## **piab** Evolving automation



Item no: 0121431

## Suction cup FCF35P Polyurethane 55/60, M10x1.5 male

The FCF-P design is suitable for oily surfaces, 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® 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.

- 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® 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.

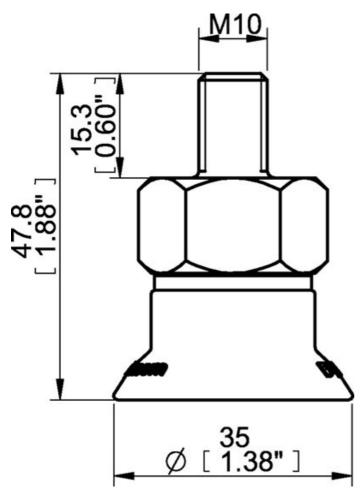
## General

Application	Oily sheet metal		
Suction cup shape	Flat Concave		
Material	PU55, PU60		
Suction cup model	FCF		
Weight	19 - 42 g		
Volume	5 cm³		
Suction cup model	FCF35P Dry metal sheet		
Specification	Dry metal sheet		
Movement, vertical max.	2.5 mm		
Curve radius, min.	40 mm		
Suction cup model	FCF35P Oily steel plate		
Specification	Oily steel plate		
Titting			
Fitting option	None		
Fitting size	M10×1.5		
Fitting style	Male		
Fitting type	M-thread		
Dimension			
Height	47.8 mm		
Outer diameter, actuated	38.5 mm		
Outer diameter	35 mm		
Performance - lifting forces			
FCF35P Dry metal sheet	£	à	
60 -kPa	42 N	30 N	
90 -kPa	58 N	42 N	
FCF35P Oily steel plate	£	→ △	
60 -kPa	34 N	26 N	
90 -kPa	50 N	32 N	

Name	PU55	PU60
Colour	Orange	GreenTransparent
Temperature	10 - 50 °C	10 - 50 °C
Hardness	55 °Shore A	60 °Shore A

Alcoholn/an/aConcentrated acids++Ethanol++Hydrolysis++MethanolOil++++++OxidationPetrol++Wear resistance++++++
Ethanol   +   +     Hydrolysis   +   +     Methanol   -   -     Oil   +++   +++     Oxidation   -   -     Petrol   +   +
Hydrolysis   +   +     Methanol   -   -     Oil   +++   +++     Oxidation   -   -     Petrol   +   +
MethanolOil++++++OxidationPetrol++
Oil +++ +++   Oxidation - -   Petrol + +
Oxidation Petrol + +
Petrol + +
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