

# NITRILE VACUUM CUPS

Vacuum Products | Families and Features

## Round Destacker Vacuum Cup

- Designed specifically for pogo-style destacking applications.
- High compressive-strength and shock-resistance extends cup life.
- High vertical lifting capacity prior to part release.
- Provides low-impact part release during pull-off by utilizing the patented stress relief port.



## Round Traction Vacuum Cups

- For applications with slick/oily surfaces or for destackers.
- Internal cleats holds part more securely in high speed applications.
- Bellows add flexibility for minor misalignments.

## Round Flatfoot Vacuum Cups

- For applications with flat to medium curvature and dry to medium slick/oily surfaces.
- Cleats provide full support to prevent damage to thin outer panels.
- Maximizes lifting capacity and minimizes slip.



## Round Belcup Vacuum Cups

- For applications with flat to mild contoured surfaces.
- Bellows add flexibility for minor misalignments.
- Ideal for general purpose.

## Round Deepdish Vacuum Cups

- For applications with contoured surfaces.
- Thin lip wraps and seals curved surfaces tightly.
- Bell structure and internal design works best on materials with convex surfaces.



## Oval Flatfoot Vacuum Cups

- For applications with medium slick/oily to dry surfaces.
- Oval shape maximizes contact on narrow panels and maximizes vertical lifting capacity.
- Cleats provide full support to prevent damage to thin outer panels.

## Oval Deepdish Vacuum Cups

- For applications with contoured surfaces as well as wet or oily surfaces.
- Oval shape maximizes contact on narrow panels and bell structure works well on materials with convex surfaces.

# POLYURETHANE VACUUM CUPS

Vacuum Products | Families and Features



## Round Bellows Vacuum Cups

- For applications with slick/oily surfaces or for destackers
- Bellows add flexibility for minor misalignments
- Dual Durometer Polyurethane - Outside 55 durometer (red), internal treads 60 durometer (dark green)
- Optional TCT (Triple durometer) style cup offers extra soft internal cleat to eliminate possible dimples on thin sheet metal



## Round Flat Foot Vacuum Cups

- Works well on flat to slightly contoured parts
- Maximizes lifting capacity and minimizes slip
- Excellent for transverse loads with high acceleration and deceleration applications
- Dual Durometer Polyurethane - Outside 55 durometer (red), internal treads 60 durometer (dark green)



## Round Deepdish Vacuum Cups

- Interchangeable with existing/competitor vacuum cups
- New bell shape design is excellent for highly contoured surfaces
- Optional lightweight plastic mount available
- Designed to handle higher acceleration/deceleration speeds
- Shape and design offers better transverse loading



## Oval Bellows Vacuum Cups

- Works well on flat and contoured parts
- Maximum lifting capacity where limited space is available
- Bellows add flexibility for minor misalignments
- Dual Durometer Polyurethane - Outside 55 durometer (red), internal treads 60 durometer (dark green)











## Oval Flat Foot Vacuum Cups

- Works well on flat to slightly contoured parts.
- Long oval shape maximizes contact on narrow surfaces
- Cleats provide full support to prevent damage to thin outer panel
- Dual Durometer Polyurethane - Outside 55 durometer (red), internal treads 60 durometer (dark green)

# CHOOSE THE RIGHT VACUUM CUP FOR YOUR APPLICATION

Vacuum Products | Application, Characteristics and Usage Chart for Vacuum Cups






	DESTACKER APPLICATION	FLAT CONTOURS	MILD CONTOURS	HIGH CONTOURS	SLICK/OILY SURFACES	DRY SURFACES	HOT FORMING	Application Direction
<b>Nitrile Vacuum Cups</b> US Patents #7,309,089 7,712,807  Destacker Vacuum Cups	5	5	N/A	N/A	3	5	N/A	VERTICAL
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	HORIZONTAL
 Round Traction Vacuum Cups	4	5	4	2	5	5	N/A	VERTICAL
	N/A	5	3	1	5	5	N/A	HORIZONTAL
 Round Flatfoot Vacuum Cups	4	4	5	3	4	4	N/A	VERTICAL
	N/A	4	5	3	4	4	N/A	HORIZONTAL
 Round Belcup Vacuum Cups	4	5	4	2	3	4	N/A	VERTICAL
	N/A	3	3	1	2	4	N/A	HORIZONTAL
 Round Deepdish Vacuum Cups	1	1	3	5	3	3	N/A	VERTICAL
	N/A	1	3	5	3	3	N/A	HORIZONTAL
 Oval Deepdish Vacuum Cups	1	3	4	2	4	3	N/A	VERTICAL
	N/A	3	4	2	3	3	N/A	HORIZONTAL
 Oval Flatfoot Vacuum Cups	3	4	3	1	4	4	N/A	VERTICAL
	N/A	4	3	1	3	4	N/A	HORIZONTAL
 Hot Forming Vacuum Cups	3	3	2	1	3	4	5	VERTICAL
	N/A	3	2	1	2	3	5	HORIZONTAL

Worst Cup for the Job **1** **2** **3** **4** **5** Best Cup for the Job **N/A** Not Advised for the application

This chart is a guide to aid in selecting the right family of cup for general surfaces, contours, and applications.

# CHOOSE THE RIGHT VACUUM CUP FOR YOUR APPLICATION

Vacuum Products | Application, Characteristics and Usage Chart for Vacuum Cups

Polyurethane Vacuum Cups		DESTACKER APPLICATION	FLAT CONTOURS	MILD CONTOURS	HIGH CONTOURS	SLICK/OILY SURFACES	DRY SURFACES	HOT FORMING	Application Direction
 <p>Round Bellows Vacuum Cups</p>		4	5	4	2	5	5	N/A	VERTICAL
		N/A	5	3	1	5	5	N/A	HORIZONTAL
 <p>Round Flat Foot Vacuum Cups</p>		4	4	5	2	4	5	N/A	VERTICAL
		N/A	4	5	2	4	5	N/A	HORIZONTAL
 <p>Round Deepdish Vacuum Cups</p>		3	4	5	5	4	5	N/A	VERTICAL
		3	4	5	5	4	5	N/A	HORIZONTAL
 <p>Oval Bellows Vacuum Cups</p>		3	4	4	2	4	5	N/A	VERTICAL
		N/A	4	3	2	3	5	N/A	HORIZONTAL
 <p>Oval Flat Foot Vacuum Cups</p>		3	4	3	2	3	5	N/A	VERTICAL
		N/A	3	3	2	2	5	N/A	HORIZONTAL

Worst Cup for the Job 1 2 3 4 5 Best Cup for the Job
N/A **Not Advised for the application**

*This chart is a guide to aid in selecting the right family of cup for general surfaces, contours, and applications.*

# CHOOSE THE RIGHT VACUUM CUP FOR YOUR APPLICATION

Vacuum Products | ACU Index, How Vacuum Cups Work, Cup Usage, and Safety Factor

## Application, Characteristics, and Usage (ACU) Index

Determining the type and durometer of vacuum cup appropriate for a particular application is typically based on three criteria.

- How oily or slick the part surface is.
- How much contour or curvature the part has.
- How long you can expect the cup to last (Longevity)?

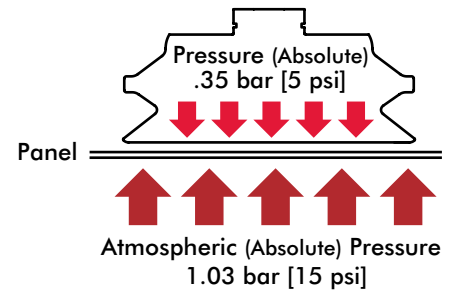


A set of vacuum cups of the same size and type, each having different durometers may handle oily/slick or contoured parts differently. However, cup longevity of each may be affected as a result of durometer, application and usage. The ACU Index is a reference shown with each type of vacuum cup and is used to illustrate the differences between vacuum cup types and durometers, when considering the above criteria.

## How Vacuum Cups work

A panel adheres to a vacuum cup because the surrounding pressure (atmospheric pressure) is greater than the pressure inside the vacuum cup. The greater pressure pushes the panel onto the cup.

To create the low pressure in the vacuum cup, it is connected to a vacuum generator. The lower the pressure (higher vacuum) inside the cup; the greater the lifting force of the suction cup.



## Vacuum Cup Usage

It is important to use the proper size and quantity of vacuum cups needed for your application. There are five steps which will help you make sure your application has the appropriate vacuum cup usage.

- Step 1:** Determine application and find appropriate cup family type.
- Step 2:** Determine panel weight.
- Step 3:** Find maximum cup size based on panel contour and shape.
- Step 4:** Find the appropriate cup size lifting capacity in the chart, found on the catalog page featuring the cup family type chosen.
- Step 5:** Determine safety factor determined on application (See Below).

Use the formula on the right to determine the proper amount of cups needed to move your panel.

### Formula

$$n = \frac{w \times s}{f}$$

- w = Weight of Panel
- f = Lifting force of cup
- s = Safety factor
- n = Number of cups

Weight and lifting force must be in the same units, either English or Metric.

## Safety Factor

Ideal plant conditions\*: (2)

- Fast moving robot: (+1)
- Slick or Oily Panel: (+1)
- Flexing Panel: (+2)
- Small cups: (+1)
- High Horizontal Loads: (+1)

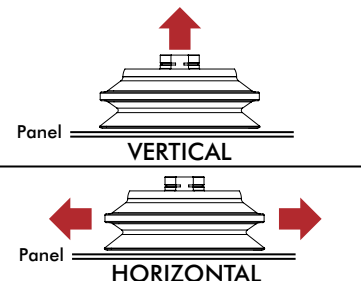
Starting with Ideal conditions (2), add each additional conditions to determine total safety factor.

For example:

Ideal conditions:	2
Fast moving robots:	+1
Flexing Panel:	+2
<b>Total Safety Factor</b>	<b>5</b>

(\*Ideal conditions are defined as having no surface, operational, or environmental conditions which could adversely effect the performance to the vacuum cup.

## Relative Cup Motion



# VACUUM CUP OPTIONS

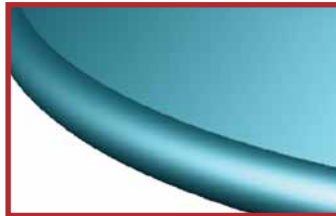
Vacuum Products | Durometer and Mounting Options

DESTACO Vacuum Cups are offered in different families, and may be offered in different durometers. Vacuum cups are also offered in Imperial and Metric mounting options which may vary according to the size and type of the vacuum cup.

Vacuum cups can be ordered as follows:  
**CPI-"MODEL"-"Mounting"-"DuRometer"**



## Vacuum Cup Durometers ("**DR**") (Color equals Durometer (Shore A Scale))



**30**

This soft durometer is useful for dryer, contoured panels. However, this durometer has less life.



**45**

This medium hard durometer will seal and adapt to contours well and is good for all around usage. This durometer has a longer life than the 30 durometer.



**60**

This hard durometer is helpful for extremely oily panels and flat surfaces such as a destacker operation. This durometer has a longer life than the 45 durometer.



**PU55/PU60**

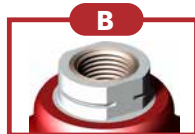
This durable long-lasting polyurethane material is resistant to oils, UV light and oxygen. No dry rotting or cracking with better elastic memory.

