible extended Controll-Box Expert 300/700 (L1/L2)
SH.OPT.EXP.0036	Flexible extended Controll-Box Expert300/900 (L1/L2)
SH.OPT.EXP.0037	Flexible extended Controll-Box Expert 400/500 (L1/L2)
SH.OPT.EXP.0038	Flexible extended Controll-Box Expert 400/600 (L1/L2)
SH.OPT.EXP.0039	Flexible extended Controll-Box Expert 400/700 (L1/L2)
SH.OPT.EXP.0040	Flexible extended Controll-Box Expert 400/900 (L1/L2)
SH.OPT.EXP.0041	Flexible extended Controll-Box Expert 500/500 (L1/L2)
SH.OPT.EXP.0042	Flexible extended Controll-Box Expert 500/600 (L1/L2)
SH.OPT.EXP.0043	Flexible extended Controll-Box Expert 500/700 (L1/L2)
SH.OPT.EXP.0044	Flexible extended Controll-Box Expert 500/900 (L1/L2)
SH.OPT.EXP.0045	Flexible extended Controll-Box Expert 700/500 (L1/L2)
SH.OPT.EXP.0046	Flexible extended Controll-Box Expert 700/600 (L1/L2)
SH.OPT.EXP.0047	Flexible extended Controll-Box Expert 700/700 (L1/L2)
SH.OPT.EXP.0048	Flexible extended Controll-Box Expert 700/900 (L1/L2)





Continued on the next page

#### Lifting tube diamenter / Pump-combination



The bars in the diagram show the recommended load weights that can be handled by the individual tube lifter / pump combination. The recommendations are based on appropriate lifting speeds. A light load will be lifted faster than a heavy load. A non-porous load (NP), for example a metal sheet, will be lifted faster than a porous load (P), for example a carton. Do not use tube lifter / pump combinations for loads heavier than recommended.

An example of how to use the diagram:

A tube lifter FIPALIFT Expert 160 / 4.6 kW (tube lifter diameter 160 mm, pump size 4.6 kW) is recommended for lifting non-porous loads in the range 70 kg to 102 kg and for porous loads in the range from 61 kg to 80 kg. The combination with a larger tube lifter and a smaller pump is recommended for softer lifting. The selection is also highly dependent on the consistency of the load to be lifted, lifting trials may be required. Please contact our Technical Sales Department.



# **Dimensions** Ø 19 8 Ø 20 140 450 (Ø 100 - 140) 485 (Ø 160 - 200)

Suction shells round - Expert

#### Suction shells round - Expert



#### **Product description**

- > Suction shells made from sheet metal with sealing foam
- > Suitable for handling barrels, cans, drums, stone, tiles and much more
- > Sealing foam can be easily replaced without the need for tools

#### Notes

- > We would be pleased to provide advice on the selection of suitable vacuum cups and to carry out vacuum tests
- > Cups without a safety factor statement must not be used with this lifting tube diameter
- > A safety factor of at least 2.5 is necessary for horizontal handling and at least 4.0 for vertical handling

#### **Technical data**

Item no.	Diameter [mm]	Suitable replacement foam
SH.ACC.EXP.0053	250	SH.SPP.EXP.0010 (p.16)
SH.ACC.EXP.0054	300	SH.SPP.EXP.0011 (p.16)
SH.ACC.EXP.0055	320	SH.SPP.EXP.0012 (p.16)
SH.ACC.EXP.0056	360	SH.SPP.EXP.0013 (p.16)

#### Safety factor by lift tube Ø

Item no.	Ø 100 mm	Ø 120 mm	Ø 140 mm	Ø 160 mm	Ø 180 mm	Ø 200 mm
SH.ACC.EXP.0053	4.8	3.4	2.5			
SH.ACC.EXP.0054	7.3	5.1	3.7	2.8		
SH.ACC.EXP.0055	8.4	5.8	4.3	3.3	2.6	
SH.ACC.EXP.0056	10.9	7.6	5.6	4.3	3.4	2.7



Suction shells oval - Expert



#### **Product description**

- > Suction shells made from sheet metal with sealing foam
- > Also available in stainless steel
- > Suitable for handling sacks and shrink-wrapped goods
- > Sealing foam can be easily replaced without the need for tools

#### Notes

- > We would be pleased to provide advice on the selection of suitable vacuum cups and to carry out vacuum tests
- > Cups without a safety factor statement must not be used with this lifting tube diameter
- > A safety factor of at least 2.5 is necessary for horizontal handling and at least 4.0 for vertical handling

#### **Technical data**

Item no.	Material	Width [mm]	Length [mm]	Suitable replacement foam
SH.ACC.EXP.0057	Steel	175	275	SH.SPP.EXP.0014 (p.16)
SH.ACC.EXP.0058	Steel	205	370	SH.SPP.EXP.0015 (p.16)
SH.ACC.EXP.0059	Steel	260	455	SH.SPP.EXP.0016 (p.16)
SH.ACC.EXP.0057.VA	Stainless steel	175	275	SH.SPP.EXP.0014 (p.16)
SH.ACC.EXP.0058.VA	Stainless steel	205	370	SH.SPP.EXP.0015 (p.16)
SH.ACC.EXP.0059.VA	Stainless steel	260	455	SH.SPP.EXP.0016 (p.16)

#### Safety factor by lift tube Ø

Item no.	Ø 100 mm	Ø 120 mm	Ø 140 mm	Ø 160 mm	Ø 180 mm	Ø 200 mm
SH.ACC.EXP.0057	3.9	2.7				
SH.ACC.EXP.0058	6.7	4.7	3.4	2.6		
SH.ACC.EXP.0059	11	7.6	5.6	4.3	3.4	2.8
SH.ACC.EXP.0057.VA	3.9	2.7				
SH.ACC.EXP.0058.VA	6.7	4.7	3.4	2.6		
SH.ACC.EXP.0059.VA	11	7.6	5.6	4.3	3.4	2.8

Replacement foam for suction shells - Expert

# Replacement foam for suction shells - Expert



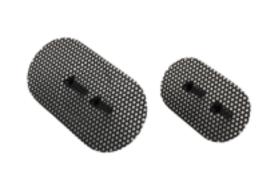


#### **Product description**

- > Easily replaced without the need for tools if worn out
  > Simply pull the foam out of the suction shell and slide in the new one

Item no.	Suitable for	Suitable for suction shell
SH.SPP.EXP.0010	SH.ACC.EXP.0053	Round Ø 250
SH.SPP.EXP.0011	SH.ACC.EXP.0054	Round Ø 300
SH.SPP.EXP.0012	SH.ACC.EXP.0055	Round Ø 320
SH.SPP.EXP.0013	SH.ACC.EXP.0056	Round Ø 360
SH.SPP.EXP.0014	SH.ACC.EXP.0057	Oval 175x275
SH.SPP.EXP.0015	SH.ACC.EXP.0058	Oval 205x370
SH.SPP.EXP.0016	SH.ACC.EXP.0059	Oval 455x260

Grid for suction shells oval - Expert



#### **Product description**

- > Support element in the suction shells in order to prevent the goods to be lifted from being drawn in too far > Important aid when handling loosely filled bags

Item no.	Material	Width [mm]	Length [mm]
SH.ACC.EXP.0063	Steel	175	275
SH.ACC.EXP.0064	Steel	205	370
SH.ACC.EXP.0065	Steel	260	455
SH.ACC.EXP.0063.VA	Stainless steel	175	275
SH.ACC.EXP.0064.VA	Stainless steel	205	370
SH.ACC.EXP.0065.VA	Stainless steel	260	455

Quick-change systems - Expert

#### Quick-change systems - Expert



#### **Product description**

- Quick-change system for rapid tool-free replacement of the vacuum cups and gripper systems on the FIPALIFT Expert
   Operates with a bayonet fitting
   Idealy suited to frequently changing handling tasks and goods

Item no.	Design	Load bearing capability [kg]
SH.ACC.EXP.0066	Upper	100
SH.ACC.EXP.0067	Lower	100
SH.ACC.EXP.0068	Upper	160
SH.ACC.EXP.0069	Lower	160

Swivel joint - Expert



#### **Product description**

- Joint for stepless rotation of the goods to be lifted by 360°
   Suitable for repositioning the goods to be lifted, e.g. when loading a machine

#### **Technical data**

Item no.	Pivoting range S [°]
SH.ACC.EXP.0070	360



Swivel adapter - Expert

#### **Product description**

- > For tipping the goods to be lifted by  $90^{\circ}$
- > Suitable for turning plates from a horizontal to a vertical position

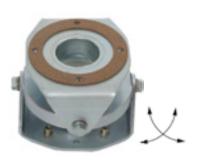
#### **Notes**

> Installation between the controller and gripper / vacuum cup

Item no.	Pivoting range S [°]
SH.ACC.EXP.0071	90

#### Cardan joint - Expert

#### Cardan joint - Expert



#### **Product description**

> For equalisation of sloping levels

#### **Technical data**

Item no. SH.ACC.EXP.0081 Description

Cardan joint

#### Release valves - Expert







SH.ACC.EXP.0080

#### **Product description**

- > Additional valve for rapid lowering of goods to be lifted

- Recommended for use with large vacuum cups and lighter goods
   Available both for the standard controller and the elongated controller
   The vacuum can be released via this valve by pushing the control button on the operating unit

Item no.	Suitable for
SH.ACC.EXP.0079	Control unit standard
SH.ACC.EXP.0080	Control unit elongated

#### Suction plates rectangular - Expert







SH.ACC.EXP.0015

#### **Product description**

- > Rectangular suction plates for direct mounting on the control unit of the FIPALIFT Expert
- > Suitable for handling of cartons, boxes and smaller flat products
- > Steel plate with exchangeable gasket made from natural rubber (NR) black
- > Gasket can be easily replaced without the need for tools
- > Concave shape available for lifting pipes or bars

#### **Notes**

- > Cups without a safety factor statement must not be used with this lifting tube diameter
- > A safety factor of at least 2.5 is necessary for horizontal handling and at least 4.0 for vertical handling

#### **Ordering notes**

> The appropriate replacement gaskets are available as accessories for all types (see page 58)

#### **Technical data**

Item no.	Design	Width [mm]	Length [mm]
SH.ACC.EXP.0010	Flat	150	210
SH.ACC.EXP.0011	Flat	120	315
SH.ACC.EXP.0012	Flat	95	430
SH.ACC.EXP.0013	Flat	200	290
SH.ACC.EXP.0014	Flat	210	330
SH.ACC.EXP.0015	Concave	120	315

#### Safety factor by lift tube $\emptyset$

Item no.	Ø 100 mm	Ø 120 mm	Ø 140 mm	Ø 160 mm	Ø 180 mm	Ø 200 mm
SH.ACC.EXP.0010	4	2.8				
SH.ACC.EXP.0011	4.8	3.3	2.5			
SH.ACC.EXP.0012	5.2	3.6	2.7			
SH.ACC.EXP.0013	7.4	5.1	3.8	2.9		
SH.ACC.EXP.0014	8.8	6.1	4.5	3.4	2.7	
SH.ACC.EXP.0015	4.8	3.3	2.5			

**EOAT Adapter - Expert** 



#### **Product description**

- > For adapting the FIPA End-of-Arm-Tooling kit to the FIPALIFT Expert > Can be used with FIPA XLine profile and the corresponding connecting elements
- > Enables the installation of special solutions for goods outside from the standard
- > Four G 3/4 connections for vacuum supply to vacuum cups
- > Two G 1/8 connections for the use of vacuum gauges

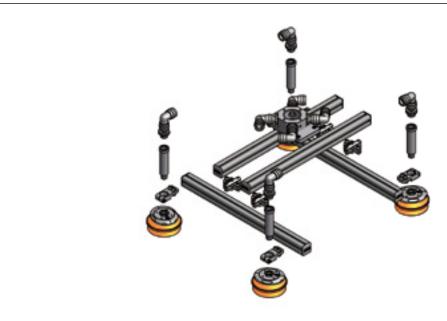
#### **Ordering notes**

> The appropriate EOAT components can be found at www.fipa.com in the gripper technology section in our gripper technology catalogue

#### **Technical data**

Item no.	Material	Weight [kg]	Accessories
SH.ACC.EXP.0090	Aluminium anodised		30.027-G (p.56) 30.123-G (p.56) 30.124-G (p.56)

#### Application examples with components from the FIPA gripper systems kit



Additional accessories can be found starting on page 51

# FIPALIFT Smart | Content

FIPALIFT Smart	24
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Vacuum grippers	31
Operating counter and stroke guide roller	32

#### **FIPALIFT Smart**





#### **FIPALIFT Smart**

The highly ergonomic FIPALIFT Smart, with a lifting force up to 65 kg, is often used for stacking or relocating packages and boxes in a production environment. However, the application capability extends to cover a wide variety of products.

The operator-friendly interface reduces work effort and improves motion control and product handling.

The versatile handle design incorporates a 90° pivot for top or side access to loads and a 360° rotation capability for precise positioning or placing of the object.

If you have right-handed or left-handed operators, the FIPALIFT Smart works for you:

> Simply easily remove the trigger and reinsert on the required side, no tools required

A wide range of factory made options and accessories are available to configure the system to suit your need:

- > Automatic vacuum shut-off feature. If the system is inactive for an extended period of time, the vacuum supply is interrupted to save energy. An adjustable switch is used in conjunction with the compressor to control its operation
- > Optional stainless steel construction. Partial or complete stainless steel construction is available for use in the food industry or corrosive environments
- > Easily adaptable to all of the FIPALIFT Basic accessories via special Basic-Smart adaptor









FIPALIFT Smart FIPALIFT

> Low headroom clearance option for 100 mm diameter FIPALIFT Smart system which utilises a special 90° support roller to transfer a portion of the required lift travel horizontally. This reduces the minimum headroom required



> FIPALIFT meets Varioflex®. For our Smart we have extended the well-known Varioflex® bellows vacuum cups by two sizes Ø 110 mm and Ø 150 mm. The cups, with two hardness zones, 30° Shore A at the sealing lip and 60° Shore A at the bellows body, have already been tried and tested over a long period in different sizes in the packaging industry.

