

VACUUM SOLUTIONS

Table of Contents



Vaccum Cups3



Magnets.....28



EcoCup29



Vacuum Generation31



Spring Cup Mounts37



Double Blank Detector Mounts46



Manifolds.....53

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 $\pm 15^\circ$ 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.



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



Round Traction Vacuum Cups

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



Round Flatfoot Vacuum Cups

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



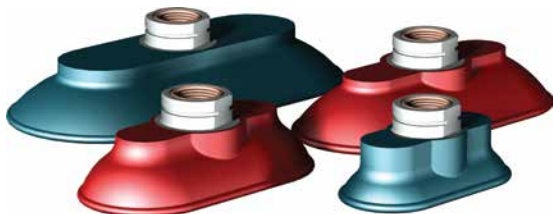
Round Belcup Vacuum Cups

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



Round Deepdish Vacuum Cups

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



Oval Flatfoot Vacuum Cups

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



Oval Deepdish Vacuum Cups

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

POLYURETHANE VACUUM CUPS

Vacuum Products | Families and Features



Round Bellows Vacuum Cups

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



Round Flat Foot Vacuum Cups

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



Round Deepdish Vacuum Cups

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



Oval Bellows Vacuum Cups

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


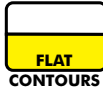





















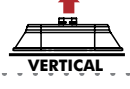


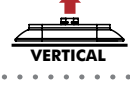






Oval Flat Foot Vacuum Cups

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

CHOOSE THE RIGHT VACUUM CUP FOR YOUR APPLICATION






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

Nitrile Vacuum Cups		 DESTACKER APPLICATION	 FLAT CONTOURS	 MILD CONTOURS	 HIGH CONTOURS	 SLICK/OILY SURFACES	 DRY SURFACES	 HOT FORMING	Application Direction
 US Patents #7,309,089 7,712,807 Destacker Vacuum Cups	 VERTICAL	5	5	N/A	N/A	3	5	N/A	
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	 HORIZONTAL
 Round Traction Vacuum Cups	 VERTICAL	4	5	4	2	5	5	N/A	
		N/A	5	3	1	5	5	N/A	 HORIZONTAL
 Round Flatfoot Vacuum Cups	 VERTICAL	4	4	5	3	4	4	N/A	
		N/A	4	5	3	4	4	N/A	 HORIZONTAL
 Round Belcup Vacuum Cups	 VERTICAL	4	5	4	2	3	4	N/A	
		N/A	3	3	1	2	4	N/A	 HORIZONTAL
 Round Deepdish Vacuum Cups	 VERTICAL	1	1	3	5	3	3	N/A	
		N/A	1	3	5	3	3	N/A	 HORIZONTAL
 Oval Deepdish Vacuum Cups	 VERTICAL	1	3	4	2	4	3	N/A	
		N/A	3	4	2	3	3	N/A	 HORIZONTAL
 Oval Flatfoot Vacuum Cups	 VERTICAL	3	4	3	1	4	4	N/A	
		N/A	4	3	1	3	4	N/A	 HORIZONTAL
 Hot Forming Vacuum Cups	 VERTICAL	3	3	2	1	3	4	5	
		N/A	3	2	1	2	3	5	 HORIZONTAL
		Worst Cup for the Job 1 2 3 4 5 Best Cup for the Job							
		N/A Not Advised for the application							

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

CHOOSE THE RIGHT VACUUM CUP FOR YOUR APPLICATION

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

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

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.

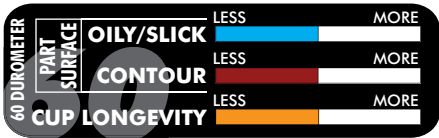
CHOOSE THE RIGHT VACUUM CUP FOR YOUR APPLICATION

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)?

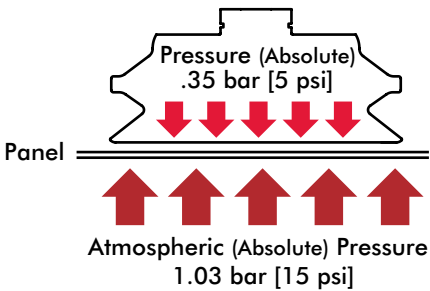


A set of vacuum cups of the same size and type, each having different durometers may handle oily/slick or contoured parts differently. However, cup longevity of each may be affected as a result of durometer, application and usage. The ACU Index is a reference shown with each type of vacuum cup and is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

How Vacuum Cups work

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

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



Vacuum Cup Usage

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

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

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

Formula

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

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

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

Safety Factor

Ideal plant conditions*: (2)

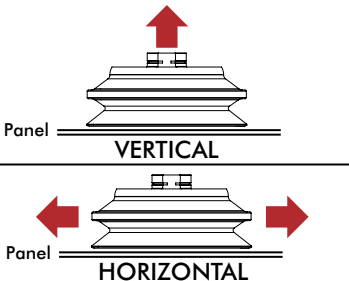
- Fast moving robot: (+1)
- Slick or Oily Panel: (+1)
- Flexing Panel: (+2)
- Small cups: (+1)
- High Horizontal Loads: (+1)

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

For example:	
Ideal conditions:	2
Fast moving robots:	+1
Flexing Panel:	+2
Total Safety Factor	5

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

Relative Cup Motion



VACUUM CUP OPTIONS

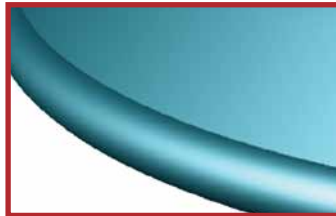
Vacuum Products | Durometer and Mounting Options

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

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



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



30

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



45

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




60

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



PU55/PU60

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

 = Durometer not available in cup style.

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



K
1/4" NPT



B
3/8" NPT



C
1.25" SQUARE



D
1/2" NPT



U-18
1/8" NPT MALE



E1
QUICK DISCONNECT

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




A
1/4" G




B
3/8" G



C
1.25" SQUARE

M  **CUP** = Mount only available in this cup size.

M  **CUP** = Mount not available in this cup size.

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



M10
M10 MALE



M8F
M8 FEMALE



SB
SMOOTH BORE

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



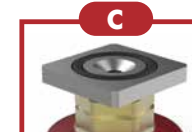
U38
3/8 NPT



P38
Nylon G3/8



G38
G3/8



C
1.25 in. Square

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



10M
10-32 MALE



18F
1/8" G FEMALE

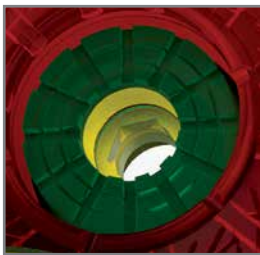


18M
1/8" G MALE

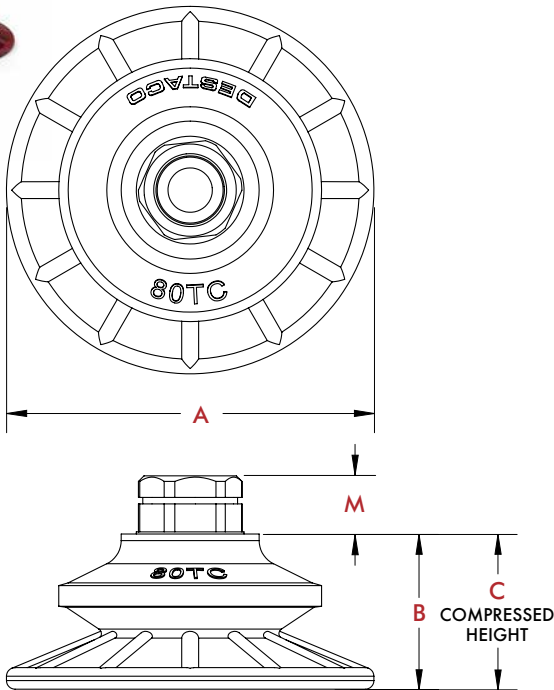
ACCELERATE® COLLECTION VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

TC Polyurethane Round Bellows



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

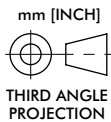


Specifications:

Temperature:

10°-49° C [50°-120° F]

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



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

Dimensions shown "[inch] mm"

TC Dimensions

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

Dimensions shown "[inch] mm"

TC Holding Capacity @ -0.6 bar vacuum

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

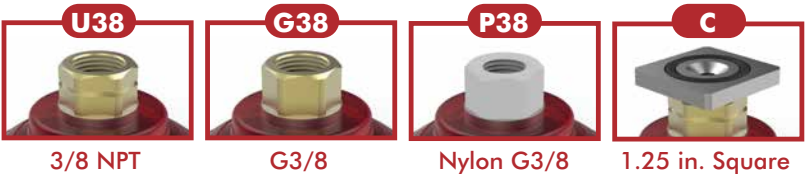
Holding capacities shown "[lbs] kg"

TC Round Bellows Ordering Information

Metric

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

Mounting Options ("M")



ACCELERATE® COLLECTION VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

Specifications:

Temperature:

10°-49° C [50°-120° F]

Materials: Dual Durometer

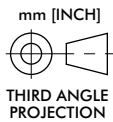
Polyurethane - Outside 55

durometer (red), internal

treads 60 durometer

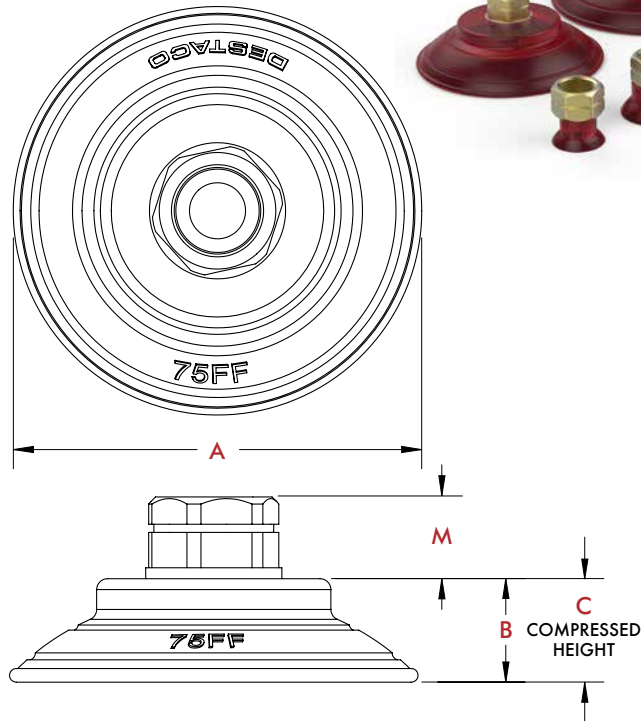
(dark green).

FF Polyurethane Round Flat



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

Dimensions shown "[inch] mm"



FF Dimensions

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

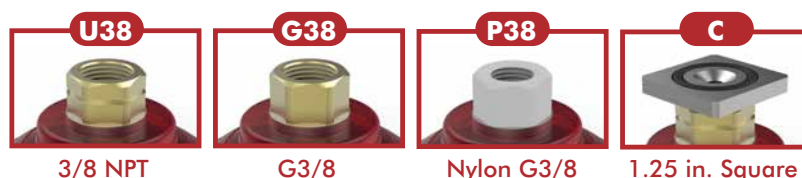
Dimensions shown "[inch] mm"

FF Holding Capacity @ -0.6 bar vacuum

Appl.	Vert. Lift	Horz. Dry	Horz. Wet
25FF	[6] 2.72	[2] 0.91	[1.5] 0.68
35FF	[13] 5.90	[9] 4.08	[7] 3.18
50FF	[24] 10.89	[23] 10.43	[16] 7.26
75FF	[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

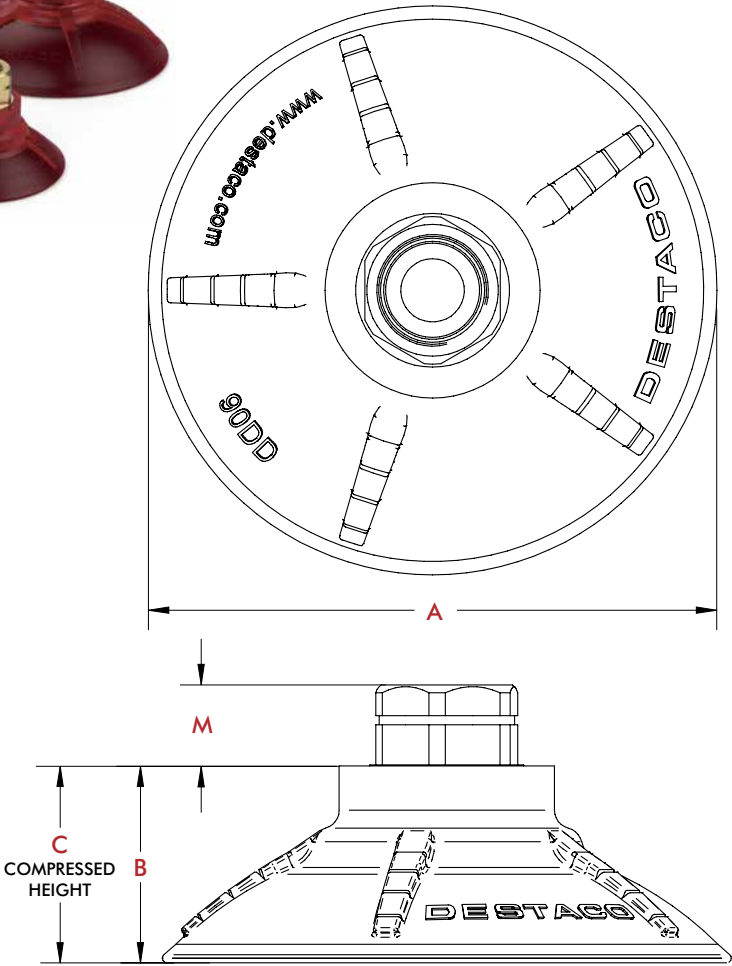
Metric

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

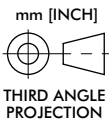
ACCELERATE® COLLECTION VACUUM CUPS

Vacuum Products | Dimensions | Technical Specifications

DD Polyurethane Round Deepdish



Specifications:
Temperature:
10°-49° C [50°-120° F]
Materials:
60 durometer (red)



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

Dimensions shown "[inch] mm"

DD Dimensions

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

Dimensions shown "[inch] mm"

DD Holding Capacity @ -0.9 bar [25.6 inhg] vacuum

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

Holding capacities shown "[lbs] kg"

DD Round Deepdish Ordering Information

Metric

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

Mounting Options ("M")



ACCELERATE® COLLECTION VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information



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

Specifications:

Temperature:

10°-49° C [50°-120° F]

Materials: Dual Durometer

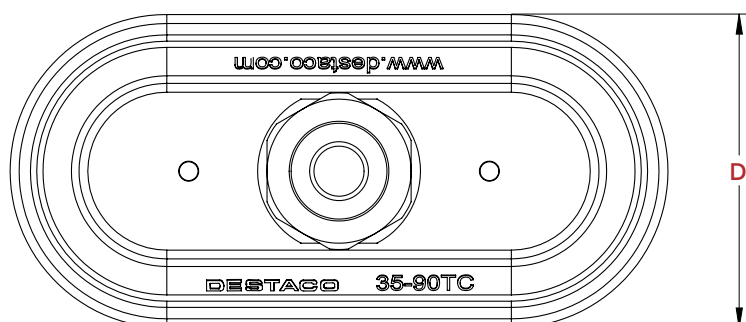
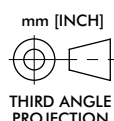
Polyurethane - Outside 55

durometer (red), internal

treads 60 durometer

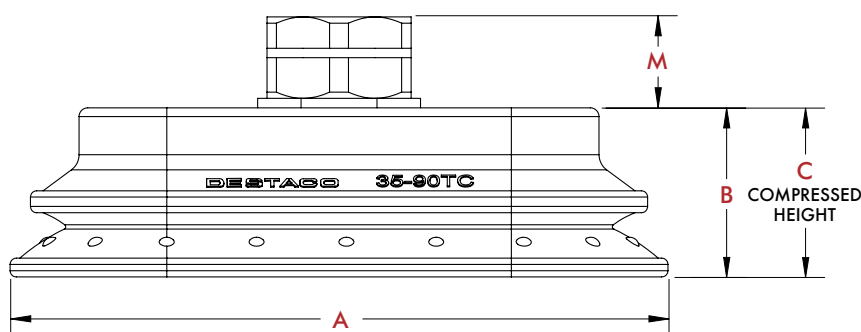
(dark green).

TC Polyurethane Oval Bellows



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

Dimensions shown "[inch] mm"



TC Dimensions

Model	A	B	C	D	Weight
35-90TC	[4.13] 105	[1.08] 27.5	[0.65] 16.5	[1.97] 50	[3.42 oz] 97 g
50-140TC	[6.18] 157	[1.40] 35.5	[0.85] 21.5	[2.64] 67	[6.70 oz] 190 g
65-170TC	[7.36] 187	[1.63] 41.5	[1.04] 26.5	[3.23] 82	[10.93 oz] 310 g

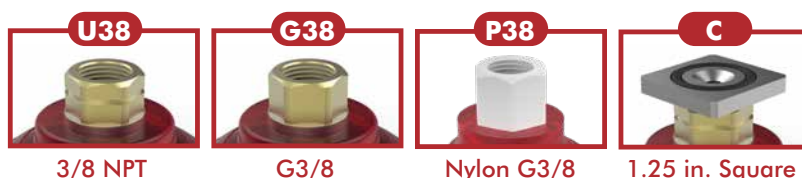
Dimensions shown "[inch] mm"

TC Holding Capacity @ -0.6 bar vacuum

Appl.	Vert. Lift	Horz. Dry	Horz. Wet
35-90TC	[45] 20.41	[40] 18.14	[34] 15.42
50-140TC	[99] 44.91	[93] 42.18	[78] 35.38
65-170TC	[128] 58.06	[139] 63.05	[149] 67.59

Holding capacities shown "[lbs] kg"

Mounting Options ("M")



TC Oval Bellows Ordering Information

Metric

Ø50x105mm VC-35-90TC-(M)-PU55

Ø67x157mm VC-50-140TC-(M)-PU55

Ø82x187mm VC-65-170TC-(M)-PU55

ACCELERATE® COLLECTION VACUUM CUPS

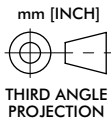
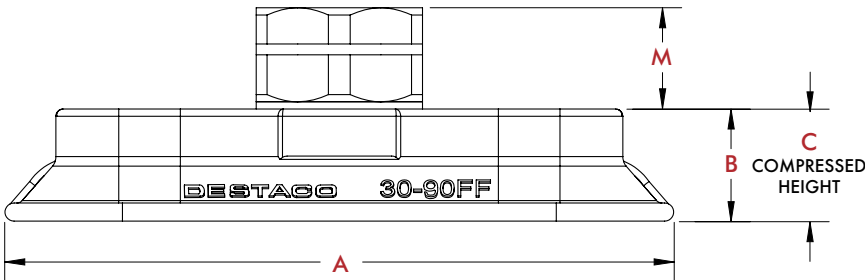
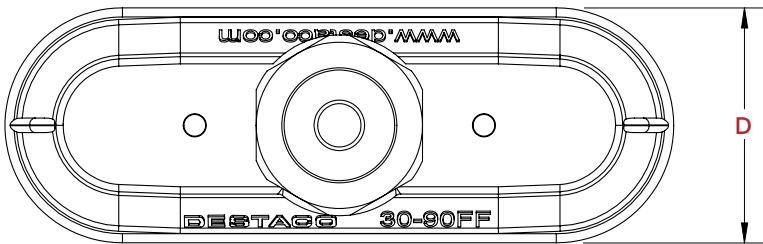
Vacuum Products | Dimensions | Ordering Information

FF Polyurethane Oval Flat



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

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



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

Dimensions shown "[inch] mm"

