ARV AND VSA SERIES VENTURIES

Vacuum Products | Features and Specifications

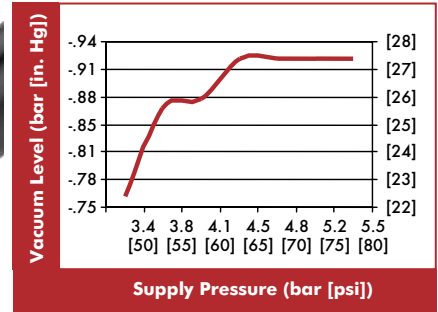### **ARV**® Series Auto-Release Venturi Cup Mount

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.

US Patents #7,540,309
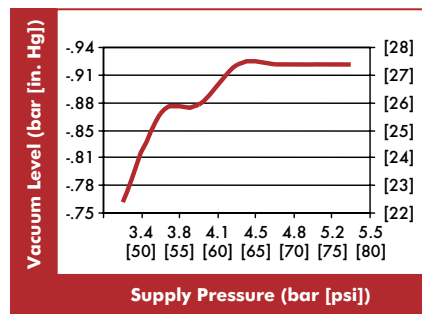

ARV® Performance:

Supply Pressure (bar [psi])

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

VSA Series Venturi Cup Mount

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

We also offers PA Series cup mounts.

VSA Performance:

Supply Pressure (bar [psi])

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

ARV SERIES VENTURIES

Vacuum Products | Dimensions | Ordering Information

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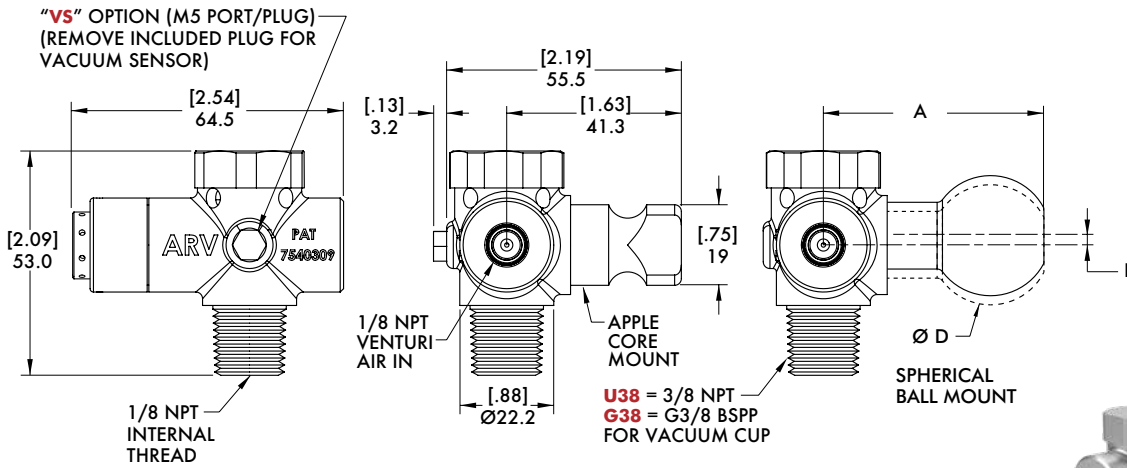114g [0.25lb]

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

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

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

"**VS**" OPTION (M5 PORT/PLUG) (REMOVE INCLUDED PLUG FOR VACUUM SENSOR)

[2.54] 64.5
[2.09] 53.0
ARV PAT 7540309
1/8 NPT INTERNAL THREAD

[.13] 3.2
[2.19] 55.5
[1.63] 41.3
1/8 NPT VENTURI AIR IN
[.88] Ø22.2
APPLE CORE MOUNT
[.75] 19
U38 = 3/8 NPT
G38 = G3/8 BSPP
FOR VACUUM CUP

