

VACUUM CUPS







VFB Series

- · Single bellows suction cup
- 5mm-150mm Diameter
- Black nitrile rubber (NBR)
- Red silicone rubber
- White silicone rubber
- Push on / Pull off fittings



1.05

1.27

1.49

1.61

1.74

1.88

B1.5 Series

- Single bellows suction cup
- 11mm-53mm Diameter
- Black nitrile rubber (NBR)

1.17

1.38

1.56

1.65

- White silicone rubber
- Push on / Pull off fittings



PGJ Series

- · Single bellows suction cup
- 6mm-50mm Diameter
- Black nitrile rubber (NBR)
- White silicone rubber



B2.5 Series

- Single bellows suction cup
- 5mm-60mm Diameter
- Black nitrile rubber (NBR)
- White silicone rubber
- Push on / Pull off fittings



VFDB Series

- 2.5 bellows suction cup
- 20mm-70mm Diameter
- Single Durmoeter PU
- Double Durometer PU
- Push on / Pull off fittings



VFBL Series

- 4.5 bellows suction cup
- 5mm-50mm Diameter
- Black nitrile rubber (NBR)
- Red silicone rubber
- White silicone rubber
- Push on / Pull off fittings



SBLP Series

- 4.5 bellows suction cup
- 30, 40, 50mm Diameter
- Red silicone rubber
- Push on / Pull off fittings



STC Series

- Single bellows suction cup
- 22mm-125mm Diameter
- 45 Durometer rubber
- 60 Durometer rubber
- Vulcanized fittings



SBF Series

- Single bellows suction cup
- 30mm-100mm Diameter
- 70 Durometer rubber
- · Vulcanized fittings



SOB Series

- Single bellows oval cup
- 45 Durometer rubber
- 60 Durometer rubber
 - Vulcanized fittings

1.81

1.98



VFF Series

- Flat cleated suction cup
- 15mm-150mm Diameter
- · Black nitrile rubber (NBR)
- · Red silicone rubber
- White silicone rubber
- Push on / Pull off fittings



PFG Series

- Flat cleated suction cup
- 15mm-150mm Diameter
- Black nitrile rubber (NBR)
- Red silicone rubberWhite silicone rubber
- Push on / Pull off fittings





STP Series

- Flat cleated suction cup
- 30mm & 60mm Diameter
- Ultra thin pick up lip
- Silicone rubber
- Push on / Pull off fittings





SFF Series

- Flat cleated suction cup
- 30mm-125mm Diameter
- 45 Durometer rubber
- 60 Durometer rubber
- Vulcanized fittings

SOF Series

- Flat oval suction cup
- 30mm & 60mm Diameter
- 45 Durometer rubber
- 60 Durometer rubber Vulcanized fittings

1.102

1.92



SOP & SNP Series

1.118

1.101

- Foam rubber vacuum cups
- Round and rectangular models
- Up to 220mm Diameter



Cup Fittings



Level Compensators



VACUUM CUP MATERIALS



There are various reasons for choosing a particular vacuum cup material. The first choice is normally the hardness. This will determine the ability of a vacuum cup to seal against the surface of the product being handled. The most commonly used hardness measurement scale is Shore Hardness, often referred to as Durometer. In fact, a durometer is the actual instrument used to measure hardness but is often referred to as the measuring unit throughout industry.

There are different hardness scales based on the materials being measured, such as plastics or rubbers or metals. The scale used to identify the hardness of vacuum cup materials is Durometer Scale A, which ranges from 100 (hard) to 5 (soft). Vacuum cups are typically available in compounds with a hardness between 35 to 70 Durometer.

Another, sometimes very important characteristic of a vacuum cup material, is the temperature resistance. Most pick-and-place applications occur at "room temperature", but in the plastic injection industry for example, part temperature is often considered in vacuum cup choice due to the high temperature of parts being removed from the mold tool. At the other end of the scale is the handling of cold products, such as refrigerated or frozen food packaging. Typical vacuum cup materials have a temperature range from -40°C to 204°C (-40°F to +400°F).

NBR (Vacuforce code suffix N) is the most common material and is the same as **Nitrile rubber and Buna-N**. NBR is used in general industrial applications and is found in steel handling, plastics handling, and any other application where the cup should be resistant to oils and related chemicals. In most applications, this is the "go-to" material choice based on its fair cost and good wear resistance. The hardness of this compound is typically 60 durometer, although this can be as low as 40 or as high as 70. NBR is often overlooked for high temperature applications such as injection molding as the user specifies a very high temperature and therefore opts for silicone. NBR is suitable for most plastic injection parts handling as its temperature rating is often in excess of 90°C/200°F.

SILICONE (Vacuforce code suffix S & ST) is a very popular cup compound found in many applications. Silicone offers the advantage of having extreme temperature resistance both cold and hot, ideal for handling frozen packaged food and hot plastic-injected molded parts with a temperature range from -40°C (-40°F) to 204°C (400°F). Silicone is softer than NBR, having a typical Durometer rating of 40, allowing it to seal against contoured or rough surfaces, such as cardboard sheet, corrugated plastic, and plastic food packaging. Vacuforce silicone is offered as standard with FDA (title 21) compliance to allow direct contact with food and drug products. Vacuforce Code S - Red Silicone, Vacuforce Code ST - White Translucent.

METAL IMPREGNATED SILICONE (Vacuforce code SMI & STMI) has the same basic characteristics as the standard silicone described above, but the metal impregnated compound has been design specifically for the food industry. Iron filings inside the actual silicone compound allow metal detectors to sense that a vacuum cup has fallen into the food packaging that contains food stuffs like bread loaves, rolls, and buns or confectionery foodstuffs. Vacuforce Code SMI - Red Silicone, Code STMI - White Translucent.

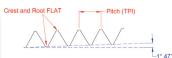
An important note about silicone that must be understood by the vacuum cup user. Silicone should never be used on surfaces which are to be painted, such as automotive body panels, as the paint will not bond properly on the area touched by the silicone compound cup. Also, it should not be used to handle decorative stone such as marble or quartz, or glass products as it will permanently etch the surface.

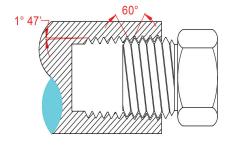
In the pneumatics and vacuum industry there are 4 types of popular thread forms in use today. This page highlights the technical data of each which should be understood when applying vacuum cup fittings shown in this catalogue to applications found in the field.

National Pipe Taper (NPT)

Referred to as NPT, this American pipe thread is by far the most common thread used in American made fluid power components and is the standard thread in the USA and Canada. This tapered thread seals using a thread sealant or tape. The Pneuforce NPT male threaded fittings have a pre-applied thread sealant to allow speed of connection to female threaded ports.

Thread Taper Angle Thread Angle Thread Crest & Root Flat



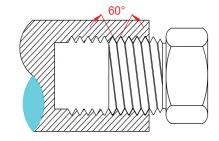


	1/8NPT	1/4NPT	3/8NPT	1/2NPT
TPI	27	18	18	14
Major Ø (mm)	10.3	13.7	17.1	21.3
Pitch (mm)	0.94	1.41	1.41	1.81

National Pipe Straight (NPS)

Often referred to as NPSF, the NPS thread has the same fundamental characteristics as NPT except that it is a straight thread. NPSF stands for National Pipe Straight Fuel and is often used in female threads for fuel line connections or in the pneumatics industry it is often found in plastic body parts where a tapered thread could split the component body as the fitting is tightened.





British Standard Pipe Taper (BSPT)

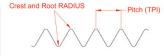
Sometimes referred to as an "R" thread, the BSP Thread (British Standard Pipe) is used throughout the world as a pipe thread except for the USA which uses NPT. BSPT is a tapered thread and is used in male threaded components to connect to female BSPT and also BSPP thread forms. Of course using a BSPT male to BSPT female is the preferred method which offers a full tapered seal, BSPT threads need a thread sealant to seal. However, Pneuforce BSPT male threads have a pre-applied thread sealant and do not require additional thread tape.

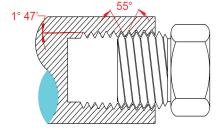


British Standard Pipe Parallel (BSPP)

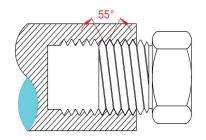
Often referred to as a G thread, the BSPP thread form is by far the most popular female thread for pneumatic components throughout the world except for the USA where NPT is the standard. A parallel thread, the male fittings seal with an O ring ensuring a perfect seal each time and also in multiple connections such as a manifold, ensure common fitting height. A further advantage is that the male fitting can be used repeatedly without the need for reapplying thread sealant. Male G threads cannot be connected to female BSPT thread ports.







	1/8BSP	1/4BSP	3/8BSP	1/2BSP
TPI	28	19	19	14
Major Ø (mm)	9.7	13.2	16.6	20.9
Pitch (mm)	0.91	1.34	1.34	1.81



VFB SINGLE BELLOWS CUP



- Single bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- Available from 5mm to 150mm diameter
- · NBR, FDA Silicone and metal detectable materials



Resignification of the second		Pauliance V	FB20	Namo	DO URBINO		
VFB		20		N	I		
Series	Model	Diameter		Cup M	aterial		

Model	Diameter
5	5
8	8
10-2	11
15-2	16
20	22
30-2	34
40	43
50-2	53
75	78
110	115
150	155

Cup Material		
N	Nitrile	
S	Red Silicone	
ST	White Translucent Silicone	
SMI	Metal Impregnated Red Silicone	
STMI	Metal Impregnated White Translucent Silicone	

Part number example VFB30-2SMI 34mm diameter single bellows vacuum cup in red metal impregnated silicone



This cup series is available in metal detectable FDA compliant silicone.

For red colored metal detectable silicone use material code SMI.

For white translucent metal detectable silicone use material code STMI.



VFB5 SINGLE BELLOWS CUP



- 5mm Diameter (0.196") single bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- NBR, FDA compliant Red and White Silicone, non conductive silicone







APPLICATIONS

- Small part pick and place
- Injection molding
- Labeling machinery
- Electronics parts pick and place
- Direct food contact pick and place

VFB		5
Series	Model	Diameter
	5	5

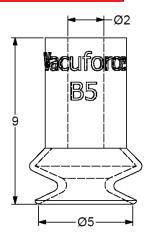
N ,					
	Cup Material				
N	Nitrile NBR				
S	Red Silicone				
ST	White Translucent Silicone				
SMI	Metal Impregnated Red Silicone				
STMI	Metal Impregnated White Translucent Silicone				

Cup Fittings
Use Fitting Type A



For cup material data please refer to <u>vacuforce.com/materials</u>
Part number example VFB5S
5mm diameter single bellows vacuum cup in red silicone

DIMENSIONS (mm)



	Working Parameters
Compressed Height	7.5mm (bellow compresses by 1.5mm)
Sealing Radius min	1.5mm (or 3mm diameter object)

VFB8 SINGLE BELLOWS CUP



- 8mm Diameter (0.315") single bellows design
- Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- NBR, FDA compliant Red and White Silicone, non conductive silicone





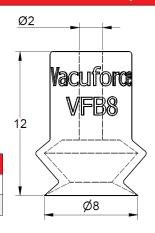


APPLICATIONS

- Small part pick and place
- Injection molding
- Labeling machinery
- Electronics parts pick and place
- Direct food contact pick and place

Working Parameters		
Compressed Height	8.5mm (bellow compresses by 3.5mm)	
Sealing Radius min	1.9mm (or 3.8mm diameter object)	

DIMENSIONS (mm)



VFB		8
Series	Model	Diameter

8

8

Cup Fittings	
Use Fitting Type	Α



	Cup Material
N	Nitrile NBR
S	Red Silicone
ST	White Translucent Silicone
SMI	Metal Impregnated Red Silicone
STMI	Metal Impregnated White Translucent Silicone

For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example VFB8S

VFB10-2 SINGLE BELLOWS CUP



- 11mm Diameter (0.433") single bellows design
- Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- NBR, FDA compliant Red and White Silicone, non conductive silicone





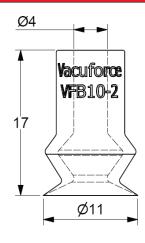


APPLICATIONS

- Small part pick and place
- Injection molding
- Labeling machinery
- Electronics parts pick and place
- Direct food contact pick and place

Working Parameters	
Compressed Height	12.5mm (bellow compresses by 4.5mm)
Sealing Radius min	4mm (or 8mm diameter object)

DIMENSIONS (mm)



VFB	1	0-2
Sories	Model	Diar

Model	Diameter
10-2	11

Cup Fittings	
Use Fitting Type	В



	Cup M	laterial
N	N	litrile NBR
9	P	ed Silicone

	Oup Material
N	Nitrile NBR
S	Red Silicone
ST	White Translucent Silicone
SMI	Metal Impregnated Red Silicone
STMI	Metal Impregnated White Translucent Silicone

For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example VFB10-2S

VFB15-2 SINGLE BELLOWS CUP



- 16mm Diameter (0.630") single bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- NBR, FDA compliant Red and White Silicone, non conductive silicone





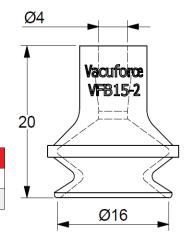


APPLICATIONS

- Small part pick and place
- Injection molding
- Labeling machinery
- Electronics parts pick and place
- Direct food contact pick and place

Working Parameters	
Compressed Height	13.5mm (bellow compresses by 6.5mm)
Sealing Radius min	5mm (or 10mm diameter object)

DIMENSIONS (mm)



VFB

15-2

Series M

Model	Diameter
15-2	16

Cup Fittings	
Use Fitting Type	В



N

Cup Material	
N	Nitrile NBR
S	Red Silicone
ST	White Translucent Silicone
SMI	Metal Impregnated Red Silicone
STMI	Metal Impregnated White Translucent Silicone

For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example VFB15-2S



- 22mm Diameter (0.866") single bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- NBR, FDA compliant Red and White Silicone, non conductive silicone



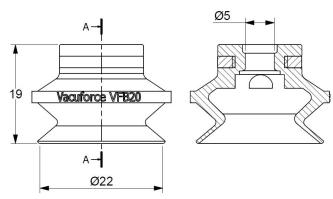


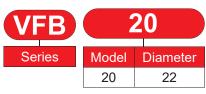


- Small part pick and place
- Injection molding
- Labeling machinery
- · Electronics parts pick and place
- Direct food contact pick and place

Working Parameters	
Compressed Height	9mm (bellow compresses by 10mm)
Sealing Radius min	10mm (or 20mm diameter object)

DIMENSIONS (mm)





Cup Fittings	
Use Fitting Type	С



Cup Material			
N	Nitrile NBR		
S	Red Silicone		
ST	White Translucent Silicone		
SMI	Metal Impregnated Red Silicone		
STMI	Metal Impregnated White Translucent Silicone		

N

For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example VFB20S 22mm diameter single bellows vacuum cup in red silicone

VFB30-2 SINGLE BELLOWS CUP



- 34mm Diameter (1.338") single bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- NBR, FDA compliant Red and White Silicone, non conductive silicone



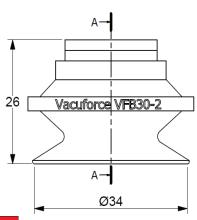


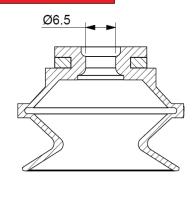


APPLICATIONS

- Small part pick and place
- Injection molding
- Labeling machinery
- · Electronics parts pick and place
- Direct food contact pick and place

DIMENSIONS (mm)





Working Parameters			
Compressed Height	12mm (bellow compresses by 14mm)		
Sealing Radius min	15mm (or 30mm diameter object)		

VFB 30-2 Series Model Diameter

30-2

34

Cup Fittings	
Use Fitting Type	D



Cup Material			
N	Nitrile NBR		
S	Red Silicone		
ST	White Translucent Silicone		
SMI	Metal Impregnated Red Silicone		
STMI	Metal Impregnated White Translucent Silicone		

For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example VFB30-2S 34mm diameter single bellows vacuum cup in red silicone



- 43mm Diameter (1.69") single bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- · NBR, FDA compliant Red and White Silicone, non conductive silicone

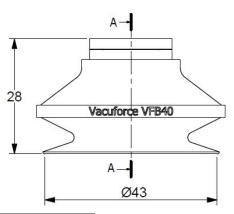


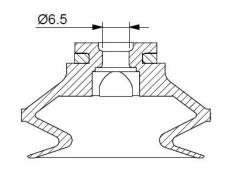




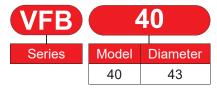
- Small part pick and place
- Injection molding
- Labeling machinery
- Electronics parts pick and place
- Direct food contact pick and place

DIMENSIONS (mm)





Working Parameters		
Compressed Height	15mm (bellow compresses by 13mm)	
Sealing Radius min	20mm (or 40mm diameter object)	



Cup Fittings	
Use Fitting Type	D



1	N

Cup Material			
N	Nitrile NBR		
S	Red Silicone		
ST	White Translucent Silicone		
SMI	Metal Impregnated Red Silicone		
STMI	Metal Impregnated White Translucent Silicone		

For cup material data please refer to <u>vacuforce.com/materials</u>
Part number example VFB40S

VFB50-2 SINGLE BELLOWS CUP



- 53mm Diameter (2.08") single bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- NBR, FDA compliant Red and White Silicone, non conductive silicone

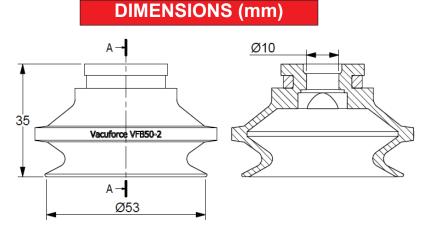






APPLICATIONS

- Small part pick and place
- Injection molding
- Labeling machinery
- · Electronics parts pick and place
- Direct food contact pick and place



Working Parameters			
Compressed Height	17mm (bellow compresses by 18mm)		
Sealing Radius min	30mm (or 60mm diameter object)		



50-2

53

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Cup Material				
N	Nitrile NBR			
S	Red Silicone			
ST	White Translucent Silicone			
SMI	Metal Impregnated Red Silicone			
STMI	Metal Impregnated White Translucent Silicone			

Cup Fittings
Use Fitting Type E

Part number example VFB50-2S 53mm diameter single bellows vacuum cup in red silicone





- 78mm Diameter (3.0") single bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- NBR, FDA compliant Red and White Silicone, non conductive silicone



VFB 75W			N	
Series	Model	Diameter	Cup Material	
	75W	78	N	Nitrile NBR
			S	Red Silicone

For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example VFB75WS 78mm diameter single bellows vacuum cup in red silicone



APPLICATIONS

- Large part pick and place
- Injection molding
- Carton palletizing
- Box handling
- Large steel plates

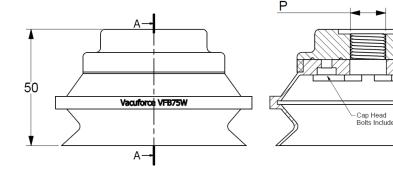
35PCD x 4 Mounting Holes A Vacuforos VFB75W Ø78

DIMENSIONS (mm)

Working Parameters		
Compressed Height	16mm (bellow compresses by 20mm)	
Sealing Radius min	40mm (or 80mm diameter object)	

VFB75W Cup Fittings





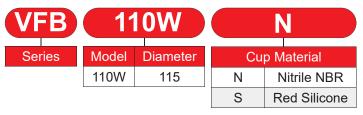
Fitting Model	P (Vacuum Port)
VFCF75-1/8	G1/8
VFCF75-1/4	G1/4
VFCF75-3/8	G3/8

VFB110W SINGLE BELLOWS CUP



- 115mm Diameter (4.53") single bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- NBR, FDA compliant Red and White Silicone, non conductive silicone





For cup material data please refer to vacuforce.com/materials

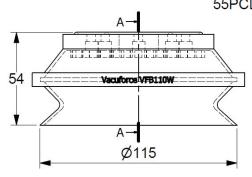
Part number example VFB110WS 115mm diameter single bellows vacuum cup in red silicone

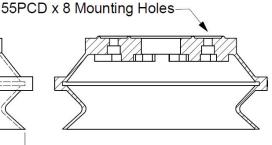


DIMENSIONS (mm)

APPLICATIONS

- Large part pick and place
- · Injection molding
- Carton palletizing
- Box handling
- Large steel plates

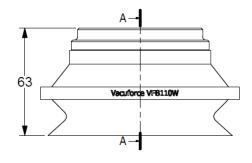




Working Parameters		
Compressed Height 24mm (bellow compresses by 30		
Sealing Radius min	60mm (or 120mm diameter object)	

VFB110W Cup Fittings





<u>P</u>
Cap head bolts included

Fitting Model	P (Vacuum Port)
VFCF110-3/8	G3/8
VFCF110-1/2	G1/2

VFB150W SINGLE BELLOWS CUP



- 155mm Diameter (6") single bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- NBR, FDA compliant Red and White Silicone, non conductive silicone



VFB 150W N			N	
Series	Model	Diameter	Cu	p Material
	150W	155	N	Nitrile NBR
			S	Red Silicone

For cup material data please refer to <u>vacuforce.com/materials</u>

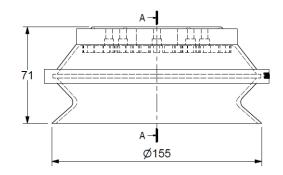
Part number example VFB150WS 155mm diameter single bellows vacuum cup in red silicone

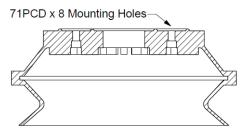


DIMENSIONS (mm)

APPLICATIONS

- Large part pick and place
- Injection molding
- Carton palletizing
- Box handling
- Large steel plates

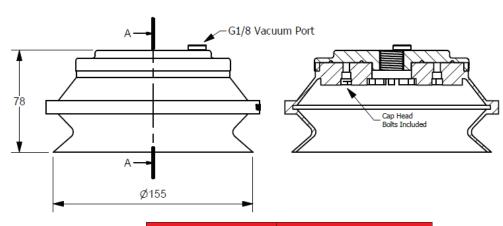




Working Parameters		
Compressed Height	26mm (bellow compresses by 45mm)	
Sealing Radius min	75mm (or 150mm diameter object)	

VFB150W Cup Fittings





Fitting Model	P (Vacuum Port)
VFCF150-1/2	G1/2

B1.5 SINGLE BELLOWS CUP



- Single bellows design
- Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- Available from 11mm to 53mm diameter
- NBR, FDA Silicone materials



B1.5

Sorios

Model	Diameter	
11	11	
13	13	
16	16	
20	20	
22	22	
25	25	
33	33	
43	43	
53	53	

N

Cup Material		
Ν	Nitrile	
ST	White Translucent Silicone	

Part number example B1.5-43ST 43mm diameter single bellows vacuum cup in white silicone





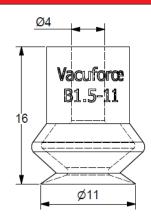
- 11mm Diameter (0.433") single bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- · NBR, FDA compliant white Silicone

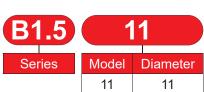




- Small part pick and place
- Injection molding
- Labeling machinery
- · Direct food contact pick and place

DIMENSIONS (mm)





N		
Cup Material		
Ν	Nitrile NBR	
ST	White Translucent Silicone	

Cup Fittings	
Use Fitting Type	В

For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example B1.5-11ST

11mm diameter single bellows vacuum cup in white silicone



B1.5-13 SINGLE BELLOWS CUP



- 13mm Diameter (0.512") single bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- NBR, FDA compliant white Silicone

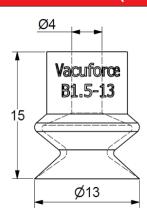




APPLICATIONS

- Small part pick and place
- Injection molding
- Labeling machinery
- · Direct food contact pick and place

DIMENSIONS (mm)