FF Dimensions

Model	A	B	C	D	Weight
20-80FF	[3.31] 84	[0.61] 15.5	[0.49] 12.5	[0.94] 24	[0.85 oz] 24 g
30-90FF	[3.66] 93	[0.61] 15.5	[0.45] 11.5	[1.30] 33	[1.05 oz] 30 g
40-110FF	[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
20-80FF	[25] 11.34	[25] 11.34	[11] 4.99
30-90FF	[35] 15.88	[36] 16.33	[17] 7.71
40-110FF	[55] 24.95	[52] 23.59	[18] 8.16

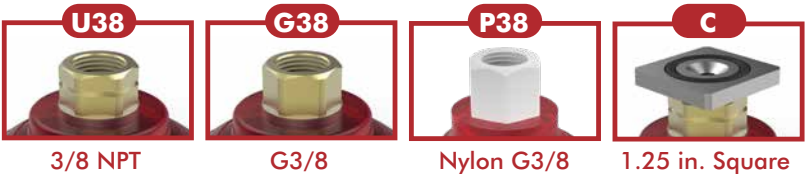
Holding capacities shown "[lbs] kg"

FF Oval Flat Ordering Information

Metric

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

Mounting Options ("M")



VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

Specifications:

Temperature:

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

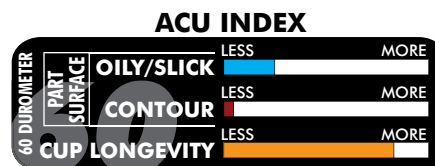
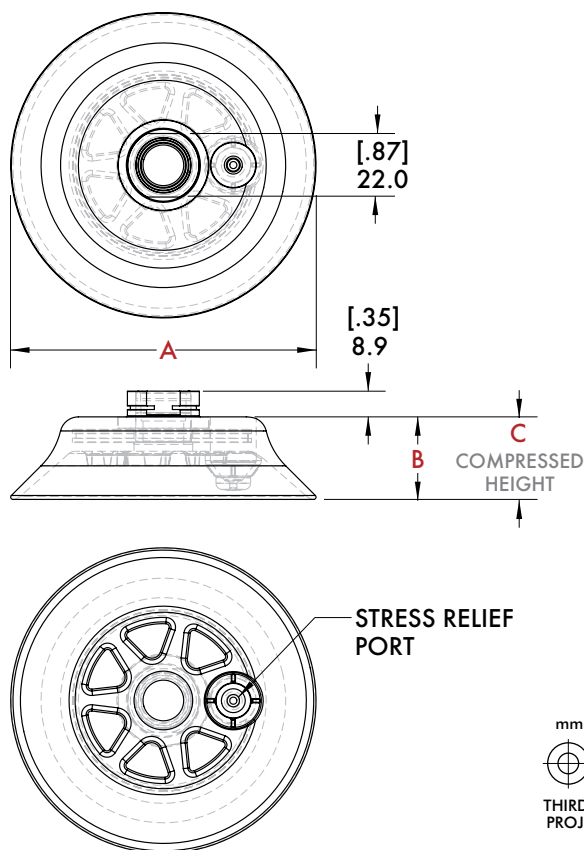
1-5 min: 15° to 180° F [-9° to 82° C]

Material: Nitrile

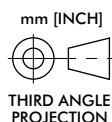
Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol

DC Destacker Stress Relieving



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



DC Dimensions

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

Dimensions shown "mm [inch]"

DC Capacity

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

Holding capacities shown "N [lbf]"

DC Destacker Stress Relieving Ordering Information

Imperial

Ø3.00" CPI-30DC-(M)-60

Ø4.00" CPI-40DC-(M)-60

Metric

Ø75 mm CPI-75DC-(M)-60

Ø100 mm CPI-100DC-(M)-60

(DR) = Durometer



(M) = Mounts Available ...

K B C D E1

(DR) = Durometer



(M) = Mounts Available

A B C

VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

TC/HT Round Traction



Specifications:

Temperature:

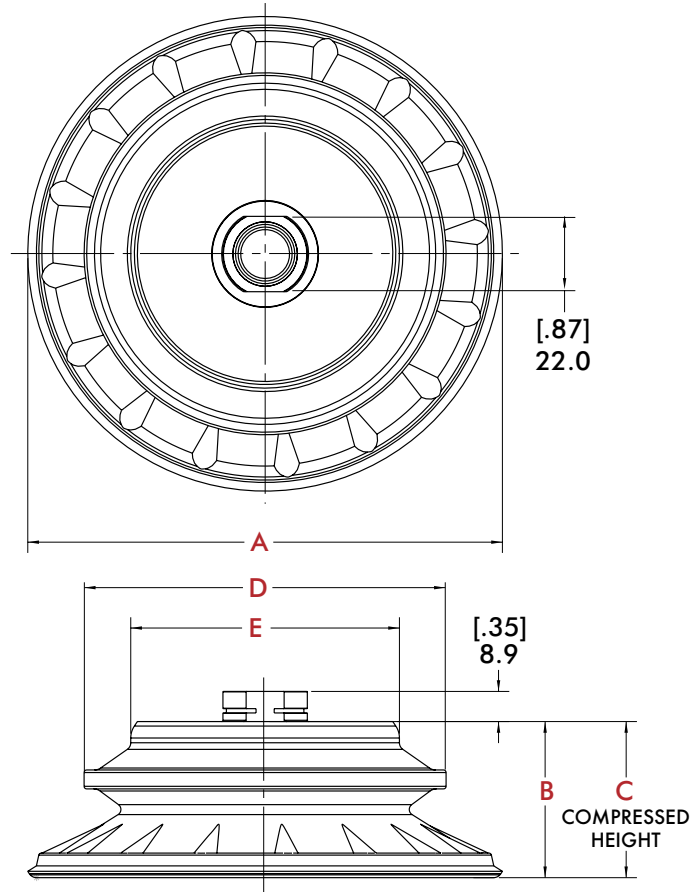
15-59 Sec: -29° to 121° C [-20° to 250° F]

1-5 min: -9° to 82° C [15° to 180° F]

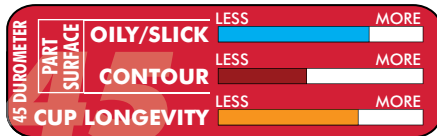
Material: Nitrile

Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol



ACU INDEX



TC/HT Dimensions

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

Dimensions shown "mm [inch]"

TC/HT Holding Capacity

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

Holding capacities shown "N [lbf]"

TC/HT Round Traction Ordering Information

Imperial

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

..(M) = Mounts Available..

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

..(DR) = Durometer..

~~45~~ **60**

Metric

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

..(M) = Mounts Available..

A B C

..(DR) = Durometer..

~~45~~ **60**

VACUUM CUPS

Vacuum Products | Dimensions | Technical Specifications

Specifications:

Temperature:

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

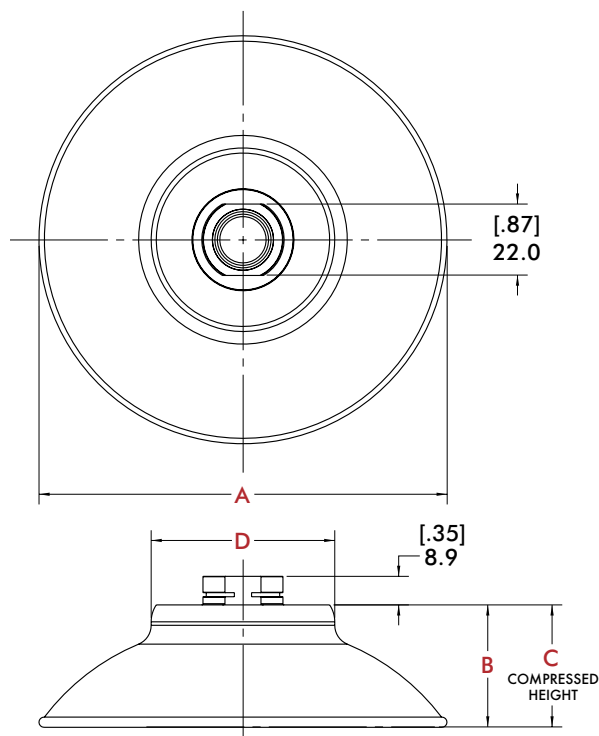
1-5 min: 15° to 180° F [-9° to 82° C]

Material: Nitrile

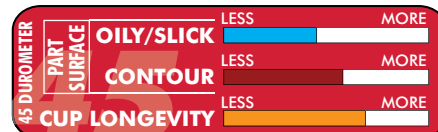
Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol

FF/PF Round Flatfoot



ACU INDEX



FF/PF Round Flatfoot

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

Dimensions shown "mm [inch]"

FF/PF Vacuum Cup Capacities:

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

Holding capacities shown "N [lbf]"

FF/PF Round Flatfoot Vacuum Cups Ordering Information

Imperial

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

(DR) = Durometer

30 45 60

(M) = Mounts Available

K B C D 40FF 50FF E1

Metric

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

(DR) = Durometer

30 45 60

(M) = Mounts Available

A B C

VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

AC/BT Round Belcup



Specifications:

Temperature:

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

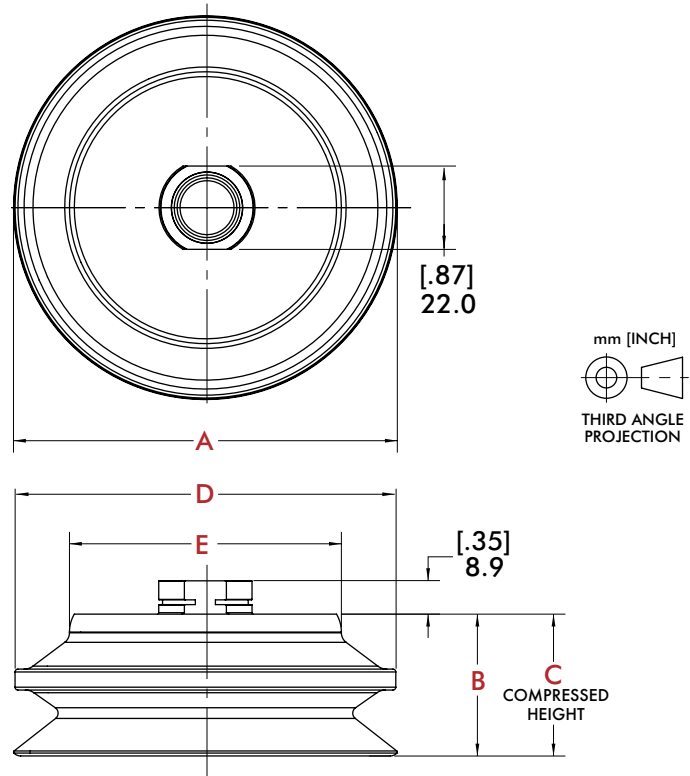
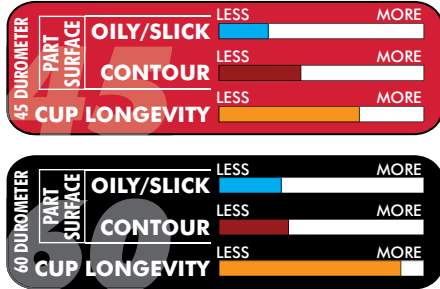
1-5 min: 15° to 180° F [-9° to 82° C]

Material: Nitrile

Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol

ACU INDEX



AC/BT Round Belcup

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

Dimensions shown "mm [inch]"

AC/BT Vacuum Cup Capacities:

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

Holding capacities shown "N [lbf]"

AC/BT Round Belcup Vacuum Cups Ordering Information

Imperial

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

(DR) = Durometer



(M) = Mounts Available



Metric

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

(DR) = Durometer



(M) = Mounts Available



VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

DD/DM Round Deepdish

Specifications:

Temperature:

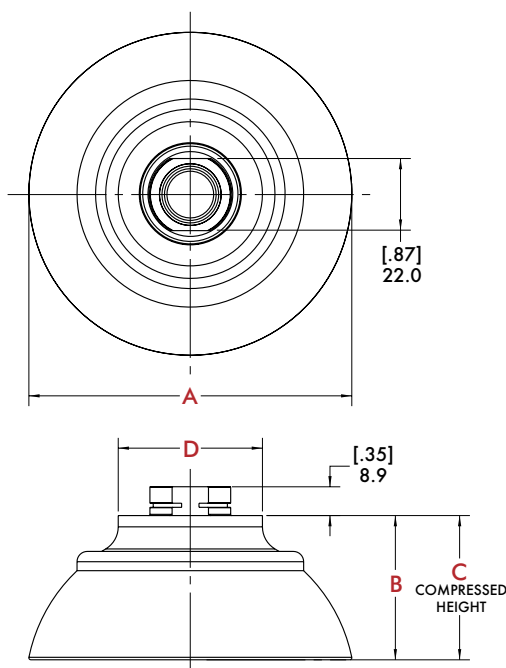
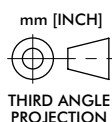
15-59 Sec: -20° to 250° F [-29° to 121° C]

1-5 min: 15° to 180° F [-9° to 82° C]

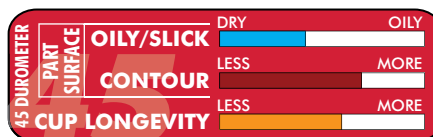
Material: Nitrile

Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol



ACU INDEX



DD/DM Round Deepdish

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

Dimensions shown "mm [inch]"

DD/DM Vacuum Cup Capacities:

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

Holding capacities shown "N [lbf]"

DD/DM Round Deepdish Vacuum Cups Ordering Information

Imperial

Ø2.00" CPI-20DD-(M)-(DR)

Ø3.00" CPI-30DD-(M)-(DR)

Ø4.00" CPI-40DD-(M)-(DR)

(DR) = Durometer

30 45

(M) = Mounts Available

K B C

Metric

Ø50mm CPI-50DM-(M)-(DR)

Ø75mm CPI-75DM-(M)-(DR)

Ø100mm CPI-100DM-(M)-(DR)

(DR) = Durometer

30 45

(M) = Mounts Available

A B C

VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

FF/PF Oval FlatFoot



Specifications:

Temperature:

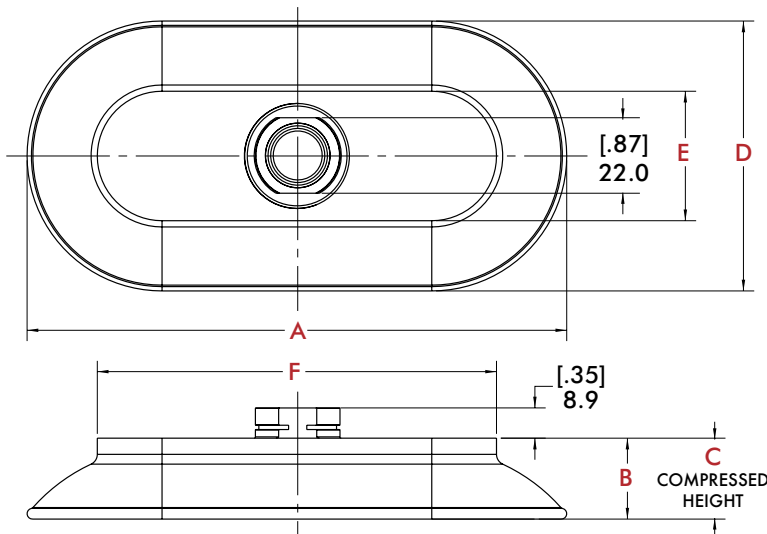
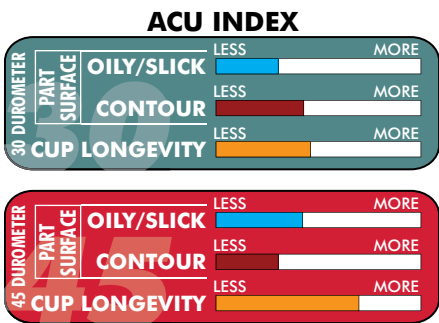
15-59 Sec: -20° to 250° F [-29° to 121° C]

1-5 min: 15° to 180° F [-9° to 82° C]

Material: Nitrile

Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol



FF/PF Oval Flatfoot

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

Dimensions shown "mm [inch]"

FF/PF Vacuum Cup Capacities:

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

Holding capacities shown "N [lbf]"

FF/PF Oval FlatFoot Vacuum Cups Ordering Information

Imperial

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

(DR) = Durometer

30 45

(M) = Mounts Available

K B C D 24FF E1 24FF

Metric

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

(DR) = Durometer

30 45

(M) = Mounts Available

A B C 60-125PF

VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

DD/DM Oval Deepdish

Specifications:

Temperature:

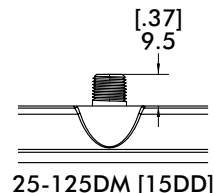
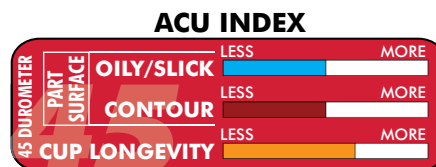
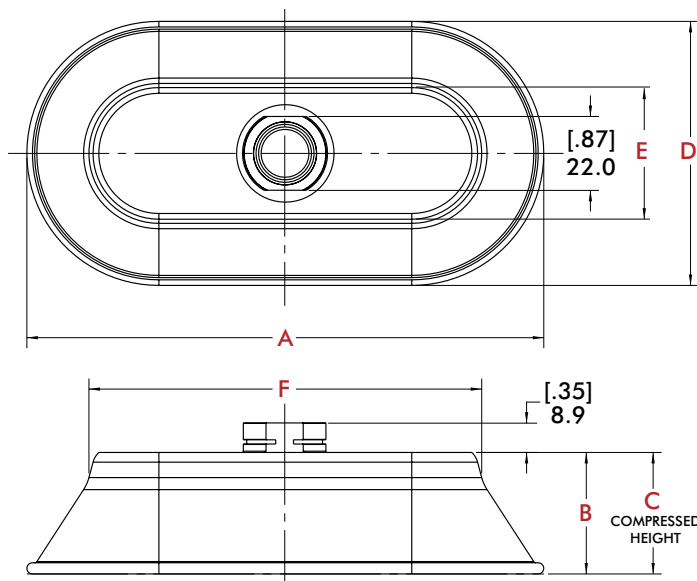
15-59 Sec: -20° to 250° F [-29° to 121° C]

1-5 min: 15° to 180° F [-9° to 82° C]

Material: Nitrile

Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol



DD/DM Oval Deepdish

Model	A	B	C	D	E	F	Weight
25-125DM	128.7	17.1	8.7	27.0	12.9	114.5	35 g
[15DD]	[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)