The low-wear PUR is particularly well suited for abrasive surfaces, such as cardboard and wood. The very soft and smooth sealing lip ensures secure handling, even if there are minor unevenness on the surface



> We have vacuum cups available in FDA approved silicone material with stainless steel plates for food product applications according to EU1935 and FDA



> Is your handling task not covered by the components in the catalogue range? Our experienced design team will develop a tailor-made solution for you



#### **FIPALIFT Smart**

#### **FIPALIFT Smart standard versions**

#### **FIPALIFT Smart standard versions**



#### **Product description**

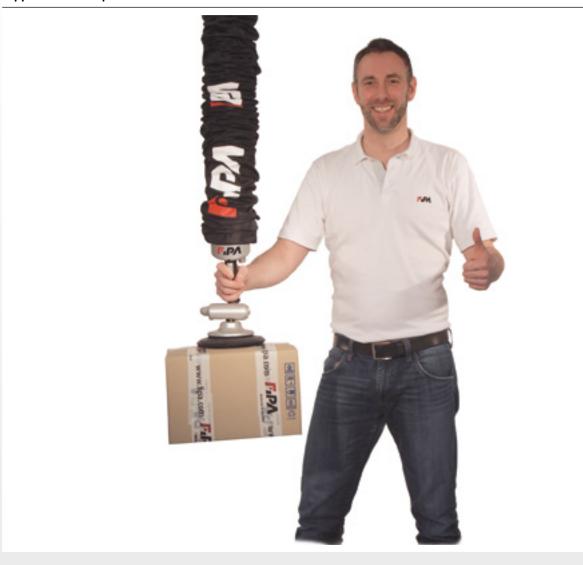
- > The standard versions have the standard controller, a lift height of 2.50 m and mounting suspension to an eye
- > We can offer a wide variety of factory-made options in addition to the standards. These can be seen below in the "Factory mounted options" table

#### **Ordering notes**

- > The required vacuum supply (see page 65) is not included in the scope of delivery
- > Please take note of the combination table "Lifting tube diameter / Pump combination" it can be used to establish the best combination for the lifting force that you need
- > We would be pleased to help you with the design of your system
- > A vacuum cup Ø 160 mm is included in the scope of delivery

Item no.	Ø-Lift tube [mm]
SH.BAS.SMA.80	80
SH.BAS.SMA.100	100
SH.BAS.SMA.120	120
SH.BAS.SMA.140	140

#### **Application example**



Continued on the next page

#### **Factory mounted options for FIPALIFT Smart**

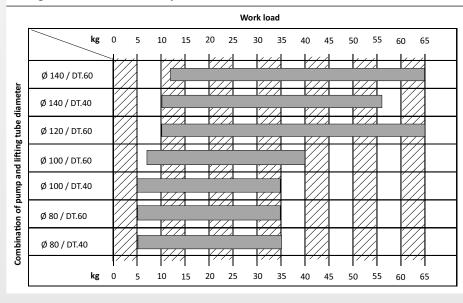
#### For lifting tube Ø 80 to 100 mm

Item no.	Description
SH.OPT.SMA.0010	FIPALIFT SMART all metall parts made of stainless steel
SH.OPT.SMA.0011	FIPALIFT SMART Controllhandle made of stainless steel
SH.OPT.SMA.0012	Lift tube SMART optional 3 m Länge
SH.OPT.SMA.0013	Lift tube SMART optional 4 m Länge
SH.OPT.SMA.0014	Protection valve SMART opt.
SH.OPT.SMA.0015	Cardan joint SMART
SH.OPT.SMA.0017	Grounded lift unit SMART
SH.OPT.SMA.0018	Automatic turn off vacuum pump SMART
SH.OPT.SMA.0019	Protection regulator SMART opt.
SH.OPT.SMA.0020	Accessory adapter SMART to BASIC
SH.OPT.SMA.0021	Extended Contoll handle SMART

#### For lifting tube $\emptyset$ 120 to 140 mm

Item no.	Description
SH.OPT.SMA.0022	FIPALIFT SMART all metall parts made of stainless steel
SH.OPT.SMA.0023	FIPALIFT SMART Controllhandle made of stainless steel
SH.OPT.SMA.0024	Lift tube SMART optional in 3 m
SH.OPT.SMA.0025	Lift tube SMART optional in 4 m
SH.OPT.SMA.0026	Cardan joint SMART
SH.OPT.SMA.0028	Grounded lift unit SMART
SH.OPT.SMA.0029	Automatic turn off vacuum pump SMART
SH.OPT.SMA.0030	Protection regulator SMART opt.
SH.OPT.SMA.0031	Accessory adapter SMART to BASIC
SH.OPT.SMA.0032	Extended contoll handle SMART

#### Lifting tube diamenter / Pump-combination



# **Dimensions** Ø 19 15 to 15 to

#### **FIPALIFT Smart**

Suction shell oval - Smart

#### Suction shell oval - Smart



#### **Product description**

- > Suction shell made from sheet metal with sealing foam
- > Suitable for handling bags and shrink-wrapped goods and much more
- > Sealing foam can be easily replaced without the need for tools

#### **Notes**

- > We would be pleased to provide advice on the selection of suitable vacuum cups and to carry out vacuum tests
- > Cups without a statement of safety factor must not be used with this lifting tube diameter
- > A safety factor of at least 2.5 is necessary for horizontal handling and at least 4.0 for vertical handling

#### **Technical data**

Item no.	Material	Width [mm]	Length [mm]	Suitable replacement foam
SH.ACC.SMA.0010	Steel	245	125	SH.SPP.BAC.0024 (p.42)

#### Safety factor by lift tube Ø

Item no.	Ø 80 mm	Ø 100 mm	Ø 120 mm	Ø 140 mm
SH.ACC.SMA.0010	5.1	3.3		

Vacuum grippers fourfold rigid - Smart



#### **Product description**

- Rigid pipe structure for use with four bellows vacuum cups
   Suitable for large cartons, boxes and flat goods
   Levels minor unevenness of the surfaces

#### Notes

- > Cups without a statement of safety factor must not be used with this lifting tube diameter
- > A safety factor of at least 2.5 is necessary for horizontal handling and at least 4.0 for vertical handling

#### **Technical data**

Item no.	Suitable for	Width [mm]	Length [mm]
SH.ACC.SMA.0011	Bellow cup Ø 75 mm	230	190
SH.ACC.SMA.0012	Bellow cup Ø 110 mm	270	150

#### Safety factor by lift tube Ø

Item no.	Ø 80 mm	Ø 100 mm	Ø 120 mm	Ø 140 mm
SH.ACC.SMA.0011	3.5	2.3		
SH.ACC.SMA.0012		4.8	3.4	2.5

#### **FIPALIFT Smart**

#### Operating counter for Smart

#### Operating counter for Smart



#### **Product description**

- > For easier monitoring of maintenance intervals
- > For mounting between the vacuum pump and the power supply

#### **Technical data**

Item no.	Max. operating voltage [V]	Operating frequency [Hz]
SH.ACC.SMA.0013	400	50

#### Stroke guide roller for FIPALIFT Smart, lifting tube Ø 100



FOR LOW HEADROOM OPERATION

#### **Product description**

- > Directs the lifting movement partly from the vertical to the horizontal > This makes it possible also to use the FIPALIFT Smart Ø 100 under low headroom conditions

#### **Technical data**

Item no.	Ø-Lift tube [mm]
SH.ACC.SMA.0014	100

Additional accessories can be found starting on page 51

# FIPALIFT Basic | Content

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FOAT adaptor	40

#### FIPALIFT Basic



#### **FIPALIFT Basic**

The FIPALIFT Basic, with a lifting force of up to 55 kg offers a highly modular design at low investment costs.

Its special safety valve also allows the use of load handling devices so that it is also possible to lift loads that do not have a suitable surface for suction attachment, e.g. open storage boxes or beverage crates.

The wide range of factory installed options and accessories are available to configure the system to suit every need:

- > Automatic vacuum shut-off feature. If the system is inactive for an extended period of time, the vacuum supply is interrupted to save energy. An adjustable switch is used in conjunction with the compressor to control its operation
- > Optional stainless steel construction. Partial or complete stainless steel construction is available for use in the food industry or corrosive environments
- > The FIPALIFT Basic is also available with a vacuum generator or ejector supply option. This allows the use of compressed air to generate the vacuum required thru the use of the Venturi principle
- > The Basic unit design allows for easy integration of FIPA End of Arm Tooling components to provide a great range of options and customization capability for our customers
- > Take advantage of our experience in EOAT design and adapt the unit to your individual needs without adding a lot of extra cost









FIPALIFT Basic FIPALIFT

#### **Elongated Controller:**

- > An elongated controller can be fitted as an optional configuration for handling large or awkward goods
- > These are available as fixed versions in lengths from 250 to 850 mm...
- $\gt$  ... and as flexible versions up to a length of 1,400 mm
- > Please see the options on page 38





- > The FIPALIFT Basic also can have an adapter for using the FIPA gripper systems kit to build a custom solution
- > Take advantage of our competence in the field of gripper manufacture and adapt the unit to your need without incurring major expenditure



- > A wide range of vacuum cups, gripper solutions and cross-beams allow the FIPALIFT Basic to be used for an extremely wide range of applications
- > They are available both as accessories or, on request, as fitted options
- > For special requirements that cannot be solved using the standard product range, we can offer special solutions



# **FIPALIFT Basic standard versions**



# **Product description**

- > The standard versions have the standard controller, a lift height of 2.50 m and mounting suspension to an eye
- > We can offer a wide variety of factory-made options in addition to the standards. These can be seen below in the "Factory mounted options"

# **Ordering notes**

- > The required vacuum supply (see page 65), vacuum cups (see page 59) and gripper equipment are not included in the scope of delivery
  > Please take note of the combination table "Lifting tube diameter / Pump combination" it can be used to establish the best combination for the lifting force that you need
- > We would be pleased to help you with the right system design

#### **Technical data**

Item no.	Ø-Lift tube [mm]
SH.BAS.BAC.60	60
SH.BAS.BAC.80	80
SH.BAS.BAC.100	100
SH.BAS.BAC.120	120

# Application example - Sheet metal handling



# **Application example - Shrink-wrapped containers**



# Factory mounted options for FIPALIFT Basic

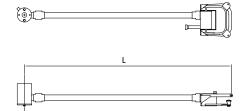
Item no.	Description
SH.OPT.BAC.0010	FIPALIFT BASIC metall parts made of stainless steel
SH.OPT.BAC.0011	FIPALIFT BASIC controllhandle made of stainless steel
SH.OPT.BAC.0012	Lift tube BASIC optional in 3 m
SH.OPT.BAC.0013	Lift tube BASIC optional in 4 m
SH.OPT.BAC.0014	Protection valve BASIC opt.
SH.OPT.BAC.0015	Split control handle
SH.OPT.BAC.0016	Release valve for standard handle opt.
SH.OPT.BAC.0017	Release valve for extended handle opt.
SH.OPT.BAC.0019	Grounded lift unit
SH.OPT.BAC.0020	Automatic turn off vacuum pump
SH.OPT.BAC.0021	Protection regulator

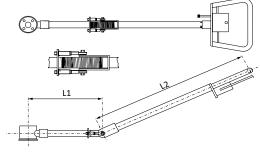
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# FIPALIFT Basic standard versions

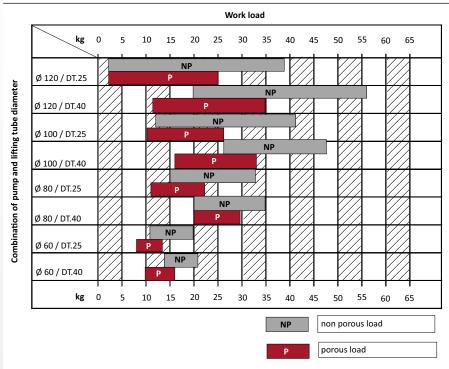
# Factory mounted options for FIPALIFT Basic

ArtNr.	Bezeichnung
SH.OPT.BAC.0022	Rigid extendend control handle 250 mm (L)
SH.OPT.BAC.0023	Rigid extendend control handle 350 mm (L)
SH.OPT.BAC.0024	Rigid extendend control handle 450 mm (L)
SH.OPT.BAC.0025	Rigid extendend control handle 650 mm (L)
SH.OPT.BAC.0026	Rigid extendend control handle 850 mm (L)
SH.OPT.BAC.0027	Flexible extendend control handle 200/300 (L1/L2)
SH.OPT.BAC.0028	Flexible extendend control handle 200/500 (L1/L2)
SH.OPT.BAC.0029	Flexible extendend control handle 200/600 (L1/L2)
SH.OPT.BAC.0030	Flexible extendend control handle 200/700 (L1/L2)
SH.OPT.BAC.0031	Flexible extendend control handle 300/300 (L1/L2)
SH.OPT.BAC.0032	Flexible extendend control handle 300/500 (L1/L2)
SH.OPT.BAC.0033	Flexible extendend control handle 300/600 (L1/L2)
SH.OPT.BAC.0034	Flexible extendend control handle 300/700 (L1/L2)
SH.OPT.BAC.0035	Flexible extendend control handle 400/300 (L1/L2)
SH.OPT.BAC.0036	Flexible extendend control handle 400/500 (L1/L2)
SH.OPT.BAC.0037	Flexible extendend control handle 400/600 (L1/L2)
SH.OPT.BAC.0038	Flexible extendend control handle 400/700 (L1/L2)
SH.OPT.BAC.0039	Flexible extendend control handle 500/300 (L1/L2)
SH.OPT.BAC.0040	Flexible extendend control handle 500/500 (L1/L2)
SH.OPT.BAC.0041	Flexible extendend control handle 500/600 (L1/L2)
SH.OPT.BAC.0042	Flexible extendend control handle 500/700 (L1/L2)
SH.OPT.BAC.0043	Flexible extendend control handle 700/300 (L1/L2)
SH.OPT.BAC.0044	Flexible extendend control handle 700/500 (L1/L2)
SH.OPT.BAC.0045	Flexible extendend control handle 700/600 (L1/L2)
SH.OPT.BAC.0046	Flexible extendend control handle 700/700 (L1/L2)





# Lifting tube diamenter / Pump-combination



The bars in the diagram show the recommended load weights that can be handled by the individual tube lifter / pump combination. The recommendations are based on appropriate lifting speeds. A light load will be lifted faster than a heavy load. A non-porous load (NP), for example a metal sheet, will be lifted faster than a porous load (P), for example a carton.

Do not use tube lifter / pump combinations for loads heavier than recommended.

#### An example of how to use the diagram:

A tube lifter FIPALIFT Basic 120 with a pump DT.25 (tube lifter diameter 120 mm, pump size 25 m³/h) is recommended for lifting non-porous loads in the range 3 kg to 38 kg and for porous loads in the range from 3 kg to 25 kg. The combination with a larger tube lifter and a smaller pump is recommended for softer lifting. The selection is also highly dependent on the consistency of the load to be lifted, lifting trials may be required. Please contact our Technical Sales Department.