B1.5	1	3
Series	Model	Diameter
	13	13

	N
	Cup Material
N	Nitrile NBR
ST	White Translucent Silicone

Cup Fittings
Use Fitting Type B

For cup material data please refer to <u>vacuforce.com/materials</u>
Part number example B1.5-13ST
13mm diameter single bellows vacuum cup in white silicone





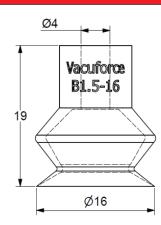
- 16mm Diameter (0.630") single bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- · NBR, FDA compliant white Silicone

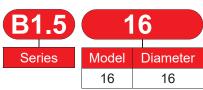




- Small part pick and place
- Injection molding
- Labeling machinery
- · Direct food contact pick and place

DIMENSIONS (mm)





N	
	Cup Material
N	Nitrile NBR
ST	White Translucent Silicone



For cup material data please refer to <u>vacuforce.com/materials</u>
Part number example B1.5-16ST
16mm diameter single bellows vacuum cup in white silicone



B1.5-20 SINGLE BELLOWS CUP



- 20mm Diameter (0.787") single bellows design
- Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- NBR, FDA compliant white Silicone

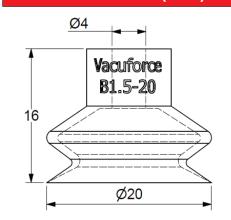




APPLICATIONS

- Small part pick and place
- Injection molding
- Labeling machinery
- · Direct food contact pick and place

DIMENSIONS (mm)



B1.5	2	20
Series	Model	Diameter
	20	20

)	N	
		Cup Material
	Ν	Nitrile NBR
	ST	White Translucent Silicone



For cup material data please refer to <u>vacuforce.com/materials</u>
Part number example B1.5-20ST
20mm diameter single bellows vacuum cup in white silicone





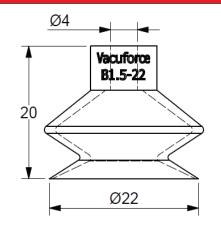
- 22mm Diameter (0.866") single bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- · NBR, FDA compliant white Silicone

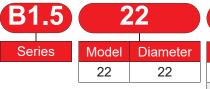




- Small part pick and place
- Injection molding
- Labeling machinery
- · Direct food contact pick and place

DIMENSIONS (mm)





	N
	Cup Material
N	Nitrile NBR
 ST	White Translucent Silicone

Cup Fittings
Use Fitting Type B

For cup material data please refer to <u>vacuforce.com/materials</u>
Part number example B1.5-22ST
22mm diameter single bellows vacuum cup in white silicone



B1.5-25 SINGLE BELLOWS CUP



- 25mm Diameter (0.984") single bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- NBR, FDA compliant white Silicone

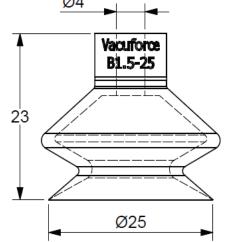


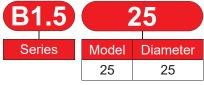


APPLICATIONS

- Small part pick and place
- Injection molding
- Labeling machinery
- Direct food contact pick and place







	N	
		Cup Material
	N Nitrile NBR	
_	ST	White Translucent Silicone

For cup material data please refer to vacuforce.com/materials



Part number example B1.5-25ST
25mm diameter single bellows vacuum cup in white silicone





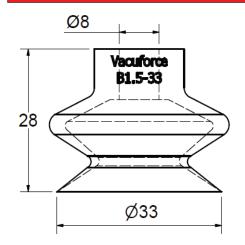
- 33mm Diameter (1.3") single bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- · NBR, FDA compliant white Silicone

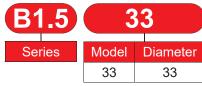




- Small part pick and place
- Injection molding
- Labeling machinery
- Direct food contact pick and place

DIMENSIONS (mm)





	N
	Cup Material
Ν	Nitrile NBR
ST	White Translucent Silicone



For cup material data please refer to <u>vacuforce.com/materials</u>
Part number example B1.5-33ST
33mm diameter single bellows vacuum cup in white silicone



B1.5-43 SINGLE BELLOWS CUP



- 43mm Diameter (1.69") single bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- NBR, FDA compliant white Silicone

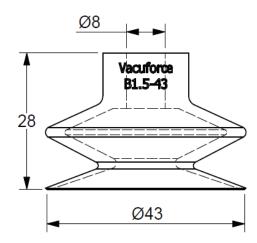


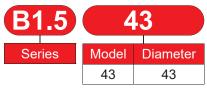


APPLICATIONS

- Small part pick and place
- Injection molding
- Labeling machinery
- · Direct food contact pick and place

DIMENSIONS (mm)





	N
	Cup Material
N	Nitrile NBR
ST	White Translucent Silicone

Cup Fittings
Use Fitting Type F

For cup material data please refer to <u>vacuforce.com/materials</u>
Part number example B1.5-43ST
43mm diameter single bellows vacuum cup in white silicone





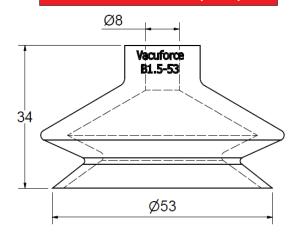
- 53mm Diameter (2.08") single bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- · NBR, FDA compliant white Silicone

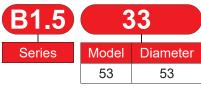




- Small part pick and place
- Injection molding
- Labeling machinery
- · Direct food contact pick and place

DIMENSIONS (mm)





	N
	Cup Material
Ν	Nitrile NBR
ST	White Translucent Silicone



For cup material data please refer to <u>vacuforce.com/materials</u>
Part number example B1.5-53ST
53mm diameter single bellows vacuum cup in white silicone



PJG SINGLE BELLOWS CUP

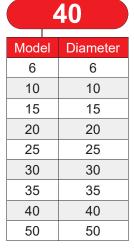


- Single bellows design
- Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- Available from 4mm to 50mm diameter

NBR, FDA Silicone materials







SI

	Cup Material
NBR	Nitrile
SI	White Translucent Silicone

Part number example PGJ-40-NBR 40mm diameter single bellows vacuum cup in white silicone



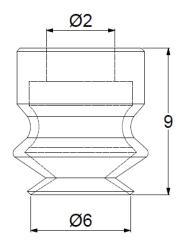
- · 6mm Diameter single bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- NBR, FDA compliant white Silicone

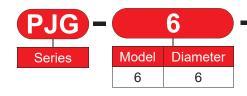




- Small part pick and place
- Injection molding
- Labeling machinery
- Direct food contact pick and place

DIMENSIONS (mm)







PJG-8 SINGLE BELLOWS CUP



- 8mm Diameter single bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- NBR, FDA compliant white Silicone

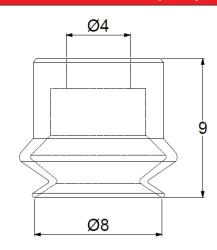


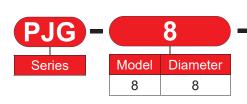


APPLICATIONS

- Small part pick and place
- Injection molding
- Labeling machinery
- · Direct food contact pick and place

DIMENSIONS (mm)





NBR	
	Cup Material
N Nitrile NBR	
SI	White Translucent Silicone



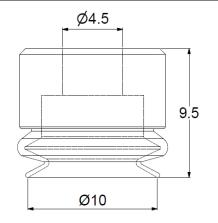
- 10mm Diameter single bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- NBR, FDA compliant white Silicone

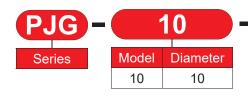




- Small part pick and place
- Injection molding
- Labeling machinery
- Direct food contact pick and place

DIMENSIONS (mm)







PJG-15 SINGLE BELLOWS CUP



- 15mm Diameter single bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- NBR, FDA compliant white Silicone

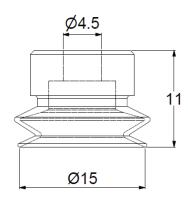


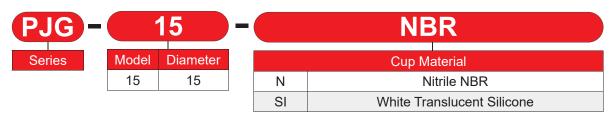


APPLICATIONS

- Small part pick and place
- Injection molding
- Labeling machinery
- · Direct food contact pick and place

DIMENSIONS (mm)







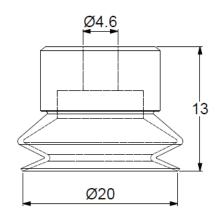
- · 20mm Diameter single bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- · NBR, FDA compliant white Silicone

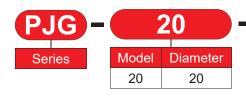




- Small part pick and place
- Injection molding
- Labeling machinery
- · Direct food contact pick and place

DIMENSIONS (mm)





	NBR
	Cup Material
N	Nitrile NBR
SI	White Translucent Silicone

PJG-25 SINGLE BELLOWS CUP



- 25mm Diameter single bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- NBR, FDA compliant white Silicone

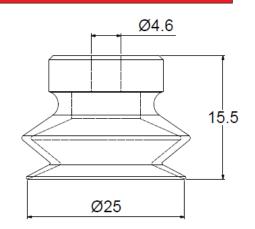


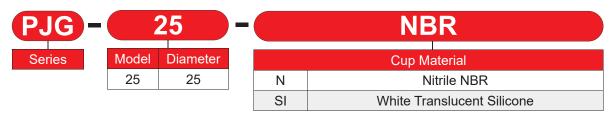


APPLICATIONS

- Small part pick and place
- Injection molding
- Labeling machinery
- Direct food contact pick and place

DIMENSIONS (mm)







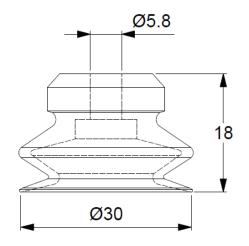
- · 30mm Diameter single bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- NBR, FDA compliant white Silicone

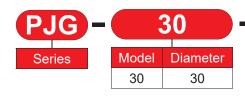




- Small part pick and place
- Injection molding
- Labeling machinery
- Direct food contact pick and place

DIMENSIONS (mm)







PJG-35 SINGLE BELLOWS CUP



- 35mm Diameter single bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- NBR, FDA compliant white Silicone

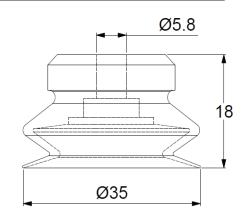


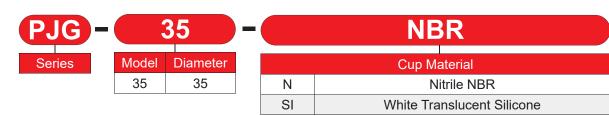


APPLICATIONS

- Small part pick and place
- Injection molding
- Labeling machinery
- · Direct food contact pick and place

DIMENSIONS (mm)







- · 40mm Diameter single bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- NBR, FDA compliant white Silicone

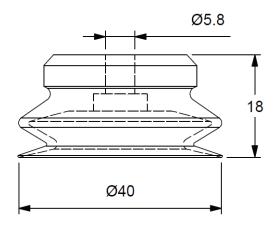


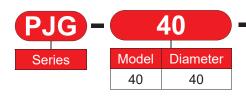


APPLICATIONS

- Small part pick and place
- Injection molding
- Labeling machinery
- Direct food contact pick and place

DIMENSIONS (mm)





NBR					
Cup Material					
N	N Nitrile NBR				
SI	White Translucent Silicone				

For cup material data please refer to <u>vacuforce.com/materials</u>

PJG-50 SINGLE BELLOWS CUP



- 50mm Diameter single bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- NBR, FDA compliant white Silicone

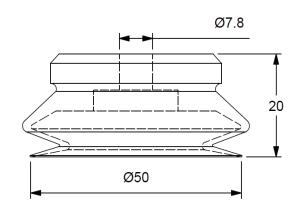


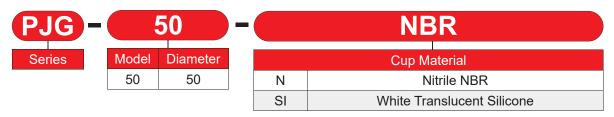


APPLICATIONS

- Small part pick and place
- Injection molding
- Labeling machinery
- Direct food contact pick and place

DIMENSIONS (mm)





For cup material data please refer to <u>vacuforce.com/materials</u>

B2.5 DOUBLE BELLOWS CUP



- Double bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- Available from 5mm to 60mm diameter
- NBR, FDA Silicone materials



B2.5

42

Series

Model	Diameter
5	5
7	7
10	10
14	14
18	18
20	20
25	25
32	32
42	42
60	60

N

Cup Material				
Ν	Nitrile			
ST	White Translucent Silicone			

Part number example B2.5-42ST 42mm diameter double bellows vacuum cup in white silicone





- 5mm Diameter (0.196") double bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- NBR, FDA compliant white Silicone

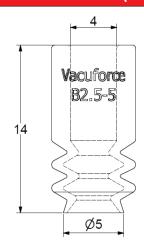


Vacuforce B2.5-5

APPLICATIONS

- Small part pick and place
- Injection molding
- Labeling machinery
- Direct food contact pick and place

DIMENSIONS (mm)



B2.5 5			N	
Series	Model	Diameter		Cup Material
	5	5	N	Nitrile NBR
			ST	White Translucent Silicone



For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example B2.5-5ST 5mm diameter double bellows vacuum cup in white silicone



B2.5-7 DOUBLE BELLOWS CUP



- 7mm Diameter (0.276") double bellows design
- Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- NBR, FDA compliant white Silicone

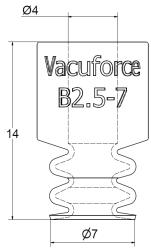


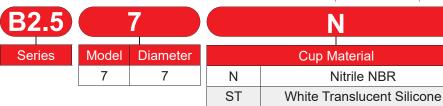


APPLICATIONS

- Small part pick and place
- · Injection molding
- Labeling machinery
- · Direct food contact pick and place

DIMENSIONS (mm)





Cup Fittings
Use Fitting Type B

For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example B2.5-7ST 7mm diameter double bellows vacuum cup in white silicone





- 10mm Diameter (0.390") double bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- · NBR, FDA compliant white Silicone

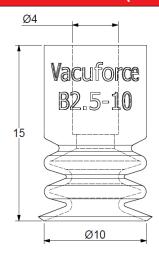




APPLICATIONS

- Small part pick and place
- Injection molding
- Labeling machinery
- Direct food contact pick and place

DIMENSIONS (mm)



B2.5 10				N
Series	Model	Diameter		Cup Material
	10	10	N	Nitrile NBR
			ST	White Translucent Silicone



For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example B2.5-10ST 10mm diameter double bellows vacuum cup in white silicone



B2.5-14 DOUBLE BELLOWS CUP



- 14mm Diameter (0.550") double bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- NBR, FDA compliant white Silicone

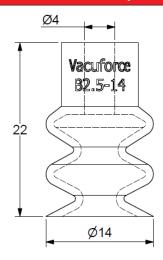


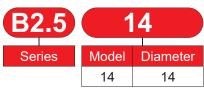


APPLICATIONS

- Small part pick and place
- Injection molding
- Labeling machinery
- · Direct food contact pick and place

DIMENSIONS (mm)





	Ņ		
	Cup Material		
N Nitrile NBR			
ST	White Translucent Silicone		

Cup Fittings
Use Fitting Type B

For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example B2.5-14ST

14mm diameter double bellows vacuum cup in white silicone





- 18mm Diameter (0.709") double bellows design
- Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- · NBR, FDA compliant white Silicone

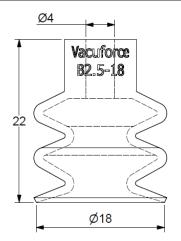




APPLICATIONS

- Small part pick and place
- Injection molding
- Labeling machinery
- Direct food contact pick and place

DIMENSIONS (mm)



B2.5 18				N
Series	Model	Diameter		Cup Material
	18	18	N	Nitrile NBR
			ST	White Translucent Silicone



For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example B2.5-18ST

18mm diameter double bellows vacuum cup in white silicone



B2.5-20 DOUBLE BELLOWS CUP



- 20mm Diameter (0.787") double bellows design
- Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- NBR, FDA compliant white Silicone

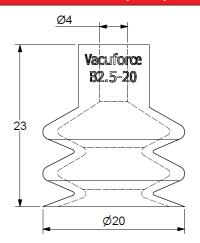




APPLICATIONS

- Small part pick and place
- Injection molding
- Labeling machinery
- · Direct food contact pick and place

DIMENSIONS (mm)



B2.5 20				N
Series	Model	Diameter		Cup Material
	20	20	N	Nitrile NBR
			ST	White Translucent Silicone



For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example B2.5-20ST 20mm diameter double bellows vacuum cup in white silicone





- 25mm Diameter (0.984") double bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- · NBR, FDA compliant white Silicone

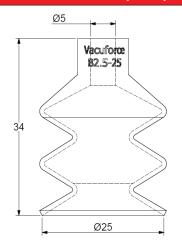




APPLICATIONS

- Small part pick and place
- Injection molding
- Labeling machinery
- Direct food contact pick and place

DIMENSIONS (mm)



B2.5 25				N
Series	Model	Diameter		Cup Material
	25	25	N	Nitrile NBR
			ST	White Translucent Silicone



For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example B2.5-25ST 25mm diameter double bellows vacuum cup in white silicone



B2.5-32 DOUBLE BELLOWS CUP



- 32mm Diameter (1.26") double bellows design
- Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- NBR, FDA compliant white Silicone

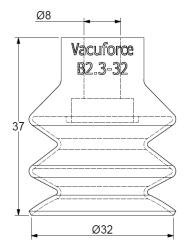




APPLICATIONS

- Small part pick and place
- Injection molding
- Labeling machinery
- · Direct food contact pick and place

DIMENSIONS (mm)







For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example B2.5-32ST 32mm diameter double bellows vacuum cup in white silicone





- 42mm Diameter (1.64") double bellows design
- Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- · NBR, FDA compliant white Silicone

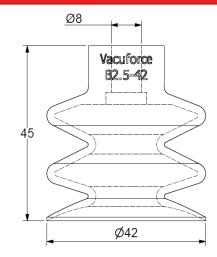




APPLICATIONS

- Small part pick and place
- Injection molding
- Labeling machinery
- Direct food contact pick and place

DIMENSIONS (mm)



B2.5	4	2
Series	Model	Diameter
	42	42

N						
Cup Material						
N	Nitrile NBR					
ST	White Translucent Silicone					

Cup Fittings
Use Fitting Type F

For cup material data please refer to <u>vacuforce.com/materials</u>

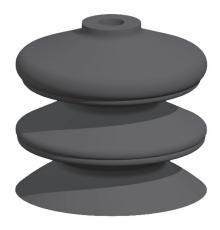
Part number example B2.5-42ST 42mm diameter double bellows vacuum cup in white silicone



B2.5-60 DOUBLE BELLOWS CUP



- 60mm Diameter (2.36") double bellows design
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- NBR, FDA compliant white Silicone

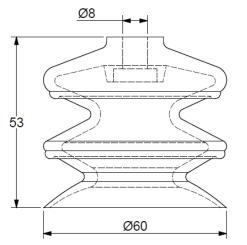


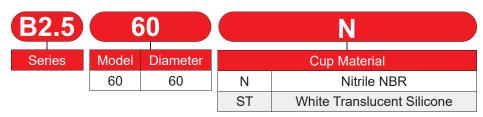


APPLICATIONS

- Small part pick and place
- Injection molding
- Labeling machinery
- · Direct food contact pick and place

DIMENSIONS (mm)





For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example B2.5-60ST 60mm diameter double bellows vacuum cup in white silicone

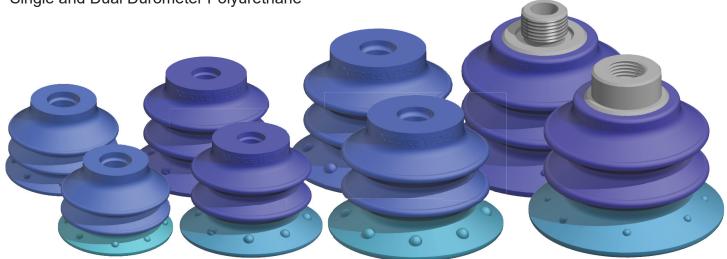
VFDB DOUBLE BELLOWS CUP



- **Double Bellows Design**
- Compensates for Height Variances in Part Picking
- Can seal on Convex and Concave Surfaces
- Available from 20mm to 70mm Diameter







Series

Model	Diameter (mm)
20	20
30	30
40	40
50	50
70	70

Cup Material			
PU	PU 60 Durometer		
DPU	Dual PU 30/60 Durometer		

For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example VFDP40DPU

40mm Diameter double bellows vacuum cup in dual durometer polyurethane compound (30/60 = lip/body)

Dual Durometer Vacuum Cups (DPU)

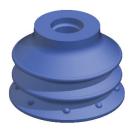
The DPU compound variant of these vacuum cups offer a dual Durometer polyurethane construction. The body of the vacuum cup is a 60 Durometer polyurethane offering rigidity and strength, whereas the lip of the vacuum cup is a 30 Durometer polyurethane offering superior sealing capabilities particularly on rough or curved surfaces.

