

Large-area vacuum gripping system FX/FCX

Maximum flexibility in automated handling tasks



Large-area vacuum gripping system FXC

Our highlights...

Your benefits

- | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • Quick-change sealing plate • Extruded aluminium section with functional elements integrated into the end covers • Integrated slide-in ejector | <ul style="list-style-type: none"> > Quick and cheap replacement of the plate when it is worn > Robust, light construction with variable lengths for short cycle times and low-cost handling systems > Flexible vacuum generation to match each application, thanks to various ejector models |
| <ul style="list-style-type: none"> • Flexible hole spacing in sealing plate with the same basic body • Valves protected against dirt and easy to clean • Innovative valve concept | <ul style="list-style-type: none"> > Quick adaptation to workpieces of varying dimensions > Operational safety and high system availability > Saves energy by intelligent vacuum generation, even at very short cycle times |

Applications

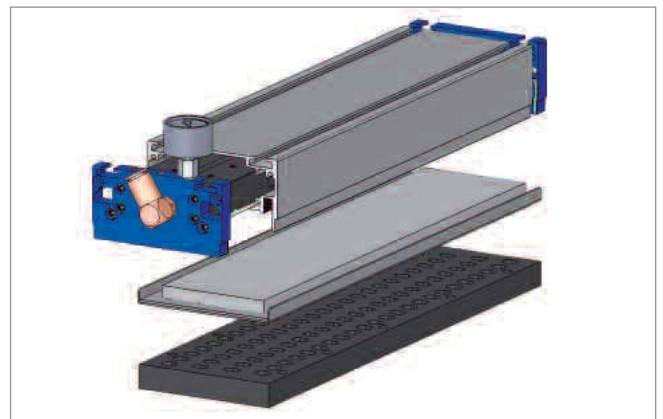
- Automated palletizing, depalletizing, commissioning and sorting of many different types of goods in various sizes with only a single gripper
- Handling of workpieces made of many different materials, such as cardboard, wood, sheet metal (dry) and plastic, with or without apertures



Large-area vacuum gripping system FXC for handling of doors

Construction

- Vacuum gripping system with integrated vacuum generator
- Adaptation to a wide range of handling tasks thanks to various formats and two different principles of operation (SVKW, SW)
- Modular design permits the combination of several vacuum gripper systems to form an overall system which is perfectly matched to the intended handling task



Suitability for branch-specific applications

Large-area vacuum gripping system FX/FXC

Maximum flexibility in automated handling tasks

Ordering codes for large-area vacuum gripping system FX/FXC

Short designation	Valve technology	Length (x width) in mm	Hole spacing
Example: FXC	SW	1425,5	18
FX	SW	120(x60)	18 ... fine
FXC	SVKW	435,5 633,5 831,5 1227,5 1425,5	36 ... medium

Ordering data for vacuum gripping system FX/FXC

Type	Without filter	With filter
FX-SW 120x60	10.01.11.01161	
FX-SW 120x60 SEA*	10.01.11.01176	
FXC-SW 435,5 18	10.01.21.00116	10.01.21.00121
FXC-SW 435,5 36	10.01.21.00126	10.01.21.00131
FXC-SW 633,5 18	10.01.21.00117	10.01.21.00122
FXC-SW 633,5 36	10.01.21.00127	10.01.21.00132
FXC-SW 831,5 18	10.01.21.00118	10.01.21.00123
FXC-SW 831,5 36	10.01.21.00128	10.01.21.00133
FXC-SW 1227,5 18	10.01.21.00119	10.01.21.00124
FXC-SW 1227,5 36	10.01.21.00129	10.01.21.00134
FXC-SW 1425,5 18	10.01.21.00120	10.01.21.00125
FXC-SW 1425,5 36	10.01.21.00130	10.01.21.00135
FXC-SVKW 435,5 18	10.01.21.00042	10.01.21.00151
FXC-SVKW 435,5 36	10.01.21.00155	10.01.21.00153
FXC-SVKW 633,5 18	10.01.21.00043	10.01.21.00152
FXC-SVKW 633,5 36	10.01.21.00156	10.01.21.00154
FXC-SVKW 831,5 18	10.01.21.00044	10.01.21.00110
FXC-SVKW 831,5 36	10.01.21.00107	10.01.21.00113
FXC-SVKW 1227,5 18	10.01.21.00105	10.01.21.00111
FXC-SVKW 1227,5 36	10.01.21.00108	10.01.21.00114
FXC-SVKW 1425,5 18	10.01.21.00106	10.01.21.00112
FXC-SVKW 1425,5 36	10.01.21.00109	10.01.21.00115