A
SPHERICAL BALL MOUNT
Ø D
B

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

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

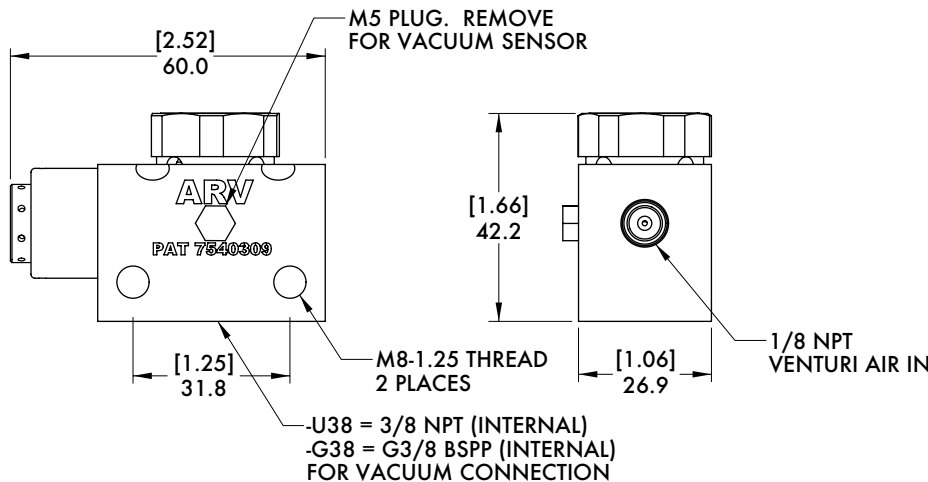| Model Number	A	B	ØD	Weight
CPI-VSA-ARV(R/L)-**B112**-(X)	[1.85] 47.1	0	[1.13] 28.5	[0.28 lb] 126g
CPI-VSA-ARV(R/L)-**B32**-(X)	[1.93] 49	[0.12] 3.2	[1.26] 32	[0.30 lb] 134g

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

M5 PLUG. REMOVE FOR VACUUM SENSOR
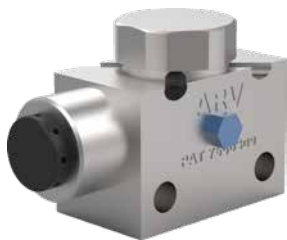
Block Style
CPI-VSA-ARV**R**-**312**-(**X**)
(**X**) = Vacuum Port Thread
U38 = 3/8" NPT Female
G38 = 3/8" G Female

Weight
104g [0.23lb]

[2.52] 60.0
ARV PAT 7540309
[1.66] 42.2
[1.25] 31.8
M8-1.25 THREAD 2 PLACES
-U38 = 3/8 NPT (INTERNAL)
-G38 = G3/8 BSPP (INTERNAL)
FOR VACUUM CONNECTION
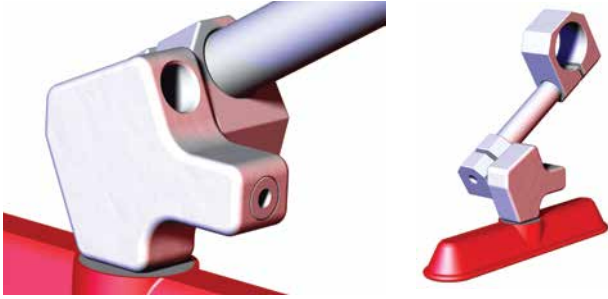[1.06] 26.9
1/8 NPT VENTURI AIR IN

