

# Suction cup FCF75P Polyurethane 55/60, G3/8" female

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- 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.

## Technical data

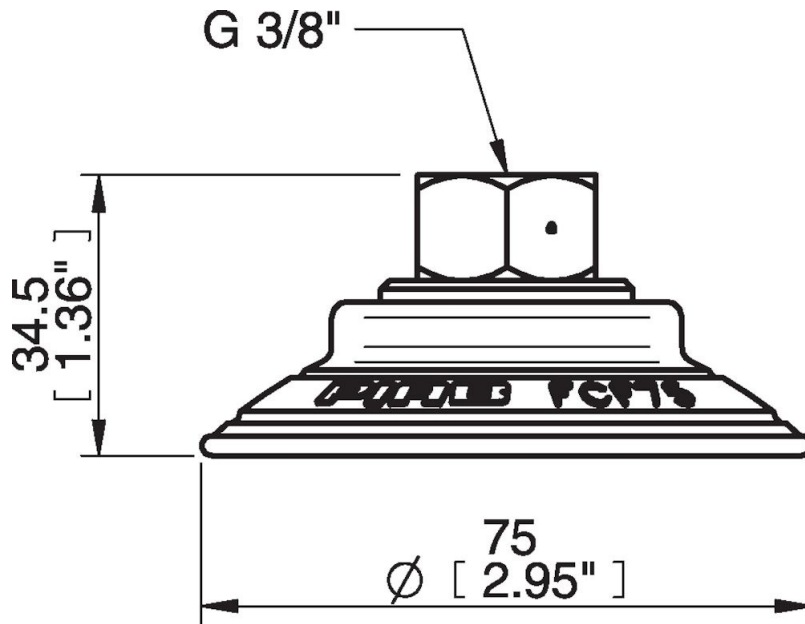
| Description              | Unit            | Value                   |
|--------------------------|-----------------|-------------------------|
| Suction cup shape        | -               | Flat Concave            |
| Application              | -               | Oily sheet metal        |
| Suction cup design       | -               | Round                   |
| Characteristics          | -               | Oily sheet metal        |
| Material                 | -               | Polyurethane (PU)       |
| Weight, max.             | g               | 91                      |
| Weight, min.             | g               | 60                      |
| Suction cup model        | -               | FCF                     |
| Volume                   | cm <sup>3</sup> | 30                      |
| Height                   | mm              | 34.5                    |
| Outer diameter, min.     | mm              | 75                      |
| Outer diameter, actuated | mm              | 78.6                    |
| Fitting size             | -               | 3/8"                    |
| Fitting option           | -               | None                    |
| Fitting style            | -               | Female                  |
| Fitting type             | -               | G-thread                |
| Suction cup model        | -               | FCF75P Dry metal sheet  |
| Movement, vertical max.  | mm              | 5.4                     |
| Curve radius, min.       | mm              | 100                     |
| Suction cup model        | -               | FCF75P Oily steel plate |
| Movement, vertical max.  | mm              | 5.4                     |
| Curve radius, min.       | mm              | 100                     |

## Performance - Lifting forces

|                         | Vertical (N) | Parallel (N) |
|-------------------------|--------------|--------------|
| FCF75P Dry metal sheet  |              |              |
| 60 -kPa                 | 171          | 166          |
| 90 -kPa                 | 236          | 211          |
| FCF75P Oily steel plate |              |              |
| 60 -kPa                 | 163          | 104          |
| 90 -kPa                 | 228          | 139          |

| 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] ± 3°C [5.5°F]).
- Standard atmosphere (101.3 [29.9 inHg] ± 1.0 kPa [0.3 inHg]).
- Relative humidity 20-70%.
- Compressed air quality, DIN ISO 8573-1 class 4.