## **VACUUM SOLUTIONS**

#### **Table of Contents**

	Vaccum Cups	3
	Magnets	28
	Vacuum Generation	31
	Spring Cup Mounts	37
	Double Blank Detector Mounts	43
i	Manifolds	49



## **VACUUM PRODUCTS**

DESTACO vacuum cups can be ordered in different types, sizes, materials and durometers to be used in a broad array of applications, ranging from sheet metal handling to plastics to glass.



DESTACO also provides vacuum cups for extreme temperatures and hot-forming applications

EcoCup™ is the world's first electric vacuum cup, creating vacuum without air. The EcoCup™ is ideal for pick-and-place applications of flat, rigid, non-porous parts, including plastic, glass, and other consumer goods with smooth, flat surfaces.





ARV® The original, patented Auto-Release Venturi offers users the fastest vacuum and blow-off in the industry with single line operation, integrated blow-off and standard silencer.

**Destacker Double Blank Detectors** (DBD) allows compliance to blanks within ±15° without needing to adjust the robot, automation or tooling.







## **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
- 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

Nitrile Vacuum Cups APPLICATION CONTOURS Covered under one or more U.S./ International **Patents** (N/A)**Destacker** Vacuum Cups Round Traction Vacuum Cups Round Flatfoot Vacuum Cups Round Belcup Vacuum Cups















































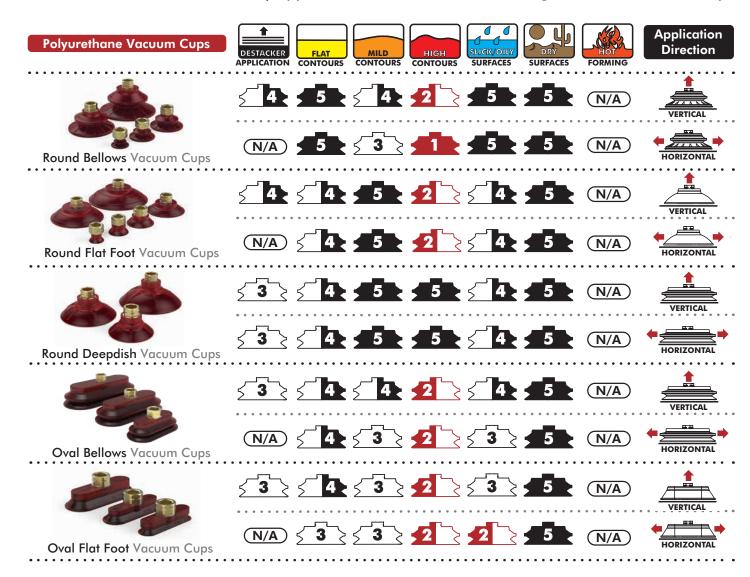
N/A Not Advised for the application

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



Worst 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)?

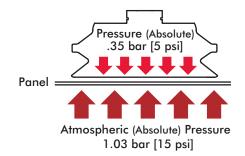


A set of vacuum cups of the same size and type, each having different durometers may handle oily/slick contoured parts differently. However, cup longevity of each may be affected as a result of durometer, application and usage. The ACU Index is a reference shown with each type of vacuum cup and is used 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.
- Find the appropriate cup size lifting capacity in the chart, found on the catalog page featuring the cup family type chosen.
- 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 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)

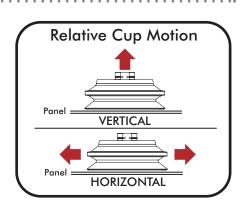
Fast moving robot: (+1) Slick or Oily Panel: (+1) Flexing Panel: (+2) Small cups: (+1)

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 **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**

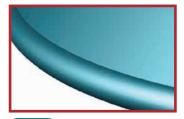
#### Vacuum Products | Durometer and Mounting Options

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

M10



1/8" NPT MALE



**QUICK DISCONNECT** 

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









M—  $\longrightarrow$  = Mount <u>not</u> available in this cup size.



**M8 FEMALE** 



**SMOOTH BORE** 

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



10-32 MALE



1/8" G FEMALE



1/8" G MALE

#### M10 MALE Polyurethane Mounting Options ("M")



3/8 NPT



G3/8

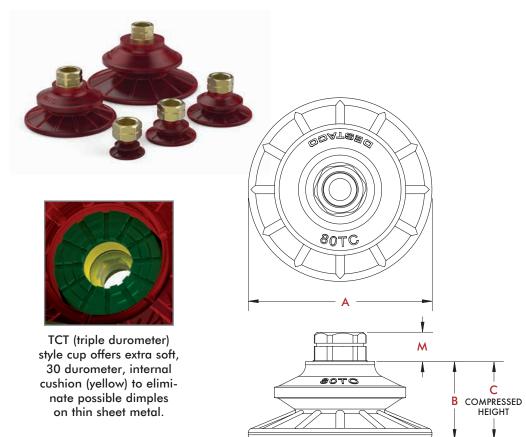


1.25 in. Square



#### 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
С	[0.73] 18.5

Dimensions shown "[inch] mm"

#### TC Dimensions

Model	Α	В	С	Weight
<b>30</b> TC	[1.18]	[0.57]	[0.37]	[1.00 oz]
	30	14.5	9.5	28 g
<b>40</b> TC	[1.77]	[0.69]	[0.41]	[1.20 oz]
	45	17.5	10.5	34 g
<b>60</b> TC	[2.40]	[0.85]	[0.45]	[2.15 oz]
	61	21.5	11.5	61 g
<b>80</b> TC/	[3.35]	[1.40]	[0.85]	[4.97 oz]
<b>80</b> 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	Horz. Wet
<b>30</b> TC	[6] 2.72	[3] 1.36	[1.75] 0.79
<b>40</b> TC	[18] 8.16	[13] 5.90	[10] 4.54
<b>60</b> TC	[25] 11.34	[27] 12.25	[20] 9.07
80TC/	[53]	[54]	[36]
80TCT	24.04	24.49	16.33
110TC/	[85]	[78]	[57]
110TCT	38.56	35.38	25.86

Holding capacities shown "[lbs] kg"

#### TC Round Bellows Ordering Informa-

tion Metric **Ø30mm**...... VC-**30TC**-(**M**)-PU55 **Ø61mm**...... VC-**60TC**-(M)-PU55 **Ø85mm**...... VC-**80TC**-(M)-PU55 Ø115mm..... VC-110TC-(M)-PU55

Ø115mm..... VC-110TCT-(M)-PU55

#### Mounting Options ("M")







G3/8 Nylon G3/8

1.25 in. Square



Vacuum Products | Dimensions | Ordering Information

#### **Specifications:**

#### Temperature:

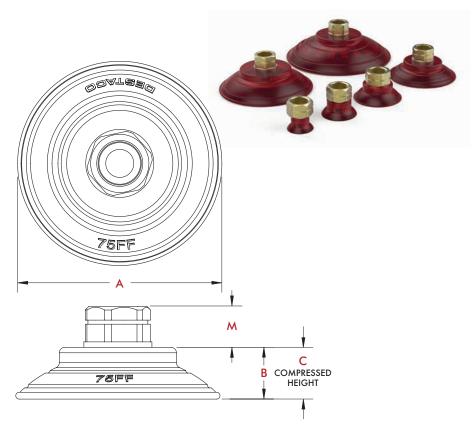
10°-49° C [50°-120° F] Materials: Dual Durometer Polyurethane - Outside 55 durometer (red), internal treads 60 durometer (dark green).



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

Model	Α	В	С	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

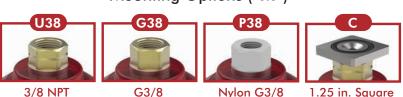
Dimensions shown "[inch] mm"

FF Holding Capacity @ -0.6 bar vacuum

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

Holding capacities shown "[lbs] kg"

#### Mounting Options ("M")

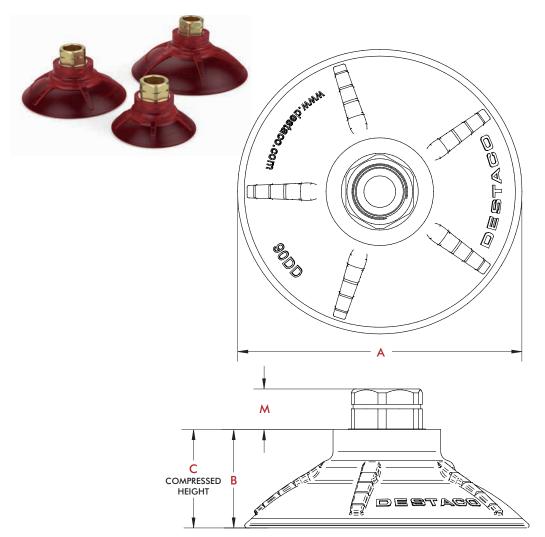


#### **FF** Round Flat Ordering Information

Metric	
Ø25mm	VC- <b>25FF</b> -(M)-PU55
Ø35mm	
Ø50mm	VC- <b>50FF</b> -(M)-PU55
Ø75mm	VC- <b>75FF</b> -(M)-PU55
Ø100mm	
Ø125mm	VC-1 <b>25FF</b> -(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
<b>65</b> DD	[2.66]	[1.11]	[0.67]	[2.08 oz]	[0.9 oz]
	67.5	28.2	17.0	59 g	25 g
<b>90</b> 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
<b>65</b> DD	[42.8]	[44.1]	[30.2]
	19.4	20.0	13.7
<b>90</b> DD	[69.7]	[80.5]	[55.8]
	31.6	36.5	25.3
11 <b>0</b> DD	[97.4]	[129.0]	[80.5]
	44.2	58.5	36.5

Holding capacities shown "[lbs] kg"