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

Metric

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

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

(DR) = Durometer



(M) = Mounts Available



(DR) = Durometer



(M) = Mounts Available



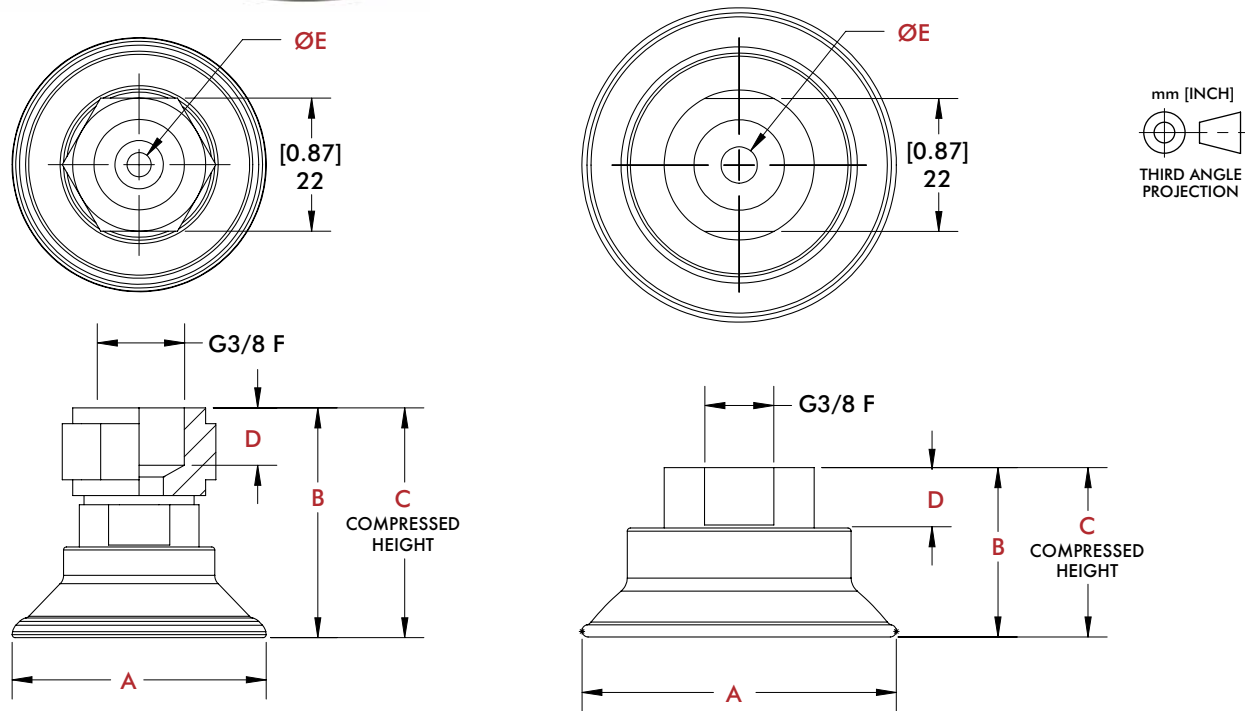
HOT FORMING VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

MFF Round Flat



Specifications:
Temperature:
Resistant up to 250° C [482° F]
(sheet metal temperature)
Material: Silicone free HT2
Chemical Resistance:
Oil, water, grease, hydraulic fluid, alcohol



MFF Dimensions

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

Dimensions shown "mm [inch]"

MFF Holding Capacity @ -0.6 bar vacuum

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

Holding capacities shown "N [lbf]"

MFF Round Flat Ordering Information

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

HOT FORMING VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

Specifications:

Temperature:

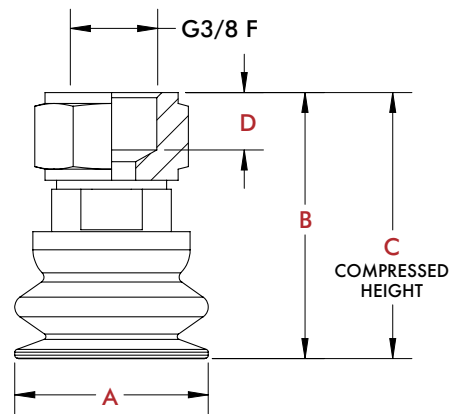
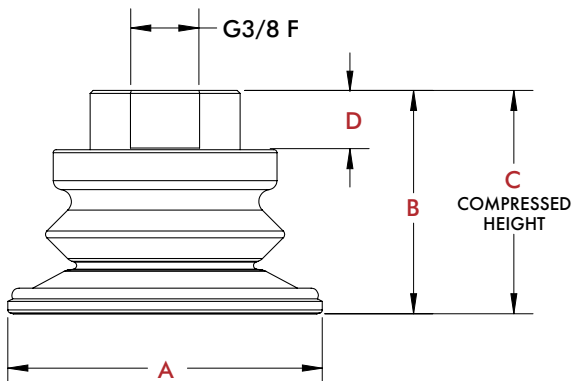
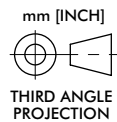
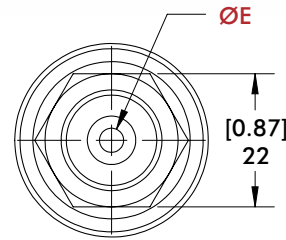
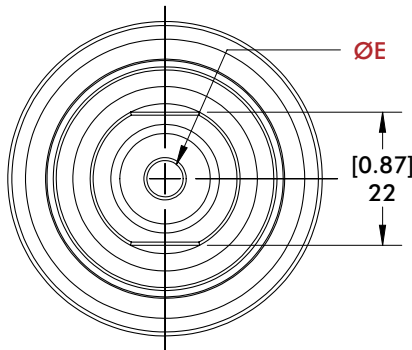
Resistant up to 250° C [482° F]
(sheet metal temperature)

Material: Silicone free HT2

Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol

MTC Round Bellows



MTC Dimensions

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

Dimensions shown "mm [inch]"

MTC Holding Capacity @ -0.6 bar vacuum

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

Holding capacities shown "N [lbf]"

MTC Round Bellows Ordering Information

Metric

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

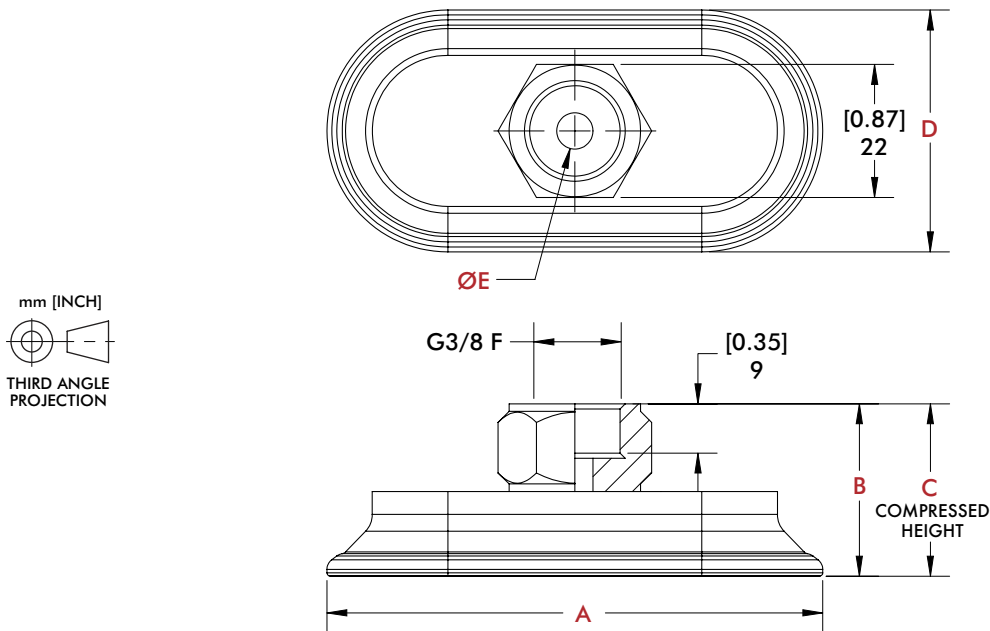
HOT FORMING VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

MFF Oval Flat



Specifications:
Temperature:
Resistant up to 250° C [482° F]
(sheet metal temperature)
Material: Silicone free HT2
Chemical Resistance:
Oil, water, grease, hydraulic fluid, alcohol



MFF Dimensions

Model	A	B	C	D	E	Weight
6023MFF	[2.52] 64	[1.02] 26	[0.91] 23	[0.98] 25	[0.24] 6	[1.57 oz] 44.6 g
9030MFF	[3.70] 94	[1.06] 27	[0.94] 24	[1.34] 34	[0.24] 6	[2.42 oz] 68.5 g
8040MFF	[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

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

Holding capacities shown "N [lbf]"

MFF Oval Flat Ordering Information

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

HOT FORMING VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

MAC Oval Bellows

Specifications:

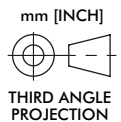
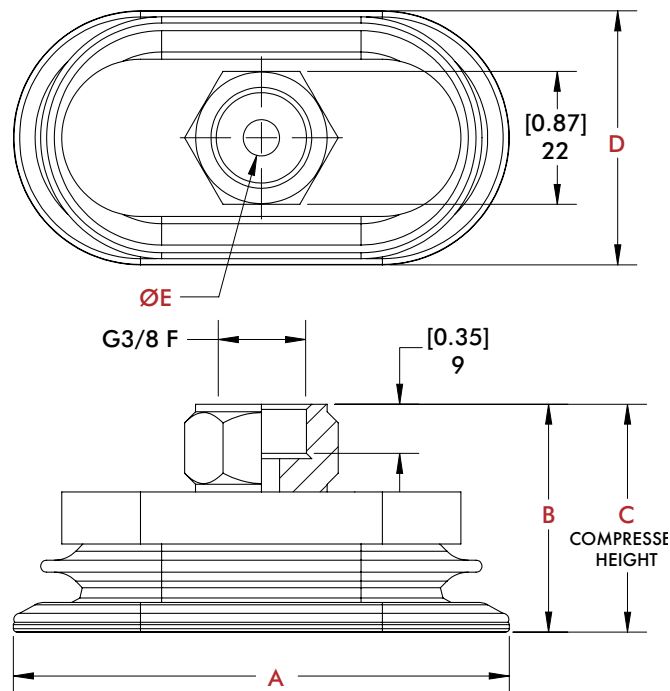
Temperature:

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

Material: Silicone free HT2

Chemical Resistance:

Oil, water, grease, hydraulic fluid, alcohol



MAC Dimensions

Model	A	B	C	D	E	Weight
6030MAC	[2.48] 63	[1.38] 35	[1.10] 28	[1.30] 33	[0.24] 6	[2.32 oz] 65.9 g
8040MAC	[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
6030MAC	[8.5] 38	[12.8] 57	[11.7] 52
8040MAC	[14.6] 65	[22.5] 100	[21.3] 95

Holding capacities shown "N [lbf]"

MAC Oval Bellows Ordering Information

Metric

Ø60x30mm CPI-6030MAC-B-HT

Ø80x40mm CPI-8040MAC-B-HT

MICRO SERIES VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

VC-F Round Flat



Applications:

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

Specifications:

Material Operating Temperature:

Viton: -40° to 450° F

[-40° to 232° C]

Silicone: -100° to 400° F

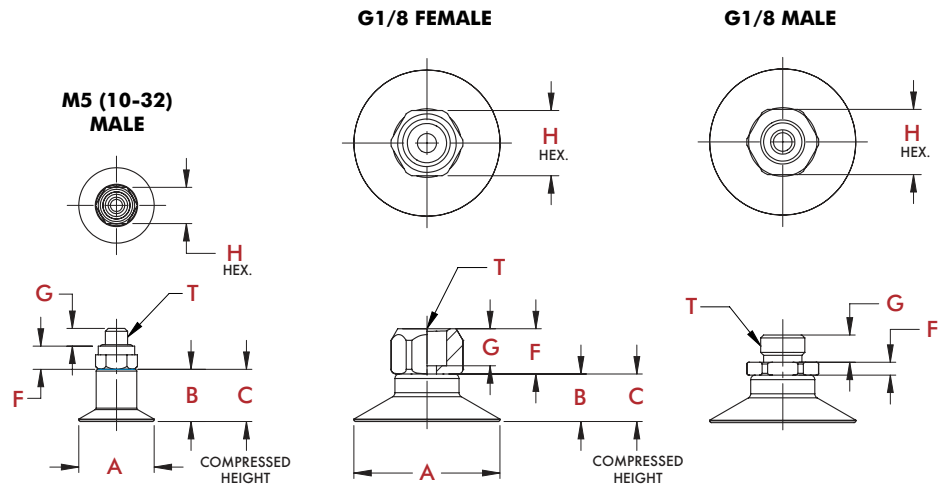
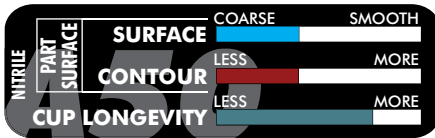
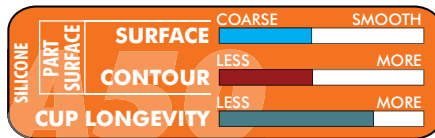
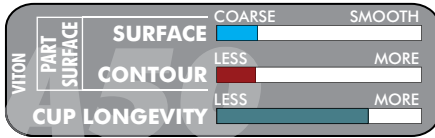
[-73° to 204.4° C]

Nitrile: -40° to 275° F

[-40° to 135° C]

Durometer: A50

ACU INDEX

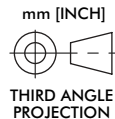


(DR) = Durometer/Material

V Viton Hi-Temp Applications where silicon is not allowed

S Silicone Extremely hot or cold environments

N Nitrile General Purpose



THIRD ANGLE PROJECTION

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

VC-F Round Flag Ordering Information

Ø15mm..... VC-F15(DR)-(M)

Ø20mm..... VC-F20(DR)-(M)

Ø30mm..... VC-F30(DR)-(M)

Ø40mm..... VC-F40(DR)-(M)

Ø50mm..... VC-F50(DR)-(M)

(DR) = Durometer/Material

V **S** **N**

Not Available in
Ø15 and Ø20mm

(M) = Mounts Available

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

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

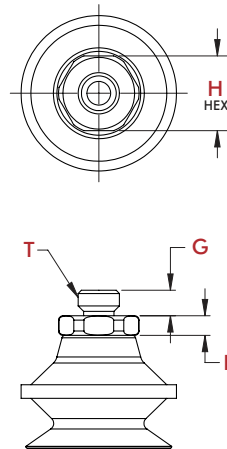
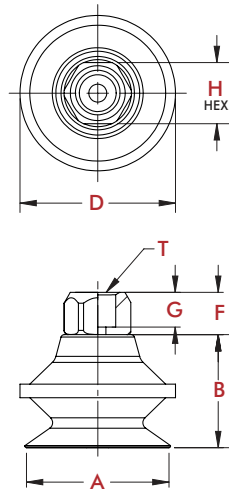
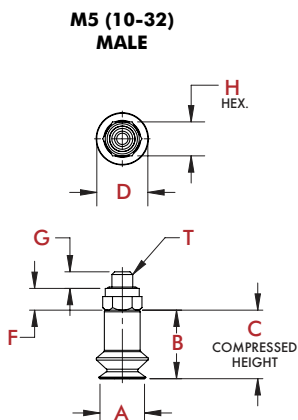
[-40° to 135° C]

Durometer: A50

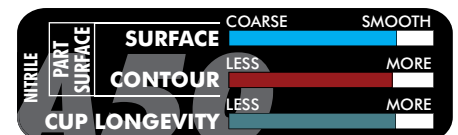
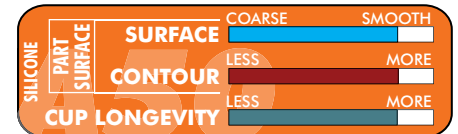
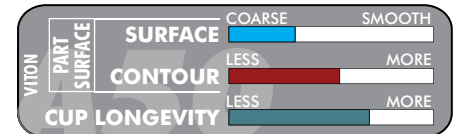


G1/8 FEMALE

G1/8 MALE



ACU INDEX



VC-B Micro Fitting Threads

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

(DR) = Durometer/Material

V Viton Hi-Temp Applications where silicon is not allowed

S Silicon Extremely hot or cold environments

N Nitrile General Purpose

VC-B Dimensions

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

VC-B Micro Series Round Multi-Bellows Ordering Information

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

(DR) = Durometer/Material

V **S** **N**

(M) = Mounts Available

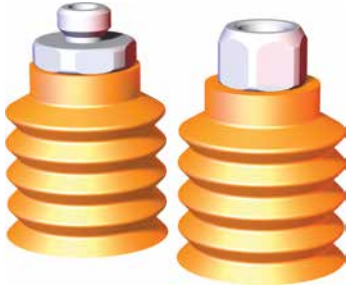
10M **18M** **18F**

Only Available in
Ø5, Ø10, Ø15, Ø20mm

MICRO SERIES VACUUM CUPS

Vacuum Products | Dimensions | Ordering Information

VC-BM Micro Series Round Multi-Bellows



Applications:

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

Specifications:

Material Operating Temperature:

Viton: -40° to 450° F

[-40° to 232° C]

Silicone: -100° to 400° F

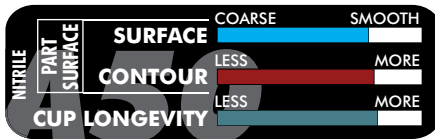
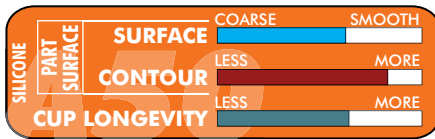
[-73° to 204.4° C]

Nitrile: -40° to 275° F

[-40° to 135° C]

Durometer: A50

ACU INDEX

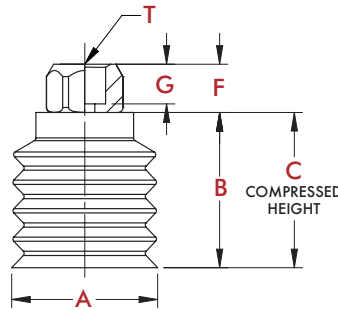
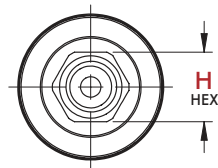


(DR) = Durometer/Material

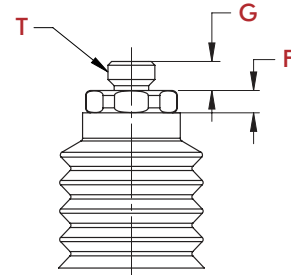
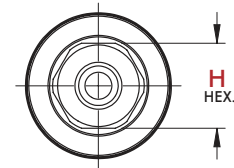
S **Silicon** Extremely hot or cold environments

N **Nitrile** General Purpose

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

VC-BM Dimensions

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

VC-BM Micro Series Round Multi-Bellows Ordering Information

Ø20mm..... VC-BM20(DR)-(M)

Ø30mm..... VC-BM30(DR)-(M)

Ø40mm..... VC-BM40(DR)-(M)

Ø50mm..... VC-BM50(DR)-(M)

(DR) = Durometer/Material

(M) = Mounts Available



Only Available in
Ø20mm

TPLP Mag-Lift Part Lifting Magnets

Features:

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

Benefits:

- NPT mount allows retrofit to existing assemblies.

Specifications:

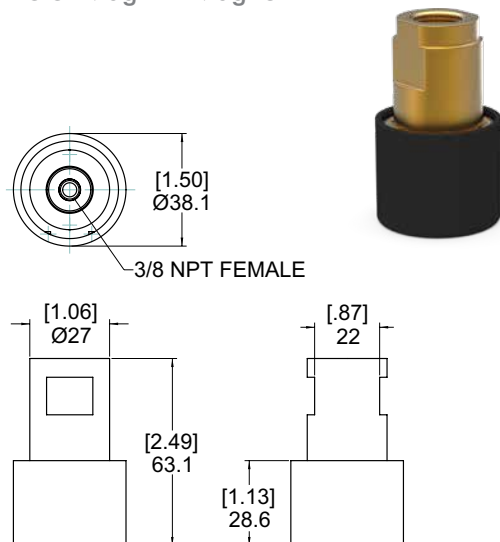
Recommended Operating Pressure:

2.4 bar [35 psi]

Port: 3/8" NPT Compressed Air Port

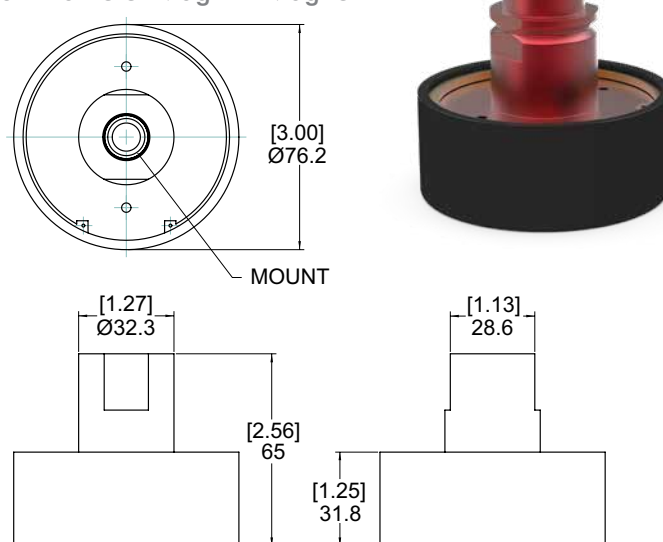
Material: Machined, Anodized Aluminum, Urethane Pad (50 durometer - low skid)

1.50" Diameter Mag-Lift Magnet



Model	Pad Only
CPI-TPLP15RB	RB15-CPI

3.00" Diameter Mag-Lift Magnet



Mount	Model	Pad Only
3/8 NPT	CPI-TPLP50373	RB30-CPI
G3/8	CPI-TPLP30BS	

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

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

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

ECOCUP SERIES

Vacuum Products | Product Overview | Technical Specifications | Dimensions

EcoCup™ creates vacuum without AIR!