DESTACO a DOVER company

MICRO TOOLING VENTURI

Vacuum Products | Dimensions | Technical Specifications
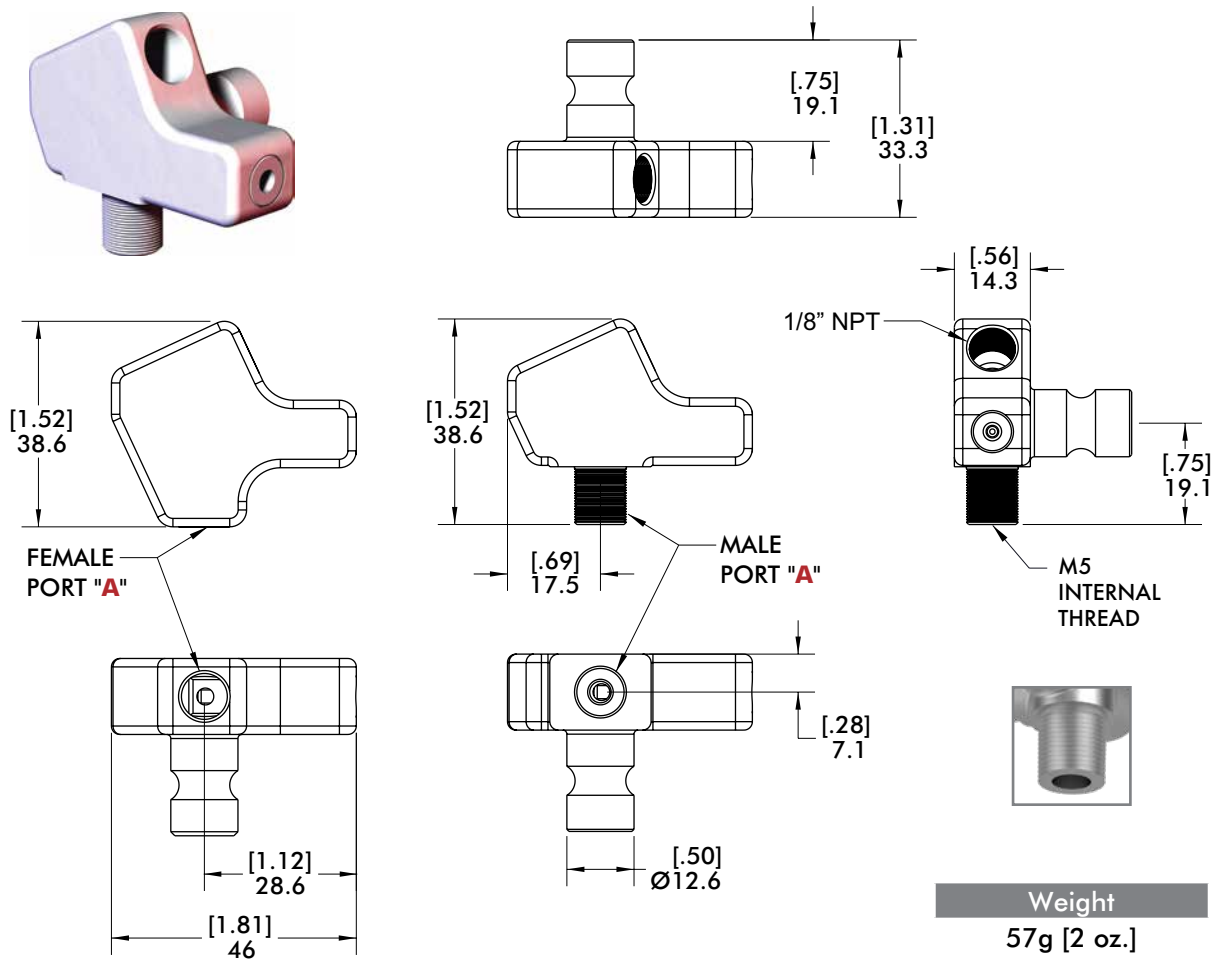
VSA 500 Series MicroTool Apple Core

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

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

[.75]
19.1

[1.31]
33.3

[.56]
14.3

1/8" NPT

[.75]
19.1

M5
INTERNAL
THREAD

[1.52]
38.6

[1.52]
38.6

FEMALE
PORT "A"

MALE
PORT "A"

[.69]
17.5

[.28]
7.1

[1.12]
28.6

[.50]
Ø12.6

[1.81]
46

Weight

57g [2 oz.]

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

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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.
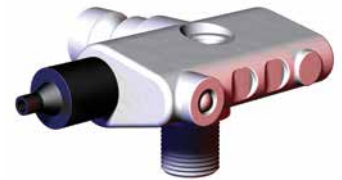- Vacuum level or part present sensing.
- Quiet operation.
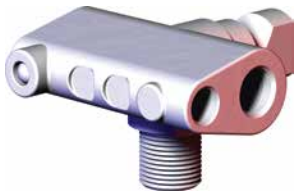
Low-Profile **750/19** w/ Blow Off No Options
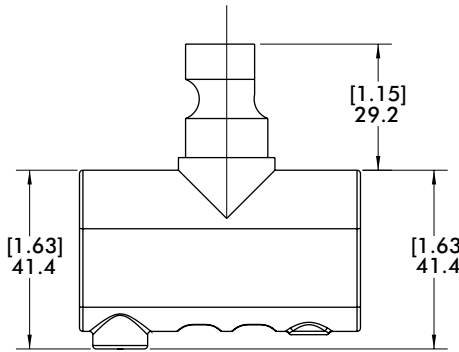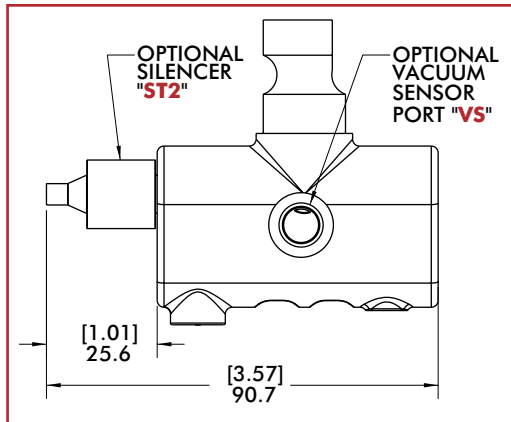**CPI-VSA-(X)-BO-LP**