= Durometer not available in cup style.

## Imperial Vacuum Cup Mounting Options ("**M**")



1/4" NPT



3/8" NPT



1.25" SQUARE



1/2" NPT



1/8" NPT MALE



QUICK DISCONNECT

## Metric Vacuum Cup Mounting Options ("**M**")



1/4" G



3/8" G



1.25" SQUARE

## Specialty Vacuum Cup Mounting Options ("**M**")



M10 MALE



M8 FEMALE



SMOOTH BORE

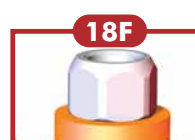
= Mount only available in this cup size.

= Mount not available in this cup size.

## Micro Industrial Mounting Options ("**M**")



10-32 MALE



1/8" G FEMALE



1/8" G MALE

## Polyurethane Mounting Options ("**M**")



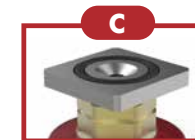
3/8 NPT



Nylon G3/8



G3/8



1.25 in. Square

# ACCELERATE® COLLECTION VACUUM CUPS

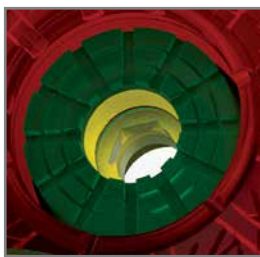
Vacuum Products | Dimensions | Ordering Information

## TC Polyurethane Round Bellows

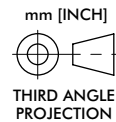
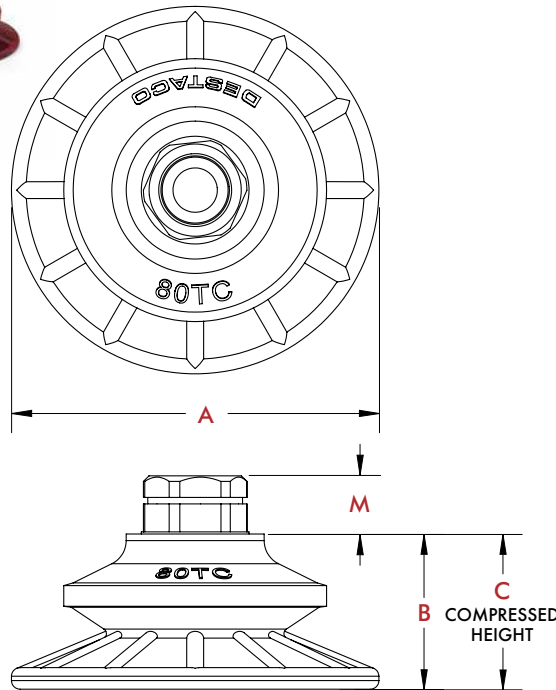
### Specifications:

**Temperature:**  
10°-49° C [50°-120° F]

**Materials:** Dual Durometer Polyurethane - Outside 55 durometer (red), internal treads 60 durometer (dark green).



TCT (triple durometer) style cup offers extra soft, 30 durometer, internal cushion (yellow) to eliminate possible dimples on thin sheet metal.



Mount	M
U38/G38	[0.57]
	14.5
P38	[0.85]
	21.5
C	[0.73]
	18.5

Dimensions shown "[inch] mm"

### TC Dimensions

Model	A	B	C	Weight
30TC	[1.18]	[0.57]	[0.37]	[1.00 oz]
	30	14.5	9.5	28 g
40TC	[1.77]	[0.69]	[0.41]	[1.20 oz]
	45	17.5	10.5	34 g
60TC	[2.40]	[0.85]	[0.45]	[2.15 oz]
	61	21.5	11.5	61 g
80TC/ 80TCT	[3.35]	[1.40]	[0.85]	[4.97 oz]
	85	35.5	21.5	141 g
110TC/ 110TCT	[4.53]	[2.03]	[1.20]	[9.70 oz]
	115	51.5	30.5	275 g

Dimensions shown "[inch] mm"

### TC Holding Capacity @ -0.6 bar vacuum

Appl.	Vert. Lift	Horz. Dry	Horz. Wet
30TC	[6]	[3]	[1.75]
	2.72	1.36	0.79
40TC	[18]	[13]	[10]
	8.16	5.90	4.54
60TC	[25]	[27]	[20]
	11.34	12.25	9.07
80TC/ 80TCT	[53]	[54]	[36]
	24.04	24.49	16.33
110TC/ 110TCT	[85]	[78]	[57]
	38.56	35.38	25.86

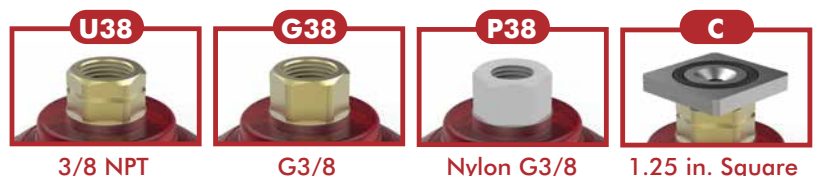
Holding capacities shown "[lbs] kg"

## TC Round Bellows Ordering Information

Metric

Ø30mm	VC-30TC-(M)-PU55
Ø45mm	VC-40TC-(M)-PU55
Ø61mm	VC-60TC-(M)-PU55
Ø85mm	VC-80TC-(M)-PU55
Ø85mm	VC-80TCT-(M)-PU55
Ø115mm	VC-110TC-(M)-PU55
Ø115mm	VC-110TCT-(M)-PU55

### Mounting Options ("M")



# ACCELERATE® COLLECTION VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

## Specifications:

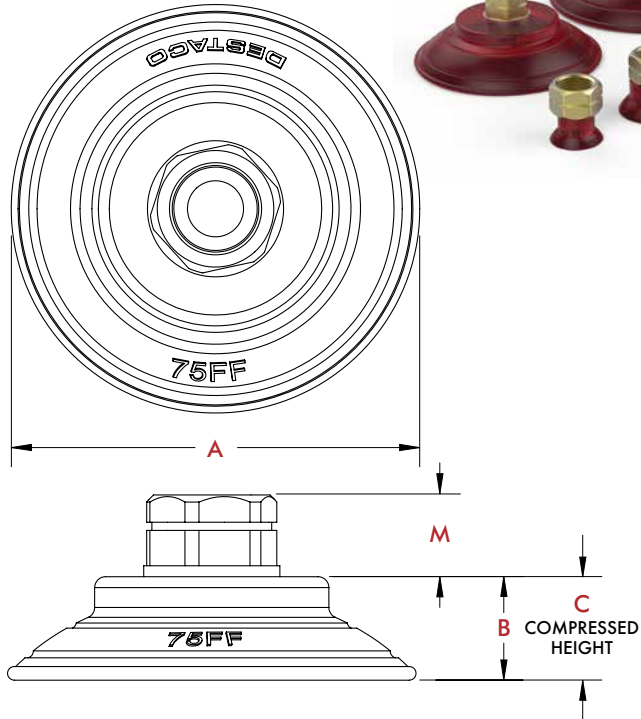
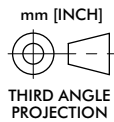
Temperature:

10°-49° C [50°-120° F]

Materials: Dual Durometer

Polyurethane - Outside 55 durometer (red), internal treads 60 durometer (dark green).

## FF Polyurethane Round Flat



Mount	M
U38/G38	[0.57]
	14.5
P38	[0.85]
	21.5
C	[0.73]
	18.5

Dimensions shown "[inch] mm"

## FF Dimensions

Model	A	B	C	Weight
25FF	[0.98]	[0.57]	[0.49]	[0.36 oz]
	25	14.5	12.5	10 g
35FF	[1.38]	[0.61]	[0.51]	[1.48 oz]
	35	15.5	13	42 g
50FF	[1.97]	[0.26]	[0.51]	[2.36 oz]
	50	6.5	13	67 g
75FF	[2.95]	[0.77]	[0.59]	[3.21 oz]
	75	19.5	15	91 g
100FF	[3.94]	[0.96]	[0.73]	[6.06 oz]
	100	24.5	18.5	172 g
125FF	[4.92]	[1.20]	[0.89]	[9.88 oz]
	125	30.5	22.5	280 g

Dimensions shown "[inch] mm"

## FF Holding Capacity @ -0.6 bar vacuum

Appl.	Vert. Lift	Horz. Dry	Horz. Wet
25FF	[6]	[2]	[1.5]
	2.72	0.91	0.68
35FF	[13]	[9]	[7]
	5.90	4.08	3.18
50FF	[24]	[23]	[16]
	10.89	10.43	7.26
75FF	[53]	[47]	[31]
	24.04	21.32	14.06
100FF	[110]	[109]	[46]
	49.90	49.44	20.87
125FF	[146]	[135]	[53]
	66.23	61.24	24.04

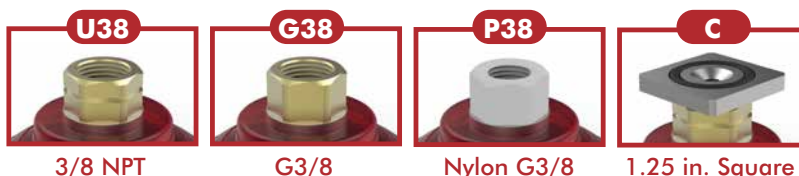
Holding capacities shown "[lbs] kg"

## FF Round Flat Ordering Information

Metric

Ø25mm	VC-25FF-(M)-PU55
Ø35mm	VC-35FF-(M)-PU55
Ø50mm	VC-50FF-(M)-PU55
Ø75mm	VC-75FF-(M)-PU55
Ø100mm	VC-100FF-(M)-PU55
Ø125mm	VC-125FF-(M)-PU55

## Mounting Options ("M")

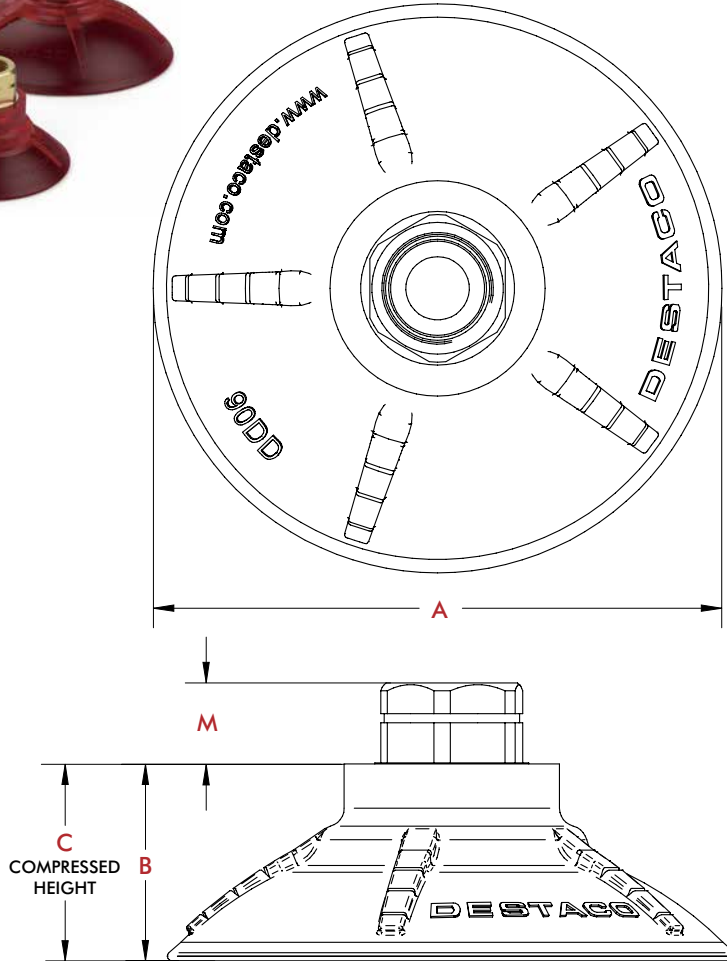




# ACCELERATE® COLLECTION VACUUM CUPS

Vacuum Products | Dimensions | Technical Specifications

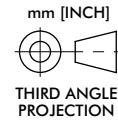
## DD Polyurethane Round Deepdish



### Specifications:

Temperature:  
10°-49° C [50°-120° F]