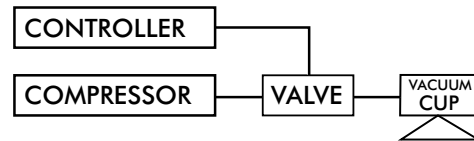
Great for pick-and-place applications of flat, rigid, non-porous parts including: plastic, glass, solar panels, and electronics, as well as other consumer goods with smooth, flat surfaces.

The EcoCup™ features:

- Light-switch operation
- Ultra-fast actuation
- Noise-free operation
- Easy installation and setup
- Reduced maintenance costs
- Easy optional mounting to Scara robots
- Eliminated risk of air-borne contaminants

The OLD way

with a Typical Pneumatic Setup



The NEW way

Using the new EcoCup™



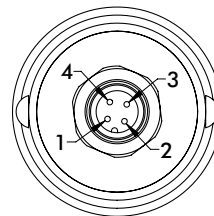
**No fittings,
no valves, no hoses,
no compressor, and
absolutely no AIR!**

EcoCup™ EC40 Electric Vacuum Cup Assembly

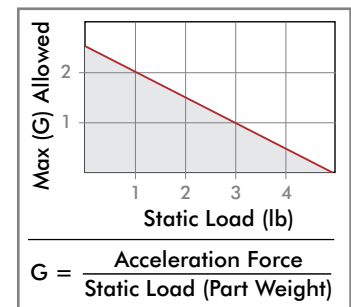
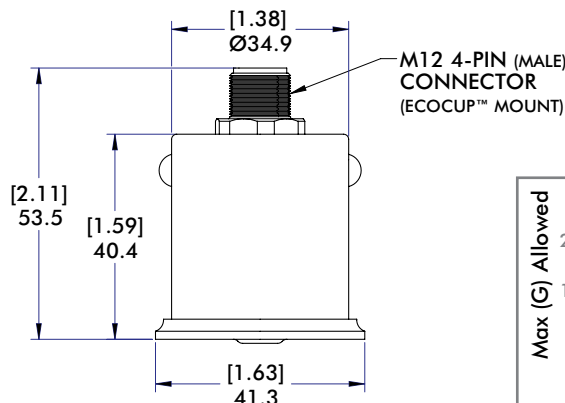


US Patent #9108319

Specifications	VC-EC40-45N
Actuation Time	25 ms
Temperature Range	5° ~ 60°C [41° ~ 140°F]
Duty Cycle	50% (½ On, ½ Off)
Voltage	24 VDC
Current	0.5 Amp
Weight	0.12 kg [0.25 lb]
Cup Material	45 Durometer Nitrile



M12 4-PIN (MALE)
CONNECTOR FACE VIEW
1: NOT USED
2: NOT USED
3: -0 VDC
4: +24 VDC



EcoCup™ EC40 Electric Vacuum Cup - Operation

Holding Capacity	VC-EC40-45N
Recommended Load	<0.45kg [1.0 lb]

Loads from 0.45kg [1.0 lb] up to 1.81kg [4.0 lb] max. may be used with longer movement times.
(See chart in drawing area for greater detail).

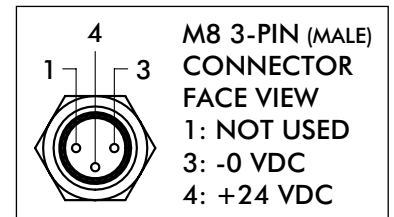
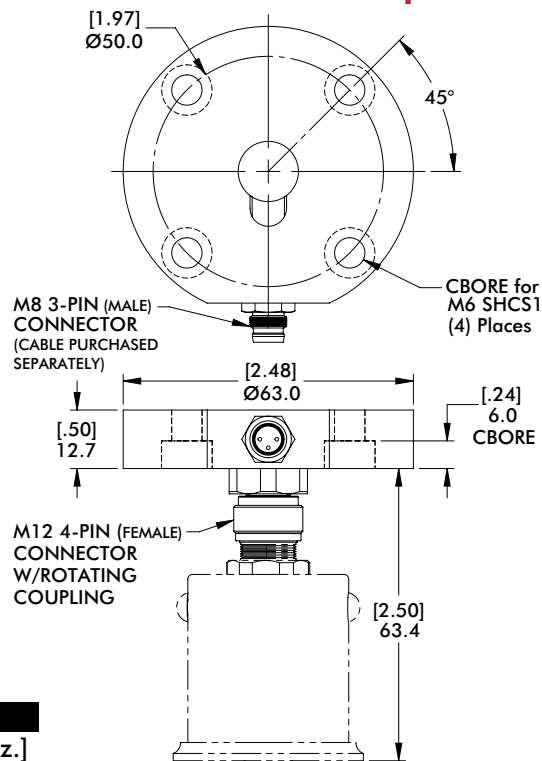
Operating Instructions:

1. Set cup on smooth, flat surface of part.
2. Apply 24VDC to Pins 3 and 4 on M12 connector.
(Center of cup lifts, creating vacuum)
3. Release voltage and part is released.

ECOCUP SERIES

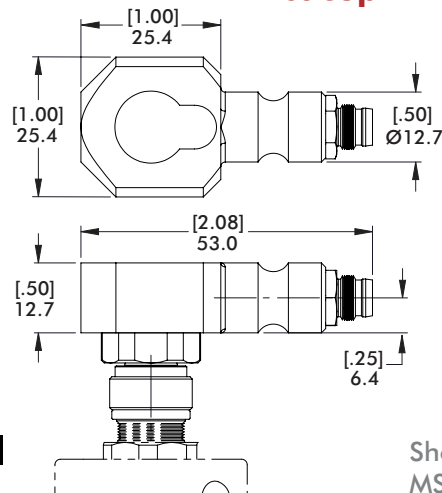
Vacuum Products | Dimensions | Technical Specifications

EcoCup™ EC40 Electric Vacuum Cup Assembly



Model	Weight
VC-EC40-SRM50	111g [3.9 oz.]

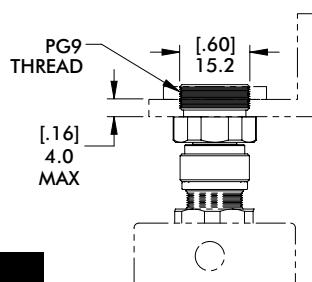
EcoCup™ EC40 Optional Apple Core Mounting



Model	Weight
VC-EC40-ACM50	40g [1.4 oz.]

Shown with DESTACO MSA Series Swivel Arm

EcoCup™ EC40 M12 4-Pin Connector with Rotating Coupling (Contact DESTACO for Custom Solutions)



Model	Weight
Turck #FKM 4.4-0.5	14g [0.5 oz.]

Shown with custom plate for array mounting



ARV AND VSA SERIES VENTURIES

Vacuum Products | Features and Specifications

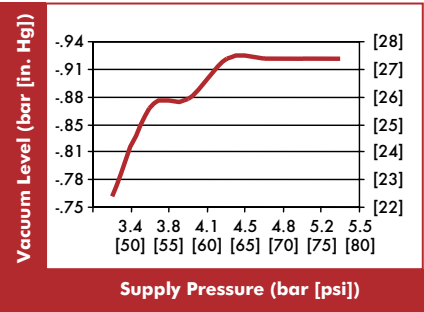
ARV® Series Auto-Release Venturi Cup Mount

Requiring (1) air line, (1) valve:

Offers integrated automatic quick panel release and exhaust silencer in one part. Mounting options include right or left hand apple core mounting or no apple core mount for use with DESTACO's spring cup mounts. The ARV® Series is also available in a block style for remote mounting and each mount can be ordered with Imperial or Metric ports.



ARV® Performance:

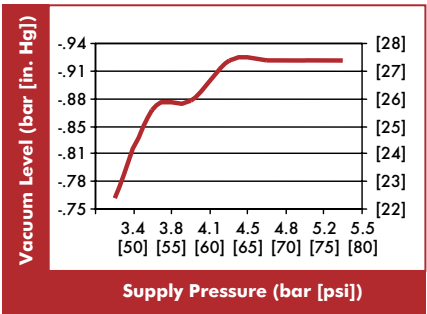


Specifications @ 4 bar [60psi]:
Speed to Vacuum: 0.2-0.3 seconds
Speed to Release: 0.02 seconds
Air Consumption:
Vacuum: 40 l/m [1.4 scfm]
Blow-off: 0
Noise Level (at one meter): 68dBA
Material: Aluminum

VSA Series Venturi Cup Mount



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 ft³]
(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

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.

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]



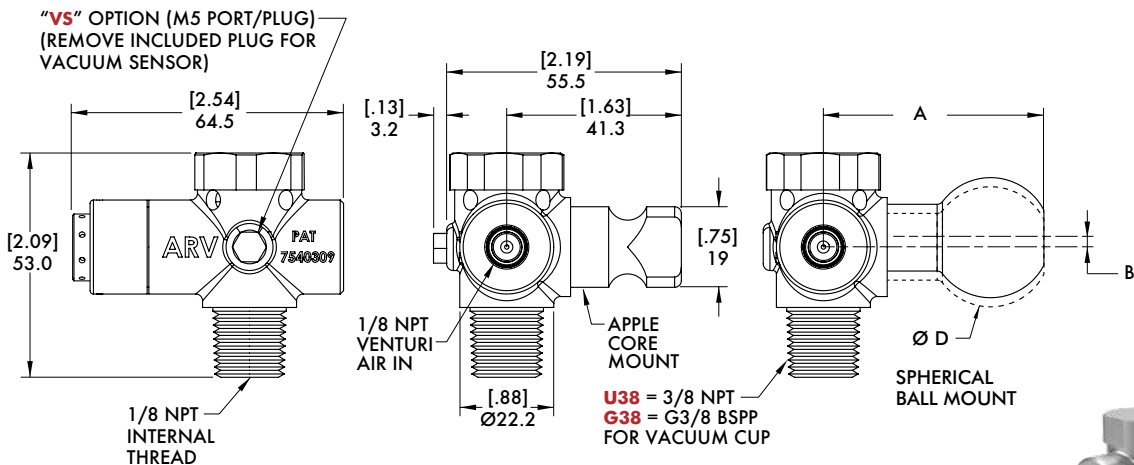
Without Apple Core
CPI-VSA-ARVR-000-(X)
86g [0.19lb]



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



(X)
Mounting
Thread
U38 = 3/8"
NPT Male
G38 = 3/8"
G Male



Vacuum Sensor
Option
Add "-VS" to
end of "ARV"
order code

US Patents #7,540,309 - 7,681,603 - 7,950,422

Model Number	A	B	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

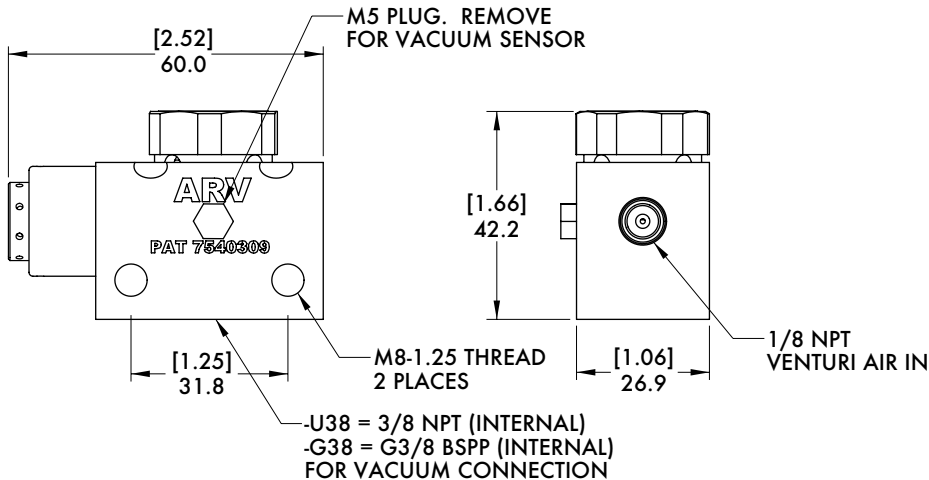


Venturi Style Vacuum Generator Cup Mounts ARV® Block Style Dimensions and Ordering Information



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]



MICRO TOOLING VENTURI

Vacuum Products | Dimensions | Technical Specifications

VSA 500 Series MicroTool Apple Core

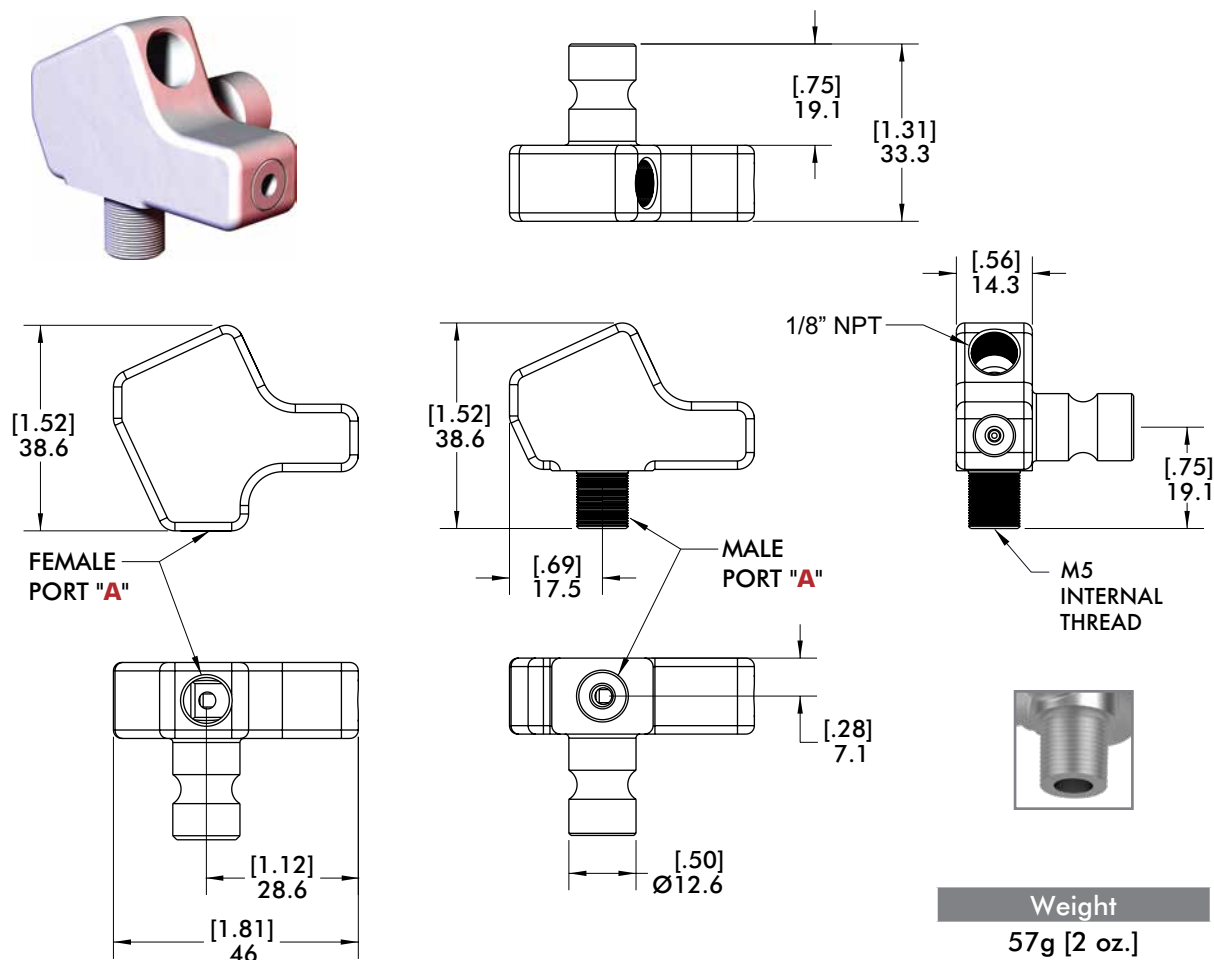


Features:



- 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

US Patents # 7,540,309 - 7,681,603 - 7,950,422

VSA SERIES VENTURIES

Vacuum Products | Dimensions | Technical Specifications

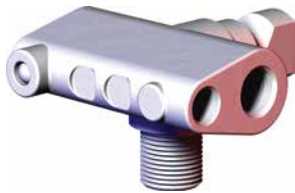
VSA Low-Profile 750/19 Series Apple-Core with Blow-Off

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.