*gripping system with blow-off function for rapid release of workpieces
Gripper types 1227,5 and 1425,5 have a second slide-in ejector

Ordering data for accessories FX/FXC

Type	Article No.
Vacuum switch VS-V-D-PNP	10.06.02.00343
Solenoid-valve kit for vacuum on/off	10.01.21.00241
Solenoid-valve kit for blow-off on/off	10.01.21.00242
Mounting kit for slot blocks	10.01.21.00243
Mounting kit for robot flange	10.01.21.00244
Mounting kit for spring-mounting	10.01.21.00245
Silencer FX 120x60-optional*	10.02.01.00234

* FX 120/60 is already equipped with a silencer.
This accessory reduces the noise level by 80 %.

Ordering codes for replaceable sealing plate FX/FXC

Short designation	Length (x width) [mm]	Hole spacing
Example: DI-PL	1425,5x120	18
DI-PL	120x60 435,5x120 633,5x120 831,5x120 1227,5x120 1425,5x120	18 ... fine 36 ... medium

Ordering data for replaceable sealing plate FX/FXC

Type	Without filter	With filter
SP-FX-SW 120x60	10.01.10.00875	
DI-PL 435,5x120 18	10.01.21.00018	10.01.21.00198
DI-PL 435,5x120 36	10.01.21.00022	10.01.21.00203
DI-PL 633,5x120 18	10.01.21.00046	10.01.21.00199
DI-PL 633,5x120 36	10.01.21.00062	10.01.21.00204
DI-PL 831,5x120 18	10.01.21.00059	10.01.21.00200
DI-PL 831,5x120 36	10.01.21.00063	10.01.21.00205
DI-PL 1227,5x120 18	10.01.21.00060	10.01.21.00201
DI-PL 1227,5x120 36	10.01.21.00064	10.01.21.00206
DI-PL 1425,5x120 18	10.01.21.00061	10.01.21.00202
DI-PL 1425,5x120 36	10.01.21.00065	10.01.21.00207

Note: By default, the sealing mat is made of a special foam material for vacuum applications. For special applications, we can also supply foam materials which are oil resistant and withstand higher temperatures (> 60 °C).

Large-area vacuum gripping system FX/FXC

Maximum flexibility in automated handling tasks

Technical data of large-area vacuum gripping systems FX/FXC

Type	Sealing-mat material*	Air consumption [l/min]	Max. suction rate [l/min]	Degree of evacuation [%]
FX-SW 120x60	Foam, 10 mm thick	117	69	80
FX-SW 120x60 SEA**	Foam, 10 mm thick	117	69	80
FXC-SW 435,5 18	Foam, 20 mm thick	197	706	80
FXC-SW 435,5 36	Foam, 20 mm thick	197	706	80
FXC-SW 633,5 18	Foam, 20 mm thick	292	905	80
FXC-SW 633,5 36	Foam, 20 mm thick	292	905	80
FXC-SW 831,5 18	Foam, 20 mm thick	376	1071	80
FXC-SW 831,5 36	Foam, 20 mm thick	376	1071	80
FXC-SW 1227,5 18	Foam, 20 mm thick	668	1976	80
FXC-SW 1227,5 36	Foam, 20 mm thick	668	1976	80
FXC-SW 1425,5 18	Foam, 20 mm thick	752	2142	80
FXC-SW 1425,5 36	Foam, 20 mm thick	752	2142	80
FXC-SVKW 435,5 18	Foam, 20 mm thick	197	706	80
FXC-SVKW 435,5 36	Foam, 20 mm thick	197	706	80
FXC-SVKW 633,5 18	Foam, 20 mm thick	292	905	80
FXC-SVKW 633,5 36	Foam, 20 mm thick	292	905	80
FXC-SVKW 831,5 18	Foam, 20 mm thick	376	1071	80
FXC-SVKW 831,5 36	Foam, 20 mm thick	376	1071	80
FXC-SVKW 1227,5 18	Foam, 20 mm thick	668	1976	80
FXC-SVKW 1227,5 36	Foam, 20 mm thick	668	1976	80
FXC-SVKW 1425,5 18	Foam, 20 mm thick	752	2142	80
FXC-SVKW 1425,5 36	Foam, 20 mm thick	752	2142	80

