



**F20** 

## Flat suction cup with cleats

- 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.

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Liftina	forces	&	Technica	l data

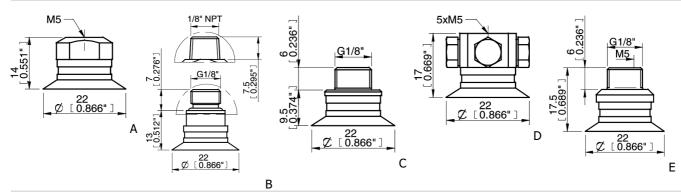
Outer Dia		orce vertical lbf, at vacuu		Lifting force parallel to the surface, lbf, at vacuum level		ne Volume Min. curve ver evel volume radius		Max. vertical movement	Weight rubber part	
in	6 -inHg	18 -inHg	27 -inHg	6 -inHg	18 -inHg	27 -inHg	in <sup>3</sup>	in	in	OZ
0.87	1.35	3.26	4.27	1.12	1.80	1.91	0.06	0.71	0.06	0.04

Material specifications				
Material	Color	Hardness °Shore A	Temperature range °F	
Chloroprene, CR	Black	50	-40–230	
Silicone, SIL	Red	50	-40–392	

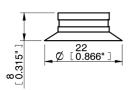
Material resistance								
Material	Wear resistance	Oil	Weather & ozone	Hydrolysis	Gasoline	Concentrated acids	Alcohol	Oxidation
Chloroprene, CR	Excellent	Fair	Good	Good	Fair	Poor	Good	Good
Silicone, SIL	Good	Poor	Excellent	Fair	Poor	Poor	Good	Excellent

## Ordering information

Orc	iering information			
	Suction cups with fitting		Weight (oz)	Part No.
Α	Suction cup F20 Chloroprene	, M5 female	0.15	F20.10.02AA
Α	Suction cup F20 Chloroprene	, M5 female, with dual flow control valve	0.15	F20.10.02DA
В	Suction cup F20 Chloroprene	, G1/8" male, with mesh filter	0.15	F20.10.02AB
В	Suction cup F20 Chloroprene control valve	, G1/8" male, with mesh filter and dual flow	0.15	F20.10.02DB
В	Suction cup F20 Chloroprene	, 1/8" NPT male, with mesh filter	0.15	F20.10.02AC
В	Suction cup F20 Chloroprene	, 1/8" NPT male, with dual flow control valve	0.15	F20.10.02DC
С	Suction cup F20 Chloroprene	, G1/8" male/M5 female	0.11	F20.10.02AD
С	Suction cup F20 Chloroprene	, G1/8" male/M5 female, with mesh filter	0.11	F20.10.02AF
С	Suction cup F20 Chloroprene valve	, G1/8" male/M5 female, with dual flow control	0.11	F20.10.02DD
D	Suction cup F20 Chloroprene	, 5xM5 female	0.39	F20.10.02AE
Α	Suction cup F20 Silicone, M5	female	0.15	F20.20.02AA
В	Suction cup F20 Silicone, G1,	/8" male, with mesh filter	0.15	F20.20.02AB
В	Suction cup F20 Silicone, G1, valve	/8" male, with mesh filter and dual flow control	0.15	F20.20.02DB
В	Suction cup F20 Silicone, 1/8	" NPT male, with mesh filter	0.15	F20.20.02AC
В	Suction cup F20 Silicone, 1/8	" NPT male, with dual flow control valve	0.15	F20.20.02DC
С	Suction cup F20 Silicone, G1,	/8" male/M5 female	0.11	F20.20.02AD
С	Suction cup F20 Silicone, G1,	/8" male/M5 female, with mesh filter	0.11	F20.20.02AF
D	Suction cup F20 Silicone, 5xN	15 female	0.39	F20.20.02AE
Е	Suction cup F20 Chloroprene	, G1/8" male/M5 female, PA	0.10	F20.10.02CD
Е	Suction cup F20 Silicone, G1,	/8" male/M5 female, PA	0.10	F20.20.02CD



Rubber parts	Part No.
Suction cup F20 Chloroprene	F20.10
Suction cup F20 Silicone	F20.20



Fittings	Part No.
Fitting M5 female	02AA
Fitting M5 female, with dual flow control valve	02DA
Fitting G1/8" male, with mesh filter	02AB

Fitting G1/8" male, with mesh filter and dual flow control valve	02DB
Fitting 1/8" NPT male, with mesh filter	02AC
Fitting 1/8" NPT male, with dual flow control valve	02DC
Fitting G1/8" male/M5 female	02AD
Fitting G1/8" male/M5 female, with mesh filter	02AF
Fitting G1/8" male/M5 female, with dual flow control valve	02DD
Fitting 5xM5 female	02AE
Fitting 5xM5 female, with dual flow control valve	02DE
Fitting G1/8" male/M5 female, PA	02CD