Continued on the next page

# **Dimensions** Ø 19 G1 380 240 200

\* = Safety valve

# Suction shells oval - Basic





# **Product description**

- > Suction shells made from sheet metal with sealing foam
- > Suitable for handling bags and shrink-wrapped goods and much more
- > Sealing foam can be easily replaced without the need for tools

#### **Notes**

- > We would be pleased to provide advice on the selection of suitable vacuum cups and to carry out vacuum tests
- > Cups without a safety factor statement must not be used with this lifting tube diameter
- > A safety factor of at least 2.5 is necessary for horizontal handling and at least 4.0 for vertical handling

#### **Technical data**

Item no.	Material	Width [mm]	Length [mm]	Suitable replacement foam
SH.ACC.BAC.0023	Steel	115	185	SH.SPP.BAC.0023 (p.42)
SH.ACC.BAC.0024	Steel	125	245	SH.SPP.BAC.0024 (p.42)
SH.ACC.BAC.0025	Steel	150	290	SH.SPP.BAC.0025 (p.42)

Item no.	Ø 60 mm	Ø 80 mm	Ø 100 mm	Ø 120 mm
SH.ACC.BAC.0023	2.6			
SH.ACC.BAC.0024	9.1	5.1	3.3	
SH.ACC.BAC.0025	13	7.3	4.7	3.3

# FIPALIFT Basic

Replacement foam for suction shells - Basic

# Replacement foam for suction shells - Basic





# **Product description**

- > Easily replaced without the need for tools if worn out
  > Simply pull the foam out of the suction shell and slide in the new one

Item no.	Suitable for	Suitable for suction shell
SH.SPP.BAC.0023	SH.ACC.BAC.0023	Oval 115x185
SH.SPP.BAC.0024	SH.ACC.BAC.0024	Oval 125x245
SH.SPP.BAC.0025	SH.ACC.BAC.0025	Oval 150x290

Suction plates rectangular - Basic



# **Product description**

- > Rectangular suction plates for direct mounting on the controller of the FIPALIFT Basic
- > Suitable for handling cartons, boxes and smaller flat products
- > Steel plate with exchangeable gasket made from natural rubber (NR) black
- > Gasket can be easily replaced without the need for tools

#### **Notes**

- > Cups without a statement of safety factor must not be used with this lifting tube diameter
- > A safety factor of at least 2.5 is necessary for horizontal handling and at least 4.0 for vertical handling

#### **Ordering notes**

> The appropriate replacement gaskets are available as accessories for all types

# **Technical data**

Item no.	Design	Width [mm]	Length [mm]
SH.ACC.BAC.0010	Flat	95	200
SH.ACC.BAC.0011	Flat	150	210

Item no.	Ø 60 mm	Ø 80 mm	Ø 100 mm	Ø 120 mm
SH.ACC.BAC.0010	6.7	3.8		
SH.ACC.BAC.0011	11.1	6.3	4	2.8

# **FIPALIFT Basic**

# Cross beams double rigid - Basic

# Cross beams double rigid - Basic



# **Product description**

- > Small cross-beams each having two rectangular suction plates 95 mm x 200 mm
- > Suitable for handling large cartons, boxes and medium-sized flat goods

#### Notes

- > Cups without a safety factor statement must not be used with this lifting tube diameter > A safety factor of at least 2.5 is necessary for horizontal handling and at least 4.0 for vertical handling

#### **Technical data**

Item no.	Width [mm]	Length [mm]
SH.ACC.BAC.0012	200	200
SH.ACC.BAC.0013	200	250
SH.ACC.BAC.0014	200	370
SH.ACC.BAC.0015	200	620

Item no.	Ø 60 mm	Ø 80 mm	Ø 100 mm	Ø 120 mm
SH.ACC.BAC.0012	13.4	7.6	4.8	3.4
SH.ACC.BAC.0013	13.4	7.6	4.8	3.4
SH.ACC.BAC.0014	13.4	7.6	4.8	3.4
SH.ACC.BAC.0015	13.4	7.6	4.8	3.4



# Vacuum grippers fourfold rigid - Basic



# **Product description**

- > Small cross-beams for use with bellows vacuum cups
- > Suitable for handling large cartons, boxes and medium-sized flat goods
  > Levels minor unevenness of the surfaces

# Notes

- > Cups without a safety factor statement must not be used with this lifting tube diameter
- > A safety factor of at least 2.5 is necessary for horizontal handling and at least 4.0 for vertical handling

#### **Technical data**

Item no.	Suitable for	Width [mm]	Length [mm]
SH.ACC.BAC.0017	Bellow cup Ø 75 mm	190	230
SH.ACC.BAC.0018	Bellow cup Ø 75 mm	235	325
SH.ACC.BAC.0019	Bellow cup Ø 75 mm	185	325
SH.ACC.BAC.0020	Bellow cup Ø 110 mm	280	370
SH.ACC.BAC.0021	Bellow cup Ø 110 mm	330	500

Item no.	Ø 60 mm	Ø 80 mm	Ø 100 mm	Ø 120 mm
SH.ACC.BAC.0017	6.3	3.5		
SH.ACC.BAC.0018	6.3	3.5		
SH.ACC.BAC.0019	6.3	3.5		
SH.ACC.BAC.0020	13.4	7.6	4.8	3.4
SH.ACC.BAC.0021	13.4	7.6	4.8	3.4

# **FIPALIFT Basic**

Vacuum gripper sixfold rigid - Basic

# Vacuum gripper sixfold rigid - Basic



# **Product description**

- > Small cross-beams for use with six bellows vacuum cups Ø 75 mm
   > Suitable for handling large cartons, boxes and medium-sized flat goods
   > Levels minor unevenness of the surfaces

#### Notes

- > Cups without a safety factor statement must not be used with this lifting tube diameter
- > A safety factor of at least 2.5 is necessary for horizontal handling and at least 4.0 for vertical handling

#### **Technical data**

Item no.	Suitable for	Width [mm]	Length [mm]
SH.ACC.BAC.0022	Bellow cup Ø 75 mm	170	260

Item no.	Ø 60 mm	Ø 80 mm	Ø 100 mm	Ø 120 mm
SH.ACC.BAC.0022	9.4	5.3	3.4	

Quick-change systems - Basic



# **Product description**

- > Quick-change system for rapid tool-free replacement of the suction cups and gripper systems on the FIPALIFT Basic
- Operates with a bayonet fitting
   Idealy suited to frequently changing handling tasks and goods

#### **Technical data**

Item no.	Design	Load bearing capability [kg]
SH.ACC.BAC.0026	Upper	100
SH.ACC.BAC.0027	Lower	100

Angle adapter - Basic



# **Product description**

- For tipping the goods to be lifted by 90°
   Helpful for turning plates from a horizontal to a vertical position, for example

#### Notes

> Mounting between controller and gripper / vacuum cup

Item no.	Pivoting range S [°]
SH.ACC.BAC.0028	90

# **FIPALIFT Basic**

Swivel joint - Basic

# Swivel joint - Basic



# **Product description**

- > Joint for stepless rotation of the goods to be lifted by 360°
- > Suitable for repositioning the goods to be lifted , e.g. when loading a machine or palletising cartons

#### **Technical data**

Pivoting range S [°] Item no. SH.ACC.BAC.0029 360

# Release valves - Basic SH.ACC.BAC.0031

# **Product description**

- > Additional valve for rapid lowering of goods to be lifted
- > Particularly suitable for use with large vacuum cups and lighter goods
- Available both for the standard controller and the elongated controller
   The vacuum can also be released via this valve by pushing the control button on the operating element

Item no.	Suitable for
SH.ACC.BAC.0031	Control unit standard
SH.ACC.BAC.0032	Control unit elongated

# **EOAT Adapter - Basic**





#### **Product description**

- For adapting the FIPA End-of-Arm-Tooling kit to the FIPALIFT Basic
   Can be used with FIPA XLine and SLine profil and the corresponding connecting elements
- > Enables the installation of special solutions for goods that deviate from the standard
- > Four G 3/4 connections for vacuum supply to vacuum cups
- > Can also be used on FIPALIFT Smart with Smart-Basic adapter

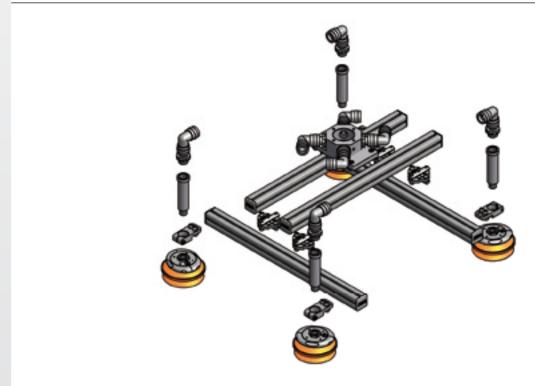
#### **Ordering notes**

> The appropriate EOAT components can be found at www.fipa.com in the End of Arm Tooling section in our End of Arm Tooling catalogue

#### **Technical data**

Item no.	Material	Weight [kg]	Accessories
SH.ACC.BAC.0035	Aluminium anodised	0.351	30.027-G (p.56) 30.123-G (p.56) 30.124-G (p.56)

# Application examples with components from the FIPA gripper systems kit



Additional accessories can be found starting on page 51

# **FIPALIFT Basic**

Notes:

# FIPALIFT Accessories suitable for all models | Content

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# FIPALIFT Accessories suitable for all models | At a glance

# FIPALIFT Accessories for all models





#### Lifting and vacuum tubes

- > Lifting tubes as a replacement or if you need a different length
- > Spiral vacuum tubes for vacuum supply to your FIPALIFT tube lifter
- > See Page 53



#### Plug fittings and tube couplings

- > Plug fittings for individual gripper configuration
- > Tube couplings for rapid tube replacement e.g. when using different pump sizes
- > See Page 56



#### Varioflex® Bellows vacuum cups - two hardness zones in a single cup

- > The cups, with the two Shore A hardness values, 30° at the sealing lip and 60° at the bellows body, have already been tried and tested over a long period in different sizes in the packaging industry
- > The low-wear PUR is particularly well suited for abrasive surfaces, such as cardboard and wood
- > The very soft and smooth sealing lip ensures secure handling, even if there are minor unevenness on the surface
- > See Page 59



#### Vacuum cups

- > A large number of vacuum cups in different shapes, sizes and materials allow flexible deployment on cross-beams, suction spiders or by direct mounting
- > This selection allows perfect adaptation to your needs
- > See Page 60



Lift tubes



# **Product description**

- > Lift tubes suitable for all tube lifter types > For replacement if worn out or if a different lift tube length is required

	6 126 x 1 x 1 x x x x x	Leave to transf
Item no.	Ø-Lift tube [mm]	Length [mm]
SH.SPP.ALL.0010	60	2,500
SH.SPP.ALL.0011	60	3,000
SH.SPP.ALL.0012	60	4,000
SH.SPP.ALL.0013	80	2,500
SH.SPP.ALL.0014	80	3,000
SH.SPP.ALL.0015	80	4,000
SH.SPP.ALL.0016	100	2,500
SH.SPP.ALL.0017	100	3,000
SH.SPP.ALL.0018	100	4,000
SH.SPP.ALL.0019	120	2,500
SH.SPP.ALL.0020	120	3,000
SH.SPP.ALL.0021	120	4,000
SH.SPP.ALL.0022	140	2,500
SH.SPP.ALL.0023	140	3,000
SH.SPP.ALL.0024	140	4,000
SH.SPP.ALL.0025	160	2,500
SH.SPP.ALL.0026	160	3,000
SH.SPP.ALL.0027	160	4,000
SH.SPP.ALL.0028	180	2,500
SH.SPP.ALL.0029	180	3,000
SH.SPP.ALL.0030	180	4,000
SH.SPP.ALL.0031	200	2,500
SH.SPP.ALL.0032	200	3,000
SH.SPP.ALL.0033	200	4,000

Adhesive tape reinforced

# Adhesive tape reinforced



# **Product description**

- > The adhesive tape is required for reinforcing the lifting tube ends when the lifting tubes are shortened > Textile-reinforced adhesive tape, extra tear-resistant
- > Adhesive based on rubber
- > Adhesive force for 25 mm at least 13 N

#### Notes

- > Shelf life 12 months at 20  $^{\circ}\text{C}$  and maximum 50 % air humidity
- > Protect against UV radiation

Item no.	Width [mm]	Length [mm]	Thickness [mm]	Usage temperature [°C]
SH.SPP.ALL.0034	50	50,000	0.18	-10 - 60

Vacuum hoses

Vacuum hoses



# **Product description**

- > Flexible hoses for connecting the vacuum generator and the FIPALIFT > Well-suited to installation in cable carriages with strips

# **Ordering notes**

> Order in metre lengths

Item no.	Suitable for	Outer diameter [mm]	Inner diameter [mm]	Usage temperature [°C]
SH.ACC.ALL.0020	Smart, Basic	31	25	-5
SH.ACC.ALL.0021	Smart, Basic	45	38	-5
SH.ACC.ALL.0022	Expert	58	50	-5

# **Quick connectors**

# **Quick connectors**





# **Product description**

- > Extra large plug fittings for individual gripper configuration > For use with the EOAT adapters on FIPALIFT Expert and Basic
- For easier repositioning of the vacuum supply between the FIPALIFT and the vacuum cups
   Straight and angled versions available

# **Ordering notes**

> Compatible vacuum hose  $\emptyset$  22 mm PVC, reinforced with spiral wires (Item No. 61.164)

Item no.	Design	Pressure range [bar]	For diameter [mm]	Thread	Operating temperature [°C]
30.027-G	Linear	-0.95 - 20	22	G3/4-male	-20 - 80
30.123-G	Angulate	-0.95 - 20	22	G3/4-male	-20 - 80
30.124-G	Angulate	-0.95 - 20	22	G1/2-male	-20 - 80



Hose couplers

# Hose couplers







Coupler plug

# **Product description**

- > For connection to the upper rotary connector on the FIPALIFT Smart and Basic in combination with the pumps DT.25, DT.40 and DT.60
- > For rapid connection or hose replacement
- > Coupler socket with hose sleeves and coupling plug with female thread

#### **Notes**

> The use of the hose coupler also has an effect on the volumetric flow. In limit cases you should use a larger vacuum pump!

#### **Technical data**

Item no.	Description	Connection thread	For hose inner Ø [mm]	Material	Usage temperature [°C]	Weight [kg]
SH.ACC.ALL.0030	Coupler socket	Without	25	Brass blank	-20 - 100	0.667
SH.ACC.ALL.0031	Coupler plug	G1	25	Brass blank	-20 - 100	0.298

# **Application example**



Gaskets for suction plates

# Gaskets for suction plates





# **Product description**

- Replacement for rectangular vacuum plates and cross-beams
   Natural rubber black in 50° Shore A
   Easy replacement without the need for tools

Item no.	Width [mm]	Length [mm]
SH.SPP.ALL.0050	95	300
SH.SPP.ALL.0051	100	435
SH.SPP.ALL.0052	120	315
SH.SPP.ALL.0053	150	210
SH.SPP.ALL.0054	200	290
SH.SPP.ALL.0055	200	315

Varioflex® bellows cups

# Varioflex® bellows cups







# **Product description**

- > Bellows vacuum cup 1.5 folds made from extremely wear-resistant PUR composition material for direct and cross-beam mounting
   > Soft and flexible sealing lip in 30° Shore A (red) for perfect sealing, even in the event of slight surface imperfections
   > Rigid body made from 60° Shore A PUR (black) to provide a long service life

- > The bellows compensates for height differences and the support ribs stabilise the product

# **Ordering notes**

> Scope of supply includes the fixing materials

Item no.	Diameter [mm]	   Material	Connection [G]
SH.CUP.23.160.16	160	Varioflex® 60°/30° (sw/r)	7x M4
SH.CUP.23.115.16	115	Varioflex® 60°/30° (sw/r)	7x M4
SH.CUP.23.075.16	75	Varioflex® 60°/30° (sw/r)	G1/2



Bellows vacuum cups 1,5 folds - SP-B1

# Bellows vacuum cups 1,5 folds - SP-B1



# **Product description**

- > These bellows vacuum cups compensate for unevenness, angular offset and height differences on the product surface
- > The handling product is lifted by switching the vacuum on, it is pulled against the support ribs inside the cup and held in this position

#### **Ordering notes**

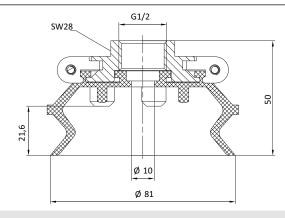
The following material variants for the sealing lips are available:

- > Chloroprene (CR) is a cost-effective material for universal applications
- > Silicone (SI) is characterised particularly by very good flexibility and high temperature resistance (max. 200 °C). Special FDA versions are available for direct contact with food products on request
- > The Tepuflex® polyurethane mixture offers increased abrasion resistance and thus a longer service life

#### **Technical data**

Item no.	Model / Lip dimensions	Connection thread		Number of folds	Material / Colour
22.078.169.17	SP-B1-75	G1/2-female	22	1.5	Tepuflex® (or)
22.078.169.2	SP-B1-75	G1/2-female	22	1.5	SI (tr)
22.078.169.9	SP-B1-75	G1/2-female	22	1.5	CR (sw)
22.117.167.17	SP-B1-110	G1/2-female	29	1.5	Tepuflex® (or)
22.117.167.2	SP-B1-110	G1/2-female	29	1.5	SI (tr)
22.117.167.9	SP-B1-110	G1/2-female	29	1.5	CR (sw)
22.160.165.17	SP-B1-150	G1/2-female	41	1.5	Tepuflex® (or)
22.160.165.2	SP-B1-150	G1/2-female	41	1.5	SI (tr)
22.160.165.9	SP-B1-150	G1/2-female	41	1.5	CR (sw)