VFDB20 DOUBLE BELLOWS CUP



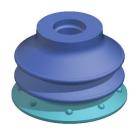
- 20mm Diameter (0.787") double bellows design
- Dual durometer option rigid 60 durometer body with soft 30 duro lip
- Non marking materials
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- · Single and dual durometer polyurethane



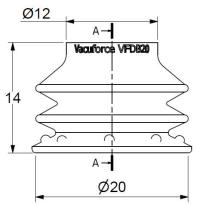


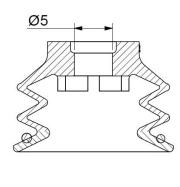
APPLICATIONS

- Small part pick and place
- Plastic and steel handling
- · Glass and decorative stone handling
- · Cardboard box handling



DIMENSIONS (mm)







20			
Model	Diameter		
20	20		
20	20		

		PU			
r		Cup Material			
	PU 60 Durometer Polyurethane				
	DPU 30/60 Dual Durometer Polyurethane				

Cup Fittings
Use Fitting Type C

For cup fittings refer to page 1.86

For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example VFDB20DPU

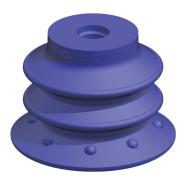
20mm diameter dual durometer polyurethane diameter double bellows vacuum cup

VFDB30 DOUBLE BELLOWS CUP



- 30mm Diameter (1.18") double bellows design
- Dual durometer option rigid 60 durometer body with soft 30 duro lip
- Non marking materials
- Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- Single and dual durometer polyurethane



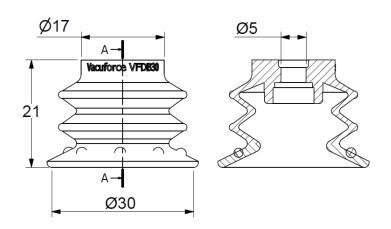


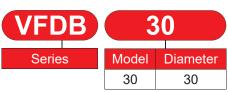


APPLICATIONS

- Small part pick and place
- Plastic and steel handling
- · Glass and decorative stone handling
- Cardboard box handling

DIMENSIONS (mm)





PU			
Cup Material			
PU	PU 60 Durometer Polyurethane		
DPU 30/60 Dual Durometer Polyurethane			



Part number example VFDB30DPU 30mm diameter dual durometer polyurethane diameter double bellows vacuum cup

For cup material data please refer to <u>vacuforce.com/materials</u>



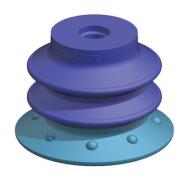
VFDB35 DOUBLE BELLOWS CUP



- 35mm Diameter (1.37") double bellows design
- Dual durometer option rigid 60 durometer body with soft 30 duro lip
- Non marking materials
- Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- Single and dual durometer polyurethane



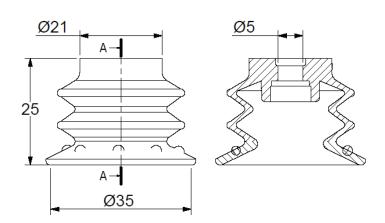


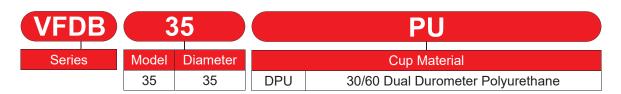


APPLICATIONS

- Small part pick and place
- Plastic and steel handling
- · Glass and decorative stone handling
- Cardboard box handling

DIMENSIONS (mm)









For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example VFDB30DPU

35mm diameter dual durometer polyurethane diameter double bellows vacuum cup

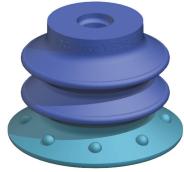
VFDB40 DOUBLE BELLOWS CUP



- 40mm Diameter (0.787") double bellows design
- Dual durometer option rigid 60 durometer body with soft 30 duro lip
- Non marking materials
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- · Single and dual durometer polyurethane



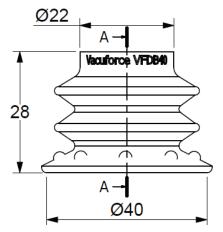


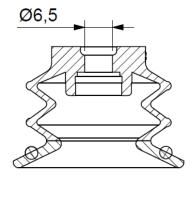


APPLICATIONS

- Small part pick and place
- Plastic and steel handling
- · Glass and decorative stone handling
- Cardboard box handling

DIMENSIONS (mm)







40				
Model	Diameter			
40	40			

	PU	
	Cup Material	
PU	60 Durometer Polyurethane	
DPU	30/60 Dual Durometer Polyurethane	

Cup Fittings		
Use Fitting Type	D	

Part number example VFDB40DPU 40mm diameter dual durometer polyurethane diameter double bellows vacuum cup

For cup material data please refer to <u>vacuforce.com/materials</u>



VFDB50 DOUBLE BELLOWS CUP



- 50mm Diameter (1.97") double bellows design
- Dual durometer option rigid 60 durometer body with soft 30 duro lip
- Non marking materials
- Compensates for height variances in part picking
- Can seal on convex and concave surfaces
- · Single and dual durometer polyurethane



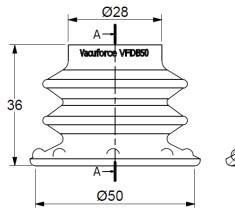


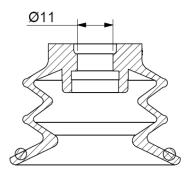


APPLICATIONS

- Small part pick and place
- Plastic and steel handling
- · Glass and decorative stone handling
- Cardboard box handling

DIMENSIONS (mm)





VFDB	5	0
Series	Model	Diameter
	50	50

PU				
	Cup Material			
PU	PU 60 Durometer Polyurethane			
DPU 30/60 Dual Durometer Polyurethane				

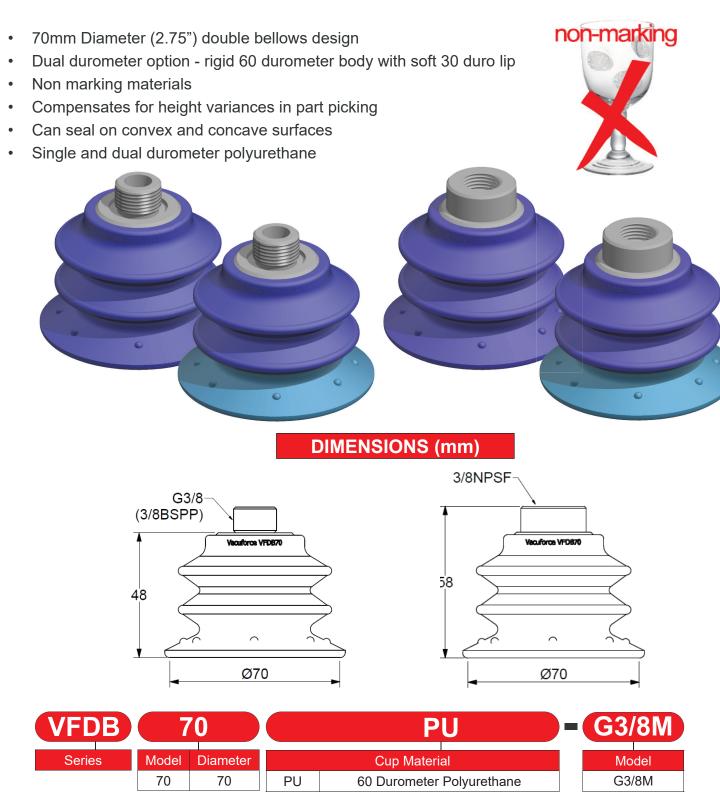
Cup Fittings
Use Fitting Type E

Part number example VFDB50DPU 50mm diameter dual durometer polyurethane diameter double bellows vacuum cup

For cup material data please refer to <u>vacuforce.com/materials</u>







APPLICATIONS

- Part pick and place
- Plastic and steel handling
- Glass and decorative stone handling
- Cardboard box handling

For cup material data please refer to vacuforce.com/materials

30/60 Dual Durometer Polyurethane

3/8NPSF

Part number example VFDB70DPU-G3/8M 70mm diameter dual durometer polyurethane diameter double bellows vacuum cup with G3/8 male fitting

DPU

VFBL MULTIPLE BELLOWS CUP



- Multiple bellows design
- · Compensates for height variances in part picking
- Thin web design allows for sealing on crinkled or uneven surfaces such as plastic wrapping in the food industry
- Available from 20mm to 50mm Diameter
- NBR, FDA Silicone and Metal Detectable Materials



VFBL 40-2				N
Series	Model	Diameter		Cup Material
	20-2	20	N	Nitrile
	30-2	30	S	Red Silicone
	40-2	40	ST White Translucent Silicone	
	50-2	50	SMI	Metal Impregnated Red Silicone

For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example VFBL30-2SMI 30mm diameter single multiple vacuum cup in red metal impregnated silicone



This cup series is available in metal detectable FDA compliant silicone.

For red colored metal detectable silicone use material code SMI.

For white translucent metal detectable silicone use material code STMI.



VFBL20 DOUBLE BELLOWS CUP



- 20mm Diameter (0.787") multiple bellows design
- Thin web design allows for sealing on crinkled or uneven surfaces such as plastic wrapping in the food industry
- NBR, FDA Silicone and Metal Detectable Materials
- Compensates for height variances in part picking
- Can seal on convex and concave surfaces





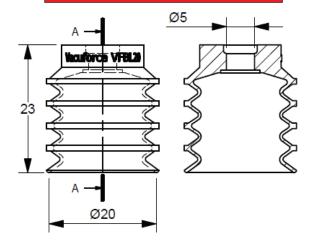


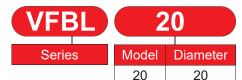


APPLICATIONS

- Small part pick and place
- Plastic and food packaging
- Direct food contact with silicone materials

DIMENSIONS (mm)





20

Cup Fittings		
Use Fitting Type	С	



	Cup Material			
N	Nitrile			
S	Red Silicone			
ST	ST White Translucent Silicone			
SMI	Metal Impregnated Red Silicone			

For cup material data please refer to vacuforce.com/materials

Part number example VFBL20-2SMI 20mm diameter multiple bellows vacuum cup in red metal impregnated silicone

VFBL30-2 DOUBLE BELLOWS CUP



- 30mm Diameter (1.18") multiple bellows design
- Thin web design allows for sealing on crinkled or uneven surfaces such as plastic wrapping in the food industry
- NBR, FDA Silicone and Metal Detectable Materials
- · Compensates for height variances in part picking
- Can seal on convex and concave surfaces





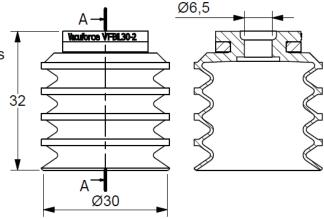


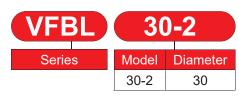


APPLICATIONS

- Small part pick and place
- Plastic and food packaging
- · Direct food contact with silicone materials

DIMENSIONS (mm)





Cup Fittings	
Use Fitting Type	D



	S
	Cup Material
N	Nitrile
S	Red Silicone
ST	White Translucent Silicone
SMI	Metal Impregnated Red Silicone

For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example VFBL30-2SMI 30mm diameter multiple bellows vacuum cup in red metal impregnated silicone

VFBL40 DOUBLE BELLOWS CUP



- 40mm Diameter (1.57") multiple bellows design
- Thin web design allows for sealing on crinkled or uneven surfaces such as plastic wrapping in the food industry
- NBR, FDA Silicone and Metal Detectable Materials
- Compensates for height variances in part picking
- Can seal on convex and concave surfaces



This cup series is available in metal detectable FDA compliant silicone.



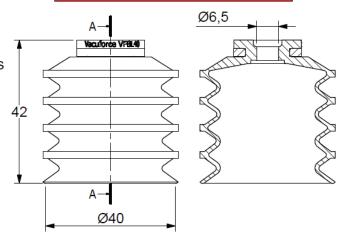


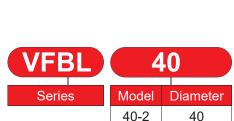


APPLICATIONS

- Small part pick and place
- Plastic and food packaging
- · Direct food contact with silicone materials

DIMENSIONS (mm)





Cup Fittings	
Use Fitting Type	D



Cup Material					
N	Nitrile				
S	Red Silicone				
ST	White Translucent Silicone				
SMI	Metal Impregnated Red Silicone				

For cup material data please refer to vacuforce.com/materials

Part number example VFBL40-2SMI 40mm diameter multiple bellows vacuum cup in red metal impregnated silicone

VFBL50-2 DOUBLE BELLOWS CUP



- 50mm Diameter (1.97") multiple bellows design
- Thin web design allows for sealing on crinkled or uneven surfaces such as plastic wrapping in the food industry
- · NBR and FDA Silicone materials
- Compensates for height variances in part picking
- Can seal on convex and concave surfaces



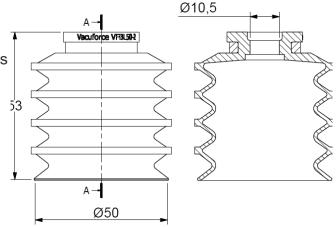




APPLICATIONS

- Small part pick and place
- Plastic and food packaging
- · Direct food contact with silicone materials

DIMENSIONS (mm)



VFBL	50)-2
Series	Model	Diameter
	50-2	50

Cup Fittings	
Use Fitting Type	Е



S					
Cup Material					
N	Nitrile				
S	Red Silicone				
ST	White Translucent Silicone				

For cup material data please refer to vacuforce.com/materials

Part number example VFBL50-2SMI 50mm diameter single multiple vacuum cup in red metal impregnated silicone

SBLP MULTIPLE BELLOWS CUPS



- Designed for handling thin plastic and paper bags
- Ultra thin seal lip ensures vacuum tight seal
- Ideal for bag opening and transfer
- High flow cup fitting
- Available in FDA silicone as standard



SBLP		30		S) –	G	1/4
Series	Model	Diameter		Cup Material		Fitting	g Thread
	30	30	S	Red Silicone		G1/4	G1/4
	40	40				G3/8	G3/8
	50	50				G1/2	G1/2

Part number example SBLP40S 40mm vacuum suction cup in silicone Part number example SBLP40S-G3/8 40mm vacuum suction cup in silicone with male G3/8 Cup Fitting

For cup material data please refer to <u>vacuforce.com/materials</u>





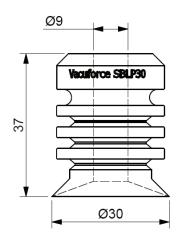
- 30mm Diameter multiple bellows cup
- Designed for handling thin plastic and paper bags
- Ultra thin seal lip ensures vacuum tight seal
- · Ideal for bag opening and transfer
- High flow cup fitting
- · Available in FDA silicone as standard

Vacuforce SBLP30 Vacuforce SBLP30

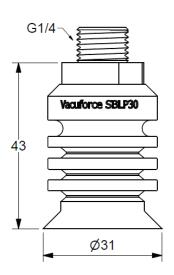
APPLICATIONS

- Thin film packaging
- Frozen food packaging
- Direct food contact

DIMENSIONS (mm) Cup Only



DIMENSIONS (mm) Cup & Fitting





For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example SBLP30S - 30mm silicone vacuum cup
Part number example SBLP30S-G1/4 - 30mm silicone vacuum cup with G1/4 fitting

SBLP40 MULTIPLE BELLOWS CUPS



- 40mm Diameter multiple bellows cup
- Designed for handling thin plastic and paper bags
- · Ultra thin seal lip ensures vacuum tight seal
- Ideal for bag opening and transfer
- High flow cup fitting
- Available in FDA silicone as standard

Vacuforce SBLP40 Vacuforce SBLP40

APPLICATIONS

- Thin film packaging
- Frozen food packaging
- Direct food contact

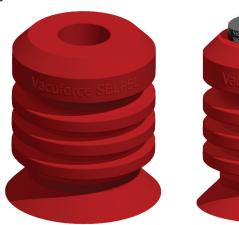
DIMENSIONS (mm) DIMENSIONS (mm) Cup Only Cup & Fitting G3/8 Ø12 Vacultoros SBLP-G03 Vacuiforce SBLP40 Vacuforce SBLP40 46 40 Ø40 Ø40 S **Cup Material** Fitting Thread Series Model Diameter S Red Silicone G3/8 G3/8 40 40 N3/8 3/8NPT

For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example SBLP40S - 40mm silicone vacuum cup Part number example SBLP40S-G3/8 - 40mm silicone vacuum cup with G1/4 fitting



- 50mm Diameter multiple bellows cup
- Designed for handling thin plastic and paper bags
- Ultra thin seal lip ensures vacuum tight seal
- · Ideal for bag opening and transfer
- High flow cup fitting
- Available in FDA silicone as standard

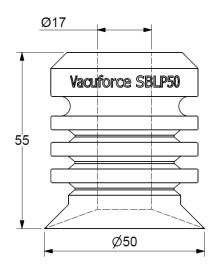




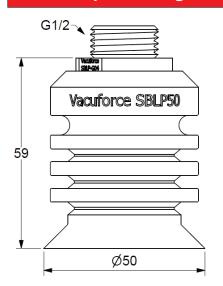
APPLICATIONS

- Thin film packaging
- Frozen food packaging
- Direct food contact

DIMENSIONS (mm) Cup Only



DIMENSIONS (mm) Cup & Fitting





For cup material data please refer to vacuforce.com/materials

Part number example SBLP50S - 50mm silicone vacuum cup
Part number example SBLP50S-G1/2 - 50mm silicone vacuum cup with G1/2 fitting

STC SINGLE BELLOWS TRACTION CUPS



The STC series of vacuum cups are designed to offer the vacuum user a cup that can pick up on angled surfaces and adapt to products such as formed sheet steel that may have a tight radius. The cups include an aluminum male or female threaded fitting for machinery and vacuum source connection.

This cup is available in Nitrile rubber in 60 Durometer. Ideal for handling pressed steel sheet and glass products. The single bellows design offers slight vertical movement when vacuum is applied independent of the machinery which aids in sheet separation and also compliance on concave and convex surfaces.



Series Model Diameter (mm) Durometer Thread 22N 22 60 G1/4F 30N 30 G1/4M

Model	Diameter (IIIII)
22N	22
30N	30
40N	40
50N	50
60N	60
80N	80
100N	100
125N	125

Thread
G1/4F
G1/4M
G3/8F
M10M
M14M
RA

APPLICATIONS

- Automotive steel stamping
- Glass handling
- Plywood transfer
- Handling of oily steel surfaces
- Concave and convex surfaces
- Large box & carton handling

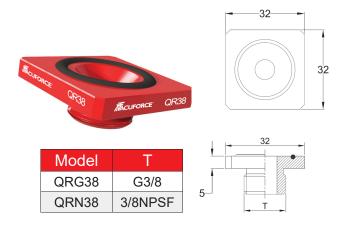
Part number example STC100N-60-G3/8F 100mm diameter bellows vacuum cup in 60 durometer NBR with G3/8 female thread connection port.

For cup material data please refer to vacuforce.com/materials

LEVEL COMPENSATORS



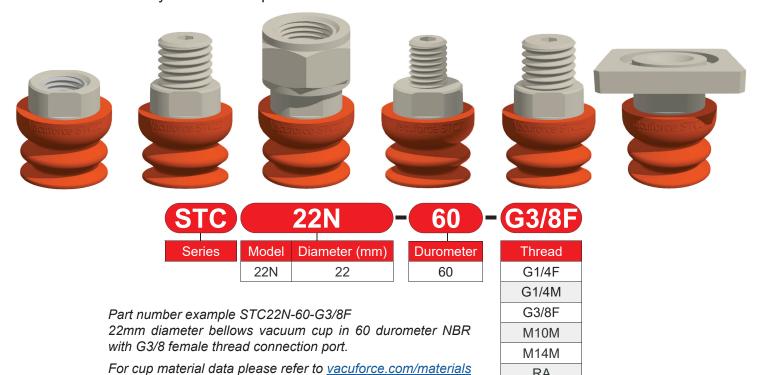
QUICK RELEASE FITTINGS



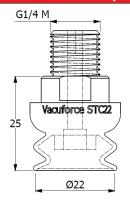


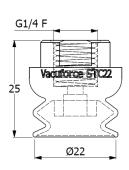
STC22 SINGLE BELLOWS TRACTION CUP

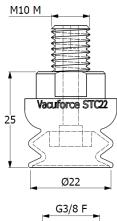
- 22mm Diameter single bellows traction cup
- Designed for steel stamping and glass handling industry
- Heavy duty construction offering superior cycle life
- Various machinery connection options

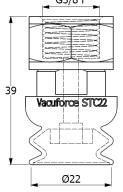


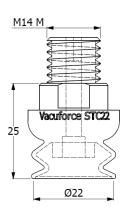
DIMENSIONS (mm)



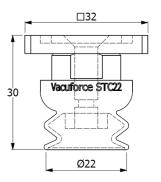








RA

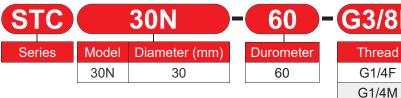


STC30 SINGLE BELLOWS TRACTION CUP



- 30mm Diameter single bellows traction cup
- Designed for steel stamping and glass handling industry
- Heavy duty construction offering superior cycle life
- · Various machinery connection options

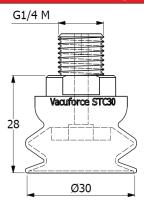


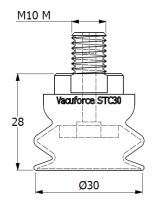


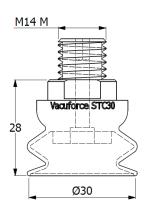
Part number example STC30N-60-G3/8F 30mm diameter bellows vacuum cup in 60 durometer NBR with G3/8 female thread connection port.

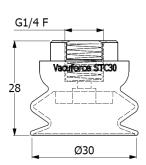
For cup material data please refer to vacuforce.com/materials

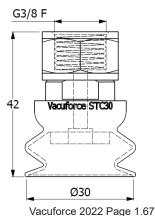
rnread	
G1/4F	
G1/4M	
G3/8F	
M10M	
M14M	
RA	

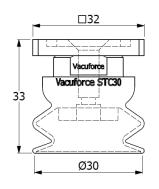














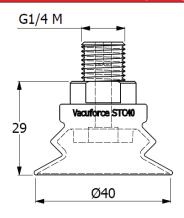
- 40mm Diameter single bellows traction cup
- Designed for steel stamping and glass handling industry
- Heavy duty construction offering superior cycle life
- Various machinery connection options

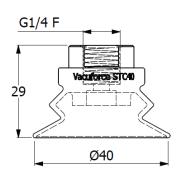


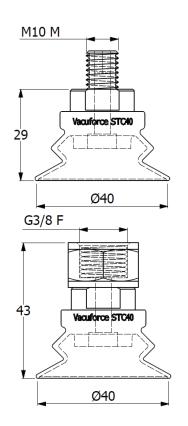
Part number example STC40N-60-G3/8F 40mm diameter bellows vacuum cup in 60 durometer NBR with G3/8 female thread connection port.

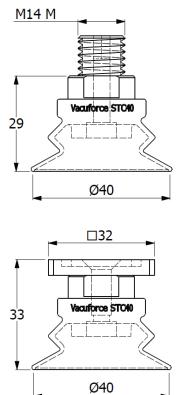
For cup material data please refer to vacuforce.com/materials

G1/4M G3/8F M10M M14M RA









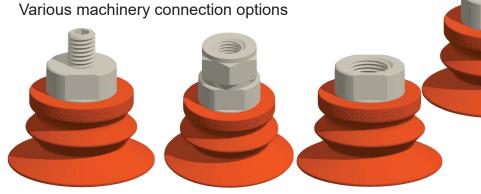
STC50 SINGLE BELLOWS TRACTION CUP

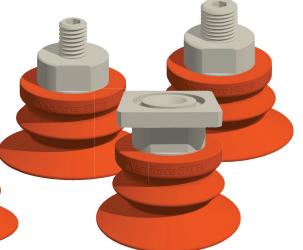




Designed for steel stamping and glass handling industry

Heavy duty construction offering superior cycle life





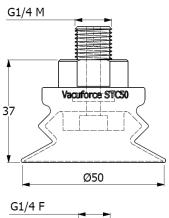
50N **G3/8F** 60 Model Diameter (mm) Durometer Series

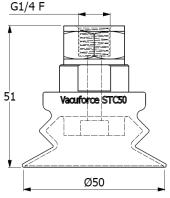
50N 50 60

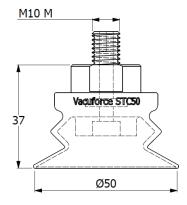
Part number example STC50N-60-G3/8F 50mm diameter bellows vacuum cup in 60 durometer NBR with G3/8 female thread connection port.

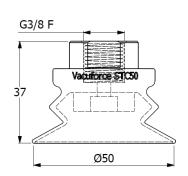
For cup material data please refer to vacuforce.com/materials

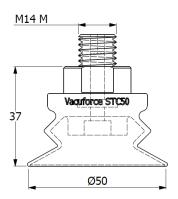
Thread	
G1/4F	
G1/4M	
G3/8F	
M10M	
M14M	
RA	
	-

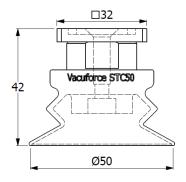








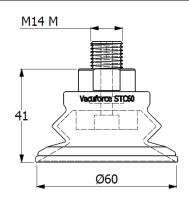


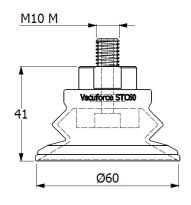


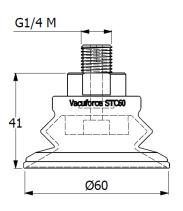


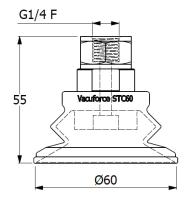
STC60 SINGLE BELLOWS TRACTION CUP

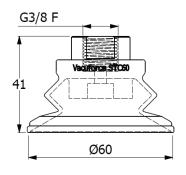


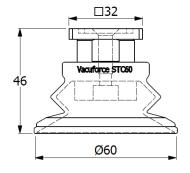








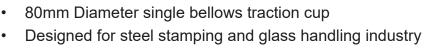


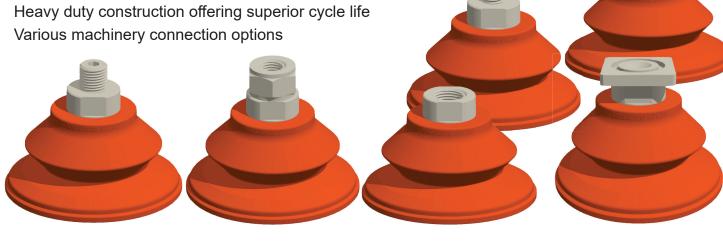


Vacuforce 2022 Page 1.70

STC80 SINGLE BELLOWS TRACTION CUP







210		8UN		—	
Series		Model	Dia	Diameter (mm)	
		80N		80	

G3/8F

Durometer 60

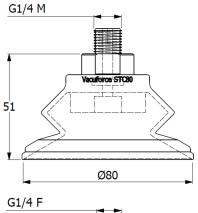
Thread	
G1/4F	
G1/4M	
G3/8F	
M10M	

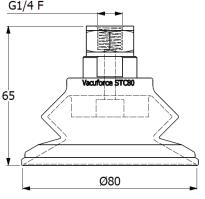
M14M

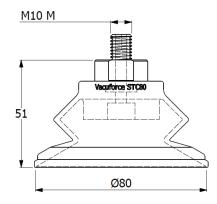
RA

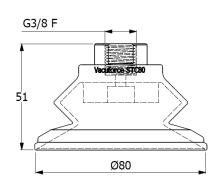
Part number example STC80N-60-G3/8F 80mm diameter bellows vacuum cup in 60 durometer NBR with G3/8 female thread connection port.

