Area Gripping Systems FQE Xc

Gripping surface (LxW) from 120 x 60 mm to 300 x 130 mm

LOGISTICS PACKAGING

Area Gripping Systems FQE Xc

System design Area Gripping Systems FQE Xc

Area gripping system FQE Xc when handling metal sheets

Suitability for industry specific applications

Application

- Flexible area gripper for handling products regardless of size and geometry
- Allows handling of products from different picking 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 intralogistics
- Handling of products in the packaging, automotive, glass or electronics sector

Design

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

Product highlights

- Innovative product design according to ISO TS 15066 enables MRK operation
- Modular lightweight construction for a low weight and thus a higher effective lift capacity
- Particularly energy efficient, integrated vacuum generation for low operating costs with high operational reliability
- Low sound level for minimal noise during collaborative operation
- Integrated control valves for minimum cycle times and interference contours

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Designation code Area Gripping Systems FQE Xc

FQE	–	Xc	–	120x60	–	SW	–	50	–	O10
1		2		3		4		5		6

1 – Abbreviated designation

Code	Version
FQE	FQE

2 – Vacuum generation

Code	Type
Xc	Integrated vacuum generation

3 – Dimension

Code	LxW in mm
120x60 … 300x130	120 x 60 to 300 x 130

4 – Valve technology

Code	Type
SW	Flow restrictor

5 – Nozzle diameter

Code	Diameter in mm
50…130	Ø 0.5 to 1.3

6 – Sealing element

Code	Type
O10	Sealing foam (height = 10 mm)
O20	Sealing foam (height = 20 mm)
SPB2	Bellows suction cup SPB2

The area gripper FQE Xc is delivered as a ready-to-connect product. Customized grippers are available on request.

Available spare parts: connection cable, vacuum gauge, vacuum switch, vacuum hose, ejector module, flow restrictor, suction cup

Available accessories: connection cable, vacuum hose, vacuum gauge, vacuum/pressure switch, flexolink, ball joints, vacuum filter

Ordering data Area Gripping Systems FQE Xc

Type	Part no.
FQE Xc 120x60 SW50 O10	10.01.44.00370
FQE Xc 120x60 SW80 SPB2	10.01.44.00371
FQE Xc 220x80 SW130 O20	10.01.44.00437
FQE Xc 220x80 SW130 SPB2	10.01.44.00373
FQE Xc 300x130 SW100 O20	10.01.44.00441
FQE Xc 300x130 SW80 SPB2	10.01.44.00375

Ordering data Spare parts Area Gripping Systems FQE Xc

Spare parts		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

Type	Ejector module	Flow resistance	Bellows suction cup (round)
FQE Xc 120x60 SW50 O10	10.02.01.01343	-	-
FQE Xc 120x60 SW80 SPB2	10.02.01.01343	10.05.04.00090	10.01.06.03125
FQE Xc 220x80 SW130 O10	-	-	-
FQE Xc 220x80 SW130 SPB2	10.02.01.01347	10.05.04.00092	10.01.06.03125
FQE Xc 300x130 SW100 O10	-	-	-
FQE Xc 300x130 SW80 SPB2	10.02.01.01347	10.05.04.00092	10.01.06.03125

Type	VSL 6-4 PTFE MI-TR	VSL 10-7 PE MI-TR	VSL 10-7 PU MI-TR
FQE Xc 120x60 SW50 O10	10.07.09.00157	-	-
FQE Xc 120x60 SW80 SPB2	10.07.09.00157	-	-
FQE Xc 220x80 SW130 O10	-	-	-
FQE Xc 220x80 SW130 SPB2	-	10.07.09.00083	10.07.09.00084
FQE Xc 300x130 SW100 O10	-	-	-
FQE Xc 300x130 SW80 SPB2	-	10.07.09.00083	10.07.09.00084

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Ordering data Accessories Area Gripping Systems FQE Xc

