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Solutions for Life



VACCON

VACUUM PRODUCTS

www.vaccon.com

**ACCELERATING AUTOMATION
WITH VACUUM TECHNOLOGY**

Push-In Venturi Vacuum Cartridges

for Vaccon Pumps & OEM Equipment

For Min and Mid Series VP Pumps



Standard Cartridges:

Vaccon offers 13 different single-stage venturi vacuum cartridges for the Min and Mid Series vacuum pumps and manifolds. Ideally suited for machine designers, venturi cartridges easily fit into OEM cavities creating an unrecognizable (proprietary) vacuum source. "Vaccon Cartridges - The Power Inside."

Vacuum cartridges are a combination of interchangeable nozzles and diffusers that enable you to optimize pump performance based on desired vacuum level, vacuum flow, evacuation speed and air consumption. If the product changes in size, porosity, or weight, you can refit the existing equipment with a different cartridge by simply swapping the entire cartridge, or just the nozzle or diffuser.

Changing cartridges can be performed in a matter of seconds, in the field with minimal downtime. Mid Series cartridges are color-coded based on performance characteristics for easy visual identification.

Performance Level Designations:

"L" 0-10"Hg, [0 to 339mbar] for low vacuum/high flow applications (not available for Min Series)

"M" 0-20"Hg, [0 to 677mbar] for medium vacuum/high flow applications

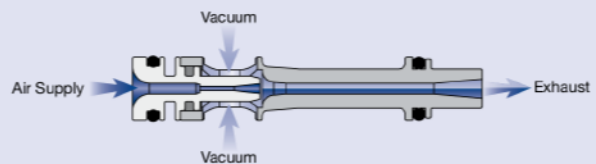
"H" 0-28"Hg, [0 to 948mbar] for high vacuum/standard flow applications

Cartridge Options:

- Choice of operating pressures to meet machine and factory air supply 80 PSI [5.5 bar] standard, 60 PSI [4.1 bar] optional
- For chemical compatibility requirements, food or medical applications, custom materials and sizes are available including stainless steel (303, 304, 316, 316L), PVC, PEEK, Teflon®, Delrin® and more. O-rings are also available in additional materials - consult factory.

Principles of Operation:

Vacuum is produced by forcing compressed air through a limiting orifice (nozzle). As the air exits the orifice, it expands, increasing in velocity to supersonic speed before entering the venturi section (diffuser). This creates a vacuum at the vacuum inlet port located between the nozzle and diffuser. The nozzle and diffuser combine to create a venturi vacuum cartridge.



Eliminate the Guesswork: Contact Us!

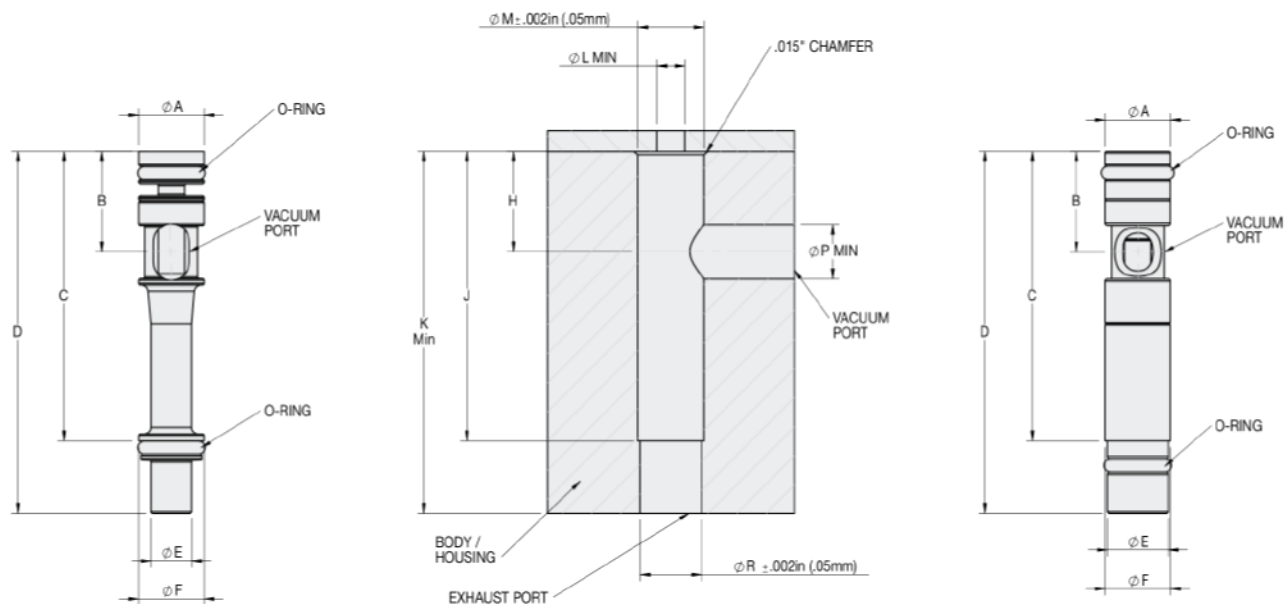
Vacuum technology isn't an exact science. To ensure proper product selection, Vaccon offers free application engineering assistance, a 30 Day Test & Evaluation Program or you can send sample products to our in-house test facility and we will test and size a pump for you.

To download a complete set of drawings in 13 different CAD formats, please visit our website at www.vaccon.com

For more information or technical assistance, please call 508-359-7200 or 800-848-8788 or email engineering@vaccon.com



Mid Series Push-In Venturi Cartridges C(60, 90, 100, 150) (L, M, H)



Cartridge housing for both
nylon and metal cartridges

Part Number: C60, 90, 100, 150 (L, M, H) -PL

Standard Material: Nylon
Weight: 0.08 oz [2.3g]

Part Number: C60, 90, 100, 150 (L, M, H)

Optional Material: Aluminum/Brass
Weight: 0.47 oz [13.2g]

Model #	Imperial Dimensions (in.)												
	A	B	C	D	E	F	H	J	K	L	M	P	R
Nylon Cartridges - PL	0.402	0.61	1.76	2.20	0.25	0.402							
Metal Cartridges	0.402	0.61	1.76	2.20	0.37	0.402							
Housing							0.61	1.78	2.21	0.14	0.402	0.33	0.38
Model #	Metric Dimensions (mm)												
	A	B	C	D	E	F	H	J	K	L	M	P	R
Nylon Cartridges - PL	10.21	15.5	44.7	55.9	6.3	10.21							
Metal Cartridges	10.21	15.6	44.7	55.9	9.4	10.21							
Housing							15.5	45.1	56.1	3.6	10.21	8.3	9.65

Mid Series Push-In Cartridge Specifications:

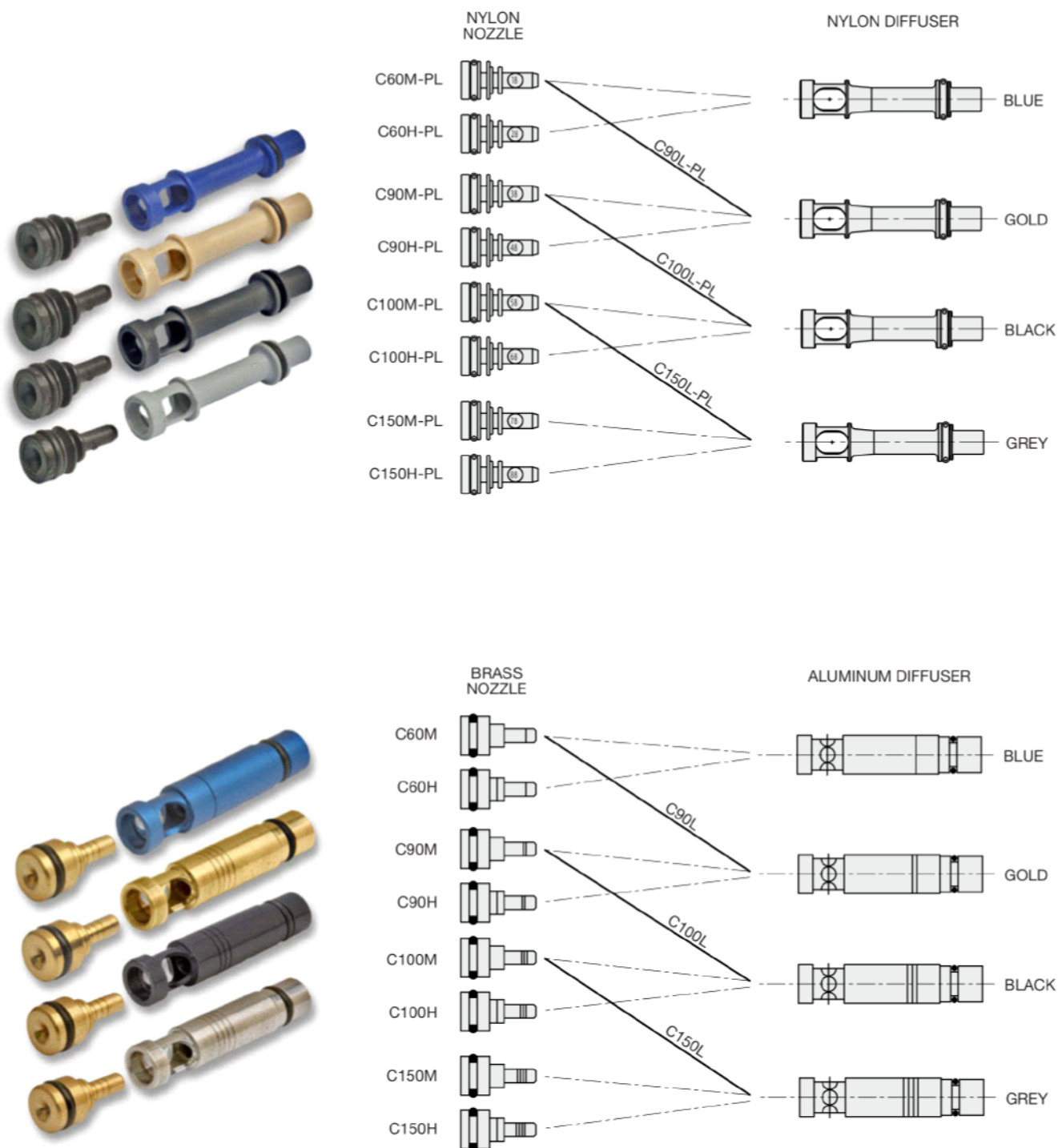
Cartridge Material: Standard: Nylon, Buna-N O-rings
Optional Materials: Brass & Aluminum, Stainless Steel, PVC, Peek, Teflon®, Delrin®
 O-rings available in additional materials - Consult factory for availability
Medium: Filtered (50 Micron) un-lubricated, non-corrosive dry gases
Operating Temperature: -30° to ~250°F [-34° to ~121°C]
Operating Pressure: 80 PSI [5.5 bar] or 60 PSI [4.1 bar] – Consult Factory for other operating pressures

Mid Series Push-In Cartridge Operating and Installation Requirements:

Cartridge size: C60 (M, H) and C90 (L, M, H) C100 (L, M, H) and C150 (L, M, H)
Supply Line: 1/4" O.D. [6mm] tube recommended 3/8" O.D. [10mm] tube recommended
Vacuum Line: 1/4" O.D. [6mm] tube recommended 3/8" O.D. [10mm] tube recommended
Vacuum Line Filtration: Typically vacuum filters are not required, if desired Vaccon recommends – VF125LPM. See Page 254.



Mid Series Push-In Cartridge Identification Chart



Custom Venturi Vacuum Cartridges

Ideal for OEM engineers and designers

Creative Engineering • Precision Manufacturing • Extensive Application Experience

When off the shelf doesn't work, Vaccon's engineering expertise and manufacturing capabilities can provide custom solutions to your specifications. Whether it's as simple as modifying a standard product, or more complex requiring new products with precise tolerances, or special materials, Vaccon has the solution.

Custom materials available: Brass, Stainless Steel, PVC, Peek, Teflon®, Delrin® - consult factory.

Custom Cartridge: C350H-303 Stainless Steel

The C350H cartridge supplies the equivalent performance as VP90-350H or JS-350 vacuum pump. Designed to fit in a custom cavity. Other performance levels available. See Mid and Max Series Performance Data for options.

Common Applications:

- High temperature
- Caustic gas applications – smoke stack analysis
- Air testing
- Food processing
- Pharmaceutical
- Corrosive chemical processing



*Top: Custom made C350H-303 stainless steel venturi cartridge 5.375" L x 1" dia.
Bottom: Standard Mid Series C150H aluminum/brass cartridge is 2.2" L x 0.40" dia.
Both cartridges generate up to 28"Hg.*

Custom Min Series Cartridges in Nylon or Brass

Min Series cartridges are available in nylon or brass and can reach up to 28"Hg. Designed to fit in a custom cavity. Other performance levels available. See Min Series Performance Data for options.

Common Applications:

- Medical – disposable applications
- Electronic
- Air monitoring
- Gas/liquid sampling
- Pick and place of small items



*Top: Standard CM60 Min Series Cartridge 1.13" L x 0.31" dia.
Bottom: Custom CM60 Min Series Cartridge 1.06" L x 0.24" dia.*



Performance Data for Min Series Cartridges

M-Series Cartridges for Medium Vacuum Applications

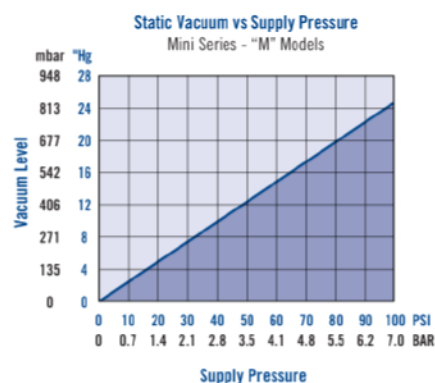
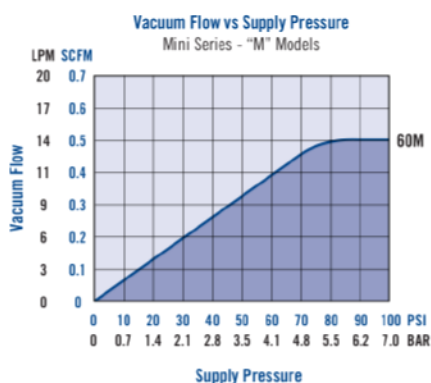
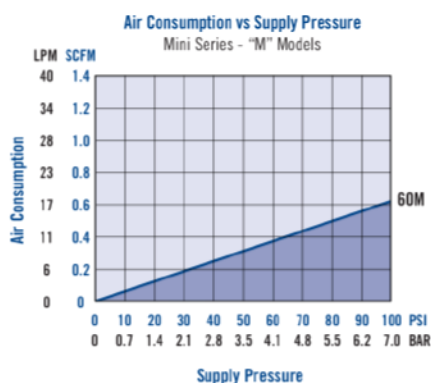
M is for "Medium" vacuum levels up to 20"Hg [677mbar] for applications involving porous materials (cardboard, wood, masonry, baked goods, textiles)

