

## Suction cup BFF110TP Polyurethane 55/60/30 G3/8" female with mesh filter

Item number: BFF110TP.5S.G77MR



- 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.

### Technical data

| Description             | Unit | Value                    |
|-------------------------|------|--------------------------|
| Suction cup shape       | -    | Bellows                  |
| Application             | -    | Oily sheet metal         |
| Suction cup design      | -    | Round                    |
| Characteristics         | -    | Oily sheet metal         |
| Material                | -    | Polyurethane (PU)        |
| Weight, min.            | oz   | 4.77                     |
| Suction cup model       | -    | BFFT                     |
| Height                  | in   | 2.60                     |
| Outer diameter, min.    | in   | 4.53                     |
| Fitting size            | -    | 3/8"                     |
| Fitting option          | -    | Filter mesh              |
| Fitting style           | -    | Female                   |
| Fitting type            | -    | G-thread                 |
| Length, actuated        | in   | 4.57                     |
| Fitting material        | -    | Al                       |
| Suction cup model       | -    | BFF110P Dry metal sheet  |
| Movement, vertical max. | in   | 0.83                     |
| Curve radius, min.      | in   | 3.74                     |
| Suction cup model       | -    | BFF110P Oily steel plate |
| Movement, vertical max. | in   | 0.83                     |
| Curve radius, min.      | in   | 3.74                     |

Performance - Lifting forces

|                          |               |               |
|--------------------------|---------------|---------------|
| BFF110P Dry metal sheet  | Vertical (lb) | Parallel (lb) |
| 17.72 -inHg              | 62.72         | 66.99         |
| 26.58 -inHg              | 84.75         | 77.78         |
| BFF110P Oily steel plate |               |               |
| 17.72 -inHg              | 63.85         | 52.83         |
| 26.58 -inHg              | 77.56         | 56.88         |

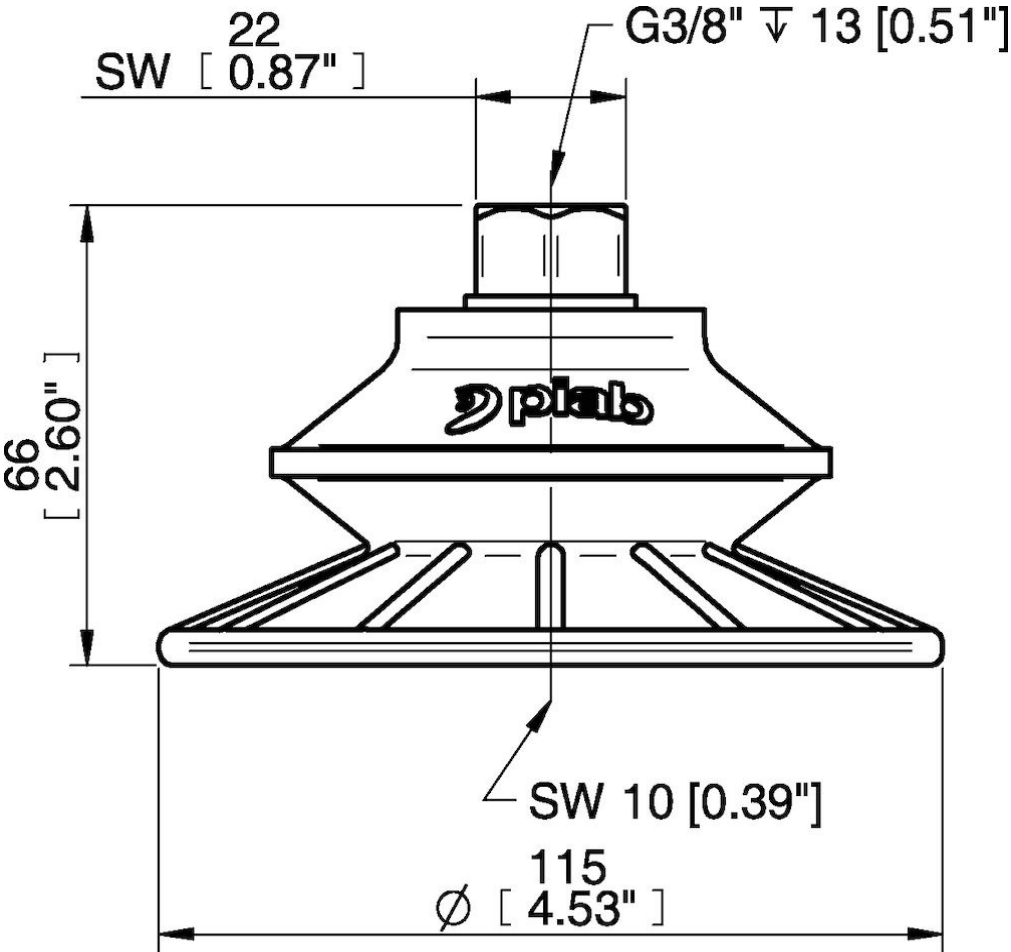
Material

|                        |                     |                     |                     |
|------------------------|---------------------|---------------------|---------------------|
| Name                   | Polyurethane (PU30) | Polyurethane (PU55) | Polyurethane (PU60) |
| Color                  | Yellow              | Orange              | Orange              |
| Temperature, min.   °F | 50.0                | 50.0                | 50.0                |
| Temperature max.   °F  | 122.0               | 122.0               | 122.0               |
| Hardness   °Shore A    | 30                  | 55                  | 60                  |

Material resistance

|                    |           |           |           |
|--------------------|-----------|-----------|-----------|
| Alcohol            | n/a       | n/a       | n/a       |
| Concentrated acids | Fair      | Fair      | Fair      |
| Ethanol            | Fair      | Fair      | Fair      |
| Hydrolysis         | Fair      | Fair      | Fair      |
| Methanol           | Poor      | Poor      | Poor      |
| Oil                | Excellent | Excellent | Excellent |
| Oxidation          | Poor      | Poor      | Poor      |
| Gasoline           | Fair      | Fair      | Fair      |
| Wear resistance    | Excellent | Excellent | Excellent |
| Weather and ozone  | Excellent | 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.