#### **DD** Round Deepdish Ordering Information

Metric

#### Mounting Options ("M")







3/8 NPT

G3/8

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:**

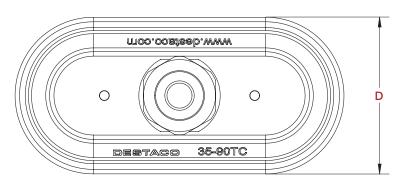
#### Temperature:

10°-49° C [50°-120° F]

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

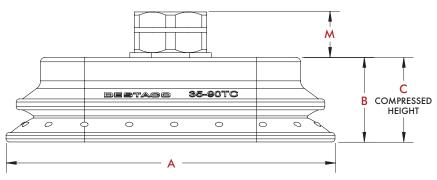






Mount	М
U38/G38	[0.57] 14.5
P38	[0.85] 21.5
С	[0.73] 18.5

Dimensions shown "[inch] mm"



#### TC Dimensions

Model	Α	В	С	D	Weight
35-90TC	[4.13] 105	[1.08] 27.5	[0.65] 16.5	[1.97] 50	[3.42 oz] 97 g
<b>50-140</b> TC	[6.18] 157	[1.40] 35.5	[0.85] 21.5	[2.64] 67	[6.70 oz] 190 g
<b>65-170</b> 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
35-90TC	[45]	[40]	[34]
03=701C	20.41	18.14	15.42
50-140TC	[99]	[93]	[78]
50-1401C	44.91	42.18	35.38
65-170TC	[128]	[139]	[149]
65-1701C	58.06	63.05	67.59

Holding capacities shown "[lbs] kg"

#### Mounting Options ("M")



TC Oval Bellows Ordering Informa-



#### Vacuum Products | Dimensions | Ordering Information

#### FF Polyurethane Oval Flat



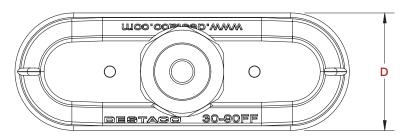
#### **Specifications:**

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

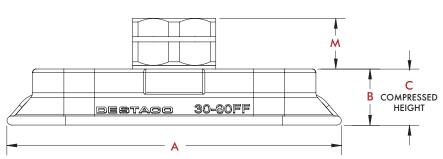
treads 60 durometer (dark green).

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

Dimensions shown "[inch] mm"

#### **FF** Dimensions

Model	Α	В	С	D	Weight
20-80FF	[3.31]	[0.61]	[0.49]	[0.94]	[0.85 oz]
	84	15.5	12.5	24	24 g
30-90FF	[3.66]	[0.61]	[0.45]	[1.30]	[1.05 oz]
	93	15.5	11.5	33	30 g
40-110FF	[4.45]	[0.85]	[0.65]	[1.69]	[1.94 oz]
	113	21.5	16.5	43	55 g

Dimensions shown "[inch] mm"

FF Holding Capacity @ -0.6 bar vacuum

Appl.	Vert. Lift	Horz. Dry	Horz. Wet
20-80FF	[25]	[25]	[11]
	11.34	11.34	4.99
30-90FF	[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

G3/8

Nylon G3/8

1.25 in. Square



EE-VAC | 13

#### Vacuum Products | Dimensions | Ordering Information

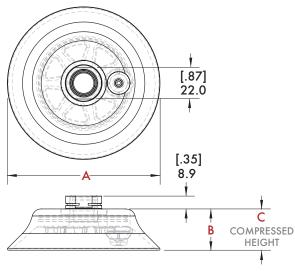
#### **Specifications:**

#### 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



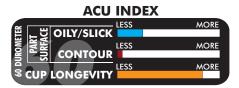




#### **DC** Destacker Stress Relieving







Covered under one or more U.S./International Patents

#### **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]

Dimensions shown "mm [inch]"

Capacity	C	Capa	city
----------	---	------	------

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

Holding capacities shown "N [lbf]"

Ø75 mm..... CPI-75DC-(M)-60

Ø100 mm...... CPI-100DC-(M)-60

#### **DC** Destacker Stress Relieving Ordering Information

Imperial Ø3.00"..... CPI-30DC-(M)-60 

(DR) = Durometer (M) = Mounts Available K B C D E



Metric







#### Vacuum Products | Dimensions | Ordering Information

#### **TC/HT** Round Traction



#### **Specifications:**

Temperature:

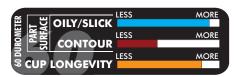
15-59 Sec: -29° to 121° C [-20° to 250° F] 1-5 min: -9° to 82° C [15° to 180° F]

Material: Nitrile **Chemical Resistance:** 

Oil, water, grease, hydraulic fluid, alcohol

#### **ACU INDEX**



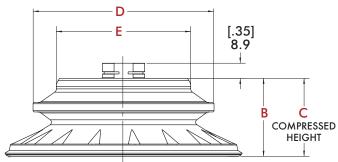


#### **TC/HT** Dimensions

Model	Α	В	С	D	E	Weight
[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]"

[.87]22.0



TC/HT Holding Capacity

	9	/	
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]"

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)

-(DR) 

(M) = Mounts Available



(DR) = Durometer





A B C

(M) = Mounts Available

**FF/PF** Round Flatfoot

#### Vacuum Products | Dimensions | Technical Specifications

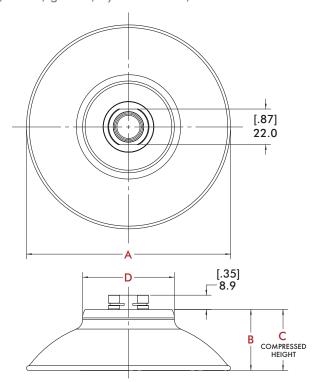
#### **Specifications:**

#### 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



#### **ACU INDEX**

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ROME	CONTOUR	LESS	MORE
8 CI	IP LONGEVITY	LESS	MORE
00	I LONGEVIII		

ESS LESS	MORE
CONTOUR LESS	MORE
LESS	MORE
₩ CUP LONGEVITY	

Ĕ LU OILY/SLICK	LESS	MORE
SCIED TONGENTY	LESS	MORE
S CUP LONGEVITY	LESS	MORE
GOI LONGEVIII		

FF/PF Round Flatfoot

,	114 1 14110				
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]

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

Dimensions shown "mm [inch]"



Metric

Ø50mm	CPI-50PF-(M)-(DR)
	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



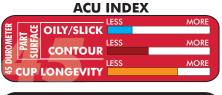
#### **Specifications:**

#### Temperature:

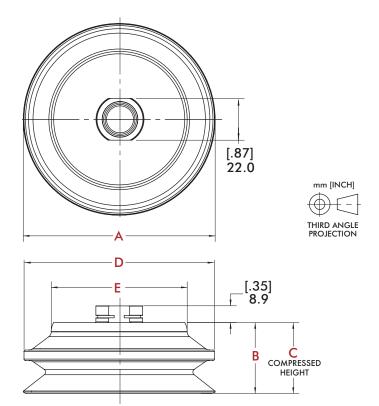
15-59 Sec: -20° to 250° F [-29° to 121° C] 1-5 min: 15° to 180° F [-9° to 82° C]

Material: Nitrile Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol







AC/BT Round Belcup

Model	Α	В	С	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

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













(DR) = Durometer

45 60

Metric







#### Vacuum Products | Dimensions | Ordering Information

#### **DD/DM** Round Deepdish

#### **Specifications:**

#### Temperature:

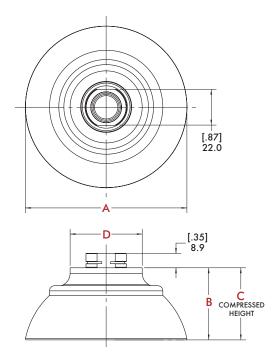
15-59 Sec: -20° to 250° F [-29° to 121° C] 1-5 min: 15° to 180° F [-9° to 82° C]

Material: Nitrile **Chemical Resistance:** 

Oil, water, grease, hydraulic fluid, alcohol







## **ACU INDEX**

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2 CNB FONG	LESS	MORE
2 601 1011		

#### **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** Ø2.00" ..... CPI-20DD-(M)-(DR) Ø3.00" ..... CPI-30DD-(M)-(DR) Ø4.00" ..... CPI-40DD-(M)-(DR)

(DR) = Durometer

30 45 (M) = Mounts Available

B (C)

Ø100mm...... CPI-100DM-(M)-(DR)

(DR) = Durometer

30 45 (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:

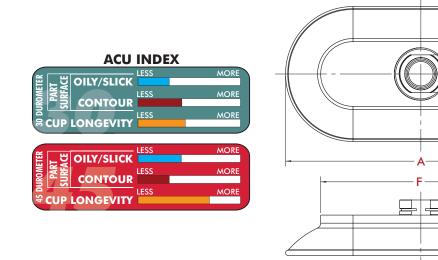
Oil, water, grease, hydraulic fluid, alcohol

[.87]

22.0

[.35] 8.9 D

C COMPRESSED HEIGHT



#### FF/PF Oval Flatfoot

#### FF/PF Vacuum Cup Capacities:

,											
Model	Α	В	С	D	Е	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 show	Dimensions shown "mm [inch]"  Holding capacities shown "N [lbf]"										

Metric

(DR) = Durometer

30 45

(M) = Mounts Available

A B C 6331250F

#### 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)

#### 



#### Vacuum Products | Dimensions | Ordering Information

**DD/DM** Oval Deepdish

#### **Specifications:**

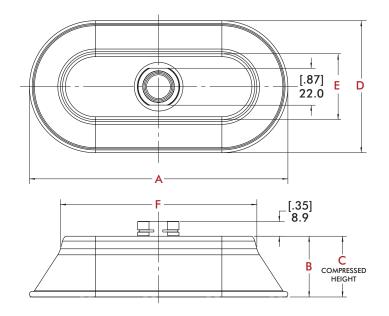
#### Temperature:

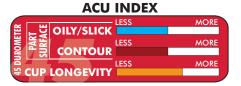
15-59 Sec: -20° to 250° F [-29° to 121° C] 1-5 min: 15° to 180° F [-9° to 82° C]

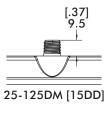
Material: Nitrile Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol









#### DD/DM Oval Deepdish

Model							Weight
25-125DM	128.7	17.1	8.7	27.0	12.9	114.5	35 g
[15DD]	[5.06]	[.67]	[.34]	[1.06]	[.51]	[4.51]	35 g [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) 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 45 (M) = Mounts Available K-()>(0) B C (U18-(3)\*(0)









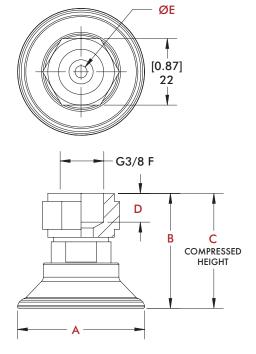


#### Vacuum Products | Dimensions | Ordering Information

#### MFF Round Flat







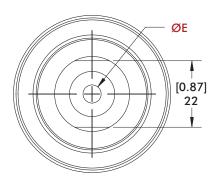
#### **Specifications:**

#### Temperature:

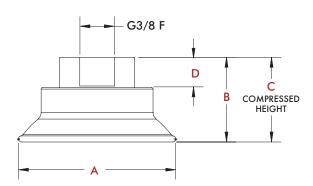
Resistant up to 250° C [482° F] (sheet metal temperature) Material: Silicone free HT2

**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
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

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_R_HT



Dimensions shown "mm [inch]"

**MTC** Round Bellows

#### Vacuum Products | Dimensions | Ordering Information

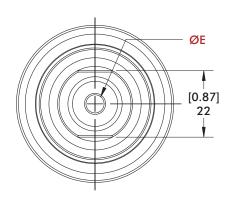
#### **Specifications:**

#### Temperature:

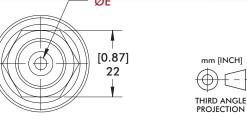
Resistant up to 250° C [482° F] (sheet metal temperature)
Material: Silicone free HT2

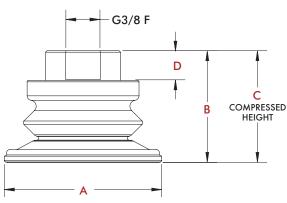
**Chemical Resistance:** 

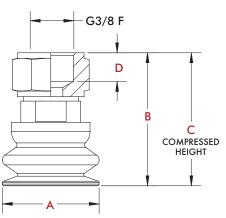
Oil, water, grease, hydraulic fluid, alcohol











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Dimensions shown "mm [inch]"

	C11310113					
Model	Α	В	С	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
<b>40</b> MTC	[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

MTC Holding Capacity @ -0.6 bar vacuum

MIC HOIG	ing Capacit	<u>y @ -U.6 ba</u>	r vacuum
Appl.	Vert. Lift	Horz. Dry	Horz. Wet
22MTC	[3.6]	[4.0]	[1.3]
	16	18	6
30MTC	[4.9]	[6.7]	[2.9]
	22	30	13
<b>40</b> MTC	[8.5]	[8.1]	[7.4]
	38	36	33
50MTC	[11.9]	[12.4]	[11.7]
	53	55	52
60MTC	[18.4]	[18.4]	[17.3]
	82	82	<i>77</i>

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

#### Vacuum Products | Dimensions | Ordering Information

#### **MFF** Oval Flat



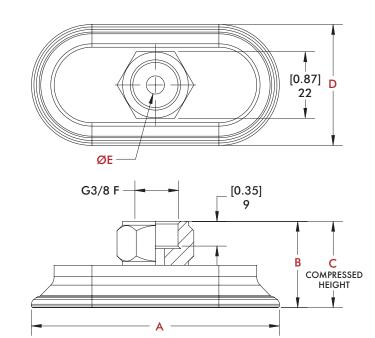
#### **Specifications:**

#### 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

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

MIFF Holding	Capacity @	<i>y</i> -0.6 bar va	acoom
Appl.	Vert. Lift	Horz. Dry	Horz. Wet
6023MFF	[12.8]	[8.3]	[7.4]
	57	37	33
9030MFF	[27.4]	[21.6]	[14.4]
	122	96	64
8040MFF	[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

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Ø60x23mm	CPI-6023MFF-B-HT
Ø <b>90x30</b> mm	CPI-9030MFF-B-HT
Ø <mark>80x40mm</mark>	CPI-8040MFF-B-HT
Ø100x50mm	CPI-10050MFF-B-HT



#### Vacuum Products | Dimensions | Ordering Information

**MAC** Oval Bellows

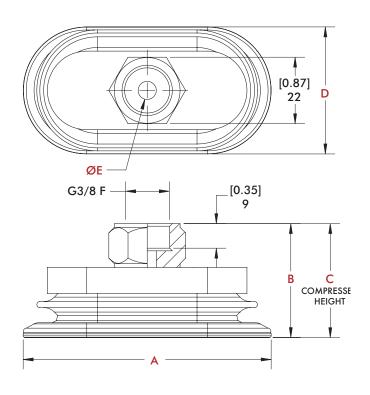
#### **Specifications:**

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

MACD	IIIICII	310113					
Mod	lel	Α	В	С	D	E	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]	[2.78 oz] 78.7 g

Dimensions shown "mm [inch]"

MAC Holding Capacity @ -0.6 bar vacuum

Model	Vert. Lift	Horz. Dry	Horz. Wet
<b>6030</b> MAC	[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



## **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:

G1/8 MALE

Viton:  $-40^{\circ}$  to  $450^{\circ}$  F [-40° to 232° C]

Silicone: -100° to 400° F

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

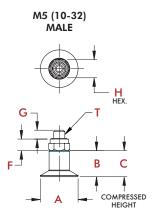
[-40° to 135° C] Durometer: A50

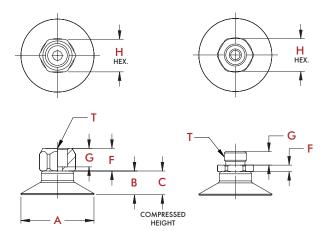
#### **ACU INDEX**











#### (DR) = Durometer/Material



Silicon Extremely hot or cold environments

Nitrile General Purpose



VC-F Micro Fitting Threads

G1/8 FEMALE

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-113	[.65]	[.45]	[.41]	[.11 oz]	[1.88 lb]
VC- <b>F20</b>	22.1	8.6	7.1	7.8 g	1.47 kg
VC-F20	[.87]	[.34]	[.28]	[.25 oz]	[3.25 lb]
VC- <b>F30</b>	32.0	10.4	8.1	6.2 g	2.55 kg
VC-F30	[1.26]	[.41]	[.32]	[.20 oz]	[5.63 lb]
VC- <b>F40</b>	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
VC-F30	[2.08]	[.69]	[.57]	[.63 oz]	[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

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:

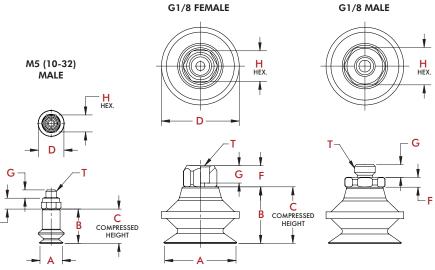
Viton: -40° to 450° F [-40° to 232° C]

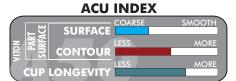
Silicone: -100° to 400° F

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

Durometer: A50













Nitrile General Purpose

**VC-B** Micro Fitting Threads

	Thread (T)	(F)	(G)	(H)
Ī	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-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-ВОЗ	[.22]	[.36]	[.30]	[.24]	[.09 oz]	[.10 lb]
VC-B10	10.9	16.0	11.4	12.2	3.4 g	.39 kg
VC-В10	[.43]	[.63]	[.45]	[.48]	[.11 oz]	[.87 lb]
VC B15	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 P20	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- <b>Б</b> 40	[1.69]	[1.08]	[.49]	[1.82]	[.60 oz]	[8.75 lb]
VC DEO	52.8	34.5	14.5	59.4	30.5 g	6.63 kg
VC- <b>B50</b>	[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



## **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

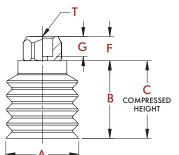
S

Silicon Extremely hot or cold environments

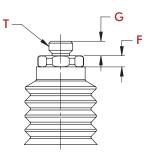
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Nitrile General Purpose

# G1/8 FEMALE HEX.







#### **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-BM20	20.1	21.9	8.9	5.3 g	.68 kg
VC-D/V(ZU	[.79]	[.86]	[.35]	[17 oz]	[1.50 lb]
VC-BM30	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-BM40	39.8	40.9	12.9	19.6 g	2.21 kg
	[1.57]	[1.61]	[.51]	[.63 oz]	[4.88 lb]
VC-BM <b>50</b>	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)





Only Available in Ø20mm



## **MAGNETS**

#### Vacuum Products | Dimensions | Ordering Information

Features:

- Provides instantaneous pick up and release without electricity.
- Maintains positive hold, even if air pressure is lost.
- Supplied with urethane pad which sofens the impact of the magnet and avoids marring or damage to delicate surfaces.

