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.



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





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.



Dimensions and technical information are subject to change without notice

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 flexibilty 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 panal
- 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



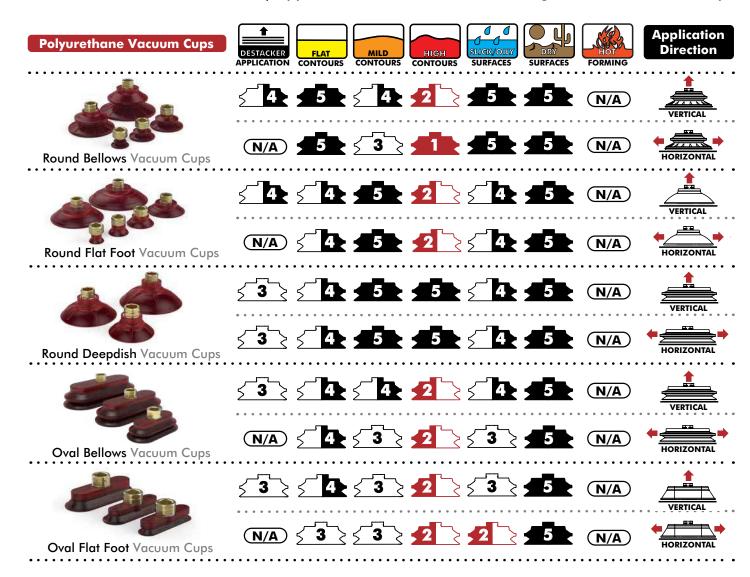
Worst Cup for the Job Best Cup for the Job Not Advised for the application

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



Worst Cup for the Job Best Cup for the Job 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)?

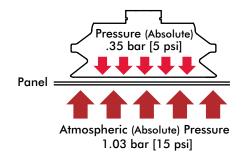


A set of vacuum cups of the same size and type, each having different durometers may handle oily/slick contoured parts differently. However, cup longevity of each may be affected as a result of durometer, application and usage. The ACU Index is a reference shown with each type of vacuum cup and is used 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 w = Weight of Panel Lifting force of cup s = Safety factorn = Number of cups Weight and lifting force must be in the same units, either English or Metric.

Safety Factor

Ideal plant conditions*: (2)

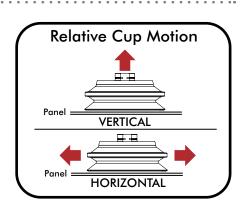
Fast moving robot: (+1) Slick or Oily Panel: (+1) Flexing Panel: (+2) Small cups: (+1)

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 **Total Safety Factor**

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





VACUUM CUP OPTIONS

Vacuum Products | Durometer and Mounting Options

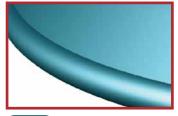
DESTACO Vacuum Cups are offered in different families, and may be offered in different durometers. Vacuum cups are also offered in Imperial and Metric mounting options which may vary according to the size and type of the vacuum cup.

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")



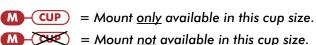


3/8" G



1.25" SQUARE





Micro Industrial Mounting Options ("M")



10-32 MALE



1/8" G FEMALE



1/8" G MALE

Specialty Vacuum Cup Mounting Options ("M")



M10 MALE



M8 FEMALE



SMOOTH BORE

Polyurethane Mounting Options ("M")



3/8 NPT



G3/8

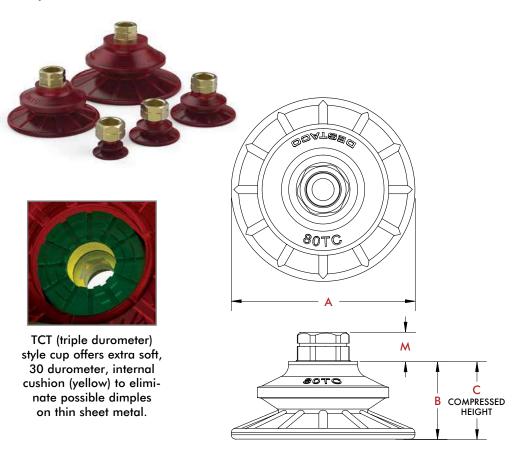


1.25 in. Square



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).



| Mount | М | |
|---------|----------------|--|
| U38/G38 | [0.57] 14.5 | |
| P38 | [0.85] 21.5 | |
| c | [0.73] 18.5 | |

Dimensions shown "[inch] mm"

TC Dimensions

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

Dimensions shown "[inch] mm"

TC Holding Capacity @ -0.6 bar vacuum

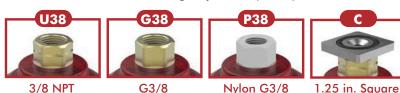
| Appl. | Vert. Lift | Horz. Dry | [1.75] 0.79 [10] 4.54 | |
|--|---------------|---------------|--------------------------------|--|
| 30 TC | [6] 2.72 | [3] 1.36 | | |
| 40 TC | [18] 8.16 | [13] 5.90 | | |
| 60 TC | [25] 11.34 | [27] 12.25 | [20] 9.07 | |
| 80 TC/ [53] 80 TCT 24.04 110 TC/ [85] | |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





