

Suction Cups For Handling Sheet Metal



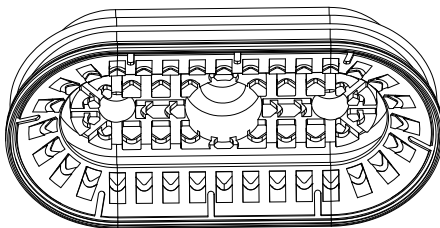
Bellows Suction Cups MAOB (Oval 1.5 Folds)

Suction area LxW 60x30mm to 110x55mm

Flat Suction Cups MAOF (Oval 1.5 Folds)



System Design Bellows Suction Cups MAOB (Oval 1.5 Folds)



Introduction and application

- ◆ Rapid handling of long, narrow metal parts, such as metal sheets and reinforcing ribs for interior decoration, etc.
- ◆ Handling of thin sheet metal without deformation or deep-drawing.
- ◆ For use in automated handling system for stamping lines in the automotive industry.
- ◆ The bottom of the suction cup has a special groove structure to prevent the oily metal plate from sliding during the handling process, ensuring accurate positioning of the workpiece in the press.

Design

- ◆ Robust, wear-resistant oval bellows suction cup MAOB made of NBR with single sealing lip, special slot and inner support.
- ◆ Suction cups and suction nipple are vulcanized and fixed (very high strength)
- ◆ Suction cup available with various connection types.

Ordering Data Bellows Suction Cups MAOB

Item no.	Suction area ϕ [mm]	Material and Shore hardness	Connection thread
MAOB	60x30	NBR-45 NBR-60	G1/4-AG
	80x40		G1/4-IG
	110x55		G3/8-IG M10-AG M14x1.5-AG RA rectangular adapter

Note: MAOB AG=external thread (M) IG=internal thread (F)

Ordering Data Bellows Suction Cups MAOB

Type	Connection						rectangular adapter
	G1/4"-M	G1/4"-F	G3/8"-F	M10x1.5-M	M14x1.5-M		
MAOB 60x30 NBR-60	90.02.03.00392	90.02.03.00396	90.02.03.00400	90.02.03.00404	90.02.03.00408	90.02.03.00531	
MAOB 80x40 NBR-60	90.02.03.00393	90.02.03.00397	90.02.03.00401	90.02.03.00405	90.02.03.00409	90.02.03.00532	
MAOB 110x55 NBR-60	90.02.03.00394	90.02.03.00398	90.02.03.00402	90.02.03.00406	90.02.03.00410	90.02.03.00533	

Combined Suction Cups

Vacuum Suction Cups

Composite Suction Cups

Special Grippers

Vacuum Gripping Systems

Mounting Elements

Vacuum Generators

Valve Technology

Switch And Monitoring

Vacuum Filters

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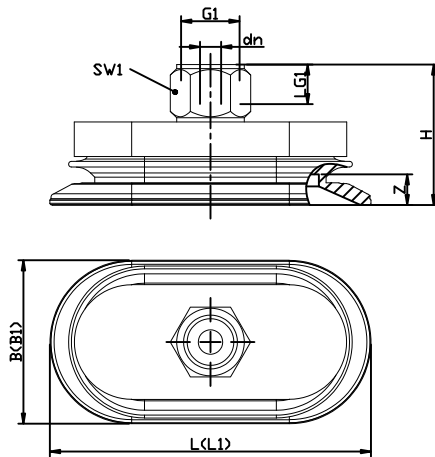
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Technical Data Bellows Suction Cups MAOB

