

Datasheet

Suction cup OBF40X80P Polyurethane 60, 3/8" NPT female

Item number: OBF40x80P.5X.N48W



- 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 $> 0,1\text{g/m}^2$ 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.

Technical data

Description	Unit	Value
Suction cup shape	-	Bellows
Application	-	Oily sheet metal
Suction cup design	-	Oval
Characteristics	-	Oily sheet metal
Material	-	Polyurethane (PU)
Weight, min.	oz	2.17
Suction cup model	-	OBF
Volume	in ³	1.36
Height (total height)	in	1.56
Height 2 (actuated total height)	in	1.23
Length	in	3.12
Fitting size	-	3/8"
Fitting option	-	None
Fitting style	-	Female
Fitting type	-	NPT-thread
Width	in	1.58
Length, actuated	in	3.17
Width, actuated	in	1.54
Fitting material	-	Brass
Suction cup model	-	OBF40x80P Dry metal sheet
Movement, vertical max.	in	0.33
Curve radius, min.	in	2.17
Suction cup model	-	OBF40x80P Oily steel plate
Movement, vertical max.	in	0.33
Curve radius, min.	in	2.17

Performance - Lifting forces

	Vertical (lb)	Parallel (lb)
OBF40x80P Dry metal sheet	16.19	9.89
17.72 -inHg	23.83	12.14
26.58 -inHg		
OBF40x80P Oily steel plate	16.19	5.62
17.72 -inHg	22.93	7.19
26.58 -inHg		

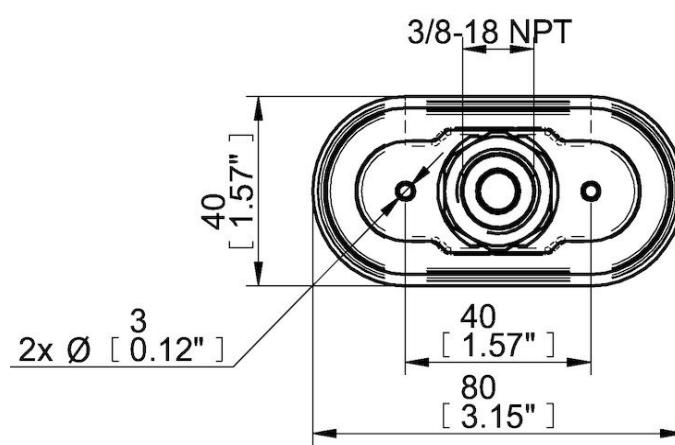
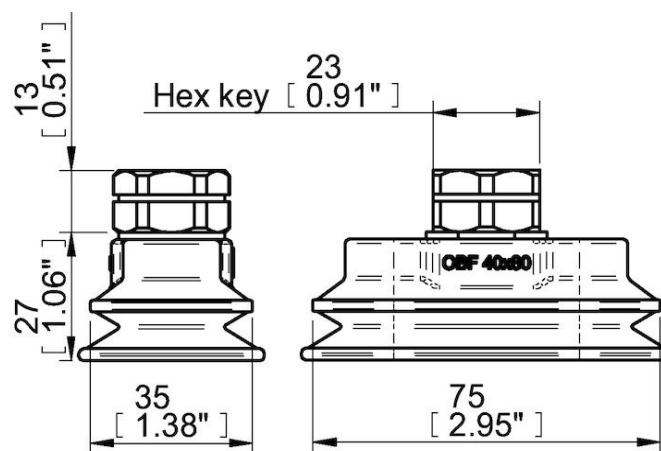
Material

Name	Polyurethane (PU60)
Color	Orange
Temperature, min. °F	50.0
Temperature max. °F	122.0
Hardness °Shore A	60

Material resistance

Alcohol	n/a
Concentrated acids	Fair
Ethanol	Fair
Hydrolysis	Fair
Methanol	Poor
Oil	Excellent
Oxidation	Poor
Gasoline	Fair
Wear resistance	Excellent
Weather and ozone	Excellent

Dimensional drawings



Values specified in this data sheet are tested at (unless otherwise stated):

- Room temperature (20°C [68°F] \pm 3°C [5.5°F]).
- Standard atmosphere (101.3 [29.9 inHg] \pm 1.0 kPa [0.3 inHg]).
- Relative humidity 20-70%.
- Compressed air quality, DIN ISO 8573-1 class 4.