

# Suction cup BXF60P Polyurethane 60, 3/8" NPT 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               | 74.5                    |
| Suction cup model        | -               | BXF                     |
| Volume                   | cm <sup>3</sup> | 80                      |
| Height                   | mm              | 65.6                    |
| Outer diameter, min.     | mm              | 60                      |
| Outer diameter, actuated | mm              | 61.7                    |
| Fitting size             | -               | 3/8"                    |
| Fitting option           | -               | Filter mesh             |
| Fitting style            | -               | Female                  |
| Fitting type             | -               | NPT-thread              |
| Material                 | -               | Al                      |
| Suction cup model        | -               | BXF60P Dry metal sheet  |
| Movement, vertical max.  | mm              | 31.8                    |
| Curve radius, min.       | mm              | 70                      |
| Suction cup model        | -               | BXF60P Oily metal sheet |
| Movement, vertical max.  | mm              | 31.8                    |
| Curve radius, min.       | mm              | 70                      |

## Performance - Lifting forces

|                         | Vertical (N) | Parallel (N) |
|-------------------------|--------------|--------------|
| BXF60P Dry metal sheet  |              |              |
| 60 -kPa                 | 88           | 47           |
| 90 -kPa                 | 122          | 50           |
| BXF60P Oily metal sheet |              |              |
| 60 -kPa                 | 82           | 43           |
| 90 -kPa                 | 115          | 46           |

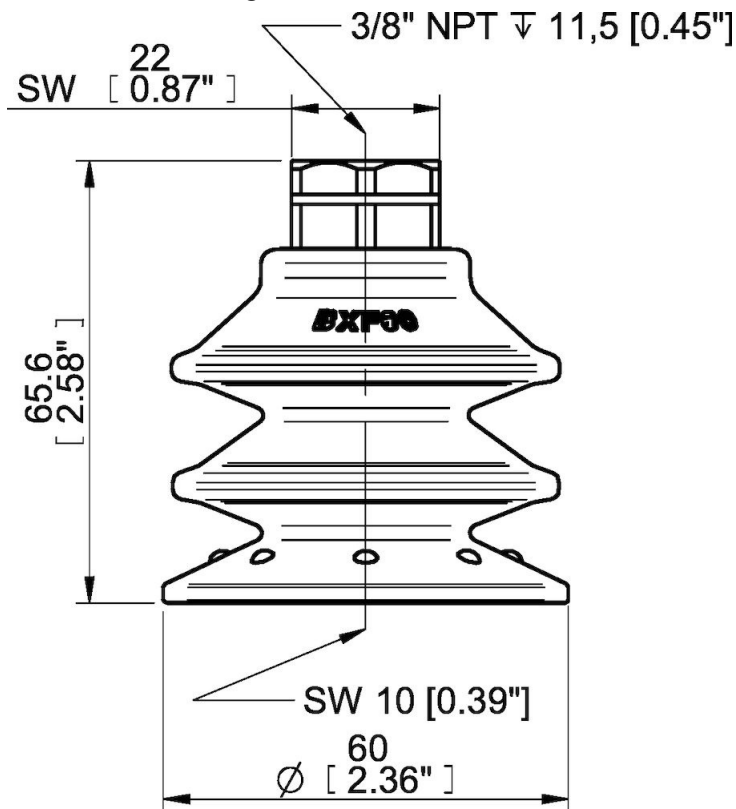
## Material

|                        |                     |
|------------------------|---------------------|
| 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.