Materials:  
60 durometer (red)



Mount	M
<b>U38</b>	[0.51] 13
<b>G38</b>	[0.77] 19.5
<b>P38</b>	[0.68] 17.3
<b>C</b>	[0.37] 9.5

Dimensions shown "[inch] mm"

### DD Dimensions

Model	A	B	C	Weight with U38/G38/C	Weight with P38
<b>65DD</b>	[2.66]	[1.11]	[0.67]	[2.08 oz]	[0.9 oz]
	67.5	28.2	17.0	59 g	25 g
<b>90DD</b>	[3.64]	[1.27]	[0.75]	[2.72 oz]	[1.5 oz]
	92.5	32.2	19.0	77 g	43 g
<b>110DD</b>	[4.43]	[1.60]	[0.83]	[3.60 oz]	[2.4 oz]
	112.5	40.6	21.0	102 g	68 g

Dimensions shown "[inch] mm"

### DD Holding Capacity

@ -0.9 bar [25.6 inhg] vacuum

Appl.	Vert. Lift	Horz. Dry	Horz. Wet
<b>65DD</b>	[42.8]	[44.1]	[30.2]
	19.4	20.0	13.7
<b>90DD</b>	[69.7]	[80.5]	[55.8]
	31.6	36.5	25.3
<b>110DD</b>	[97.4]	[129.0]	[80.5]
	44.2	58.5	36.5

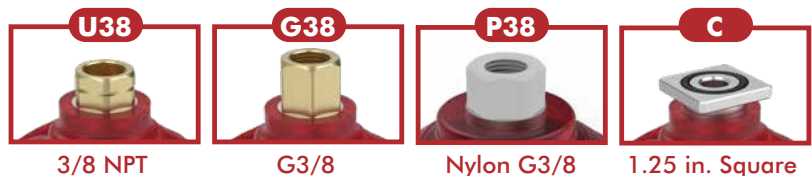
Holding capacities shown "[lbs] kg"

### DD Round Deepdish Ordering Information

Metric

Ø67.5mm ..... VC-65DD-(M)-PU60  
 Ø92.5mm ..... VC-90DD-(M)-PU60  
 Ø112.5mm ..... VC-110DD-(M)-PU60

### Mounting Options ("M")



# ACCELERATE® COLLECTION VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

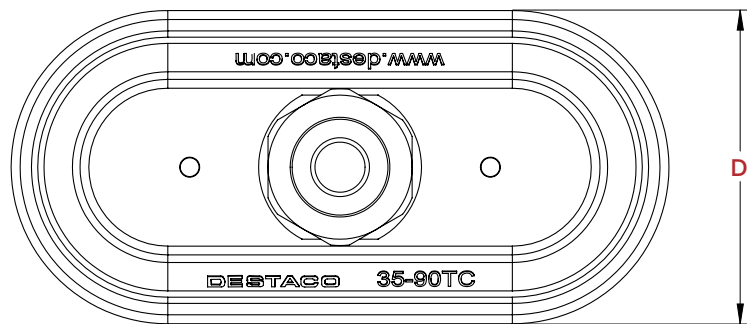
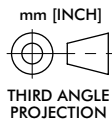


Positioning Kit (for G38 and P38 thread mounts only). Sold separately. Order No. **CPI-LNB-VSA-19** Includes (1) O-ring and (1) locknut.

### Specifications:

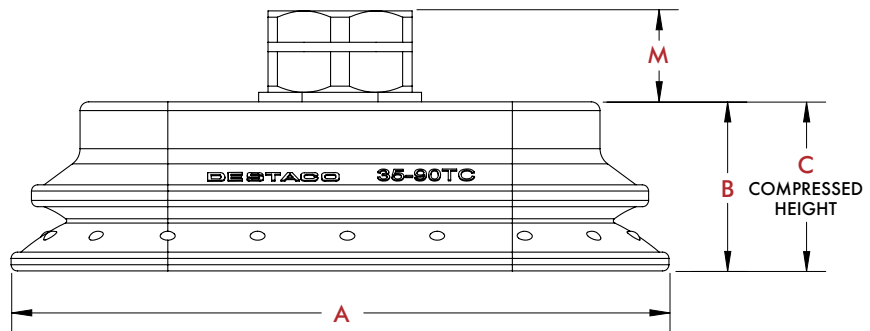
**Temperature:** 10°-49° C [50°-120° F]  
**Materials:** Dual Durometer Polyurethane - Outside 55 durometer (red), internal treads 60 durometer (dark green).

### TC Polyurethane Oval Bellows



Mount	M
U38/G38	[0.57] 14.5
P38	[0.85] 21.5
C	[0.73] 18.5

Dimensions shown "[inch] mm"



### TC Dimensions

Model	A	B	C	D	Weight
35-90TC	[4.13] 105	[1.08] 27.5	[0.65] 16.5	[1.97] 50	[3.42 oz] 97 g
	[6.18] 157	[1.40] 35.5	[0.85] 21.5	[2.64] 67	[6.70 oz] 190 g
65-170TC	[7.36] 187	[1.63] 41.5	[1.04] 26.5	[3.23] 82	[10.93 oz] 310 g

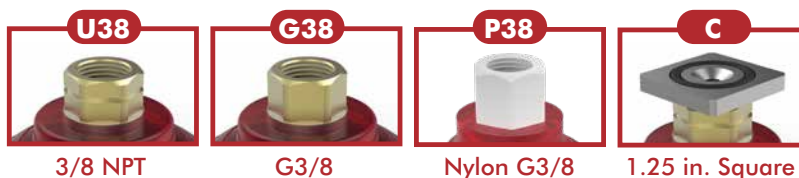
Dimensions shown "[inch] mm"

### TC Holding Capacity @ -0.6 bar vacuum

Appl.	Vert. Lift	Horz. Dry	Horz. Wet
35-90TC	[45] 20.41	[40] 18.14	[34] 15.42
	[99] 44.91	[93] 42.18	[78] 35.38
65-170TC	[128] 58.06	[139] 63.05	[149] 67.59

Holding capacities shown "[lbs] kg"

### Mounting Options ("M")



### TC Oval Bellows Ordering Information

Metric

Ø50x105mm ..... VC-35-90TC-(M)-PU55  
 Ø67x157mm ..... VC-50-140TC-(M)-PU55  
 Ø82x187mm ..... VC-65-170TC-(M)-PU55

# ACCELERATE® COLLECTION VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

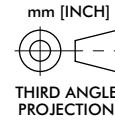
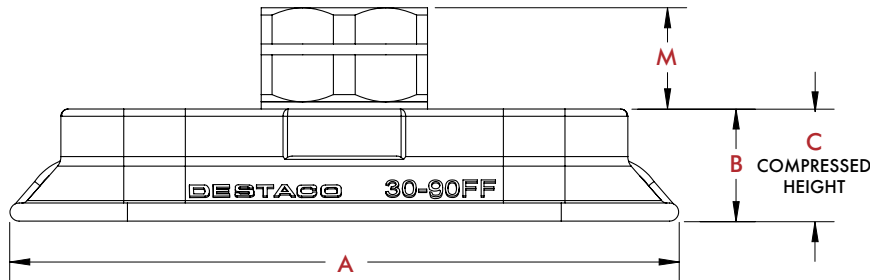
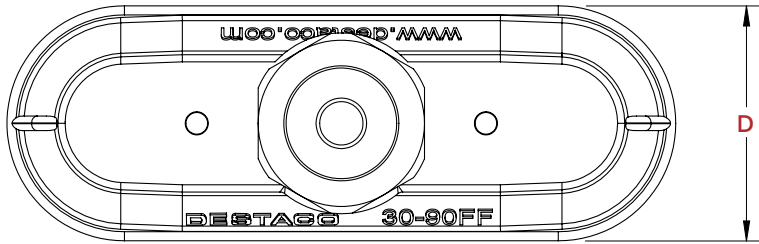
## FF Polyurethane Oval Flat



### Specifications:

**Temperature:**  
10°-49° C [50°-120° F]  
**Materials:** Dual Durometer Polyurethane - Outside 55 durometer (red), internal treads 60 durometer (dark green).

Positioning Kit (for G38 and P38 thread mounts only).  
Sold separately.  
Order No. **CPI-LNB-VSA-19**  
Includes (1) O-ring and (1) locknut.



Mount	M
<b>U38/G38</b>	[0.57] 14.5
	[0.85] 21.5
<b>P38</b>	[0.73] 18.5

Dimensions shown "[inch] mm"

### FF Dimensions

Model	A	B	C	D	Weight
<b>20-80FF</b>	[3.31] 84	[0.61] 15.5	[0.49] 12.5	[0.94] 24	[0.85 oz] 24 g
	[3.66] 93	[0.61] 15.5	[0.45] 11.5	[1.30] 33	[1.05 oz] 30 g
<b>40-110FF</b>	[4.45] 113	[0.85] 21.5	[0.65] 16.5	[1.69] 43	[1.94 oz] 55 g

Dimensions shown "[inch] mm"

### FF Holding Capacity @ -0.6 bar vacuum

Appl.	Vert. Lift	Horz. Dry	Horz. Wet
<b>20-80FF</b>	[25] 11.34	[25] 11.34	[11] 4.99
	[35] 15.88	[36] 16.33	[17] 7.71
<b>40-110FF</b>	[55] 24.95	[52] 23.59	[18] 8.16

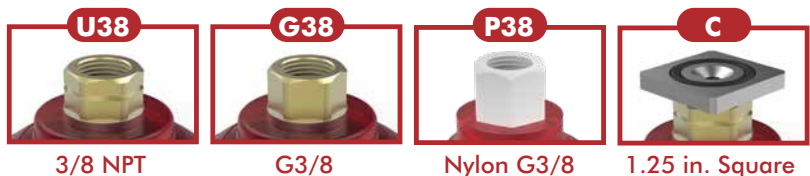
Holding capacities shown "[lbs] kg"

### FF Oval Flat Ordering Information

Metric

Ø24x84mm ..... VC-20-80FF-(M)-PU55  
 Ø33x93mm ..... VC-30-90FF-(M)-PU55  
 Ø43x113mm ..... VC-40-110FF-(M)-PU55

### Mounting Options ("M")



# VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

## Specifications:

### Temperature:

15-59 Sec: -20° to 250° F [-29° to 121° C]