Model #	Air Consumption SCFM	Imperial - Vacuum Flow (SCFM) vs. Vacuum Level ("Hg)							
CM60M	0.50	0"Hg	3"Hg	6"Hg	9"Hg	12"Hg	15"Hg	18"Hg	20"Hg
		0.50	0.40	0.30	0.22	0.15	0.08	0.03	0.00
		Evacuation Time in Seconds based on 1 Cu. Ft. Volume/"Hg							
		0"Hg	3"Hg	6"Hg	9"Hg	12"Hg	15"Hg	18"Hg	20"Hg
		0.00	12.50	25.10	43.90	68.60	99.30	153.70	227.00

Model #	Air Consumption L/min	Metric - Vacuum Flow (L/min) vs. Vacuum Level (mbar)							
CM60M	14.2	0 mbar	102 mbar	203 mbar	305 mbar	406 mbar	508 mbar	609 mbar	677mbar
		14.2	11.3	8.5	6.2	4.2	2.3	0.8	0.0
		Evacuation Time in Seconds based on 1 Liter Volume / mbar							
		0 mbar	102 mbar	203 mbar	305 mbar	406 mbar	508 mbar	609 mbar	677mbar
		0.0	0.4	0.9	1.6	2.4	3.5	5.4	8.0

Note 1: Standard operating pressure for Vaccon pumps is 80 PSI [5.5BAR]. Pumps can be factory modified to run at other operating pressures i.e. 60 PSI [4 BAR] etc. The values shown in the performance chart will remain the same for all operating pressures.

Note 2: Evacuation speed is linear with volume, a two cu. ft. volume will take twice as long to evacuate as a one cu. ft. volume.



Performance Data for Min Series Cartridges

H-Series Cartridges for High Vacuum Applications

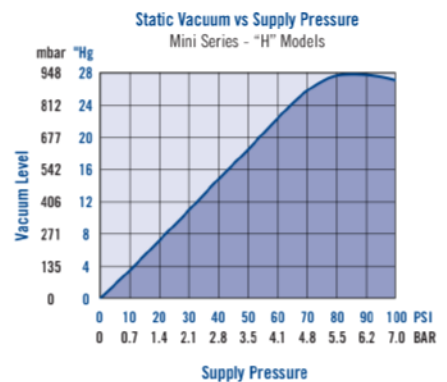
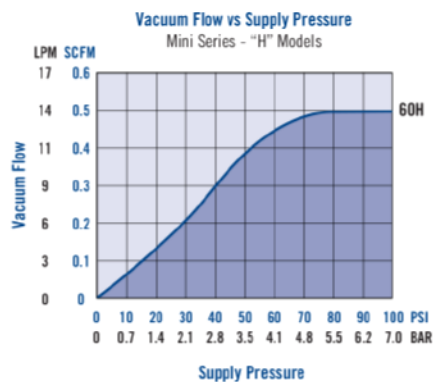
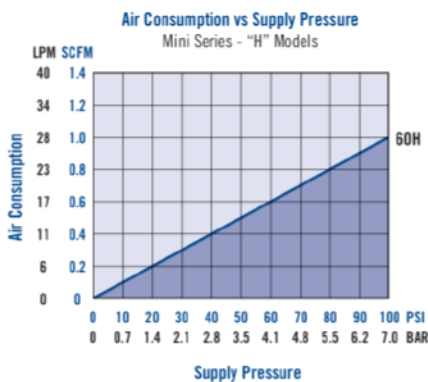
H is for "High" vacuum levels up to 28"Hg [948mbar] for applications involving non-porous materials (steel, plastic, glass, etc.). The high vacuum level provides high vacuum force for lifting heavy materials and holding them securely.

Model #	Air Consumption SCFM	Imperial - Vacuum Flow (SCFM) vs. Vacuum Level ("Hg)										
CM60H	0.80	0"Hg	3"Hg	6"Hg	9"Hg	12"Hg	15"Hg	18"Hg	21"Hg	24"Hg	27"Hg	28"Hg
		0.50	0.38	0.32	0.30	0.27	0.23	0.20	0.13	0.05	0.02	0.00
		Evacuation Time in Seconds based on 1 Cu. Ft. Volume/"Hg										
		0"Hg	3"Hg	6"Hg	9"Hg	12"Hg	15"Hg	18"Hg	21"Hg	24"Hg	27"Hg	28"Hg
		0.00	15.00	29.80	50.60	74.50	102.80	135.90	183.20	245.90	410.20	790.80

Model #	Air Consumption L/min	Metric - Vacuum Flow (L/min) vs. Vacuum Level (mbar)										
CM60H	22.7	0 mbar	102 mbar	203 mbar	305 mbar	406 mbar	508 mbar	609 mbar	711 mbar	813 mbar	914 mbar	948 mbar
		14.2	10.8	9.1	8.5	7.6	6.5	5.7	3.7	1.4	0.6	0.0
		Evacuation Time in Seconds based on 1 Liter Volume/mbar										
		0 mbar	102 mbar	203 mbar	305 mbar	406 mbar	508 mbar	609 mbar	711 mbar	813 mbar	914 mbar	948 mbar
		0.00	0.5	1.1	1.8	2.6	3.6	4.8	6.5	8.7	14.5	27.9

Note 1: Standard operating pressure for Vaccon pumps is 80 PSI [5.5BAR]. Pumps can be factory modified to run at other operating pressures i.e. 60 PSI [4 BAR] etc. The values shown in the performance chart will remain the same for all operating pressures.

Note 2: Evacuation speed is linear with volume, a two cu. ft. volume will take twice as long to evacuate as a one cu. ft. volume.



Performance Data for Mid Series Cartridges

L-Series Cartridges for Low Vacuum Applications

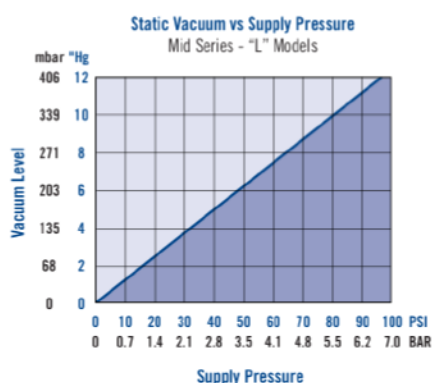
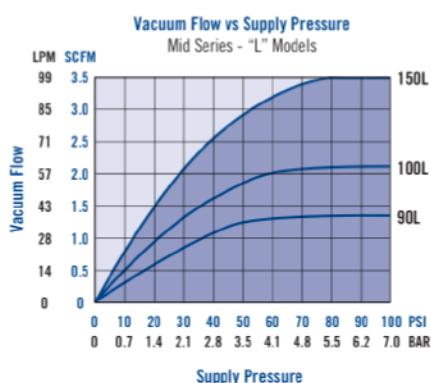
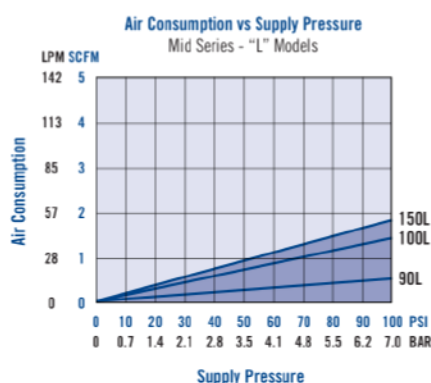
L is for “Low” vacuum levels up to 10”Hg [339mbar] for applications handling delicate parts, thin walled materials and for process control.

