## Datasheet

# Suction cup DCF30P Polyurethane 60, G1/4" male

Article number: 0210593



- 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® 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        | -               | Deep Concave           |
| Application              | -               | Oily sheet metal       |
| Suction cup design       | -               | Round                  |
| Characteristics          | -               | Oily sheet metal       |
| Material                 | -               | Polyurethane (PU)      |
| Weight, min.             | g               | 22.4                   |
| Suction cup model        | -               | DCF                    |
| Volume                   | cm <sup>3</sup> | 1.6067                 |
| Height                   | mm              | 18.7                   |
| Height 2 (Actuated)      | mm              | 14.9                   |
| Outer diameter, min.     | mm              | 30                     |
| Outer diameter, actuated | mm              | 32                     |
| Fitting size             | -               | 1/4"                   |
| Fitting style            | -               | Male                   |
| Fitting type             | -               | G-thread               |
| Material                 | -               | Al                     |
| Suction cup model        | -               | DCF30 Dry metal sheet  |
| Movement, vertical max.  | mm              | 3.8                    |
| Curve radius, min.       | mm              | 15                     |
| Suction cup model        | -               | DCF30 Oily metal sheet |
| Movement, vertical max.  | mm              | 3.8                    |
| Curve radius, min.       | mm              | 15                     |

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

| DCF30 Dry metal sheet  | Vertical (N) | Parallel (N) |  |  |
|------------------------|--------------|--------------|--|--|
| 60 -kPa                | 30           | 17           |  |  |
| 90 -kPa                | 41           | 27           |  |  |
| DCF30 Oily metal sheet |              |              |  |  |
| 60 -kPa                | 26           | 12           |  |  |
| 90 -kPa                | 35           | 17           |  |  |

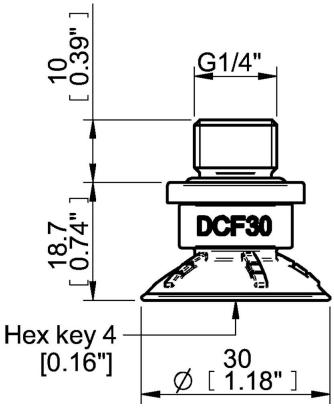
#### **Material**

Name

| 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 |

Polyurethane (PU60)

### **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.