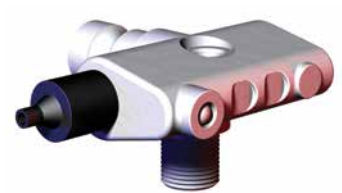
Low-Profile 750/19 w/
Blow Off No Options
CPI-VSA-(X)-BO-LP



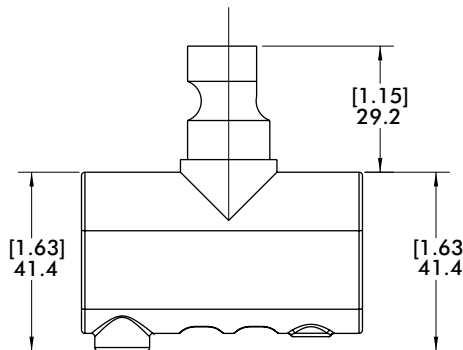
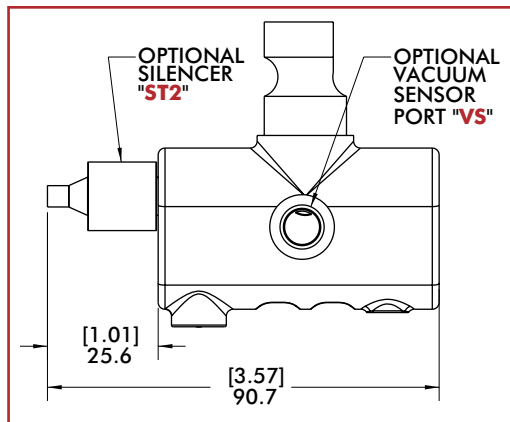
Low-Profile 750/19 with
Blow Off with Detector Option
CPI-VSA-(X)-BO-LP-DET



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



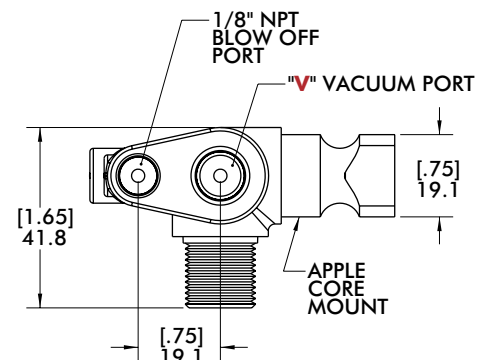
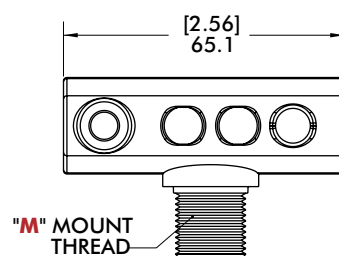
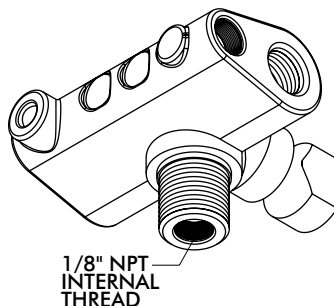
VS/DET Thread

DET = M5

VS = 1/8 NPT

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

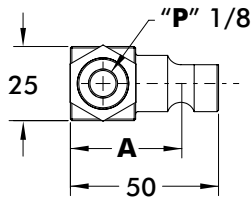
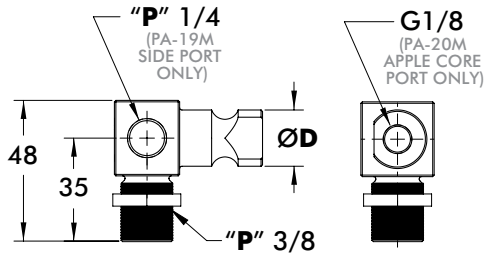
ACCELERATE® PORT ONLY ADAPTORS

Vacuum Products | Dimensions | Technical Specifications



PA Series

Apple Core Mount



CPI-LNA-VSA-19
G1/4 Locking Nut
CPI-LNB-VSA-19
G3/8 Locking Nut



PA-19M



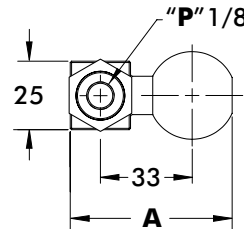
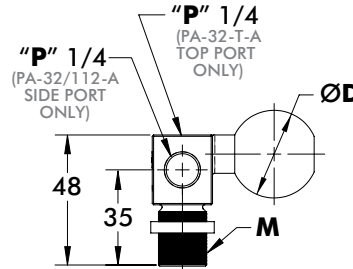
PA-20M

Material: Aluminum
Load: 150Nm

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

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

Ball Mount



PA-B32/B112

PA-B32-G38-T-A

Material: Aluminum
Load: 150Nm

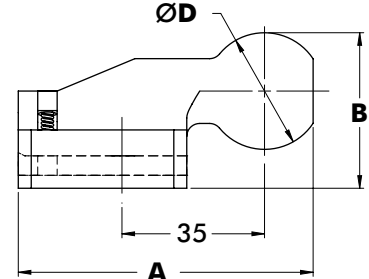
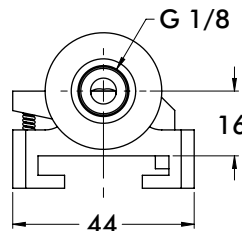
Weight includes locking nut* and plug
(not shown) *Except U38 models

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

PA 28mm - 32mm Ball for C-Mount



Material: Aluminum
Load: 150Nm

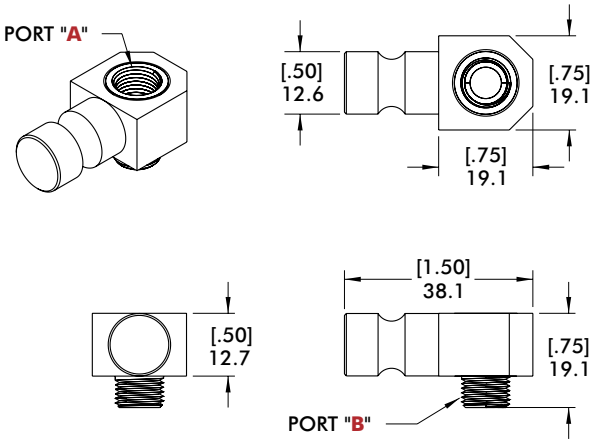


Model Number	A	B	ØD	Weight
CPI-PA-B112-CM	[2.84] 72.1	[1.50] 38.1	[1.13] 28.5	[0.23 lb] 106g
CPI-PA-B32-CM	[2.98] 75.7	[1.69] 42.9	[1.26] 32	[0.27 lb] 122g

MICRO TOOLING PORT ONLY ADAPTER

Vacuum Products | Dimensions | Technical Specifications

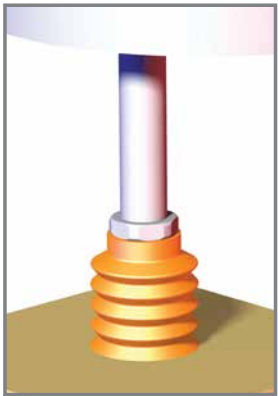
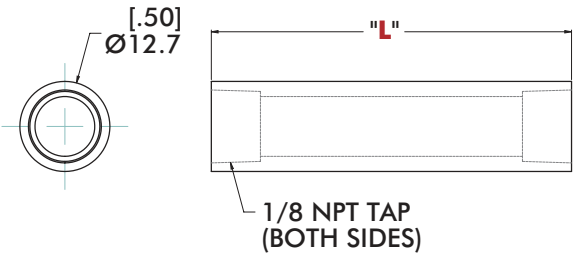
PA 500 Series



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

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

PAT 1/8 NPT Vacuum Extension

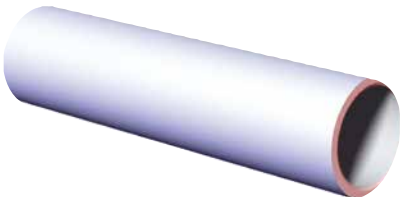


"L"

Standard
Lengths

- 02 = 2.00"
- 03 = 3.00"
- 04 = 4.00"
- 05 = 5.00"
- 06 = 6.00"

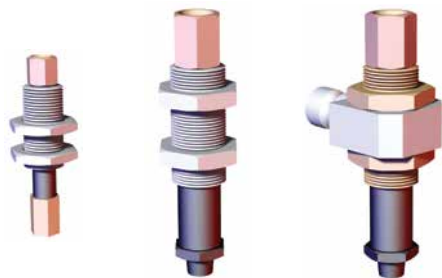
Model Number	Weight
CPI-PAT-50T-"L"-U18	[0.13 lb/ft] 193.0 g/m



SPRING-LOADED CUP MOUNTS

Vacuum Products | Dimensions | Technical Specifications

LC Bulk Head Style Micro Series Level Compensators



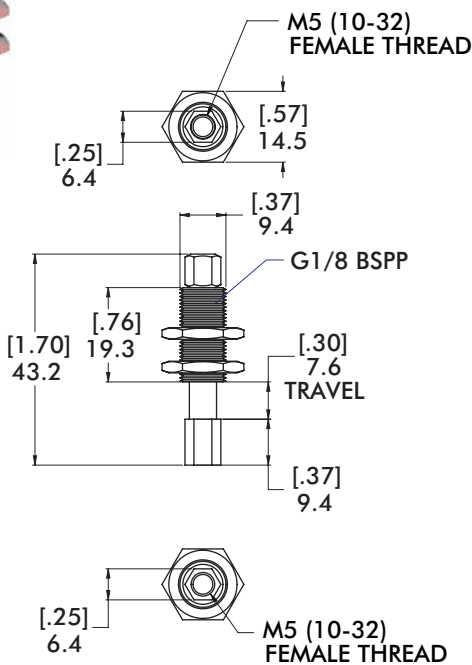
Specifications:
Material: Aluminum

Features:

- M5 or G mounting threads and vacuum ports.



0.30" TRAVEL
ORDERING INFORMATION
CPI-LC10

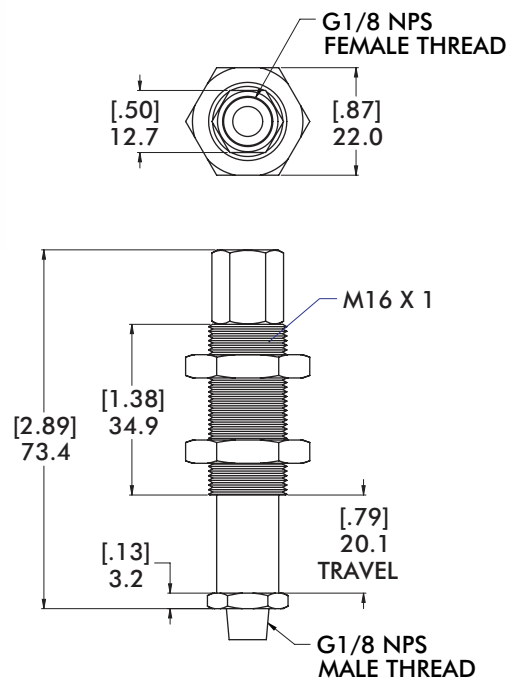


Weight

5.7 g [0.2 oz.]



0.75" TRAVEL
ORDERING INFORMATION
CPI-LC18



Weight

28.3 g [1.0 oz.]

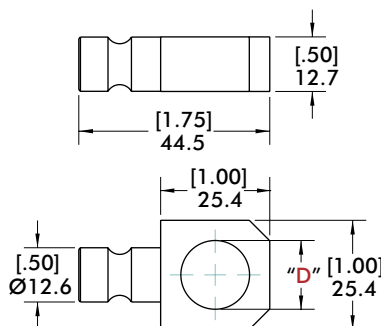
LCM Series Mount



CPI-LCM-10-"D"

Weight

23 g [0.8 oz.]



"D" = (Ø) Diameter
16 = Ø16mm [.63"]
10 = Ø10mm [.39"]

SPRING-LOADED CUP MOUNTS

Vacuum Products | Dimensions | Technical Specifications

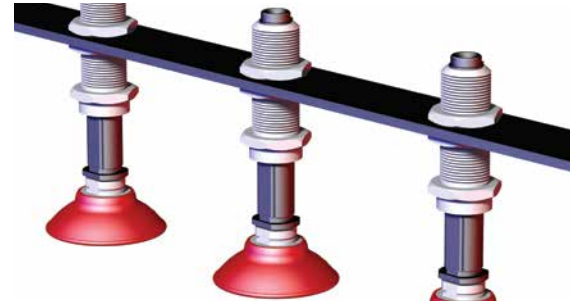
Features:

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

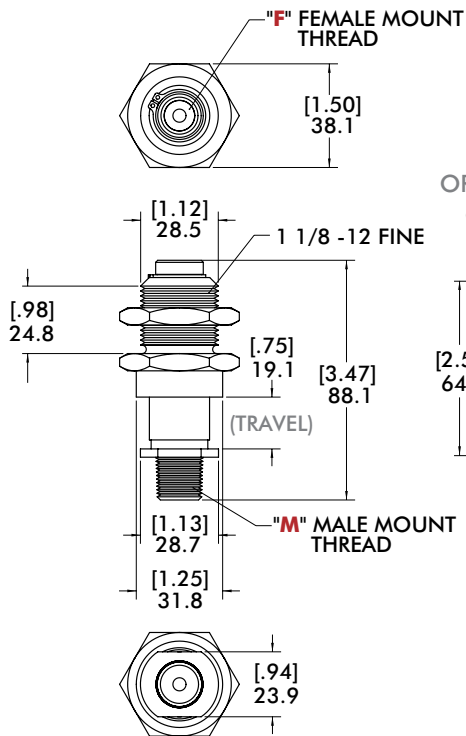
Specifications:

Material: Aluminum

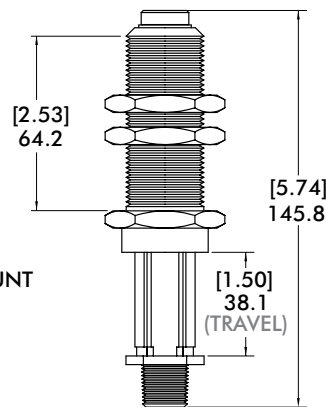
RCM Bulkhead Style Standard Travel



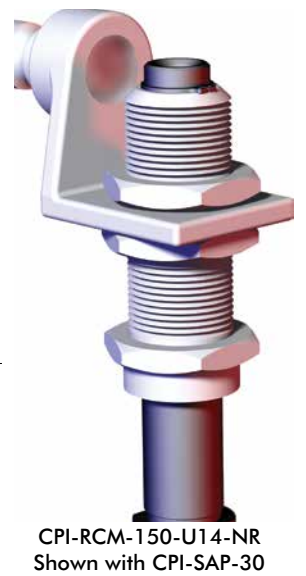
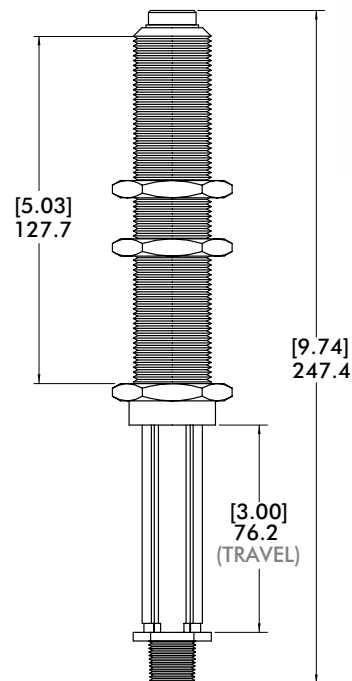
0.75" TRAVEL ORDERING INFORMATION CPI-RCM-30



1.50" TRAVEL ORDERING INFORMATION CPI-RCM-150-U14-NR



3.00" TRAVEL ORDERING INFORMATION CPI-RCM-300-U14-NR



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

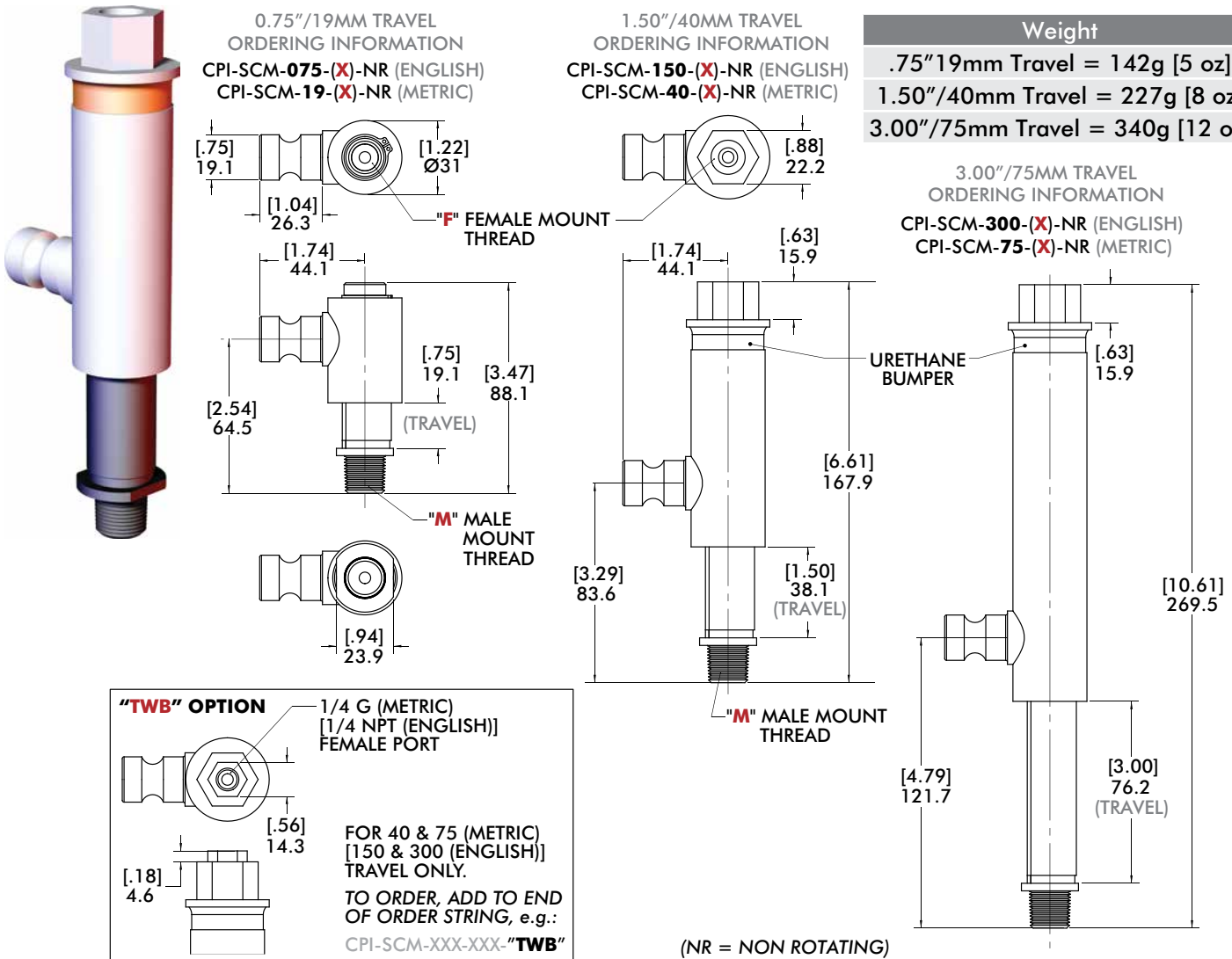


Specifications:

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.



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

Version	M	F	(X)
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	M	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

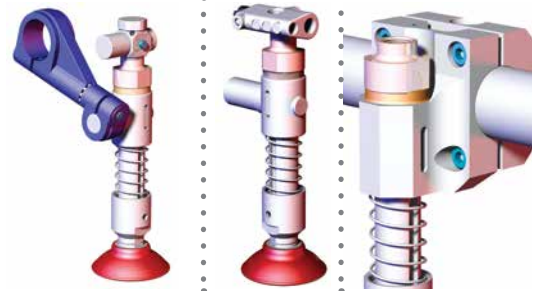
Features:

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

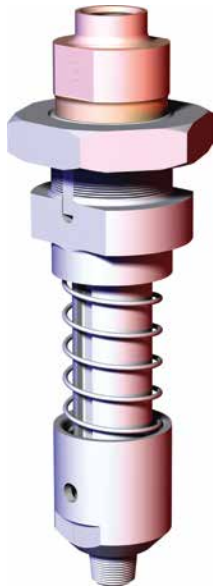
Benefits:

- 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.