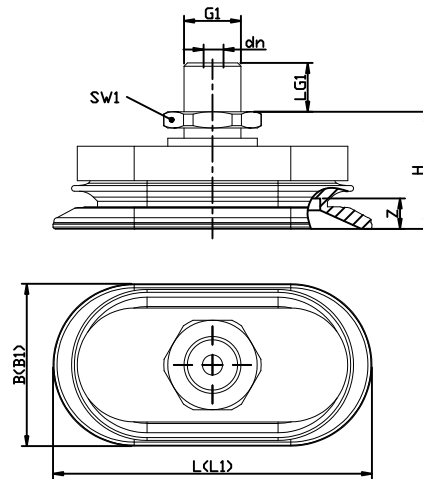
Type	Suction Force [N]	Pull-off force [N]	Lateral force [N]	Lateral force oily surface [N]	Volume [cm ³]	Workpiece radius min [mm] (Convex)	Recom. internal hose diameter d[mm]
MAOB 60x30 NBR-60	38	55	57	52	9.6	30	4
MAOB 80x40 NBR-60	65	100	100	95	20.6	40	6
MAOB 110x55 NBR-60	110	185	180	161	50.8	50	6

Design Data Bellows Suction Cups MAOB

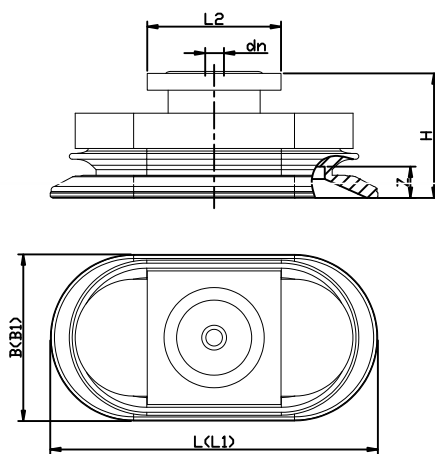
MAOB 60 × 30 to 110 × 55 IG



MAOB 60 × 30 to 110 × 55 AG



MAOB 60 × 30 to 110 × 55 RA (Rectangular adapter)



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Type	Dimensions [mm]										
	B	B1	dn	G1	H	L	L1	L2	LG1	SW1	Z(Stroke)
MAOB 60x30 NBR-60G1/4-AG	32	33	5	G1/4"-M	27.0	62	63	-	8	17	7.0
MAOB 60x30 NBR-60G1/4-IG	32	33	6	G1/4"-F	34.5	62	63	-	8	17	7.0
MAOB 60x30 NBR-60G3/8-IG	32	33	6	G3/8"-F	35.0	62	63	-	9	22	7.0
MAOB 60x30 NBR-60M10x1.5-AG	32	33	4	M10x1.5-M	27.0	62	63	-	10	17	7.0
MAOB 60x30 NBR-60M14x1.5-AG	32	33	5	M14x1.5-M	29.0	62	63	-	10	22	7.0
MAOB 60x30 NBR-60RA	32	33	4	-	30.0	62	63	32	-	-	7.0
MAOB 80x40 NBR-60G1/4-AG	42	43	5	G1/4"-M	29.7	82	83	-	8	17	9.0
MAOB 80x40 NBR-60G1/4-IG	42	43	6	G1/4"-F	37.2	82	83	-	8	17	9.0
MAOB 80x40 NBR-60G3/8-IG	42	43	6	G3/8"-F	37.7	82	83	-	9	22	9.0
MAOB 80x40 NBR-60M10x1.5-AG	42	43	4	M10x1.5-M	29.7	82	83	-	10	17	9.0
MAOB 80x40 NBR-60M14x1.5-AG	42	43	5	M14x1.5-M	31.7	82	83	-	10	22	9.0
MAOB 80x40 NBR-60RA	42	43	4	-	32.7	82	83	32	-	-	9.0
MAOB 110x55 NBR-60G1/4-AG	57	59	6	G1/4"-M	35.5	112	114	-	8	17	13.0
MAOB 110x55 NBR-60G1/4-IG	57	59	8	G1/4"-F	43.0	112	114	-	8	17	13.0
MAOB 110x55 NBR-60G3/8-IG	57	59	8	G3/8"-F	43.5	112	114	-	9	22	13.0
MAOB 110x55 NBR-60M10x1.5-AG	57	59	4	M10x1.5-M	35.5	112	114	-	10	17	13.0
MAOB 110x55 NBR-60M14x1.5-AG	57	59	6	M14x1.5-M	37.5	112	114	-	10	22	13.0
MAOB 110x55 NBR-60RA	57	59	6	-	38.5	112	114	32	-	-	13.0

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