Model #	Air Consumption SCFM	Imperial – Vacuum Flow (SCFM) vs. Vacuum Level (“Hg)				
		0” Hg	3” Hg	6” Hg	9” Hg	10” Hg
90L	0.50	1.30	1.10	0.70	0.20	0.00
100L	1.40	2.10	1.60	1.10	0.50	0.00
150L	1.80	3.50	2.50	1.90	0.70	0.00
Model #		Evacuation Time in Seconds based on 1 Cubic Foot Volume/”Hg				
		0” Hg	3” Hg	6” Hg	9” Hg	10” Hg
90L		0.00	3.26	7.93	18.65	39.63
100L		0.00	2.33	4.66	10.88	24.0
150L		0.00	1.54	4.36	10.77	22.83

Model #	Air Consumption L/min	Metric – Vacuum Flow (L/min) vs. Vacuum Level (mbar)				
		0 mbar	102 mbar	203 mbar	305 mbar	339 mbar
90L	14.2	36.8	31.1	19.8	5.7	0.0
100L	39.6	59.5	45.3	31.1	14.2	0.0
150L	51.0	99.1	70.8	53.8	19.8	0.0
Model #		Evacuation Time in Seconds based on 1 Liter Volume/mbar				
		0 mbar	102 mbar	203 mbar	305 mbar	339 mbar
90L		0.0	0.1	0.3	0.7	1.4
100L		0.0	0.1	0.2	0.4	0.9
150L		0.0	0.1	0.2	0.4	0.8

Note 1: Standard operating pressure for Vaccon pumps is 80 PSI [5.5BAR]. Pumps can be factory modified to run at other operating pressures i.e. 60 PSI [4 BAR] etc. The values shown in the performance chart will remain the same for all operating pressures.

Note 2: Evacuation speed is linear with volume, a two cu. ft. volume will take twice as long to evacuate as a one cu. ft. volume.



Performance Data for Mid Series Cartridges

M-Series Cartridges for Medium Vacuum Applications

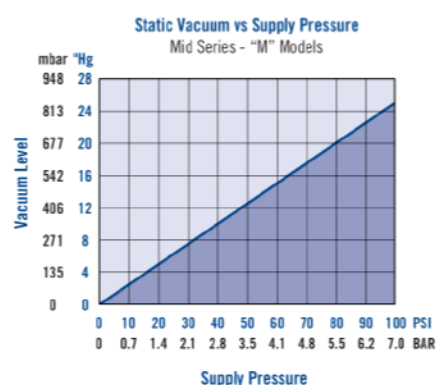
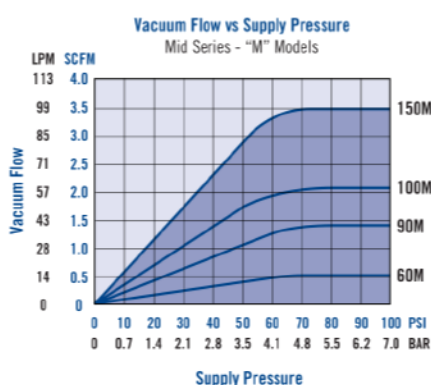
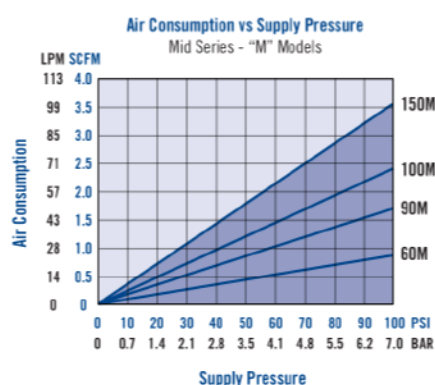
M is for "Medium" vacuum levels up to 20"Hg [677mbar] for applications involving porous materials (cardboard, wood, masonry, baked goods, textiles)

Model #	Air Consumption SCFM	Imperial – Vacuum Flow (SCFM) vs. Vacuum Level ("Hg)							
		0"Hg	3"Hg	6"Hg	9"Hg	12"Hg	15"Hg	18"Hg	20"Hg
60M	0.50	0.50	0.40	0.30	0.22	0.15	0.08	0.03	0.00
90M	1.40	1.40	1.25	1.20	1.05	0.85	0.65	0.25	0.00
100M	1.80	2.10	2.00	1.85	1.75	1.60	1.25	0.80	0.00
150M	2.80	3.50	3.20	2.95	2.75	2.50	1.80	0.95	0.00
Model #		Evacuation Time in Seconds based on 1 Cubic Foot Volume/"Hg							
		0"Hg	3"Hg	6"Hg	9"Hg	12"Hg	15"Hg	18"Hg	20"Hg
60M		0.00	12.50	25.10	43.90	68.60	99.30	153.70	227.00
90M		0.00	3.75	7.20	12.40	19.10	29.90	52.00	104.00
100M		0.00	2.65	5.80	9.90	16.20	22.90	36.20	56.60
150M		0.00	1.35	3.20	5.20	7.70	11.80	23.40	52.00

Model #	Air Consumption L/min	Metric – Vacuum Flow (L/min) vs. Vacuum Level (mbar)							
		0 mbar	102 mbar	203 mbar	305 mbar	406 mbar	508 mbar	609 mbar	677 mbar
60M	14.2	14.2	11.3	8.5	6.2	4.2	2.3	0.8	0.0
90M	39.6	39.6	35.4	34.0	29.7	24.1	18.4	7.1	0.0
100M	51.0	59.5	56.6	52.4	49.6	45.3	35.4	22.7	0.0
150M	79.3	99.1	90.6	83.5	77.9	70.8	51.0	26.9	0.0
Model #		Evacuation Time in Seconds based on 1 Liter Volume/mbar							
		0 mbar	102 mbar	203 mbar	305 mbar	406 mbar	508 mbar	609 mbar	677 mbar
60M		0.0	0.4	0.9	1.6	2.4	3.5	5.4	8.0
90M		0.0	0.1	0.23	0.4	0.7	1.1	1.8	3.7
100M		0.0	0.1	0.2	0.3	0.6	0.8	1.3	2.0
150M		0.0	0.0	0.1	0.2	0.3	0.4	0.8	1.8

Note 1: Standard operating pressure for Vaccon pumps is 80 PSI [5.5BAR]. Pumps can be factory modified to run at other operating pressures i.e. 60 PSI [4 BAR] etc. The values shown in the performance chart will remain the same for all operating pressures.

Note 2: Evacuation speed is linear with volume, a two cu. ft. volume will take twice as long to evacuate as a one cu. ft. volume.