Vacuum Products | Dimensions | Ordering Information

Specifications:

Temperature:

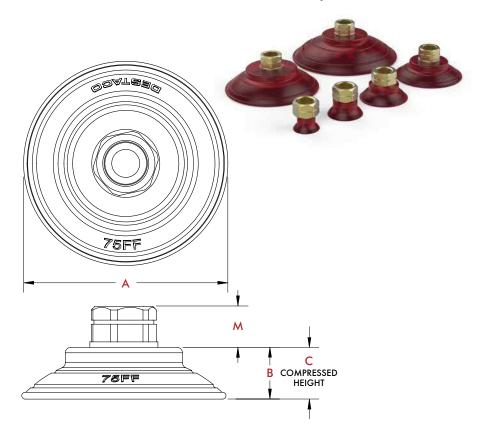
10°-49° C [50°-120° F] Materials: Dual Durometer Polyurethane - Outside 55 durometer (red), internal treads 60 durometer (dark green).



| Mount | М |
|---------|----------------|
| U38/G38 | [0.57] 14.5 |
| | |
| P38 | [0.85] 21.5 |
| С | [0.73] |
| | 18.5 |

Dimensions shown "[inch] mm"

FF Polyurethane Round Flat



FF Dimensions

| Madal | ٨ | В | | Wainb. |
|---------------|--------|--------|--------|-----------|
| Model | Α | D | С | Weight |
| 25 FF | [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 |
| 75 FF | [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 |
| 125 FF | [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 | |
|--------------|------------|-----------|-----------|--|
| 25 FF | [6] | [2] | [1.5] | |
| | 2.72 | 0.91 | 0.68 | |
| 35FF | [13] | [9] | [7] | |
| | 5.90 | 4.08 | 3.18 | |
| 50 FF | [24] | [23] | [16] | |
| | 10.89 | 10.43 | 7.26 | |
| 75 FF | [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"

Mounting Options ("M")

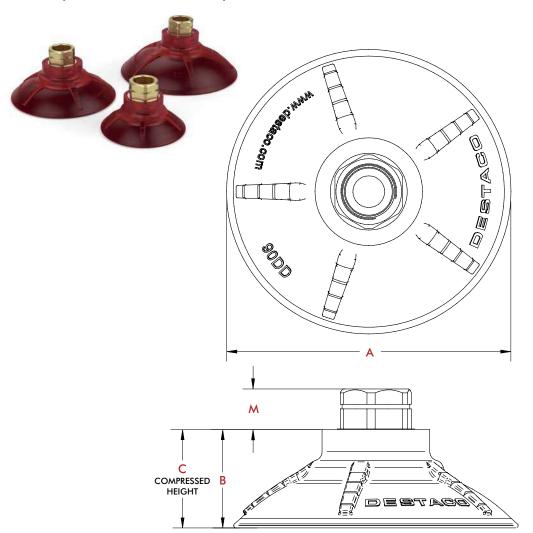


FF Round Flat Ordering Information

| Metric | |
|---------------|---------------------------|
| Ø 25mm | VC-25FF-(M)-PU55 |
| Ø35mm | VC- 35FF -(M)-PU55 |
| Ø50mm | VC- 50FF -(M)-PU55 |
| Ø 75mm | VC- 75FF -(M)-PU55 |
| Ø100mm | VC-100FF-(M)-PU55 |
| | VC-125FF-(M)-PU55 |
| | |

Vacuum Products | Dimensions | Technical Specifications

DD Polyurethane Round Deepdish



Specifications:

Temperature:

10°-49° C [50°-120° F]

Materials:

60 durometer (red)



| Mount | М | |
|-------|----------------|--|
| U38 | [0.51] 13 | |
| G38 | [0.77] 19.5 | |
| P38 | [0.68] 17.3 | |
| С | [0.37] 9.5 | |

Dimensions shown "[inch] mm"

DD Dimensions

| Model | Α | В | С | Weight with U38/G38/C | Weight with P38 |
|--------------|--------|--------|--------|--------------------------|--------------------|
| 65 DD | [2.66] | [1.11] | [0.67] | [2.08 oz] | [0.9 oz] |
| | 67.5 | 28.2 | 17.0 | 59 g | 25 g |
| 90 DD | [3.64] | [1.27] | [0.75] | [2.72 oz] | [1.5 oz] |
| | 92.5 | 32.2 | 19.0 | 77 g | 43 g |
| 110DD | [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 | |
|---------------|------------|-----------|-----------|--|
| 65 DD | [42.8] | [44.1] | [30.2] | |
| | 19.4 | 20.0 | 13.7 | |
| 90 DD | [69.7] | [80.5] | [55.8] | |
| | 31.6 | 36.5 | 25.3 | |
| 110 DD | [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")







3/8 NPT

Nylon G3/8

1.25 in. Square



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:

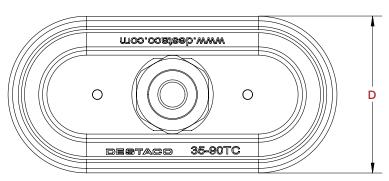
10°-49° C [50°-120° F]

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

TC Polyurethane Oval Bellows

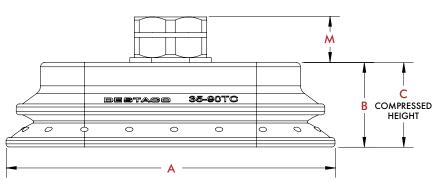






| Mount | М | |
|---------|----------------|--|
| U38/G38 | [0.57] 14.5 | |
| P38 | [0.85] 21.5 | |
| C | [0.73] 18.5 | |

Dimensions shown "[inch] mm"



TC Dimensions

| | Model | Α | В | С | D | Weight |
|--|------------------|---------------|----------------|----------------|--------------|---------------------|
| | 35-90 TC | [4.13] 105 | [1.08] 27.5 | [0.65] 16.5 | [1.97] 50 | [3.42 oz] 97 g |
| | 50-140 TC | [6.18] 157 | [1.40] 35.5 | [0.85] 21.5 | [2.64] 67 | [6.70 oz] 190 g |
| | 65-170 TC | [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 |
|------------------|------------|-----------|-----------|
| 35-90 TC | [45] | [40] | [34] |
| 33-9010 | 20.41 | 18.14 | 15.42 |
| 50-140 TC | [99] | [93] | [78] |
| 50-1401C | 44.91 | 42.18 | 35.38 |
| 4E 170TC | [128] | [139] | [149] |
| 65-170 TC | 58.06 | 63.05 | 67.59 |

Holding capacities shown "[lbs] kg"

Mounting Options ("M")



TC Oval Bellows Ordering Information

Metric

| Ø50x105mm | VC- 35-90TC -(M)-PU55 |
|-----------|--|
| | VC- 50-140TC -(m)-PU55 |
| | VC- 65-170TC -(<mark>m</mark>)-PU55 |



Vacuum Products | Dimensions | Ordering Information

FF Polyurethane Oval Flat



Specifications:

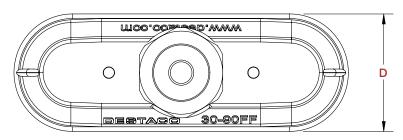
Temperature:

(dark green).

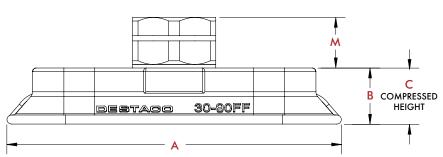
10°-49° C [50°-120° F] Materials: Dual Durometer Polyurethane - Outside 55 durometer (red), internal treads 60 durometer

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 | М | |
|---------|----------------|--|
| U38/G38 | [0.57] 14.5 | |
| P38 | [0.85] 21.5 | |
| c | [0.73] 18.5 | |

Dimensions shown "[inch] mm"

FF Dimensions

| Model | Α | В | С | D | Weight |
|------------------|---------------|----------------|----------------|--------------|-------------------|
| 20-80 FF | [3.31] 84 | [0.61] 15.5 | [0.49] 12.5 | [0.94] 24 | [0.85 oz] 24 g |
| 30-90 FF | [3.66] 93 | [0.61] 15.5 | [0.45] 11.5 | [1.30] 33 | [1.05 oz] 30 g |
| 40-110 FF | [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 |
|-----------------|------------|---------------|-----------|
| 20-80 FF | [25] | [25] | [11] |
| | 11.34 | 11.34 | 4.99 |
| 30-90 FF | [35] | [36] 16.33 | [17] |
| 40-110FF | [55] | [52] | [18] |
| | 24.95 | 23.59 | 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")









3/8 NPT

Nylon G3/8

1.25 in. Square



DC Destacker Stress Relieving

Vacuum Products | Dimensions | Ordering Information

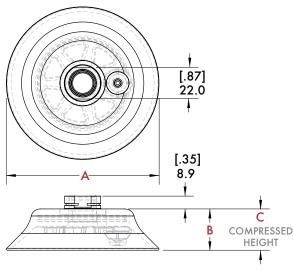
Specifications:

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:

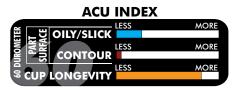
Oil, water, grease, hydraulic fluid, alcohol











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

DC Dimensions

| Model | Α | В | С | 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] |

mm [INCH]

THIRD ANGLE

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]"

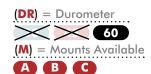
DC Destacker Stress Relieving Ordering Information

(DR) = Durometer

60
(M) = Mounts Available

K B C D E1

| Metric | |
|---------|-------------------|
| Ø75 mm | . CPI-75DC-(M)-60 |
| Ø100 mm | CPI-100DC-(M)-60 |