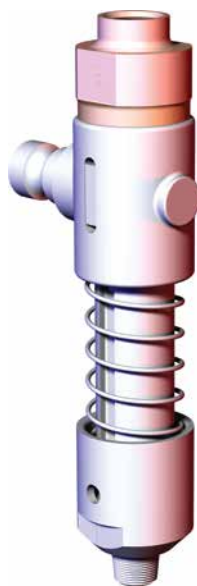
TCL T-Clamp Ø1.00" (in)



Ø1.25" Bulkhead Style
CPI-SCM(**B**)-"T"



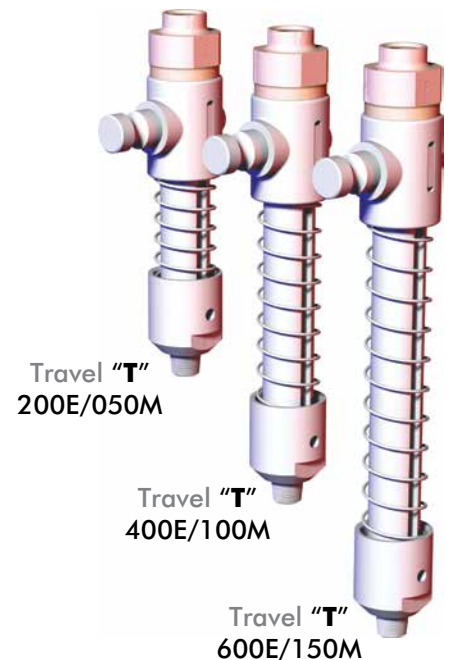
Ø0.75" Apple Core Style
CPI-SCM(**A**)-"T"



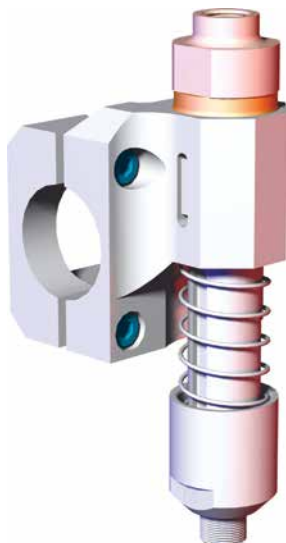
Ø1.00"/25MM
Extension Style
CPI-SCM(**10/25**)-"T"



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



Ø1.50"/40MM
Tube Mount
CPI-SCM(**C**)-"D"- "T"- "O"



Ø1.50"/40MM
Single Strap Tube Mount
CPI-SCM(**S**)-"D"- "T"- "O"



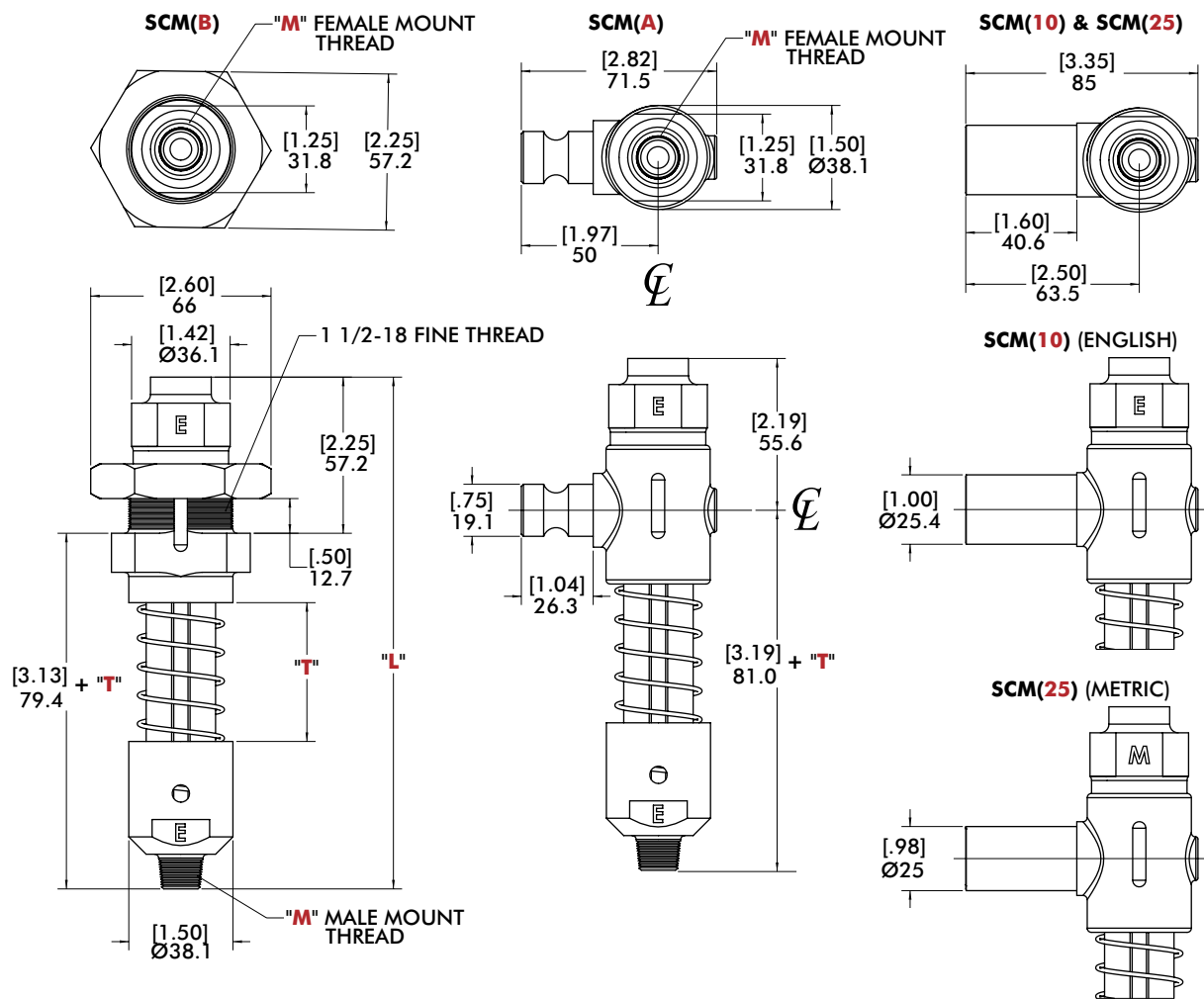
Ø1.50"/45MM
Single Strap Tube Mount
CPI-SCMS-45B-"T"





SPRING LOADED VACUUM CUP MOUNTS

Vacuum Products | Extended Travel Dimensions

SCM Bulkhead/Apple Core/Extension Style



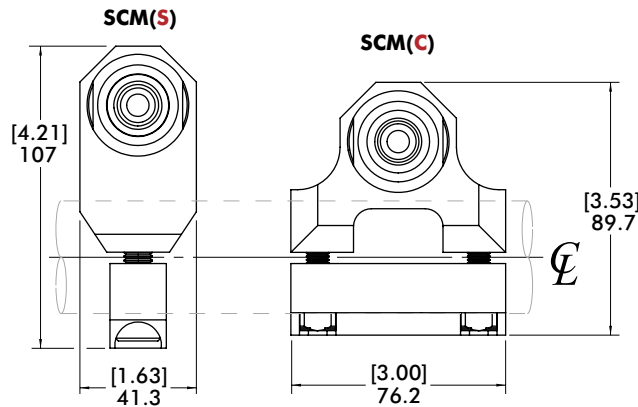
SCM Travel and Length - CPI-SCM(X)-"T"

Version	Travel "T"	L	M	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]
	600E (6.00" Vertical Travel)	288.9 [11.38]	3/8" NPT	.58kg [1.27 lb]
 Metric	050M (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]

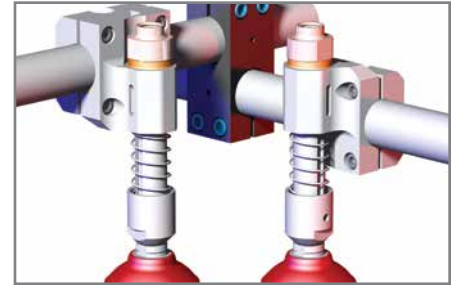
SPRING-LOADED CUP MOUNTS

Vacuum Products | Extended Travel Dimensions

SCM Tube Mounted

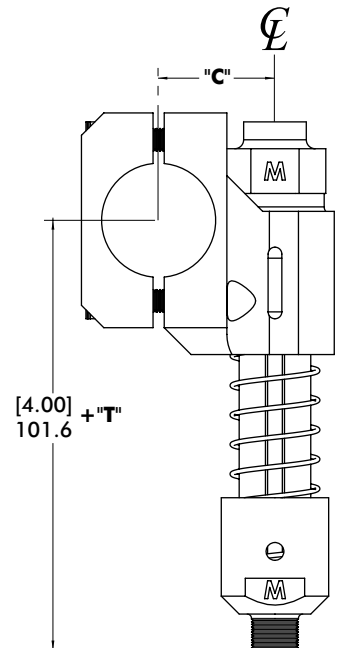
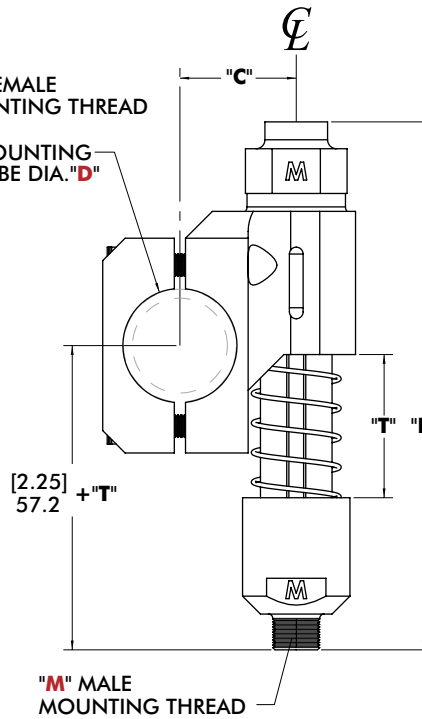
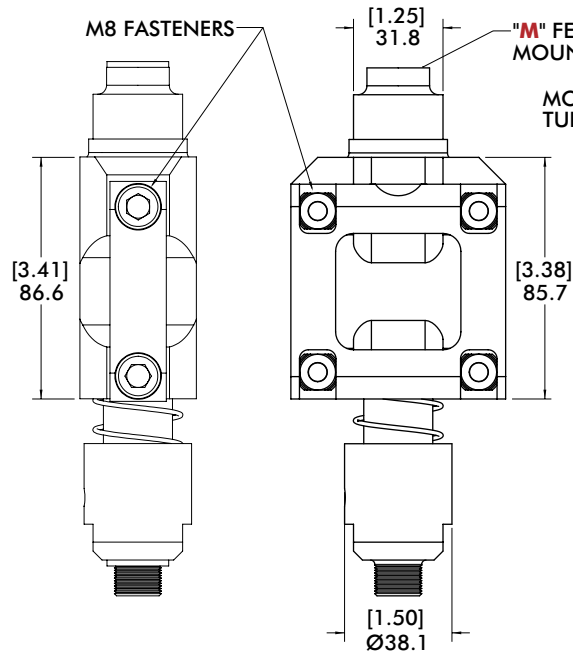


Patent Pending



SCM(S/C) MOUNTING ORIENTATION (SHOWN)
"O" = A (RAISED POSITION)

SCM(S/C) MOUNTING ORIENTATION (SHOWN)
"O" = B (LOWERED POSITION)



Model	C
CPI-SCMC	41.3 [1.63]
CPI-SCMS	54.1 [2.13]

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

Version	Travel "T"	L	M	D	Weight
Imperial	200E (2.00" Vertical Travel)	187.3 [7.38]	3/8" NPT	150 (Ø1.50")	.85kg [1.87 lb]
	400E (4.00" Vertical Travel)	238.2 [9.38]	3/8" NPT	150 (Ø1.50")	.90kg [1.97 lb]
	600E (6.00" Vertical Travel)	288.9 [11.38]	3/8" NPT	150 (Ø1.50")	.94kg [2.08 lb]
Metric	050M (50mm Vertical Travel)	187.3 [7.38]	3/8" G	40M (Ø40mm)	.85kg [1.87 lb]
	100M (100mm Vertical Travel)	238.2 [9.38]	3/8" G	40M (Ø40mm)	.90kg [1.97 lb]
	150M (150mm Vertical Travel)	288.9 [11.38]	3/8" G	40M (Ø40mm)	.94kg [2.08 lb]

SPRING LOADED VACUUM CUP MOUNT ACCESSORIES

Vacuum Products | Dimensions | Technical Specifications

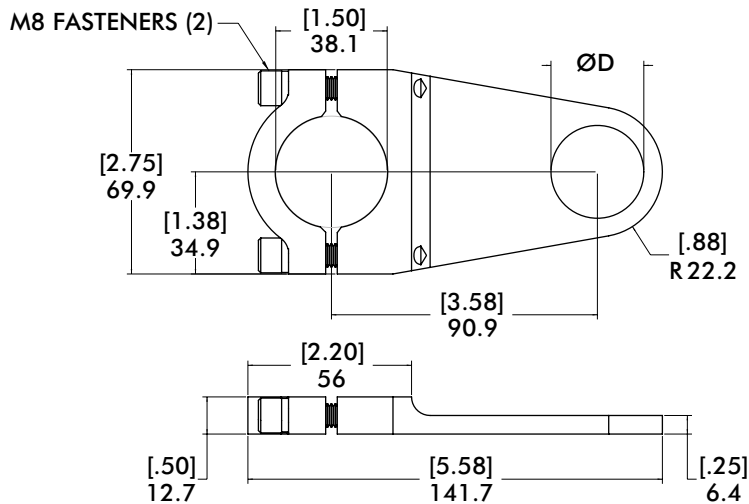
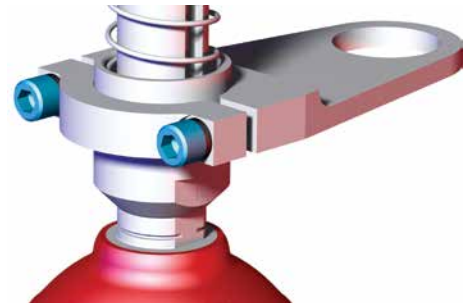
SAP Extended Travel Proximity Switch Mounts

Specifications:

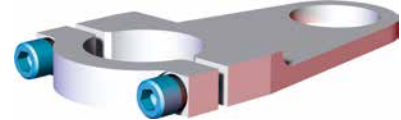
Material: Aluminum

Features:

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

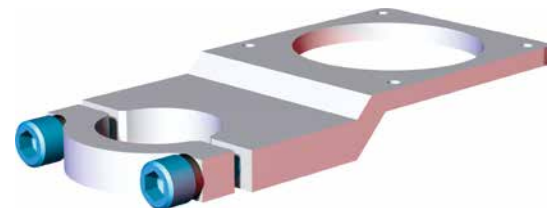
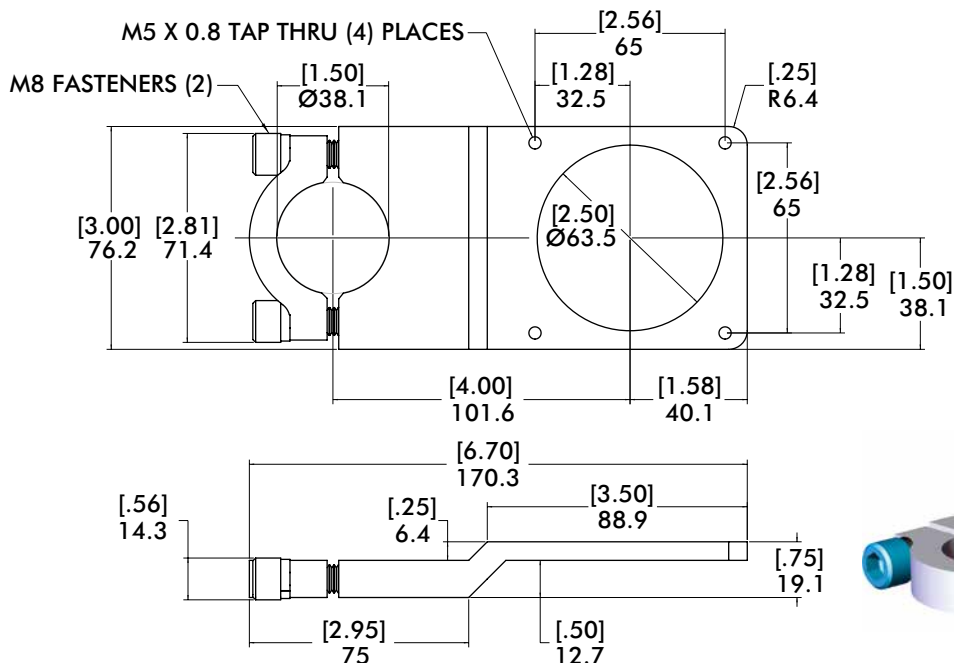


SAP 30mm Barrel Style



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

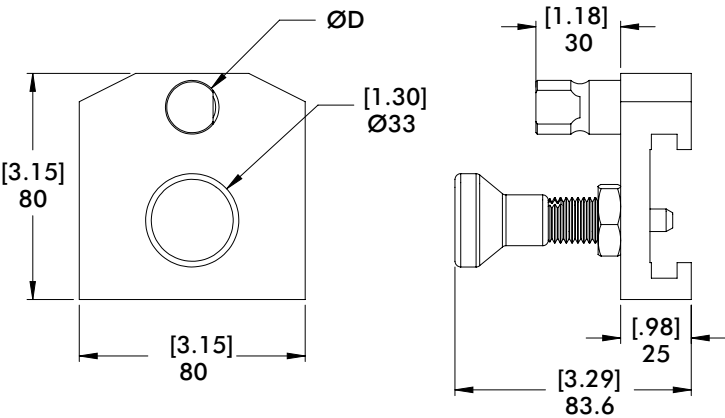
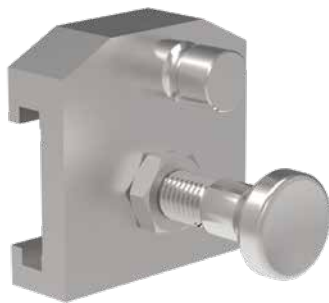


Model	Weight
CPI-SAP-NI50-PM-150	.23 kg [.56 lb]

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]

DESTACKER DOUBLE BLANK DETECTOR SPRING MOUNTS

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. [US Patent #4,662,668]
- 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

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** - **SCMB** - **SCM10/25** - **HD** - **Heavy-Duty** (SCMB (Double Pogo) only)

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 46-47)

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

US/INTL Patents: 6,988,696 / 7,281,739 / 1,921,031

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

Ø1.25"/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
050M 50mm with G Vacuum Port
100M 100mm with G Vacuum Port
150M 150mm with G Vacuum Port

D=Tube Mount

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

(See page 50)

CPI-DBD-42-200E-SCMS

Ø45mm
BodyBuilder Mount

(See page 51)



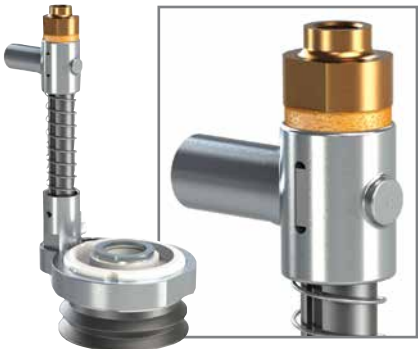
DESTACKER DOUBLE BLANK DETECTOR SPRING MOUNTS

Vacuum Products | Dimensions | Technical Specifications

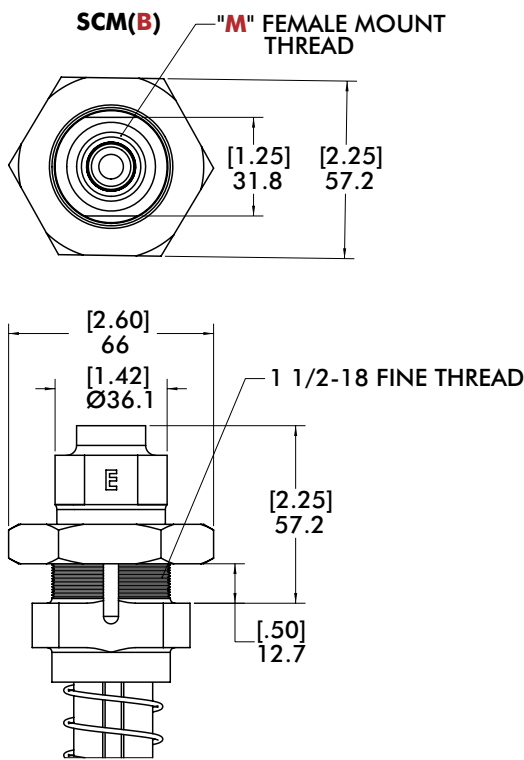
DBD Bulkhead/Extension Style Dimensions



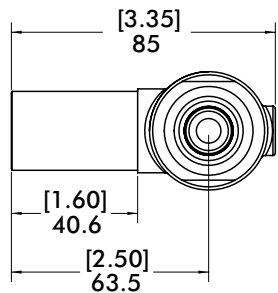
SCMB
Ø1.25" Thru Hole
Bulkhead Mount



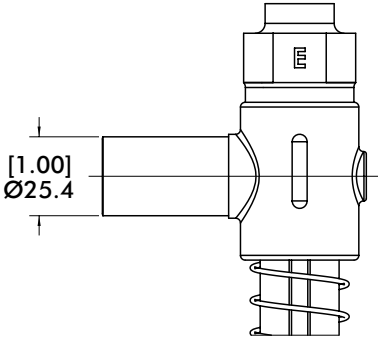
SCM10/25
Ø1.00"/25mm
Extension Mount



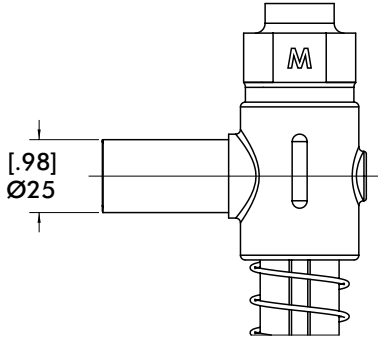
SCM(10) & SCM(25)