#### **Dimensions**





Bellows vacuum cups 1,5 folds - SP-B1

Item no.	<b>Ø D</b> [mm]	Ø d2 [mm]	G1	H [mm]	<b>h3</b> [mm]	SW
22.078.169.17	81	10	G1/2	50	21.6	28
22.078.169.2	81	10	G1/2	50	21.6	28
22.078.169.9	81	10	G1/2	50	21.6	28
22.117.167.17	117	25	G1/2	66	28	30
22.117.167.2	117	25	G1/2	66	28	30
22.117.167.9	117	25	G1/2	66	28	30
22.160.165.17	160	24	G1/2	81.5	42	38
22.160.165.2	160	24	G1/2	81.5	42	38
22.160.165.9	160	24	G1/2	81.5	42	38

FiPA

Flat vacuum cups with fixed fitting - SP-FA

# Flat vacuum cups with fixed fitting - SP-FA



#### **Product description**

- > These flat vacuum cups are particularly suitable for flat product surfaces, such as wood panels, glass, sheet metal or cardboard
- > The support ribs stabilise the connection between the vacuum cup and the product and largely prevent any deformation of the product caused during the vacuum connection process
- > They increase the friction and can thus accommodate greater lateral forces

#### **Ordering notes**

The following material variants for the sealing lips are available:

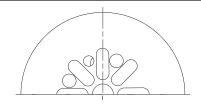
- > Chloroprene (CR) is a cost-effective material for universal applications
- > Silicone (SI) is characterised particularly by very good flexibility and high temperature resistance (max. 200 °C). Special FDA versions are available for direct contact with food products on request
- > The Tepuflex® polyurethane mixture offers increased abrasion resistance and thus a longer service life

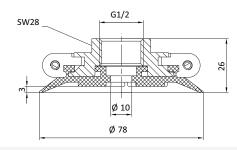
Item no.	Model / Lip dimensions	Connection thread		Material / Colour
152.078.139.17	SP-FA-75	G1/2-female	3	Tepuflex® (or)
152.078.139.2	SP-FA-75	G1/2-female	3	SI (tr)
152.078.139.9	SP-FA-75	G1/2-female	3	CR (sw)
152.113.137.17	SP-FA-110	G1/2-female	5	Tepuflex® (or)
152.113.137.2	SP-FA-110	G1/2-female	5	SI (tr)
152.113.137.9	SP-FA-110	G1/2-female	5	CR (sw)
152.155.135.17	SP-FA-150	G1/2-female	5	Tepuflex® (or)
152.155.135.2	SP-FA-150	G1/2-female	5	SI (tr)
152.155.135.9	SP-FA-150	G1/2-female	5	CR (sw)



Flat vacuum cups with fixed fitting - SP-FA

#### **Dimensions**





	<b>d</b> D []	di da [aaaa]	61	11 []	h2 []	CW
Item no.	Ø <b>D</b> [mm]	Ø d4 [mm]	G1	H [mm]	<b>h3</b> [mm]	SW
152.078.139.17	78	10	G1/2	26	3	28
152.078.139.2	78	10	G1/2	26	3	28
152.078.139.9	78	10	G1/2	26	3	28
152.113.137.17	113	25	G1/2	35	5	30
152.113.137.2	113	25	G1/2	35	5	30
152.113.137.9	113	25	G1/2	35	5	30
152.155.135.17	155	25	G1/2	38	5	38
152.155.135.2	155	25	G1/2	38	5	38
152.155.135.9	155	25	G1/2	38	5	38

Bellows cups Ø 160 for direct mounting

# Bellows cups Ø 160 for direct mounting



Chloroprene



Silicone

# **Product description**

- > Bellows vacuum cups for direct mounting on the FIPALIFT Smart
- Silicone (SI) is characterised particularly by very good flexibility and high temperature resistance (max. 200 °C)
   The silicone vacuum cup complies with the requirements of Directive EU1935 / FDA and is suitable for direct contact with food products
- > Chloroprene (CR) is a cost-effective material for universal applications
- > Bellows vacuum cups compensate for unevenness, angular offset and differing heights on the product surface

# **Ordering notes**

> Scope of supply includes the fixing materials

#### **Technical data**

Item no.	Diameter [mm]	Material
SH.CUP.23.160.2-LE	160	Silicon
SH.CUP.23.160.9	160	Chloroprene

# View of suction surface

> Chloroprene



> Silicone



# FIPALIFT Vacuum supply | Content

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# FIPALIFT Vacuum supply | At a glance

# **FIPALIFT Vacuum supply**





# Rotary vane vacuum pumps - oil-free

- > Recomendet for FIPALIFT Smart and Basic
- > Suitable for load change and continuous use
- > Very low maintenance
- > See Page 68



# Side channel blowers with reduction

- > Recomended for FIPALIFT Expert
- > High volume flow at low motor power
- > Very low maintenance
- > See Page 71



# **Silencing boxes**

- > Reduces noise caused by the vacuum pump
- > See Page 74

# Filter units and cartridges

- > Reliable protection of the vacuum supply from dust and other contaminants
- > Available in various versions and sizes
- > Suitable filter inserts
- > See Page 75









# **Radio controls**

- > For switching the vacuum pumps on and off from a remote location
- > Your FIPALIFT tube lifter is available as soon as you need it
- > Saves energy and reduces vacuum pump wear
- > See Page 76



Rotary vane vacuum pumps - oil-free

# Rotary vane vacuum pumps - oil-free

Handling in dry areas



# **Product description**

- > High reliability and low maintenance costs due to simple design
- > Universal application: Continuous operation at different vacuum levels > Cooling with powerful fan at the rear of the motor
- > Compact design and low weight

# **Ordering notes**

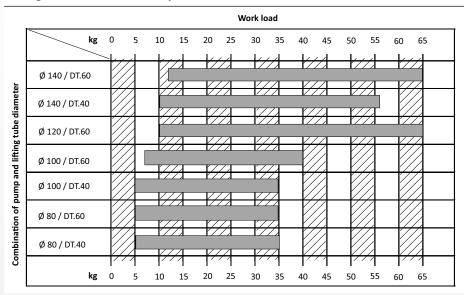
- > Available in single-phase and three-phase designs (Index -1 or -3)
- Included in scope of delivery:Safety filter on suction side

  - Silencer on pressure side
- > Electric cables not included

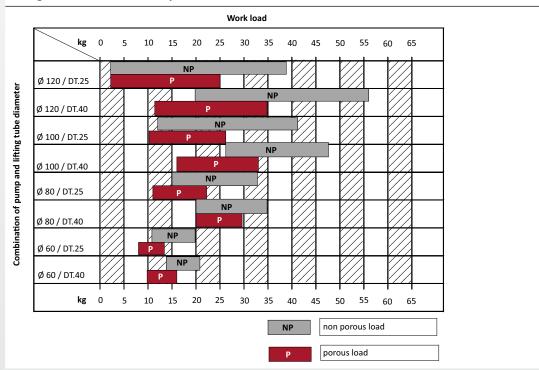
Technical data						
Item no.	DT.25B-1	DT.25B-3	DT.40B-1	DT.40B-3	DT.60C-3	
Suction power at 50 Hz [m <sup>3</sup> /h]	25	25	40	40	60	
Suction power at 60 Hz [m <sup>3</sup> /h]	29	29	46	46	70	
Final vacuum [%]	88	88	88	88	88	
Power supply at 50 (60) Hz [V]	220 - 240	Delta: 220-255 (220-266) Star: 380-440 (380-460)	220 - 240	Delta: 220-255 (220-266) Star: 380-440 (380-460)	Delta: 230 (265) Star: 400 (460)	
Current consumption at 50 (60) Hz [A]	5.8 (6.2)	Delta: 3.8-4.2 (4.4-4.2) Star: 2.2-2.4 (2.5-2.4)	9.8 (9)	Delta: 7 (7.1-7) Star: 4 (4.1-4.0)	Delta: 5.91 (5.6) Star: 3.4 (3.23)	
Rated power at 50 Hz [kW]	0.75	0.75	1.5	1.5	1.5	
Rated power at 60 Hz [kW]	0.9	0.9	1.8	1.8	1.8	
Noise level at 50 Hz [dB(A)]	65	65	68	68	70	
Noise level at 60 Hz [dB(A)]	67	67	70	70	72	
Operating temperature at 50 Hz [°C]	65 - 70	65 - 70	75 - 80	75 - 80	70 - 73	
Operating temperature at 60 Hz [°C]	70 - 75	70 - 75	80 - 85	80 - 85	72 - 75	
Weight [kg]	29	28.5	40	37.5	66	
Accessories	Spare part kit KIT-DT.25B* Vacuum regulator 73.003 Pre-filter FC 25F		Spare part kit Vacuum regula Pre-filter FC 30	ator 73.003	Spare part kit KIT-DT.60C Silencer 72.003 Pre-filter FC 30F	

Rotary vane vacuum pumps - oil-free

# Lifting tube diamenter / Pump-combination for FIPALIFT Smart



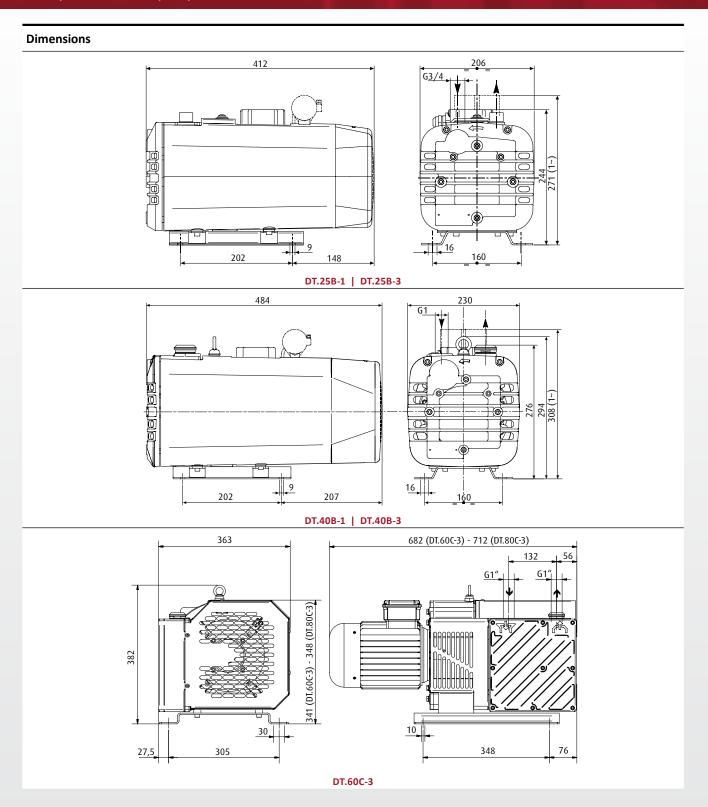
# Lifting tube diamenter / Pump-combination for FIPALIFT Basic



Continued on the next page



Rotary vane vacuum pumps - oil-free



#### Side channel blowers



#### **Product description**

- > Compressor housing with separate motor with reduction via belt drive
- > Generates high volume flow at low motor power
- > For use with the FIPALIFT Expert
- > High volume flow at medium vacuum level

#### **Notes**

> Please note: Side channel blowers are not suitable for continuous operation at end vacuum levels

#### **Ordering notes**

- > Please consult the combination table tube lifter with side channel blowers
- > The ratio between these two combinations influences the lifting force and the sensitivity of the system
- > If you need help in designing the system, please contact FIPA we would be pleased to advise you

#### **Technical data**

Item no.	Suction power [m³/h]	Power supply [V]	Operating frequency [Hz]	Rated power [kW]	Radial power system
SKV.85-1.9-C-3-RT50.220D	85	200 - 220	50	1.9	Delta
SKV.85-1.9-C-3-RT50.240D	85	220 - 240	50	1.9	Delta
SKV.85-1.9-C-3-RT50.420Y	85	380 - 420	50	1.9	Star
SKV.85-1.9-C-3-RT60.220D	85	200 - 220	60	1.9	Delta
SKV.85-1.9-C-3-RT60.275D	85	255 - 275	60	1.9	Delta
SKV.85-1.9-C-3-RT60.480Y	85	440 - 480	60	1.9	Star
SKV.85-1.9-C-3-RT60.380Y	85	380	60	1.9	Star
SKV.120-2.5-C-3-RT50.220D	120	200 - 220	50	2.5	Delta
SKV.120-2.5-C-3-RT50.240D	120	220 - 240	50	2.5	Delta
SKV.120-2.5-C-3-RT50.420Y	120	380 - 420	50	2.5	Star
SKV.120-2.5-C-3-RT60.220D	120	200 - 220	60	2.5	Delta
SKV.120-2.5-C-3-RT60.275D	120	255 - 275	60	2.5	Delta
SKV.120-2.5-C-3-RT60.480Y	120	440 - 480	60	2.5	Star
SKV.120-2.5-C-3-RT60.380Y	120	380	60	2.5	Star
SKV.170-4.6-C-3-RT50.220D	170	200 - 220	50	4.6	Delta
SKV.170-4.6-C-3-RT50.240D	120	220 - 240	50	4.6	Delta
SKV.170-4.6-C-3-RT50.420Y	170	380 - 420	50	4.6	Star

Continued on the next page



# **FIPALIFT Vacuum supply**

Side channel blowers

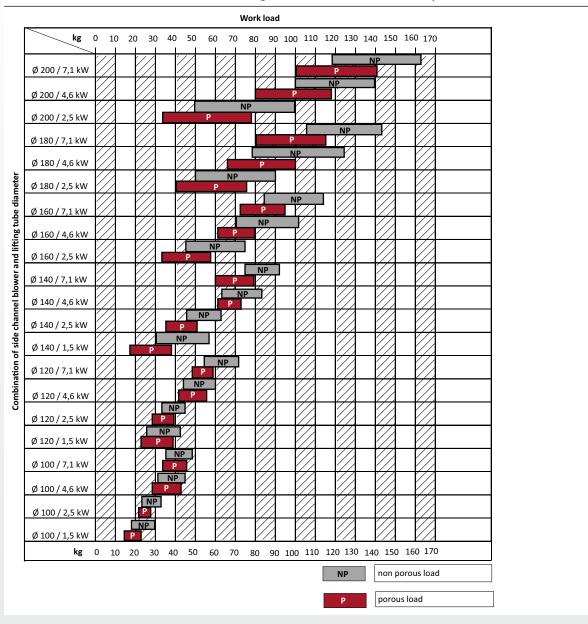
## **Technical data**

Item no.	Suction power [m³/h]	Power supply [V]	Operating frequency [Hz]	Rated power [kW]	Radial power system
SKV.170-4.6-C-3-RT60.220D	170	200 - 220	60	4.6	Delta
SKV.170-4.6-C-3-RT60.275D	170	255 - 275	60	4.6	Delta
SKV.170-4.6-C-3-RT60.480Y	170	440 - 480	60	4.6	Star
SKV.170-4.6-C-3-RT60.380Y	170	380	60	4.6	Star
SKV.250-7.1-C-3-RT50.220D	250	200 - 220	50	7.1	Delta
SKV.250-7.1-C-3-RT50.240D	250	220 - 240	50	7.1	Delta
SKV.250-7.1-C-3-RT50.420Y	250	380 - 420	50	7.1	Star
SKV.250-7.1-C-3-RT60.220D	250	200 - 220	60	7.1	Delta
SKV.250-7.1-C-3-RT60.275D	250	255 - 275	60	7.1	Delta
SKV.250-7.1-C-3-RT60.480Y	250	440 - 480	60	7.1	Star
SKV.250-7.1-C-3-RT60.380Y	250	380	60	7.1	Star