* Other mat thicknesses on request

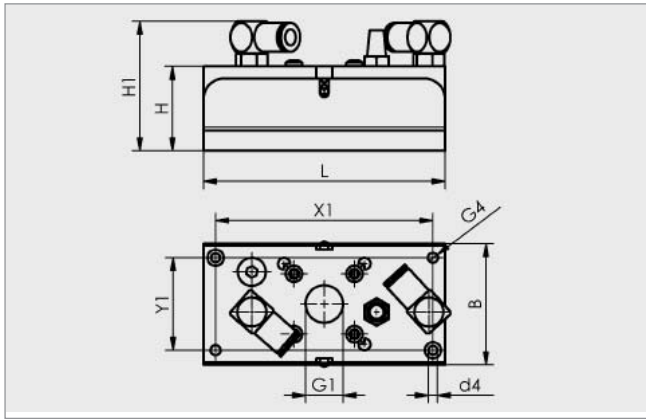
Type	Holding force at 40% vacuum [N]*	Holding force at 60% vacuum [N]*	Holding force at 80% vacuum [N]*	Weight [kg]	Noise level [db(A)]
FX-SW 120x60	69	98	137	0.7	65
FX-SW 120x60 SEA**	69	98	137	0.8	65
FXC-SW 435,5 18	540	800	1070	3	65
FXC-SW 435,5 36	540	800	1070	3	65
FXC-SW 633,5 18	800	1200	1600	4.0	65
FXC-SW 633,5 36	800	1200	1600	4.0	65
FXC-SW 831,5 18	1080	1600	2150	5.0	65
FXC-SW 831,5 36	1080	1600	2150	5.0	65
FXC-SW 1227,5 18	1600	2430	3200	7.4	65
FXC-SW 1227,5 36	1600	2430	3200	7.4	65
FXC-SW 1425,5 18	1850	2840	3760	8.4	65
FXC-SW 1425,5 36	1850	2840	3760	8.4	65
FXC-SVKW 435,5 18	540	800	1070	3.5	65
FXC-SVKW 435,5 36	540	800	1070	3.5	65
FXC-SVKW 633,5 18	800	1200	1600	4.8	65
FXC-SVKW 633,5 36	800	1200	1600	4.8	65
FXC-SVKW 831,5 18	1080	1600	2150	6.1	65
FXC-SVKW 831,5 36	1080	1600	2150	6.1	65
FXC-SVKW 1227,5 18	1600	2430	3200	8.8	65
FXC-SVKW 1227,5 36	1600	2430	3200	8.8	65
FXC-SVKW 1425,5 18	1850	2840	3760	10.1	65
FXC-SVKW 1425,5 36	1850	2840	3760	10.1	65

* With rigid workpieces and full coverage

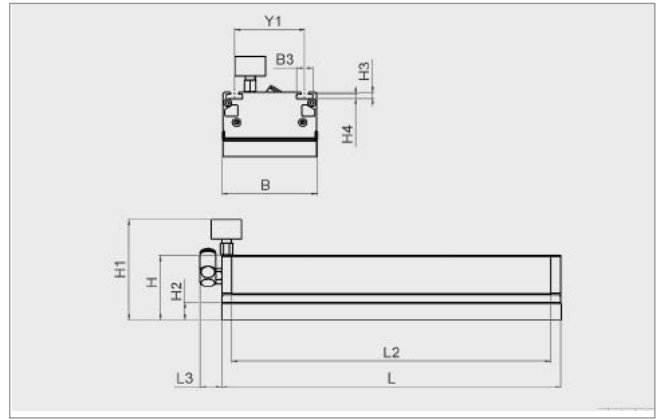
** Gripping system with blow-off function for rapid release of the workpieces

