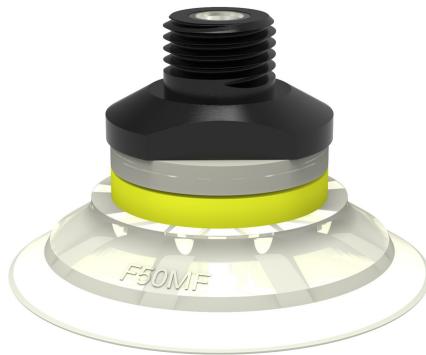


# Datasheet

## Suction cup F50MF Thermoelastic polyurethane, 1/4" NPT male, with dual flow control valve

Item number: F50MF.40.05DC



- Suction cup of TPU, a mark free material that leaves no trace on the object being handled.
- Suitable for flat surfaces.
- Good stability and little inherent movement.
- Recommended when the lifting force is parallel to the surface of the object.

### Technical data

| Description             | Unit            | Value                   |
|-------------------------|-----------------|-------------------------|
| Suction cup shape       | -               | Flat                    |
| Application             | -               | Mark Free               |
| Suction cup design      | -               | Round                   |
| Characteristics         | -               | Mark free               |
| Material                | -               | TPE                     |
| Weight, min.            | oz              | 0.35                    |
| Suction cup model       | -               | F-MF                    |
| Volume                  | in <sup>3</sup> | 0.61                    |
| Leakage flow, max.      | scfm            | 0.34                    |
| Height                  | in              | 1.28                    |
| Outer diameter, min.    | in              | 2.087                   |
| Fitting size            | -               | 1/4"                    |
| Fitting option          | -               | Dual flow control valve |
| Fitting style           | -               | Male                    |
| Fitting type            | -               | NPT-thread              |
| Valve restriction       | in              | 0.039                   |
| Suction cup model       | -               | F50MF                   |
| Movement, vertical max. | in              | 0.087                   |
| Curve radius, min.      | in              | 3.74                    |

### Performance - Lifting forces

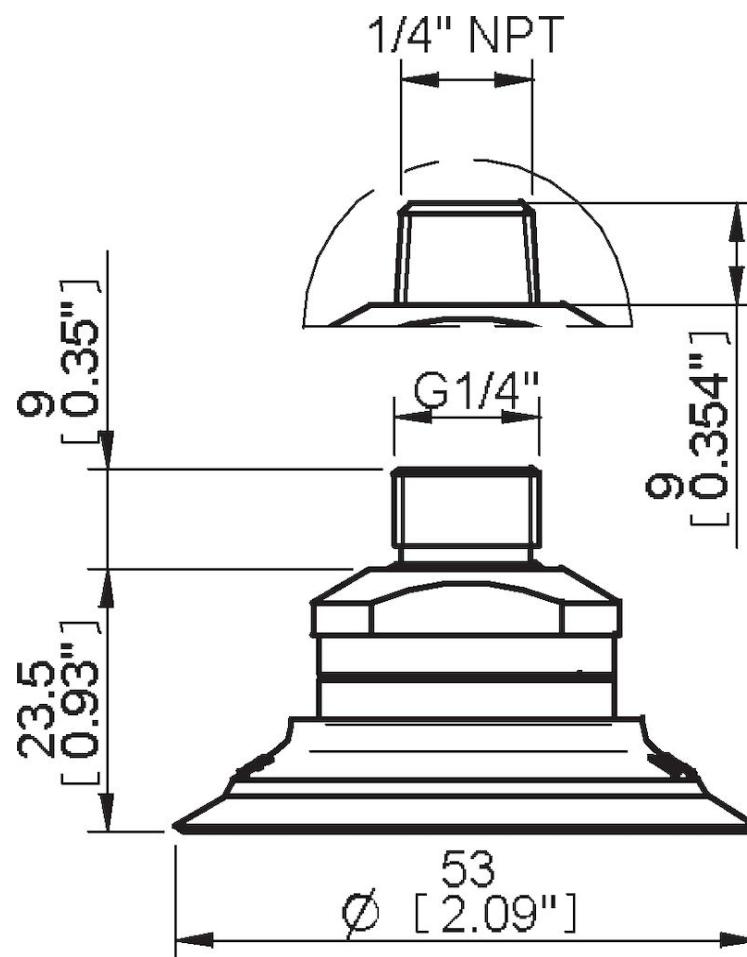
| F50MF       | Vertical (lb) | Parallel (lb) |
|-------------|---------------|---------------|
| 5.91 -inHg  | 5.51          | 6.97          |
| 17.72 -inHg | 20.68         | 18.43         |
| 26.58 -inHg | 31.70         | 24.055        |

|                        |                                    |
|------------------------|------------------------------------|
| <b>Material</b>        |                                    |
| Name                   | Thermoplastic Polyurethane (TPE-U) |
| Color                  | White transparent                  |
| Temperature, min.   °F | -4.0                               |
| Temperature max.   °F  | 176.0                              |
| Hardness   °Shore A    | 81                                 |

#### Material resistance

|                    |           |
|--------------------|-----------|
| Alcohol            | Good      |
| Concentrated acids | Poor      |
| Ethanol            | n/a       |
| Hydrolysis         | Poor      |
| Methanol           | n/a       |
| Oil                | Excellent |
| Oxidation          | Good      |
| Gasoline           | Poor      |
| 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.

## Accessories

05AF | Fitting 5x1/8" NPSF female, 50  
05AG | Fitting 1/8" NPSF female, 50, with mesh filter  
05CA | Fitting 1/8" NPSF female, 50, PA  
05AA | Fitting 1/8" NPSF female, 50  
05AD | Fitting G3/8" male, 50, with mesh filter  
05AE | Fitting 3/8" NPT male, with mesh filter  
05AB | Fitting G1/4" male, 50, with mesh filter  
05AC | Fitting 1/4" NPT male, with mesh filter  
05DA | Fitting 1/8" NPSF female, 50, with dual flow control valve  
05DB | Fitting G1/4" male, with dual flow control valve  
05DD | Fitting G3/8" male, 50, with mesh filter and dual flow control valve  
05DE | Fitting 3/8" NPT male, with dual flow control valve  
05DF | Fitting 5x1/8" NPSF female, 50, with dual flow control valve

## Spare parts

F50MF.40 | Suction cup F50MF Thermoelastic polyurethane  
05DC | Fitting 1/4" NPT male, with dual flow control valve