#### Benefits:

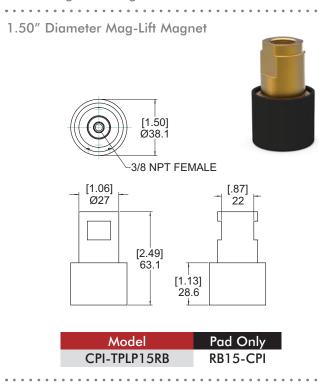
 NPT mount allows retrofit to existing assemblies. **TPLP** Mag-Lift Part Lifting Magnets

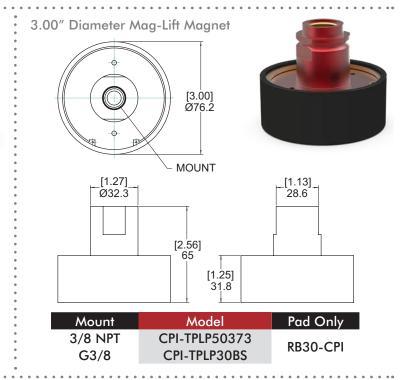
#### **Specifications:**

Recommended Operating Pressure:

2.4 bar [35 psi]

Port: 3/8" NPT Compressed Air Port Material: Machined, Anodized Aluminum, Urethane Pad (50 durometer - low skid)





Note: The minimum air pressure required for the Mag-Lift to release parts is 25 psi. The suggested air pressure for normal operation is 35 psi. If part do not release immediately, increase the air pressure in 5 psi increments until the part releases. Do not exceed 60 psi. Air pressure should be measured at the inlet of the Mag-Lift to ensure effective operation.

TPLP 1.50" Diameter Mag-Lift Magnet - CPI-TPLP15RB - Capacities

		_			-	
Gage Of Steel	26 GA	22 GA	16 GA	12 GA	3/16"	Weight
(Ferrous Only)	(0.018")	(0.030")	(0.050")	(0.100")	(0.187")	
With Pad	3.18 kg	4.08 kg	4.54 kg	4.54 kg	4.54 kg	136g
	[7.0 lb]	[9.0 lb]	[10.0 lb]	[10.0 lb]	[10.0 lb]	[5 oz]
Without Pad	4.54 kg	6.35 kg	7.26 kg	[7.71 kg]	7.71 kg	136g
	[10.0 lb]	[14.0 lb]	[16.0 lb]	17.0 lb	[17.0 lb]	[5 oz]

TPLP 3.00" Diameter Mag-Lift Magnet - CPI-TPLP50373 - Capacities

Gage Of Steel	26 GA	22 GA	16 GA	12 GA	3/16"	Weight
(Ferrous Only)	(0.018")	(0.030")	(0.050")	(0.100")	(0.187")	
With Pad	8.62 kg	13.61 kg	19.96 kg	19.96 kg	20.87 kg	363g
	[19.0 lb]	[30.0 lb]	[44.0 lb]	[44.0 lb]	[46.0 lb]	[13 oz]
Without Pad	9.53 kg	14.97 kg	26.76 kg	27.22 kg	29.03 kg	363g
	[21.0 lb]	[33.0 lb]	[59.0 lb]	[60.0 lb]	[64.0 lb]	[13 oz]

Note: Capacity values are stated at approximately 30% of the maximum holding value. Use this value for determining the quantity of Mag-Lift magnets required for an application.



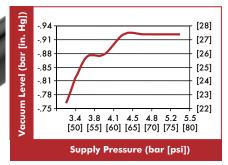
## ARV AND VSA SERIES VENTURIES

#### Vacuum Products | Features and Specifications

#### **ARV®** Series Auto-Release Venturi Cup Mount



#### **ARV® Performance:**



Specifications @ 4 bar [60psi]: Speed to Vacuum: 0.2-0.3 seconds Speed to Release: 0.02 seconds

Air Consumption:

Vacuum: 40 l/m [1.4 scfm]

Blow-off: 0

Noise Level (at one meter): 68dBA

Material: Aluminum

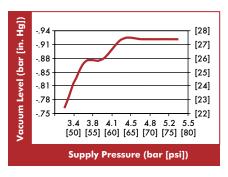
#### VSA Series Venturi Cup Mount



Blow-off typically requires two air lines and multiple valves. The VSA series offers a low-profile version as shown. Additional options includes silencer and sensor port options. Mounting threads can also be ordered in Imperial or Metric ports.

We also offers PA Series cup mounts.

#### **VSA Performance:**



Specifications @ 4 bar [60psi]: Speed to Vacuum: .36 seconds Speed to Release: 0.08 seconds

Air Consumption:

Vacuum: 40 l/m [1.4 scfm] Blow-off: 2.6 liters [0.09 ft<sup>3</sup>]

(156 l/m [5.5scfm] @ 1 sec. duration)

Noise Level (At one meter): Inline to exhaust: 76dBA

Inline to exhaust with Silencer: 68dBA

Material: Aluminum



## **ARV SERIES VENTURIES**

#### Vacuum Products | Dimensions | Ordering Information



Left Hand Apple Core CPI-VSA-ARVL-750-(X) 114g [0.25lb]



Right Hand Apple Core CPI-VSA-ARVR-750-(X) 114g [0.25lb]



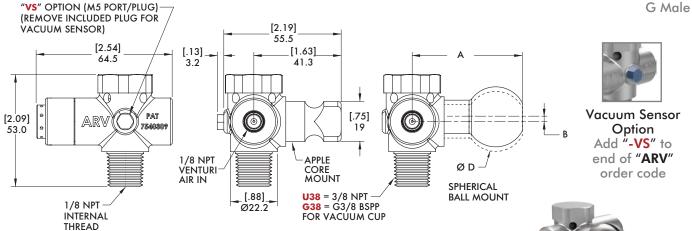
Without Apple Core CPI-VSA-ARVR-000-(X) 86g [019lb]



RH/LH Spherical Ball
CPI-VSA-ARV(R/L)-B112-(X)
CPI-VSA-ARV(R/L)-B32-(X)



Mounting Thread U38 = 3/8" NPT Male G38 = 3/8"



Covered under one or more U.S./International Patents

Model Number	Α	В	ØD	Weight
CPI-VSA-ARV(R/L)-B112-(X)	[1.85] 47.1	0	[1.13] 28.5	[0.28 lb] 126g
CPI-VSA-ARV(R/L)-B32-(X)	[1.93] 49	[0.12] 3.2	[1.26] 32	[0.30 lb] 134g

B112-01 28.58mm ball only B112-32-01

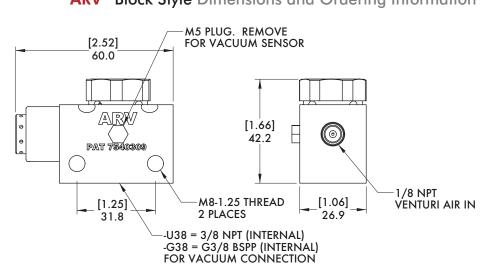
32mm ball only

## Venturi Style Vacuum Generator Cup Mounts ARV® Block Style Dimensions and Ordering Information



Block Style
CPI-VSA-ARVR-312-(X)
(X) = Vacuum Port Thread
U38 = 3/8" NPT Female
G38 = 3/8" G Female

Weight 104g [0.23lb]



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## **MICRO TOOLING VENTURI**

#### Vacuum Products | Dimensions | Technical Specifications

#### VSA 500 Series MicroTool Apple Core



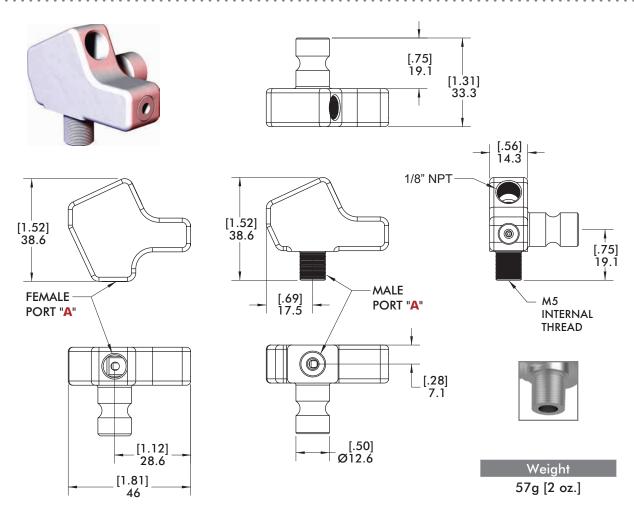


#### Features:

- MicroTool sized venturi.
- 1/8 NPT, 1/8 G Ports.

#### **Benefits:**

- Small and lightweight.
- Convenient mounts for most small vacuum cups.



500 Series Venturi MicroTool - CPI-VSA-500-"A"

Description	Port A
Female 1/8" NPT to Female 1/8" NPT	F18
Female 1/8" NPT to Male 1/8" NPT	M18

Covered under one or more U.S./International Patents



## **VSA SERIES VENTURIES**

#### Vacuum Products | Dimensions | Technical Specifications

VSA Low-Profile 750/19 Series Apple-Core with Blow-Off

#### Features:

- Low profile construction.
- Integrated blow-off.
- Optional vacuum sensing port.
- Optional exhaust silencer.
- Imperial or Metric ports.

#### Benefits:

- Lower tool profile to fit in smaller spaces.
- · Quick release of panels.
- Vacuum level or part present sensing.
- Quiet operation.





Low-Profile 750/19 w/ Blow Off No Options CPI-VSA-(X)-BO-LP



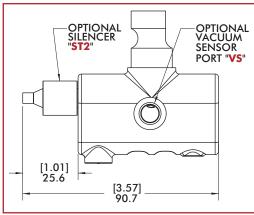
Low-Profile 750/19 with Blow Off with Detector Option CPI-VSA-(X)-BO-LP-DET

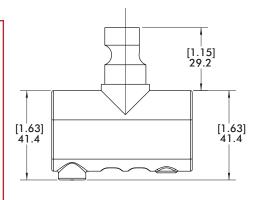


Low-Profile 750/19 with Blow Off with "VS" Option CPI-VSA-(X)-BO-LP-VS



For Silencer Option; add "ST2" to the end of order code (as shown). CPI-VSA-(X)-BO-LP-VS-ST2

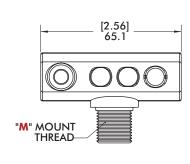


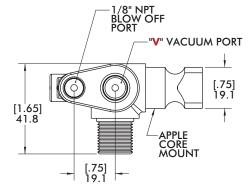




Weight 170g [6 oz.]