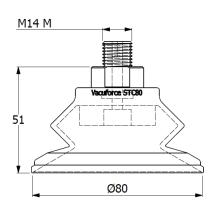
For cup material data please refer to <u>vacuforce.com/materials</u>

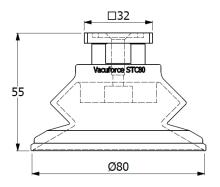








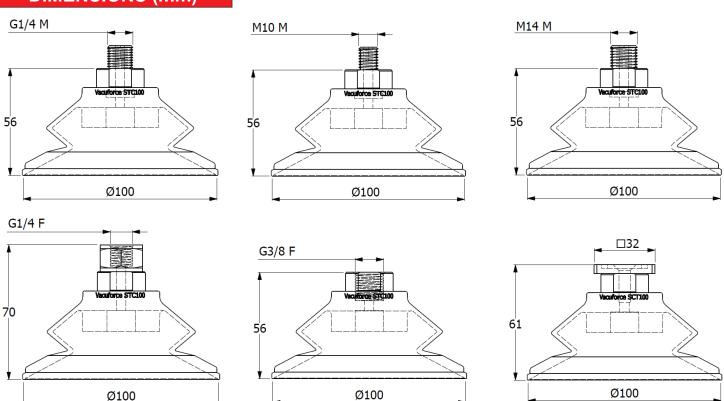






STC100 SINGLE BELLOWS TRACTION CUP





STC125 SINGLE BELLOWS TRACTION CUP





G3/8F

Series Model Diameter (mm) 125N 125

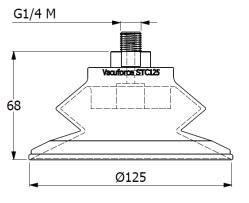
Thread Durometer G1/4F G1/4M

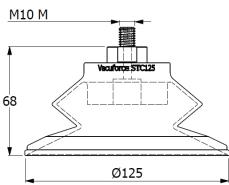
60

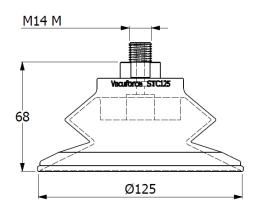
Part number example STC125N-60-G3/8F 125mm diameter bellows vacuum cup in 60 durometer NBR with G3/8 female thread connection port.

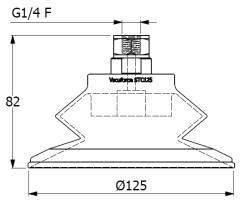
For cup material data please refer to vacuforce.com/materials

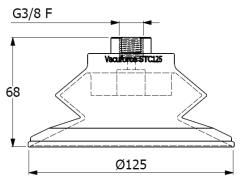
G3/8F M10M M14M RA

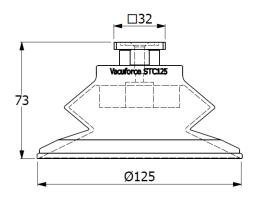












SBF POLYURETHANE BELLOWS TRACTION CUPS



The SBF series of vacuum cups are designed to offer the vacuum user a cup that can pick up on angled surfaces and adapt to products such as formed sheet steel that may have a tight radius. The cups include an aluminum male or female threaded fitting for machinery and vacuum source connection.

This cup is available as standard in POLYURETHANE which is a MARK FREE compound. It is as flexible as rubber but much harder wearing. Ideal for handling pressed steel sheet and glass products. Standard Durometer is 60 but other Durometer grades are available upon request.

The single bellows design offers slight vertical movement when vacuum is applied independent of the machinery aiding sheet separation and also compliance on concave and convex surfaces.



SBF		80	— (PU	
Series	Model	Diameter (mm)			Material	
	30	30		PU	Polyurethan	е
	40	40				
	50	50				
	60	60				
	80	80				
	100	100				

APPLICATIONS

Thread

G1/4F

G1/4M

G3/8F

G3/8M

3/8NPSF

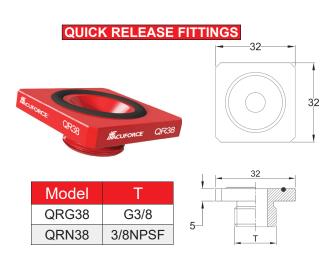
- Automotive steel stamping
- Glass handling
- Plywood transfer
- Handling of oily steel surfaces
- Concave and convex surfaces
- Large box & carton handling

Part number example SBF60-PU-G3/8F 60mm diameter vacuum cup in polyurethane with G3/8 female thread.

LEVEL COMPENSATORS

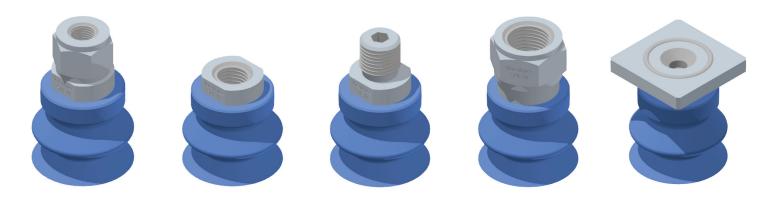
Refer to page 1.33 for suitable level compensators for this vacuum cup range.







- 30mm Diameter single bellows cup
- Designed for steel stamping and glass handling industry
- · Heavy duty construction offering superior cycle life
- · Non-marking polyurethane compound
- · Various machinery connection options

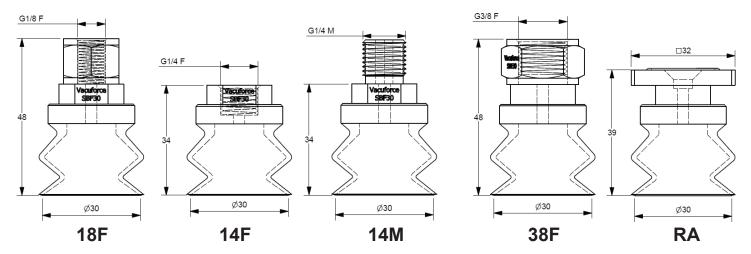


SBF		30	—		P	U
Series	Model	Diameter		C	up N	laterial
	30	30		PU	Р	olyurethane
For cup material data please refer to vacuforce.com/materials						

For cup material data please refer to <u>vacuforce.com/materials</u>
Part number example SBF30-PU-38F - 30mm diameter
polyurethane vacuum cup with G3/8 female fitting

Fitting Thread					
18F	G1/8F				
14F	G1/4F				
14M	G1/4M				
38F	G3/8F				
RA	Quick Connector				

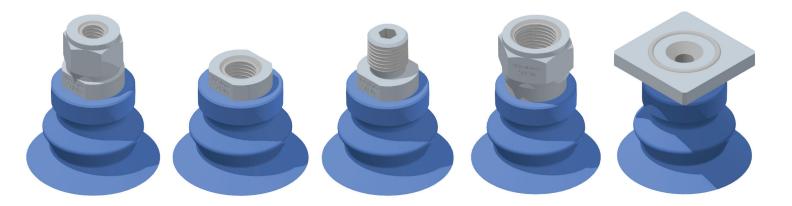
18F



SBF40 PU BELLOWS CUP



- 40mm Diameter single bellows cup
- Designed for steel stamping and glass handling industry
- · Heavy duty construction offering superior cycle life
- Non-marking polyurethane compound
- Various machinery connection options

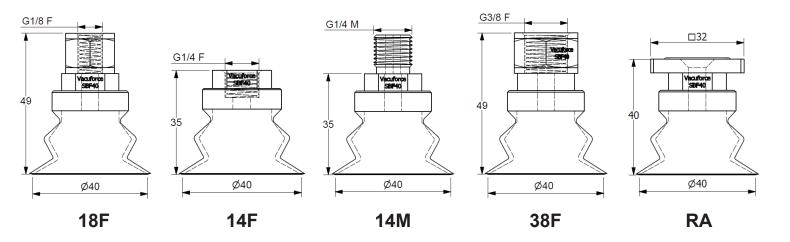


SBF		40	_		PU
Series	Model	Diameter		С	up Material
	40	40		PU	Polyurethane
For cup material data please refer to vacuforce.com/materials					

For cup material data please refer to <u>vacuforce.com/materials</u>
Part number example SBF40-PU-38F - 40mm diameter
polyurethane vacuum cup with G3/8 female fitting

Fitting Thread						
18F	G1/8F					
14F	G1/4F					
14M	G1/4M					
38F	G3/8F					
RA	Quick Connector					

18F





- 50mm Diameter single bellows cup
- · Designed for steel stamping and glass handling industry
- · Heavy duty construction offering superior cycle life
- Non-marking polyurethane compound
- Various machinery connection options

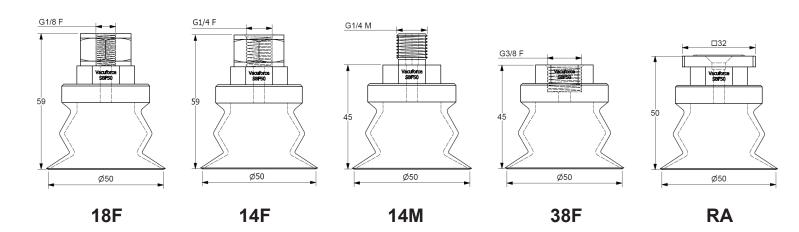


SBF	į,	50	_		PU
Series	Model	Diameter		С	up Material
	50	50		PU	Polyurethane
For cup material data please refer to vacuforce com/materials					

For cup material data please refer to <u>vacuforce.com/materials</u>
Part number example SBF50-PU-38F - 50mm diameter
polyurethane vacuum cup with G3/8 female fitting

Fitting Thread						
18F	G1/8F					
14F	G1/4F					
14M	G1/4M					
38F	G3/8F					
RA	Quick Connector					

18F



SBF60 PU BELLOWS CUP



- 60mm Diameter single bellows cup
- Designed for steel stamping and glass handling industry
- · Heavy duty construction offering superior cycle life
- Non-marking polyurethane compound
- · Various machinery connection options

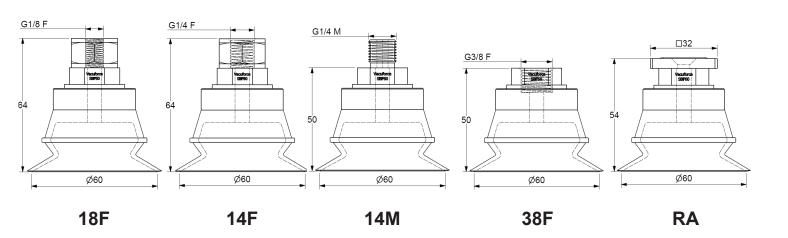


SBF		60	_		PU
Series	Model	Diameter		С	up Material
	60	60		PU	Polyurethane

For cup material data please refer to <u>vacuforce.com/materials</u> Part number example SBF60-PU-38F - 60mm diameter polyurethane vacuum cup with G3/8 female fitting

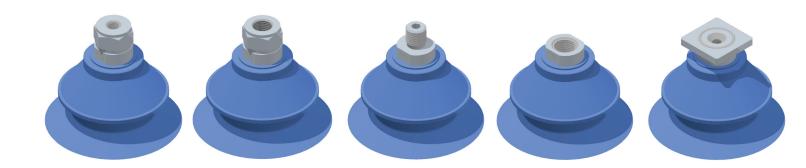
Fitting Thread					
18F	G1/8F				
14F	G1/4F				
14M	G1/4M				
38F	G3/8F				
RA	Quick Connector				

18F





- 80mm Diameter single bellows cup
- · Designed for steel stamping and glass handling industry
- · Heavy duty construction offering superior cycle life
- Non-marking polyurethane compound
- Various machinery connection options

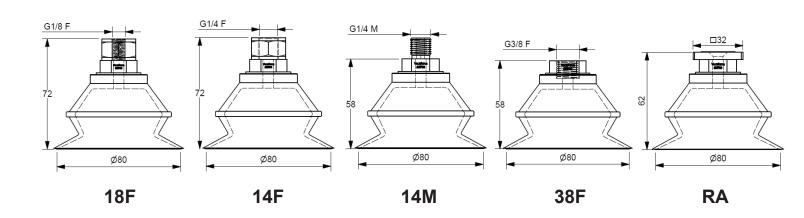


SBF	({	30	—		PU
Series	Model	Diameter		C	up Material
	80	80		PU	Polyurethane
For cup material data please refer to <u>vacuforce.com/materials</u>					

For cup material data please refer to <u>vacuforce.com/materials</u>
Part number example SBF80-PU-38F - 80mm diameter
polyurethane vacuum cup with G3/8 female fitting

Fitting Thread						
18F	G1/8F					
14F	G1/4F					
14M	G1/4M					
38F	G3/8F					
RA	Quick Connector					

18F

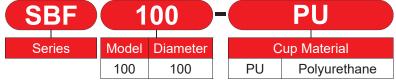


SBF100 PU BELLOWS CUP



- 100mm Diameter single bellows cup
- Designed for steel stamping and glass handling industry
- Heavy duty construction offering superior cycle life
- Non-marking polyurethane compound
- Various machinery connection options

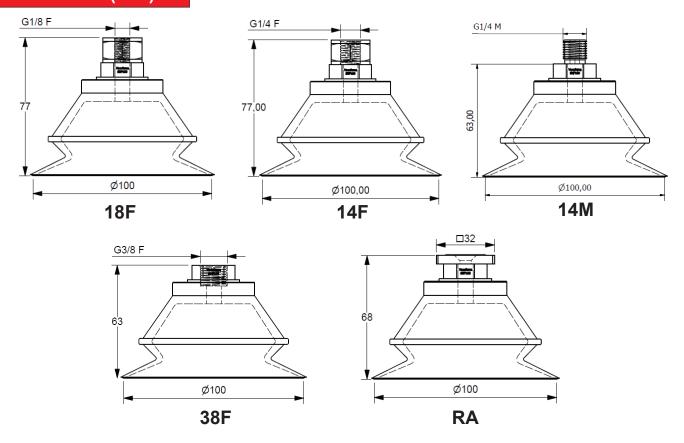




For cup material data please refer to <u>vacuforce.com/materials</u>
Part number example SBF100-PU-38F - 100mm diameter polyurethane vacuum cup with G3/8 female fitting

Fitting Thread						
18F G1/8F						
14F	G1/4F					
14M	G1/4M					
38F	G3/8F					
RA	Quick Connector					

18F



SOB OVAL BELLOWS CUP



The SOB series of vacuum cups are designed to offer the vacuum user a cup that can pick up on narrow surfaces and adapt to products such as formed sheet steel.

The cups include an aluminum male or female threaded fitting for machinery and vacuum source connection.

This cup is available in Nitrile rubber in both 45 and 60 Durometer. Ideal for handling pressed steel sheet and glass products.

The single bellows design offers slight vertical movement when vacuum is applied independent of the machinery aiding sheet separation and also compliance on concave and convex surfaces.

G3/8 female threaded fitting.



SOB	30>	(60N	— (60	_	G 3/8F
Series	Model	LxW (mm)		Durometer		Thread
	30X60N	30 x 60		60		G1/4F
	40X80N	40 x 80				G1/4M
	55X110N	55 x 110				G3/8F
	70X140N	70 x 140				3/8NPSF
Part number	evamnle SC	DB30X60N-60-	C3	/8E		M10M
	,	ows Cup 60 D				M14M

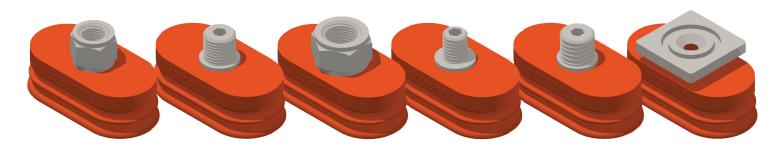
Refer to page 1.33 for suitable level compensators for this vacuum cup range.

Model T QRG38 G3/8 QRN38 3/8NPSF

QUICK RELEASE FITTINGS



- 30mm x 60mm single bellows oval cup
- · Designed for steel stamping and glass handling industry
- · Heavy duty construction offering superior cycle life
- · Various machinery connection options

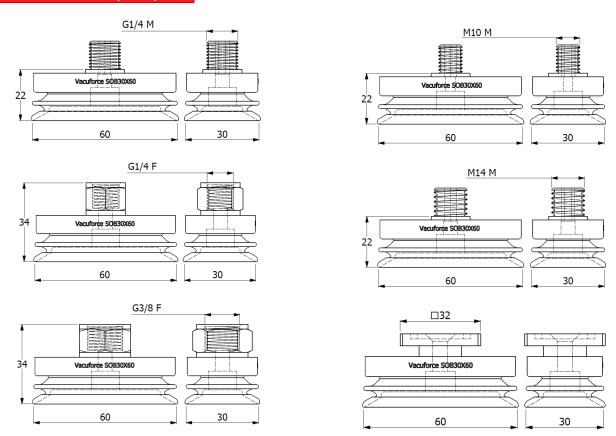




Part number example SOB30X60N-60-G3/8F 30mm x 60mm single bellows oval cup in 60 durometer NBR with G3/8 female thread connection port.

For cup material data please refer to vacuforce.com/materials

Thread
G1/4F
G1/4M
G3/8F
M10M
M14M
RA



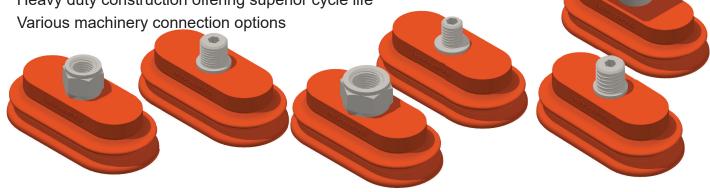
SOB40X80 OVAL BELLOWS CUP





Designed for steel stamping and glass handling industry

Heavy duty construction offering superior cycle life



SOB 40X80N - 60 - G3/8F

 Series
 Model
 L x W (mm)

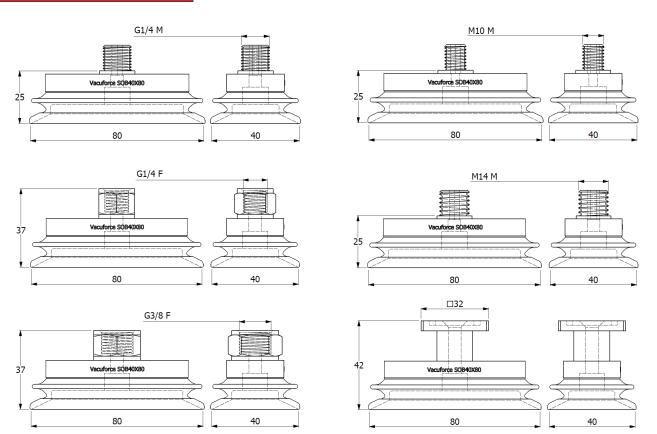
 40X80N
 40 x 80

Durometer 60 G²

Part number example SOB40X80N-60-G3/8F 40mm x 80mm single bellows oval cup in 60 durometer NBR with G3/8 female thread connection port.

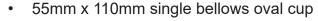
For cup material data please refer to <u>vacuforce.com/materials</u>

Thread
G1/4F
G1/4M
G3/8F
M10M
M14M
RA

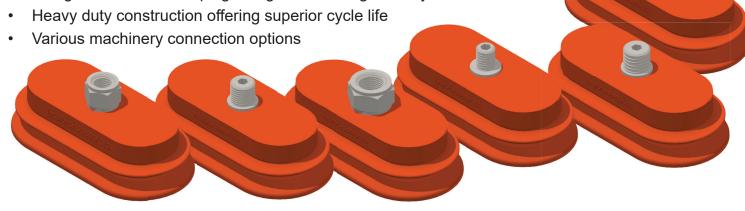








· Designed for steel stamping and glass handling industry



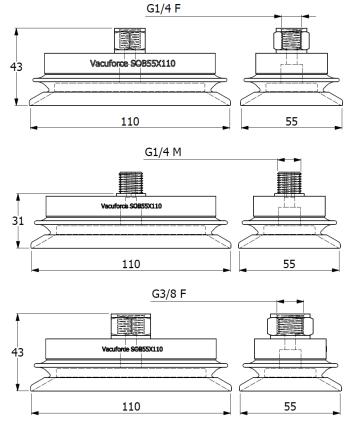
SOB 55X110N - 60 - G3/8F

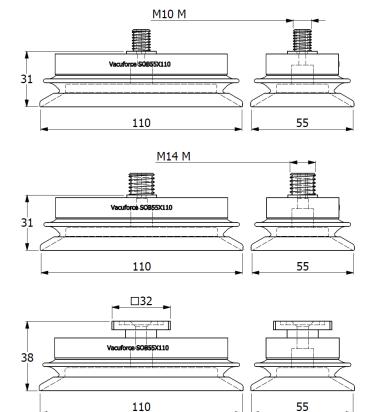
Sei	ries	Model	LxW (mm)	Duror	neter
		55X110N	55 x 110	60	0

Part number example SOB55X110N-60-G3/8F 55mm x 110mm single bellows oval cup in 60 durometer NBR with G3/8 female thread connection port.

For cup material data please refer to <u>vacuforce.com/materials</u>

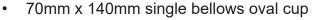
Thread G1/4F G1/4M G3/8F M10M M14M RA





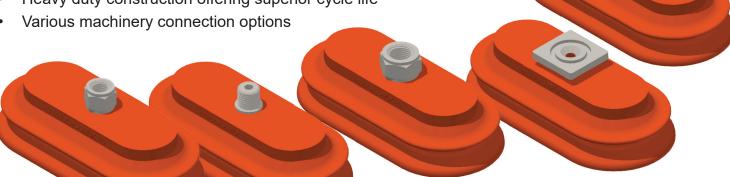
SOB70X140 OVAL BELLOWS CUP





Designed for steel stamping and glass handling industry

Heavy duty construction offering superior cycle life



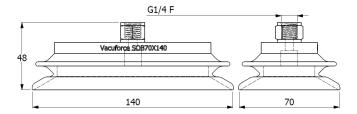
SOB 70X140N - 60

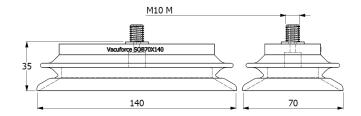
Series	Model	L x W (mm)
	70X140N	70 x 140

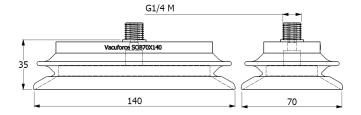
Durometer 60 Thread
G1/4F
G1/4M
G3/8F
M10M
M14M
RA

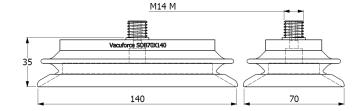
Part number example SOB70X140N-60-G3/8F 70mm x 140mm single bellows oval cup in 60 durometer NBR with G3/8 female thread connection port.