SCM(10) (ENGLISH)



SCM(25) (METRIC)

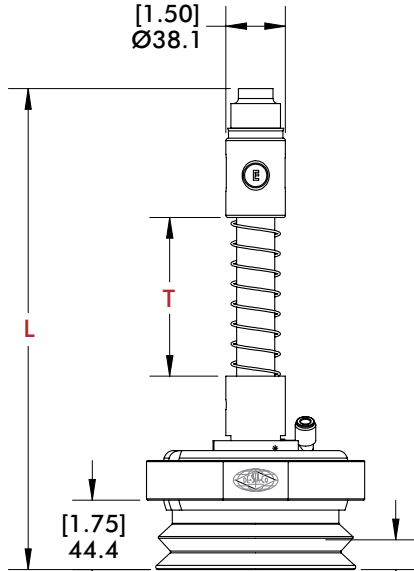
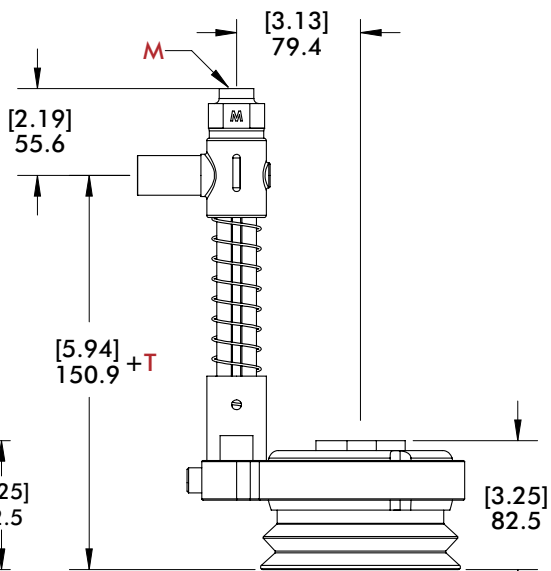
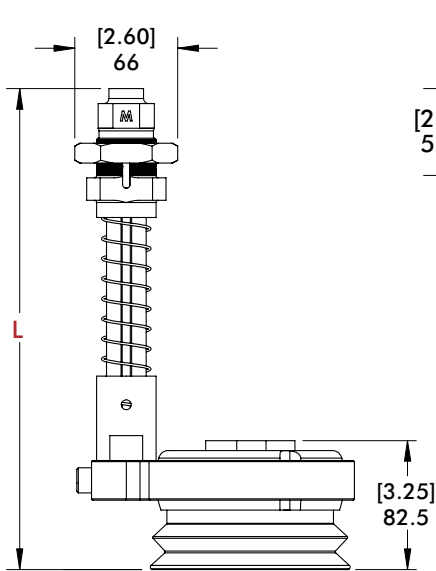
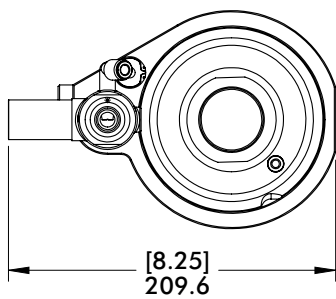
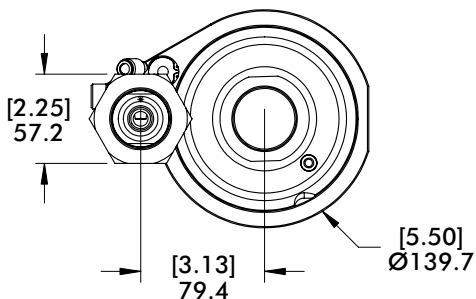
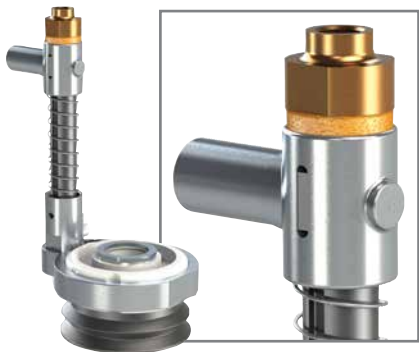
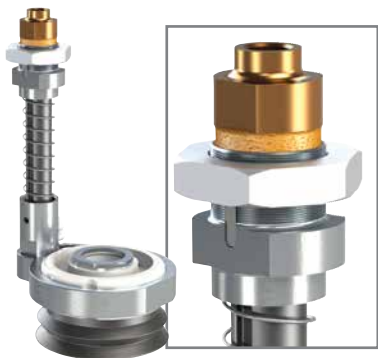


Version	(M)
Imperial	3/8" NPT
Metric	3/8" G



DESTACKER DOUBLE BLANK DETECTOR SPRING MOUNTS

Vacuum Products | Dimensions | Technical Specifications

DBD Bulkhead/Extension Style



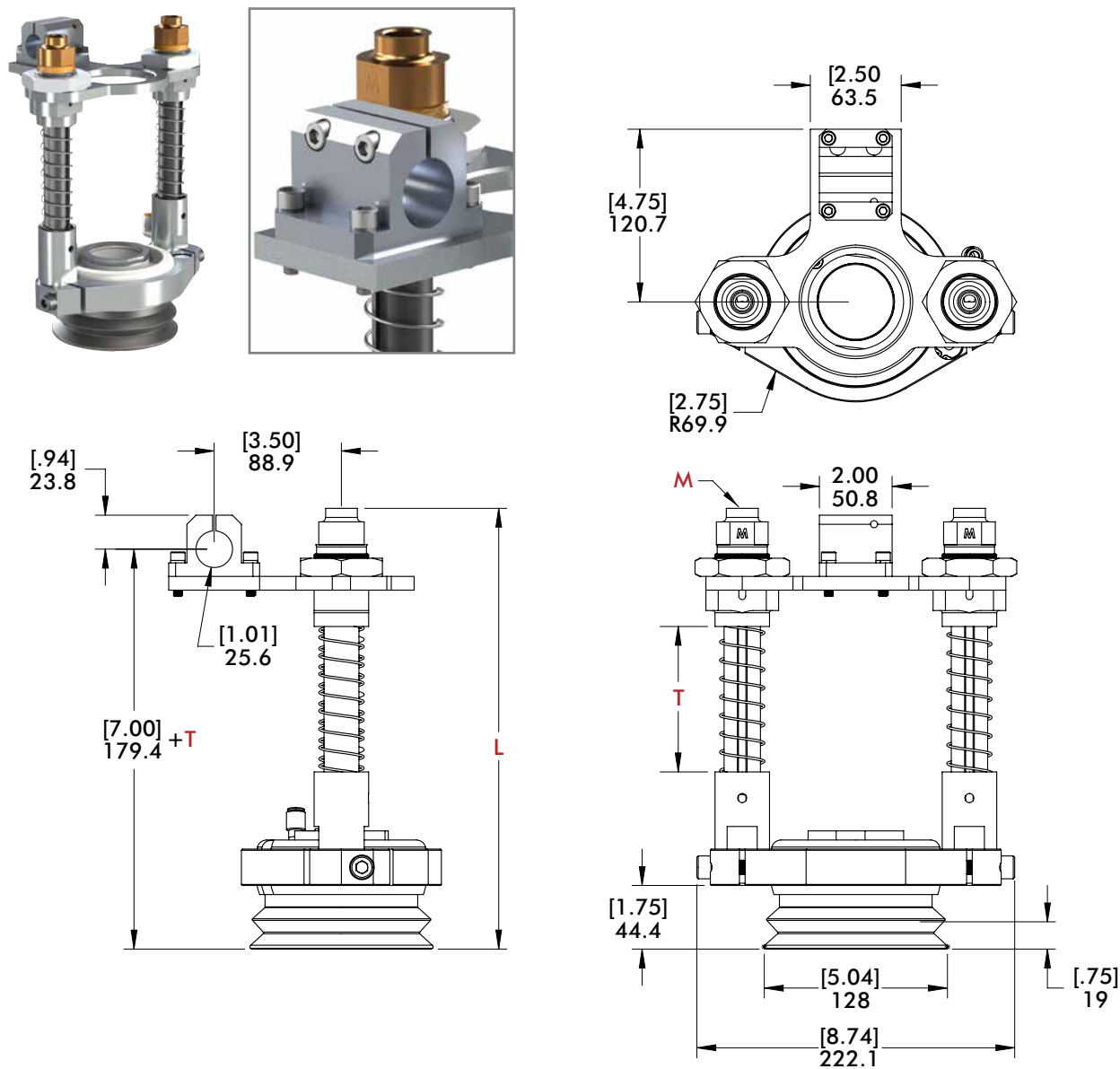
DBD Travel and Length - CPI-DBD-(X)-SCM(X)-(T)

Version	Vertical Travel (T)	(L)	(M)	Weight
 Imperial	200E (2.00")	257.1 [10.12]	3/8" NPT	.85kg [1.87 lb]
	400E (4.00")	307.9 [12.12]		.90kg [1.97 lb]
	600E (6.00")	358.7 [14.12]		.94kg [2.08 lb]
 Metric	050M (50mm)	257.1 [10.12]	3/8" G	.85kg [1.87 lb]
	100M (100mm)	307.9 [12.12]		.90kg [1.97 lb]
	150M (150mm)	358.7 [14.12]		.94kg [2.08 lb]



DESTACKER DOUBLE BLANK DETECTOR SPRING MOUNTS

Vacuum Products | Dimensions | Technical Specifications

DBD Heavy Duty (Double Pogo)



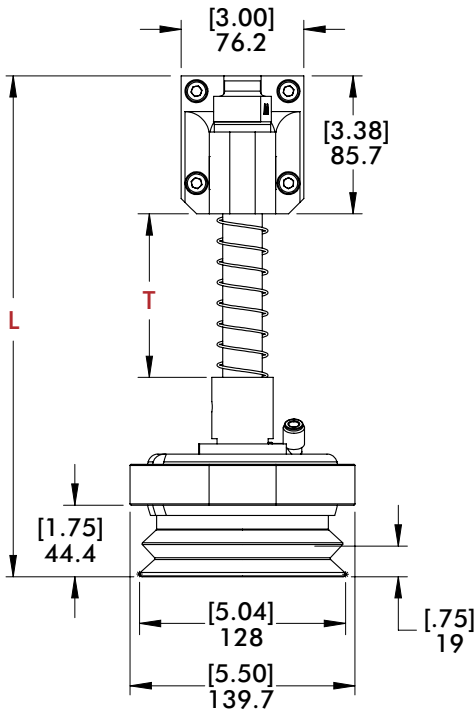
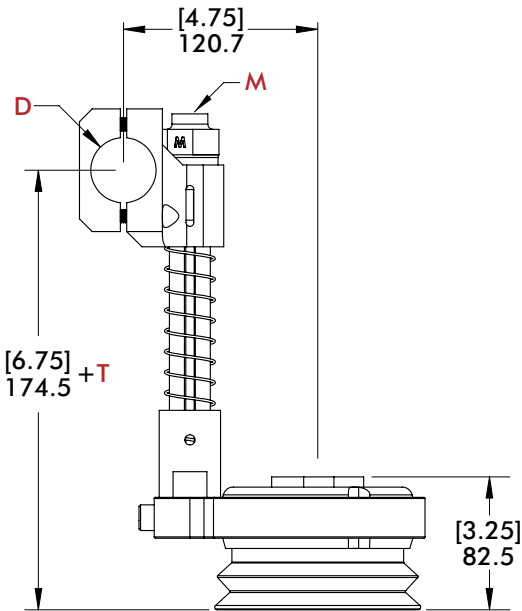
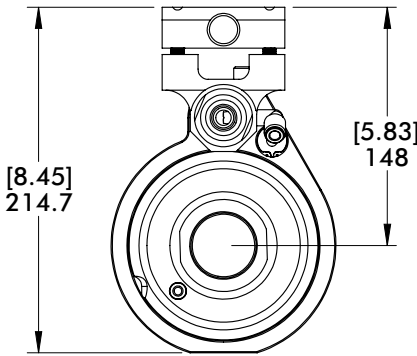
DBD Travel and Length - CPI-DBD-(X)-SCMB-(T)-HD

Version	Vertical Travel (T)	(L)	(M)	Weight
 Imperial	400E (4.00")	307.9 [12.12]	3/8" NPT	3.06kg [6.75 lb]
	600E (6.00")	357.9 [14.09]		3.16kg [6.97 lb]
	800E (8.00")	405.9 [15.98]		3.23kg [7.12 lb]
 Metric	100M (100mm)	307.9 [12.12]	3/8" G	3.06kg [6.75 lb]
	150M (150mm)	357.9 [14.09]		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 Ø1.25"/40mm Tube Mount





X=Sensor Size

42 Ø42mm

54 Ø54mm

(Sensors not Included)

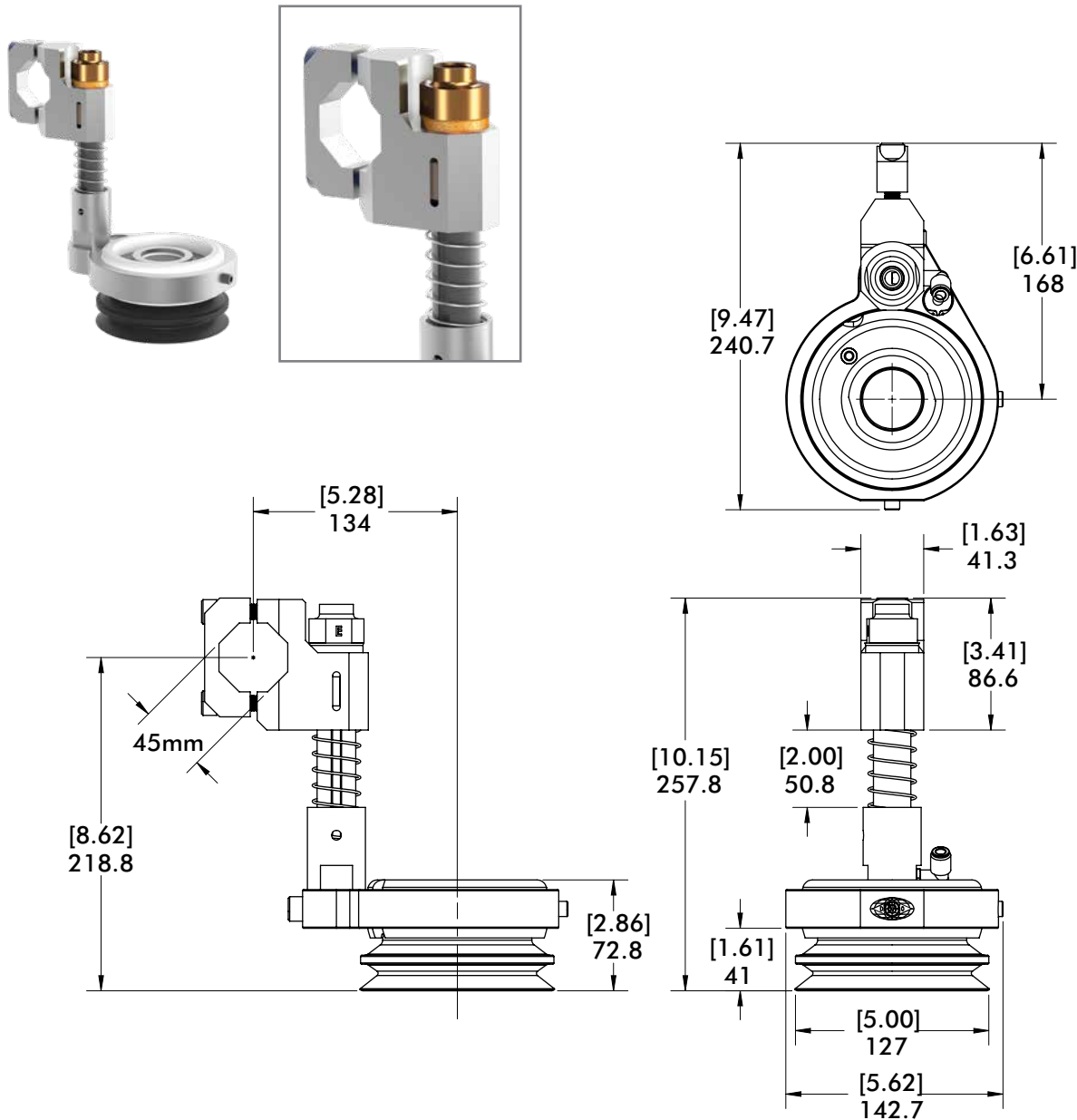
DBD Travel and Length - CPI-DBD-(**X**)-(T)-SCMC-(**D**)

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

DESTACKER DOUBLE BLANK DETECTOR SPRING MOUNTS

Vacuum Products | Dimensions | Technical Specifications

DBD Ø45mm BodyBuilder Mount



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

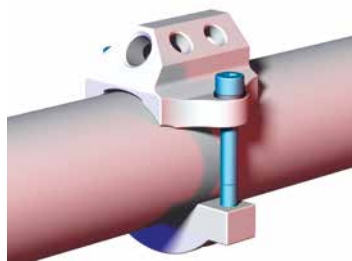
Version	Thread	Weight
Imperial	3/8" NPT	1.8kg [3.9 lb]

[illegible]

MANIFOLDS

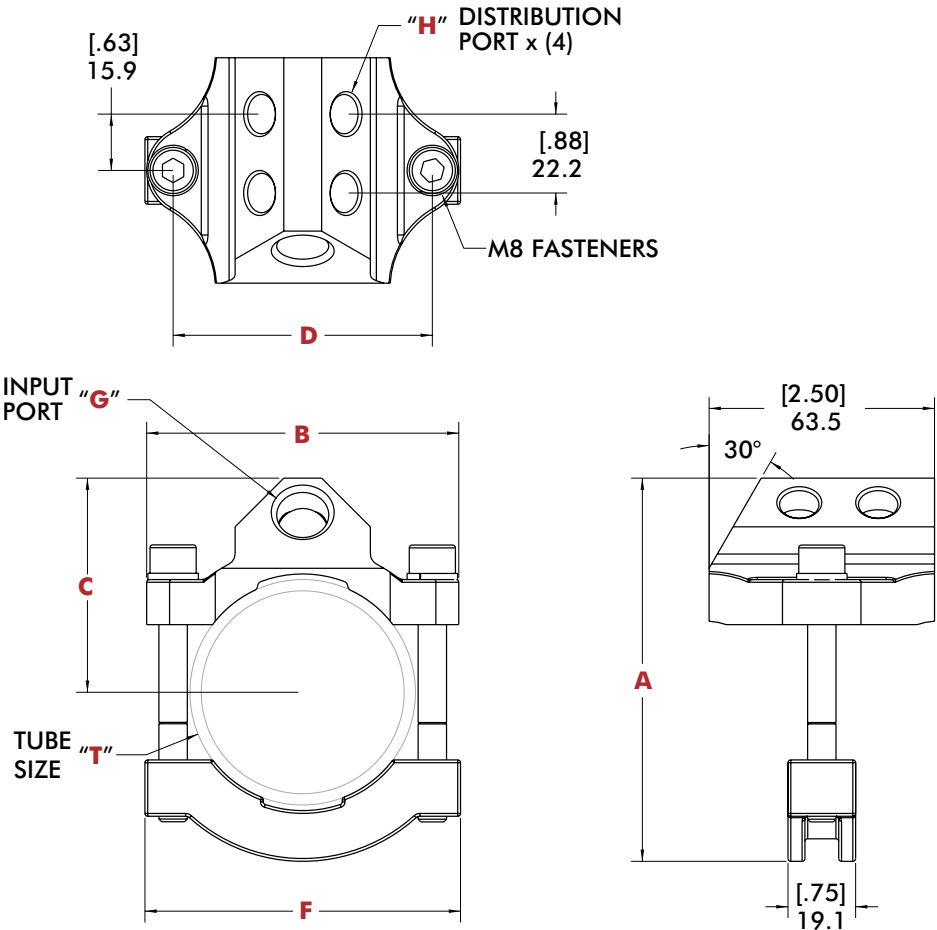
Vacuum Products | Dimensions | Technical Specifications

