## **piab** Evolving automation



Item no: 0122287

## Suction cup OBF35X90P Polyurethane 55/60, 3/8" NPT female

Special designed friction cups for oily surfaces, such as sheets in metal forming processes. 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-P 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. 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.

- 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/m2 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.

## General

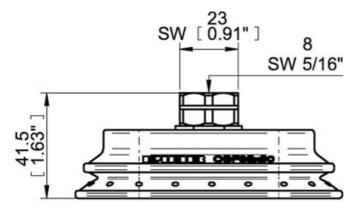
Application	Oily sheet metal		
Suction cup shape	Oval Bellows		
Material	PU55, PU60		
Suction cup model	OBF		
Weight	77 - 97 g		
Volume	36 cm <sup>3</sup>		
Suction cup model	OBF35x90P Dry metal sheet		
Specification	Dry metal sheet		
Movement, vertical max.	11 mm		
Curve radius, min.	30 mm		
Suction cup model	OBF35x90P Oily steel plate		
Specification	Oily steel plate		
Titting			
Fitting option	None		
Fitting size	3/8"		
Fitting style	Female		
Fitting type	NPT-thread		
Dimension			
Height	41.5 mm		
Length	105 mm		
Width	50 mm		
Performance - lifting forces			
OBF35x90P Dry metal sheet	<u>^</u>	, ∠	
60 -kPa	140 N	125 N	
90 -kPa	198 N	179 N	
OBF35x90P Oily steel plate	<b>↑</b>	, ∠	
60 -kPa	108 N	105 N	
90 -kPa	157 N	151 N	

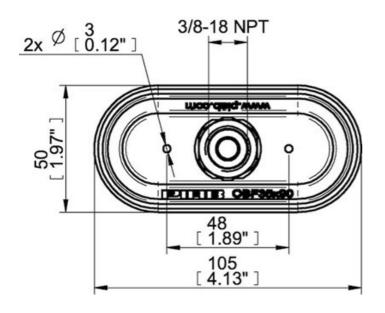
Material

Name	PU55	PU60	
Colour	Orange	GreenTransparent	
Temperature	10 - 50 °C	10 - 50 °C	
Hardness	55 °Shore A	60 °Shore A	

	PU55	PU60
Alcohol	n/a	n/a
Concentrated acids	+	+
Ethanol	+	+
Hydrolysis	+	+
Methanol	-	-
Oil	+++	+++
Oxidation	-	-
Petrol	+	+
Wear resistance	+++	+++
Weather and ozone	+++	+++

Dimensional drawings 🔓





Values specified in the data sheet are tested at:

- Room temperature: (20°C [68°F] ± 3°C [5.5°F])
- Standard atmosphere: (101.3 [29.9 inHg] ± 1.0 kPa [0.3 inHg])
- Relative humidity: 0-100%
- Compressed air quality: DIN ISO 8573-1 class 4