

Datasheet

Suction cup F50-2 Nitrile-PVC, G1/4" male, with mesh filter and dual flow control valve

Item number: F50-2.30.05DB



- Suitable for flat objects.
- Good stability and little inherent movement.
- Recommended when the lifting force is parallel to the surface of the object.
- Cleats prevent thin, sensitive objects from being deformed and gives extra friction when the lifting force is parallel.

Technical data

Description	Unit	Value
Suction cup shape	-	Flat
Application	-	Dry sheet metal
Suction cup design	-	Round
Characteristics	-	Dry sheet metal
Material	-	Nitrile-PVC (NPV)
Weight, min.	oz	0.49
Suction cup model	-	F
Volume	in ³	0.61
Leakage flow, max.	scfm	0.34
Height	in	1.28
Outer diameter, min.	in	2.087
Outer diameter, actuated	in	2.15
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	-	F50-2
Movement, vertical max.	in	0.087
Curve radius, min.	in	2.17

Performance - Lifting forces

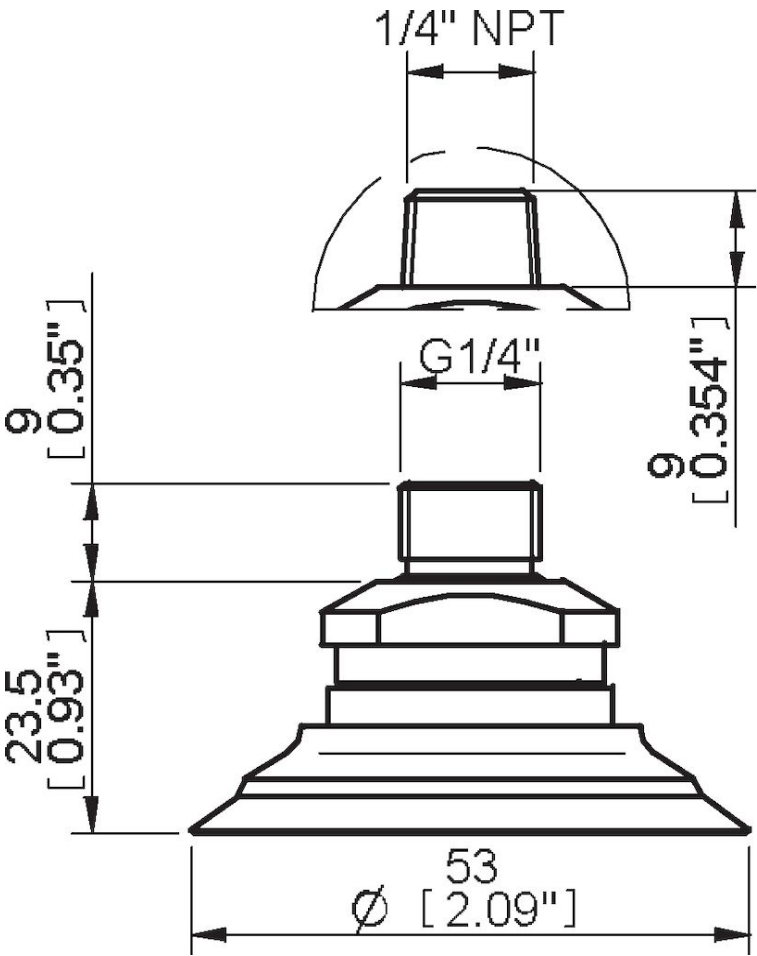
F50-2	Vertical (lb)	Parallel (lb)
5.91 -inHg	8.093	5.40
17.72 -inHg	16.64	8.99
26.58 -inHg	21.58	11.24

Material	
Name	Nitrile-PVC (NPV)
Color	Black
Temperature, min. °F	32.0
Temperature max. °F	194.0
Hardness °Shore A	50

Material resistance

Alcohol	Good
Concentrated acids	Fair
Ethanol	n/a
Hydrolysis	Good
Methanol	n/a
Oil	Excellent
Oxidation	Good
Gasoline	Excellent
Wear resistance	Excellent
Weather and ozone	Good

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
F50-2.20 | Suction cup F50-2 Silicone
05AG | Fitting 1/8" NPSF female, 50, with mesh filter
05UV | Fitting 1/8" NPSF female, 50, with cone valve
F50-2.37 | Suction cup F50-2 HNBR
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
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
31.50.241P | Suction cup F50-2 Nitrile-PVC
31.50.241S | Suction cup F50-2 Silicone, for fitting with cone valve

Spare parts

F50-2.30 | Suction cup F50-2 Nitrile-PVC
31.50.057 | Cone valve for F50-2
05DB | Fitting G1/4" male, with dual flow control valve