### Datasheet

# Suction cup BFF80P Polyurethane 55/60 G1/4" male with mesh filter

#### Article number: 0209104



- 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 "BFF" design is suitable for uneven/curved surfaces or if level compensation is needed, for example in de-stacking applications.
- The flat inner support gives stability during movement in any orientation.
- 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.

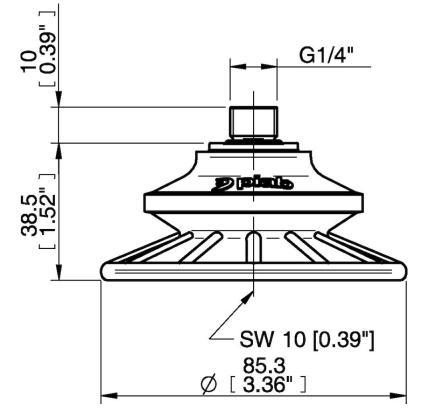
Technical data		
Description	Unit	Value
Suction cup shape	-	Bellows
Application	-	Oily sheet metal
Suction cup design	-	Round
Characteristics	-	Oily sheet metal
Material	-	Polyurethane (PU)
Weight, min.	g	0.0845
Suction cup model	-	BFF
Height	mm	48.5
Outer diameter, min.	mm	85.8
Outer diameter, actuated	mm	86.7
Fitting size	-	1/4"
Fitting option	-	Filter mesh
Fitting style	-	Male
Fitting type	-	G-thread
Material	-	Al
Suction cup model	-	BFF80P Dry metal sheet
Movement, vertical max.	mm	14
Curve radius, min.	mm	50
Suction cup model	-	BFF80P Oily steel plate
Movement, vertical max.	mm	14
Curve radius, min.	mm	50

#### **Performance - Lifting forces**

BFF80P Dry metal sheet	Vertical (N)	Parallel (N)
60 -kPa	176	201
90 -kPa	236	240
BFF80P Oily steel plate		
60 -kPa	174	110
90 -kPa	207	160

Material					
Name	Polyurethane (PU55)	Polyurethane (PU60)			
Colour	Orange	Orange			
Temperature, min.   °C	10	10			
Temperature max.   °C	50	50			
Hardness   <sup>o</sup> 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			
Wear resistance	Excellent	Excellent			
Weather and ozone	Excellent	Excellent			

#### **Dimensional drawings**



## 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 inHg]  $\pm$  1.0 kPa [0.3 inHg]).
- •Relative humidity 20-70%.
- •Compressed air quality, DIN ISO 8573-1 class 4.