

Suction cup BXF105P Polyurethane 60, G1/4" female with mesh filter

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- Special designed friction cup with multi bellows for oily metal sheets. Suitable for application where great level compensation is needed such as de-stacking sheets from magazines (press-line) and picking car body parts from racks.
- Very low vacuum level needed to fully compress the extra-long bellows causes the cup not to push away parts from position.
- The "BXF" design is suitable for flat as well as uneven/curved surfaces.
- Internal friction pattern on the lip can withstand high shear forces, typically 3–5 times more than corresponding conventional suction cups.
- Best choice if > 0.1g/m² press oil is used on the sheet but also a great choice for dry metal sheets.
- DURAFLEX® is a material that features the elasticity of rubber and wear resistance of polyurethane. The material has a fantastic elastic memory, even after hundreds of thousand cycles.

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. | g | 185 |
| Suction cup model | - | BXF |
| Volume | cm ³ | 284 |
| Height | mm | 99.1 |
| Outer diameter, min. | mm | 105 |
| Outer diameter, actuated | mm | 108 |
| Fitting size | - | 1/4" |
| Fitting option | - | Filter mesh |
| Fitting style | - | Female |
| Fitting type | - | G-thread |
| Material | - | Al |
| Suction cup model | - | BXF105P Dry metal sheet |
| Movement, vertical max. | mm | 56.4 |
| Curve radius, min. | mm | 230 |
| Suction cup model | - | BXF105P Oily metal sheet |
| Movement, vertical max. | mm | 56.4 |
| Curve radius, min. | mm | 230 |

Performance - Lifting forces

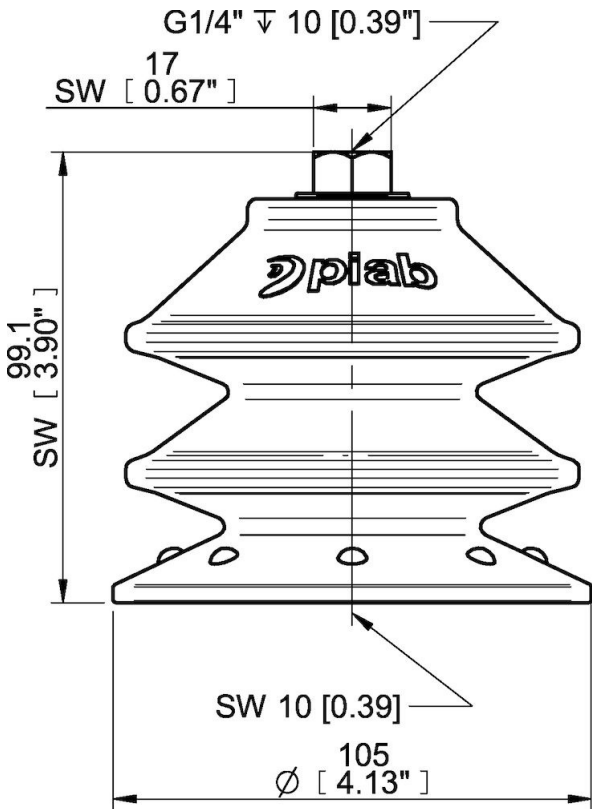
| | Vertical (N) | Parallel (N) |
|--------------------------|--------------|--------------|
| BXF105P Dry metal sheet | | |
| 60 -kPa | 217 | 105 |
| 90 -kPa | 282 | 114 |
| BXF105P Oily metal sheet | | |
| 60 -kPa | 238 | 125 |
| 90 -kPa | 314 | 129 |

Material

| | |
|------------------------|---------------------|
| Name | Polyurethane (PU60) |
| Colour | Orange |
| Temperature, min. °C | 10 |
| Temperature max. °C | 50 |
| Hardness °Shore A | 60 |

Material resistance

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

Dimensional drawings

Values specified in this data sheet are tested at (unless otherwise stated):

- Room temperature (20°C [68°F] \pm 3°C [5.5°F]).
- Standard atmosphere (101.3 [29.9 inHg] \pm 1.0 kPa [0.3 inHg]).
- Relative humidity 20-70%.
- Compressed air quality, DIN ISO 8573-1 class 4.