# **Application example**



### Combination of side channel blower and lifting tube diameter for FIPALIFT Expert



# FIPALIFT Vacuum supply

Silencing boxes

## Silencing boxes



#### **Product description**

> Reduces the noise level generated by the side channel blowers and thus provides a more pleasant working environment

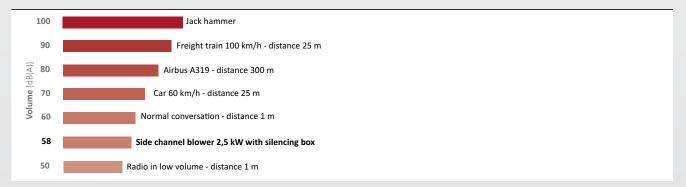
#### **Notes**

- > Example reading: Side channel blowers 2.5 kW with silencer box 58 dB/A, without silencer box 70 dB/A
- > Comparison values: Vacuum cleaner at 1 m distance 70 dB/A, normal speech at 1 m distance 60 dB/A
- > Continuous noise pollution can lead to hearing damage; we can help you minimise the noise pollution for your employees, and we would be pleased to provide advice

#### **Ordering notes**

- > Available for all vacuum pumps and side channel compressors that fit the FIPALIFT
- > Available partially with electric fans

Item no.	Design	Suitable for
SH.ACC.EXP.0082	Without fan	SKV 1.9 kW
SH.ACC.EXP.0083	With fan	SKV 1.9 kW
SH.ACC.EXP.0084	Without fan	SKV 2.5 kW
SH.ACC.EXP.0085	With fan	SKV 2.5 kW
SH.ACC.EXP.0086	Without fan	SKV 4.6 kW
SH.ACC.EXP.0087	With fan	SKV 4.6 kW
SH.ACC.EXP.0088	Without fan	SKV 7.1 kW
SH.ACC.EXP.0089	With fan	SKV 7.1 kW
SH.ACC.ALL.0010	Without fan	DT.25, DT.40
SH.ACC.ALL.0011	Without fan	DT.60



#### Filter units





#### **Product description**

- > Protection of your vacuum supply from dust and other contaminants
- > Available in two sizes

#### **Notes**

> In order to ensure safe operation of the vacuum supply, a filter between the tube lifter and the vacuum supply is required!

#### **Technical data**

Item no.	Design	Pipe connection [mm]	Material
SH.ACC.EXP.0072	Small	50	Steel
SH.ACC.EXP.0072.VA	Small	50	Stainless steel
SH.ACC.SMA.0020	Small	25	Steel
SH.ACC.EXP.0074	Big	50	Steel

# Filter cartridges





#### **Product description**

- > Replacement or reserve filter inserts for filter units
- Filter cartridges for standard and large filter units
   Filter bag for large filter unit

Item no.	Design	Suitable for
SH.ACC.EXP.0073	Filter cartridge	Filter unit standard
SH.ACC.EXP.0075	Filter bag	Filter unit big
SH.ACC.EXP.0076	Filter cartridge	Filter unit big

# **FIPALIFT Vacuum supply**

#### Radio controls



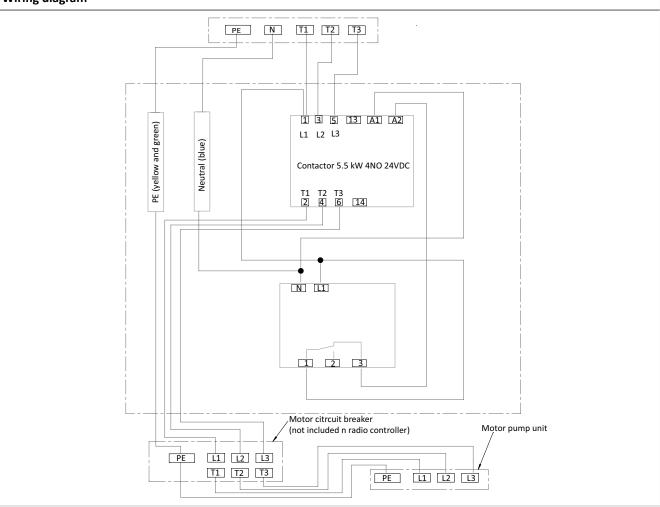
#### **Product description**

- > For switching the vacuum pumps on and off from a remote location
- > Avoids unnecessary pump running time and thus saves energy, minimises pump wear and noise pollution

#### **Technical data**

Item no.	Effective range [m]	Suitable for
SH.ACC.EXP.0077	100	to 1,5 kW
SH.ACC.EXP.0078	100	to 7,5 kW

#### Wiring diagram



# Chain hoists | Content

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# **Chain hoists**

## **FIPA Chain hoists**





#### **Electric chain hoists**

Electric chain hoists are lifting units which use round steel chains as the carrying equipment. They are used for lifting and lowering of freely moving loads.

The advantages of chain hoists are their positioning accuracy and continuous maintenance of height, which is particularly significant for assembly work.



#### Chain hoists





#### **Product description**

- > Electric chain hoists with appropriate connection to the carriages on FIPA crane systems
- > High degree of positioning accuracy
- > For applications where an elevation needs to be maintained continuously
- > With two lifting speeds, main lift and fine lift
- > Low noise level and long service life as a result of carburised gears running in oil-bath lubrication
- > IP 65 and 42V control switch
- > Motor in protection rating IP 55, connection for flat cable
- > Adjustable slipping clutch to protect against overload
- > Electromagnetic spring brake to stop the load, also in the event of a power failure

#### **Notes**

> Not approved for passenger transport!

#### **Ordering notes**

- Chain store included in scope of delivery
   Optional metre-length stroke extension for the load chain and the control cable available
- > Stroke extension for chain hoist 250 kg (Item no. CH.03.0010-250)
- > Stroke extension for chain hoist 500 kg (Item no. CH.03.0010-500)
- > Remote control, stainless steel chain and synchronisation control available on request

Item no.	CH.01.250.3.1	CH.01.500.3.1
Load bearing capability [kg]	250	500
Number of chain strands	1	2
Speed one [m/min]	8	4
Speed two [m/min]	2	1
Group of mechanism [°]	1Am / M4	1Am / M4
Lifting heigth [m]	3	3
Duty ratio [%]	33 - 17	33 - 17
Rated power [kW]	0.37 - 0.09	0.37 - 0.09
Weight [kg]	19	19

# **Crane systems design - Overview**

#### **FIPA Crane Systems**



#### **Monorails and twin-tracks**

The monorail and twin-tracks represent a simple and cost-effective method of linear transport of material from A to B in crane technology. The investment for this crane is comparatively low.



#### Single carrier crane and single carrier bridge crane

These cranes are a combination of twin-track and one or more crane bridges. The lifting equipment, e.g. our FIPALIFT tube lifter, is suspended from the crane bridge. This crane system offers optimal surface coverage. If we combine the crane bridge with a jacking module we can gain extra headroom. This is a particular advantage for low headroom conditions. This construction is also available as a twin carrier bridge crane.



#### Bridge crane with telescopic bridge

The telescopic bridge means that you can access areas that are otherwise inaccessible. This is of particular importance if your production facility has many columns or recesses.

The automatic telescopic bridge retraction prevents collisions and thus provides the necessary safety for your overhead crane.



#### **Gantry crane**

This type of crane installation is used where no suitable overhead structure is available for fixing the rail systems.

It consists of a steelw frame from which the rail system is suspended. \\

We offer extendable standard solutions with a grid dimension of 6 m by 6 m and special dimensions matched to your requirements.



## **Swing crane**

Available as a wall-mounted swing crane and a pillar-mounted swing crane. The swing crane is the simplest method if the lifting procedure is in a restricted area. One advantage is rapid and uncomplicated installation with low investment costs.

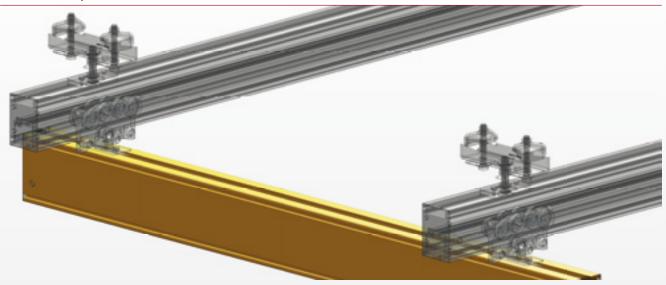
The modularity of our products guarantee rapid quotation generation and rapid realisation of the crane projects.

# **Crane profiles** | Content

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Notes:

# **FIPA Crane profiles**





### Easy running aluminium crane profiles

- > Manufactured in a continuous extrusion process
- > For the design of crane tracks and crane bridges
- > High-quality colourless anodised finish E6 EV1
- > See Page 84



#### **Curved segments**

- > For the design of curved monorails
- > If you need to "go round the corner"
- > See Page 94



#### **Reinforcement profiles**

- > For example to increase the span of crane bridges
- > See Page 95



#### **Service stations**

- > For simple replacement of the traverse units
- > Facilitates convenient maintenance without great expense
- > See Page 96

# Aluminium crane profiles XS



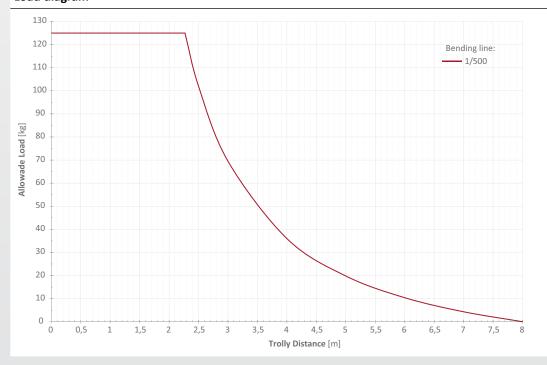
#### **Product description**

- $\,>\,$  For modular design of an overhead crane system up to max. 125 kg capacity  $\,>\,$  Smooth running for ergonomic operation
- > Very light and robust
- Suitable for direct roof mounting, also in combination with carrier systems
   Made from EN AW 6063 T66 natural aluminium

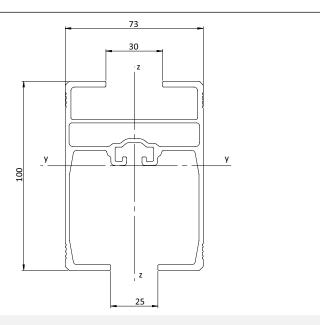
#### **Technical data**

Item no.	Length [mm]	Moment of resistance [Wy/Wz]	Weight [kg]
KT01.XS.1000	1,000	25 cm <sup>3</sup> / 20 cm <sup>3</sup>	3
KT01.XS.2000	2,000	25 cm <sup>3</sup> / 20 cm <sup>3</sup>	6
KT01.XS.3000	3,000	25 cm <sup>3</sup> / 20 cm <sup>3</sup>	9
KT01.XS.4000	4,000	25 cm <sup>3</sup> / 20 cm <sup>3</sup>	12
KT01.XS.5000	5,000	25 cm <sup>3</sup> / 20 cm <sup>3</sup>	15
KT01.XS.6000	6,000	25 cm <sup>3</sup> / 20 cm <sup>3</sup>	18
KT01.XS.7000	7,000	25 cm <sup>3</sup> / 20 cm <sup>3</sup>	21
KT01.XS.8000	8,000	25 cm <sup>3</sup> / 20 cm <sup>3</sup>	24

#### Load diagram



## **Dimensions**



Item no.	Width [mm]	Height [mm]
KT01.XS.1000	73	100
KT01.XS.2000	73	100
KT01.XS.3000	73	100
KT01.XS.4000	73	100
KT01.XS.5000	73	100
KT01.XS.6000	73	100
KT01.XS.7000	73	100
KT01.XS.8000	73	100

# Aluminium crane profiles S



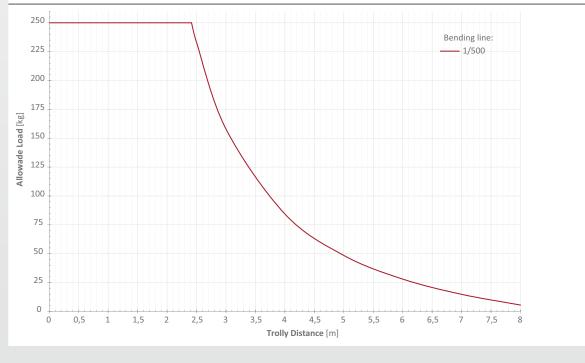
#### **Product description**

- > For modular design of an overhead crane system up to max. 250 kg capacity > Smooth running for ergonomic operation
- > Very light and robust
- > Suitable for direct roof mounting, also in combination with carrier systems
- Lateral grooves for fixing optional accessories
   Made from EN AW 6063 T66 natural aluminium

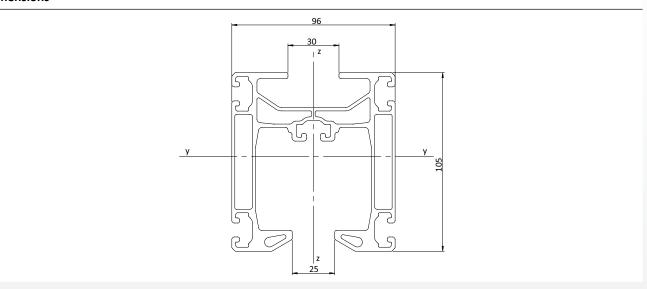
#### **Technical data**

Item no.	Length [mm]	Moment of resistance [Wy/Wz]	Weight [kg]
KT01.S.1000	1,000	46 cm <sup>3</sup> / 49 cm <sup>3</sup>	5.3
KT01.S.2000	2,000	46 cm <sup>3</sup> / 49 cm <sup>3</sup>	10.6
KT01.S.3000	3,000	46 cm <sup>3</sup> / 49 cm <sup>3</sup>	15.9
KT01.S.4000	4,000	46 cm <sup>3</sup> / 49 cm <sup>3</sup>	21.2
KT01.S.5000	5,000	46 cm <sup>3</sup> / 49 cm <sup>3</sup>	26.5
KT01.S.6000	6,000	46 cm <sup>3</sup> / 49 cm <sup>3</sup>	31.8
KT01.S.7000	7,000	46 cm <sup>3</sup> / 49 cm <sup>3</sup>	37.1
KT01.S.8000	8,000	46 cm <sup>3</sup> / 49 cm <sup>3</sup>	42.4

#### Load diagram



## **Dimensions**



Item no.	Width [mm]	Height [mm]
KT01.S.1000	96	105
KT01.S.2000	96	105
KT01.S.3000	96	105
KT01.S.4000	96	105
KT01.S.5000	96	105
KT01.S.6000	96	105
KT01.S.7000	96	105
KT01.S.8000	96	105