Accessories		Part no.
Connection cable	ASK WB-M12-5 5000 K-4P	21.04.05.00557
Vacuum hose (meter)	VSL 4-2 PU MI-TR	10.07.09.00001
Vacuum hose (meter)	VSL 6-4 PU MI-TR	10.07.09.00002
Vacuum hose (meter)	VSL 8-6 PU MI-TR	10.07.09.00003
Vacuum hose (meter)	VSL 10-7 PE MI-TR	10.07.09.00083
Vacuum hose (meter)	VSL 12-9 PU MI-TR	10.07.09.00037
Vacuum hose (meter)	VSL 14-11 PU MI-TR	10.07.09.00038
Vacuum hose (meter)	VSL 26-19 PVC-DS KL-TR	10.07.09.00007
Vacuum gauge	VAM 40 V U BAR	10.07.02.00046
Vacuum/pressure switch	VSi V D M8-4	10.06.02.00577

Type	Ball joint	Vacuum filter (inline)
FQE Xc 120x60 SW50 O10	10.01.03.00109	10.07.01.00328
FQE Xc 120x60 SW80 SPB2	10.01.03.00109	10.07.01.00328

Accessories	FLK G1/4-IG G1/4-AG	FLK G1/2-IG G1/2-AG	KGL G1/4-IG G1/4-AG	KGL G1/2-IG G1/2-AG	VFT G3/8-IG 80	VFT G3/4-IG 80	VFT G3/8-IG 100
FQE Xc 220x80 SW130 O10	-	-	-	-	-	-	-
FQE Xc 220x80 SW130 SPB2	10.01.03.00178	10.01.03.00175	10.01.03.00110	10.01.03.00111	10.07.01.00122	10.07.01.00128	10.07.01.00123
FQE Xc 300x130 SW100 O10	-	-	-	-	-	-	-
FQE Xc 300x130 SW80 SPB2	10.01.03.00178	10.01.03.00175	10.01.03.00110	10.01.03.00111	10.07.01.00122	10.07.01.00128	10.07.01.00123

Technical data Area Gripping Systems FQE Xc

Type	Shape	Function	Nozzle diameter [mm]	Material type	Suction cup type	Number of suction cells	Number of ejectors	with	Control valve	Weight [kg]
FQE Xc 120x60 SW50 O10	Integrated vacuum generation	controlled	1	Foam O, Height 10 mm	-	16	2	Ejector module SEP	Normally open	1
FQE Xc 120x60 SW80 SPB2	Integrated vacuum generation	controlled	1	-	SPB2	10	2	Ejector module SEP	Normally open	1
FQE Xc 220x80 SW130 O20	Integrated vacuum generation	controlled	2	Foam O, Height 20 mm	-	24	3	Ejector module SEP	Normally open	1
FQE Xc 220x80 SW130 SPB2	Integrated vacuum generation	controlled	2	-	SPB2	22	3	Ejector module SEP	Normally open	1
FQE Xc 300x130 SW100 O20	Integrated vacuum generation	controlled	1	Foam O, Height 20 mm	-	35	3	Ejector module SEP	Normally open	2
FQE Xc 300x130 SW80 SPB2	Integrated vacuum generation	controlled	1	-	SPB2	59	3	Ejector module SEP	Normally open	2

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FQE Xc 120x60 O10

FQE Xc 120x60 SPB2

FQE Xc 220x80 SPB2

FQE Xc 300x130 SPB2

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Type	B [mm]	Ds [mm]	dn	d3 [mm]	d4 [mm]	G1	G2	H [mm]	H1 [mm]	H2 [mm]	L [mm]	X1 [mm]	Y1 [mm]
FQE Xc 120x60 SW50 O10	60	-	6	-	-	G1/8"-F	M5-F	56.0	101.5	10.0	120	104.4	44.4
FQE Xc 120x60 SW80 SPB2	60	20	6	-	-	G1/8"-F	M5-F	70.2	116.0	24.3	120	104.4	44.4
FQE Xc 220x80 SW130 O20	80	-	10	4	4	G1/4"-F	M5-F	80.4	126.0	20.0	220	202.4	62.4
FQE Xc 220x80 SW130 SPB2	80	20	10	-	-	G1/4"-F	M5-F	84.7	130.3	24.3	220	202.4	62.4
FQE Xc 300x130 SW100 O20	130	-	20	4	4	G1/4"-F	M5-F	73.8	129.4	20.0	300	282.4	112.4
FQE Xc 300x130 SW80 SPB2	130	20	10	-	-	G1/4"-F	M5-F	88.1	133.7	24.3	300	282.4	112.4

Multimedia product presentation

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

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