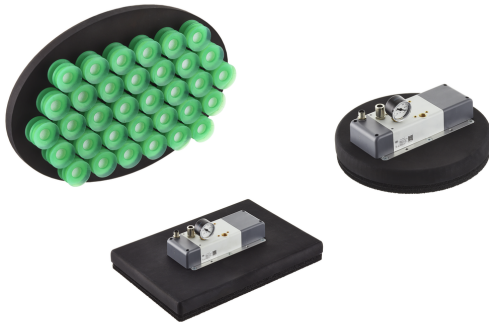
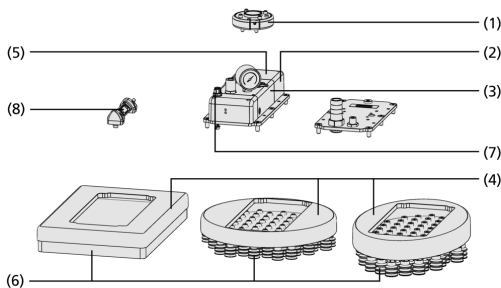


Area Gripping Systems FQE-V Xc

Gripping surface (LxW in mm) scalable from 110 x 230 mm to 400 x 280 mm



Area Gripping Systems FQE-V Xc



System design Area Gripping Systems FQE-V Xc



Area gripping system FQE-V Xc when palletizing cardboard boxes

Suitability for industry specific applications

Application

- Flexible area gripper for handling products of different sizes and geometries
- Enables products to be handled from different pick-up positions
- Ideal for stationary handling tasks with collaborative robots
- Suitable for fully automated applications
- Typically used for pick-and-place applications or end-of-line packaging in intra-logistics
- Freely scalable gripper dimensions make it particularly suitable for layer-wise filling of goods in outer packaging
- For handling products in the packaging, automotive, glass and electronics industries

Design

- Flange connector (1)
- Silencer cover (2) and sound insulation (5)
- Ejector modules ecoPump SEP (3) for vacuum generation
- Suction tray (4) and suction plate (replaceable) (6)
- Multi-pin plug (7)
- Optional vacuum switch VSi (8)

Product highlights

- Freely scalable gripper dimensions for precise handling of the project-specific workpiece geometry
- Innovative product design in accordance with ISO TS 15066 enables HRC operation
- Modular lightweight construction for low weight and therefore higher effective load capacity
- Particularly energy-efficient, integrated vacuum generation for low operating costs and high operational reliability
- Low sound level for minimal noise pollution for surrounding employees

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Designation code Area Gripping Systems FQE-V Xc



1 – Abbreviated designation

Code	Version
FQE-V	FQE-V

4 – Dimension

Code	LxW in mm
230x210...	230 x 210 to
400x280	400 x 280

7 – Sealing element

Code	Type
O20	Sealing foam (height = 20 mm)
SPB2	Bellows suction cup SPB2

2 – Vacuum generation

Code	Type
Xc	Integrated vacuum generation

5 – Valve technology

Code	Type
SW	Flow restrictor

8 – Product addition

Code	Type
F	Filter

3 – Shape

Code	Type
CI	Circular
OV	Oval
R	Rectangular

6 – Nozzle diameter

Code	Diameter in mm
80...100	Ø 0.8 to 1.0

The area gripper FQE-V Xc is individually configured and supplied ready-to-connect. Special grippers on inquiry. The gripper consists of:

- integrated pneumatic vacuum generation
- control valves for suction cup on/off and blow-off on/off
- freely scalable 3D printed suction plate

Available spare parts: spare foam, ejector nozzles, plugs, silencer insert, plug-in screw unions, hose sleeves, protection covers, elastomer suction cups, filter discs, flow restrictor screw-in nozzles

Available accessories: connection cables, vacuum hoses, vacuum/pressure switches, spring plungers, ball joints, external vacuum generators, vacuum filters, vacuum valves, solenoid valves, vacuum gauges

Ordering data Area Gripping Systems FQE-V Xc

Type	Part no.
FQE-V Xc R 230x120 SW80 SPB2 F	10.01.44.00580
FQE-V Xc R 230x120 SW80 O20	10.01.44.00584
FQE-V Xc R 400x280 SW80 SPB2 F	10.01.44.00560
FQE-V Xc R 400x280 SW80 O20	10.01.44.00565
FQE-V Xc OV 400x280 SW80 SPB2 F	10.01.44.00568
FQE-V Xc OV 400x280 SW80 O20	10.01.44.00574
FQE-V Xc CI 280x280 SW80 SPB2 F	10.01.44.00570
FQE-V Xc CI 280x280 SW80 O20	10.01.44.00578

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Ordering data Spare parts Area Gripping Systems FQE-V Xc

Spare parts		Part no.
Ejector module	SEP HF 2 13 22	10.02.01.01798
Silencer kit	SD FQE 7	10.01.44.00116
Basic body (injection-moulded)	GK 73.9x80.5x41.2 FQE	10.01.44.00030