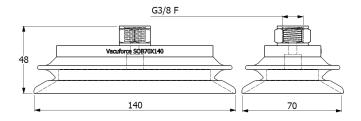
For cup material data please refer to <u>vacuforce.com/materials</u>

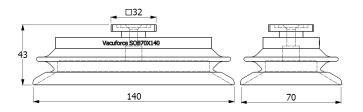












EHC EGG HANDLING CUPS



- · Egg handling vacuum cups
- · Available in FDA silicone as standard
- Multiple bellows offers vacuum lift independent of machine movement



Е	ш	0	

3475

Series

Model	Diameter
3475	34
3566	35
3776	37

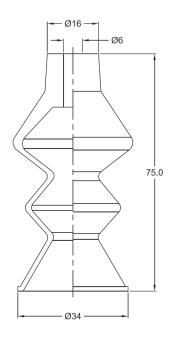
N

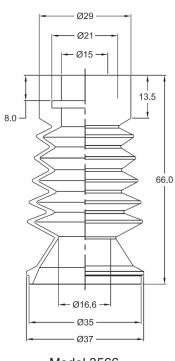
Cup Material		
N	NBR Black 50 Durometer	
S	Silicone White 30 Durometer	
SBLK	Silicone Black 50 Durometer	
SR	Silicone Red 50 Durometer	
SBLU	Silicone Blue 50 Durometer	
SR	Silicone Red 50 Durometer	

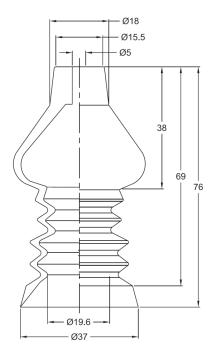
Part number example EHC3475N 34mm Egg Handling Cup in NBR

Note - #3566 only available in Blue Silicone #3766 only available in Red Silicone

DIMENSIONS (mm)







Model 3475

Model 3566

Model 3776



This cup series is available in metal detectable FDA compliant silicone.

For red colored metal detectable silicone use material code SMI.

For white translucent metal detectable silicone use material code STMI.





- Foam seal lips for VFB series vacuum cups
- · Used for handling rough or embossed surfaces
- Self adhesive seal bonds to base of VFB series vacuum cups



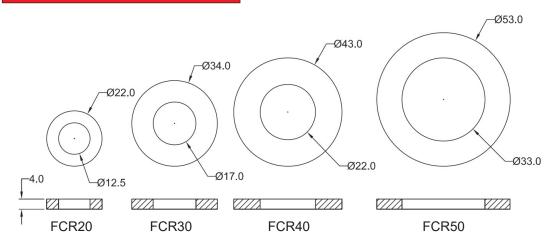
FCR		30			S
Series	Model	Suitable	e for Cup Model	Seal I	Material
	20		VFB20	N	NBR
	30	\	VFB30-2	S	Silicone
	40		VFB40		
	50	١	√FB50-2		

ASSEMBLY



Ensure that the vacuum cup is free from dirt and grease on the sealing lip and is in good overall condition. Remove the self adhesive seal from the foam ring and place on a flat surface with sticky face upwards.

Place cup centrally over foam ring and press against the foam ring squarely and firmly for 1-2 seconds.



For larger foam cups please refer to pages 1.30 - 1.32



VFF FLAT CUPS



- Flat design vacuum cup
- · Internal cleats for increased grip in lateral movement
- · Good for shear movement and grip
- Available from 15mm to 150mm diameter
- NBR and FDA Silicone



N S

ST

VFF	40-2			
Series	Model	Diameter		
	15	15		
	20	20		
	30-2	30		
	40-2	40		
	50-2	50		
	75W	75		
	110W	110		
	150W	150		

up M	laterial	
	Nitrile	
R	ed Silicone	

White Translucent Silicone

For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example VFF30-2S 30mm diameter flat vacuum cup in red silicone

LEVEL COMPENSATORS





For cup fittings refer to page 1.86



- 16mm Diameter (0.787") flat cup design
- · Internal cleats for increased grip in lateral movement
- Good for shear movement and grip
- NBR and FDA Silicone materials



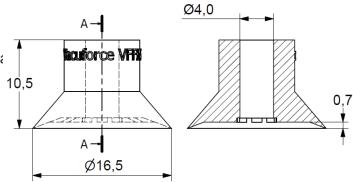




APPLICATIONS

- Small part pick and place
- · Plastic and food packaging
- Direct food contact with silicone materia

DIMENSIONS (mm)



VFF	15	
Series	Model	Diameter
	15	16.5

	5
	Cup Material
N	Nitrile
S	Red Silicone

Cup Fittings			
Use Fitting Type	В		

For cup material data please refer to vacuforce.com/materials

Part number example VFF15S 16.5mm diameter flat vacuum cup in red silicone



For cup fittings refer to page 1.86

VFF20 FLAT VACUUM CUP



- 22mm Diameter (0.866") flat cup design
- · Internal cleats for increased grip in lateral movement
- Good for shear movement and grip
- NBR and FDA Silicone materials



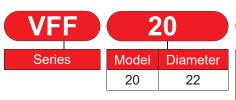




APPLICATIONS

- Small part pick and place
- · Plastic and food packaging
- · Direct food contact with silicone materials

DIMENSIONS (mm) A - Wacuforce VH-20 A - Ø22



Cup Fittings			
Use Fitting Type	С		

Ÿ			
Cup Material			
N	Nitrile		
S	Red Silicone		
ST	White Translucent Silicone		

For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example VFF20S 22mm diameter flat vacuum cup in red silicone



For cup fittings refer to page 1.86



- 32mm Diameter (1.26") flat cup design
- · Internal cleats for increased grip in lateral movement
- Good for shear movement and grip
- NBR and FDA Silicone materials



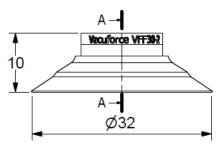


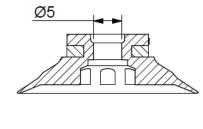


APPLICATIONS

- Small part pick and place
- · Plastic and food packaging
- Direct food contact with silicone materials

DIMENSIONS (mm)





VFF	30)-2
Series	Model	Diameter
	30	32

Cup Fittings	
Use Fitting Type	C

Cup Material			
N	N Nitrile		
S	Red Silicone		
ST	White Translucent Silicone		

For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example VFF30-2S 32mm diameter flat vacuum cup in red silicone



For cup fittings refer to page 1.86

VFF40-2 FLAT VACUUM CUP



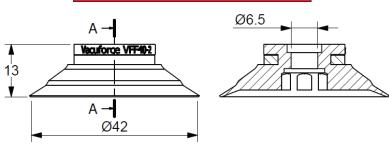
- 42mm Diameter (1.65") flat cup design
- Internal cleats for increased grip in lateral movement
- Good for shear movement and grip
- NBR and FDA Silicone materials



APPLICATIONS

- Small part pick and place
- Plastic and food packaging
- Direct food contact with silicone materials

DIMENSIONS (mm)





Cup Fittings				
Use Fitting Type	D			

S			
Cup Material			
N	N Nitrile		
S	Red Silicone		
ST	White Translucent Silicone		

For cup material data please refer to vacuforce.com/materials

Part number example VFF40-2S 42mm diameter flat vacuum cup in red silicone



For cup fittings refer to page 1.86



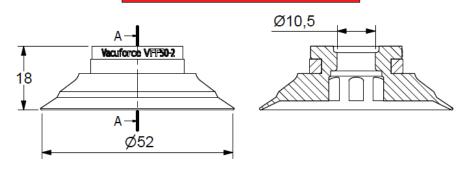
- 52mm Diameter (2.05") flat cup design
- · Internal cleats for increased grip in lateral movement
- · Good for shear movement and grip
- NBR and FDA Silicone materials

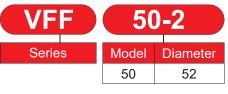


APPLICATIONS

- · Small part pick and place
- Plastic and food packaging
- Direct food contact with silicone materials

DIMENSIONS (mm)





Cup Fittings			
Use Fitting Type	Е		

Cup Material

N Nitrile

S Red Silicone

ST White Translucent Silicone

For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example VFF50-2S 52mm diameter flat vacuum cup in red silicone



For cup fittings refer to page 1.86

VFF75W FLAT VACUUM CUP



- 75mm Diameter (3") flat cup design
- · Internal cleats for increased grip in lateral movement
- · Ideal for high speed shear movement and grip
- NBR and FDA Silicone materials

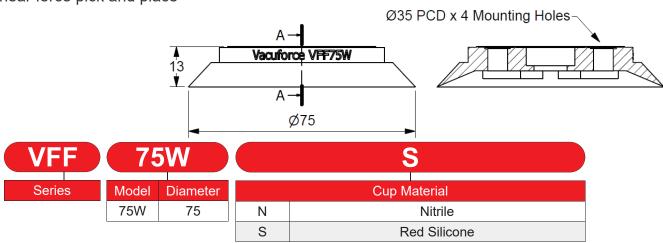




APPLICATIONS

- Part pick and place
- Sheet metal and lumber handling
- High shear force pick and place

DIMENSIONS (mm)

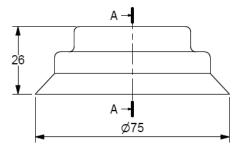


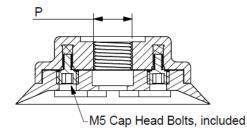
For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example VFF75WS - 75mm diameter flat vacuum cup in red silicone

VFF75W Cup Fittings



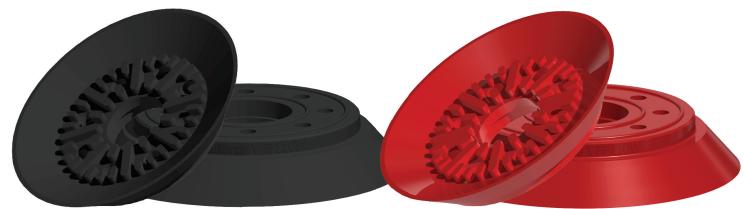




Fitting Model	P (Vacuum Port)
VFCF75-1/8	G1/8
VFCF75-1/4	G1/4
VFCF75-3/8	G3/8



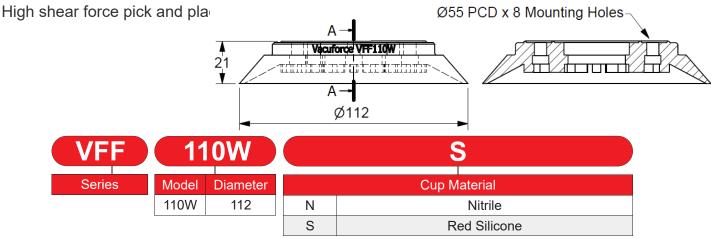
- 112mm Diameter (4.4") flat cup design
- · Internal cleats for increased grip in lateral movement
- · Ideal for high speed shear movement and grip
- NBR and FDA Silicone materials



APPLICATIONS

- · Part pick and place
- Sheet metal and lumber handling

DIMENSIONS (mm)

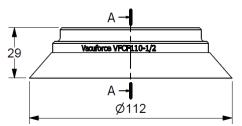


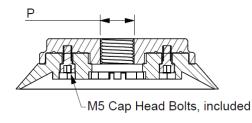
For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example VFF110WS - 112mm diameter flat vacuum cup in red silicone

VFF110W Cup Fittings







Fitting Model	P (Vacuum Port)
VFCF110-3/8	G3/8
VFCF110-1/2	G1/2

VFF150W FLAT VACUUM CUP

VACUFORCE®

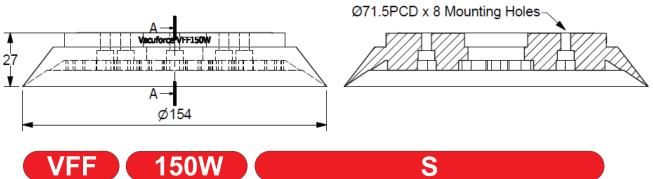
- 154mm Diameter (6.06") flat cup design
- · Internal cleats for increased grip in lateral movement
- Ideal for high speed shear movement and grip
- NBR and FDA Silicone materials

APPLICATIONS

- Part pick and place
- · Sheet metal and lumber handling
- · High shear force pick and place



DIMENSIONS (mm)



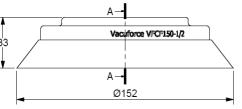
VFF	13	DUVV		5
Series	Model	Diameter		Cup Material
	150W	154	N	Nitrile
			S	Red Silicone

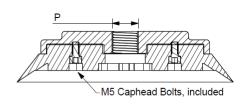
For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example VFF150WS - 154mm diameter flat vacuum cup in red silicone

VFF150W Cup Fittings







Fitting Model	P (Vacuum Port)			
VFCF150-1/2	G1/2			

VFF200N FLAT VACUUM CUP



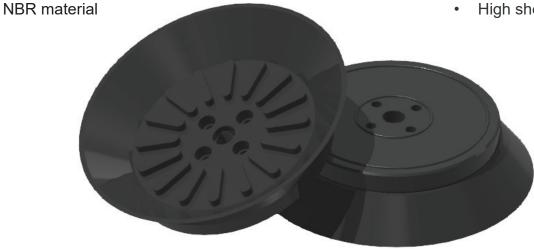
- 200mm Diameter (8"") flat cup design
- Internal cleats for increased grip in lateral movement

Ideal for high speed shear movement and grip

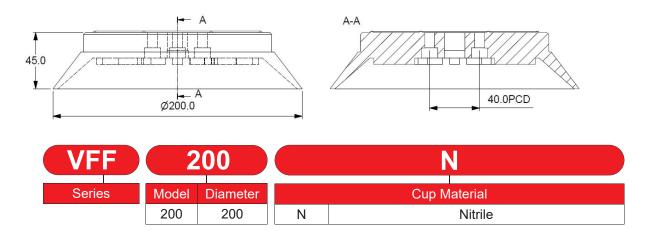


APPLICATIONS

- Part pick and place
- Sheet metal and lumber handling
- High shear force pick and place

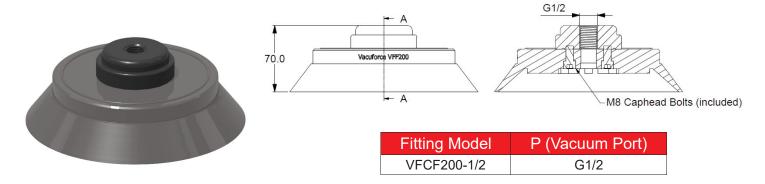


DIMENSIONS (mm)



For cup material data please refer to vacuforce.com/materials Part number example VFF200N - 200mm diameter flat vacuum cup in NBR rubber

VFF200N Cup Fittings



PFG FLAT VACUUM CUPS



- Flat design vacuum cup
- · Good for shear movement and grip
- Available from 2mm to 50mm diameter





PFG Series

50

Model Diameter (mm)

Model	Diameter (min)
2	2
3.5	3.5
5	5
6	6
8	8
20	20
25	25
30	30
35	35
40	40
50	50

NBR

Cup Material						
NBR	Nitrile					
SI	White Silicone					

For cup material data please refer to <u>vacuforce.com/materials</u>

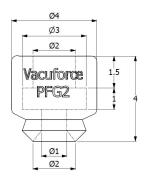
Part number example PFG-50-NBR 50mm diameter flat vacuum cup in NBR rubber.





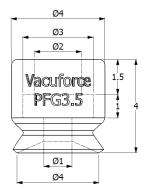
PFG-2-*





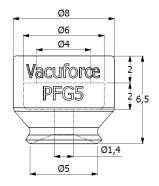
PFG-3.5-*





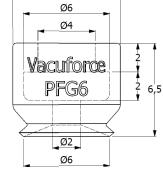
PFG-5-*





PFG-6-*





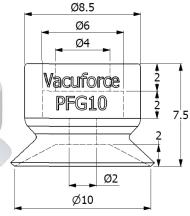
PFG-8-*



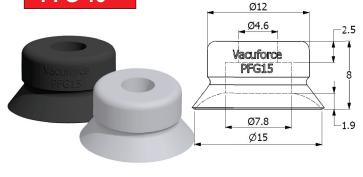


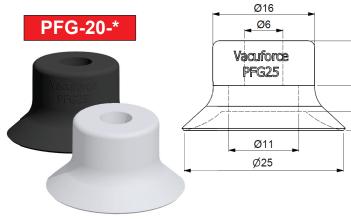
PFG-10-*



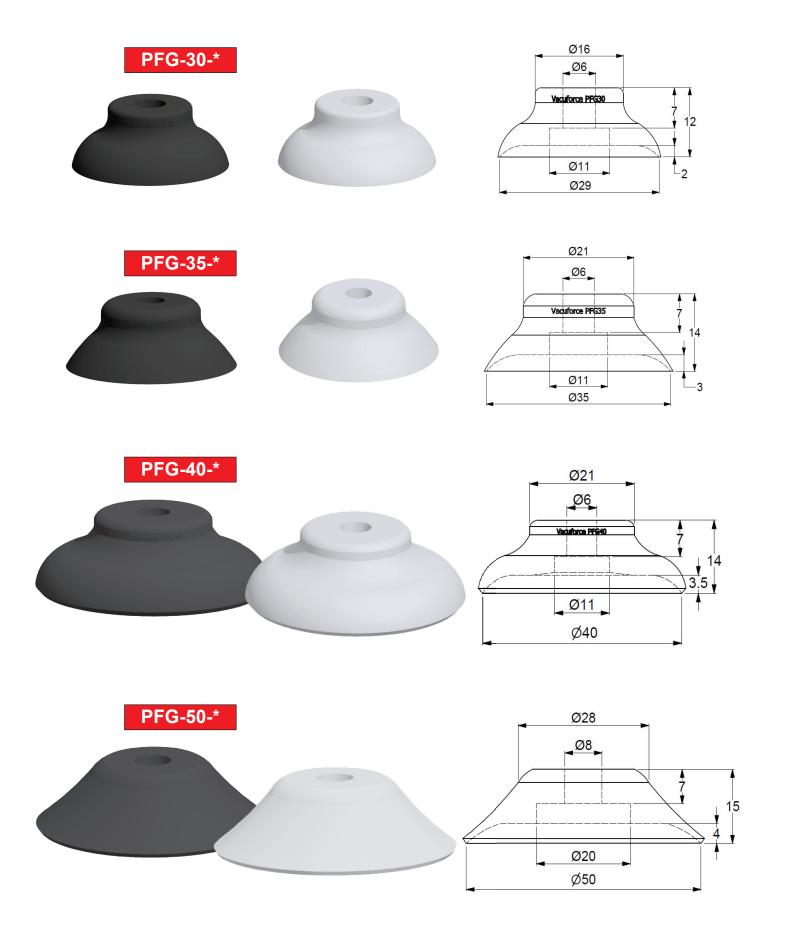


PFG-15-*









STP SERIES SUPER THIN LIP



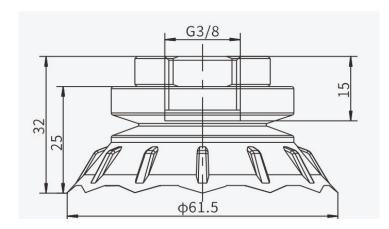
- Ultra thin 0.25mm thick pick up sealing lip
- 60mm Diameter
- Designed to seal against thin packaged products albags
- Inner support ribs enable high speed transfer of products



APPLICATIONS

- Part pick and place
- Plastic wrapped food packaging
- Bags and sacks

DIMENSIONS (mm)





For cup material data please refer to <u>vacuforce.com/materials</u>

SFF FLAT CUPS



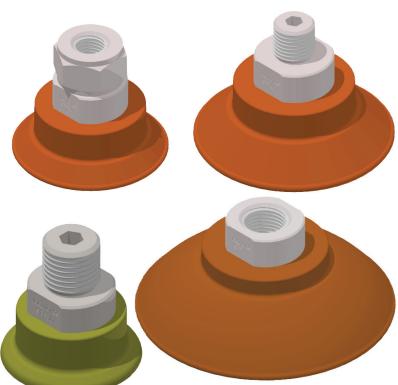
The SFF series of vacuum cups are designed to offer the vacuum user very high speed lateral transfer especially on wet or oily surfaces such as steel stamped parts.

The SFF cups are also suitable for shear plane applications where the part is being turned through 90 degrees. The cups include an aluminum male or female threaded fitting for machinery and vacuum source connection.

These vacuum cups are available in 45 and 60 Durometer NBR.

APPLICATIONS

- Automotive steel stamping
- Glass handling
- Plywood transfer
- Handling of oily steel surfaces
- Large box & carton handling



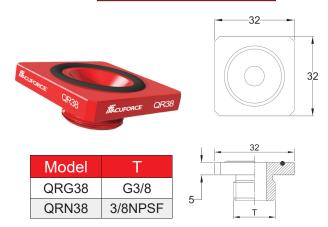
SFF	80		N	-	60	_	G3/8F
Series	Diameter (mm)		Material		Durometer		Thread
	30	Ν	NBR		45		G1/4F
	40				60		G1/4M
	50						G3/8F
	60						3/8NPSF
	80						M10M
	100						M14M
	125						

Part number example SFF80N-60-G3/8F 80mm diameter flat cup 60 Durometer NBR with G3/8 female thread

LEVEL COMPENSATORS

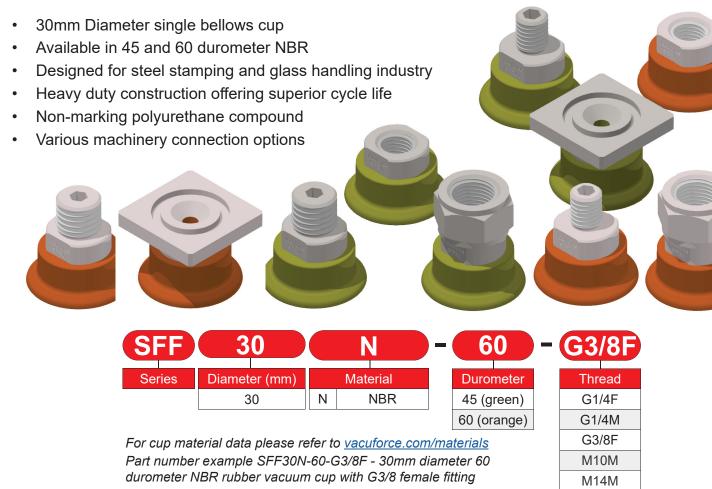


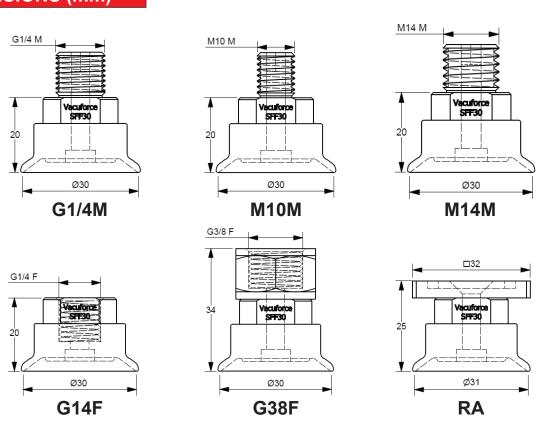
QUICK RELEASE FITTINGS



RA

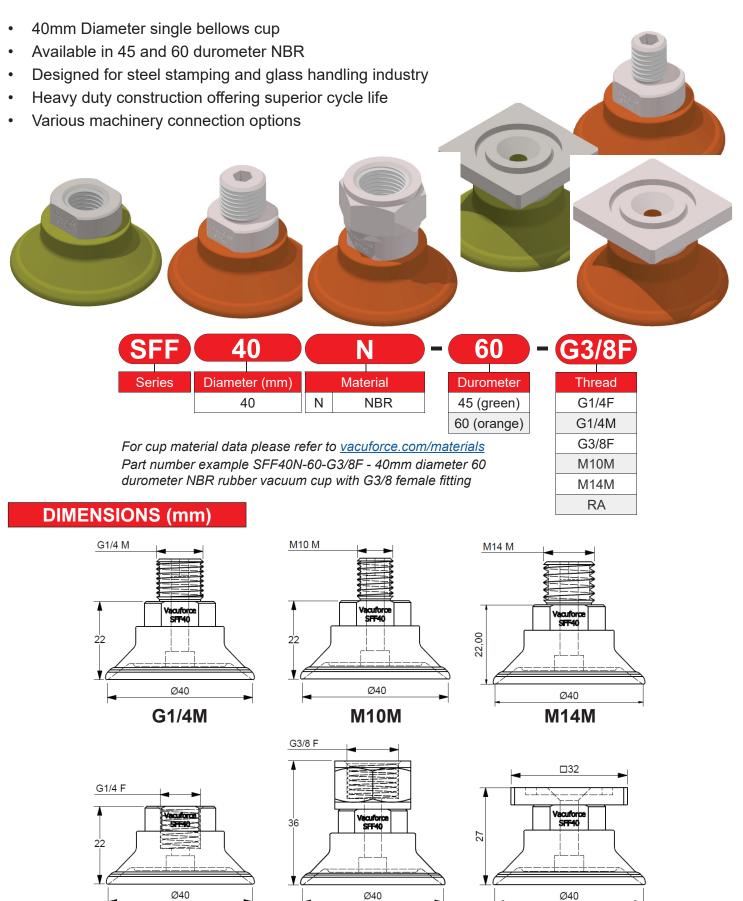






SFF40 FLAT CUPS



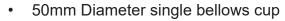


RA

G3/8F

G1/4F



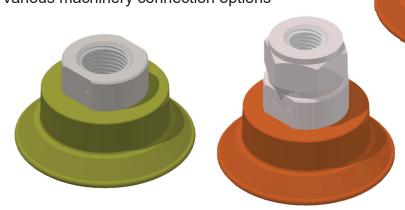


Available in 45 and 60 durometer NBR

Designed for steel stamping and glass handling industry

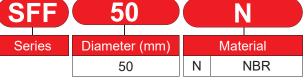
Heavy duty construction offering superior cycle life