# Aluminium crane profiles M



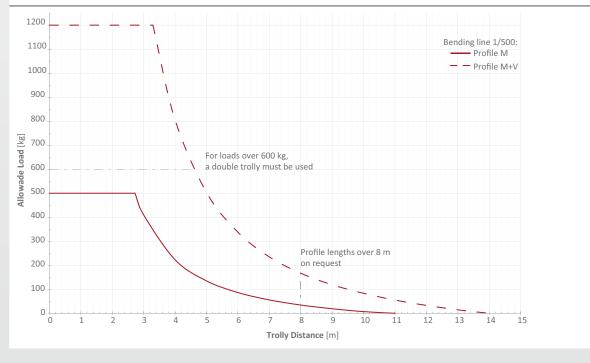
#### **Product description**

- > For modular design of an overhead crane system up to max. 500 kg capacity > Smooth running for ergonomic operation
- > Very light and robust
- > Suitable for direct roof mounting, also in combination with carrier systems
- Lateral grooves for fixing optional accessories
   Made from EN AW 6063 T66 natural aluminium

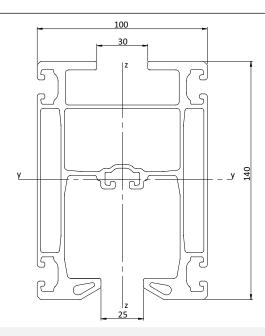
#### **Technical data**

Item no.	Length [mm]	Moment of resistance [Wy/Wz]	Weight [kg]
KT01.M.1000	1,000	90 cm <sup>3</sup> / 70 cm <sup>3</sup>	7.3
KT01.M.2000	2,000	90 cm <sup>3</sup> / 70 cm <sup>3</sup>	14.6
KT01.M.3000	3,000	90 cm <sup>3</sup> / 70 cm <sup>3</sup>	21.9
KT01.M.4000	4,000	90 cm <sup>3</sup> / 70 cm <sup>3</sup>	29.2
KT01.M.5000	5,000	90 cm <sup>3</sup> / 70 cm <sup>3</sup>	36.5
KT01.M.6000	6,000	90 cm <sup>3</sup> / 70 cm <sup>3</sup>	43.8
KT01.M.7000	7,000	90 cm <sup>3</sup> / 70 cm <sup>3</sup>	51.1
KT01.M.8000	8,000	90 cm <sup>3</sup> / 70 cm <sup>3</sup>	58.4

#### Load diagram



## **Dimensions**



Item no.	Width [mm]	Height [mm]
KT01.M.1000	100	140
KT01.M.2000	100	140
KT01.M.3000	100	140
KT01.M.4000	100	140
KT01.M.5000	100	140
KT01.M.6000	100	140
KT01.M.7000	100	140
KT01.M.8000	100	140

# Aluminium crane profiles L

# Aluminium crane profiles L



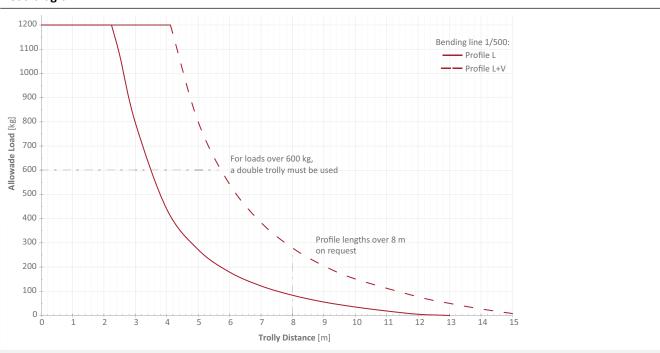
#### **Product description**

- > For modular design of an overhead crane system up to max. 750 kg capacity
   > Smooth running for ergonomic operation
   > Very light and robust

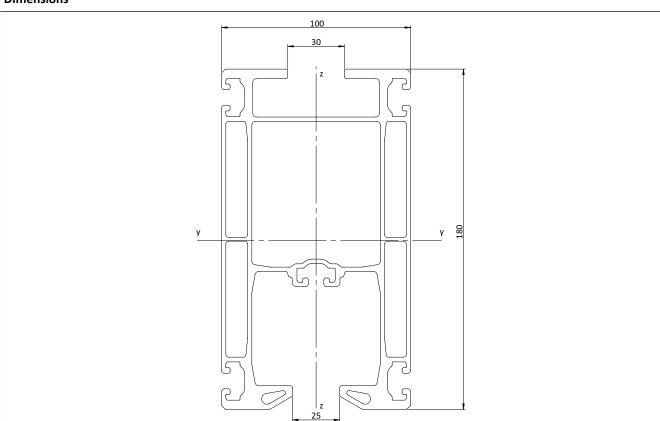
- Suitable for direct roof mounting, also in combination with carrier systems
   Lateral grooves for fixing optional accessories
   Made from EN AW 6063 T66 natural aluminium

Technical data				Dimensions	
Item no.	Length [mm]	Moment of resistance [Wy/Wz]	Weight [kg]	Width [mm]	Height [mm]
KT01.L.1000	1,000	133 cm <sup>3</sup> / 88 cm <sup>3</sup>	8.7	100	180
KT01.L.2000	2,000	133 cm <sup>3</sup> / 88 cm <sup>3</sup>	17.4	100	180
KT01.L.3000	3,000	133 cm <sup>3</sup> / 88 cm <sup>3</sup>	26.1	100	180
KT01.L.4000	4,000	133 cm <sup>3</sup> / 88 cm <sup>3</sup>	34.8	100	180
KT01.L.5000	5,000	133 cm <sup>3</sup> / 88 cm <sup>3</sup>	43.5	100	180
KT01.L.6000	6,000	133 cm <sup>3</sup> / 88 cm <sup>3</sup>	52.2	100	180
KT01.L.7000	7,000	133 cm <sup>3</sup> / 88 cm <sup>3</sup>	60.9	100	180
KT01.L.8000	8,000	133 cm <sup>3</sup> / 88 cm <sup>3</sup>	69.6	100	180
KT01.L.9000	9,000	133 cm <sup>3</sup> / 88 cm <sup>3</sup>	78.3	100	180
KT01.L.10000	10,000	133 cm <sup>3</sup> / 88 cm <sup>3</sup>	87	100	180
KT01.L.11000	11,000	133 cm <sup>3</sup> / 88 cm <sup>3</sup>	95.7	100	180
KT01.L.12000	12,000	133 cm <sup>3</sup> / 88 cm <sup>3</sup>	104.4	100	180
KT01.L.13000	13,000	133 cm <sup>3</sup> / 88 cm <sup>3</sup>	113.1	100	180
KT01.L.14000	14,000	133 cm <sup>3</sup> / 88 cm <sup>3</sup>	121.8	100	180

## Load diagram



#### **Dimensions**



Aluminium crane profiles XL

# Aluminium crane profiles XL

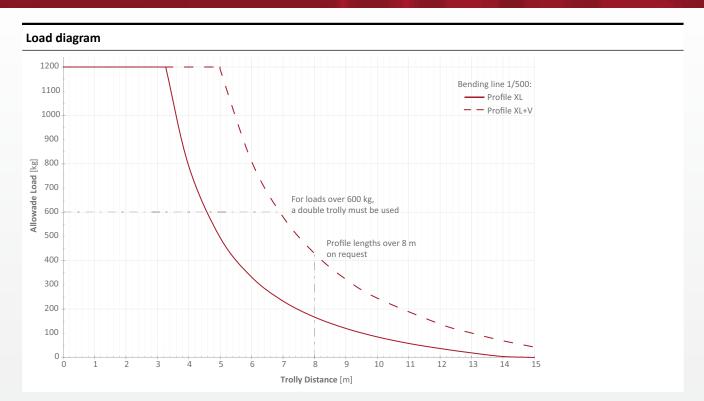


#### **Product description**

- > For modular design of an overhead crane system up to max. 1,200 kg capacity
   > Smooth running for ergonomic operation
   > Very light and robust

- Suitable for direct roof mounting, also in combination with carrier systems
   Lateral grooves for fixing optional accessories
   Made from EN AW 6063 T66 natural aluminium

Technical data				Dimensions	
Item no.	Length [mm]	Moment of resistance [Wy/Wz]	Weight [kg]	Width [mm]	Height [mm]
KT01.XL.1000	1,000	197 cm <sup>3</sup> / 104 cm <sup>3</sup>	10	100	220
KT01.XL.2000	2,000	197 cm <sup>3</sup> / 104 cm <sup>3</sup>	20	100	220
KT01.XL.3000	3,000	197 cm <sup>3</sup> / 104 cm <sup>3</sup>	30	100	220
KT01.XL.4000	4,000	197 cm <sup>3</sup> / 104 cm <sup>3</sup>	40	100	220
KT01.XL.5000	5,000	197 cm <sup>3</sup> / 104 cm <sup>3</sup>	50	100	220
KT01.XL.6000	6,000	197 cm <sup>3</sup> / 104 cm <sup>3</sup>	60	100	220
KT01.XL.7000	7,000	197 cm <sup>3</sup> / 104 cm <sup>3</sup>	70	100	220
KT01.XL.8000	8,000	197 cm <sup>3</sup> / 104 cm <sup>3</sup>	80	100	220



# Dimensions 100 y y 88 88 88

**Curved segments** 

# **Curved segments**



## **Product description**

- > Corresponds to the profile geometries of smooth-running crane profiles > Available for the profile sizes XS to XL

- > For use in single carrier tracks
  > Straight run-out at the ends of the profiles for mounting the joint transitions
  > Made from EN AW 6063 T66 natural aluminium

#### Notes

> Curved segments cannot be reinforced!

## **Ordering notes**

> Radii larger than 2 m upon request

Technical data		Dimensions	
ltem no.	Suitable for	Weight [kg]	Radius [mm]
KT01.020	XS	9.6	2,000
KT01.021	S	16	2,000
KT01.022	M	22.4	2,000
KT01.023	L	27.2	2,000
KT01.024	XL	32	2,000

# Reinforcement profiles

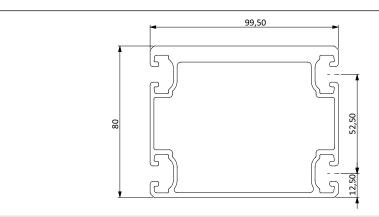


## **Product description**

- To increase the span width and suspension spacings
   Reduction in deflection of the crane profile
   Available for the profile sizes S to XL
   Made from EN AW 6063 T66 natural aluminium

Technical data				Dimensions	
Item no.	Suitable for	Length [mm]	Weight [kg]	<b>Width</b> [mm]	Height [mm]
KT01.VST.1000	S/M/L/XL	1,000	4	99.5	80
KT01.VST.2000	S/M/L/XL	2,000	8	99.5	80
KT01.VST.3000	S/M/L/XL	3,000	12	99.5	80
KT01.VST.4000	S/M/L/XL	4,000	16	99.5	80
KT01.VST.5000	S/M/L/XL	5,000	20	99.5	80
KT01.VST.6000	S/M/L/XL	6,000	24	99.5	80
KT01.VST.7000	S/M/L/XL	7,000	28	99.5	80
KT01.VST.8000	S/M/L/XL	8,000	32	99.5	80

#### **Dimensions**



# Service stations



## **Product description**

- > For easy lifting in and out of the carriages
   > Quick and easy to open
   > Suitable for using several carriages on one crane rail
   > Available for sizes S to XL

Item no.	Suitable for	Length [mm]	Weight [kg]
KT01.030	S	700	7.3
KT01.031	M	700	9.3
KT01.032	L	700	10.9
KT01.033	XL	700	12.4



# **Suspensions** | Content

Crane suspensions at a glance	98
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Rigid suspensions	10
Rigid suspensions short	102
Inclined cucroncions	10:

## FIPA Suspensions for crane rails





#### **Pendular suspensions**

- > The most frequently used type of suspension, due to smooth operation
- > The pendular suspension accommodates lateral forces and oscillations
- > We offer standard solutions for carrier clamping and for installation on concrete
- > See Page 100



#### **Rigid suspensions**

- > For use with lateral mounting parts and with vertical load applications, such as the telescopic crane system
- > See Page 101



#### **Rigid suspensions short**

- > For use if the crane track is particularly high and needs to be suspended close to the roof
- > See Page 102



#### **Inclined suspension**

- > If there are large distances between the bottom and the top construction
- > Other applications for top constructions at an angle of more than 8°
- > See Page 103

# FIPA Suspensions for crane rails

#### **Special suspensions**

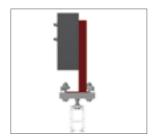
No factory or workshop is the same. There are many factors which mean, you may not be able to use any of our standard solutions. Such as the carrying capacity of the roof or the absence of a carrier structure. Talk to us - we will find a solution for your situation.

Non standard mounting examples









# **Suspensions**

# Pendular suspensions

# Pendular suspensions



#### **Product description**

- > For suspension of the smooth-running crane profile
- Variants for fixing on T-beams or double T-beams or for concrete
   Accommodates lateral oscillations and takes load off the entire system

#### Notes

> The pendular suspension for concrete is directly fixed to the roof with an injection mortar and concrete anchors. A 14 mm Ø drill is required for setting the anchors

Item no.	Suitable for	Load Bearing capability [kg]	Width adjustment [mm]	Height adjustment [mm]	Maximum ceiling incline [°]	Weight [kg]
KT02.020	Carrier clamping	2,000	50 - 150	85 - 125	8	4.15
KT02.021	Carrier clamping	2,000	150 - 250	85 - 125	8	4.9
KT02.022	Carrier clamping	2,000	250 - 310	85 - 125	8	5.35
KT02.040	Concrete	2,000		85 - 125	0	3







## **Product description**

- For suspension of the smooth-running crane profile
   Variants for fixing on T-beams or for concrete
   Use with vertical forces e.g. with telescopes

#### Notes

> The rigid suspension for concrete is directly fixed to the roof with an injection mortar and concrete anchors. A 14 mm Ø drill is required for setting the anchors

Item no.	Suitable for	Load Bearing capability [kg]	Width adjustment [mm]	Height adjustment [mm]	Weight [kg]
KT02.030	Carrier clamping	2,000	50 - 150	85 - 125	4.2
KT02.031	Carrier clamping	2,000	150 - 250	85 - 125	5
KT02.032	Carrier clamping	2,000	250 - 310	85 - 125	5.5
KT02.041	Concrete	2,000		85 - 105	3

# **Suspensions**

Rigid suspensions short

# Rigid suspensions short



IDEAL FOR LOW HEADROOM OPERATION

## **Product description**

- Use for reduction in headroom
   Extension of possible lifting height
   Available for mounting position 0° and 90°

#### Notes

> Not to be used with jacking module!