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



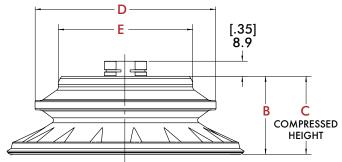


TC/HT Dimensions

| Model | Α | В | С | D | E | Weight |
|-----------------|--------|--------|-------|--------|--------|----------|
| [20 TC] | [2.06] | [1.02] | [.68] | [1.64] | [1.25] | [1.3 oz] |
| 50 HT | 52.3 | 25.7 | 17.3 | 41.7 | 31.8 | 37 g |
| [35 TC] | [3.50] | [1.71] | [.82] | [2.50] | [1.65] | [2.6 oz] |
| 90 HT | 88.9 | 43.44 | 20.8 | 63.5 | 41.9 | 73 g |
| [45 TC] | [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 |
| [55 TC] | [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]"

[.87]22.0



TC/HT Holding Capacity

| A | Appl. | Hor. Dry | Hor. Wet | Ver. Lift |
|----|-------|----------|----------|-----------|
| [2 | 20TC] | [8.5 lb] | [7 lb] | [22.7 lb] |
| 5 | OHT | 3.9 kg | 3.2 kg | 10.3 kg |
| [3 | 35TC] | [30 lb] | [20 lb] | [66 lb] |
| 9 | POHT | 13.6 kg | 9.1 kg | 29.9 kg |
| [4 | 15TC] | [45 lb] | [30 lb] | [103 lb] |
| 1 | 15HT | 20.4 kg | 13.6 kg | 46.7 kg |
| [5 | 55TC] | [100 lb] | [45 lb] | [164 lb] |
| 1. | 40HT | 45.5 kg | 20.4 kg | 74.4 kg |

Holding capacities shown "N [lbf]"

Ø50mm CPI-50HT-(M)-(DR)

Ø90mm CPI-90HT-(M)-(DR)

Ø115mm CPI-115HT-(M)-(DR) Ø140mm CPI-140HT-(M)-(DR)

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



(DR) = Durometer 45 60





A B C

(M) = Mounts Available

Vacuum Products | Dimensions | Technical Specifications

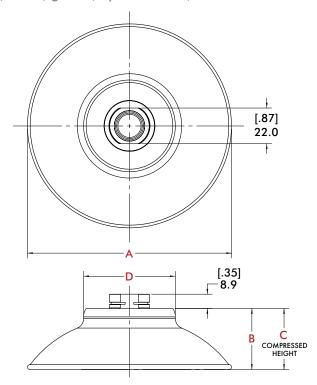
Specifications:

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

| # LUOILY | /SLICK LESS | MORE |
|------------|-------------|------|
| PAR | NTOUR LESS | MORE |
| S CUP LONG | LESS | MORE |
| | | |

| # P | OILY/SLICK LESS | MORE |
|---------------------------|-----------------|------|
| ROMETER PART URFACE | LESS | MORE |
| | CONTOUR | MORE |
| ⊕ CUP | LONGEVITY | |

| Ĕ L U OILY/SLICK LESS | MORE |
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| CONTOUR | MORE |
| S CUP LONGEVITY | MORE |
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FF/PF Round Flatfoot

| 11/11 100 | Jila i lallo | 01 | | | | | | | |
|------------------------------|--------------|--------|--------|--------|----------|--|--|--|--|
| Model | Α | В | С | 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



Vacuum Products | Dimensions | Ordering Information

AC/BT Round Belcup



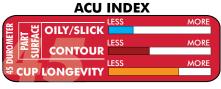
Specifications:

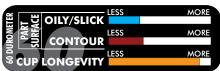
Temperature:

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





[.87]22.0 mm [INCH] THIRD ANGLE PROJECTION [.35]

AC/BT Round Belcup

| Model | Α | В | С | D | Е | 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] |

COMPRESSED HEIGHT

Holding capacities shown "N [lbf]"

AC/BT Round Belcup Vacuum Cups Ordering Information

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)

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 A B C M10

Metric

(DR) = Durometer

45 60

Vacuum Products | Dimensions | Ordering Information

DD/DM Round Deepdish

Specifications:

Temperature:

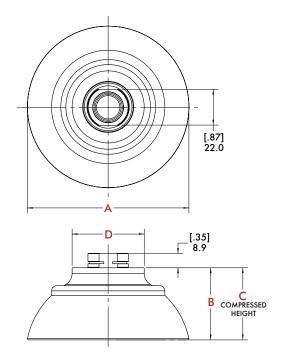
15-59 Sec: -20° to 250° F [-29° to 121° C] 1-5 min: 15° to 180° F [-9° to 82° C]

Material: Nitrile Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol







ACU INDEX BESS MORE CONTOUR CONTOUR LESS MORE LESS MORE LESS MORE LESS MORE

| ≝ . ⊎oil | Y/SLICK DRY | OILY |
|-----------|-------------|------|
| REA ME | DNTOUR LESS | MORE |
| S CNB FOV | LESS | MORE |
| A COL FOL | TOLVIII | |