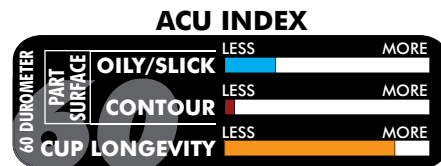
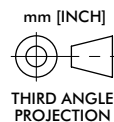
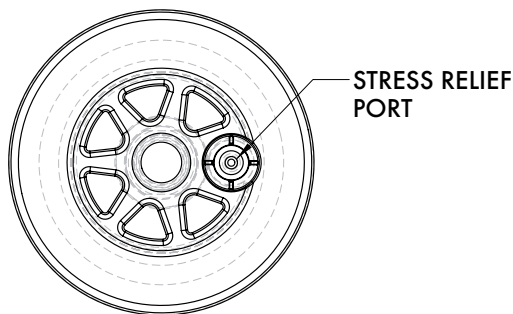
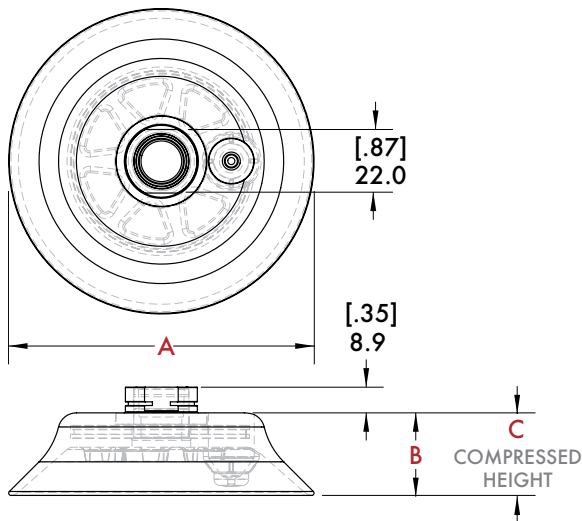
1-5 min: 15° to 180° F [-9° to 82° C]

### Material: Nitrile

### Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol

## DC Destacker Stress Relieving



US Patents #7,309,089  
7,712,807

## DC Dimensions

Model	A	B	C	Weight
75DC	84.8	25.4	16.7	84 g
[30DC]	[3.34]	[1.00]	[.68]	[3.0 oz]
100DC	105.9	28.6	16.7	120 g
[40DC]	[4.16]	[1.11]	[.68]	[4.2 oz]

Dimensions shown "mm [inch]"

## DC Capacity

Appl.	Ver. Lift
75DC	15.9 kg
[30DC]	[35 lb]
100DC	63.1 kg
[40DC]	[139 lb]

Holding capacities shown "N [lbf]"

## DC Destacker Stress Relieving Ordering Information

### Imperial

Ø3.00" ..... CPI-30DC-(M)-60

Ø4.00" ..... CPI-40DC-(M)-60

### Metric

Ø75 mm ..... CPI-75DC-(M)-60

Ø100 mm ..... CPI-100DC-(M)-60

(DR) = Durometer



(M) = Mounts Available



(DR) = Durometer



(M) = Mounts Available



# VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

## TC/HT Round Traction



### Specifications:

Temperature:

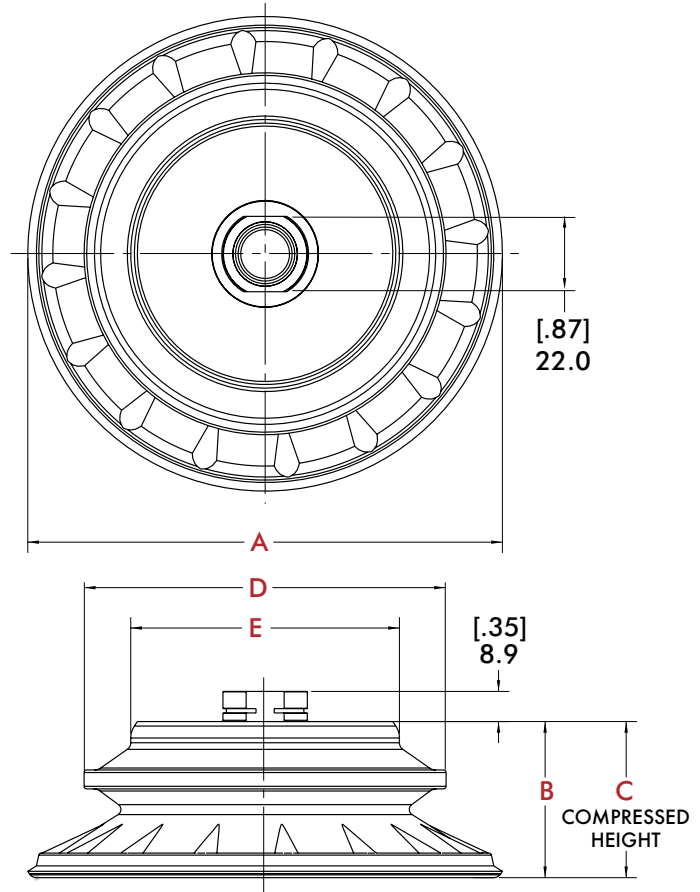
15-59 Sec: -29° to 121° C [-20° to 250° F]

1-5 min: -9° to 82° C [15° to 180° F]

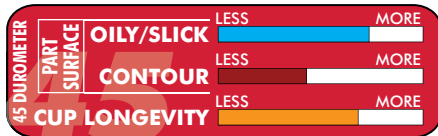
Material: Nitrile

Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol



### ACU INDEX



### TC/HT Dimensions

Model	A	B	C	D	E	Weight
[20TC]	[2.06]	[1.02]	[.68]	[1.64]	[1.25]	[1.3 oz]
50HT	52.3	25.7	17.3	41.7	31.8	37 g
[35TC]	[3.50]	[1.71]	[.82]	[2.50]	[1.65]	[2.6 oz]
90HT	88.9	43.44	20.8	63.5	41.9	73 g
[45TC]	[4.50]	[1.81]	[.87]	[3.25]	[2.25]	[4.4 oz]
115HT	114.3	46.1	22.1	82.4	57.2	125 g
[55TC]	[5.50]	[1.81]	[.87]	[4.00]	[3.04]	[7.2 oz]
140HT	139.7	46.1	22.1	101.4	77.1	204 g

Dimensions shown "mm [inch]"

### TC/HT Holding Capacity

Appl.	Hor. Dry	Hor. Wet	Ver. Lift
[20TC]	[8.5 lb]	[7 lb]	[22.7 lb]
50HT	3.9 kg	3.2 kg	10.3 kg
[35TC]	[30 lb]	[20 lb]	[66 lb]
90HT	13.6 kg	9.1 kg	29.9 kg
[45TC]	[45 lb]	[30 lb]	[103 lb]
115HT	20.4 kg	13.6 kg	46.7 kg
[55TC]	[100 lb]	[45 lb]	[164 lb]
140HT	45.5 kg	20.4 kg	74.4 kg

Holding capacities shown "N [lbf]"

## TC/HT Round Traction Ordering Information

Imperial

- Ø2.00" ..... CPI-20TC-(M)-(DR)
- Ø3.50" ..... CPI-35TC-(M)-(DR)
- Ø4.50" ..... CPI-45TC-(M)-(DR)
- Ø5.50" ..... CPI-55TC-(M)-(DR)

..(M) = Mounts Available..

**K B C D** ~~20TC~~ ~~E1~~ ~~20TC~~

..(DR) = Durometer..

~~45~~ **60**

Metric

- Ø50mm ..... CPI-50HT-(M)-(DR)
- Ø90mm ..... CPI-90HT-(M)-(DR)
- Ø115mm ..... CPI-115HT-(M)-(DR)
- Ø140mm ..... CPI-140HT-(M)-(DR)

..(M) = Mounts Available..

**A B C**

..(DR) = Durometer..

~~45~~ **60**

# VACUUM CUPS

Vacuum Products | Dimensions | Technical Specifications

## Specifications:

### Temperature:

15-59 Sec: -20° to 250° F [-29° to 121° C]

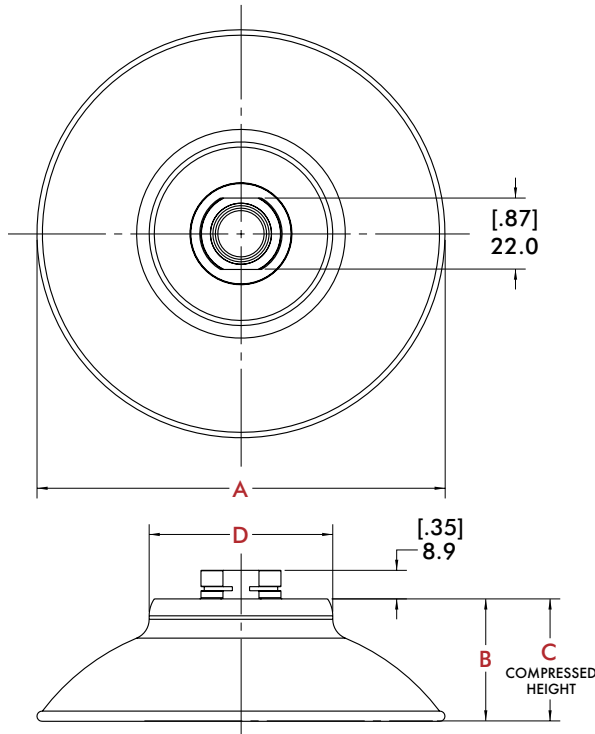
1-5 min: 15° to 180° F [-9° to 82° C]

### Material: Nitrile

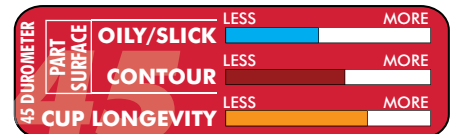
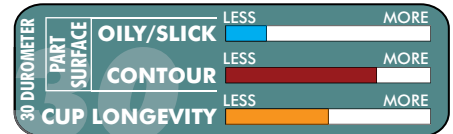
### Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol

## FF/PF Round Flatfoot



## ACU INDEX



## FF/PF Round Flatfoot

Model	A	B	C	D	Weight
50PF	50.8	22.5	13.0	19.1	40 g
[20FF]	[2.00]	[.89]	[.51]	[.75]	[1.4 oz]
75PF	76.2	25.4	18.2	39.6	57 g
[30FF]	[3.00]	[1.00]	[.72]	[1.56]	[2.0 oz]
100PF	101.6	33.3	22.2	39.6	96 g
[40FF]	[4.00]	[1.31]	[.88]	[1.56]	[3.4 oz]
125PF	127.0	38.2	25.4	57.2	159 g
[50FF]	[5.00]	[1.50]	[1.00]	[2.25]	[5.6 oz]

Dimensions shown "mm [inch]"

## FF/PF Vacuum Cup Capacities:

Appl.	Hor. Dry	Hor. Wet	Ver. Lift
50PF	6.4 kg	2.7 kg	9.1 kg
[20FF]	[14 lb]	[6 lb]	[20 lb]
75PF	13.6 kg	5.9 kg	27.2 kg
[30FF]	[30 lb]	[13 lb]	[60 lb]
100PF	15.9 kg	9.1 kg	46.3 kg
[40FF]	[35 lb]	[20 lb]	[102 lb]
125PF	31.8 kg	25.8 kg	74.8 kg
[50FF]	[70 lb]	[55 lb]	[165 lb]

