

Datasheet

Suction cup F20MF Thermoelastic polyurethane, 1/8" NPT male with mesh filter

Item number: F20MF.40.02AC



- **Mark-Free Material.** Made from special thermoelastic polyurethane (TPU), these cups leave no marks or traces on handled objects, ensuring perfect surface integrity for glass, metal, and other sensitive materials.
- **Ideal for Flat Surfaces.** Engineered specifically for flat objects, the F-MF cups provide excellent stability and minimal inherent movement during handling.
- **The design delivers a strong, stable grip** with minimal deformation, making them reliable for precise positioning and parallel lifting.
- **Available in multiple sizes** from 15 to 50 mm, the series covers a broad range of application needs, from small to large flat objects.
- **The material withstands a wide temperature range** and resists common chemicals, making the cups suitable for demanding industrial environments
- **Recommended when the lifting force is parallel** to the surface of the object.

Technical data

Description	Unit	Value
Suction cup shape	-	Flat
Suction cup design	-	Round
Characteristics (for filtering)	-	Mark free
Material	-	TPE
Weight, min.	oz	0.042
Suction cup model	-	F-MF
Volume	in ³	0.061
Height	in	0.79
Outer diameter, min.	in	0.87
Fitting size	-	1/8"
Fitting option	-	Filter mesh
Fitting style	-	Male
Fitting type	-	NPT-thread
Fitting material	-	Al
Suction cup model	-	F20MF
Movement, vertical max.	in	0.047
Curve radius, min.	in	0.71

Performance - Lifting forces

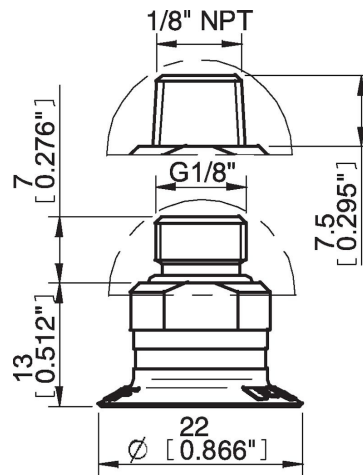
F20MF	Vertical (lb)	Parallel (lb)
5.91 -inHg	0.81	1.8
17.72 -inHg	3.26	3.26
26.58 -inHg	4.95	4.72

Material	
Name	TPE-U
Color	Black
Temperature, min. °F	-4
Temperature max. °F	176
Hardness °Shore A	81

Material resistance

Alcohol	Good
Concentrated acids	Poor
Ethanol	Not applicable
Hydrolysis	Poor
Methanol	Not applicable
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

- 02AE | Fitting 5xM5 female
- 02AF | Fitting G1/8" male/M5 female, with mesh filter
- 02CD | Fitting G1/8" male/M5 female, PA
- 02AA | Fitting M5 female
- 02AD | Fitting G1/8" male/M5 female
- 02AB | Fitting G1/8" male, with mesh filter
- 02DA | Fitting M5 female, with dual flow control valve
- 02DC | Fitting 1/8" NPT male, with dual flow control valve
- 02DD | Fitting G1/8" male/M5 female, with dual flow control valve
- 02DE | Fitting 5xM5 female, with dual flow control valve

Spare parts

- F20MF.40 | Suction cup F20MF Thermoelastic polyurethane
- 02AC | Fitting 1/8" NPT male, with mesh filter