

# OBF35x90P, OBF50x140P, OBF65x170P



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### Features

- 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, lbf, at vacuum level		Friction shear force parallel to the surface, lbf, at vacuum level		Volume in <sup>3</sup>	Min. curve radius in	Weight oz
		18 -inHg	27 -inHg	18 -inHg	27 -inHg			
OBF35x90P	Oily steel plate	24.2 (31.5*)	35.3 (44.5*)	23.6 (28.1*)	33.9 (40.2*)	2.20	1.18	2.72-3.42
OBF50x140P	Oily steel plate	55.3 (73.1*)	83.6 (98.5*)	60.9 (73.7*)	78.0 (93.3*)	5.80	1.97	6.07-6.70
OBF65x170P	Oily steel plate	90.6 (89.2*)	113 (128*)	121 (98.2*)	149 (139*)	12.2	1.97	10.2-10.9

Values valid for steel sheet with surface finish  $R_a 1$  and 2-3g/m<sup>2</sup> of press oil. \*) Dry metal sheet

### Material specifications

Material	Color	Hardness, °Shore A	Temperature range, °F
Polyurethane, PU55	Orange	55	50-122
Polyurethane, PU60	Green transparent	60	50-122

### Material resistance

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

### Measurements suction cups with fitting [in]

	OBF35x90P				OBF50x140P			OBF65x170P		
	A	B	C	D	A	B	D	A	B	D
1	1.97x4.13	1.97x4.13	1.97x4.13	1.97x4.13	2.64x6.18	67x157	2.64x6.18	2.64x6.18	2.64x6.18	2.64x6.18
2	1.14	—	—	—	1.46	—	—	1.73	—	—
3	1.54	1.65	1.89	1.88	1.85	1.97	2.20	2.13	2.24	2.47
Max. vertical movement	0.43	0.43	0.43	0.43	0.51	0.51	0.51	0.59	0.59	0.59
Max. expanding	1.97x4.29	1.97x4.29	1.97x4.29	1.97x4.29	2.64x6.38	2.64x6.38	2.64x6.38	3.27x7.52	3.27x7.52	3.27x7.52



## Ordering information

Suction cups with fitting		Part No.
A	Suction cup OBF35x90P Polyurethane 55/60, G3/8" male, with mesh filter	OBF35x90P.5R.G40M
B	Suction cup OBF35x90P Polyurethane 55/60, G3/8" female	OBF35x90P.5R.G46W
C	Suction cup OBF35x90P Polyurethane 55/60, G3/8" female, 17 mm thread	OBF35x90P.5R.G62W
B	Suction cup OBF35X90P Polyurethane 55/60, 3/8" NPT female	OBF35X90P.5R.N48W
D	Suction cup OBF35x90P Polyurethane 55/60, M10x1.5 male	OBF35x90P.5R.M10M
A	Suction cup OBF50x140P Polyurethane 55/60, G3/8" male, with mesh filter	OBF50x140P.5R.G40M
B	Suction cup OBF50x140P Polyurethane 55/60, G3/8" female	OBF50x140P.5R.G46W
B	Suction cup OBF50X140P Polyurethane 55/60, 3/8" NPT female	OBF50X140P.5R.N48W
D	Suction cup OBF50x140P Polyurethane 55/60, M10x1.5 male	OBF50x140P.5R.M10M
A	Suction cup OBF65x170P Polyurethane 55/60, G3/8" male, with mesh filter	OBF65x170P.5R.G40M
B	Suction cup OBF65x170P Polyurethane 55/60, G3/8" female	OBF65x170P.5R.G46W
B	Suction cup OBF65X170P Polyurethane 55/60, 3/8" NPT female	OBF65X170P.5R.N48W
D	Suction cup OBF65x170P Polyurethane 55/60, M10x1.5 male	OBF65x170P.5R.M10M