Holding capacities shown "N [lbf]"

## FF/PF Round Flatfoot Vacuum Cups Ordering Information

### Imperial

Ø2.00" ..... CPI-20FF-(M)-(DR)  
 Ø3.00" ..... CPI-30FF-(M)-(DR)  
 Ø4.00" ..... CPI-40FF-(M)-(DR)  
 Ø5.00" ..... CPI-50FF-(M)-(DR)

(DR) = Durometer

30 45 60

(M) = Mounts Available

K B C D 40FF 50FF E1

### Metric

Ø50mm ..... CPI-50PF-(M)-(DR)  
 Ø75mm ..... CPI-75PF-(M)-(DR)  
 Ø100mm ..... CPI-100PF-(M)-(DR)  
 Ø125mm ..... CPI-125PF-(M)-(DR)

(DR) = Durometer

30 45 60

(M) = Mounts Available

A B C

# VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

## AC/BT Round Belcup



### Specifications:

#### Temperature:

15-59 Sec: -20° to 250° F [-29° to 121° C]

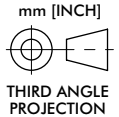
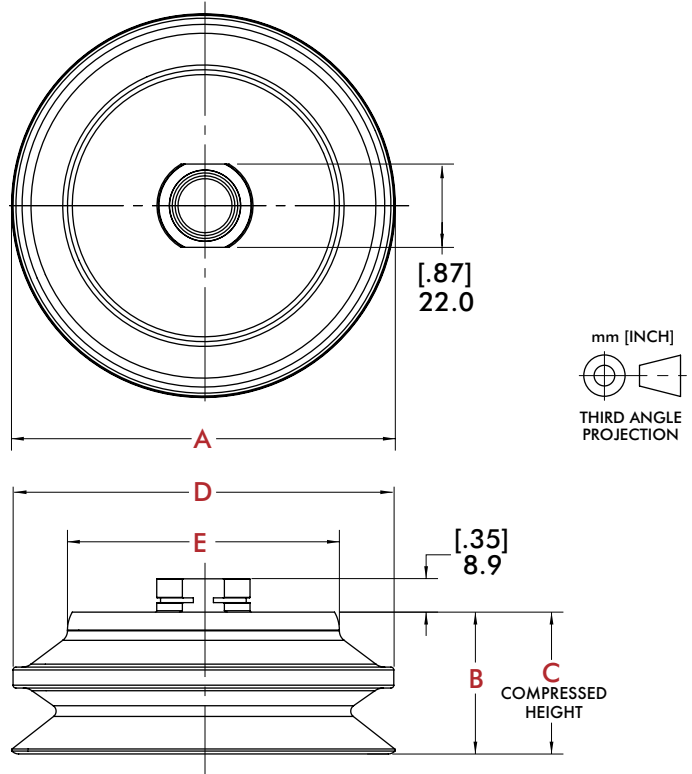
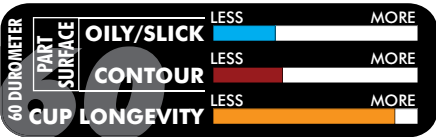
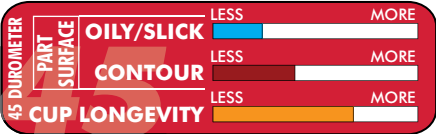
1-5 min: 15° to 180° F [-9° to 82° C]

Material: Nitrile

#### Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol

### ACU INDEX



## AC/BT Round Belcup

Model	A	B	C	D	E	Weight
40BT	41.1	25.9	11.9	41.1	31.8	35 g
[15AC]	[1.62]	[1.02]	[.47]	[1.63]	[1.25]	[1.2 oz]
50BT	57.4	37.4	18.3	57.9	38.1	57 g
[20AC]	[2.26]	[1.47]	[.72]	[2.28]	[1.50]	[2.0 oz]
75BT	78.9	38.8	19.8	80.0	56.6	91 g
[30AC]	[3.11]	[1.53]	[.78]	[3.15]	[2.23]	[3.2 oz]
100BT	102.4	37.8	18.6	101.6	72.6	159 g
[40AC]	[4.03]	[1.49]	[.73]	[4.00]	[2.85]	[5.6 oz]
125BT	127.0	38.1	19.0	127.0	97.8	232 g
[50AC]	[5.00]	[1.50]	[.75]	[5.00]	[3.85]	[8.2 oz]

Dimensions shown "mm [inch]"

## AC/BT Vacuum Cup Capacities:

Appl.	Hor. Dry	Hor. Wet	Ver. Lift
40BT	2.7 kg	1.4 kg	3.6 kg
[15AC]	[6 lb]	[3 lb]	[8 lb]
50BT	3.9 kg	2.0 kg	11.8 kg
[20AC]	[8.5 lb]	[4.5 lb]	[26 lb]
75BT	5.4 kg	2.7 kg	25.4 kg
[30AC]	[12 lb]	[6 lb]	[56 lb]
100BT	15.0 kg	3.6 kg	40.4 kg
[40AC]	[33 lb]	[8 lb]	[89 lb]
125BT	24.0 kg	6.8 kg	62.6 kg
[50AC]	[53 lb]	[15 lb]	[138 lb]

Holding capacities shown "N [lbf]"

## AC/BT Round Belcup Vacuum Cups Ordering Information

### Imperial

**Ø1.50"** ..... CPI-15AC-(M)-(DR)  
**Ø2.00"** ..... CPI-20AC-(M)-(DR)  
**Ø3.00"** ..... CPI-30AC-(M)-(DR)  
**Ø4.00"** ..... CPI-40AC-(M)-(DR)  
**Ø5.00"** ..... CPI-50AC-(M)-(DR)

(DR) = Durometer

~~45~~ **60**

(M) = Mounts Available

~~K~~ ~~B~~ ~~C~~ ~~D~~ ~~15AC~~ ~~20AC~~ **M8F** **20AC** ~~E1~~ ~~15AC~~

### Metric

**Ø40mm** ..... CPI-40BT-(M)-(DR)  
**Ø50mm** ..... CPI-50BT-(M)-(DR)  
**Ø75mm** ..... CPI-75BT-(M)-(DR)  
**Ø100mm** ..... CPI-100BT-(M)-(DR)  
**Ø125mm** ..... CPI-125BT-(M)-(DR)

(DR) = Durometer

~~45~~ **60**

(M) = Mounts Available

**A** **B** **C** **M10**

# VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

## DD/DM Round Deepdish

### Specifications:

#### Temperature:

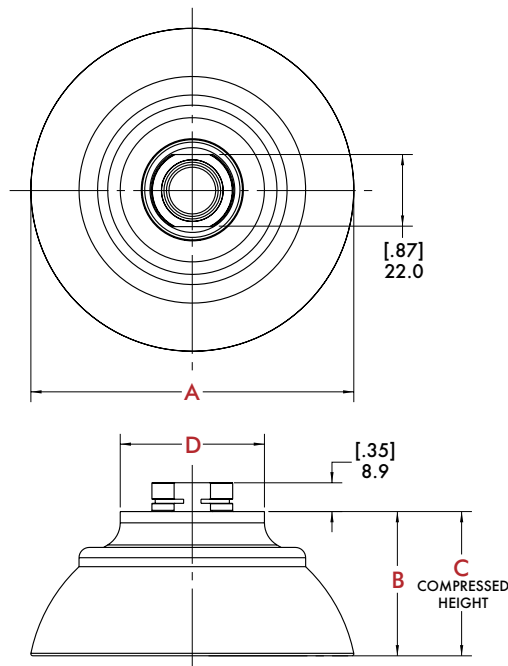
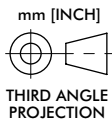
15-59 Sec: -20° to 250° F [-29° to 121° C]

1-5 min: 15° to 180° F [-9° to 82° C]

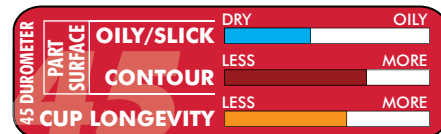
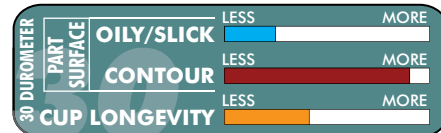
#### Material: Nitrile

#### Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol



### ACU INDEX



### DD/DM Round Deepdish

Model	A	B	C	D	Weight
50DM	50.8	29.1	18.3	38.1	40 g
[20DD]	[2.00]	[1.14]	[.72]	[1.50]	[1.4 oz]
75DM	76.2	40.4	24.3	44.0	57 g
[30DD]	[3.00]	[1.59]	[.96]	[1.73]	[2.0 oz]
100DM	101.6	44.5	20.8	44.5	96 g
[40DD]	[4.00]	[1.75]	[.82]	[1.75]	[3.4 oz]

Dimensions shown "mm [inch]"

### DD/DM Vacuum Cup Capacities:

Appl.	Hor. Dry	Hor. Wet	Ver. Lift
50DM	4.1 kg	3.2 kg	5.4 kg
[20DD]	[9 lb]	[7 lb]	[12 lb]
75DM	6.4 kg	2.7 kg	9.1 kg
[30DD]	[14 lb]	[6 lb]	[20 lb]
100DM	11.3 kg	3.2 kg	15.8 kg
[40DD]	[25 lb]	[7lb]	[35 lb]

Holding capacities shown "N [lbf]"

### DD/DM Round Deepdish Vacuum Cups Ordering Information

#### Imperial

Ø2.00" ..... CPI-20DD-(M)-(DR)

Ø3.00" ..... CPI-30DD-(M)-(DR)

Ø4.00" ..... CPI-40DD-(M)-(DR)

(DR) = Durometer

30 45 ~~X~~

(M) = Mounts Available

K B C

#### Metric

Ø50mm ..... CPI-50DM-(M)-(DR)

Ø75mm ..... CPI-75DM-(M)-(DR)

Ø100mm ..... CPI-100DM-(M)-(DR)

(DR) = Durometer

30 45 ~~X~~

(M) = Mounts Available

A B C



# VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

## FF/PF Oval FlatFoot



### Specifications:

#### Temperature:

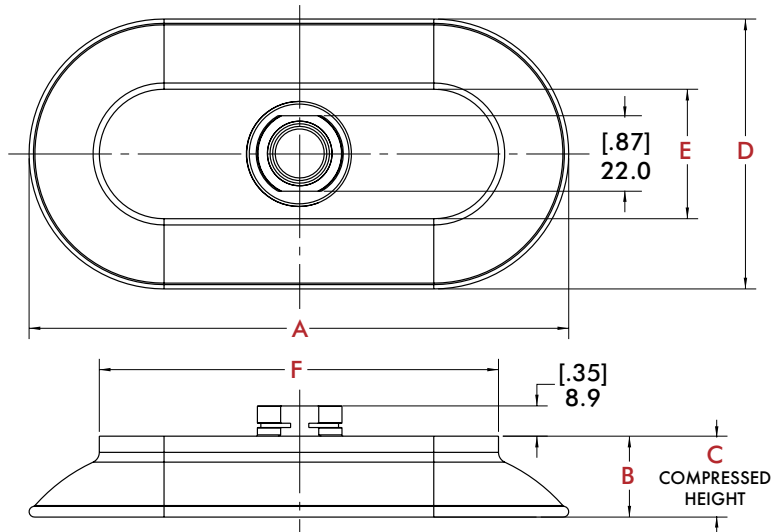
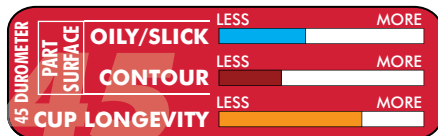
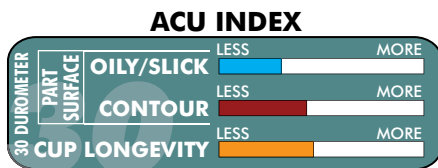
15-59 Sec: -20° to 250° F [-29° to 121° C]

