

# Datasheet

## Suction cup B50MF Thermoelastic polyurethane, G1/4" male, with dual flow control valve and mesh filter

Item number: B50MF.40.05DB



- Suction cup of TPU, a mark free material that leaves no trace on the object being handled.
- Suitable for level adjustment.
- Lifting movement to separate small and thin objects.
- Only lightweight objects should be handled when the lifting force is parallel to the surface.

### Technical data

Description	Unit	Value
Suction cup shape	-	Bellows
Application	-	Mark Free
Suction cup design	-	Round
Characteristics	-	Mark free
Material	-	TPE
Weight, min.	oz	0.67
Suction cup model	-	B-MF
Volume	in <sup>3</sup>	1.95
Leakage flow, max.	scfm	0.34
Height	in	1.97
Outer diameter, min.	in	2.012
Outer diameter, actuated	in	2.41
Fitting size	-	1/4"
Fitting option	-	Dual flow control valve, Filter mesh
Fitting style	-	Male
Fitting type	-	G-thread
Valve restriction	in	0.039
Suction cup model	-	B50MF
Movement, vertical max.	in	0.56
Curve radius, min.	in	1.024

### Performance - Lifting forces

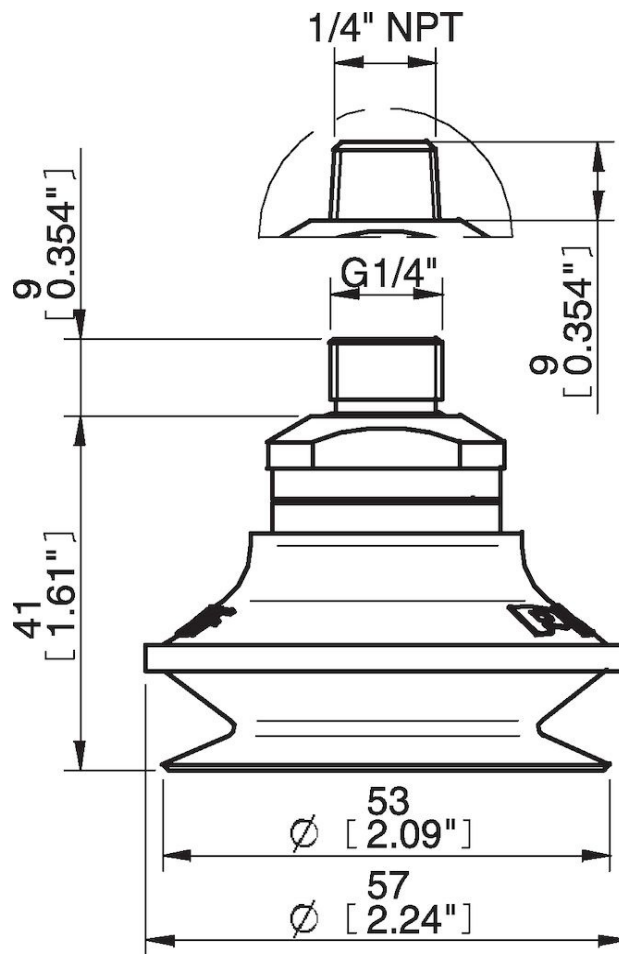
B50MF	Vertical (lb)	Parallel (lb)
5.91 -inHg	6.74	5.17
17.72 -inHg	20.91	14.16
26.58 -inHg	30.57	21.81

Material	
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
- 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
- 05DC | Fitting 1/4" NPT 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**

- B50MF.40 | Suction cup B50MF Thermoelastic polyurethane
- 05DB | Fitting G1/4" male, with dual flow control valve