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).
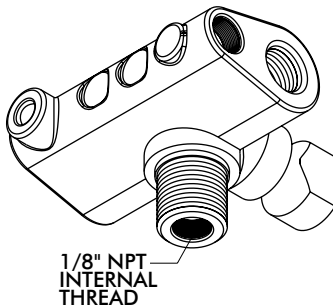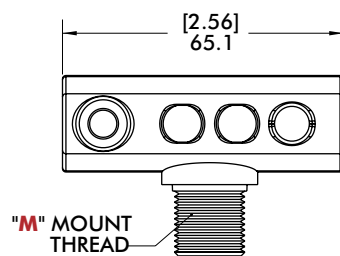**CPI-VSA-(X)-BO-LP-VS-ST2**

OPTIONAL SILENCER "ST2"
OPTIONAL VACUUM SENSOR PORT "VS"

[1.01] 25.6
[3.57] 90.7

[1.15] 29.2
[1.63] 41.4
[1.63] 41.4

VS/DET Thread
DET = M5
VS = 1/8 NPT

Weight
170g [6 oz.]

1/8" NPT INTERNAL THREAD

[2.56] 65.1
"M" MOUNT THREAD

1/8" NPT BLOW OFF PORT
"V" VACUUM PORT
[1.65] 41.8
[.75] 19.1
APPLE CORE MOUNT
[.75] 19.1
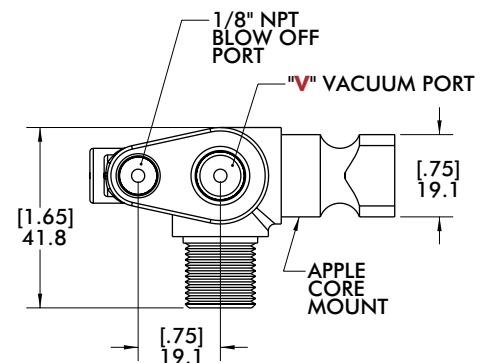
Low Profile 750/19 Series w/blow-off - **CPI-VSA-(X)-BO-LP**

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**

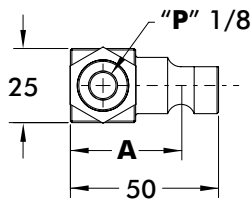Dimensions and technical information are subject to change without notice   EE-VAC | 34

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ACCELERATE® PORT ONLY ADAPTORS

Vacuum Products | Dimensions | Technical Specifications

ACCELERATE COLLECTION®

PA Series

Apple Core Mount

"P" 1/4 (PA-19M SIDE PORT ONLY)
G1/8 (PA-20M APPLE CORE PORT ONLY)
ØD
48
35
"P" 3/8
25
"P" 1/8
A
50

CPI-LNA-VSA-19 G1/4 Locking Nut
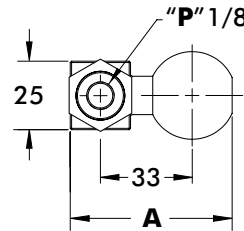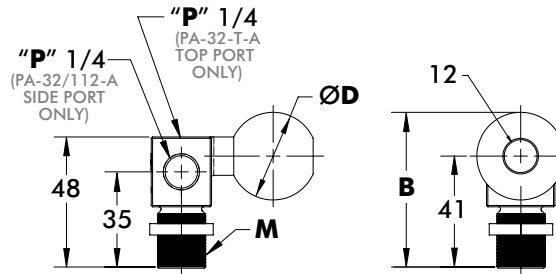**CPI-LNB-VSA-19** G3/8 Locking Nut
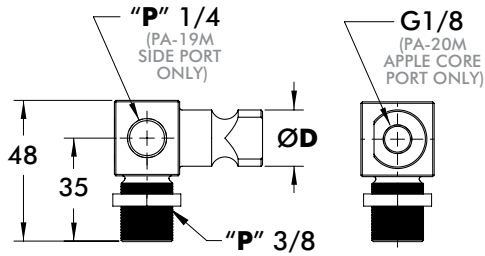
PA-19M   PA-20M

