

SUCTION CUPS / Flat

VF20

Features and Strengths

Specifically designed for flat and curved surface
Available to handle multiple objects with the same suction cup

Examples of use

Metal sheet, Veneer sheets, Glass, Electronic components



Recommended Lifting Force (Max.)

Model	Volume (cm ³)	Lifting Force (Kg) - Perpendicular			Lifting Force (Kg) - Parallel		
		- 20 kPa	- 60 kPa	- 90 kPa	- 20 kPa	- 60 kPa	- 90 kPa
VF20	1.00	0.61	1.47	1.93	0.51	0.81	0.86

※ The lifting force above does not include safety factor

Material Specifications

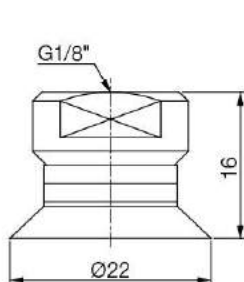
Material	Hardness Shore (°)	Color	Temperature (°C)
NBR	60	Black	-20~110
Silicone	55	Red	-70~200
White Silicone	55	Translucent White	-70~200
White Silicone (FDA)	55	Translucent White	-70~200
High temp. Silicone	50	Blue	-70~280
Conductive Silicone	70	Smoky Black	-45~90
Urethane	60	Dark Green	0~100
Mark Free	75	Black	-10~100

Material Resistance

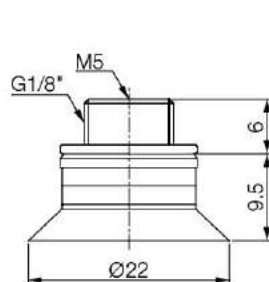
Description	NBR	Silicone	White Silicone	High temp. Silicone	Conductive Silicone	Urethane	Mark Free
Wear Resistance	Excellent	Good	Good	Good	Good	Excellent	Good
Oil	Excellent	Poor	Poor	Poor	Poor	Excellent	Excellent
Weather / Ozone	Fair	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Alcohol	Good	Good	Good	Good	Good	Fair	Good
Acid	Fair	Poor	Poor	Poor	Poor	Poor	Excellent

Dimension

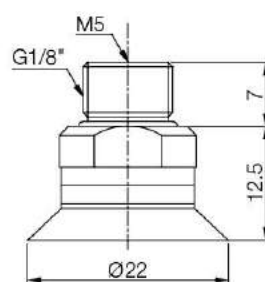
[Unit : mm]



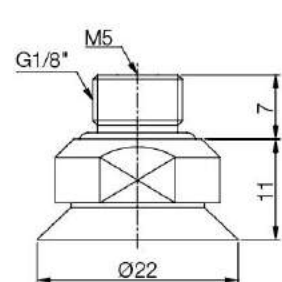
[With 18F fitting]



[With M518MF fitting]



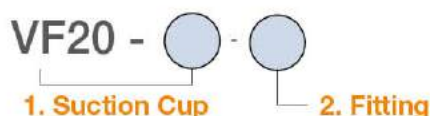
[With M518MFO fitting]



[With M518MFX fitting]



Build an Ordering No.



1. Suction cup	Description	Symbol
	Flat suction cup, 20mm diameter, Nitrile (NBR)	VF20-N
	Flat suction cup, 20mm diameter, Silicone	VF20-S
	Flat suction cup, 20mm diameter, White silicone	VF20-WS
	Flat suction cup, 20mm diameter, White silicone (FDA)	VF20-WS (FDA)
	Flat suction cup, 20mm diameter, High temperature silicone	VF20-HS
	Flat suction cup, 20mm diameter, Conductive silicone	VF20-CS
	Flat suction cup, 20mm diameter, Urethane	VF20-U
	Flat suction cup, 20mm diameter, Mark free	VF20-A
2. Fitting	Description	Symbol
	Fitting, G1/8 male - M5 female	M518MF
	Fitting, G1/8 male - M5 female, Mesh filter	M-M518MF
	Efficiency valve, Fitting, G1/8 Male - M5 female	M518MF-EV
	Fitting, G1/8 male - M5 female, Button valve	M518MF-BV
	Fitting, G1/8 male - M5 female, Old profile	M518MFO
	Fitting, G1/8 male - M5 female, Old profile, Mesh filter	M-M518MFO
	Efficiency valve, Fitting, G1/8 Male - M5 female, Old profile	M518MFO-EV
	Fitting, G1/8 male - M5 female, For silicone material	M518MFX*
	Fitting, G1/8 female	18F
	Fitting, G1/8 female, Mesh filter	M-18F
	Efficiency valve, Fitting, G1/8 female	18F-EV
	Fitting, G1/8 female, Button valve	18F-BV

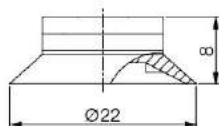
※ M518MFX* is available only for Silicone material

Spare Parts – Rubber Parts

Part No.	Description	Weight (g)	Color
VF20-N	Flat suction cup, 20mm diameter, Nitrile (NBR)	1.31	Black
VF20-S	Flat suction cup, 20mm diameter, Silicone	1.23	Red
VF20-WS	Flat suction cup, 20mm diameter, White silicone	1.23	Translucent White
VF20-WS (FDA)	Flat suction cup, 20mm diameter, White silicone (FDA)	1.23	Translucent White
VF20-HS	Flat suction cup, 20mm diameter, High temperature silicone	1.23	Blue
VF20-CS	Flat suction cup, 20mm diameter, Conductive silicone	1.29	Smoky Black
VF20-U	Flat suction cup, 20mm diameter, Urethane	1.32	Dark Green
VF20-A	Flat suction cup, 20mm diameter, Mark free	1.48	Black

Dimension

[Unit : mm]



[Rubber Part]

Spare Parts – Fittings

Part No.	Part No.	Description	Weight (g)
350 000 3209	M518MF	G1/8 male - M5 female	1.82
350 000 5209	M518MF-F	G1/8 male - M5 female, Mesh filter	1.92
350 010 4209	M518MF-EV	Efficiency valve, G1/8 Male - M5 female	1.94
350 020 4209	M518MF-BV	G1/8 male - M5 female, Button valve	2.24
350 000 1209	M518MFO	G1/8 male - M5 female, Old profile	2.88
350 000 1109	M518MFO-F	G1/8 male - M5 female, Old profile, Mesh filter	2.94
350 010 1209	M518MFO-EV	Efficiency valve, G1/8 Male - M5 female, Old profile	2.87
350 000 3229	M518MFX	G1/8 male - M5 female, For silicone material	3.71
350 000 3310	18F	G1/8 female	3.23
350 000 4310	18F-F	G1/8 female, Mesh filter	3.30
350 010 3310	18F-EV	Efficiency valve, G1/8 female	3.34
350 020 3310	18F-BV	G1/8 female, Button valve	3.59