DD/DM Round Deepdish

| Model | Α | В | С | 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 **©2.00**" CPI-20DD-(M)-(DR)

Ø3.00" CPI-30DD-(M)-(DR) Ø4.00" CPI-40DD-(M)-(DR)

(DR) = Durometer



(M) = Mounts Available

K B C

| A A - I | |
|---|-----|
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| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | |
| ~ | |

(DR) = Durometer



(M) = Mounts Available





Vacuum Products | Dimensions | Ordering Information

FF/PF Oval FlatFoot



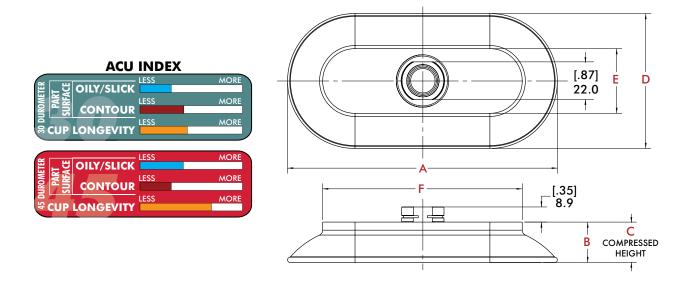
Specifications:

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

FF/PF Vacuum Cup Capacities:

| Model | Α | В | С | D | E | F | Weight | Appl. | Hor. Dry | Hor. Wet | Ver. Lift |
|--|--------|--------|-------|--------|--------|--------|----------|----------|----------|----------|-----------|
| 40-75PF | 76.2 | 22.3 | 16.2 | 38.1 | 22.2 | 60.3 | 35 g | 40-75PF | 6.8 kg | 2.3 kg | 8.2 kg |
| [153FF] | [3.00] | [.88] | [.64] | [1.50] | [.88] | [2.37] | [1.2 oz] | [153FF] | [15 lb] | [5 lb] | [18 lb] |
| 50-100PF | 101.6 | 23.8 | 16.2 | 50.8 | 22.2 | 73.0 | 119 g | 50-100PF | 8.2 kg | 2.7 kg | 19.1 kg |
| [24FF] | [4.00] | [.94] | [.64] | [2.00] | [.88] | [2.88] | [4.2 oz] | [24FF] | [18 lb] | [6 lb] | [42 lb] |
| 60-125PF | 127.0 | 22.3 | 16.2 | 63.5 | 22.2 | 85.7 | 147 g | 60-125PF | 20.4 | 3.2 kg | 25 kg |
| [255FF] | [5.00] | [.88] | [.64] | [2.50] | [.88] | [3.38] | [5.2 oz] | [255FF] | [45 lb] | [7 lb] | [55 lb] |
| 75-150PF | 152.9 | 25.4 | 18.3 | 76.2 | 38.1 | 114.3 | 201 g | 75-150PF | 24.9 | 4.1 kg | 32.7 kg |
| [36FF] | [6.00] | [1.00] | [.72] | [3.00] | [1.50] | [4.50] | [7.1 oz] | [36FF] | [55 lb] | [9 lb] | [72 lb] |
| Dimensions shown "mm [inch]" Holding capacities shown "N [lbf]" | | | | | | | | | _ | | |

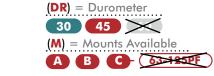
FF/PF Oval FlatFoot Vacuum Cups Ordering Information

40 x 75mm CPI-40-75PF-(M)-(DR)

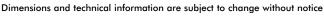
50 x 100mm CPI-50-100PF-(M)-(DR)

60 x 125mm CPI-60-125PF-(M)-(DR)

75 x 150mm CPI-75-150PF-(M)-(DR)



Metric



Vacuum Products | Dimensions | Ordering Information

DD/DM Oval Deepdish

Specifications:

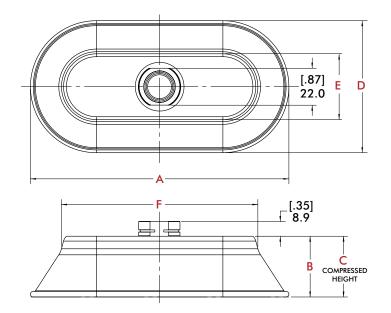
Temperature:

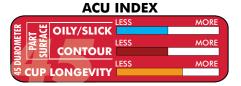
15-59 Sec: -20° to 250° F [-29° to 121° C] 1-5 min: 15° to 180° F [-9° to 82° C]

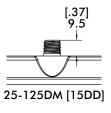
Material: Nitrile Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol









DD/DM Oval Deepdish

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

Dimensions shown "mm [inch]"

DD/DM Vacuum Cup Capacities:

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

(DR) = Durometer **45 45** (M) = Mounts Available K-()>50 B C U18-(3>50

| Merric | |
|---------------------------|-----------------------|
| 25 x 125mm | CPI-25-125DM-(M)-(45) |
| 75 x 150 mm | CPI-75-150DM-(M)-(45) |