Low Profile 750/19 Series w/blow-off - CPI-VSA-(X)-BO-LP

		- ' - ' / ' -	
Version	Mount Thread "M"	Vacuum Port "V"	(X)
Metric	3/8" G Male	1/4" G	19
Imperial	3/8" NPT Male	1/4" NPT	750

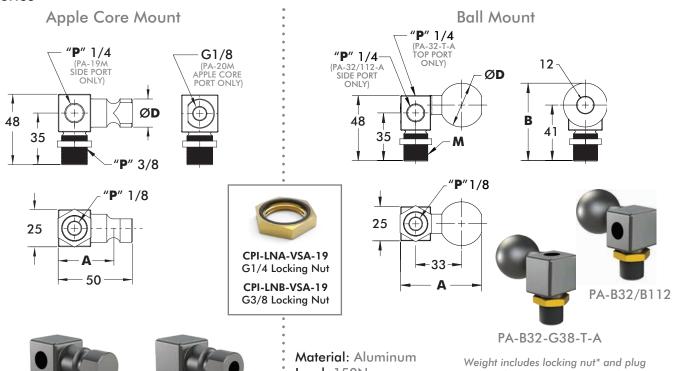


## **ACCELERATE® PORT ONLY ADAPTORS**

#### Vacuum Products | Dimensions | Technical Specifications



#### **PA** Series



PA-19M

PA-20M

Material: Aluminum Load: 150Nm

Weight includes locking nut\* and plug (not shown) \*Except U38 models

Model Number	Α	ØD	P	Weight
PA-19M-G38-A	[1.46]	[0.75]	G	[0.17 lb] 77g
PA-19M-U38-A	[1.46] 37	19	NPT	[0.15 lb] 68g
PA-20M-G38-AC-A	[1.34] 34	[0.79] 20	G	[0.16 lb] 71g

Load: 150Nm (not shown) \*Except U38 models

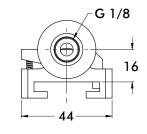
Model Number	Α	В	ØD	M	P	Weight
PA-B32-G38-A	[2.32] 59			G3/8	G	[0.23 lb] 103g
PA-B32-G38-T-A		[2.24]	[1.26]	G3/6	G	[0.21 lb] 96g
PA-B32-U38-A		57	32	3/8 NPT	NPT	[0.21 lb] 94g
PA-B32-G14-A				G1/4	G	[0.21 lb] 95g
PA-B112-G38-A	[2.24] 57	[2.17]	[1.12]	G3/8	G	[0.20 lb] 89g
PA-B112-U38-A		55	28	3/8 NPT	NPT	[0.18 lb] 80g

#### PA 28mm - 32mm Ball for C-Mount



Material: Aluminum

Load: 150Nm



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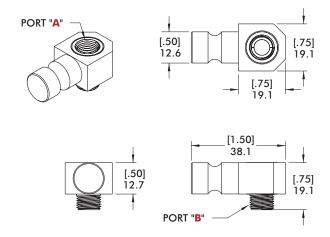
Model Number	Α	В	ØD	Weight
CPI-PA-B112-CM	[2.84] 72.1	[1.50] 38.1	[1.13] 28.5	[0.23 lb] 106g
CPI-PA-B32-CM	[2.98] 75.7	[1.69] 42.9	[1.26] 32	[0.27 lb] 122g



## MICRO TOOLING PORT ONLY ADAPTER

Vacuum Products | Dimensions | Technical Specifications

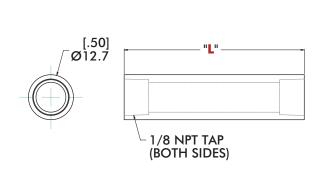
PA 500 Series



CPI-PA-500-"A"-"B" Ordering Information

Description	Α	В	Weight
Female 1/8" NPT/Female 1/8" NPT	F18	F18	
Female 1/8" G/Female 1/8" G	FG18	FG18	
Female M5/Female M5	FM5	FM5	23g
Female 1/8" NPT/Male 1/8" NPT	F18	M18	[0.8 oz.]
Female 1/8" G/Male 1/8" G	FG18	MG18	
Female M5/Male M5	FM5	MM5	

PAT 1/8 NPT Vacuum Extension





**"L"** Standard Lengths

02 = 2.00"

03 = 3.00"

04 = 4.00"

**05** = 5.00"

**06** = 6.00"

Model Number	Weight
CPI-PAT-50T-"L"-U18	[0.13 lb/ft] 193.0 g/m



## **SPRING-LOADED CUP MOUNTS**

Vacuum Products | Dimensions | Technical Specifications

#### LC Bulk Head Style Micro Series Level Compensators





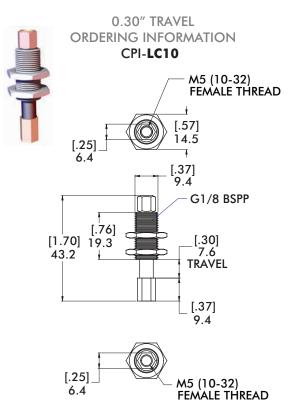


**Specifications:** Material: Aluminum

#### Features:

• M5 or G mounting threads and vacuum ports.

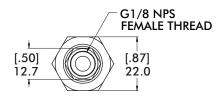
Note: To be used in vertical orientations only.

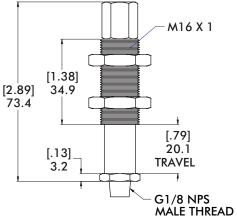






0.75" TRAVEL ORDERING INFORMATION CPI-LC18





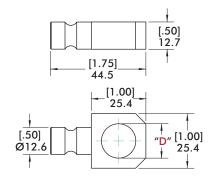
Weight 28.3 g [1.0 oz.]

#### **LCM** Series Mount



CPI-LCM-10-"D"

Weight 23 g [0.8 oz.]



"D"= (Ø) Diameter  $16 = \emptyset 16 \text{mm} [.63"]$ 10 = Ø10mm [.39"]



## **SPRING-LOADED CUP MOUNTS**

Vacuum Products | Dimensions | Technical Specifications

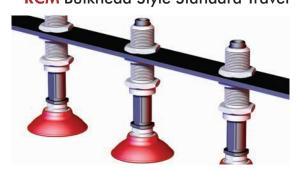
#### **RCM** Bulkhead Style Standard Travel

#### Features:

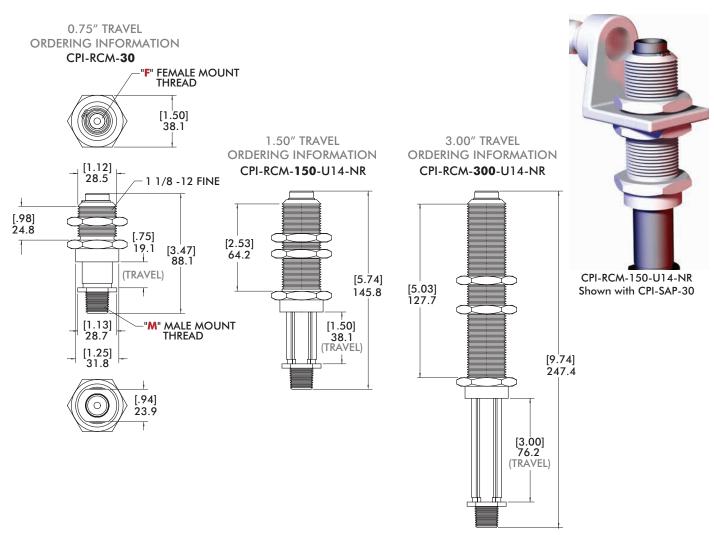
- Available in three different travel lengths.
- NPT or G mounting threads and vacuum ports.

#### **Specifications:**

Material: Aluminum



Note: To be used in vertical orientations only.



#### Bulkhead Mount - CPI-RCM-XXX

Version	Mount Thread M	Vacuum Port F
Imperial	3/8" NPT Male	1/4" NPT

Weight		
.75" Travel = 142g [5 oz]		
1.50" Travel = 227g [8 oz]		
3.00" Travel = $340g [12 oz]$		

# **SPRING-LOADED CUP MOUNTS**

### Vacuum Products | Dimensions | Technical Specifications | Ordering Information

### **SCM** Apple-Core Style



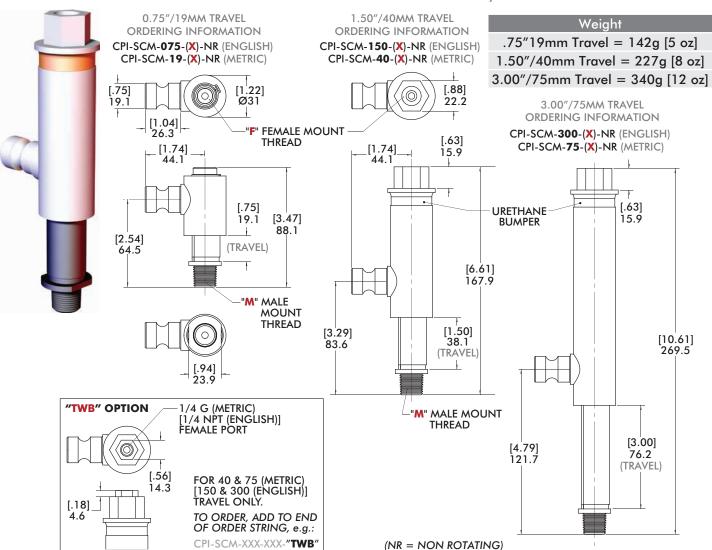
#### **Specifications:**

Material: Aluminum used on 1.50"/40mm and 3.00"/75mm travel.