Type	Spare parts		Part no.
FQE-V Xc R 230x120 SW80 SPB2 F	Flow resistance	SW 100 P 7.3	10.05.04.00091
FQE-V Xc R 400x280 SW80 SPB2 F	Flow resistance	SW 80 P 7.3	10.05.04.00090
FQE-V Xc OV 400x280 SW80 SPB2 F	Flow resistance	SW 80 P 7.3	10.05.04.00090
FQE-V Xc CI 280x280 SW80 SPB2 F	Flow resistance	SW 80 P 7.3	10.05.04.00090

Type	Bellows suction cup (round)	Filter disc	Sealing plate (FQE)
FQE-V Xc R 230x120 SW80 SPB2 F	10.01.06.03125	10.01.06.02565	-
FQE-V Xc R 230x120 SW80 O20	-	-	10.01.44.00582
FQE-V Xc R 400x280 SW80 SPB2 F	10.01.06.03126	10.01.06.02572	-
FQE-V Xc R 400x280 SW80 O20	-	-	10.01.44.00563
FQE-V Xc OV 400x280 SW80 SPB2 F	10.01.06.03126	10.01.06.02572	-
FQE-V Xc OV 400x280 SW80 O20	-	-	10.01.44.00572
FQE-V Xc CI 280x280 SW80 SPB2 F	10.01.06.03125	10.01.06.02565	-
FQE-V Xc CI 280x280 SW80 O20	-	-	10.01.44.00576

Ordering data Accessories Area Gripping Systems FQE-V Xc

Accessories		Part no.
Connection cable	ASK B-M12-5 5000 K-5P	21.04.05.00080
Connection cable	ASK WB-M12-5 5000 K-4P	21.04.05.00557
Vacuum gauge	VAM 40 V U BAR	10.07.02.00046
Vacuum/pressure switch	VSI V D M8-4	10.06.02.00577

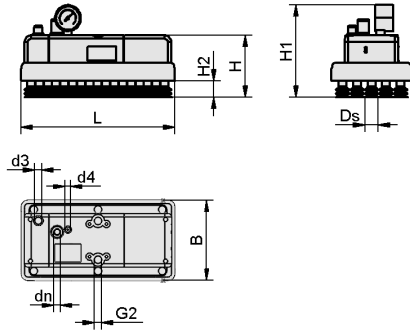
Technical data Area Gripping Systems FQE-V Xc

Type	Shape	Nozzle diameter [mm]	Control valve	with	Material type	Suction cup type	Weight [kg]
FQE-V Xc R 230x120 SW80 SPB2 F	Integrated vacuum generation	0.8	Normally open	Ejector module SEP	-	Bellows suction cups SPB2	1.7
FQE-V Xc R 230x120 SW80 O20	Integrated vacuum generation	0.8	Normally open	Ejector module SEP	Foam O, Height 20 mm	-	1.2
FQE-V Xc R 400x280 SW80 SPB2 F	Integrated vacuum generation	0.8	Normally open	Ejector module SEP	-	Bellows suction cups SPB2	2.9
FQE-V Xc R 400x280 SW80 O20	Integrated vacuum generation	0.8	Normally open	Ejector module SEP	Foam O, Height 20 mm	-	1.8
FQE-V Xc OV 400x280 SW80 SPB2 F	Integrated vacuum generation	0.8	Normally open	Ejector module SEP	-	Bellows suction cups SPB2	2.1
FQE-V Xc OV 400x280 SW80 O20	Integrated vacuum generation	0.8	Normally open	Ejector module SEP	Foam O, Height 20 mm	-	1.7
FQE-V Xc CI 280x280 SW80 SPB2 F	Integrated vacuum generation	0.8	Normally open	Ejector module SEP	-	Bellows suction cups SPB2	1.4
FQE-V Xc CI 280x280 SW80 O20	Integrated vacuum generation	0.8	Normally open	Ejector module SEP	Foam O, Height 20 mm	-	1.8

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Design data Area Gripping Systems FQE-V Xc



FQE-V Xc

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Design data Area Gripping Systems FQE-V Xc

Type	B [mm]	D [mm]	d3 [mm]	d4 [mm]	dn [mm]	Ds [mm]	G2	H [mm]	H1 [mm]	H2 [mm]	L [mm]
FQE-V Xc R 230x120 SW80 SPB2 F	120	-	-	-	10	20	M5-F	92.6	118.6	25	230
FQE-V Xc R 230x120 SW80 O20	120	-	-	-	10	-	M5-F	86.3	112.3	20	230
FQE-V Xc R 400x280 SW80 SPB2 F	280	-	-	-	10	40	M5-F	115.3	160.8	47	400
FQE-V Xc R 400x280 SW80 O20	280	-	-	-	10	-	M5-F	86.3	131.8	20	400
FQE-V Xc OV 400x280 SW80 SPB2 F	280	-	-	-	10	40	M5-F	115.3	160.8	47	400
FQE-V Xc OV 400x280 SW80 O20	280	-	-	-	10	-	M5-F	86.3	131.8	20	400
FQE-V Xc CI 280x280 SW80 SPB2 F	280	-	-	-	10	20	M5-F	92.6	138.1	25	280
FQE-V Xc CI 280x280 SW80 O20	280	-	-	-	10	-	M5-F	86.3	131.8	20	280

Multimedia product presentation

Medium	Link
Product video	https://vimeo.com/465674930 https://vimeo.com/461418552