Vacuum Products | Dimensions | Ordering Information

MFF Round Flat



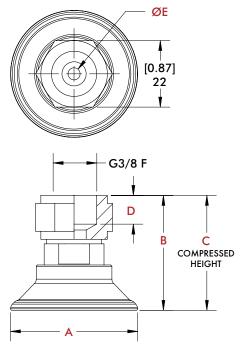
Specifications:

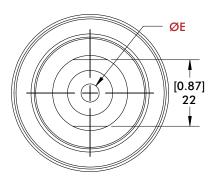
Temperature:

Resistant up to 250° C [482° F] (sheet metal temperature) Material: Silicone free HT2

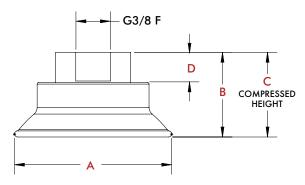
Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol









MFF Dimensions

| Model | Α | В | С | D | Е | Weight |
|---------------|--------|--------|--------|--------|--------|-----------|
| 30MFF | [1.34] | [1.42] | [1.30] | [0.35] | [0.16] | [1.64 oz] |
| | 34 | 36 | 33 | 9 | 4 | 46.5 g |
| 40 MFF | [1.81] | [1.50] | [1.34] | [0.35] | [0.16] | [1.77 oz] |
| | 46 | 38 | 34 | 9 | 4 | 50.1 g |
| 50 MFF | [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 |

MFF Holding Capacity @ -0.6 bar vacuum

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

Holding capacities shown "N [lbf]"

Dimensions shown "mm [inch]"

MFF Round Flat Ordering Information

| Metric | |
|---------------|-------------------------|
| Ø30mm | CPI-30MFF-B-HT |
| Ø40mm | CPI- 40MFF -B-HT |
| Ø 50mm | CPI- 50MFF -B-HT |
| Ø60mm | CPI-60MFF-R-HT |



Vacuum Products | Dimensions | Ordering Information

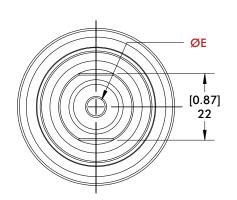
Specifications:

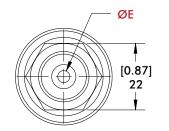
Temperature:

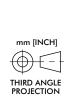
Resistant up to 250° C [482° F] (sheet metal temperature) Material: Silicone free HT2

Chemical Resistance:

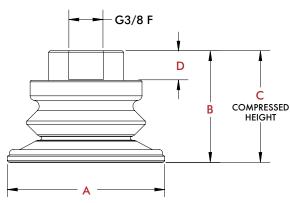
Oil, water, grease, hydraulic fluid, alcohol

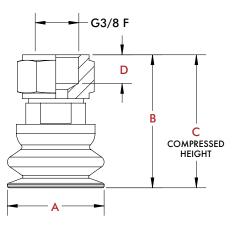






MTC Round Bellows





MTC Dimensions

Dimensions shown "mm [inch]"

| MIC DIIII | C11310113 | _ | _ | | | |
|---------------|--------------|----------------|----------------|---------------|---------------|---------------------|
| Model | Α | В | С | D | E | Weight |
| 22 MTC | [0.87] 22 | [1.61] 41 | [1.39] 35.2 | [0.35] 9.5 | [0.14] 3.5 | [1.54 oz] 43.6 g |
| 30 MTC | [1.34] 34 | [1.73] 44 | [1.38] 35 | [0.35] 9 | [0.16] 4 | [1.74 oz] 49.3 g |
| 40 MTC | [1.77] 45 | [1.73] 44 | [1.34] 34 | [0.35] 9 | [0.16] 4 | [1.79 oz] 50.8 g |
| 50 MTC | [2.20] 56 | [1.46] 37 | [1.00] 25.5 | [0.59] 15 | [0.24] 6 | [1.40 oz] 39.6 g |
| 60 MTC | [2.64] 67 | [1.63] 41.5 | [1.06] 27 | [0.59] 15 | [0.24] 6 | [1.83 oz] 51.8 g |

MTC Holding Capacity @ -0.6 bar vacuum

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

Holding capacities shown "N [lbf]"

MTC Round Bellows Ordering Information

Metric

| Mellic | |
|--------|----------------|
| Ø22mm | CPI-22MTC-B-HT |
| Ø30mm | CPI-30MTC-B-HT |
| Ø40mm | CPI-40MTC-B-HT |
| Ø50mm | CPI-50MTC-B-HT |
| Ø60mm | CPI-60MTC-R-HT |

Vacuum Products | Dimensions | Ordering Information

MFF Oval Flat



Specifications:

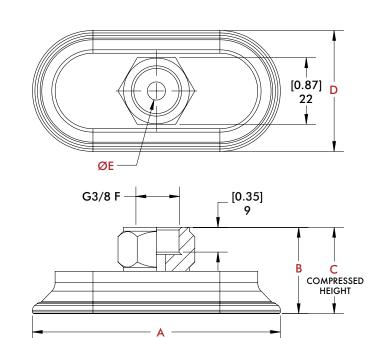
Temperature:

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

Material: Silicone free HT2

Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol





mm [INCH]

| WIT DIFFICUSIONS | | | | | | |
|------------------|---------------|--------------|--------------|--------------|-------------|----------------------|
| Model | Α | В | С | D | E | Weight |
| 6023 MFF | [2.52] 64 | [1.02] 26 | [0.91] 23 | [0.98] 25 | [0.24] | [1.57 oz] 44.6 g |
| 9030 MFF | [3.70] 94 | [1.06] 27 | [0.94] 24 | [1.34] 34 | [0.24] 6 | [2.42 oz] 68.5 g |
| 8040 MFF | [3.35] 85 | [1.10] 28 | [0.94] 24 | [1.69] 43 | [0.24] 6 | [2.30 oz] 65.1 g |
| 10050MFF | [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

| MFF Holding Capacity @ -0.6 bar vacuum | | | | | | | |
|--|------------|-----------|-----------|--|--|--|--|
| Appl. | Vert. Lift | Horz. Dry | Horz. Wet | | | | |
| 6023 MFF | [12.8] | [8.3] | [7.4] | | | | |
| | 57 | 37 | 33 | | | | |
| 9030 MFF | [27.4] | [21.6] | [14.4] | | | | |
| | 122 | 96 | 64 | | | | |
| 8040 MFF | [31.5] | [24.7] | [22.5] | | | | |
| | 140 | 110 | 100 | | | | |
| 10050MFF | [48.8] | [40.7] | [27.2] | | | | |
| | 217 | 181 | 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 |



Vacuum Products | Dimensions | Ordering Information

MAC Oval Bellows

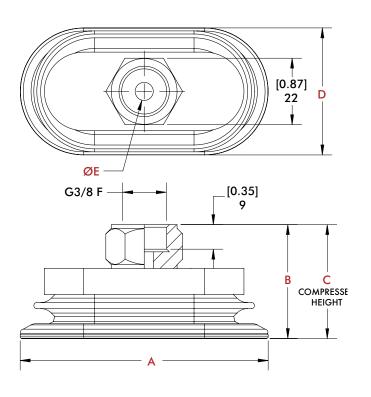
Specifications:

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

| MAC DIFFER | 310113 | | | | | |
|-----------------|--------------|----------------|----------------|--------------|-------------|---------------------|
| Model | Α | В | С | D | Ε | Weight |
| 6030 MAC | | | | | | [2.32 oz] 65.9 g |
| 8040 MAC | [3.27] 83 | [1.48] 37.7 | [1.13] 28.7 | [1.69] 43 | [0.24] 6 | [2.78 oz] 78.7 g |

Dimensions shown "mm [inch]"

MAC Holding Capacity @ -0.6 bar vacuum

| Model | Vert. Lift | Horz. Dry | Horz. Wet |
|-----------------|------------|-----------|-----------|
| 6030 MAC | [8.5] | [12.8] | [11.7] |
| | 38 | 57 | 52 |
| 8040 MAC | [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



EE-VAC

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:

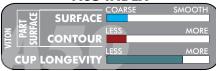
Viton: -40° to 450° F [-40° to 232° C]

Silicone: -100° to 400° F

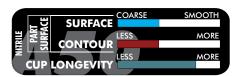
[-73° to 204.4° C] Nitrile: -40° to 275° F

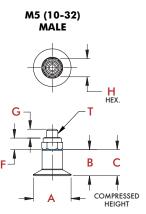
[-40° to 135° C] Durometer: A50

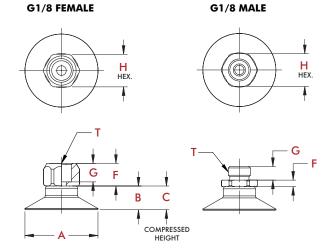
ACU INDEX



| | COARSE | SMOOTH |
|-------|-----------|--------|
| | SURFACE | |
| S AF | LESS | MORE |
| | CONTOUR | |
| S TIP | LESS | MORE |
| CUP | LONGEVITY | |







(DR) = Durometer/Material



Silicon Extremely hot or cold environments

Nitrile General Purpose



VC-F Micro Fitting Threads

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

VC-F Dimensions

| Model | Α | В | С | CUP WT | LOAD |
|----------------|--------|-------|-------|----------|-----------|
| VC-F15 | 16.5 | 11.4 | 10.4 | 3.4 g | .85 kg |
| VC-F13 | [.65] | [.45] | [.41] | [.11 oz] | [1.88 lb] |
| VC- F20 | 22.1 | 8.6 | 7.1 | 7.8 g | 1.47 kg |
| VC-F20 | [.87] | [.34] | [.28] | [.25 oz] | [3.25 lb] |
| VC- F30 | 32.0 | 10.4 | 8.1 | 6.2 g | 2.55 kg |
| | [1.26] | [.41] | [.32] | [.20 oz] | [5.63 lb] |
| VC- F40 | 42.2 | 14.0 | 11.4 | 11.8 g | 4.08 kg |
| VC-F40 | [1.66] | [.55] | [.45] | [.38 oz] | [9.00 lb] |
| VC- F50 | 53.1 | 17.5 | 14.5 | 19.6 g | 7.54 kg |
| | [2.08] | [.69] | [.57] | [.63 oz] | [16.6 lb] |

| VC-F Round Flag Orde | ering 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 |
| VSN | 10M 18M 18F |
| Not Available in Ø15 and Ø20mm | Only Available in Ø15 and Ø20mm |