#### Features:

- Available in three different travel lengths.
- Apple core .75" [19mm] mounting for adjustment along on axis.
- NPT or G mounting threads and vacuum ports.

Note: To be used in vertical orientations only.



### CPI-SCM-(19/075)-(X)-NR Ports

Version	M	, F	( <b>Y</b> )
Version	///	'	(A)
Metric	3/8" G	1/4" G	G14
Imperial	3/8" NPT	1/4" NPT	U14

CPI-SCM-(40/150 & 75/300)-(X)-NR Ports

Version	М	F	(X)
Metric	3/8" G	3/8" G	G14
Imperial	3/8" NPT	3/8" NPT	U14



# **SPRING-LOADED CUP MOUNTS**

Vacuum Products | Features and Options

#### Features:

- Two mounting options.
- Three travel lengths.
- NPT or G mounting threads and vacuum ports.
- Urethane shock absorber.
- Teflon coated shaft.
- Fully modular construction.

#### **Benefits:**

- Urethane shock absorber reduces "pick-up" shock.
- Extensive use of polymers reduce weight and cost.
- Extended travel cup mounts can be reconfigured or rebuilt.
- Smooth operation, reduced wear.

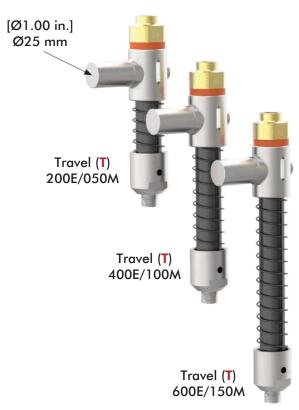


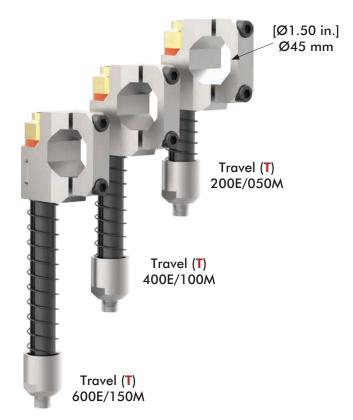
Note: To be used in vertical orientations only.

### **Extension Style Mount** Ø1.00 in. / 25 mm

CPI-SCM10-(T) Imperial CPI-SCM25-(T) Metric

### **BodyBuilder Boom Mount** CPI-SCMS-45B-(T)



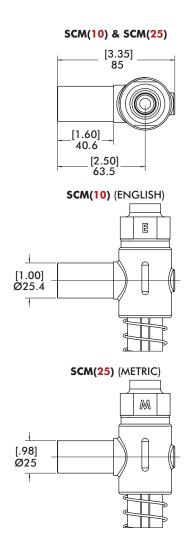




# **SPRING LOADED VACUUM CUP MOUNTS**

Vacuum Products | Extended Travel Dimensions

**SCM** Bulkhead/Apple Core/Extension Style



SCM Travel and Length - CPI-SCM(X)-"T"

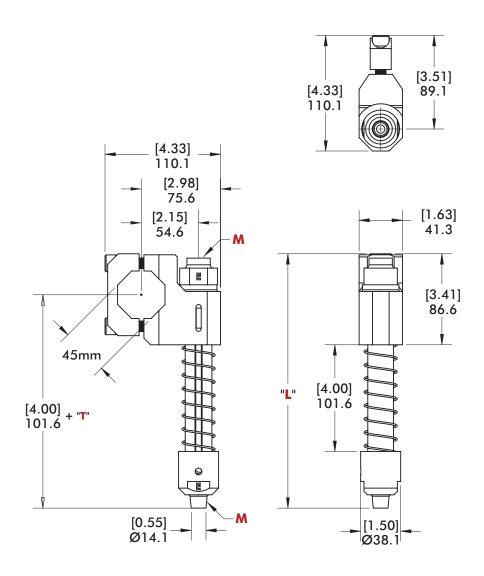
Version	Travel "T"	L	М	Weight
Imperial	200E (2.00" Vertical Travel)	187.3 [7.38]	3/8" NPT	.48kg [1.06 lb]
	400E (4.00" Vertical Travel)	238.2 [9.38]	3/8" NPT	.53kg [1.16 lb]
	<b>600E</b> (6.00" Vertical Travel)	288.9 [11.38]	3/8" NPT	.58kg [1.27 lb]
Metric	<b>050M</b> (50mm Vertical Travel)	187.3 [7.38]	3/8" G	.48kg [1.06 lb]
	100M (100mm Vertical Travel)	238.2 [9.38]	3/8" G	.53kg [1.16 lb]
	150M (150mm Vertical Travel)	288.9 [11.38]	3/8" G	.58kg [1.27 lb]



# **BODY BUILDER SPRING LOADED VACUUM CUP MOUNTS**

Vacuum Products | Extended Travel Dimensions

**SCM** BodyBuilder Mounted



SCM Travel and Length - CPI-SCMS-45B-"T"

Version	Travel "T"	L	М	Weight
Imperial	200E (2.00" Vertical Travel)	191.5 [7.54]	3/8" NPT	.77kg [1.7 lb]
	400E (4.00" Vertical Travel)	242.2 [9.54]	3/8" NPT	.82kg [1.8 lb]
	600E (6.00" Vertical Travel)	293.1 [11.54]	3/8" NPT	.87kg [1.9 lb]
Metric	050M (50mm Vertical Travel)	191.5 [7.54]	3/8" G	.77kg [1.7 lb]
	100M (100mm Vertical Travel)	242.2 [9.54]	3/8" G	.82kg [1.8 lb]
	150M (150mm Vertical Travel)	293.1 [11.54]	3/8" G	.87kg [1.9 lb]

# SPRING LOADED VACUUM CUP MOUNT ACCESSORIES

# Vacuum Products | Extended Travel Dimensions

## **SAP** Extended Travel Proximity Switch Mounts

#### **Specifications:**

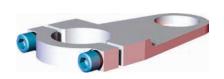
Material: Aluminum

#### Features:

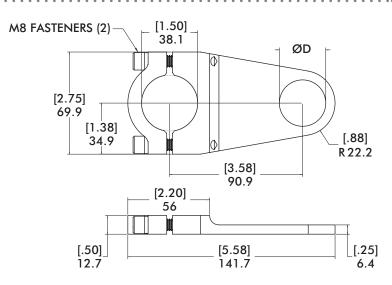
 Mounts 30mm barrel style and square style proximity switches to the extended travel spring-loaded cup mounts.



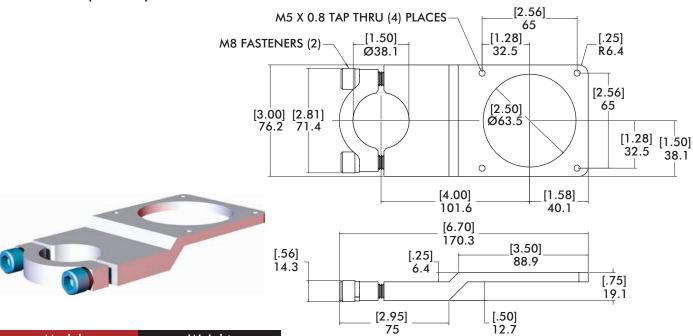
### **SAP** 30mm Barrel Style



Model	ØD	Weight
CPI-SAP-30-PM-150	[1.25] 31.8	.13 kg [.29 lb]
CPI-SAP-18-PM-150	[.75] 19	.17 kg [.38 lb]



## **SAP** 50mm Square Style



 Model
 Weight

 CPI-SAP-NI50-PM-150
 .23 kg [.56 lb]

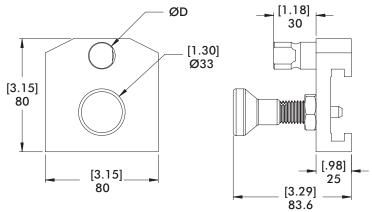


# **DOUBLE BLANK DETECTOR QUICK-CHANGE MOUNT**

Vacuum Products | Dimensions | Technical Specifications

# **DBD** Quick-Change Mount





Model	ØD	Weight
DBD-19-QC-A	19mm	522g [1.15 lb]
DBD-20-QC-A	20mm	527g [1.16 lb]

## Vacuum Products | Features and Options | Ordering Information

#### **DBD** Series

#### Features:

- Orbital design allows compliance to blanks within +/- 15° without having to make any automation, tooling or robot adjustments.
- Elimination of compression springs results in long-lasting, reliable performance
- HD Version provides added stability for heavy-duty applications

#### **Specifications:**

Operating Pressure: 4 bar [60psi] Electric: Sensor supplied by customer

Note: To be used in vertical orientations only.

