

# Suction Cups for High-Temperature Applications



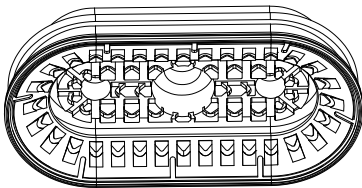
## Bellows Suction Cups MAOB HT1/HT2 (Oval)

Suction area (LxW) 60 x 30 mm to 110 x 55 mm

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System design Bellows Suction Cups MAOB HT1/HT2 (Oval)



### Introduction and application

- ◆ Oval bellows suction cup with 1.5 folds for handling planar and curved workpieces or thermoformed plates. MAOB HT1 handling of hot metal sheets up to 170°C, MAOB HT2 handling of hot metal sheets up to 250°C
- ◆ The positioning of the handling process is accurate, Corrugated structure provides angle and height compensation.
- ◆ Unloading e.g. of elongated workpieces after forming, e.g. reinforcement ribs and plates
- ◆ Handling of thin aluminum sheets without deformation or deep drawing
- ◆ For use e.g. in feeder systems for press lines in the automotive industry
- ◆ Provide extremely high lateral force grip in dusty and humid environments

### Design

- ◆ Wear-resistant material Oval bellows suction cup with special pattern design and internal support structure
- ◆ Connection nipple glued to the reinforcing element of the suction cup (very high strength)
- ◆ The surface design of the special structure provides a high-performance gripping force

### Ordering Guide Bellows Suction Cups MAOB HT1/HT2 (Oval)

Item no.	Suction area $\phi$ [mm]	Material and Shore hardness	Connection thread
MAOB HT1/HT2	60*30	HT1-60	G1/4-IG
	80*40	HT2-65	G1/4-AG
	110*55		G3/8-AG
			G3/8-IG

Note: MAOB HT1/HT2 AG=external thread (M) IG=internal thread (F)

### Ordering Data Bellows Suction Cups MAOB HT1/HT2 (Oval)

Type	Dimensions			
	G1/4"-M	G1/4"-F	G3/8"-M	G3/8"-F
MAOB60x30HT1-60	90.02.01.00575	90.02.01.00579	90.02.01.00583	90.02.01.00587
MAOB80x40HT1-60	90.02.01.00576	90.02.01.00580	90.02.01.00584	90.02.01.00588
MAOB110x55HT1-60	90.02.01.00577	90.02.01.00581	90.02.01.00585	90.02.01.00589
MAOB140x70HT1-60	90.02.01.00578	90.02.01.00582	90.02.01.00586	90.02.01.00590

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Type	Dimensions		
	G1/4"-M	G1/4"-F	G3/8"-F
MAOB 60x30 HT2-65	90.02.01.00591	90.02.01.00593	90.02.01.00595
MAOB 80x40 HT2-65	90.02.01.00592	90.02.01.00594	90.02.01.00596

### Technical Data Bellows Suction Cups MAOB HT1 (Oval)

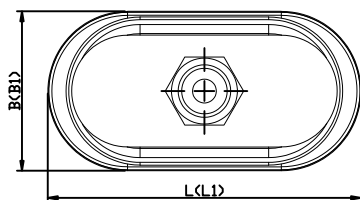
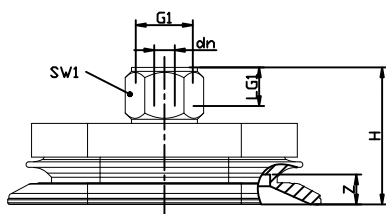
Type	Suction force [N]	Pull-off force [N]	Lateral force [N]	Volume [cm <sup>3</sup> ]	Min. curve radius [mm](convex)	Recom.internal hose diameter d[mm]
MAOB60x30HT1-60	38	70	80	10.5	18	4
MAOB80x40HT1-60	65	132	153	21.8	25	6
MAOB110x55HT1-60	110	234	299	53.1	50	6

### Technical Data Bellows Suction Cups MAOB HT2 (Oval)

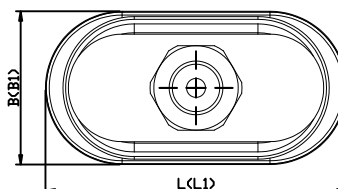
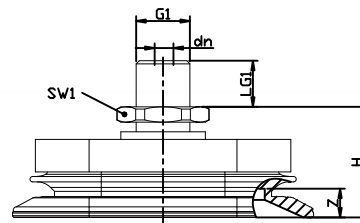
Type	Suction force [N]	Pull-off force [N]	Lateral force [N]	Volume [cm <sup>3</sup> ]	Min. curve radius [mm](convex)	Recom.internal hose diameter d[mm]
MAOB 60x30 HT2-65	38	55	56	9.6	30	4
MAOB 80x40 HT2-65	65	100	98	20.6	40	6

### Technical Data Bellows Suction Cups MAOB HT2 (Oval)

MAOB HT1 60x30 to 110x55 IG



MAOB HT1 60x30 to 110x55 AG



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### Design Data Bellows Suction Cups MAOB HT1 (Oval)

