### Datasheet

# Suction cup DCF110P Polyurethane 60, G3/8" female, with mesh filter

Article number: 0206547



- Special designed friction cups for domed or flat oily surfaces, such as sheets in metal forming processes.
- Long lasting material, 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 but also a great choice for dry metal sheets.
- Refined internal friction pattern provides additional grip performance, the suction cups can withstand high shear forces, typically 3-5 times more than corresponding conventional suction cups.
- Thin design that easily will follow convex or concave surfaces. The thin and pliable design in combination with a special inner friction pattern will maximize grip performance.
- 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 cycles.

| Description              | Unit            | Value                    |  |  |  |  |
|--------------------------|-----------------|--------------------------|--|--|--|--|
| Suction cup shape        | -               | Deep Concave             |  |  |  |  |
| Application              | -               | Oily sheet metal         |  |  |  |  |
| Suction cup design       | -               | Round                    |  |  |  |  |
| Characteristics          | -               | Oily sheet metal         |  |  |  |  |
| Material                 | -               | Polyurethane (PU)        |  |  |  |  |
| Weight, min.             | g               | 103.1                    |  |  |  |  |
| Suction cup model        | -               | DCF                      |  |  |  |  |
| Volume                   | cm <sup>3</sup> | 110.2                    |  |  |  |  |
| Height                   | mm              | 50.6                     |  |  |  |  |
| Outer diameter, min.     | mm              | 112.5                    |  |  |  |  |
| Outer diameter, actuated | mm              | 121.2                    |  |  |  |  |
| Fitting size             | -               | 3/8"                     |  |  |  |  |
| Fitting option           | -               | Filter mesh              |  |  |  |  |
| Fitting style            | -               | Female                   |  |  |  |  |
| Fitting type             | -               | G-thread                 |  |  |  |  |
| Suction cup model        | -               | DCF110P Oily metal sheet |  |  |  |  |
| Movement, vertical max.  | mm              | 17.2                     |  |  |  |  |
| Curve radius, min.       | mm              | 153                      |  |  |  |  |
| Suction cup model        | -               | DCF110P Dry metal sheet  |  |  |  |  |
| Movement, vertical max.  | mm              | 17.2                     |  |  |  |  |
| Curve radius, min.       | mm              | 153                      |  |  |  |  |
|                          |                 |                          |  |  |  |  |

#### **Performance - Lifting forces**

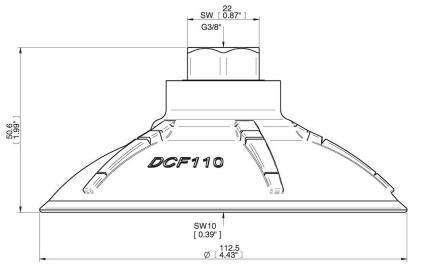
| DCF110P Oily metal sheet | Vertical (N) | Parallel (N) |
|--------------------------|--------------|--------------|
| 60 -kPa                  | 313          | 286          |
| 90 -kPa                  | 433          | 358          |
| DCF110P Dry metal sheet  |              |              |

#### Technical data

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| DCF110P Oily metal sheet        | Vertical (N)        | Parallel (N) |
|---------------------------------|---------------------|--------------|
|                                 |                     |              |
| 60 -kPa                         | 315                 | 377          |
| 90 -kPa                         | 436                 | 573          |
| Material                        |                     |              |
| Name                            | Polyurethane (PU60) |              |
| Colour                          | Orange              |              |
| Temperature, min.   °C          | 10                  |              |
| Temperature max.   °C           | 50                  |              |
| Hardness   <sup>o</sup> 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] ± 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.