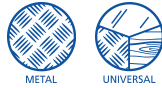
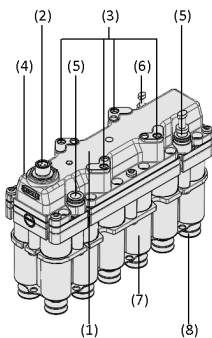


Matrix Area Grippers FMG

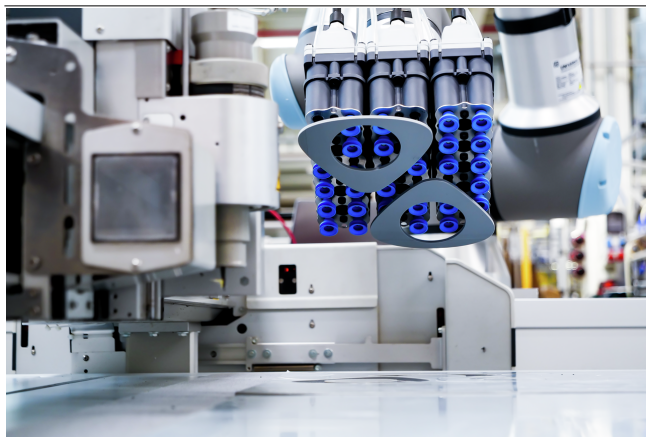
Dimensions 180 x 60 mm



Matrix Area Grippers FMG



System design Matrix Area Grippers FMG



Matrix area gripper FMG when handling demanding sheet metal parts

Suitability for industry specific applications

Application

- Compact gripping module for the design of flexible area grippers
- Handling of flat and predominantly suction-tight workpieces in various shapes and dimensions
- Targeted picking up and depositing of workpieces from complete storages and gripping of very thin workpieces
- In sheet metal processing for the automation of laser machines, throughfeed machines and bending machines
- In wood working for the automation of nesting machines
- Automation of high-mix, low-volume processes, e.g. for cutting machines or pick & place applications

Design

- Valve unit (1) with solenoid valves, IO-Link connector (2) and mounting holes (3)
- Central pneumatic connections for supplying the gripping module with compressed air (4) and vacuum (5)
- Additional pneumatic connection for connecting a vacuum switch (6)
- Lifting unit (7) with extendable suction cups
- Pistons for connecting the suction cups (8)

Product highlights

- Individually controllable suction cups per module for maximum flexibility, especially when several modules are linked to form an area gripper
- Fast set-up through simultaneous activation of all suction points of an area gripper
- Integrated lift when activating the suction cup prevents incorrect parts from being sucked in
- Efficient design and operation thanks to simple integration, low vacuum requirement and functional design
- Self-locking of suctioned workpieces in the event of loss of actuator voltage

Matrix Area Grippers FMG

Dimensions 180 x 60 mm

Designation code Matrix Area Grippers FMG

FMG	–	179.5x59.5	–	30x30	–	20	–	HT1
1		2		3		4		5

1 – Abbreviated designation

Code	Version
FMG	FMG

2 – Dimension

Code	LxW in mm
179.5x59.5	179.5 x 59.5

3 – Grid

Code	Grid in mm
30x30	30 x 30

4 – Diameter

Code	Diameter in mm
20	Ø 20

5 – Material

Code	Material
HT1	High temperature material

Matrix area gripper FMG is delivered as a ready-to-connect product.

A flange plate is required by the customer to assemble an area gripper consisting of several FMGs.

The suction points are controlled via IO-Link by a control module provided by the customer.

External vacuum generation with ventilation function required.

Spare parts available: valve unit, lifting unit, suction cup, filter elements

Available accessories: suction cups in various geometries and materials

Ordering data Matrix Area Grippers FMG

Type	Part no.
FMG 180x60x120 30 12 20-HT1	10.12.10.00024
FMG 180x60x120 60 3 50-HT1	10.12.10.00111

Ordering data Spare parts Matrix Area Grippers FMG

Spare parts	Part no.
Set of filters	ERS-SET-STF FMG 4x6 10.12.10.00048
Set of spare parts	ERS FMG-GK 10.12.10.00050
Set of spare parts	ERS FMG-VENT-EINH 10.12.10.00181
Sealing plug	VRS-STEC 6x14.4 10.08.06.00012
Sealing plug	VRS-STEC 8x18.5 10.08.06.00013
Sieve, round	SIEB 14x0.7 MS-A2 0.1/0.07 10.05.03.00182

Spare parts	Part no.
Bellows suction cup (round)	FGA 20 HT1-60 N016 10.01.06.05777
Flat suction cup (round)	SUF 50 HT1-60 SC050 10.01.01.13996

Ordering data Accessories Matrix Area Grippers FMG

Accessories	Part no.
Bellows suction cup (round)	FGA 12 HT1-60 N016 10.01.06.05776
Connection cable	ASK B-M12-5 1000 S-M12-5 21.04.05.00158
Connection cable	ASK B-M12-5 2000 S-M12-5 21.04.05.00211
Connection cable	ASK B-M12-5 5000 S-M12-5 21.04.05.00266
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

Matrix Area Grippers FMG

Dimensions 180 x 60 mm

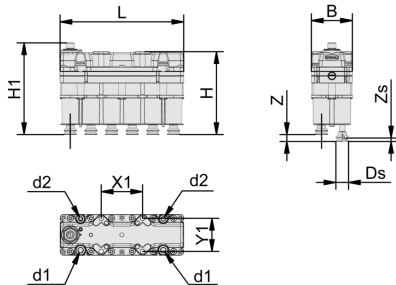
Technical data Matrix Area Grippers FMG

Type	[mm]	Number of suction plates	Material	Communication	Operating pressure	Pressure max. [bar]	Lift capacity (horizontal) [N]	Operating temperature max. [°C]	Weight [g]
FMG 180x60x120 30 12 20-HT1	30	12	High temperature material HT1	IO-Link (Class B)	4.0 ... 6.0 bar	6	56.4	50	995
FMG 180x60x120 60 3 50-HT1	60	3	High temperature material HT1	IO-Link (Class B)	4.0 ... 6.0 bar	6	190.0	50	1,100

Matrix Area Grippers FMG

Dimensions 180 x 60 mm

Design data Matrix Area Grippers FMG



FMG

Matrix Area Grippers FMG

Dimensions 180 x 60 mm

Design data Matrix Area Grippers FMG

Type	B [mm]	d1 [mm]	d2 [mm]	Ds [mm]	H [mm]
FMG 180x60x120 30 12 20-HT1	60.0	8	6	20	120
FMG 180x60x120 60 3 50-HT1	60.0	8	6	50	120

Type	H1 [mm]	L [mm]	X1 [mm]	Y1 [mm]	Z [m]	Zs [mm]
FMG 180x60x120 30 12 20-HT1	133	180.0	60	48	1	5
FMG 180x60x120 60 3 50-HT1	133	180.0	60	48	1	5