### CPI-DBD-(X)-SCMB-(T)

Ø1.25" Thru Hole Bulkhead Mount



### CPI-DBD-(X)-SCM10/25-(T)

Ø1.00"/25mm Extension Mount



# CPI-DBD-(X)-SCMB-(T)-HD

Ø1.00"/25mm Tube Mount Heavy-duty (Double Pogo)



# CPI - DBD

Base Model DBD

Double Blank Detector

#### **Sensor Size**

**42** Ø42mm **54** Ø54mm

(Sensors not Included)

### Mounting Style

SCM10 Ø1.00" Extension Mount SCM25 Ø25mm Extension Mount

SCMB Bulkhead Mount

Vertical Travel (T) (See pages 45-47)

200E 2.00 in. with NPT Vacuum Port (Except -HD)

Heavy-Duty (SCMB (Double Pogo) only)

**400E** 4.00 in. with NPT Vacuum Port **600E** 6.00 in. with NPT Vacuum Port

**800E** 8.00 in. with NPT Vacuum Port (-HD only) **050M** 50mm with G Vacuum Port (Except -HD)

100M 100mm with G Vacuum Port 150M 150mm with G Vacuum Port

200M 200mm with G Vacuum Port (-HD only)

Covered under one or more U.S./International Patents

### CPI-DBD-(X)-(T)-SCMC-(D)

Ø1.50"/40mm Tube Mount



#### X=Sensor Size

**42** Ø42mm

**54** Ø54mm

(Sensors not Included)

#### T=Vertical Travel

200E 2.00 in. with NPT Vacuum Port
 400E 4.00 in. with NPT Vacuum Port
 600E 6.00 in. with NPT Vacuum Port
 50mm with G Vacuum Port
 100M 150mm with G Vacuum Port
 150mm with G Vacuum Port

#### D=Tube Mount

40 40mm Tube Mount (Metric Only) 150 1.50" Tube Mount (Imperial Only)

(See page 47)

#### CPI-DBD-42-200E-SCMS

Ø45mm

BodyBuilder Mount

(See page 48)





Vacuum Products | Dimensions | Technical Specifications

**DBD** Bulkhead/Extension Style Dimensions

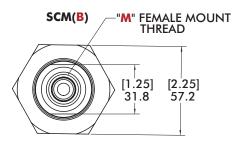


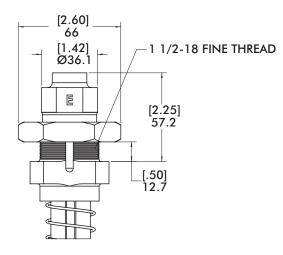
SCMB Ø1.25" Thru Hole Bulkhead Mount

Note: To be used in vertical orientations only.



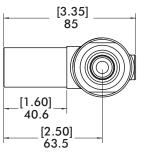
SCM10/25 Ø1.00"/25mm Extension Mount



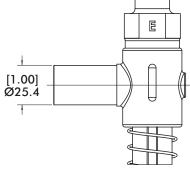


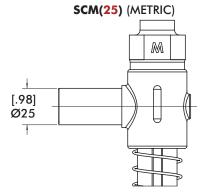


# SCM(10) & SCM(25)



SCM(10) (ENGLISH)





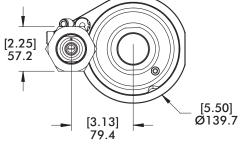


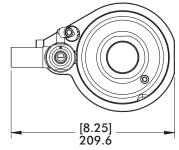
Vacuum Products | Dimensions | Technical Specifications

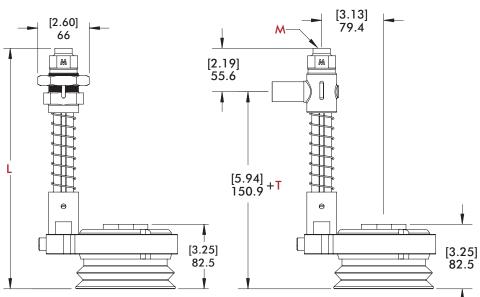
# **DBD** Bulkhead/Extension Style

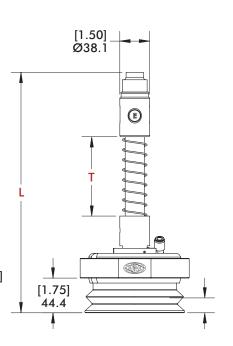












DBD Travel and Length - CPI-DBD-(X)-SCM(X)-(T)

Version	Vertical Travel ( <b>T</b> )	ical Travel (T) (L) (M)		Weight	
Imperial	200E (2.00")	257.1 [10.12]		.85kg [1.87 lb]	
	400E (4.00")	307.9 [12.12]	3/8" NPT	.90kg [1.97 lb]	
	600E (6.00")	358.7 [14.12]	.94kg [2.08 lb]		
Metric	050M (50mm)	257.1 [10.12]		.85kg [1.87 lb]	
	100M (100mm)	307.9 [12.12]	3/8" G	.90kg [1.97 lb]	
No. of the last of	150M (150mm)	358.7 [14.12]		.94kg [2.08 lb]	

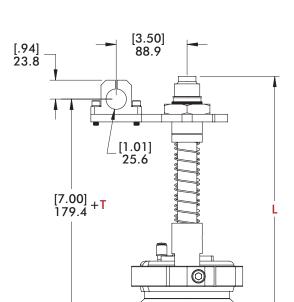


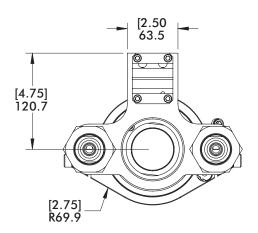
Vacuum Products | Dimensions | Technical Specifications

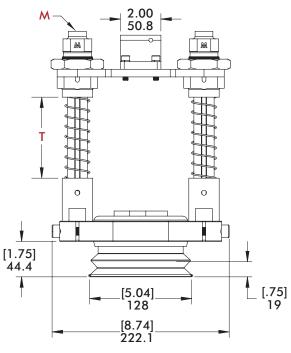
**DBD** Heavy Duty (Double Pogo)











DBD Travel and Length - CPI-DBD-(X)-SCMB-(T)-HD

Version	Vertical Travel ( <b>T</b> )	(L)	(M)	Weight
Imperio	400E (4.00")	307.9 [12.12]		3.06kg [6.75 lb]
	600E (6.00")	357.9 [14.09]	3/8" NPT	3.16kg [6.97 lb]
	800E (8.00")	405.9 [15.98]		3.23kg [7.12 lb]
Metric	100M (100mm)	307.9 [12.12]		3.06kg [6.75 lb]
	150M (150mm)	357.9 [14.09]	3/8" G	3.16kg [6.97 lb]
	200M (200mm)	405.9 [15.98]		3.23kg [7.12 lb]

# BODYBUILDER™ DOUBLE BLANK DETECTOR SPRING MOUNTS

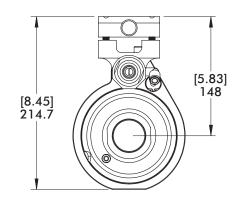
Vacuum Products | Dimensions | Technical Specifications

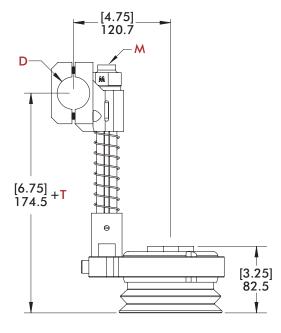
DBD Ø1.50"/40mm Tube Mount

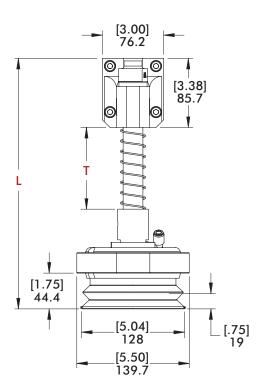
Note: To be used in vertical orientations only.











**54** Ø54mm (Sensors not Included)

X=Sensor Size

**42** Ø42mm

DBD Travel and Length - CPI-DBD-(X)-(T)-SCMC-(D)

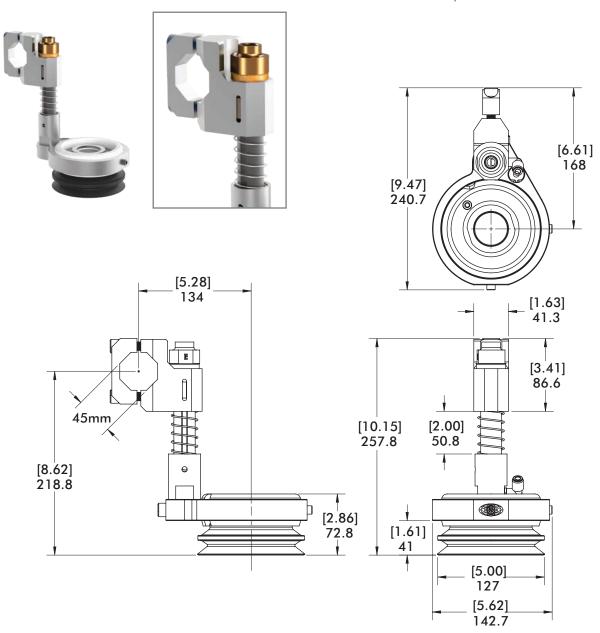
Version	Vertical Travel ( <b>T</b> )	(L)	(M)	( <b>D</b> )	Weight
Imperial	200E (2.00")	261.1 [10.28]			.85kg [1.87 lb]
9	400E (4.00")	311.1 [12.25]	3/8" NPT	150 (Ø1.50")	.90kg [1.97 lb]
	600E (6.00")	369.9 [14.21]			.94kg [2.08 lb]
Metric	050M (50mm)	261.1 [10.28]			.85kg [1.87 lb]
	100M (100mm)	311.1 [12.25]	3/8" G	40M (Ø40mm)	.90kg [1.97 lb]
	150M (150mm)	369.9 [14.21]			.94kg [2.08 lb]



Vacuum Products | Dimensions | Technical Specifications

DBD Ø45mm BodyBuilder Mount

Note: To be used in vertical orientations only.



### CPI-DBD-42-200E-SCMS-45B

Version	Thread	Weight
Imperial		
	3/8" NPT	1.8kg [3.9 lb]



# Vacuum Products | Dimensions | Technical Specifications

# MBC/MLK Boom Mounted Single 4-Port - 30° Angled Input Port



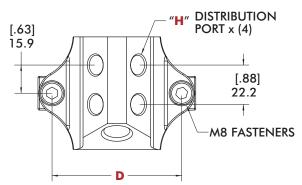
#### Features:

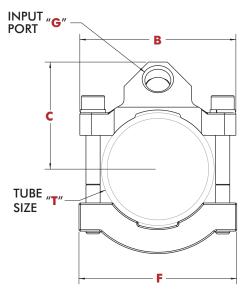
- 30° Angled input port.
- Provides a 4-port air distribution system mount on the boom.