Performance Data for Mid Series Cartridges

H-Series Cartridges for High Vacuum Applications

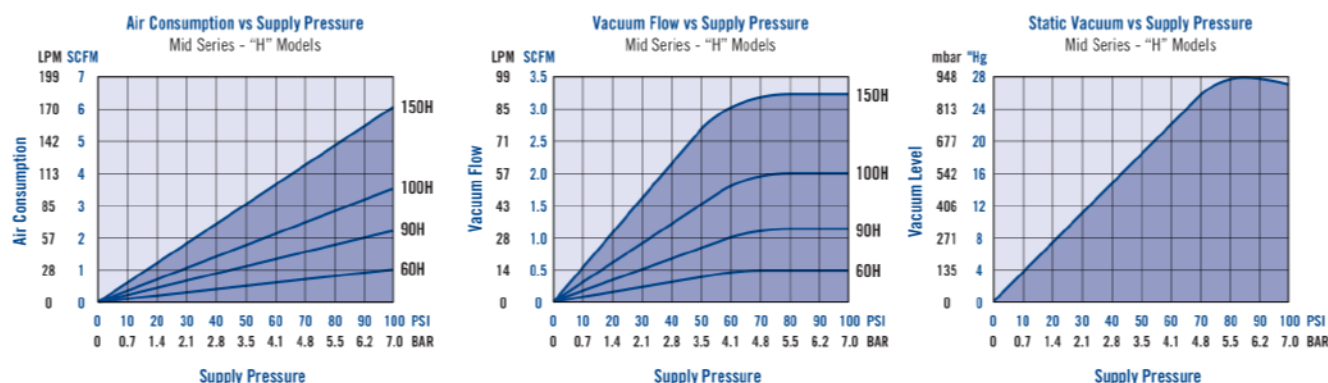
H is for “High” vacuum levels up to 28”Hg [948mbar] for applications involving non-porous materials (steel, plastic, glass, etc.). The High vacuum level provides high vacuum force for lifting heavy materials and holding them securely.

Model #	Air Consumption SCFM	Imperial – Vacuum Flow (SCFM) vs. Vacuum Level (“Hg)										
		0”Hg	3”Hg	6”Hg	9”Hg	12”Hg	15”Hg	18”Hg	21”Hg	24”Hg	27”Hg	28”Hg
60H	0.80	0.50	0.38	0.32	0.30	0.27	0.23	0.20	0.13	0.05	0.02	0.00
90H	1.80	1.20	1.00	0.95	0.90	0.85	0.75	0.70	0.52	0.47	0.20	0.00
100H	2.80	2.00	1.85	1.75	1.57	1.40	1.25	1.05	0.84	0.70	0.35	0.00
150H	4.80	3.20	2.80	2.50	2.30	2.00	1.60	1.40	1.20	0.80	0.50	0.00
Model #		Evacuation Time in Seconds based on 1 Cubic Foot Volume/”Hg										
		0”Hg	3”Hg	6”Hg	9”Hg	12”Hg	15”Hg	18”Hg	21”Hg	24”Hg	27”Hg	28”Hg
60H		0.00	15.00	29.80	50.60	74.50	102.80	135.90	183.20	245.90	410.20	790.80
90H		0.00	6.50	12.30	18.90	32.50	47.00	65.40	92.20	130.00	222.20	281.30
100H		0.00	2.70	6.50	11.20	17.50	25.80	38.40	55.20	79.20	166.70	251.80
150H		0.00	2.30	3.80	6.50	10.20	14.20	21.30	44.90	55.00	81.00	125.00

Model #	Air Consumption L/min	Metric – Vacuum Flow (L/min) vs. Vacuum Level (mbar)										
		0 mbar	102 mbar	203 mbar	305 mbar	406 mbar	508 mbar	609 mbar	711 mbar	813 mbar	914 mbar	948 mbar
60H	22.7	14.2	10.8	9.1	8.5	7.6	6.5	5.7	3.7	1.4	0.6	0.0
90H	51.0	34.0	28.3	26.9	25.5	24.1	21.2	19.8	14.7	13.3	5.7	0.0
100H	79.3	56.6	52.4	49.6	44.5	39.6	35.4	29.7	23.8	19.8	9.9	0.0
150H	135.9	90.6	79.3	70.8	65.1	56.6	45.3	39.6	34.0	22.7	14.6	0.0
Model #		Evacuation Time in Seconds based on 1 Liter Volume/mbar										
		0 mbar	102 mbar	203 mbar	305 mbar	406 mbar	508 mbar	609 mbar	711 mbar	813 mbar	914 mbar	948 mbar
60H		0.0	0.5	1.1	1.8	2.6	3.6	4.8	6.5	8.7	14.5	27.9
90H		0.0	0.2	0.4	0.7	1.1	1.7	2.3	3.3	4.6	7.8	9.9
100H		0.0	0.1	0.2	0.4	0.6	0.9	1.4	1.9	2.8	5.9	8.9
150H		0.0	0.1	0.1	0.2	0.3	0.5	0.8	1.6	1.9	2.9	4.4

Note 1: Standard operating pressure for Vaccon pumps is 80 PSI [5.5BAR]. Pumps can be factory modified to run at other operating pressures i.e. 60 PSI [4 BAR] etc. The values shown in the performance chart will remain the same for all operating pressures.

Note 2: Evacuation speed is linear with volume, a two cu. ft. volume will take twice as long to evacuate as a one cu. ft. volume.



Threaded Venturi Vacuum Cartridges

for OEM Equipment & Applications



C200M-TH threaded cartridge shown in manifold block - assembled/unassembled.



Mid & Max Series Threaded Cartridges with removable silencers

Ideal Applications:

- Flexible manufacturing environments
- Packaging Machinery
- Food Processing
- Robotics / End-of-Arm Tooling
- Pick & place
- Integrate into blood or gas analysis machines
- Vessel evacuation
- Vacuum filling, vacuum chucking
- Medical Applications – diagnostic equipment, disposal products
- Flexible manufacturing environments

Features/Benefits:

- Saves space – eliminates the need for an external pump, install close to vacuum point
- High Productivity – powerful vacuum up to 28"Hg [948mbar], fast response time
- Compact & lightweight – reduces overall equipment weight
- Efficient – minimal air consumption, high performance
- Performance Optimization – precise control of flow and vacuum level
- Reduces plumbing connections
- Available in a range of materials for food handling, chemical, and medical applications

Standard Threaded Cartridges:

Vaccon developed the Mid and Max Series Threaded Vacuum Cartridges at the request of OEM customers that are often challenged with limited space to integrate components in machines and automation systems. Vaccon offers 23 models of the Threaded Vacuum Cartridges that can be installed within a very tight envelope by easily threading them into an OEM threaded cavity on the machine. All cartridges have the same unique non-clogging, dirt tolerant design that is carried throughout the Vaccon product line.

Vaccon Threaded Venturi Vacuum Cartridges offer a wide range of performance levels enabling you to optimize performance based on desired vacuum level, vacuum flow, evacuation speed and air consumption. If the product changes in size, porosity, or weight, you can re-fit the existing equipment with a different cartridge by simply swapping the cartridge.

Performance Level Designations:

"L" 0-10"Hg, [0 to 339mbar] for low vacuum/high flow applications (not available for Min Series)

"M" 0-20"Hg, [0 to 677mbar] for medium vacuum/high flow applications

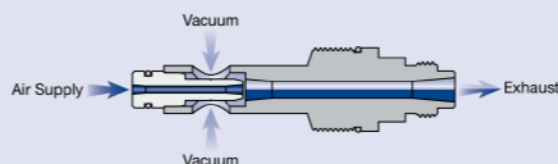
"H" 0-28"Hg, [0 to 948mbar] for high vacuum/standard flow applications

Cartridge Options:

- Choice of operating pressures to meet machine and factory air supply 80 PSI [5.5 bar] standard, 60 PSI [4.1 bar] optional
- For chemical compatibility requirements, food or medical applications, custom materials and sizes are available. Consult factory.

Principles of Operation:

Vacuum is produced by forcing compressed air through a limiting orifice (nozzle). As the air exits the orifice, it expands, increasing in velocity to supersonic speed before entering the venturi section (diffuser). This creates a vacuum at the vacuum inlet port located between the nozzle and diffuser. The nozzle and diffuser combine to create a venturi vacuum cartridge.



Eliminate the Guesswork: Contact Us!

