

Datasheet

Suction cup BFF40P Polyurethane 55/60, G3/8" female, plastic thread

Item number: BFF40P.5RC.G56WC



- 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 $> 0.1\text{g/m}^2$ 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) |
| Suction cup model | - | BFF |
| Volume | in ³ | 0.61 |
| Height | in | 1.54 |
| Outer diameter, min. | in | 1.77 |
| Fitting size | - | 3/8" |
| Fitting option | - | None |
| Fitting style | - | Female |
| Fitting type | - | G-thread |
| Suction cup model | - | BFF40P Dry metal sheet |
| Movement, vertical max. | in | 0.28 |
| Curve radius, min. | in | 0.91 |
| Suction cup model | - | BFF40P Oily steel plate |
| Movement, vertical max. | in | 0.28 |
| Curve radius, min. | in | 0.91 |

Performance - Lifting forces

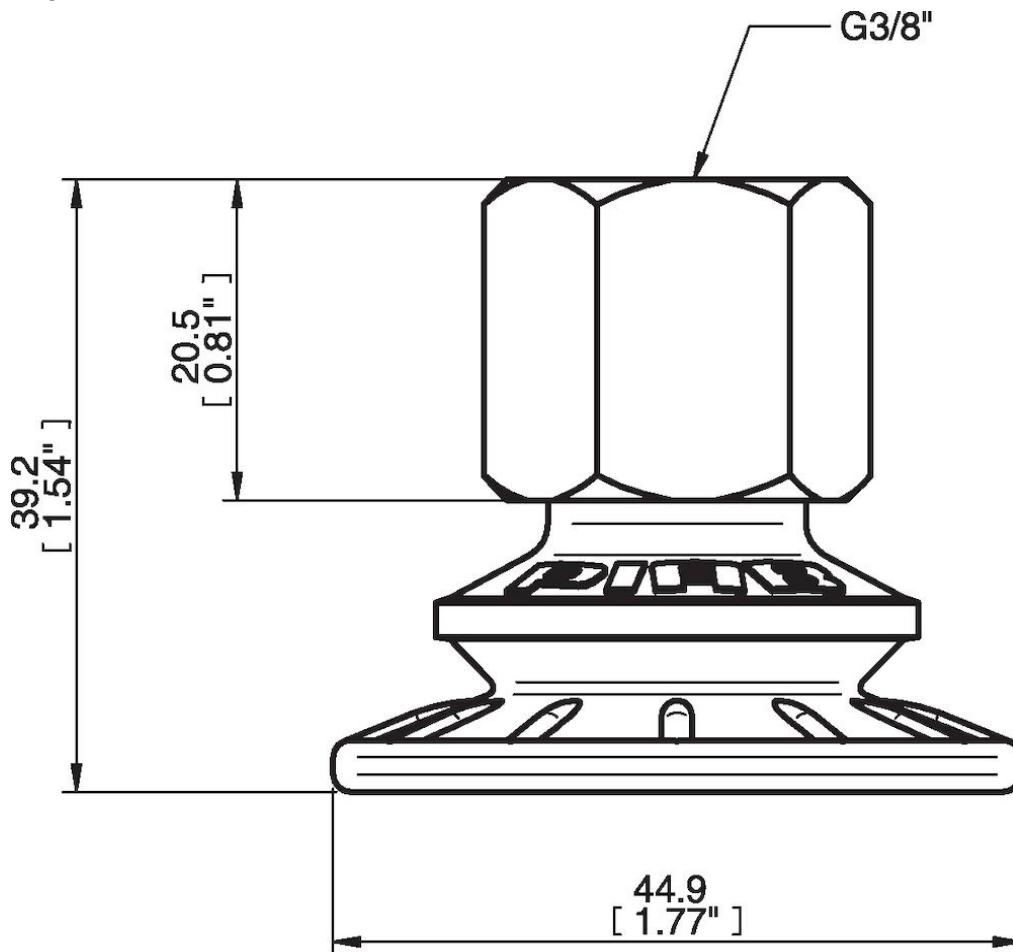
| | Vertical (lb) | Parallel (lb) |
|-------------------------|---------------|---------------|
| BFF40P Dry metal sheet | | |
| 17.72 -inHg | 9.67 | 13.49 |
| 26.58 -inHg | 12.59 | 18.21 |
| BFF40P Oily steel plate | | |
| 17.72 -inHg | 10.12 | 7.87 |
| 26.58 -inHg | 13.49 | 10.12 |

| Name | Polyurethane (PU55) | Polyurethane (PU60) |
|------------------------|---------------------|---------------------|
| Color | Orange | Green transparent |
| Temperature, min. °F | 50.0 | 50.0 |
| Temperature max. °F | 122.0 | 122.0 |
| 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 |
| Gasoline | 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.