Various machinery connection options









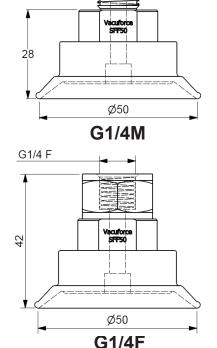
Durometer 45 (green) 60 (orange)

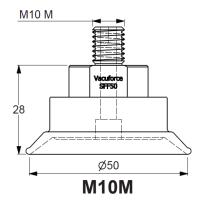
Thread G1/4F G1/4M G3/8F M10M M14M RA

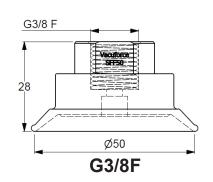
For cup material data please refer to vacuforce.com/materials Part number example SFF50N-60-G3/8F - 50mm diameter 60 durometer NBR rubber vacuum cup with G3/8 female fitting

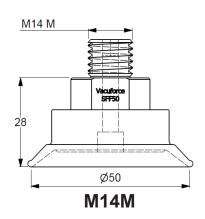
DIMENSIONS (mm)

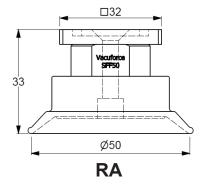
G1/4 M











SFF60 FLAT CUPS

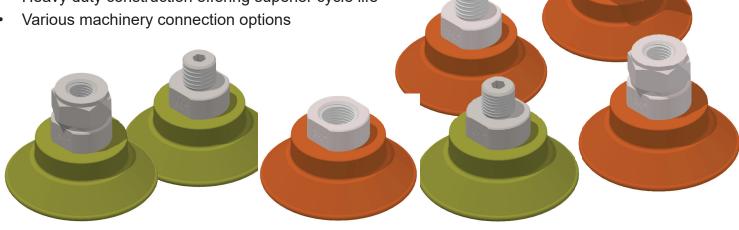


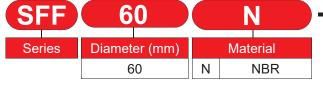


Available in 45 and 60 durometer NBR

Designed for steel stamping and glass handling industry

Heavy duty construction offering superior cycle life





For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example SFF60N-60-G3/8F - 60mm diameter 60

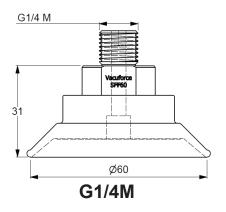
durometer NBR rubber vacuum cup with G3/8 female fitting

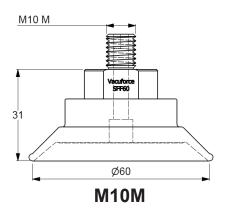
Thread G1/4F G1/4M G3/8F M10M M14M RA

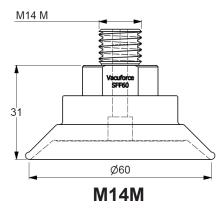
60

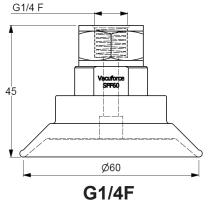
Durometer

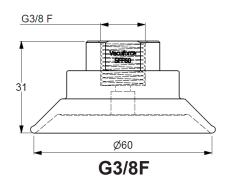
45 (green)

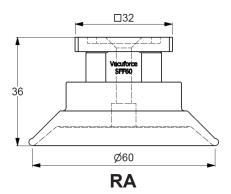




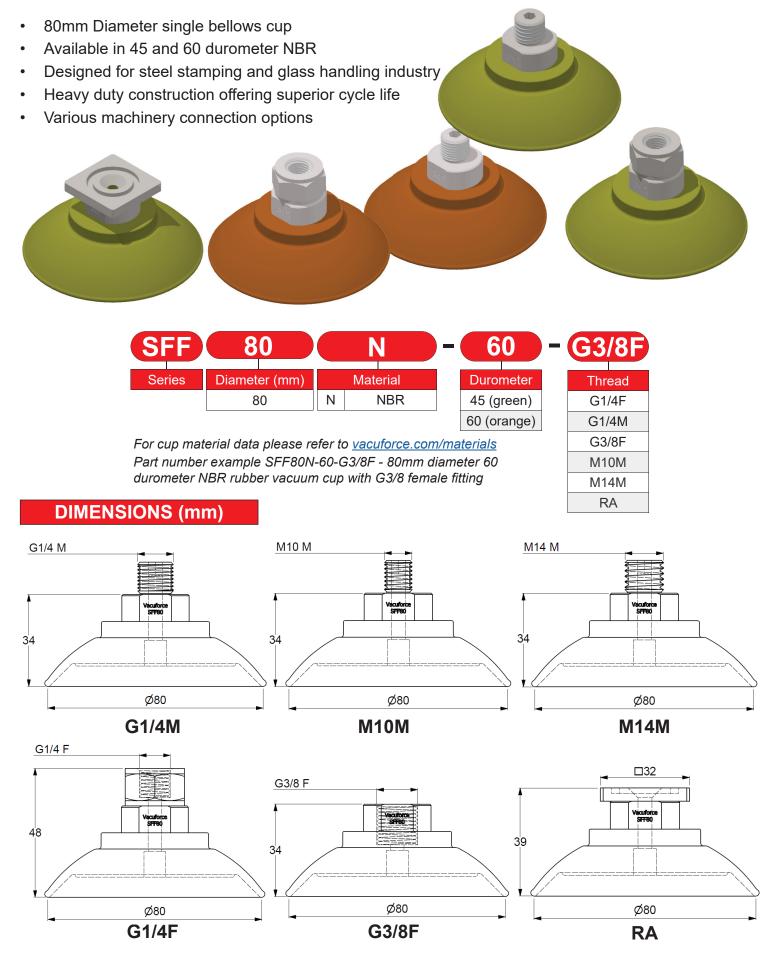






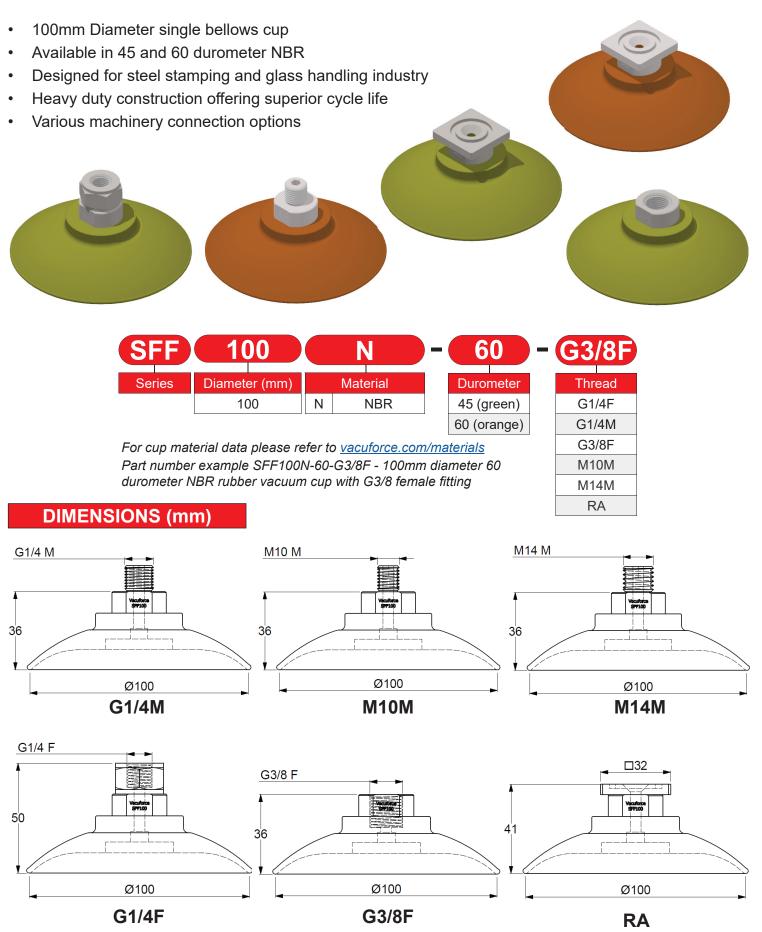




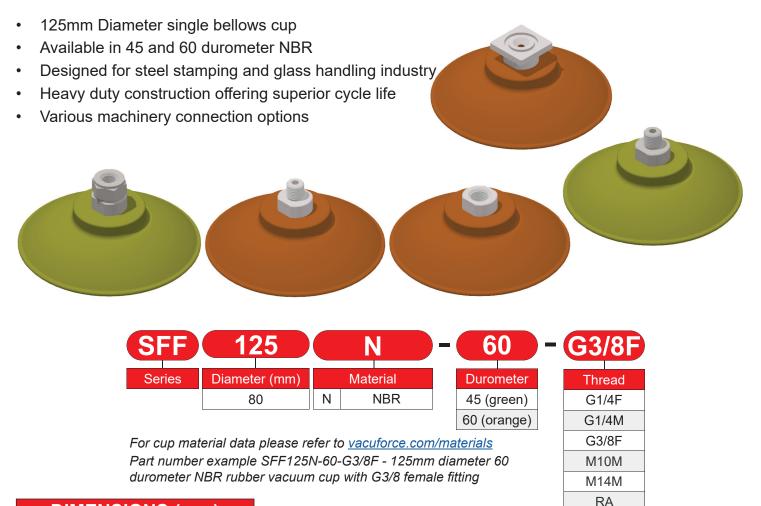


SFF100 FLAT CUPS

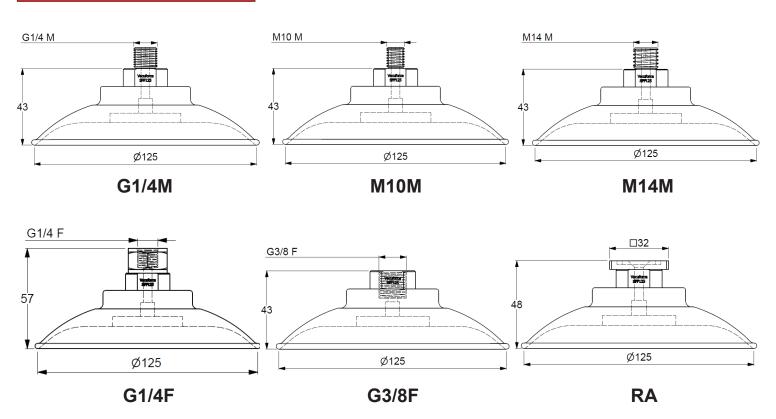








DIMENSIONS (mm)



SOF OVAL FLAT CUP



The SOF series of vacuum cups are designed to offer the vacuum user a cup that can pick up on narrow surfaces.

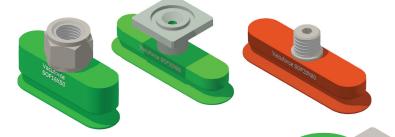
The cups include an aluminum male or female threaded fitting for machinery and vacuum source connection.

This cup is available in NBR rubber compound in both 45 and 60 Durometer. Ideal for handling pressed steel sheet and glass products.



APPLICATIONS

- Automotive steel stamping
- Glass handling
- Plywood transfer
- · Handling of oily steel surfaces
- Large box & carton handling





Model	LxW (mm)
16X50	16 x 50
20X80	20 x 80
23X60	23 x 60
30X90	30 x 90
40X110	40 x 110
50X100	50 x 100
60X120	60 x 120
70X140	70X140

4	5	-	G 3	/8 F	
		[

urometer	Thr	ead
45	G1,	/4F
60	G1/	4M
	G3	/8F
	M1	OM
	M1	4M
	R	Α



For cup material data please refer to <u>vacuforce.com/materials</u>
Part number example SFF80N-60-G3/8F
80mm diameter flat cup 60 Durometer NBR with G3/8 female thread

QUICK RELEASE FITTINGS

32-

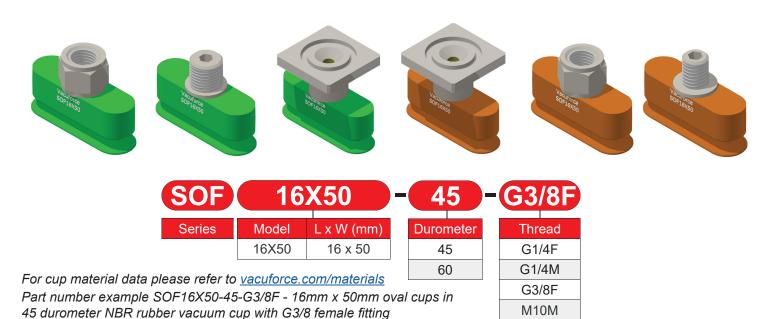


LEVEL COMPENSATORS

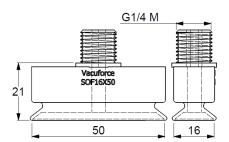


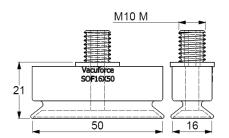


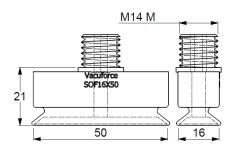
- 16mm x 50mm flat oval vacuum cup
- Available in 45 and 60 durometer NBR
- Designed for steel stamping and glass handling industry
- · Ideal for narrow surfaces such as a steel door frame
- Heavy duty construction offering superior cycle life
- · Various machinery connection options



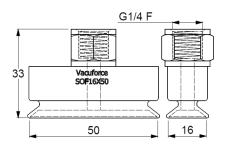
DIMENSIONS (mm)

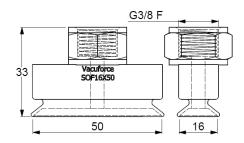


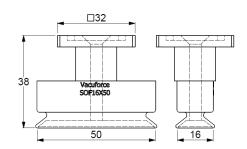




M14M RA



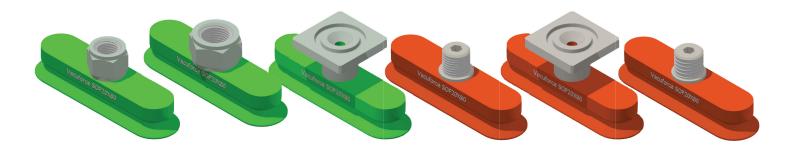




SOF20X80 FLAT OVAL CUP



- 20mm x 80mm flat oval vacuum cup
- Available in 45 and 60 durometer NBR
- Designed for steel stamping and glass handling industry
- Ideal for narrow surfaces such as a steel door frame
- Heavy duty construction offering superior cycle life
- · Various machinery connection options



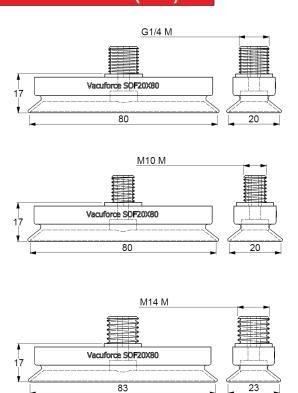


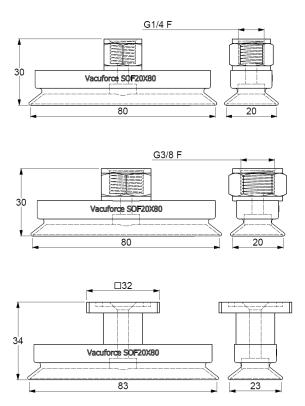
For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example SOF20X80-45-G3/8F - 20mm x 80mm oval cups in
45 durometer NBR rubber vacuum cup with G3/8 female fitting

Thread G1/4F G1/4M G3/8F M10M M14M RA

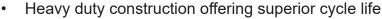
DIMENSIONS (mm)







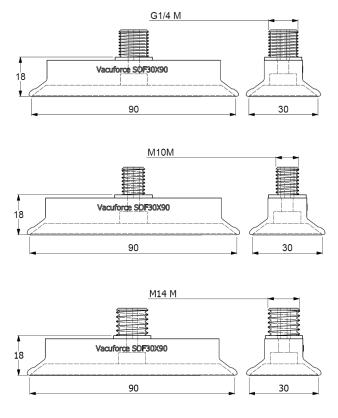
- 30mm x 90mm flat oval vacuum cup
- Available in 45 and 60 durometer NBR
- Designed for steel stamping and glass handling industry
- Ideal for narrow surfaces such as a steel door frame

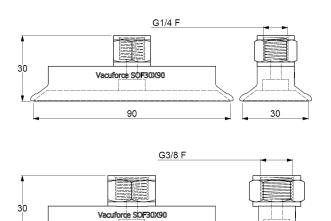




For cup material data please refer to vacuforce.com/materials Part number example SOF30X90-45-G3/8F - 30mm x 90mm oval cups in 45 durometer NBR rubber vacuum cup with G3/8 female fitting

DIMENSIONS (mm)

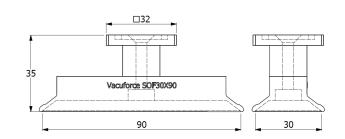




G3/8F

M₁₀M

M14M RA



90

SOF40X110 FLAT OVAL CUP

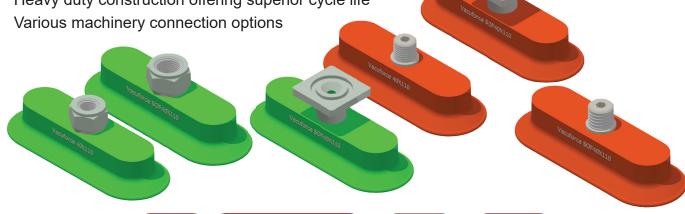


- 40mm x 110mm flat oval vacuum cup
- Available in 45 and 60 durometer NBR

· Designed for steel stamping and glass handling industry

Ideal for narrow surfaces such as a steel door frame

Heavy duty construction offering superior cycle life



SOF 40X110 - 45 - G3/8F

Durometer

45

Series	Model	L x W (mm)
	40X110	40 x 110

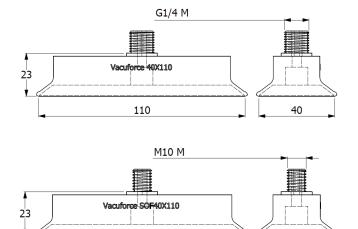
40

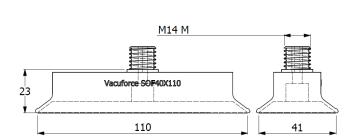
For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example SOF40X110-45-G3/8F - 40mm x 110mm oval cups in 45 durometer NBR rubber vacuum cup with G3/8 female fitting

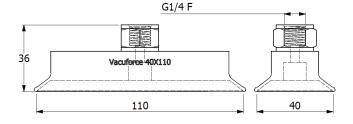
Thread
G1/4F
G1/4M
G3/8F
M10M
M14M
RA

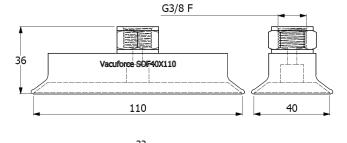
DIMENSIONS (mm)

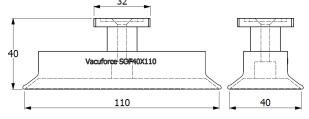




110









- 50mm x 100mm flat oval vacuum cup
- Available in 45 and 60 durometer NBR
- Designed for steel stamping and glass handling industry
- Ideal for narrow surfaces such as a steel door frame

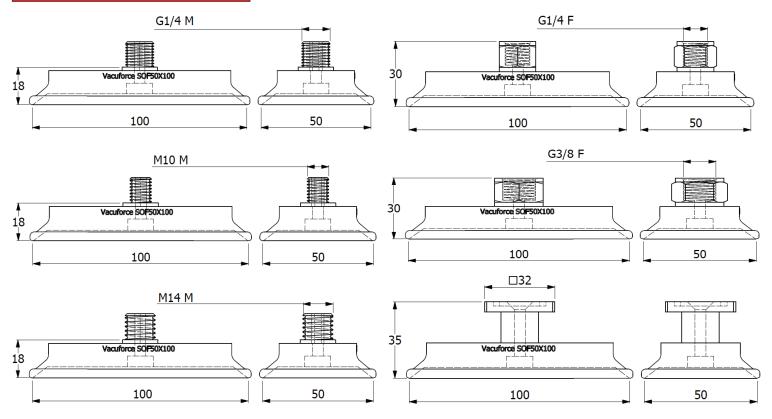


45

60 For cup material data please refer to vacuforce.com/materials Part number example SOF50X100-45-G3/8F - 50mm x 100mm oval cups in 45 durometer NBR rubber vacuum cup with G3/8 female fitting

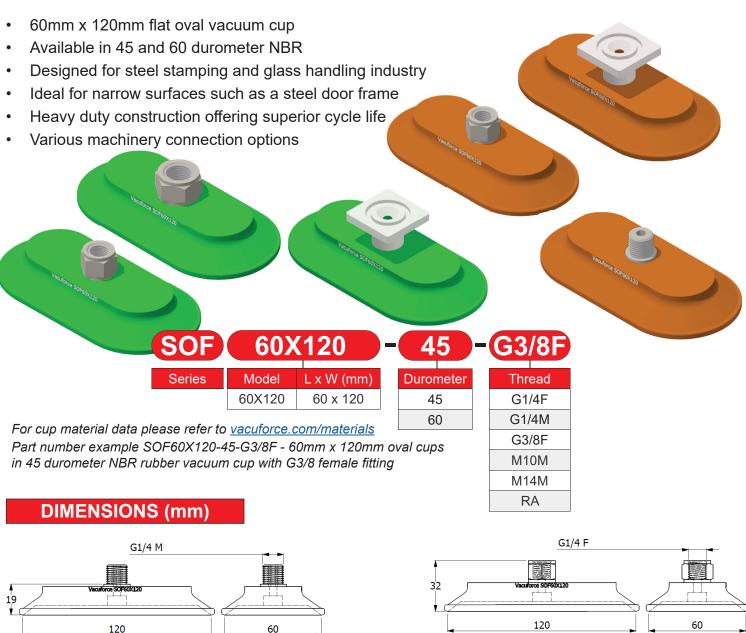
G1/4F G1/4M G3/8F M₁₀M M14M RA

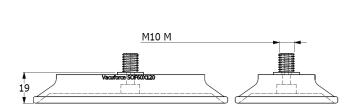
DIMENSIONS (mm)



