Datasheet

Suction cup BFF110TP Polyurethane 55/60/30 G3/8" female with mesh filter, 17 mm thread

Article number: 0207204



- Special designed friction cups for thin (0.6-0.8 mm) oily metal sheets, such as outer body car parts in a press-to press forming process.
- Long lasting material, normal wear on friction cup will not affect the long term grip performance.
- The suction cups 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.
- The "BFF-TP" design is suitable for thin flat or uneven/curved surfaces and if level compensation is needed.
- The flat inner support, made of dual hardness, gives stability and good grip 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 and has a fantastic elastic memory, even after hundreds of thousands of cycle.

| l'echnical 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 | 176 |
| Suction cup model | - | BFFT |
| Height | mm | 72.5 |
| Outer diameter, min. | mm | 115 |
| Fitting size | - | 3/8" |
| Fitting option | - | Filter mesh |
| Fitting style | - | Female |
| Fitting type | - | G-thread |
| Length, actuated | mm | 116 |
| Material | - | Al |
| Suction cup model | - | BFF110P Dry metal sheet |
| Movement, vertical max. | mm | 21 |
| Curve radius, min. | mm | 95 |
| Suction cup model | - | BFF110P Oily steel plate |
| Movement, vertical max. | mm | 21 |
| Curve radius, min. | mm | 95 |
| | | |

Performance - Lifting forces

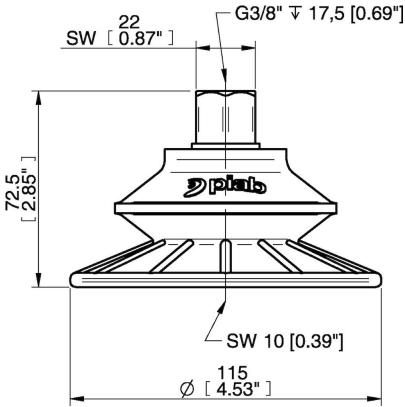
| BFF110P Dry metal sheet | Vertical (N) | Parallel (N) | | | | |
|--------------------------|--------------|--------------|--|--|--|--|
| 60 -kPa | 279 | 298 | | | | |
| 90 -kPa | 377 | 346 | | | | |
| BFF110P Oily steel plate | | | | | | |
| 60 - kPa | 284 | 235 | | | | |
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Technical data

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| BFF110P Dry metal sheet 90 -kPa | | Vertical (N) 345 | Parallel (N) 253 | | | | |
|------------------------------------|---------------------|---------------------|---------------------|--|--|--|--|
| Material | | | | | | | |
| Name | Polyurethane (PU30) | Polyurethane (PU55) | Polyurethane (PU60) | | | | |
| Colour | Yellow | Orange | Orange | | | | |
| Temperature, min. °C | 10 | 10 | 10 | | | | |
| Temperature max. °C | 50 | 50 | 50 | | | | |
| Hardness ^o 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 | | | | |
| Petrol | 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.