# Suction cup FCF50P Polyurethane 55/60, G3/8" male, with mesh filter, FCF50P.4R.05UF



#### General

- 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 "FCF" design is suitable for slightly domed and flat surfaces, e.g., such as those encountered when handling metal sheets in press lines.
- The suction cups have support cleats that prevent thin objects from being disfigured.
- DURAFLEX<sup>®</sup> 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.

Item number, alternative	E12045035
Curve radius	1.97 in
Movement, vertical max.	0.14 in
Application	Oily sheet metal
Material	Polyurethane (PU55), Polyurethane (PU60)
Suction cup model	FCF
Suction cup shape	Flat Concave
Volume	0.61 in <sup>3</sup>
Weight	1.09 – 2.36 oz
Fitting	
Fitting size	3/8"
Fitting style	Male
Fitting type	G-thread
Fitting option	Filter mesh
Dimension	
Height	1.34 in
Outer diameter	1.97 in
Outer diameter, actuated	2.11 in

#### Performance — lifting forces, Dry metal sheet

		1
18 -inHg	17.5 lbf	17.3 lbf
27 -inHg	23.8 lbf	23.6 lbf

## Performance — lifting forces, Oily steel plate

	<b>±</b>	<b>±</b>
18-inHg	16.2 lbf	11.7 lbf
27 -inHg	22.7 lbf	15.7 lbf

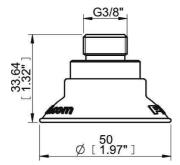
#### Material

	Polyurethane (PU55)	Polyurethane (PU60)
Color	Orange	Green transparent
Hardness	55 °Shore A	60 °Shore A
Temperature	50 – 122 °F	50 – 122 °F

#### **Material resistance**

	Polyurethane (PU55)	Polyurethane (PU60)
Alcohol	N/A	N/A
Concentrated acids	+	+
Ethanol	+	+
Hydrolysis	+	+
Methanol	-	-
Oil	+++	+++
Oxidation	-	-
Gasoline	+	+
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