

Oval Bellows family (OB)



The oval suction cups are suitable for handling of long and narrow objects and surfaces when maximum lifting force is desired. Oval suction cups are specially suitable for irregular surfaces and when level compensation is desired. This program of oval suction cups has characteristics that are specially suited for handling of metal-sheet material.

Lifting forces

	Lifting force vertical to the surface, N, at vacuum level			Lifting force parallel to the surface, N, at vacuum level		
	20 -kPa	60 -kPa	90 -kPa	20 -kPa	60 -kPa	90 -kPa
OB20x60P	13	34	57	13	37	48
OB35x90P (PU30°/PU60°)	42	119	174	48	73	100
OB35x90P (PU60°)	42	117	185	32	85	111
OB50x140P (PU30°/PU60°)	58	235	366	110	260	349
OB50x140P (PU60°)	77	231	368	122	292	396
OB65x170P (PU30°/PU60°)	119	335	541	141	379	532
OB65x170P (PU60°)	130	310	533	170	440	600
OBF35x90P	—	140/108*	198/157*	—	125/105*	179/151*
OBF50x140P	—	325/246*	438/372*	—	328/271*	415/347*
OBF65x170P	—	397/403*	570/502*	—	437/538*	619/665*
OBL40x90P (PU60°)	44	105	160	40	87	121
OBL40x90P (PU70°)	49	117	178	45	97	135

* Dry metal sheet/Oily metal sheet.

General specifications

	Outer diameter, mm	Height, mm	Min. curve radius, mm	Max. vertical movement, mm	Volume, cm ³
OB20x60P	62x23.5	23.6	7	4.5	24
OB35x90P	95.6x42.4	27.2	30	10.5	38
OB50x140P	146x59	34.5	23/26**	11.3	95
OB65x170P	177x76	41.5	38	16	175
OBF35x90P	105x50	39–47.9*	30	11	36

	Outer diameter, mm	Height, mm	Min. curve radius, mm	Max. vertical movement, mm	Volume, cm ³
OBF50x140P	157x67	47–55.8*	50	13	95
OBF65x170P	187x82	54–62.8*	50	15	200
OBL40x90P	92.6x45	63–73*	28	31	105

* Height range includes fittings, ** PU30°/PU60° / PU60°.

Available materials

	PU30°/PU60°	PU55°/PU60°	PU60°	PU70°
OB20x60P			●	
OB35x90P	●		●	
OB50x140P	●		●	
OB65x170P	●		●	
OBF35x90P		●		
OBF50x140P		●		
OBF65x170P		●		
OBL40x90P			●	●

Material resistance

For more material information go to page 23.

Applications

Table shows typical applications for the suction cup. For more detailed information, please visit piab.com.

	Oily sheet metal	Corrugated / cardboard	Glass handling	Mark Free
OB20x60P				●
OB35x90P		●		●
OB50x140P		●		●
OB65x170P		●		●
OBF35x90P	●			
OBF50x140P	●			
OBF65x170P	●			
OBL40x90P			●	●

Fittings

For a table of possible fittings to use go to page 80, for technical information on all fittings visit piab.com.

Ordering information

For a complete list of available cups and combinations with further information visit piab.com. On our webpage you will also be able to find dimensional drawings, CAD-drawings and much more. Register to receive full access to all resources available.