

## OBF35X90P, OBF50X140P, OBF65X170P



- ▶ Special designed friction cups for oily surfaces, such as sheets in metal forming processes.
- ▶ Normal wear on friction cup will not affect the long term shear force performance.
- ▶ Best choice if  $> 0,1g/m^2$  press oil is used on the sheet.
- ▶ Thanks to the strong grip on oily surfaces, the suction cups can withstand high shear forces, typically 2–4 times more than corresponding conventional suction cups.
- ▶ The "OBF" design is suitable for oblong objects with domed and flat surfaces, such as those encountered with body parts in the automotive industry.
- ▶ Can handle objects with height differences.
- ▶ Fitting option, male G3/8", with a swivel function prior to the locking operation, for easy positioning of the oval cup.
- ▶ DURAFLEX® suction cups manufactured in a specially developed material that features the elasticity of rubber and wear resistance of polyurethane. The material does not leave any marks on the objects handled.

### LIFTING FORCES & TECHNICAL DATA

Model	Material to be handled	Lifting forces vertical to the surface, N, at vacuum level		Friction/shear forces parallel to the surface, N, at vacuum level		Volume cm <sup>3</sup>	Min. curve radius mm	Weight g
		60 -kPa	90 -kPa	60 -kPa	90 -kPa			
OBF35x90P	Oily steel plate	108	157	105	151	36	30	77-97
OBF50x140P	Oily steel plate	246	372	271	347	95	50	172-190
OBF65x170P	Oily steel plate	403	502	538	665	200	50	289-310

Values valid for steel sheet with surface finish Ra 1 and 2-3g/m<sup>2</sup> of press oil.

### MATERIAL SPECIFICATIONS

Material	Colour	Hardness, °Shore A	Temperature range, °C
Polyurethane, PU55	Orange	55	10-50
Polyurethane, PU60	Green transparent	60	10-50

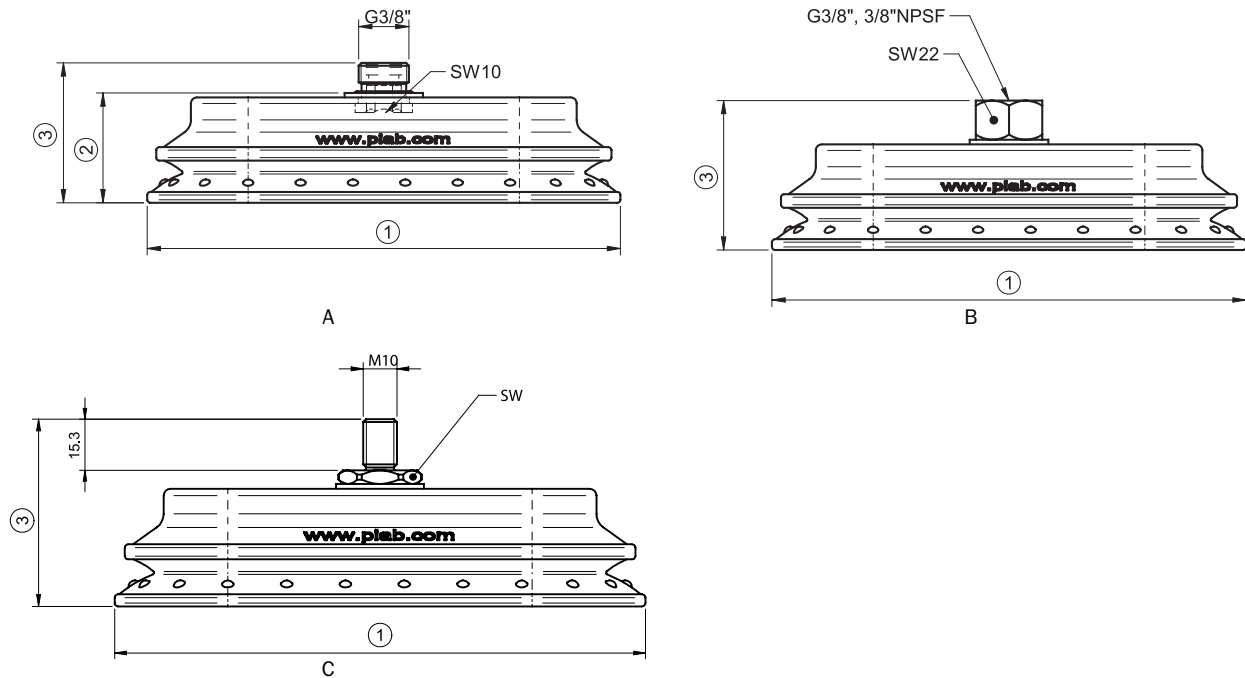
### MATERIAL RESISTANCE

Wear resistance	Oil	Weather & ozone	Hydrolysis	Petrol	Concentrated acids	Ethanol	Methanol	Oxidation
Excellent	Excellent	Excellent	Fair**	Fair	Fair**	Fair	Poor	Poor

\*\*Please contact PIAB.

## ORDERING INFORMATION

	Complete suction cups	Code	Art. No.
A	Suction cup OBF35x90P Polyurethane 55/60, G3/8" male, with mesh filter	OBF35x90P.5R.G40M	0119121
B	Suction cup OBF35x90P Polyurethane 55/60, G3/8" female	OBF35x90P.5R.G46W	0119123
B	Suction cup OBF35x90P Polyurethane 55/60, 3/8" NPSF female	OBF35x90P.5R.N40W	0119122
C	Suction cup OBF35x90P Polyurethane 55/60, M10 male	OBF35x90P.5R.M10M	0121436
A	Suction cup OBF50x140P Polyurethane 55/60, G3/8" male, with mesh filter	OBF50x140P.5R.G40M	0119125
B	Suction cup OBF50x140P Polyurethane 55/60, G3/8" female	OBF50x140P.5R.G46W	0119127
B	Suction cup OBF50x140P Polyurethane 55/60, 3/8" NPSF female	OBF50x140P.5R.N40W	0119126
C	Suction cup OBF50x140P Polyurethane 55/60, M10 male	OBF50x140P.5R.M10M	0121437
A	Suction cup OBF65x170P Polyurethane 55/60, G3/8" male, with mesh filter	OBF65x170P.5R.G40M	0119129
B	Suction cup OBF65x170P Polyurethane 55/60, G3/8" female	OBF65x170P.5R.G46W	0119131
B	Suction cup OBF65x170P Polyurethane 55/60, 3/8" NPSF female	OBF65x170P.5R.N40W	0119130
C	Suction cup OBF65x140P Polyurethane 55/60, M10 male	OBF65x140P.5R.M10M	0121438



Suction cups OBF-P

Measures complete suction cups	OBF35x90P			OBF50x140P			OBF65x170P		
	A	B	C	A	B	C	A	B	C
1	50x105	50x105	50x105	67x157	67x157	67x157	82x187	82x187	82x187
2	29	—	—	37	—	—	44	—	—
3	39	42	47.8	47	50	55.8	54	57	62.8
Max. vertical movement, mm	11	11	11	13	13	13	15	15	15
Max. expanding lip, mm	50x109	50x109	50x109	67x162	67x162	67x162	83x191	83x191	83x191
Wrench size SW	—	22	22	—	22	22	—	22	22