Item no.	Weight [kg]	Load Bearing capability	[kg] Width adjustment [mm]	Angle [°]
KT02.050	2.7	2,000	50 - 150	0
KT02.051	3.9	1,500	150 - 250	0
KT02.052	4.25	1,000	250 - 310	0
KT02.055	2.6	2,000	50 - 150	90
KT02.056	3.25	1,500	150 - 250	90
KT02.057	3.65	1.000	250 - 310	90

Item no.	Height [mm]
KT02.050	27
KT02.051	27
KT02.052	27
KT02.055	27
KT02.056	27
KT02.057	27

# **Inclined suspensions**



## **Product description**

> A complete inclined suspension always consists of upper part, an adjusting rod and a base part

#### **Technical data**

Item no.	Description	Height adjustment [mm]	Width adjustment [mm]
KT02.060	Upper part		50 - 150
KT02.061	Upper part		150 - 250
KT02.062	Upper part		250 - 310
KT02.065	Suspension	1,000	
KT02.066	Suspension	2,000	
KT02.067	Suspension	3,000	
KT02.068	Base part		

# **Inclined suspensions**





# Suspensions

Notes:

# Trolleys | Content

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Tandem trolleys and reduction for trolleys	108



# Trolleys | At a glance

# FIPA Trolleys for crane bridges and lifting equipment





#### **Hinge trolley**

- > For linkage mounting of a crane bridge to the crane track using a crane carrier suspension
- > See Page 107



#### **Gab trolleys**

- > For direct fitting of the lifting tackle, such as our FIPALIFT tube lifter, for example
- > See Page 107



#### **Tandem trolleys**

- $\gt$  To double the load-carrying capacity from 600 to 1,200 kg
- > Available with gabe trolleys and hinge trolleys
- > See Page 108

# Hinge trolley





### **Product description**

- > For fixing crane bridges to the crane track
   > Wheels made from high-performance polyamide for friction-free running
   > Body made from sturdy aluminium
- > Rubber buffers on both sides

#### **Technical data**

Item no.	Load Bearing capability [kg]	Weight [kg]
KT03.010	600	1.25

Gab trolleys



### **Product description**

- > For direct mounting of the lifting equipment, such as a tube lifter or chain hoist
   > Wheels made from high-performance polyamide for friction-free running
   > Body made from sturdy aluminium
   > Rubber buffers on both sides

Item no.	Туре	Load Bearing capability [kg]	Weight [kg]
KT03.014	Two rollers	600	1.25
KT03.015	Four rollers	600	1.6



### Tandem trolleys





#### **Product description**

- > Variants for crane bridges or lifting equipment
- Double the carrying capacity
   Wheels made from high-performance polyamide for friction-free running
   Body made from sturdy aluminium
- > Rubber buffers on both sides

#### **Technical data**

Item no.	Туре	Suitable for	Load Bearing capability [kg]	Weight [kg]
KT03.021	Gab trolley	Lifting equipment	1,200	6
KT03.022	Gab trolley	Crane girder	1,200	6.35
KT03.023	Hinge trolley	Crane girder	1,200	6.25

### Reduction in carriage pin to Ø 16 mm

NECESSARY FOR THE USE OF FIPALIFT



#### **Product description**

- > Reduced carriage pin with Ø 16 mm > For example, required when using the FIPALIFT tube lifter

Item no.	Weight [kg]
KT03.046	0.114

# Power supply | Content

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Top part for tubes	11

# Power supply | At a glance

### FIPA Construction kit for power supply in crane installations



> There are many reasons why energy in the form of vacuum, compressed air or electricity is required in a crane installation. You may wish to use our FIPALIFT and need a hose that directs the vacuum from our generators to the tube lifters. We can offer you a wide range of possibilities in order to incorporate energy into our crane technology.



#### **Cable trolleys**

- > Cable trolleys are used for transporting flat and round cables and for hoses of varying diameters
- > See Page 112



#### **End clamps**

- > End clamps are mounted at the start of the crane track
- > See Page 113



#### **Drivers**

- > Driver are mounted on moving parts, such as trolleys or crane bridges and are required for the actual drag movement
- > See Page 114

### FIPA Construction kit for power supply in crane installations

#### **Electric cables**

- > Flat and round cables with five cores for reliable transmission of power in the crane installation
- > Available by metre
- > Flat lines: particularly suitable for cable drags in cable carriages
- > Round lines: e.g. for the use in energy chains

See Page 115



#### **Connection box**

- > Electrical allocation
- > See Page 116



#### **Main switch**

- > Indispensable accessory for electrical devices in a crane system
- > Stipulated by regulations
- > Can be isolated using a padlock to avoid restarting
- > See Page 117



#### **Special solutions for crane projects**

> Our standard solutions can be used for a wide variety of simple applications, but a complex requirement might need a custom solution

We would be pleased to develop a project for you on request, such as power take-off rails and energy chains



# **Power supply**

# Cable trolleys

# Cable trolleys





### **Product description**

- For flat cables, round cables and hosesFor internal cable drags

### **Ordering notes**

> The number of cable trolleys depends on the distance of traverse. Please ask our technical sales department

Item no.	Usage	for diameter [mm]	Suitable for	Weight [kg]
KT04.020	Flat cable		XS	0.16
KT04.021	Round cable and hoses	10 - 16	XS	0.18
KT04.022	Round cable and hoses	17 - 25	XS	0.2
KT04.023	Round cable and hoses	26 - 36	XS	0.25
KT04.024	Vacuum hose	0 - 90	XS	0.16
KT04.025	Flat cable		S/M/L/XL	0.16
KT04.026	Round cable and hoses	10 - 16	S/M/L/XL	0.18
KT04.027	Round cable and hoses	17 - 25	S/M/L/XL	0.2
KT04.028	Round cable and hoses	26 - 36	S/M/L/XL	0.25
KT04.029	Vacuum hose	0 - 90	S/M/L/XL	0.16







### **Product description**

- > For flat cables, round cables and hoses > For fixing the power supply at the base of the crane

Item no.	Usage	for diameter [mm]	   Weight [kg]
KT04.030	Flat cable		0.22
KT04.031	Round cable and hoses	10 - 16	0.23
KT04.032	Round cable and hoses	17 - 25	0.25
KT04.033	Round cable and hoses	26 - 36	0.3
KT04.034	Vacuum hose	0 - 90	0.21

# **Power supply**

### **Drivers**

### **Drivers**



### **Product description**

- For flat cables, round cables and hoses
   As an intermediate fixing e.g. on crane bridges
   Prevents tangling or trapping of the lines

Item no.	Usage	for diameter [mm]	Weight [kg]
KT04.040	Flat cable		0.13
KT04.041	Round cable and hoses	10 - 16	0.14
KT04.042	Round cable and hoses	17 - 25	0.16
KT04.043	Round cable and hoses	26 - 36	0.21
KT04.044	Vacuum hose	0 - 90	0.12

### Electric cables





#### **Product description**

- > Available as a flat or round cable
- > Five core 1.5 mm<sup>2</sup>
- > For supplying power to your power-operated devices, such as chain hoists

#### Notes

- > In accordance with DIN EN 50214
- > Conductor class 5 in accordance with DIN VDE 0295 and IEC60228
- > Core marking VDE 0293-308
- > Smallest bend radius fixed / moving in accordance with DIN VDE 0298 Part 3
- > Fire behaviour IEC 60332-1

Item no.	Usage temperature [°C]	Material	Design	Nominal voltage [V]	Test voltage [kV]
KT04.011	-25 - 60	PVC	Flat	450 - 750	2.5
KT04.012	-25 - 60	Rubber	Round	450 - 750	2.5

# **Power supply**

# Connection box



### **Product description**

> For mounting on crane bridges that need to be fed with power

Item no.	Weight [kg]
KT04.013	0.11

Item no.	Length [mm]	Width [mm]	Height [mm]
KT04.013	139	119	67.5

Main switch



### **Product description**

- For de-energising the entire crane installation
   One main crane switch is required per crane system
   Can be locked with a padlock

Item no.	Waight [kg]
item no.	weight [v8]
KT04.014	0.35

# **Power supply**

Top part for tubes





### **Product description**

- For expanding the cable trolley for hoses and round lines
   For example when using a compressed air line and a round electrical line, as may be required for a vacuum cross-beam

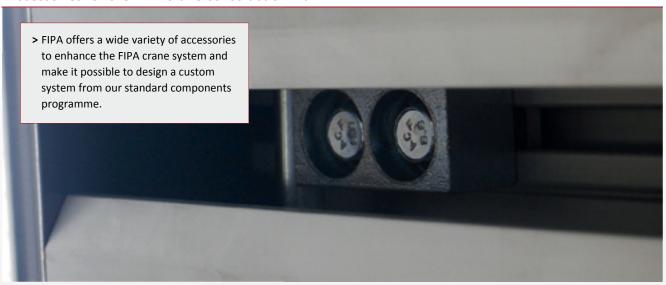
Item no.	Usage	For diameter [mm]	Weight [kg]
KT04.050	Round cable and hoses	10 - 16	0.07
KT04.051	Round cable and hoses	17 - 25	0.09
KT04.052	Round cable and hoses	26 - 36	0.11

# Modular crane kits - Accessory | Content

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# Modular crane kits - Accessory | At a glance

#### Accessories for the FIPA crane construction kit





#### **End caps**

- > As a clean end piece for your crane profiles
- > Protects against dirt and thus maintains smooth running properties
- > See Page 121



#### **Joint sets**

- > To connect two profiles
- > See Page 122



#### **Crane girder suspensions**

- > Connecting link between crane track and crane bridge
- > For suspension in a linkage carriage
- > See Page 123



#### **End stops**

- > In various versions
- > Fixed, moving and with damping
- > See Page 124





### **Product description**

- End cap for crane profiles to prevent contamination
   This retains the smooth running characteristics of the crane system
   Available in plastic or in steel

#### Notes

> Must not be used as end stops for the trolleys

Item no.	Material	Suitable for	Weight [kg]
KT05.010	Plastic	XS	0.03
KT05.011	Plastic	S	0.04
KT05.012	Plastic	М	0.06
KT05.013	Plastic	L	0.07
KT05.014	Plastic	XL	0.08
KT05.015	Plastic	Rainforcement profile	0.07
KT05.016	Steel	S	1
KT05.017	Steel	М	1.7
KT05.018	Steel	L	2.1
KT05.019	Steel	XL	2.5

Joint sets

#### Joint sets



#### **Product description**

- > For connection of two crane profiles, permitting elongation of crane tracks as required
- > Fixing via side grooves on profiles S to XL
- > Fixing via the top opening on profile size XS

#### **Notes**

- > Please note: Suspensions must not be mounted centrally over profile joint connectors
- > Please take into account the entire layout when extending the crane bridges. In case of doubt, consult our technical sales department

#### **Ordering notes**

> One kit contains two profile joint connectors (number for one connection)

Item no.	Suitable for	Weight [kg]
KT05.030	XS	1.35
KT05.031	S	2.15
KT05.032	M	2.6
KT05.033	L	3.1
KT05.034	XL	3.65

Crane girder suspensions

Crane girder suspensions



### **Product description**

- For fixing the crane bridge to the crane track in combination with linkage carriages
   Linkage suspension and with zero play
   90° variant for crane bridges, 0° variant for telescope bridges

Item no.	Suitable for	Angle [°]	Weight [kg]
KT05.040	Crane girder	90	0.73
KT05.041	Telescope bridge	0	0.73
KT05.042	Universal		1

### **End stops**



#### **Product description**

- > Fixed end stop for the trolleys
   > Prevents inadvertent drop-out of the trolleys
   > Drilling template available as an accessory (KT05.052)

#### Notes

> Even when using an adjustable stop, an additional fixed stop is obligatory!

Item no.	Suitable for	Weight [kg]
KT05.050	XS	0.07
KT05.051	S/M/L/XL	0.1

End stop adjustable

End stop adjustable



#### **Product description**

- > For traverse limitation within the crane track, e.g. when using several trolleys > For additional use for the end stop pin

#### Notes

> Must not be used as the only end stop!

Item no.	Waight [kg]
item no.	AnciBur [v8]
KT05.053	0.19

End stop buffered

# End stop buffered



### **Product description**

- > For soft end stopping
   > Fixing via the lateral profile groove
   > For additional use for the end stop pin

#### Notes

> Must not be used as the only end stop!

Item no.	Weight [kg]
KT05.054	0.8

Spacer



### **Product description**

- For fixed spacing with double bridges
   Choice of track width from 310 mm to 1,500 mm

### **Ordering notes**

> When ordering, always quote the desired track width

Item no.	Suitable for	Weight [kg]
KT05.060	S	5.6
KT05.061	M	7.4
KT05.062	L	9
KT05.063	XL	10.04

#### **Elevation modules**



#### **Product description**

- > To lift the crane bridge to a higher level
- > Suitable for gaining additional headroom with a low ceiling

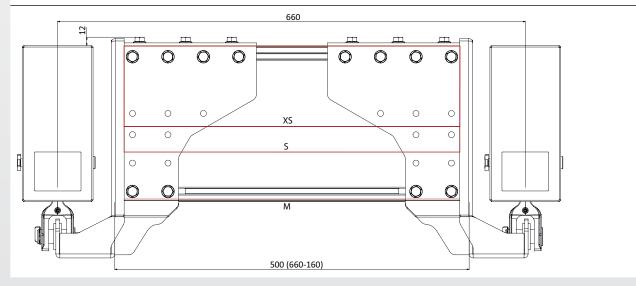
#### Notes

- > There is a matching jacking module for each smooth-running aluminium profile, but other combinations can also be realised
- A combi-mix can be used to gain even more headroom (see below image)
   The jacking module cannot always be used with the "rigid suspension short 0°"

#### **Technical data**

Item no.	Suitable for	Weight [kg]
KT05.070	XS	4.45
KT05.071	S	5.9
KT05.072	M	6.75
KT05.073	L	7.6
KT05.074	XL	8.55

#### **Elevation module profile L**



Cover profiles





#### **Product description**

- > To close the profile grooves in smooth-running aluminium profiles > Prevents dirt and dust accumulation in the grooves
- > Particularly important in clean room applications and in the food sector

#### **Ordering notes**

> When ordering the cover profiles for the top groove, please quote the desired length in metres

		Level to a
Item no.	Usage	Length [mm]
KT05.080	Top groove	
KT05.081	Side groove	2,000

Pull back telescope girder



### **Product description**

- A tension spring immediately pulls the telescopic bridge back to the start position after unloading
   To prevent collisions, e.g. with hall columns

Item no.	Weight [kg]
KT05.085	1.9



#### **Product description**

- > To provide spacing between two crane bridges on a crane track > Prevent accidents by collision with the crane bridges

### **Ordering notes**

- > Please state the desired length when ordering
- > Choice up to 3 m

Item no.	Weight [kg]
KT05.086	10

Safety ropes

# Safety ropes SAFETY FEATURE

#### **Product description**

- Additional safety for the crane track, crane bridge and preventing the trolley from falling
   In the event of an impact with the crane installation, e.g. by collision with a forklift truck, your employees have additional protection

Item no.	Usage	Weight [kg]
KT05.090	Profil	1.02
KT05.091	Crane girder	1.42
KT05.092	Trolley	0.56

# Jib cranes and steel-portal frames | Content

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Steel-portal frames	140



# Jib cranes and steel-portal frames | At a glance

### FIPA Jib cranes and steel-portal frames





### Column-mounted jib crane

- > For loads up to 500 kg
- > Ideally suited to self-installation

The column is fixed to the floor using heavy-duty anchors before mounting the compact jib unit. If the pre-assembled crane profile is plugged in, the horizontal alignment of the jib is carried out simply and rapidly via the two anchors that connect the rotary linkage with the tip of the profile. Since the crane main switch is already integrated in the column, electrical wiring of the crane is minimised.

> See Page 137



#### Wall-mounted jib cranes

- > For loads up to 500 kg
- > For simple installation using heavy-duty anchors or clamping brackets
- > Ideally suited to self-installation
- > See Page 135



#### **Steel frame gantries**

The practical modular design in the form 6 x 6 m makes it possible to install a surface crane quickly and economically, even if there is no suitable overhead construction, or if the load capacity of the roof is inadequate.

If you need a special format this is also possible, of course.