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

"P" 1/4 (PA-32-T-A TOP PORT ONLY)
"P" 1/4 (PA-32/112-A SIDE PORT ONLY)
ØD
48
35
M
12
B
41
"P" 1/8
25
33
A

PA-B32-G38-T-A   PA-B32/B112

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	[2.32] 59	[2.24] 57	[1.26] 32	G3/8	G	[0.23 lb] 103g
PA-B32-G38-T-A				G3/8	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

G 1/8
16
44
ØD
B
35
A
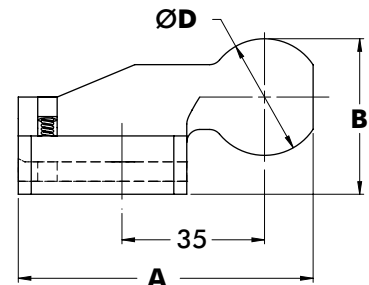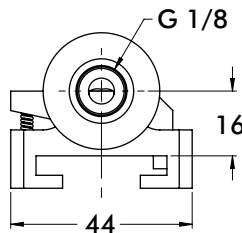
Model Number	A	B	ØD	Weight
CPI-PA-B112-CM	[2.84] 72.1	[1.50] 38.1	[1.13] 28.5	[0.23 lb] 106g
CPI-PA-B32-CM	[2.98] 75.7	[1.69] 42.9	[1.26] 32	[0.27 lb] 122g

PA 500 Series

PORT "**A**"

[.50]
12.6

[.75]
19.1

[.75]
19.1

[.50]
12.7

[1.50]
38.1

[.75]
19.1

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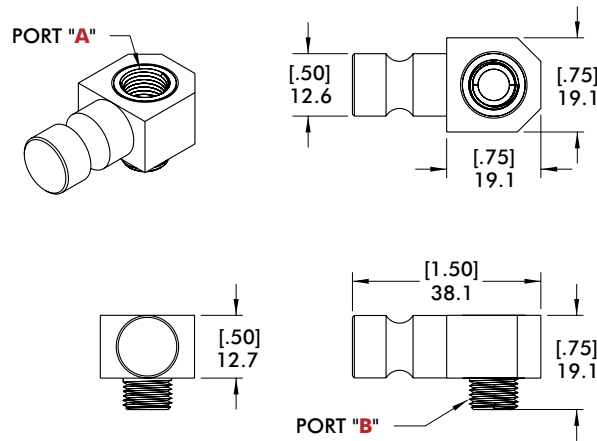
CPI-PA-500-"A"-"B" Ordering Information

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

[.50]
Ø12.7

"**L**"

1/8 NPT TAP
(BOTH SIDES)
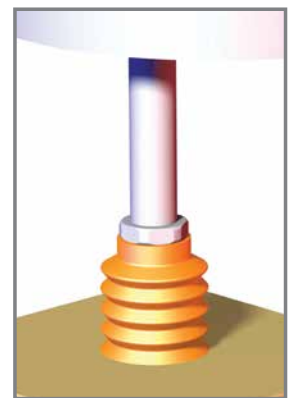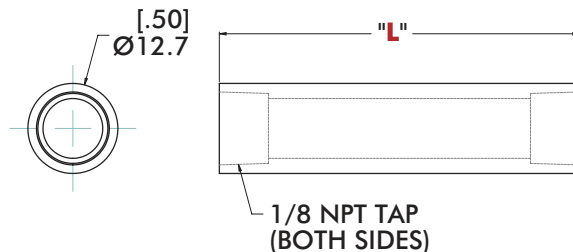
"L"
Standard
Lengths
02 = 2.00"
03 = 3.00"
04 = 4.00"
05 = 5.00"
06 = 6.00"
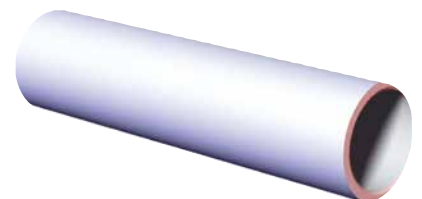
Model Number	Weight
CPI-PAT-50T-"L"-U18	[0.13 lb/ft] 193.0 g/m

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