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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

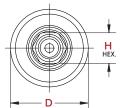
[-40° to 135° C] Durometer: A50

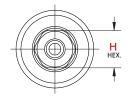


SURFACE

UP LONGEVITY

G1/8 FEMALE

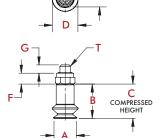




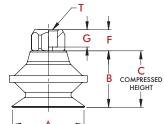
G1/8 MALE

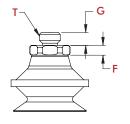
CUP LONGEVITY LESS MORE SURFACE COARSE SMOOTH

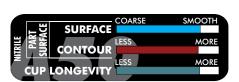
ACU INDEX



M5 (10-32) MALE







VC-B Micro Fitting Threads

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

(DR) = Durometer/Material







VC-B Dimensions

| Model | Α | В | С | D | Cup Wt | Load |
|----------------|--------|--------|-------|--------|----------|-----------|
| VC- B05 | 5.6 | 9.1 | 7.6 | 6.1 | 5.8 g | .04 kg |
| VC-В03 | [.22] | [.36] | [.30] | [.24] | [.09 oz] | [.10 lb] |
| VC- B10 | 10.9 | 16.0 | 11.4 | 12.2 | 3.4 g | .39 kg |
| VC-BIU | [.43] | [.63] | [.45] | [.48] | [.11 oz] | [.87 lb] |
| VC D15 | 16.0 | 19.8 | 13.2 | 17.5 | 3.7 g | .57 kg |
| VC- B15 | [.63] | [.78] | [.52] | [.69] | [.12 oz] | [1.25 lb] |
| VC- B20 | 22.4 | 17.5 | 7.6 | 23.9 | 6.2 g | 1.02 kg |
| VC-B20 | [.88] | [.69] | [.30] | [.94] | [.20 oz] | [2.25 lb] |
| VC- B30 | 34.0 | 26.4 | 11.4 | 36.3 | 11.5 g | .2.21 kg |
| VC-B30 | [1.34] | [1.04] | [.45] | [1.43] | [.37 oz] | [4.88 lb] |
| VC- B40 | 42.9 | 27.4 | 12.4 | 46.2 | 18.7 g | 3.97 kg |
| VC- B40 | [1.69] | [1.08] | [.49] | [1.82] | [.60 oz] | [8.75 lb] |
| VC B50 | 52.8 | 34.5 | 14.5 | 59.4 | 30.5 g | 6.63 kg |
| VC- B50 | [2.08] | [1.36] | [.57] | [2.34] | [.98 oz] | [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

EE-VAC



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]

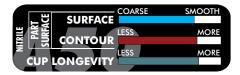
Silicone: -100° to 400° F

[-73° to 204.4° C] Nitrile: -40° to 275° F [-40° to 135° C]

Durometer: A50

ACU INDEX





(DR) = Durometer/Material

5

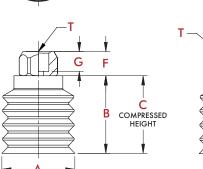
Silicon Extremely hot or cold environments

N

Nitrile General Purpose

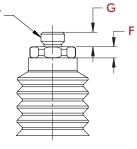
H HEX.

G1/8 FEMALE



G1/8 MALE





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) | 2.8 | 5.8 | 14.2 |
| (MALE) | [.11] | [.23] | [.56] |
| 18F (G1/8) | 9.9 | 6.4 | 14.2 |
| (FEMALE) | [.39] | [.25] | [.56] |

VC-BM Dimensions

| Model | Α | В | С | Cup Wt | Load |
|-----------------|--------|--------|-------|-----------|-----------|
| VC-BM 20 | 20.1 | 21.9 | 8.9 | 5.3 g | .68 kg |
| VC-D/\(20 | [.79] | [.86] | [.35] | [17 oz] | [1.50 lb] |
| VC-BM 30 | 30.0 | 30.7 | 10.7 | 10.3 g | 1.64 kg |
| VC-D/V(30 | [1.18] | [1.21] | [.42] | [.33 oz] | [3.63 lb] |
| VC-BM 40 | 39.8 | 40.9 | 12.9 | 19.6 g | 2.21 kg |
| | [1.57] | [1.61] | [.51] | [.63 oz] | [4.88 lb] |
| VC-BM 50 | 50.0 | 51.1 | 23.1 | 32.7 g | 4.37 kg |
| | [1.97] | [2.01] | [.91] | [1.05 oz] | [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
10M 18M 18F

Only Available in Ø20mm

Dimensions and technical information are subject to change without notice