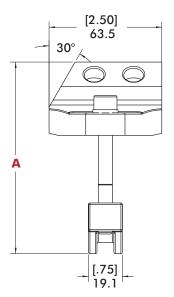
### **Specifications:**

Material: Aluminum









#### **MBC/MLK** Dimensions

Model	Α	В	С	D	F	G	Н	Т	Weight
CPI-MLK-60-G44-30	108.0	87.9	60.3	73	88.9	3/8 G	1/4 G	Ø60MM	340g
[CPI-MBC-250-4-4-30]	[4.25]	[3.46]	[2.38]	[2.88]	[3.50]	[3/8 NPT]	[1/4 NPT]	[Ø2.50"]	[12 oz]



# Vacuum Products | Dimensions | Technical Specifications

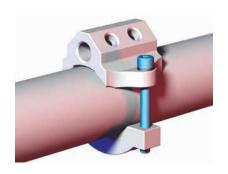
# MBC/MLK Boom Mounted Single 4-Port

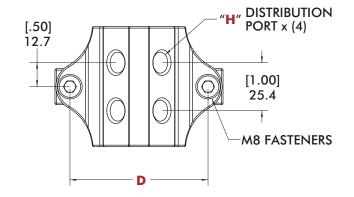
### **Specifications:**

Material: Aluminum

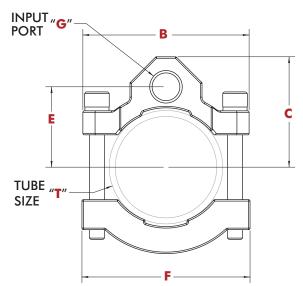
#### Features:

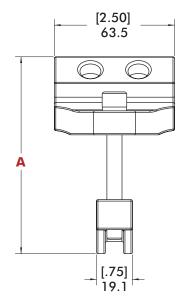
- Provides a 4-port air distribution system mount on the boom.
- Available in two sizes to allow clamping to Ø40mm [Ø1.50"] and Ø60mm [Ø2.50"] materials.









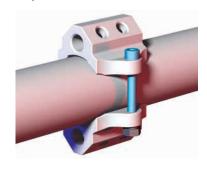


#### **MBC/MLK** Dimensions

Model	Α	В	С	D	E	F	G	Н	Т	Weight
CPI-MLK-40-G44	88.9	64.3	52.5	48.5	36.7	64.3	12.9	114.5	Ø40MM	283g
[CPI-MBC-150-4-4]	[3.50]	[2.53]	[2.07]	[1.91]	[1.44]	[2.53]	[.51]	[4.51]	[Ø1.50"]	[10 oz]
CPI-MLK-60-G44	104.1	87.9	58.4	73	42.5	88.9	39.7	118.4	Ø60MM	340g
[CPI-MBC-250-4-4]	[4.10]	[3.46]	[2.30]	[2.88]	[1.67]	[3.50]	[1.56]	[4.65]	[Ø2.50"]	[12 oz]

# Vacuum Products | Dimensions | Technical Specifications

## MBC/MLK Boom Mounted Double 8-Port

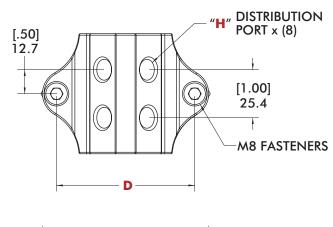


#### Features:

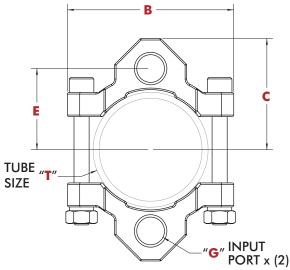
- Provides an 8-port (4 ports on top and bottom) air distribution system mount on the boom.
- Available in two sizes to allow clamping to Ø40mm [Ø1.50"] and Ø60mm [Ø2.50"] materials.

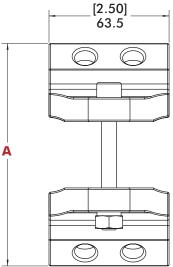
### **Specifications:**

Material: Aluminum









### **MBC/MLK** Dimensions

Model	Α	В	С	D	Е	G	Н	Т	Weight
CPI-MLK-40-G88	105.1	64.3	52.5	48.5	36.8	3/8 G	1/4 G	Ø40MM	425g
[CPI-MBC-150-8-8]	[4.14]	[2.53]	[2.07]	[1.91]	[1.45]	[3/8 NPT]	[1/4 NPT]	[Ø1.50"]	[16 oz]
CPI-MLK-60-G88	117.6	87.9	58.8	73.0	42.9	3/8 G	1/4 G	Ø60MM	510g
[CPI-MBC-250-8-8]	[4.63]	[3.46]	[2.32]	[2.88]	[1.69]	[3/8 NPT]	[1/4 NPT]	[Ø2.50"]	[18 oz]



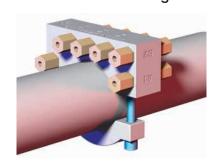
# Vacuum Products | Dimensions | Technical Specifications

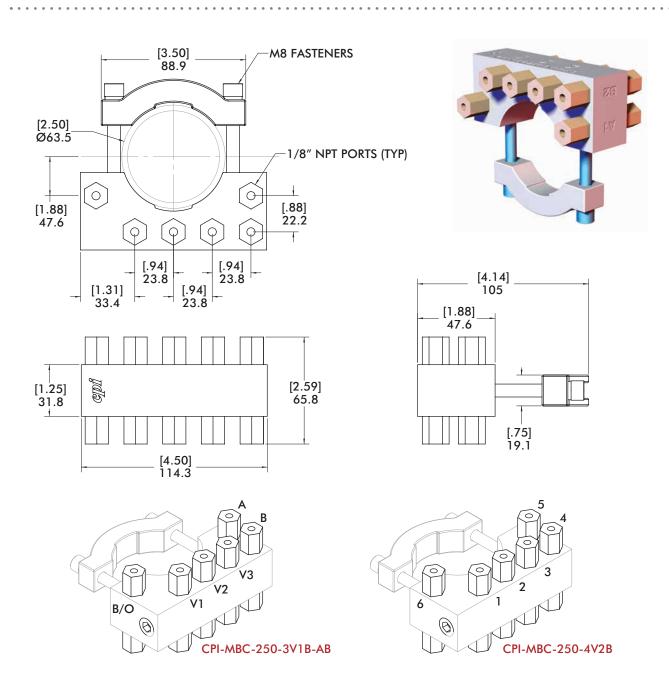
# **MBC** Boom Mounted Single 6-Port

### Specifications: Material: Aluminum

### Features:

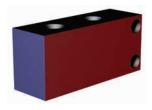
- Provides a 6-port air distribution system mounted on the boom.
- Easy access.





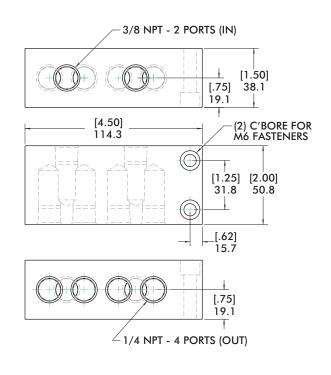
## Vacuum Products | Dimensions | Technical Specifications

# **GDA/MBB** Block Style for Remote Mounting



Material: Aluminum

Model	Weight
CPI-GDA-M24-37327	.23 kg [.56 lb]

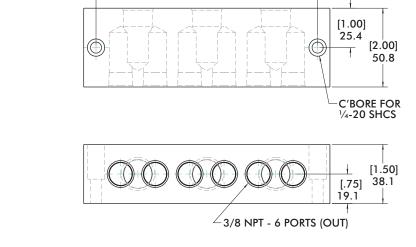


1/2 NPT - 3 PORTS (IN)



Material: Aluminum

Model



[6.25] 158.8

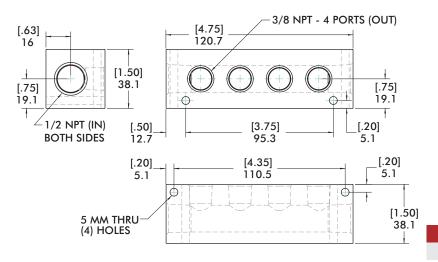
[5.63] 142.9



Weight

### Vacuum Products | Dimensions | Technical Specifications

# **MMB** Block Style or Remote Mounting

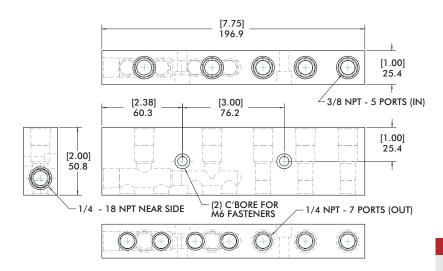




Material: Aluminum

Model	Weight
CPI-MMB-4P	.23 kg [.56 lb]

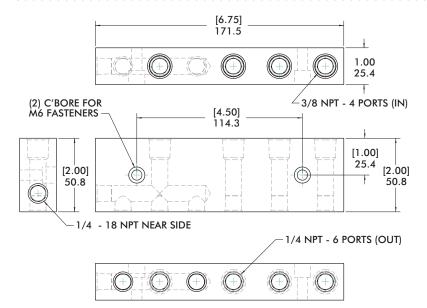
## **MMB** Block Style or Remote Mounting





Material: Aluminum

Model	Weight			
CPI-MMB-4VSP-AB	.23 kg [.56 lb]			





Material: Aluminum

Model	Weight
CPI-MMB-3V1B-AB	.23 kg [.56 lb]