Vaccon technology isn't an exact science. To ensure proper product selection, Vaccon offers free application engineering assistance, a 30 Day Test & Evaluation Program or you can send sample products to our in-house test facility and we will test and size a pump for you.

To download a complete set of drawings in 13 different CAD formats, please visit our website at www.vaccon.com

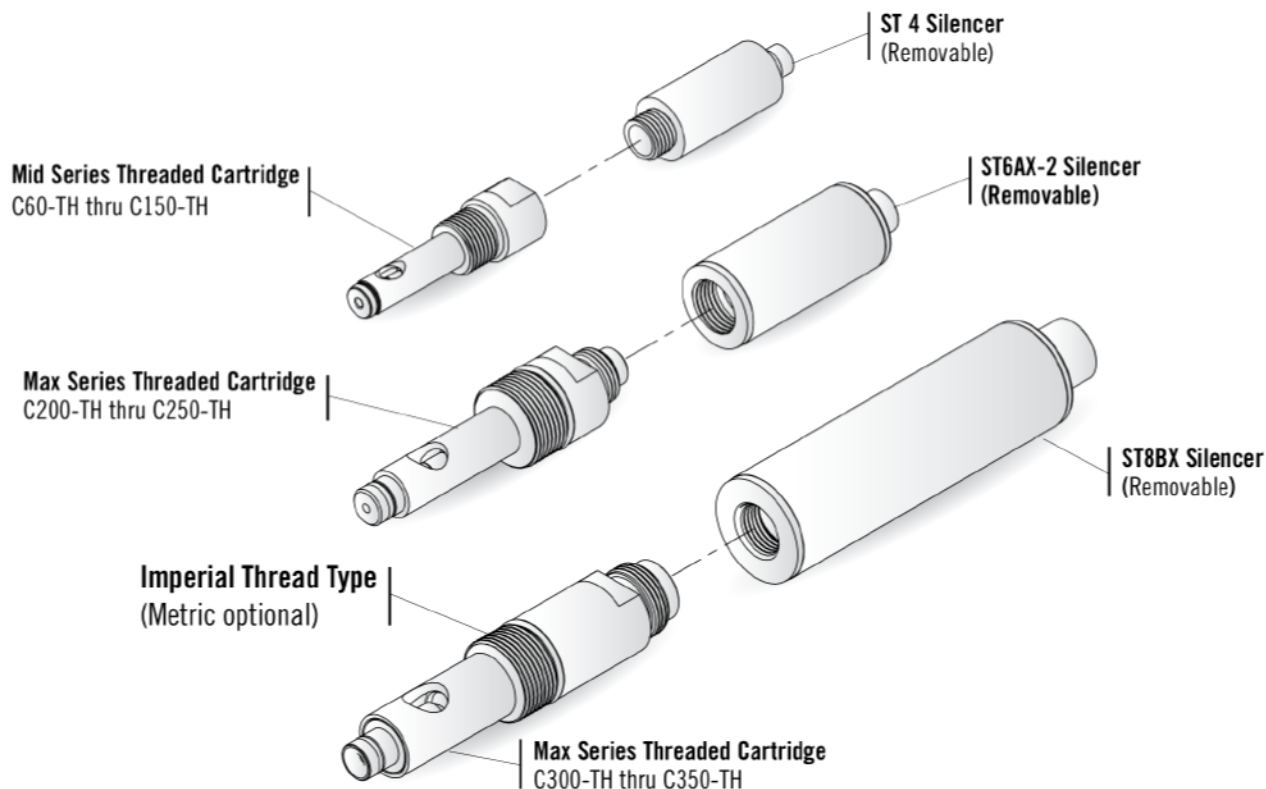
For more information or technical assistance, please call 508-359-7200 or 800-848-8788 or email engineering@vaccon.com



Venturi Vacuum Cartridges – Threaded

Threaded Venturi Vacuum Cartridges (Mid and Max Series) Configurations and Options:

Vaccon Mid & Max Series threaded cartridges are standard with removable silencers. Vaccon strongly recommends the use of its ST Series silencers. The ST Series silencers are designed with a straight through flow path that eliminates clogging by allowing the contaminants to pass directly through the silencer. Each silencer is tuned in proportion to its exhaust flow to minimize noise.



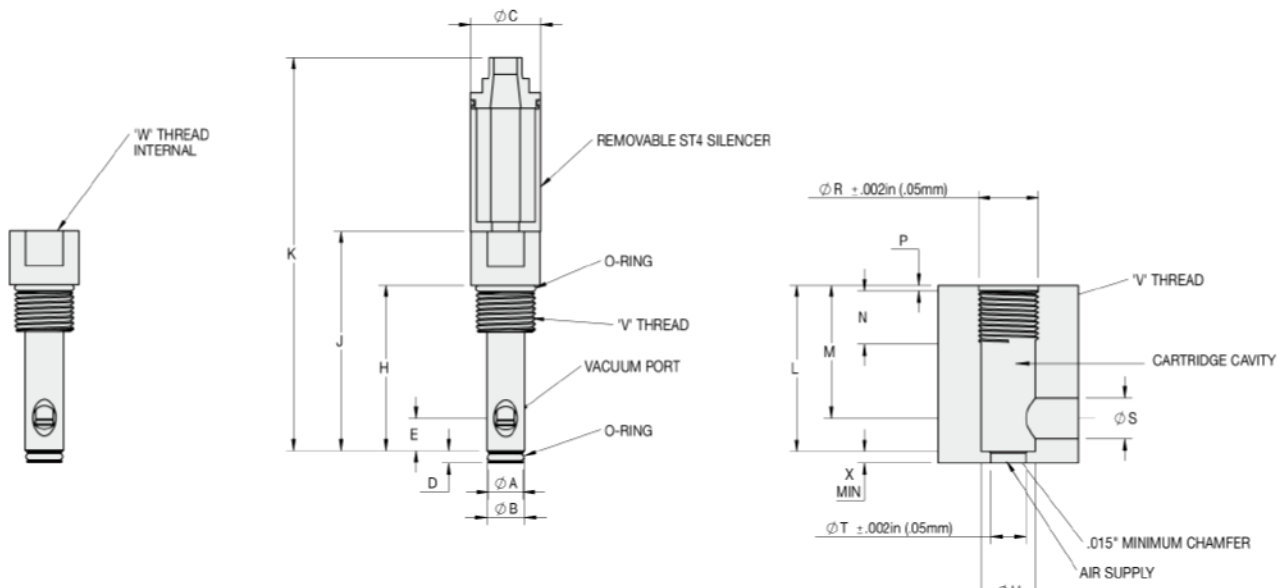
How to Specify:

Mid Cartridges		I - C60 H - TH - 60	
P/N	Thread Type	P/N	Operating Pressure
I	Imperial Thread Metric Thread	60	80 PSI [5.5 bar] - Standard 60 PSI [4.0 bar]
P/N	Max. Flow Level	P/N	Max. Vac Level
C60	Mid Series Only	L	10"Hg [339 mbar] (n/a C60)
C90	Mid Series Only	M	20"Hg [677 mbar]
C100	Mid Series Only	H	28"Hg [948 mbar]
C150	Mid Series Only		
C200	Max Series Only		
C250	Max Series Only		
C300	Max Series Only		
C350	Max Series Only		

For complete Performance Data, see page 24.