Large-area vacuum gripping system FX/FXC

Maximum flexibility in automated handling tasks



FX-SW 120x60



FXC-SW/SVKW

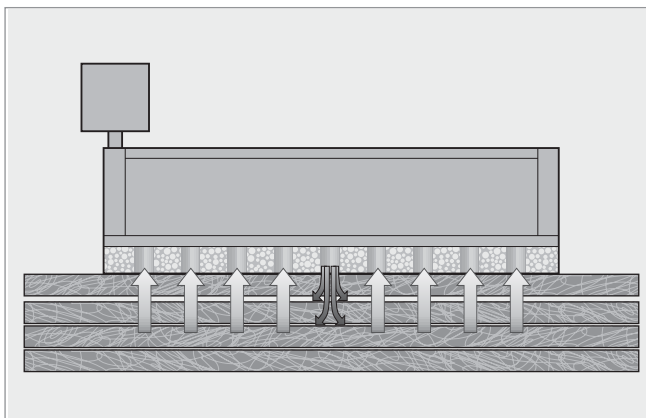
Design data for large-area vacuum gripping system FX/FXC*

Type	Dimensions														
	B	B3	d4	G1	G4	H	H1	H2	H3	H4	L	L2	L3	X1	Y1
FX-SW 120x60	60	-	4.5	G1/2"-IG	M6-IG	42	63	-	-	-	120.0	-	-	108	46
FX-SW 120x60 SEA	60	-	4.5	G1/2"-IG	M6-IG	42	63	-	-	-	120.0	-	-	108	46
FXC-SW 435,5 18	122	21	-	-	-	82	128	22	7.7	5.2	435.5	409.5	27	-	90
FXC-SW 435,5 36	122	21	-	-	-	82	128	22	7.7	5.2	435.5	409.5	27	-	90
FXC-SW 633,5 18	122	21	-	-	-	82	128	22	7.7	5.2	633.5	607.5	27	-	90
FXC-SW 633,5 36	122	21	-	-	-	82	128	22	7.7	5.2	633.5	607.5	27	-	90
FXC-SW 831,5 18	122	21	-	-	-	82	128	22	7.7	5.2	831.5	805.5	27	-	90
FXC-SW 831,5 36	122	21	-	-	-	82	128	22	7.7	5.2	831.5	805.5	27	-	90
FXC-SW 1227,5 18	122	21	-	-	-	82	128	22	7.7	5.2	1227.5	1201.5	27	-	90
FXC-SW 1227,5 36	122	21	-	-	-	82	128	22	7.7	5.2	1227.5	1201.5	27	-	90
FXC-SW 1425,5 18	122	21	-	-	-	82	128	22	7.7	5.2	1425.5	1399.5	27	-	90
FXC-SW 1425,5 36	122	21	-	-	-	82	128	22	7.7	5.2	1425.5	1399.5	27	-	90
FXC-SVKW 435,5 18	122	21	-	-	-	82	128	22	7.7	5.2	435.5	409.5	27	-	90
FXC-SVKW 435,5 36	122	21	-	-	-	82	128	22	7.7	5.2	435.5	409.5	27	-	90
FXC-SVKW 633,5 18	122	21	-	-	-	82	128	22	7.7	5.2	633.5	607.5	27	-	90
FXC-SVKW 633,5 36	122	21	-	-	-	82	128	22	7.7	5.2	633.5	607.5	27	-	90
FXC-SVKW 831,5 18	122	21	-	-	-	82	128	22	7.7	5.2	831.5	805.5	27	-	90
FXC-SVKW 831,5 36	122	21	-	-	-	82	128	22	7.7	5.2	831.5	805.5	27	-	90
FXC-SVKW 1227,5 18	122	21	-	-	-	82	128	22	7.7	5.2	1227.5	1201.5	27	-	90
FXC-SVKW 1227,5 36	122	21	-	-	-	82	128	22	7.7	5.2	1227.5	1201.5	27	-	90
FXC-SVKW 1425,5 18	122	21	-	-	-	82	128	22	7.7	5.2	1425.5	1399.5	27	-	90
FXC-SVKW 1425,5 36	122	21	-	-	-	82	128	22	7.7	5.2	1425.5	1399.5	27	-	90

* Customer-specific sizes available to order

The gripper types 1227,5 and 1425,5 have a second slide-in ejector

Required compressed air hose: 8/6 mm



Large-area vacuum gripping system FXC with separation

Separation pulse flows through the sheets and prevents several sheets from sticking together when the top sheet is gripped

Type	Article No.	Air consumption [l/min]	Weight [kg]
FXC-SW 435,5-V	10.01.21.00246	197	3,2