1-5 min: 15° to 180° F [-9° to 82° C]

#### Material: Nitrile

#### Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol



## FF/PF Oval Flatfoot

Model	A	B	C	D	E	F	Weight
40-75PF [153FF]	76.2 [3.00]	22.3 [.88]	16.2 [.64]	38.1 [1.50]	22.2 [.88]	60.3 [2.37]	35 g [1.2 oz]
50-100PF [24FF]	101.6 [4.00]	23.8 [.94]	16.2 [.64]	50.8 [2.00]	22.2 [.88]	73.0 [2.88]	119 g [4.2 oz]
60-125PF [255FF]	127.0 [5.00]	22.3 [.88]	16.2 [.64]	63.5 [2.50]	22.2 [.88]	85.7 [3.38]	147 g [5.2 oz]
75-150PF [36FF]	152.9 [6.00]	25.4 [1.00]	18.3 [.72]	76.2 [3.00]	38.1 [1.50]	114.3 [4.50]	201 g [7.1 oz]

Dimensions shown "mm [inch]"

## FF/PF Vacuum Cup Capacities:

Appl.	Hor. Dry	Hor. Wet	Ver. Lift
40-75PF [153FF]	6.8 kg [15 lb]	2.3 kg [5 lb]	8.2 kg [18 lb]
50-100PF [24FF]	8.2 kg [18 lb]	2.7 kg [6 lb]	19.1 kg [42 lb]
60-125PF [255FF]	20.4 [45 lb]	3.2 kg [7 lb]	25 kg [55 lb]
75-150PF [36FF]	24.9 [55 lb]	4.1 kg [9 lb]	32.7 kg [72 lb]

Holding capacities shown "N [lbf]"

## FF/PF Oval FlatFoot Vacuum Cups Ordering Information

### Imperial

- 1.50" x 3.00" ..... CPI-153FF-(M)-(DR)
- 2.00" x 4.00" ..... CPI-24FF-(M)-(DR)
- 2.50" x 5.00" ..... CPI-255FF-(M)-(DR)
- 3.00" x 6.00" ..... CPI-36FF-(M)-(DR)

(DR) = Durometer



(M) = Mounts Available



### Metric

- 40 x 75mm ..... CPI-40-75PF-(M)-(DR)
- 50 x 100mm ..... CPI-50-100PF-(M)-(DR)
- 60 x 125mm ..... CPI-60-125PF-(M)-(DR)
- 75 x 150mm ..... CPI-75-150PF-(M)-(DR)

(DR) = Durometer



(M) = Mounts Available



# VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

## DD/DM Oval Deepdish

### Specifications:

#### Temperature:

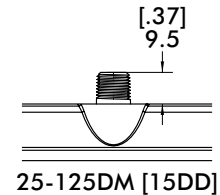
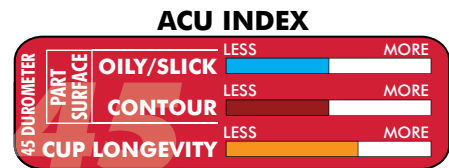
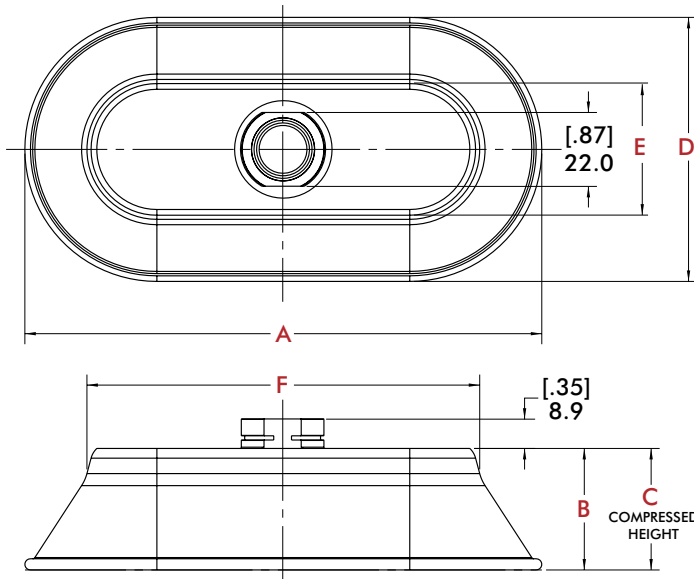
15-59 Sec: -20° to 250° F [-29° to 121° C]

1-5 min: 15° to 180° F [-9° to 82° C]

#### Material: Nitrile

#### Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol



### DD/DM Oval Deepdish

Model	A	B	C	D	E	F	Weight
25-125DM [15DD]	128.7 [5.06]	17.1 [.67]	8.7 [.34]	27.0 [1.06]	12.9 [.51]	114.5 [4.51]	35 g [1.2 oz]
75-150DM [36DD]	155.8 [6.13]	36.7 [1.44]	16.51 [.65]	79.6 [3.13]	39.7 [1.56]	118.4 [4.65]	201 g [7.1 oz]

Dimensions shown "mm [inch]"

### DD/DM Vacuum Cup Capacities:

Appl.	Hor. Dry	Hor. Wet	Ver. Lift
25-125DM [15DD]	10.0 kg [22 lb]	3.2 kg [7 lb]	15.9 kg [35 lb]
75-150DM [36DD]	24.9 kg [55 lb]	10.4 kg [23 lb]	63.1 kg [139 lb]

Holding capacities shown "N [lbf]"

### DD/DM Oval Deepdish Vacuum Cups Ordering Information

#### Imperial

1.00" x 5.00" ..... CPI-15DD-(M)-(45)

3.00" x 6.00" ..... CPI-36DD-(M)-(45)

#### Metric

25 x 125mm ..... CPI-25-125DM-(M)-(45)

75 x 150mm ..... CPI-75-150DM-(M)-(45)

(DR) = Durometer



(M) = Mounts Available



(DR) = Durometer



(M) = Mounts Available



# HOT FORMING VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

## MFF Round Flat



### Specifications:

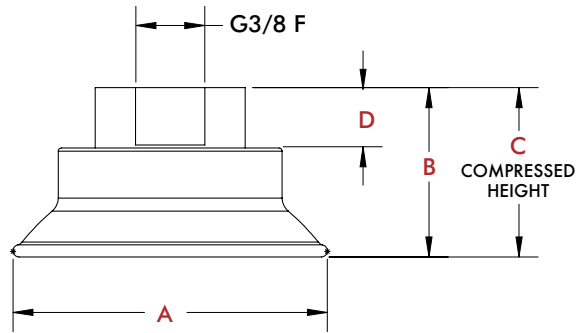
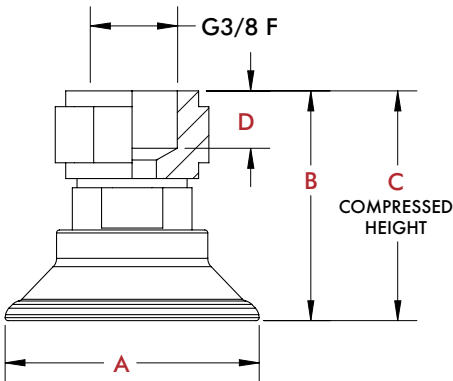
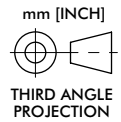
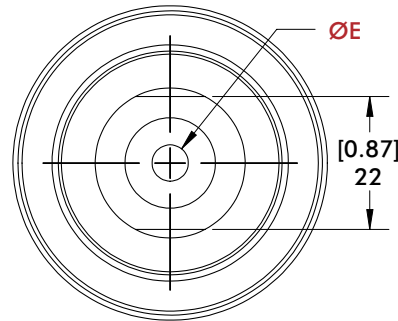
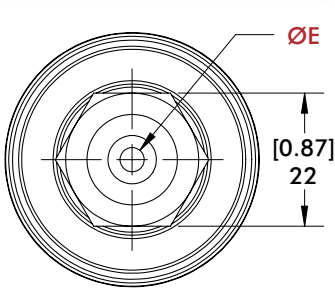
#### Temperature:

Resistant up to 250° C [482° F]  
(sheet metal temperature)

**Material:** Silicone free HT2

#### Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol



### MFF Dimensions

Model	A	B	C	D	E	Weight
30MFF	[1.34]	[1.42]	[1.30]	[0.35]	[0.16]	[1.64 oz]
	34	36	33	9	4	46.5 g
40MFF	[1.81]	[1.50]	[1.34]	[0.35]	[0.16]	[1.77 oz]
	46	38	34	9	4	50.1 g
50MFF	[2.20]	[1.10]	[0.91]	[0.59]	[0.24]	[1.35 oz]
	56	28	23	15	6	38.2 g
60MFF	[2.64]	[1.22]	[0.98]	[0.59]	[0.24]	[0.95 oz]
	67	31	25	15	6	27 g

Dimensions shown "mm [inch]"

### MFF Holding Capacity @ -0.6 bar vacuum

Appl.	Vert. Lift	Horz. Dry	Horz. Wet
30MFF	[8.5]	[6.7]	[6.3]
	38	30	28
40MFF	[15.5]	[11.7]	[11.2]
	69	52	50
50MFF	[22.5]	[18.0]	[17.1]
	100	80	76
60MFF	[33.7]	[23.6]	[19.1]
	150	105	85

Holding capacities shown "N [lbf]"

