Datasheet

Suction cup OBF50x140P Polyurethane 55/60, M10x1.5 male

Article number: 0121437



- 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.

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, max.	g	190
Weight, min.	g	172
Suction cup model	-	OBF
Volume	cm³	95
Height	mm	40.5
Length	mm	157
Fitting size	-	M10×1.5
Fitting option	-	None
Fitting style	-	Male
Fitting type	-	M-thread
Width (1)	mm	68
Suction cup model	-	OBF50x140P Dry metal sheet
Movement, vertical max.	mm	14
Curve radius, min.	mm	50
Suction cup model	-	OBF50x140P Oily steel plate
Movement, vertical max.	mm	14
Curve radius, min.	mm	50

Performance - Lifting forces

OBF50x140P Dry metal sheet	Vertical (N)	Parallel (N)
60 -kPa	325	328
90 -kPa	438	415
OBF50x140P Oily steel plate		

OBF50x140P Dry metal sheet	Vertical (N)	Parallel (N)
60 -kPa	246	271
90 -kPa	372	347

Material

Name	Polyurethane (PU55)	Polyurethane (PU60)			
Colour	Orange	Green transparent			
Temperature, min. °C	10	10			
Temperature max. °C	50	50			
Hardness °Shore A	55	60			
Material resistance					
Alcohol	n/a	n/a			
Concentrated acids	Fair	Fair			
Ethanol	Fair	Fair			
Hydrolysis	Fair	Fair			
Methanol	Poor	Poor			
Oil	Excellent	Excellent			
Oxidation	Poor	Poor			
Petrol	Fair	Fair			

Excellent

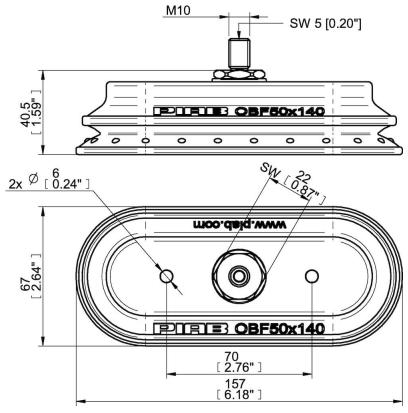
Excellent

Excellent

Excellent

Dimensional drawings

Wear resistance Weather and ozone



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

- •Room temperature (20°C [68°F] ± 3°C [5.5°F]).
- •Standard atmosphere (101.3 [29.9 in Hg] \pm 1.0 kPa [0.3 in Hg]).
- •Relative humidity 20-70%.
- $\bullet \textsc{Compressed}$ air quality, DIN ISO 8573-1 class 4.