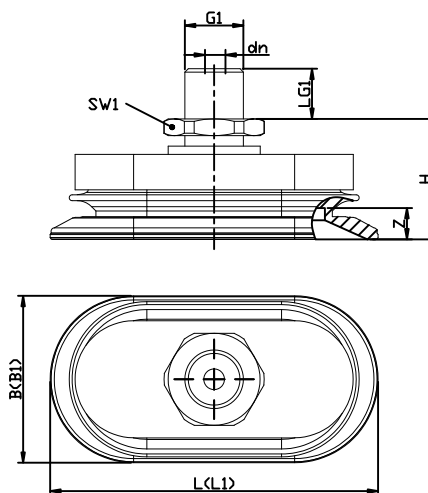
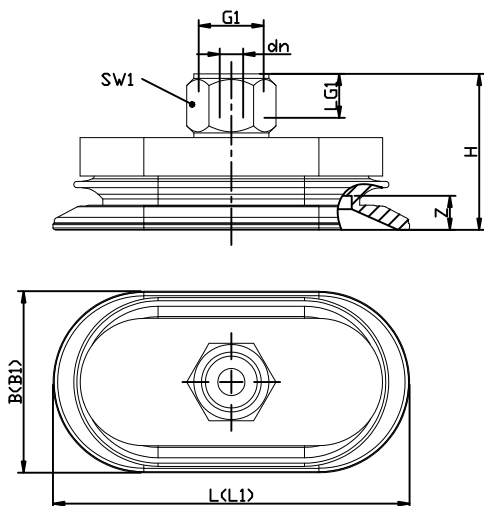
Type	Dimensions[mm]												
	B1	Bmax(s)	Bs	dn	G1	H	L1	LG1	Lmax(s)	Ls	SW1	Z (Stroke)	
MAOB 60x30 HT1-60 G1/4-AG	31	33	30.6	5.0	G1/4"-M	27.0	55.7	8.0	63.0	60.6	17	7.0	
MAOB 60x30 HT1-60 G1/4-IG	31	33	30.6	5.5	G1/4"-F	34.4	55.7	8.0	63.0	60.6	17	7.0	
MAOB 60x30 HT1-60 G3/8-AG	31	33	30.6	5.2	G3/8"-M	27.5	55.7	7.4	63.0	60.6	22	7.0	
MAOB 60x30 HT1-60 G3/8-IG	31	33	30.6	6.0	G3/8"-F	35.0	55.7	9.0	63.0	60.6	22	7.0	
MAOB 80x40 HT1-60 G1/4-AG	40	43	40.6	5.0	G1/4"-M	29.7	73.3	8.0	83.0	80.6	17	9.0	
MAOB 80x40 HT1-60 G1/4-IG	40	43	40.6	6.0	G1/4"-F	37.2	73.3	8.0	83.0	80.6	17	9.0	
MAOB 80x40 HT1-60 G3/8-AG	40	43	40.6	5.2	G3/8"-M	27.7	73.3	8.0	83.0	80.6	22	9.0	
MAOB 80x40 HT1-60 G3/8-IG	40	43	40.6	6.0	G3/8"-F	37.7	73.3	9.0	83.0	80.6	22	9.0	
MAOB 110x55 HT1-60 G1/4-AG	53	59	55.1	6.0	G1/4"-M	35.5	98.8	8.0	114.0	110.1	17	12.0	
MAOB 110x55 HT1-60 G1/4-IG	53	59	55.1	8.0	G1/4"-F	43.0	98.8	8.0	114.0	110.1	17	12.0	
MAOB 110x55 HT1-60 G3/8-AG	53	59	55.1	6.1	G3/8"-M	33.5	98.8	8.0	114.0	110.1	22	12.0	
MAOB 110x55 HT1-60 G3/8-IG	53	59	55.1	8.0	G3/8"-F	43.5	98.8	9.0	114.0	110.1	22	12.0	



### Design Data Bellows Suction Cups MAOB HT2 (Oval)

MAOB HT2 60x30 to 80x40 IG

MAOB HT2 60x30 to 80x40 AG



Type	Dimensions[mm]												
	B1	Bmax(s)	Bs	dn	G1	H	L1	LG1	Lmax(s)	Ls	SW1	Z (Stroke)	
MAOB 60x30 HT2-65 G1/4-AG	31	33	30.6	5	G1/4"-M	27.0	56	8	63	60.6	17	7	
MAOB 60x30 HT2-65 G1/4-IG	31	33	30.6	6	G1/4"-F	34.4	56	8	63	60.6	17	7	
MAOB 60x30 HT2-65 G3/8-IG	31	33	30.6	6	G3/8"-F	35.0	56	9	63	60.6	22	7	
MAOB 80x40 HT2-65 G1/4-AG	40	43	40.6	5	G1/4"-M	29.7	73	8	83	80.6	17	9	
MAOB 80x40 HT2-65 G1/4-IG	40	43	40.6	6	G1/4"-F	37.2	73	8	83	80.6	17	9	
MAOB 80x40 HT2-65 G3/8-IG	40	43	40.6	6	G3/8"-F	37.7	73	9	83	80.6	22	9	