> See Page 140

Wall-mounted jib cranes

Wall-mounted jib cranes



#### **Product description**

- For direct and easy wall mountingA good alternative to large crane installations
- > Can be used in restricted spaces
- > Easy-turning swing mechanism

#### Notes

- > Direct mounting on the wall using heavy-duty anchors
- > However, the jib crane can also be clamped to columns using additional materials

#### **Ordering notes**

- > Included in scope of delivery: Wall-mounted jib cranes with power supply (cable trolley), main switch and one gab trolley for lifting equipment
- > Installation is not included in the scope of delivery, but we would be pleased to prepare a quotation for you

Technical data			Dimensions
ltem no.	Load bearing capability [kg]	Weight [kg]	Jib length [mm]
WSK.125-2.0	125	65.5	2,000
WSK.125-2.5	125	69.4	2,500
WSK.125-3.0	125	72.7	3,000
WSK.125-3.5	125	86	3,500
WSK.125-4.0	125	90.8	4,000
WSK.125-4.5	125	98.9	4,500
WSK.125-5.0	125	103.7	5,000
WSK.125-5.5	125	104.1	5,500
WSK.125-6.0	125	130.2	6,000
WSK.160-2.0	160	65.3	2,000
WSK.160-2.5	160	68.9	2,500
WSK.160-3.0	160	72.7	3,000
WSK.160-3.5	160	89.2	3,500
WSK.160-4.0	160	94	4,000
WSK.160-4.5	160	98.9	4,500

Continued on the next page



Wall-mounted jib cranes

Technical data	1		Dimensions
Item no.	Load bearing capability [kg]	Weight [kg]	Jib length [mm]
WSK.160-5.0	160	118	5,000
WSK.160-5.5	160	122.9	5,500
WSK.160-6.0	160	129.9	6,000
WSK.250-2.0	250	70	2,000
WSK.250-2.5	250	78.1	2,500
WSK.250-3.0	250	91.4	3,000
WSK.250-3.5	250	97.4	3,500
WSK.250-4.0	250	103.5	4,000
WSK.250-4.5	250	118.8	4,500
WSK.250-5.0	250	125.5	5,000
WSK.250-5.5	250	132.2	5,500
WSK.250-6.0	250	145.2	6,000
WSK.320-2.0	320	80	2,000
WSK.320-2.5	320	86.2	2,500
WSK.320-3.0	320	92.3	3,000
WSK.320-3.5	320	98.3	3,500
WSK.320-4.0	320	112.9	4,000
WSK.320-4.5	320	119.7	4,500
WSK.320-5.0	320	134.2	5,000
WSK.320-5.5	320	154.5	5,500
WSK.320-6.0	320	164	6,000
WSK.500-2.0	500	80	2,000
WSK.500-2.5	500	90.1	2,500
WSK.500-3.0	500	96.9	3,000
WSK.500-3.5	500	115.5	3,500
WSK.500-4.0	500	123.1	4,000
WSK.500-4.5	500	146.9	4,500
WSK.500-5.0	500	157.6	5,000
WSK.500-5.5	500	165.1	5,500
WSK.500-6.0	500	175.3	6,000

Column-mounted jib cranes

Column-mounted jib cranes



#### **Product description**

- > For easy mounting on the floor of the factory
- > A good alternative to large crane installations
- > Can be used in restricted spaces
- > Easy-turning swing mechanism

#### Notes

- > Installation generally directly on the floor with heavy-duty anchors
- > It may be necessary to prepare a special foundation
- > Please always have your structural situation assessed before installation

#### **Ordering notes**

- > Included in scope of delivery: Column-mounted jib crane with power supply (cable trolleys), main switch, gab trolley and installation material for the column
- > Installation is not included in the scope of delivery, but we would be pleased to prepare a quotation for you

Technical data		Dimensions			
Item no.	Load bearing capability [kg]	<b>A</b> [mm]	<b>B</b> [mm]	c [mm]	Jib length [mm]
SSK.125-2.0	125	2,976	3,555	500	2,000
SSK.125-2.5	125	2,976	3,555	500	2,500
SSK.125-3.0	125	2,976	3,555	500	3,000
SSK.125-3.5	125	2,976	3,555	500	3,500
SSK.125-4.0	125	2,976	3,555	500	4,000
SSK.125-4.5	125	2,976	3,555	500	4,500
SSK.125-5.0	125	2,976	3,555	500	5,000
SSK.125-5.5	125	2,976	3,555	500	5,500
SSK.125-6.0	125	2,976	3,555	500	6,000
SSK.160-2.0	160	2,976	3,555	500	2,000
SSK.160-2.5	160	2,976	3,555	500	2,500
SSK.160-3.0	160	2,976	3,555	500	3,000
SSK.160-3.5	160	2,976	3,555	500	3,500
SSK.160-4.0	160	2,976	3,555	500	4,000

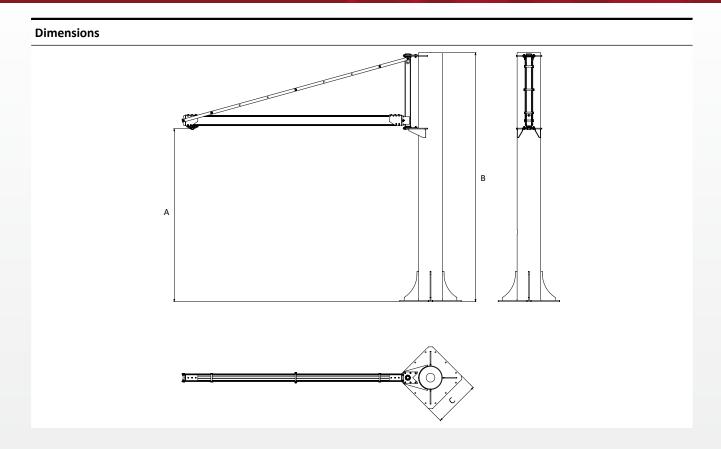
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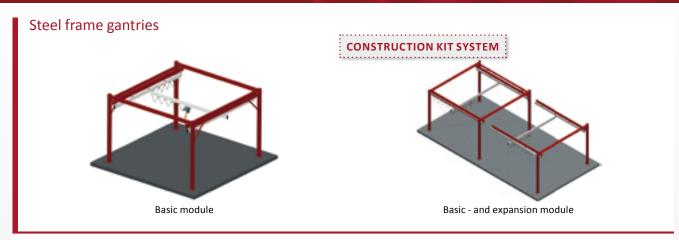
Column-mounted jib cranes

Technical data	a	Dimensions			
Item no.	Load bearing capability [kg]	<b>A</b> [mm]	<b>B</b> [mm]	c [mm]	Jib length [mm]
SSK.160-4.5	160	2,976	3,555	500	4,500
SSK.160-5.0	160	2,976	3,555	500	5,000
SSK.160-5.5	160	2,976	3,555	500	5,500
SSK.160-6.0	160	2,976	3,555	500	6,000
SSK.250-2.0	250	2,976	3,555	500	2,000
SSK.250-2.5	250	2,976	3,555	500	2,500
SSK.250-3.0	250	2,976	3,555	500	3,000
SSK.250-3.5	250	2,976	3,555	500	3,500
SSK.250-4.0	250	2,976	3,555	500	4,000
SSK.250-4.5	250	2,976	3,555	500	4,500
SSK.250-5.0	250	2,976	3,555	500	5,000
SSK.250-5.5	250	2,976	3,555	500	5,500
SSK.250-6.0	250	2,976	3,555	500	6,000
SSK.320-2.0	320	2,973	3,870	650	2,000
SSK.320-2.5	320	2,973	3,870	650	2,500
SSK.320-3.0	320	2,973	3,870	650	3,000
SSK.320-3.5	320	2,973	3,870	650	3,500
SSK.320-4.0	320	2,973	3,870	650	4,000
SSK.320-4.5	320	2,973	3,870	650	4,500
SSK.320-5.0	320	2,973	3,870	650	5,000
SSK.320-5.5	320	2,973	3,870	650	5,500
SSK.320-6.0	320	2,973	3,870	650	6,000
SSK.500-2.0	500	2,973	3,870	650	2,000
SSK.500-2.5	500	2,973	3,870	650	2,500
SSK.500-3.0	500	2,973	3,870	650	3,000
SSK.500-3.5	500	2,973	3,870	650	3,500
SSK.500-4.0	500	2,973	3,870	650	4,000
SSK.500-4.5	500	2,973	3,870	650	4,500
SSK.500-5.0	500	2,973	3,870	650	5,000
SSK.500-5.5	500	2,973	3,870	650	5,500
SSK.500-6.0	500	2,973	3,870	650	6,000

Column-mounted jib cranes



### Steel frame gantries



#### **Product description**

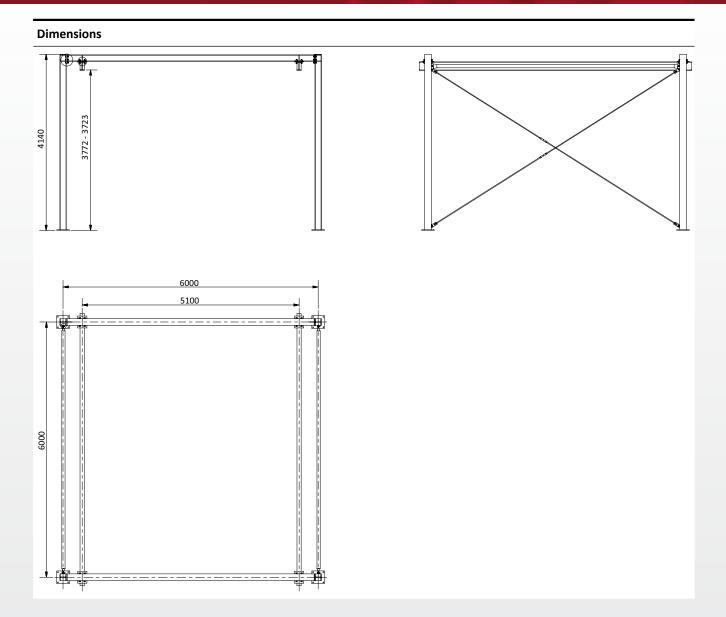
- > Rigid frame gantry for installation of a crane system
- > Standard dimensions and modular design
- > Suitable if, for example, an overhead design is not available or if the carrying capacity of the roof is inadequate
- > Painted RAL 3003 ruby red
- > With carrying capacities 500, 750 and 1,000 kg

#### **Ordering notes**

- > Please state the requested carrying capacity
- > Special dimensions and colours available on request
- > Scope of delivery does not include crane system

Item no.	Description
KT.STB.0001	Steel frame gantry - basic module
KT.STB.0002	Steel frame gantry - expansion module

Steel frame gantries



# Questionnaire | FIPALIFT Tube lifter

10:	Company:
FIPA GmbH	
Freisinger Str. 30	Name:
85737 Ismaning, Germany	Street:
Fax +49 (0)89 / 96 24 89 - 11	Postcode/City/Country:
info@fipa.com	Postcode/City/Country:
	Phone/Fax:
	Sector:
FIPALIFT Tube lifter	Enquiry No. (internal):
Please answer the following questions carefully so that we ca	n select the optimal tube lifter for you.
1. What loads need to be lifted?	
Packages Panes / Plat	es / Sheet metal
Sacks Foodstuffs	
Other:	
2. What materials are involved?	
Cardboard Wood	Glass
Plastic Metal	
Other:	
3. What are the dimensions of the load to be lifted?	
Length x Width x Height	mm
Note:	
4. What are the weights to be lifted?	
Maximum weight: kg	
Minimum weight: kg	
5. What height level needs to be overcome?	
Height difference: mm	
6. Do you already have a crane system?	
yes no	
·	
If yes: What is the distance between ground level and the	suspension device (carriage)?
Distance: mm	
If no: Please consult our crane system questionnaire.	

# Questionnaire | FIPALIFT Tube lifter

7. Are th	ey any special conditions that	need to	be taken into ac	count?					
	Dusty environment		Direct contact v	with foods	tuffs	5	Explosive	environment	(ATEX)
	Special requirements concerr	ning nois	e generation			Particularly lo	w headroom (le	ss than 3 m)	
	Load needs to be tilted by 90	0				Load rotation	required		
8. Descri	iption of the application:								
9. Notes	and instructions:								

Online form and downloads: www.fipa.com



# Questionnaire | Crane systems

То:		
FIPA G	imbH	Company:
Freising	er Str. 30	Name:
85737 Is	smaning, Germany	Street:
_	//	Street.
	(0)89/962489-11	Postcode/City/Country:
info@fip	pa.com	Phone/Fax:
		Sector:
Crane	systems	Enquiry No. (internal):
Cranc	. systems	Eliquii y No. (litterilai).
Please a	answer the following questions carefully so that we c	an select the optimal crane system for you.
1. Instal	llation	
	Monorail Twin-track	
	Single carrier crane Twin carrie	er crane
الفائد		
		Nidth (S) mm
		Suspension spacing (A) mm
		reely selectable
	Carrying capacity kg 1	Telescoping mm
* Note:	: For monorails you only need to specify the length of the crane trac	:k
3. Trave	rse	
	Manual traverse	_
	Electric traverse Crane mov	rement (X) electric Trolley movement (Y) electric
4. Type	of media	
		ompressed air Data cable
5. Medi	a supply	
	Electrical power rail take-off ( internal /	external)
	Cable/Hose carriages Energy cha	in

# Questionnaire | Crane systems

ight of overhead construction: ttom edge)	mm Beam width (flan	ge): mm	Roof inclination:°
<del>*   *</del>		Ď	
I-beam suspension		Roof suspensio	n
Concrete beam suspensio	n	Lateral suspens	sion
Destroy d l'fato este el la			
Desired lifting tackle  Tube lifter	Floatric aboin boist with	th vacuum cross-beam	Lifting out
Tube lifter	Electric chain noist wil	th vacuum cross-beam	Lifting axle
Flootrio oboin boist with Do	ndont controller or Dodie		
Electric chain hoist with Pe	ndant controller or 🔲 Radio	o remote control	
Electric chain hoist with Pe	ndant controller or 🔲 Radic	o remote control	
	ndant controller or 🔲 Radic	o remote control	
nstallation		o remote control	
nstallation  Installation by customer	Postcode, installation	location:	ring capacity:kg
Installation Installation by customer Offer installation	Postcode, installation	location:	
nstallation  Installation by customer  Offer installation  Forklift truck available	Postcode, installation Lift height:	location:	
nstallation  Installation by customer  Offer installation  Forklift truck available  Scissor-lift platform available	Postcode, installation Lift height:	location:	
nstallation  Installation by customer  Offer installation  Forklift truck available  Scissor-lift platform available  Linkage telescopic platform avail  Only weekend installation possib	Postcode, installation Lift height:	location:	
nstallation  Installation by customer  Offer installation  Forklift truck available  Scissor-lift platform available  Linkage telescopic platform avail	Postcode, installation Lift height:	location:	
nstallation  Installation by customer  Offer installation  Forklift truck available  Scissor-lift platform available  Linkage telescopic platform avail  Only weekend installation possib	Postcode, installation Lift height:	location:	
nstallation  Installation by customer  Offer installation  Forklift truck available  Scissor-lift platform available  Linkage telescopic platform avail  Only weekend installation possib	Postcode, installation Lift height:	location:	
nstallation  Installation by customer  Offer installation  Forklift truck available  Scissor-lift platform available  Linkage telescopic platform avail  Only weekend installation possib	Postcode, installation Lift height:	location:	
nstallation  Installation by customer  Offer installation  Forklift truck available  Scissor-lift platform available  Linkage telescopic platform avail  Only weekend installation possib	Postcode, installation Lift height:	location:	
nstallation  Installation by customer  Offer installation  Forklift truck available  Scissor-lift platform available  Linkage telescopic platform avail  Only weekend installation possib	Postcode, installation Lift height:	location:	

Online form and downloads: www.fipa.com



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