SOF60X120 FLAT OVAL CUP

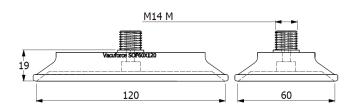




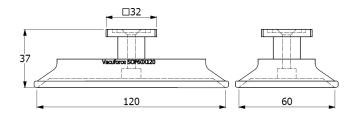


60

120







120



- 70mm x 140mm flat oval vacuum cup
- Available in 45 and 60 durometer NBR
- · Designed for steel stamping and glass handling industry
- · Ideal for narrow surfaces such as a steel door frame
- · Heavy duty construction offering superior cycle life
- · Various machinery connection options



SOF 70X140 - 45 - G3/8F

Durometer 45

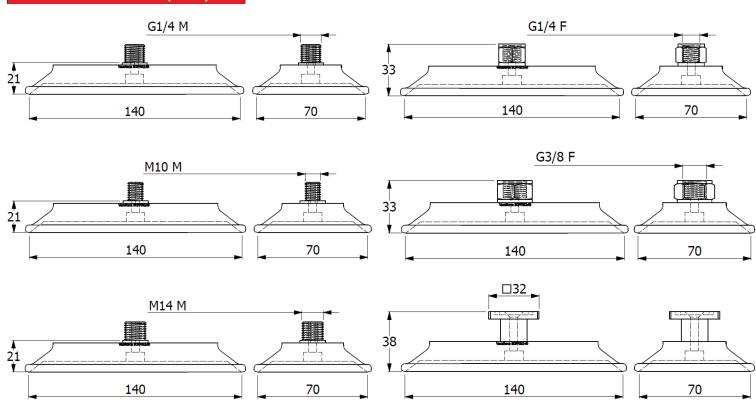
Series	Model	L x W (mm)
	70X140	70 x 140

For cup material data please refer to <u>vacuforce.com/materials</u>

Part number example SOF70X140-45-G3/8F - 70mm x 140mm oval cups in 45 durometer NBR rubber vacuum cup with G3/8 female fitting

Thread
G1/4F
G1/4M
G3/8F
M10M
M14M
RA

DIMENSIONS (mm)



SNP FOAM SEAL CUPS



- Designed for handling rough or embossed materials
- · Excellent vacuum seal for wood, brick, stone and more
- Two types of foam density depending on application
- Self adhesive foam seal



SNP	107x 75		N/	AT
Sorios	Length v V	Vidth (mm)	Foam	Type

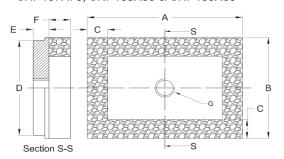
Series	Length x Width (mm)
	107x75
	135x50
	135x60
	290x68
	290x140

Foam Type				
NAT Natural Rubber				
NBR Nitrile Rubber				

Part number example SNP107X75NAT 107mm x 75mm Natural Foam Rubber Suction Cup Including Fitting

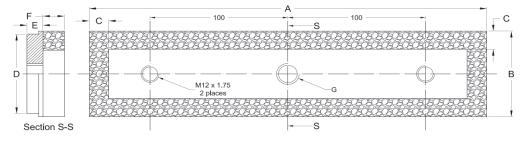
DIMENSIONS (mm)

SNP107X75, SNP135X50 & SNP135X60



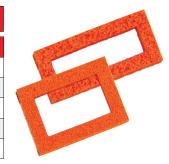
Model	Α	В	С	D	Е	F	G
SNP107X75	107	75		70			
SNP135X50	125	50		45			G1/8
SNP135X60	135	60	15	55	11	15	
SNP290X68	200	68		62			C4/2
SNP290X140	290	140		134			G1/2

SNP290X68, SNP290X140



Spare Seals

Assembly	Spare Seal
SNP107X75	FR107X75
SNP135X50	FR135X50
SNP135X60	FR135X60
SNP290X68	FR290X68
SNP290X140	FR290X140



LEVEL COMPENSATORS

Refer to page 1.33 for suitable NON-ROTATING level compensators for this vacuum cup range.

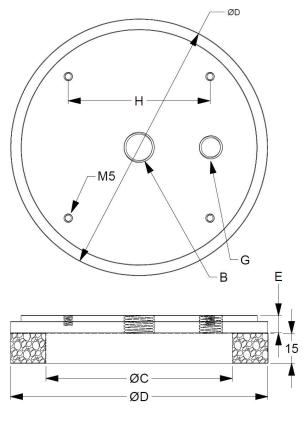


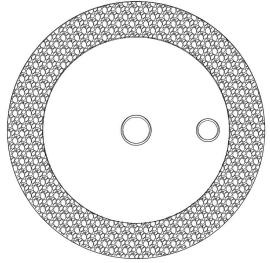


- · Designed for handling rough or embossed materials
- Excellent vacuum seal for wood, brick, stone and more
- Two types of foam density depending on application
- Self adhesive foam seal



DIMENSIONS (mm)





SOP	92		NAT
Series	Diameter (mm)		Foam Type
	40	NAT	Natural Rubber
	64	NBR	Nitrile Rubber
	92		
	127		
	180		

Part number example SOP92NAT 92mm Diameter Natural Foam Rubber Suction Cup Including Fitting

Model	Α	В	С	D	Е	F	G	
SOP40	40	G1/4	20	40	10	15		
SOP64	60	G 1/4	40	64	10		n/a	
SOP92	88	02/0	64	92				
SOP127	120	G3/8	92	127	15		G3/8	
SOP180	160	G1/2	140	180			G3/0	

Spare Seals									
Assembly	Natural Rubber Seal	Nitrile Rubber Seal							
SOP40	FR40NAT	FR40NBR							
SOP64	FR64NAT	FR64NBR							
SOP92	FR92NAT	FR92NBR							
SOP127	FR127NAT	FR127NBR							
SOP180	FR180NAT	FR180NBR							



VS FOAM SEAL CUPS

The EPDM foam vacuum cups are developed for handling very rough or coarse products such as concrete, rough sawn wood, marble and granite etc. These cups are sold as two separate parts.

- 1. Anodized Aluminum Support
- 2. Foam Seal

The foam is able to deform to the profile of the product being handled and offer a virtually air tight seal to enable safe lift and transfer. A mounting port is central to the support. This

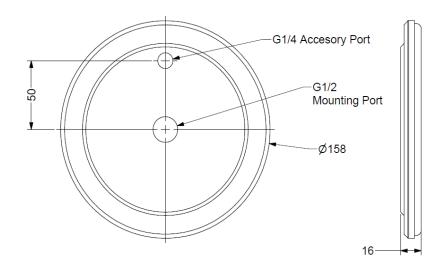
thread is suitable for either 1/2NPT or G1/2 studding.

If a separate vacuum port is required, the offset G1/4 port can be used. This port is used for either a venturi or vacuum gauge connection.

The cup fitting and seal should be ordered seperately



DIMENSIONS (mm)















These cup fittings enable the vacuum cups shown in this catalogue to be mounted to machinery and other apparatus. All male threads utilize the Vacuforce Tri Thread which is a universal thread form suitable for connection to female NPT, NPSF, BSPT and BSPP threads.

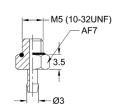
All fittings are hard anodized and can be used with all VFB, VFBL, VFDB and VFF vacuum cups.

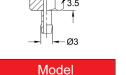


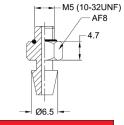
FITTING TYPE A

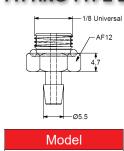
FITTING TYPE B

FITTING TYPE B









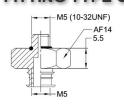
VFCF10-U01



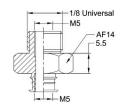
VFCFB3-M5

Model VFCFB6.5-M5

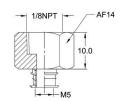




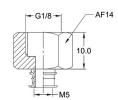




Model VFCF20-U01

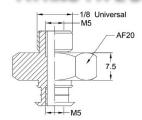


Model VFCF20-1/8FNPT

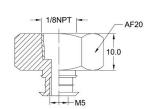


Model VFCF20-FG1/8

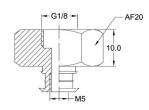
FITTING TYPE D



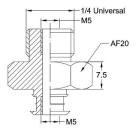




Model VFCF40-1/8FNPT



Model VFCF40-FG1/8

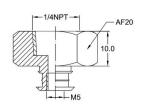


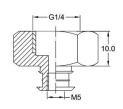
Model VFCF40-U02

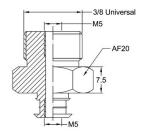
VACUUM CUP FITTINGS

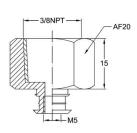


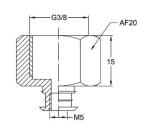
FITTING TYPE D











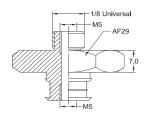
Model VFCF40-1/4FNPT

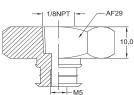


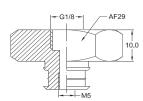
Model VFCF40-U03 Model
VFCF40-3/8FNPT

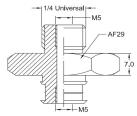
Model VFCF40-FG3/8

FITTING TYPE E









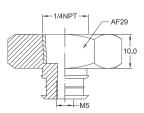
Model VFCF50-U01

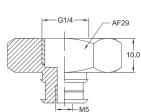
Model
VFCF50-1/8FNPT

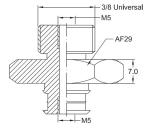


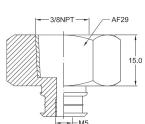
Model VFCF50-U02

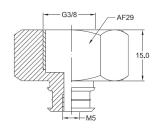
FITTING TYPE E











Model VFCF50-1/4FNPT

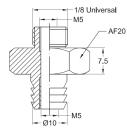


Model VFCF50-U03

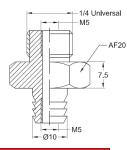
Model VFCF50-3/8FNPT



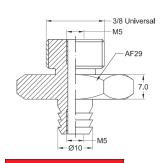
FITTING TYPE F



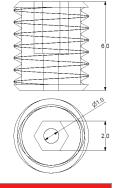




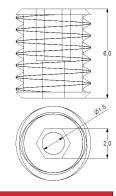
Model VFCFB10-U02



Model VFCFB10-U03



Model VFOS1.0



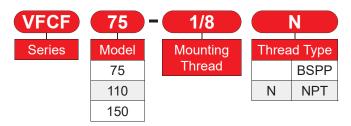
Model VFOS1.5



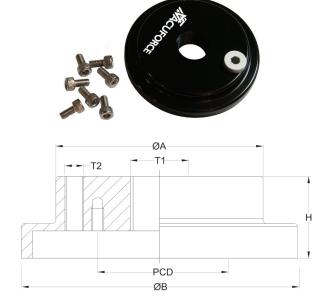
FITTING TYPE J, K & L

The cup fitting series J, K and L utilize M4 bolts to attach the corresponding cup to the fitting body. The fitting model number shown in the table below includes the necessary bolts.

The K & L series fitting has an optional 1/8 vacuum port as shown by T2 in the drawing below.



Fitting Type	Model	ØA	PCD	T1	T2	Н	ØB
	VFCF75-1/8	45	35	1/8	n/a	18	55
J	VFCF75-1/4			1/4			
	VFCF75-3/8			3/8			
	VFCF110-1/4	70	55	1/4	1/8	15	79
K	VFCF110-3/8			3/8			
	VFCF110-1/2			1/2			
1	VFCF150-3/8	00	71	3/8		16	112
L	VFCF150-1/2	90		1/2			



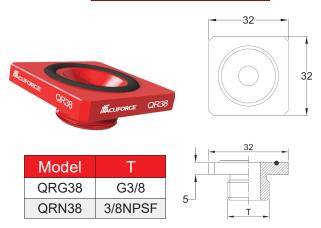
Blanking Plugs



These blanking plugs are used to block female threads in a vacuum, compressed air system or a component port. These fittings utilize universal threads and are suitable for NPT, BSPT and BSPP(G) pipe thread connection.

Model	Thread Size					
VFBP1/8	1/8 Universal					
VFBP1/4	1/4 Universal					
VFBP3/8	3/8 Universal					

QUICK RELEASE FITTINGS



VACUUM CUP HOLDERS



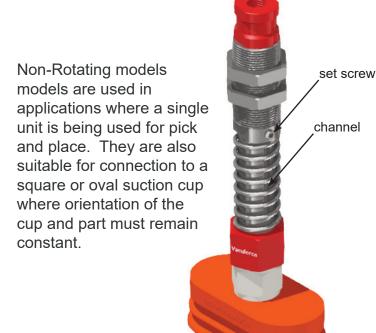
The Vacuforce cup holders, often referred to as level compensators, are normally used on multiple vacuum cup systems such as sheet or plate handling where the height of the load varies during production cycles. These cup holders have been developed with the best materials to offer maximum life in the toughest applications.

Materials

- Hard anodized aluminum thread fittings
- Nickel Plated bushings and lock nuts
- Hard anodized aluminum or chrome plated steel rods

Non-Rotating Models

VFLC		EX		NR		18	2	5	M	16	X	10
	Spring Type			Rotating	Rotating Cup Thread		Buffer Stroke		Bulkhead Thread		Bulkhead Length	
	EX	External	NR	Non-Rotating	M5	M5						
	IN	Internal		Rotating	18	G1/8						
					14	G1/4						
					38	G3/8						
					12	G1/2						

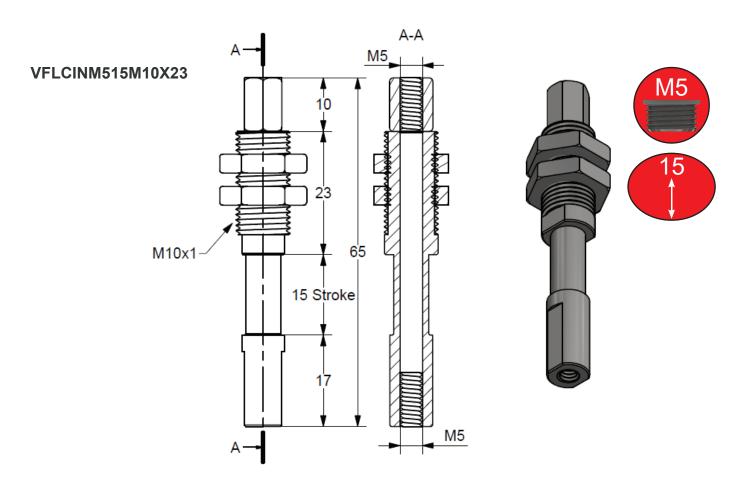


Rotating Models

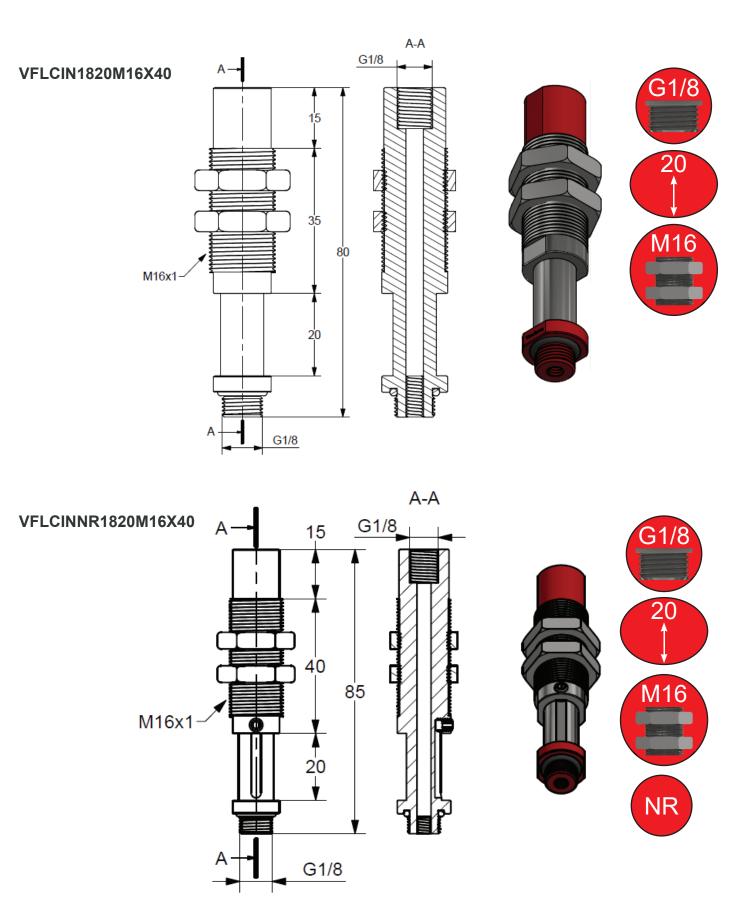




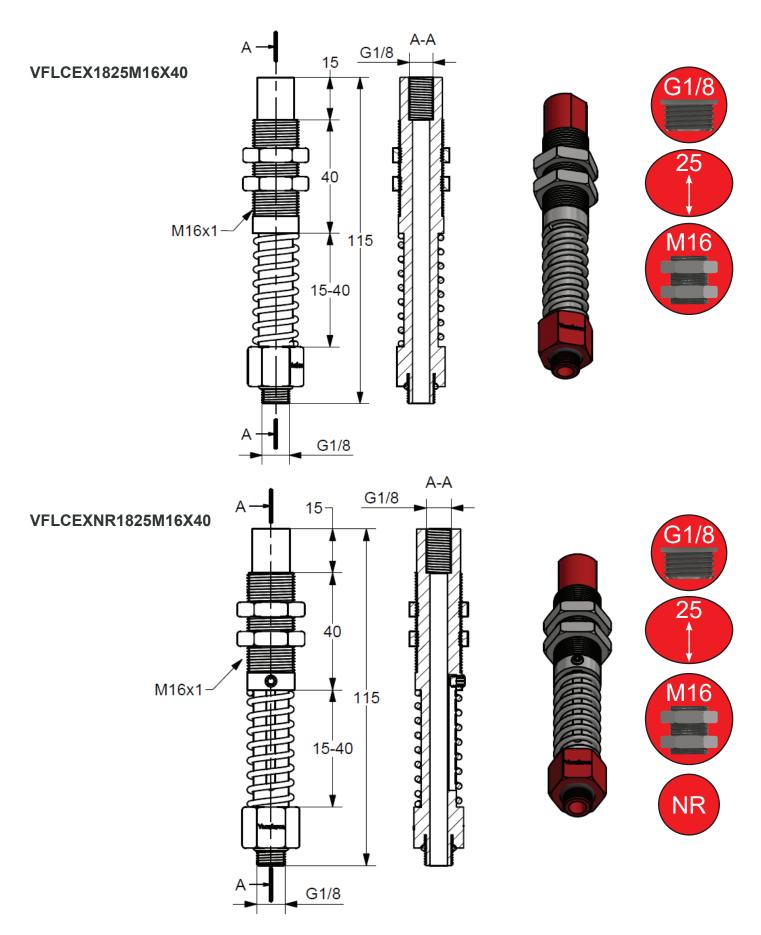
M5 VACUUM CUP HOLDERS



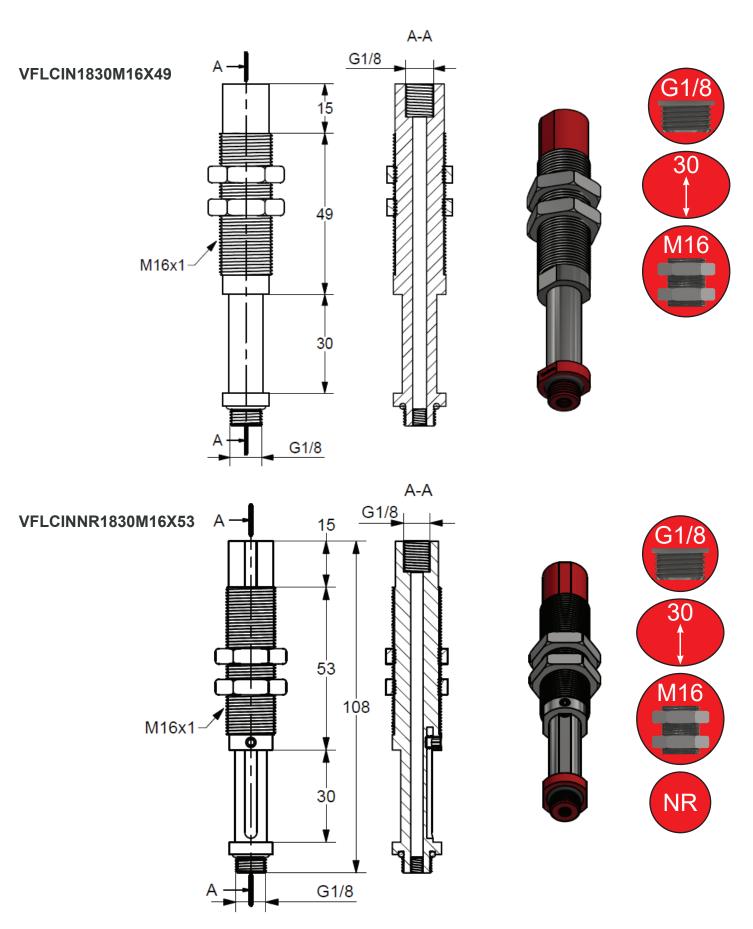








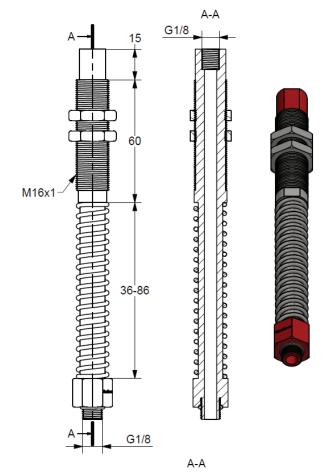


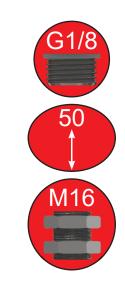




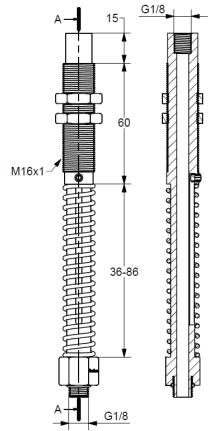


VFLCEX1850M16X50





VFLCEXNR1850M16X50

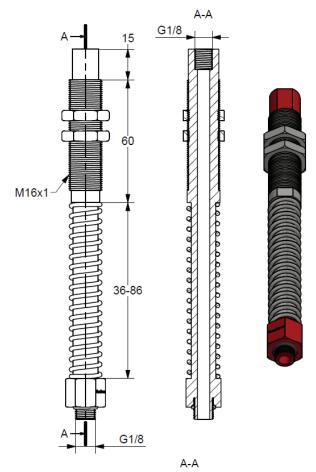


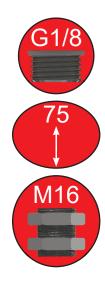




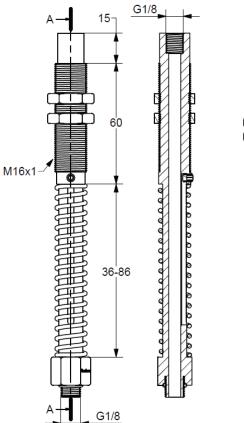


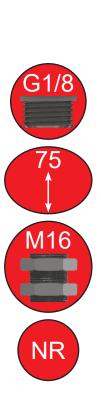
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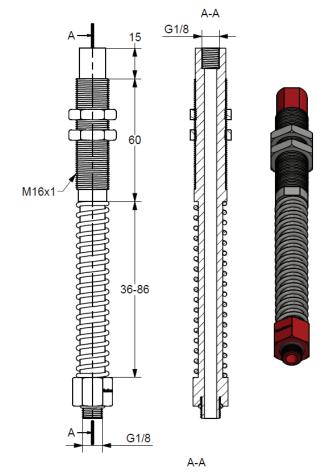