### MFF Round Flat Ordering Information

#### Metric

Ø30mm	.....	CPI-30MFF-B-HT
Ø40mm	.....	CPI-40MFF-B-HT
Ø50mm	.....	CPI-50MFF-B-HT
Ø60mm	.....	CPI-60MFF-B-HT

# HOT FORMING VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

## Specifications:

### Temperature:

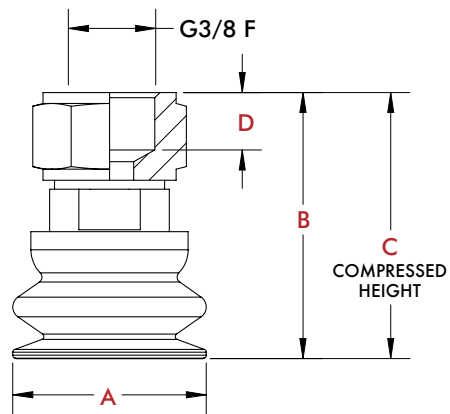
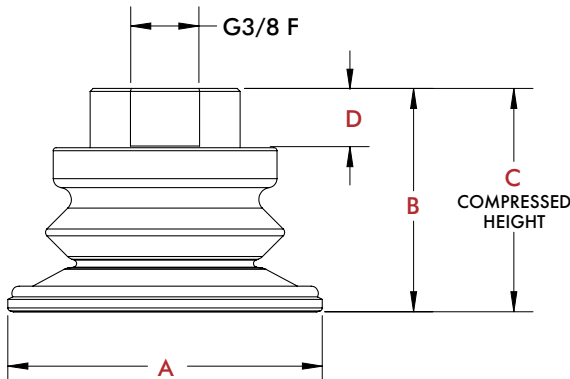
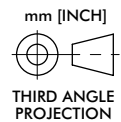
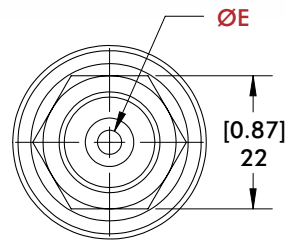
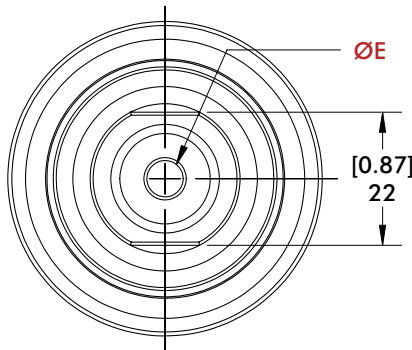
Resistant up to 250° C [482° F]  
(sheet metal temperature)

Material: Silicone free HT2

### Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol

## MTC Round Bellows



### MTC Dimensions

Model	A	B	C	D	E	Weight
22MTC	[0.87] 22	[1.61] 41	[1.39] 35.2	[0.35] 9.5	[0.14] 3.5	[1.54 oz] 43.6 g
30MTC	[1.34] 34	[1.73] 44	[1.38] 35	[0.35] 9	[0.16] 4	[1.74 oz] 49.3 g
40MTC	[1.77] 45	[1.73] 44	[1.34] 34	[0.35] 9	[0.16] 4	[1.79 oz] 50.8 g
50MTC	[2.20] 56	[1.46] 37	[1.00] 25.5	[0.59] 15	[0.24] 6	[1.40 oz] 39.6 g
60MTC	[2.64] 67	[1.63] 41.5	[1.06] 27	[0.59] 15	[0.24] 6	[1.83 oz] 51.8 g

Dimensions shown "mm [inch]"

### MTC Holding Capacity @ -0.6 bar vacuum

Appl.	Vert. Lift	Horz. Dry	Horz. Wet
22MTC	[3.6] 16	[4.0] 18	[1.3] 6
30MTC	[4.9] 22	[6.7] 30	[2.9] 13
40MTC	[8.5] 38	[8.1] 36	[7.4] 33
50MTC	[11.9] 53	[12.4] 55	[11.7] 52
60MTC	[18.4] 82	[18.4] 82	[17.3] 77

Holding capacities shown "N [lbf]"

## MTC Round Bellows Ordering Information

### Metric

- Ø22mm ..... CPI-22MTC-B-HT
- Ø30mm ..... CPI-30MTC-B-HT
- Ø40mm ..... CPI-40MTC-B-HT
- Ø50mm ..... CPI-50MTC-B-HT
- Ø60mm ..... CPI-60MTC-B-HT

# HOT FORMING VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

## MFF Oval Flat



### Specifications:

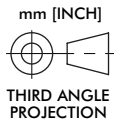
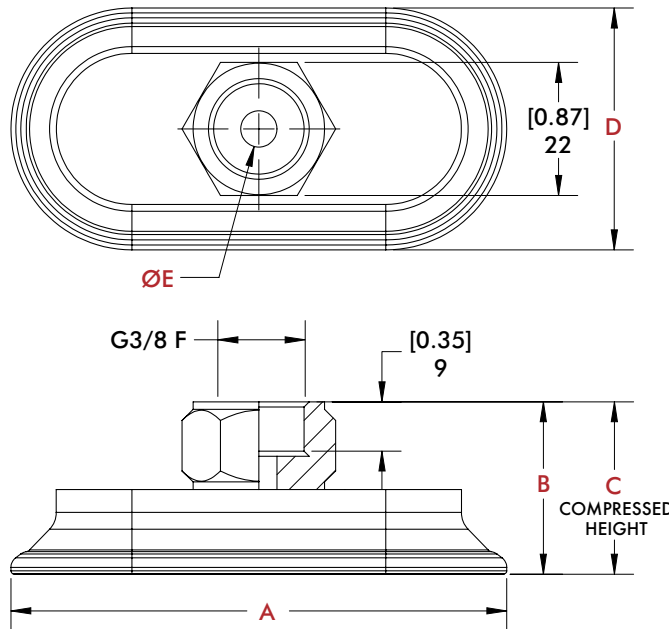
#### Temperature:

Resistant up to 250° C [482° F]  
(sheet metal temperature)

**Material:** Silicone free HT2

#### Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol



### MFF Dimensions

Model	A	B	C	D	E	Weight
<b>6023MFF</b>	[2.52] 64	[1.02] 26	[0.91] 23	[0.98] 25	[0.24] 6	[1.57 oz] 44.6 g
<b>9030MFF</b>	[3.70] 94	[1.06] 27	[0.94] 24	[1.34] 34	[0.24] 6	[2.42 oz] 68.5 g
<b>8040MFF</b>	[3.35] 85	[1.10] 28	[0.94] 24	[1.69] 43	[0.24] 6	[2.30 oz] 65.1 g
<b>10050MFF</b>	[4.17] 106	[1.22] 31	[1.02] 26	[2.13] 54	[0.31] 8	[3.68 oz] 104.2 g

Dimensions shown "mm [inch]"

### MFF Holding Capacity @ -0.6 bar vacuum

Appl.	Vert. Lift	Horz. Dry	Horz. Wet
<b>6023MFF</b>	[12.8] 57	[8.3] 37	[7.4] 33
<b>9030MFF</b>	[27.4] 122	[21.6] 96	[14.4] 64
<b>8040MFF</b>	[31.5] 140	[24.7] 110	[22.5] 100
<b>10050MFF</b>	[48.8] 217	[40.7] 181	[27.2] 121

Holding capacities shown "N [lbf]"

### MFF Oval Flat Ordering Information

#### Metric

- Ø60x23mm ..... CPI-6023MFF-B-HT
- Ø90x30mm ..... CPI-9030MFF-B-HT
- Ø80x40mm ..... CPI-8040MFF-B-HT
- Ø100x50mm ..... CPI-10050MFF-B-HT

# HOT FORMING VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

## MAC Oval Bellows

### Specifications:

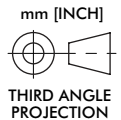
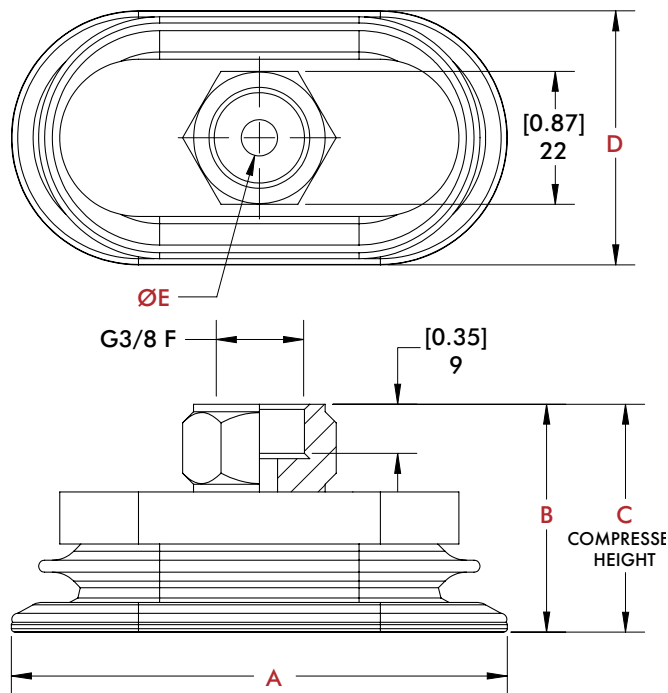
#### Temperature:

Resistant up to 250° C [482° F]  
(sheet metal temperature)

**Material:** Silicone free HT2

#### Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol



### MAC Dimensions

Model	A	B	C	D	E	Weight
6030MAC	[2.48]	[1.38]	[1.10]	[1.30]	[0.24]	[2.32 oz]
	63	35	28	33	6	65.9 g
8040MAC	[3.27]	[1.48]	[1.13]	[1.69]	[0.24]	[2.78 oz]
	83	37.7	28.7	43	6	78.7 g

Dimensions shown "mm [inch]"

### MAC Holding Capacity @ -0.6 bar vacuum

Model	Vert. Lift	Horz. Dry	Horz. Wet
6030MAC	[8.5]	[12.8]	[11.7]
	38	57	52
8040MAC	[14.6]	[22.5]	[21.3]
	65	100	95

Holding capacities shown "N [lbf]"

## MAC Oval Bellows Ordering Information

Metric

Ø60x30mm ..... CPI-6030MAC-B-HT

Ø80x40mm ..... CPI-8040MAC-B-HT

# MICRO SERIES VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

## VC-F Round Flat



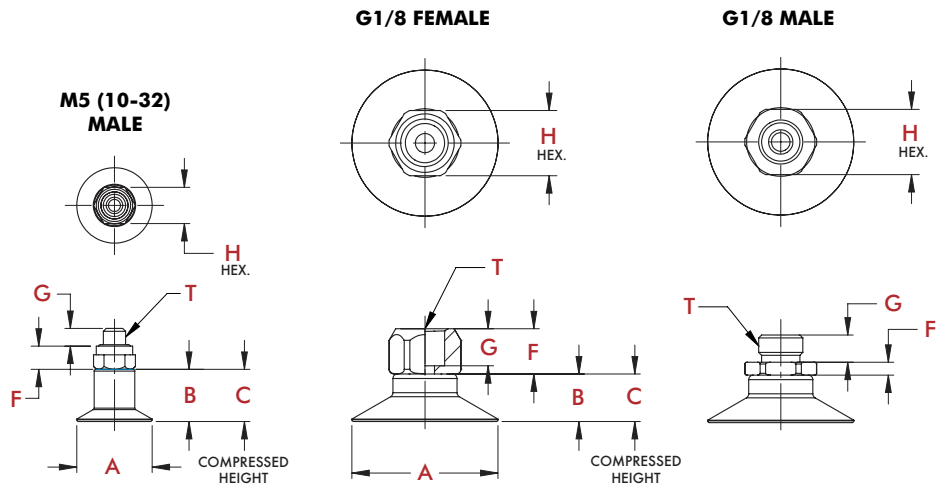
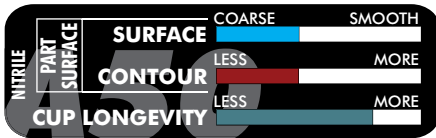
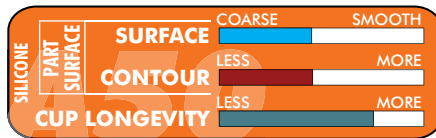
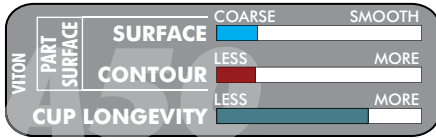
### Applications:

- Relatively flat surfaces.
- Dry to moderate oily/slippery surfaces.
- Low Compression distances.
- Higher precision applications.

