### Datasheet

Technical data

# Suction cup BFF40P Polyurethane 55/60, G3/8" male, with mesh filter

#### Article number: 0118991



- 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.

l'echnical data		
Description	Unit	Value
Suction cup shape	-	Bellows
Application	-	Oily sheet metal
Suction cup design	-	Round
Characteristics	-	Oily sheet metal
Material	-	Polyurethane (PU)
Weight, max.	g	17
Weight, min.	g	20
Suction cup model	-	BFF
Volume	cm <sup>3</sup>	10
Height	mm	32
Outer diameter, min.	mm	45
Fitting size	-	3/8"
Fitting option	-	Filter mesh
Fitting style	-	Female
Fitting type	-	G-thread
Suction cup model	-	BFF40P Dry metal sheet
Movement, vertical max.	mm	7
Curve radius, min.	mm	23
Suction cup model	-	BFF40P Oily steel plate
Movement, vertical max.	mm	7
Curve radius, min.	mm	23

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

BFF40P Dry metal sheet	Vertical (N)	Parallel (N)				
60 -kPa	43	60				
90 -kPa	56	81				
BFF40P Oily steel plate						
60 -kPa	45	35				
90 -kPa	60	45				

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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			
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]  $\pm$  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.