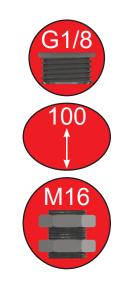




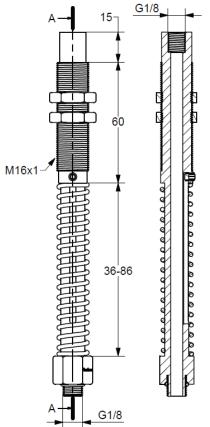


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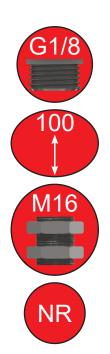




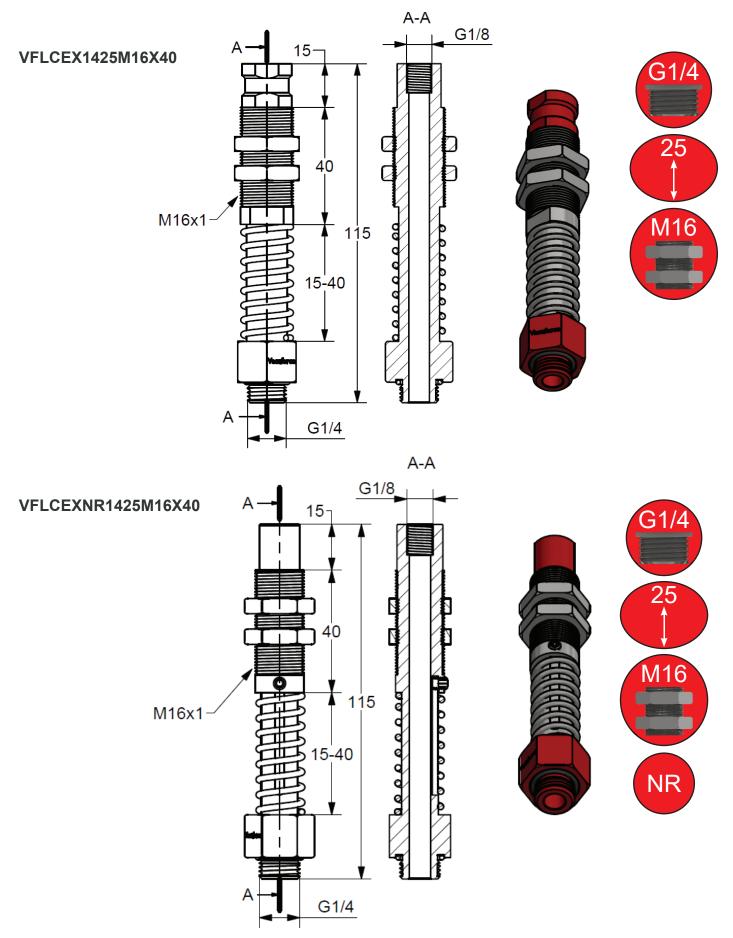
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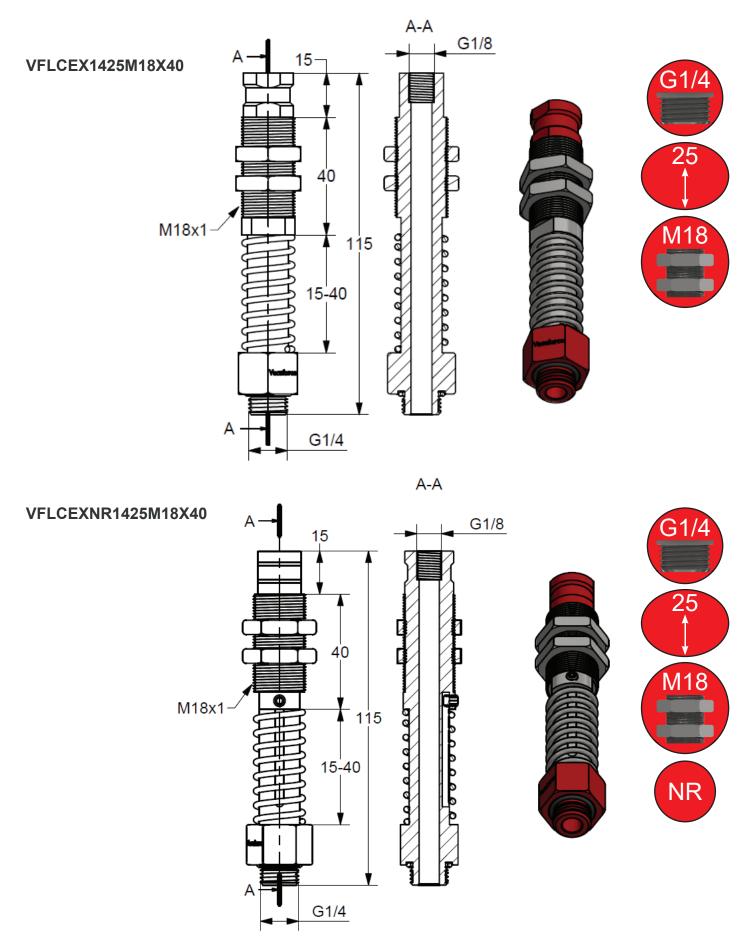




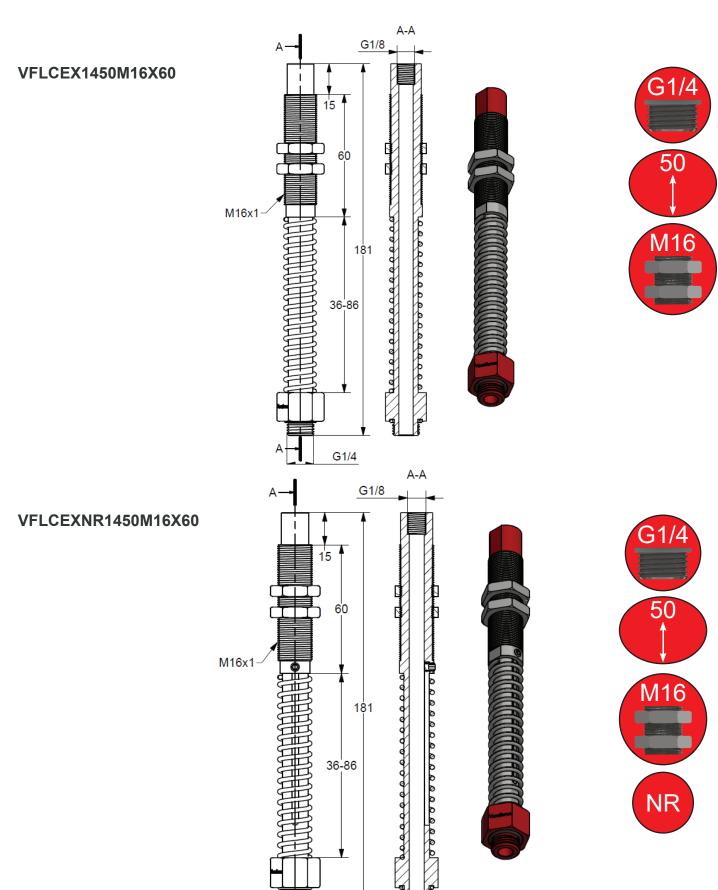








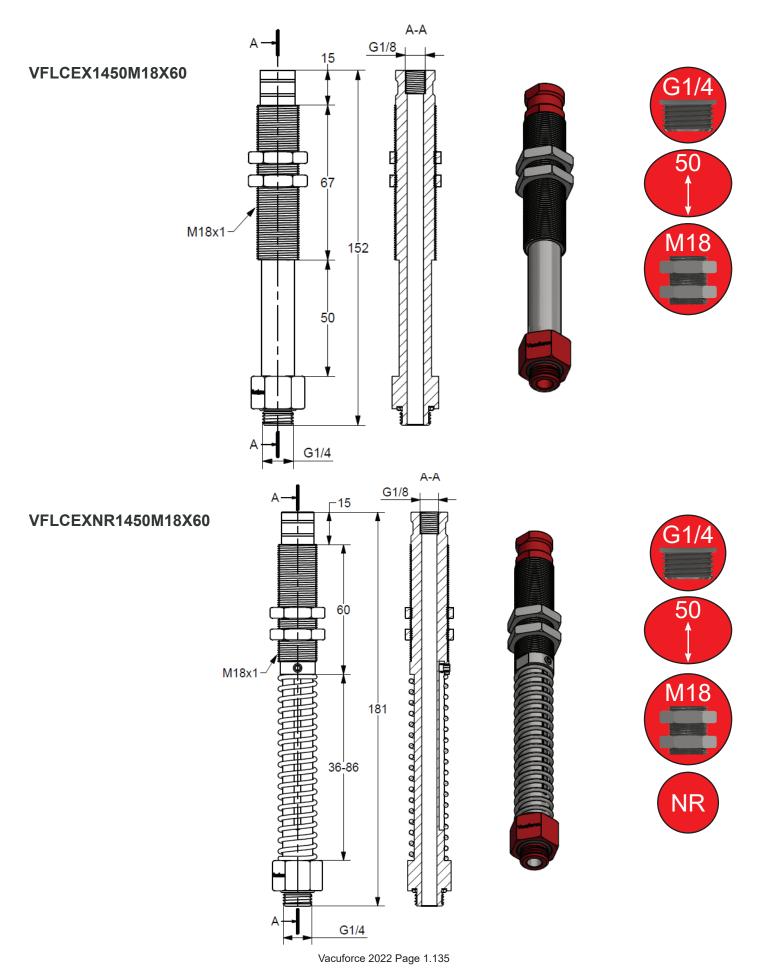




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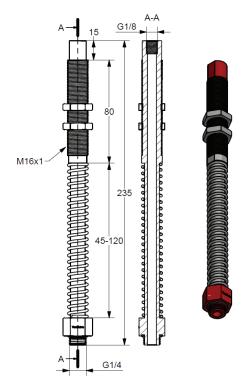


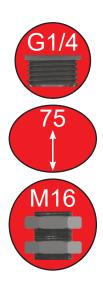




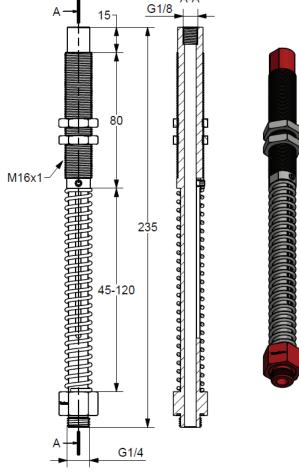


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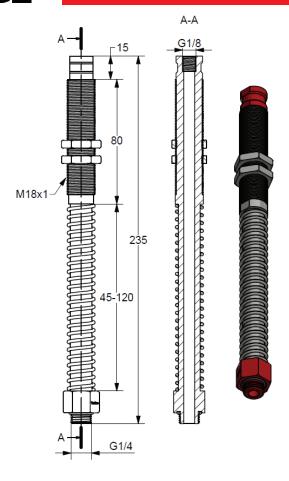
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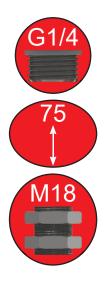




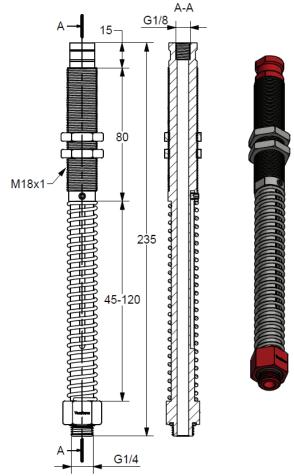


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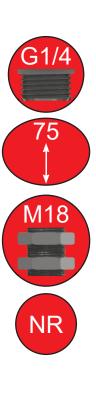




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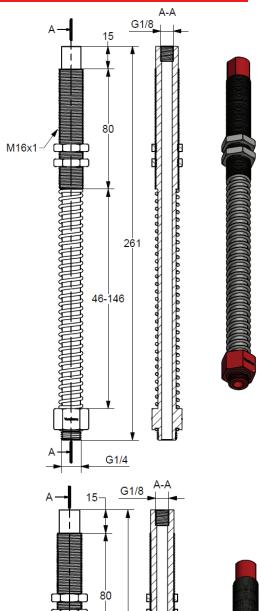


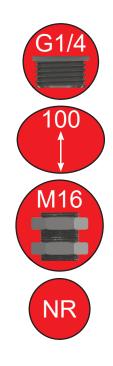
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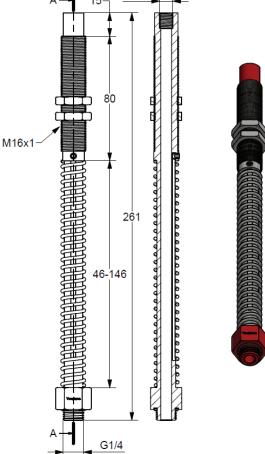


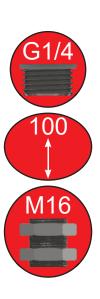






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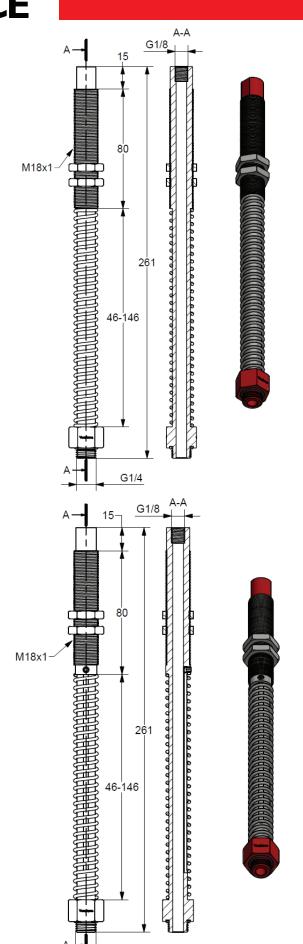


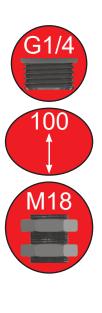




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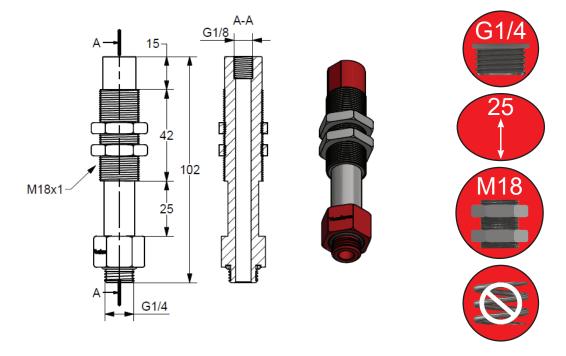


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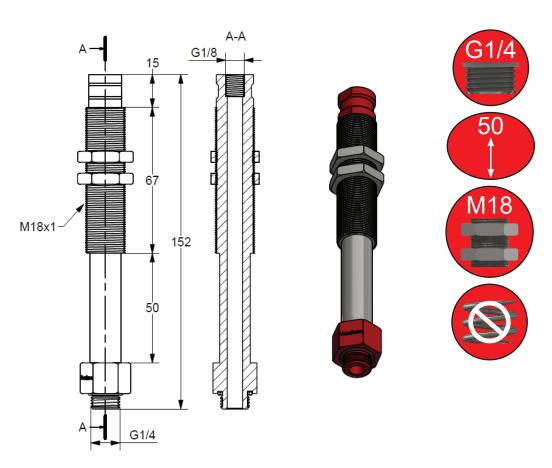
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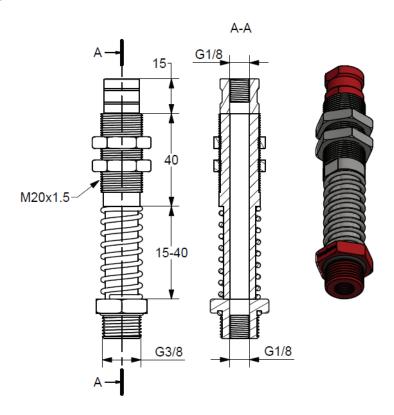


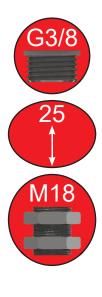
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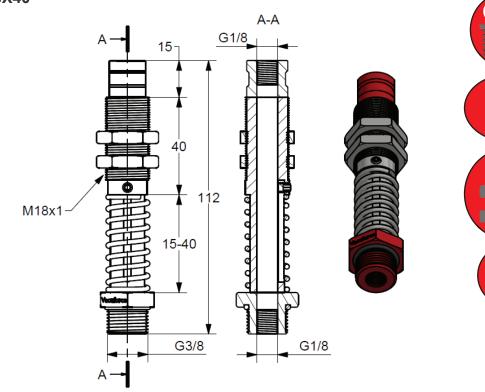
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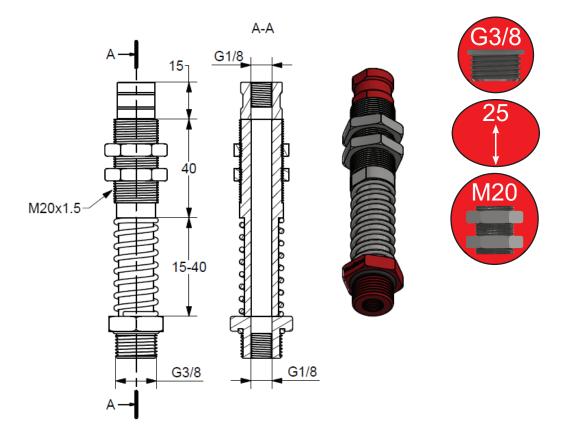
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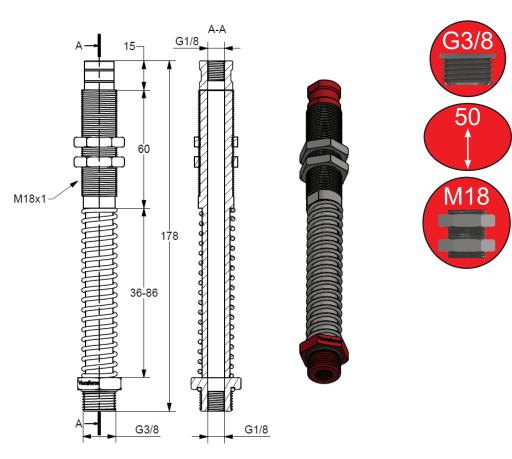




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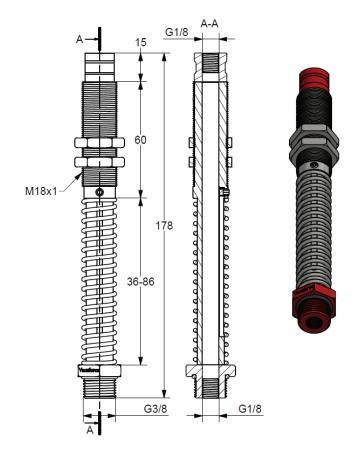
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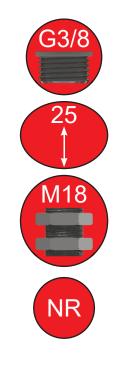


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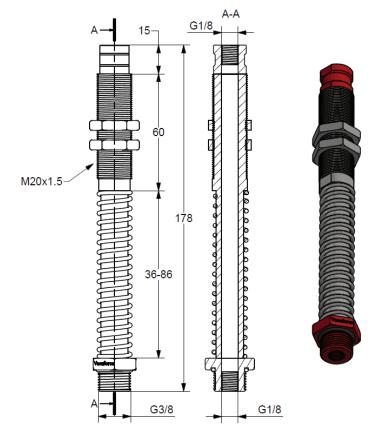


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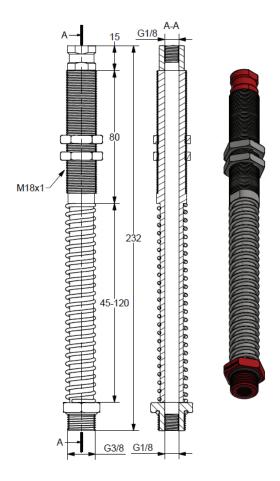
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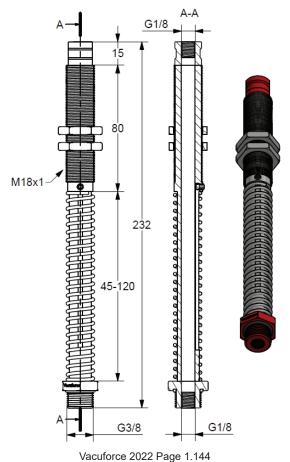


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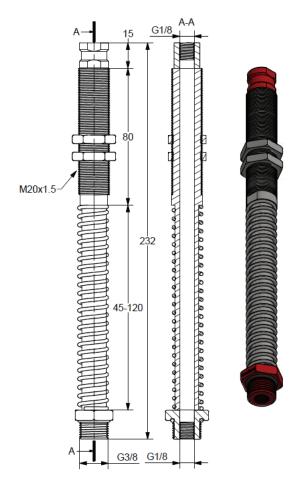


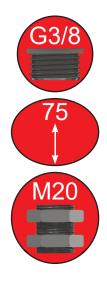




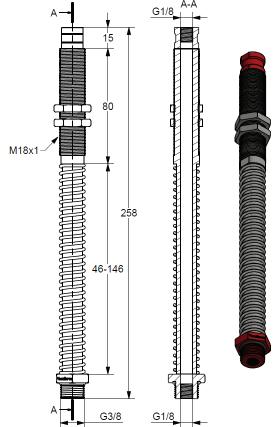


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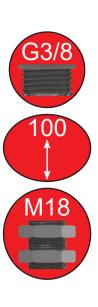




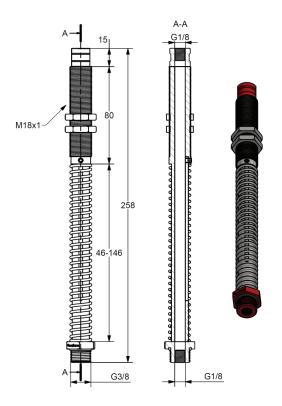
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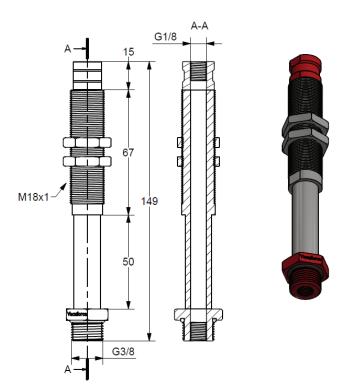


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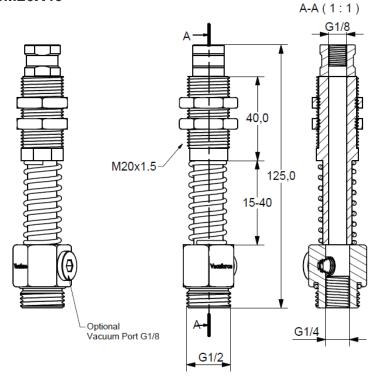
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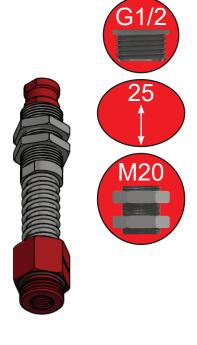




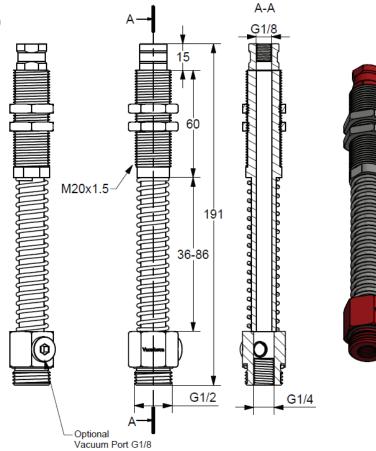


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VFLCEX1250M20X60





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VFLCEX1275M20X80