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	A	B	C	D	F	G	H	T	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]

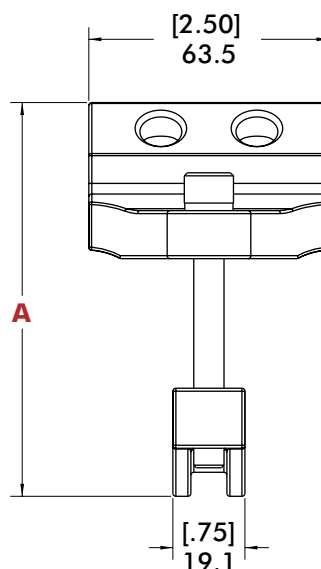
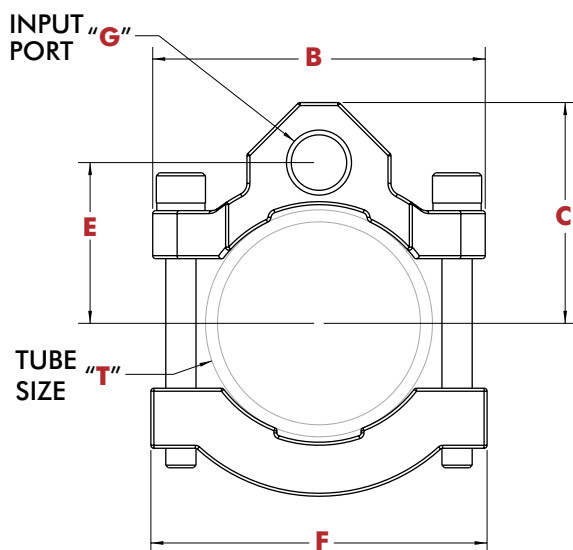
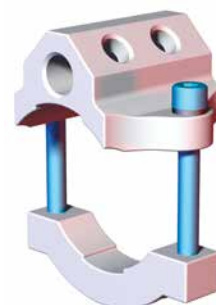
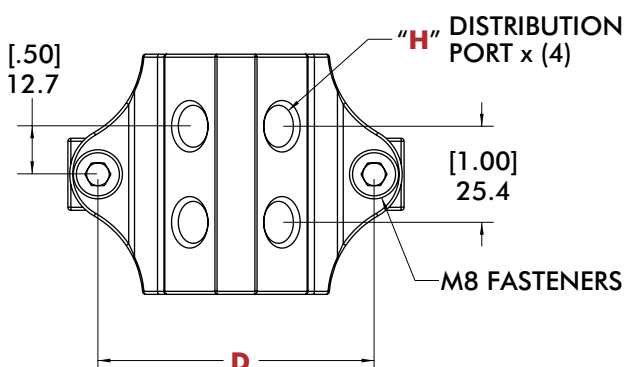
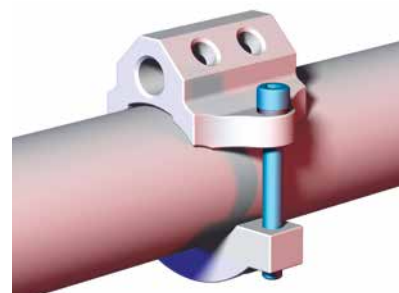
MBC/MLK Boom Mounted Single 4-Port

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.



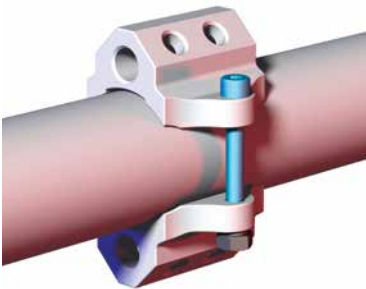
MBC/MLK Dimensions

Model	A	B	C	D	E	F	G	H	T	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]

MANIFOLDS

Vacuum Products | Dimensions | Technical Specifications

MBC/MLK Boom Mounted Double 8-Port

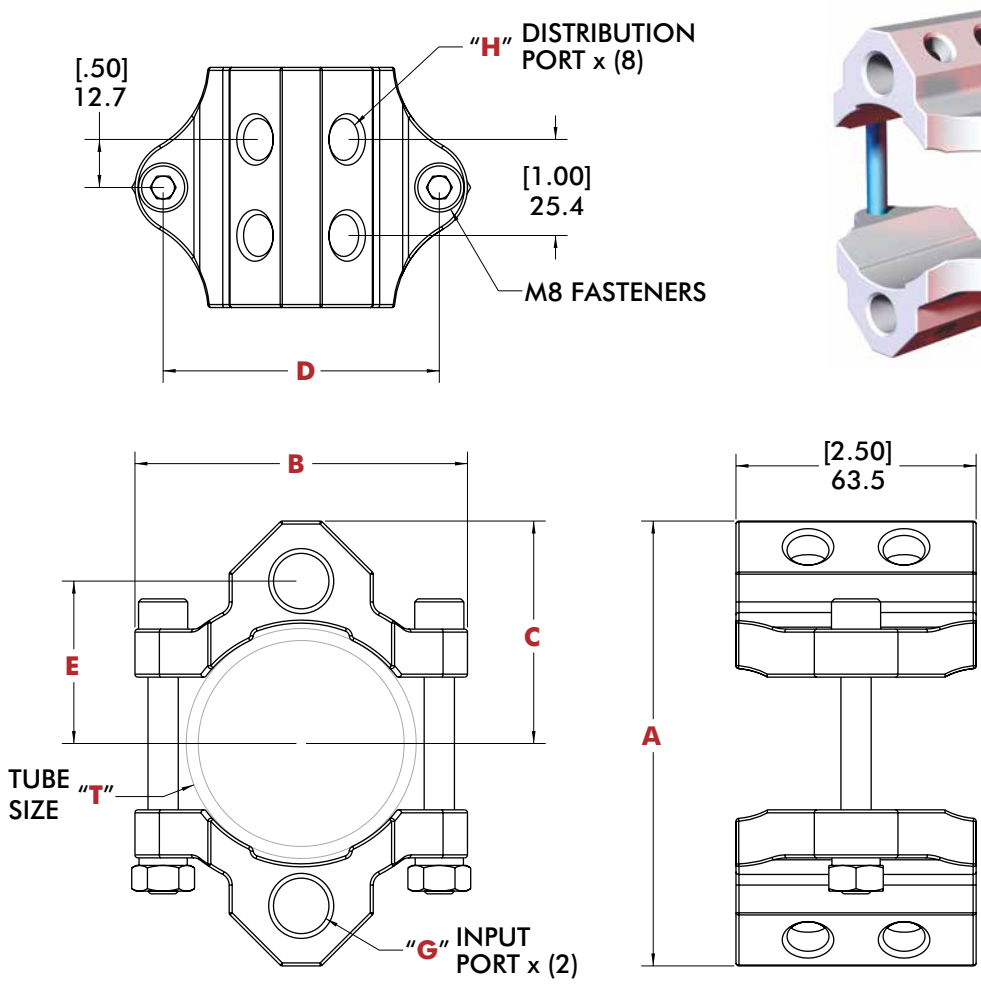


Features:

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

MANIFOLDS

Vacuum Products | Dimensions | Technical Specifications

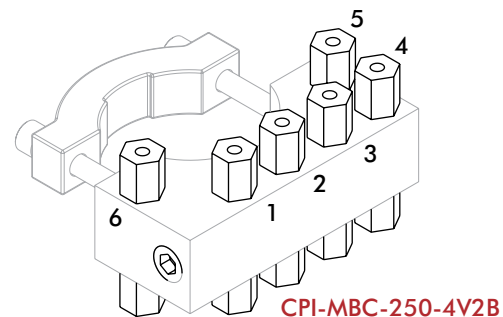
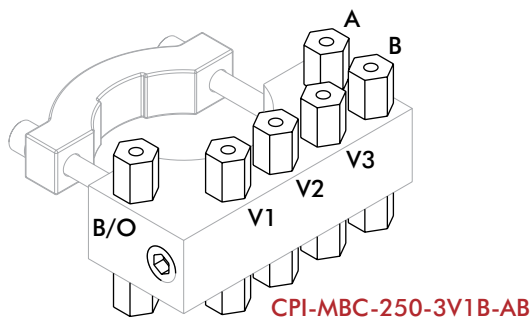
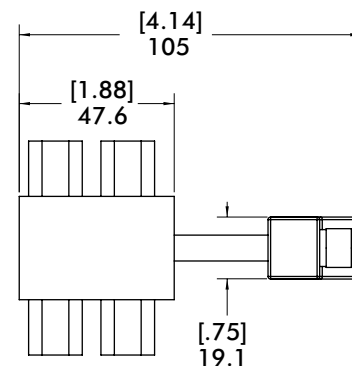
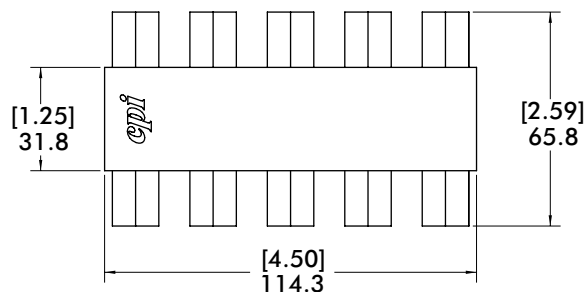
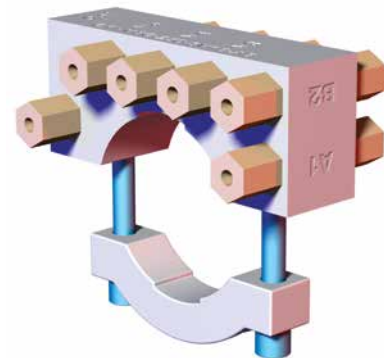
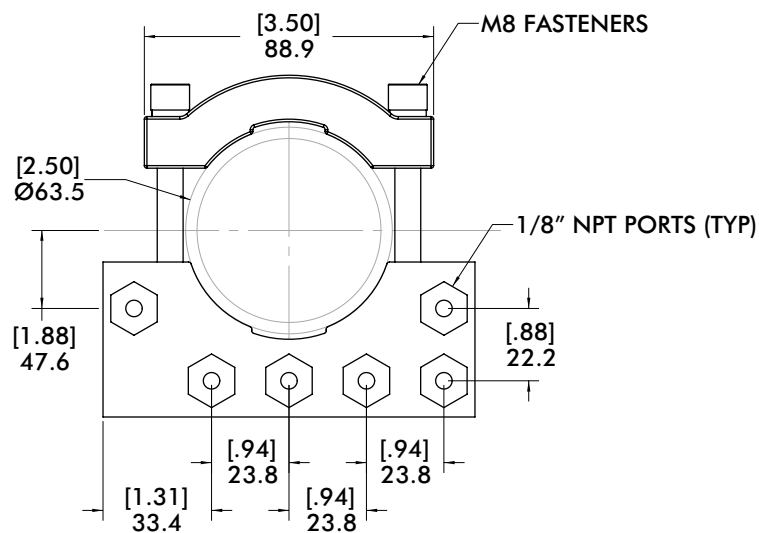
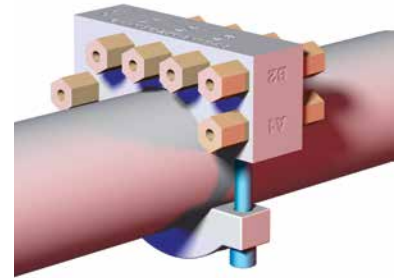
MBC Boom Mounted Single 6-Port

Specifications:

Material: Aluminum

Features:

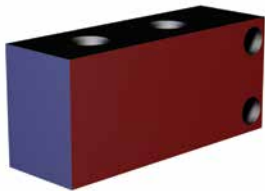
- Provides a 6-port air distribution system mounted on the boom.
- Easy access.



MANIFOLDS

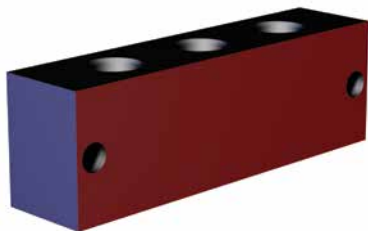
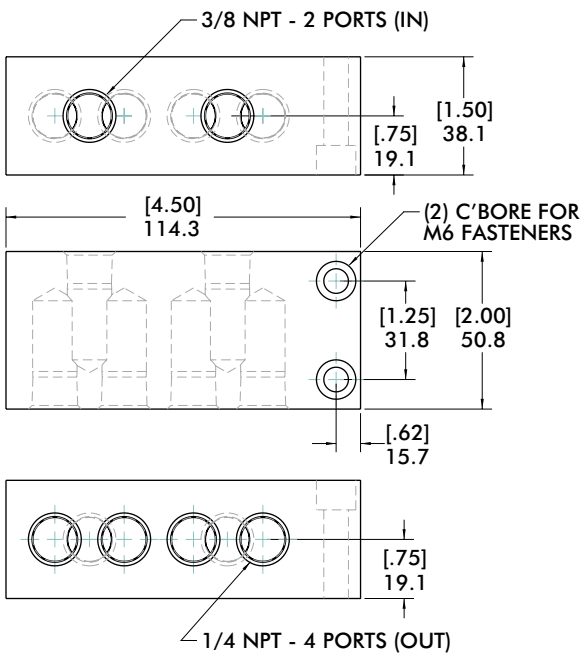
Vacuum Products | Dimensions | Technical Specifications

GDA/MBB Block Style for Remote Mounting



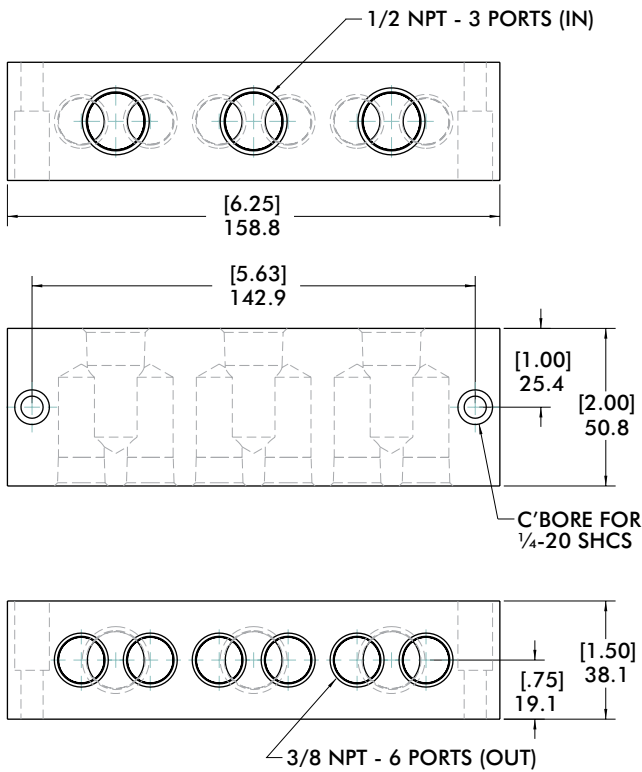
Material: Aluminum

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



Material: Aluminum

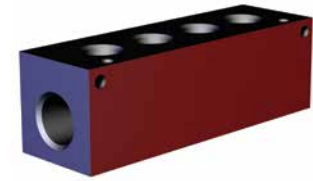
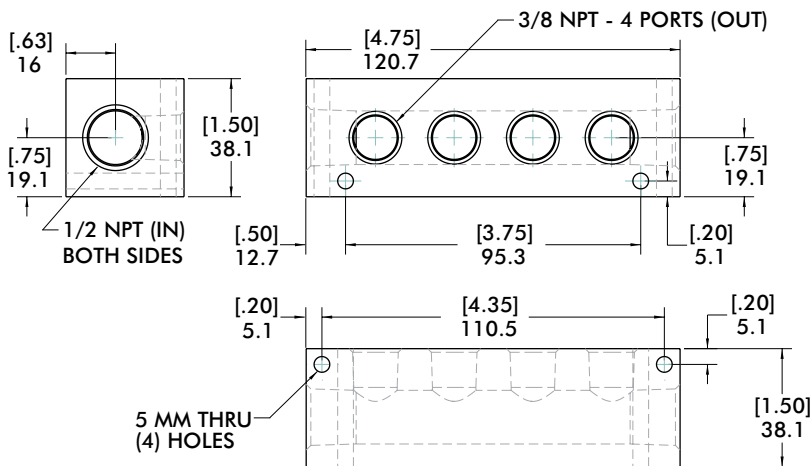
Model	Weight
CPI-MMB-4V2B-LG	.23 kg [.56 lb]



MANIFOLDS

Vacuum Products | Dimensions | Technical Specifications

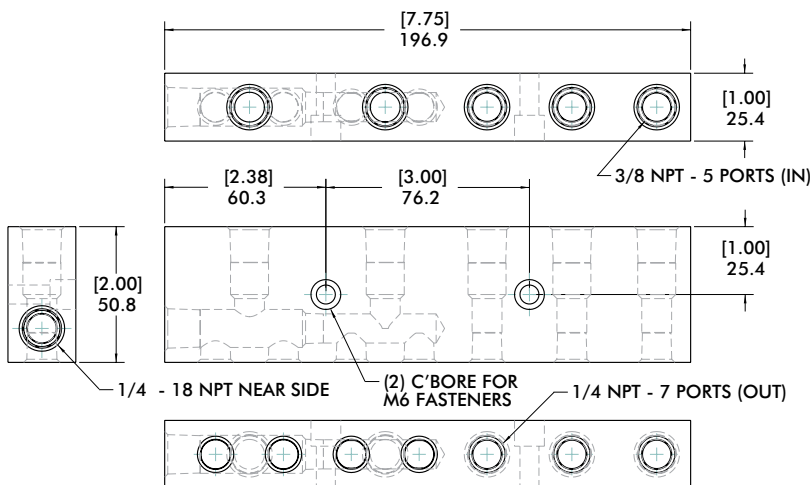
MMB Block Style or Remote Mounting



Material: Aluminum

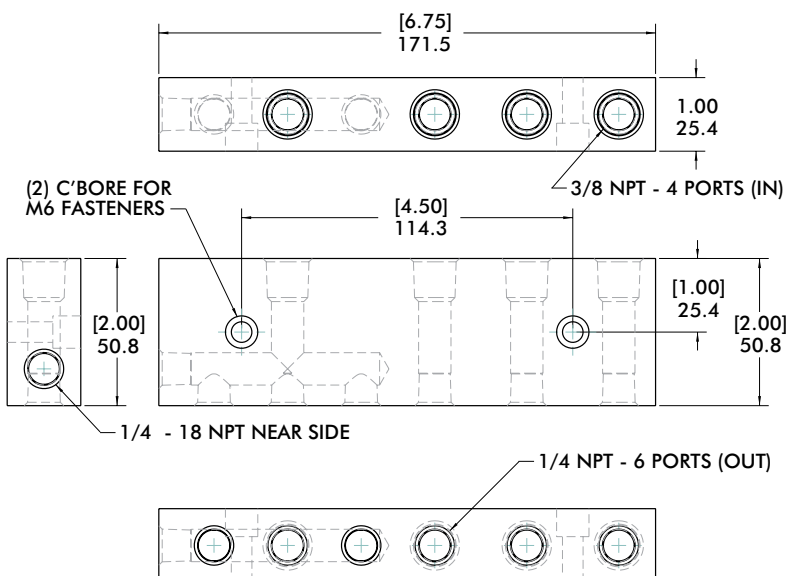
Model	Weight
CPI-MMB-4P	.23 kg [.56 lb]

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]