### Specifications:

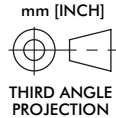
**Material Operating Temperature:**  
**Viton:** -40° to 450° F  
 [-40° to 232° C]  
**Silicone:** -100° to 400° F  
 [-73° to 204.4° C]  
**Nitrile:** -40° to 275° F  
 [-40° to 135° C]  
**Durometer:** A50

### ACU INDEX



(DR) = Durometer/Material

- V** Viton Hi-Temp Applications where silicon is not allowed
- S** Silicone Extremely hot or cold environments
- N** Nitrile General Purpose



### VC-F Micro Fitting Threads

Thread (T)	(F)	(G)	(H)
10M (M5) (10-32 MALE)	5.1 [.20]	4.1 [.16]	7.9 [.31]
18M (G1/8) (MALE)	2.8 [.11]	5.8 [.23]	14.2 [.56]
18F (G1/8) (FEMALE)	9.9 [.39]	6.4 [.25]	14.2 [.56]

### VC-F Dimensions

Model	A	B	C	CUP WT	LOAD
VC-F15	16.5 [.65]	11.4 [.45]	10.4 [.41]	3.4 g [.11 oz]	.85 kg [1.88 lb]
VC-F20	22.1 [.87]	8.6 [.34]	7.1 [.28]	7.8 g [.25 oz]	1.47 kg [3.25 lb]
VC-F30	32.0 [1.26]	10.4 [.41]	8.1 [.32]	6.2 g [.20 oz]	2.55 kg [5.63 lb]
VC-F40	42.2 [1.66]	14.0 [.55]	11.4 [.45]	11.8 g [.38 oz]	4.08 kg [9.00 lb]
VC-F50	53.1 [2.08]	17.5 [.69]	14.5 [.57]	19.6 g [.63 oz]	7.54 kg [16.6 lb]

### VC-F Round Flag Ordering Information

- Ø15mm..... VC-F15(DR)-(M)
- Ø20mm..... VC-F20(DR)-(M)
- Ø30mm..... VC-F30(DR)-(M)
- Ø40mm..... VC-F40(DR)-(M)
- Ø50mm..... VC-F50(DR)-(M)

(DR) = Durometer/Material

(M) = Mounts Available

- V** **S** **N**

- 10M** **18M** **18F**

Not Available in  
Ø15 and Ø20mm

Only Available in  
Ø15 and Ø20mm

# MICRO SERIES VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

## VC-B Micro Series Round Bellows

### Applications:

- Moderately flat surfaces.
- Best performance on dry surfaces.
- Moderate compression distance.
- Bellows allows for minor misalignments.

### Specifications:

Material Operating Temperature:

Viton: -40° to 450° F

[-40° to 232° C]

Silicone: -100° to 400° F

[-73° to 204.4° C]

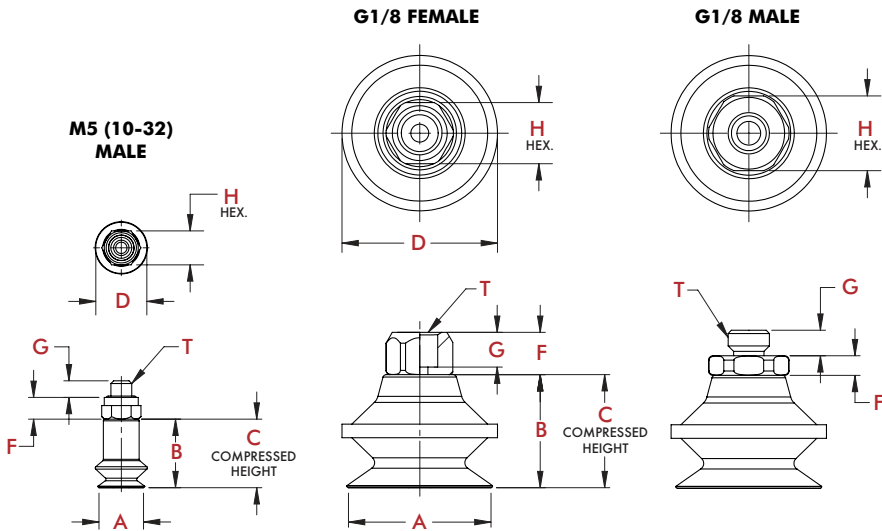
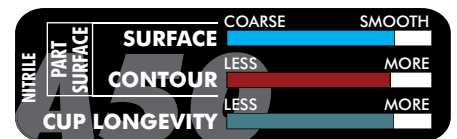
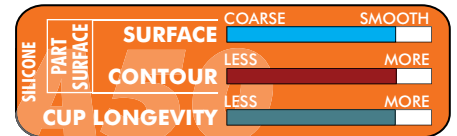
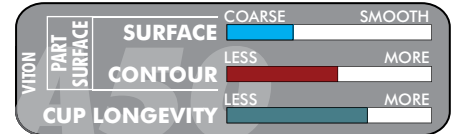
Nitrile: -40° to 275° F

[-40° to 135° C]

Durometer: A50



### ACU INDEX



### VC-B Micro Fitting Threads

Thread (T)	(F)	(G)	(H)
10M (M5) (10-32 MALE)	5.1 [.20]	4.1 [.16]	7.9 [.31]
18M (G1/8) (MALE)	2.8 [.11]	5.8 [.23]	14.2 [.56]
18F (G1/8) (FEMALE)	9.9 [.39]	6.4 [.25]	14.2 [.56]

(DR) = Durometer/Material

**V** Viton Hi-Temp Applications where silicon is not allowed

**S** Silicon Extremely hot or cold environments

**N** Nitrile General Purpose

### VC-B Dimensions

Model	A	B	C	D	Cup Wt	Load
VC-B05	5.6 [.22]	9.1 [.36]	7.6 [.30]	6.1 [.24]	5.8 g [.09 oz]	.04 kg [.10 lb]
VC-B10	10.9 [.43]	16.0 [.63]	11.4 [.45]	12.2 [.48]	3.4 g [.11 oz]	.39 kg [.87 lb]
VC-B15	16.0 [.63]	19.8 [.78]	13.2 [.52]	17.5 [.69]	3.7 g [.12 oz]	.57 kg [1.25 lb]
VC-B20	22.4 [.88]	17.5 [.69]	7.6 [.30]	23.9 [.94]	6.2 g [.20 oz]	1.02 kg [2.25 lb]
VC-B30	34.0 [1.34]	26.4 [1.04]	11.4 [.45]	36.3 [1.43]	11.5 g [.37 oz]	2.21 kg [4.88 lb]
VC-B40	42.9 [1.69]	27.4 [1.08]	12.4 [.49]	46.2 [1.82]	18.7 g [.60 oz]	3.97 kg [8.75 lb]
VC-B50	52.8 [2.08]	34.5 [1.36]	14.5 [.57]	59.4 [2.34]	30.5 g [.98 oz]	6.63 kg [14.6 lb]

### VC-B Micro Series Round Multi-Bellows Ordering Information

- Ø05mm..... VC-B05(DR)-(M)
- Ø10mm..... VC-B10(DR)-(M)
- Ø15mm..... VC-B15(DR)-(M)
- Ø20mm..... VC-B20(DR)-(M)
- Ø30mm..... VC-B30(DR)-(M)
- Ø40mm..... VC-B40(DR)-(M)
- Ø50mm..... VC-B50(DR)-(M)

(DR) = Durometer/Material

(M) = Mounts Available

**V** **S** **N**

**10M** **18M** **18F**

Only Available in Ø5, Ø10, Ø15, Ø20mm



# MICRO SERIES VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

## VC-BM Micro Series Round Multi-Bellows



### Applications:

- Angled/curved/bumpy surfaces.
- Best performance on dry surfaces.
- Higher compression distance. (Reach in Box)
- Bellows allow for minor
- Provides Partial extraction.

### Specifications:

Material Operating Temperature:

Viton: -40° to 450° F

[-40° to 232° C]

Silicone: -100° to 400° F

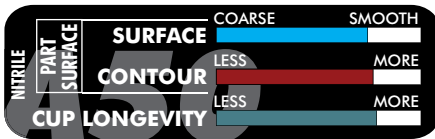
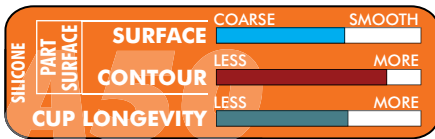
[-73° to 204.4° C]

Nitrile: -40° to 275° F

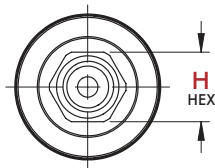
[-40° to 135° C]

Durometer: A50

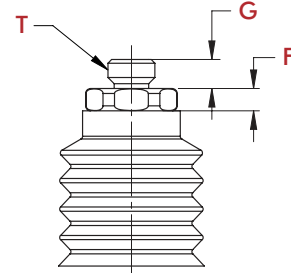
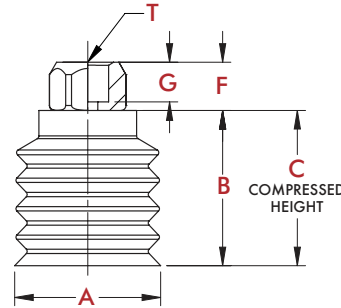
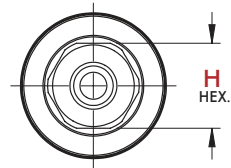
### ACU INDEX



G1/8 FEMALE



G1/8 MALE



(DR) = Durometer/Material

**S** Silicon Extremely hot or cold environments

**N** Nitrile General Purpose

## VC-BM Micro Fitting Threads

Thread (T)	(F)	(G)	(H)
10M (M5) (10-32 MALE)	5.1 [.20]	4.1 [.16]	7.9 [.31]
18M (G1/8) (MALE)	2.8 [.11]	5.8 [.23]	14.2 [.56]
18F (G1/8) (FEMALE)	9.9 [.39]	6.4 [.25]	14.2 [.56]

## VC-BM Dimensions

Model	A	B	C	Cup Wt	Load
VC-BM20	20.1 [.79]	21.9 [.86]	8.9 [.35]	5.3 g [17 oz]	.68 kg [1.50 lb]
VC-BM30	30.0 [1.18]	30.7 [1.21]	10.7 [.42]	10.3 g [.33 oz]	1.64 kg [3.63 lb]
VC-BM40	39.8 [1.57]	40.9 [1.61]	12.9 [.51]	19.6 g [.63 oz]	2.21 kg [4.88 lb]
VC-BM50	50.0 [1.97]	51.1 [2.01]	23.1 [.91]	32.7 g [1.05 oz]	4.37 kg [9.63 lb]

## VC-BM Micro Series Round Multi-Bellows Ordering Information

Ø20mm..... VC-BM20(DR)-(M)

Ø30mm..... VC-BM30(DR)-(M)

Ø40mm..... VC-BM40(DR)-(M)

Ø50mm..... VC-BM50(DR)-(M)

(DR) = Durometer/Material

(M) = Mounts Available



Only Available in Ø20mm