Mid Series Threaded Cartridges C60/150-TH



Part Number: C60M-TH/ C150H-TH

Standard Material: Anodized Aluminum

Weight: 0.069 oz [19.5g]

Model #	Imperial Dimensions (in.)																	
C60/150-TH	A	B	C	D	E	H	J	K	L	M	N	P	R	S	T	U	V	W
Cartridge	0.37	0.41	0.75	0.13	0.36	1.78	2.36	4.22	-	-	-	-	-	-	-	-	5/8-18 UNF	1/4-18 NPS
Cavity	-	-	-	-	-	-	-	-	1.78	1.43	0.63	0.06	0.64	0.44	0.38	0.58	5/8-18 UNF	0.13
Model #	Metric Dimensions (mm)																	
I-C60/150-TH	A	B	C	D	E	H	J	K	L	M	N	P	R	S	T	U	V	W
Cartridge	9.40	10.36	19.05	3.18	9.14	45.21	59.94	107.06	-	-	-	-	-	-	-	-	M16x1.0	1/4-18 NPS
Cavity	-	-	-	-	-	-	-	-	45.21	36.32	16.00	1.60	16.26	11.11	9.53	14.68	M16x1.0	3.30

Mid Series Threaded Cartridge Specifications:

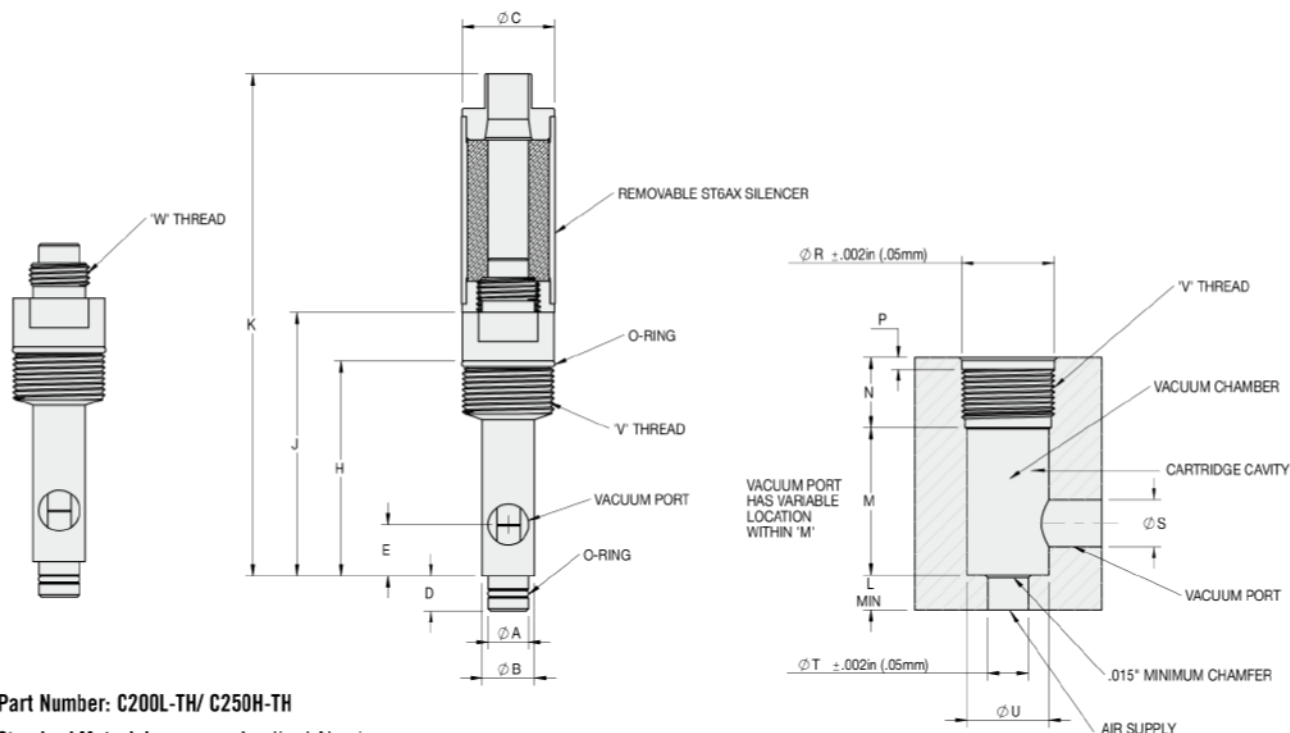
Cartridge Material:	Standard: Anodized Aluminum, Buna-N O-rings
Optional Materials:	Stainless Steel, PVC, Peek, Teflon®, Delrin® O-rings available in additional materials - Consult factory for availability
Medium:	Filtered (50 Micron) un-lubricated, non-corrosive dry gases
Operating Temperature:	-30° to ~250°F [-34° to ~121°C]
Operating Pressure:	80 PSI [5.5 bar] or 60 PSI [4.1 bar] – Consult Factory for other operating pressures

Mid Series Threaded Cartridge Operating and Installation Requirements:

Cartridge size:	C60(M, H)-TH and C90(L, M, H)-TH	C100(L, M, H)-TH and C150(L, M, H)-TH
Supply Line:	1/4" O.D. [6mm] tube recommended	3/8" O.D. [10mm] tube recommended
Vacuum Line:	1/4" O.D. [6mm] tube recommended	3/8" O.D. [10mm] tube recommended
Vacuum Line Filtration:	Typically vacuum filters are not required, if desired Vaccon recommends – VF125LPM. See Page 254.	



Max Series Threaded Cartridges C200/250-TH



Part Number: C200L-TH/ C250H-TH

Standard Material: Anodized Aluminum

Weight: 1.87 oz [53.0g]

Model #	Imperial Dimensions (in.)																	
C200/ 250-TH	A	B	C	D	E	H	J	K	L	M	N	P	R	S	T	U	V	W
Cartridge	0.43	0.56	1.00	0.38	0.55	2.30	2.82	5.37	-	-	-	-	-	-	-	-	7/8-20 UNEF	3/8-18 NPT
Cavity	-	-	-	-	-	-	-	-	0.38	1.58	0.75	0.13	0.99	0.50	0.44	0.88	7/8-20 UNEF	-
Model #	Metric Dimensions (mm)																	
I- C200/ 250-TH	A	B	C	D	E	H	J	K	L	M	N	P	R	S	T	U	V	W
Cartridge	11.00	14.22	25.40	9.65	13.97	58.42	71.63	136.42	-	-	-	-	-	-	-	-	M25x1.5	3/8-18 NPT
Cavity	-	-	-	-	-	-	-	-	9.65	40.13	19.05	3.30	25.15	12.70	11.18	22.00	M25x1.5	-

Max Series Threaded Cartridge Specifications:

Cartridge Material: Standard: Anodized Aluminum, Buna-N O-rings

Optional Materials: Stainless Steel, PVC, Peek, Teflon®, Delrin®
O-rings available in additional materials - Consult factory for availability

Medium: Filtered (50 Micron) un-lubricated, non-corrosive dry gases

Operating Temperature: -30° to ~250°F [-34° to ~121°C]

Operating Pressure: 80 PSI [5.5 bar] or 60 PSI [4.1 bar] – Consult Factory for other operating pressures

Max Series Threaded Cartridge Operating and Installation Requirements:

Cartridge size: C200(L, M, H)-TH

C250(L, M, H)-TH

Supply Line: 3/8" O.D. [6mm] tube recommended

3/8" O.D. [10mm] tube recommended

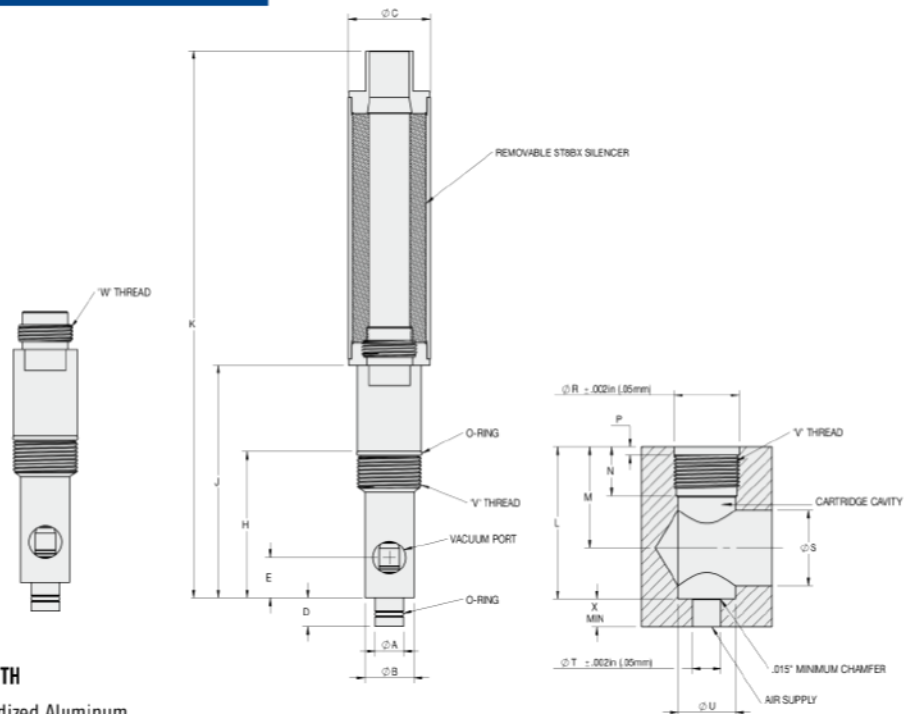
Vacuum Line: 3/8" O.D. [6mm] tube recommended

3/8" O.D. [10mm] tube recommended

Vacuum Line Filtration: Typically vacuum filters are not required, if desired Vaccon recommends – VF375F. See Page 254.



Max Series Threaded Cartridges - C300/350-TH



Part Number: C300L-TH/ C350H-TH

Standard Material: Anodized Aluminum
Weight: 3.06 oz [86.8g]

Model #	Imperial Dimensions (in.)																		
C300/ 350-TH	A	B	C	D	E	H	J	K	L	M	N	P	R	S	T	U	V	W	X
Cartridge	0.43	0.75	1.25	0.44	0.62	2.24	3.56	8.36	-	-	-	-	-	-	-	-	7/8-20 UNEF	1/2 14 NPS	-
Cavity	-	-	-	-	-	-	-	-	2.33	1.55	0.75	0.13	0.99	1.16	0.44	0.88	7/8-20 UNEF	-	0.44
Model #	Metric Dimensions (mm)																		
I-C300/ 350-TH	A	B	C	D	E	H	J	K	L	M	N	P	R	S	T	U	V	W	X
Cartridge	11.00	19.05	31.75	11.18	15.70	56.90	90.35	212.39	-	-	-	-	-	-	-	-	M25x1.5	1/2 14 NPS	-
Cavity	-	-	-	-	-	-	-	-	59.06	39.24	19.05	3.18	25.15	29.36	11.11	22.00	M25x1.5	-	22.00

Max Series Threaded Cartridge Specifications:

Cartridge Material: Standard: Anodized Aluminum, Buna-N O-rings
Optional Materials: Stainless Steel, PVC, Peek, Teflon®, Delrin®
 O-rings available in additional materials - Consult factory for availability
Medium: Filtered (50 Micron) un-lubricated, non-corrosive dry gases
Operating Temperature: -30° to ~250°F [-34° to ~121°C]
Operating Pressure: 80 PSI [5.5 bar] or 60 PSI [4.1 bar] – Consult Factory for other operating pressures

Max Series Threaded Cartridge Operating and Installation Requirements:

Cartridge size:	C300(L, M, H)-TH	C350(L, M, H)-TH
Supply Line:	1/2" O.D. [12mm] tube recommended	1/2" O.D. [12mm] tube recommended
Vacuum Line:	1/2" O.D. [12mm] tube recommended	1/2" O.D. [12mm] tube recommended
Vacuum Line Filtration:	Typically vacuum filters are not required, if desired Vaccon recommends – VF500F. See Page 254.	



Performance Data for Mid Series Threaded Cartridges

L-Series Cartridges for Low Vacuum Applications

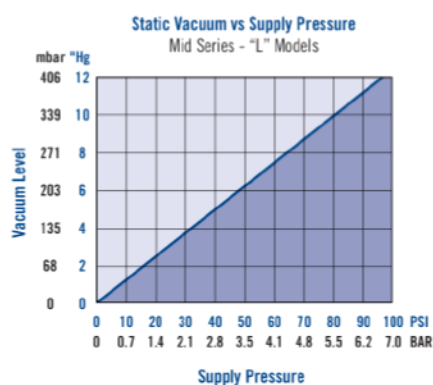
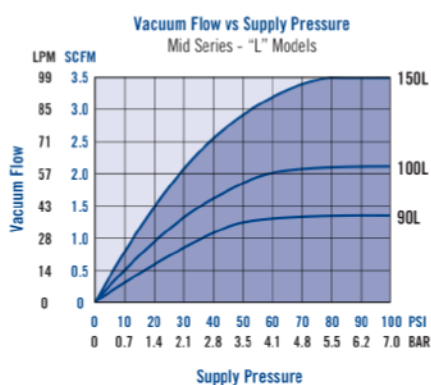
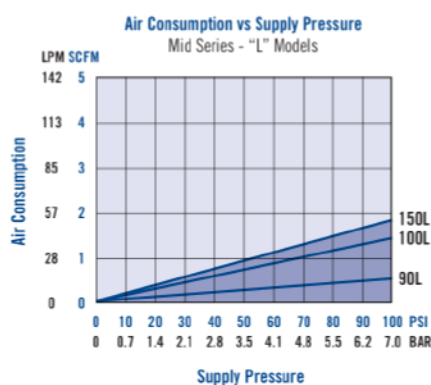
L is for “Low” vacuum levels up to 10”Hg [339mbar] for applications handling delicate parts, thin walled materials and for process control.

Model #	Air Consumption SCFM	Imperial – Vacuum Flow (SCFM) vs. Vacuum Level (“Hg)				
		0” Hg	3” Hg	6” Hg	9” Hg	10” Hg
C90L-TH	0.50	1.30	1.10	0.70	0.20	0.00
C100L-TH	1.40	2.10	1.60	1.10	0.50	0.00
C150L-TH	1.80	3.50	2.50	1.90	0.70	0.00
Model #		Evacuation Time in Seconds based on 1 Cubic Foot Volume/”Hg				
		0” Hg	3” Hg	6” Hg	9” Hg	10” Hg
C90L-TH		0.00	3.26	7.93	18.65	39.63
C100L-TH		0.00	2.33	4.66	10.88	24.0
C150L-TH		0.00	1.54	4.36	10.77	22.83

Model #	Air Consumption L/min	Metric – Vacuum Flow (L/min) vs. Vacuum Level (mbar)				
		0 mbar	102 mbar	203 mbar	305 mbar	339 mbar
C90L-TH	14.2	36.8	31.1	19.8	5.7	0.0
C100L-TH	39.6	59.5	45.3	31.1	14.2	0.0
C150L-TH	51.0	99.1	70.8	53.8	19.8	0.0
Model #		Evacuation Time in Seconds based on 1 Liter Volume/mbar				
		0 mbar	102 mbar	203 mbar	305 mbar	339 mbar
C90L-TH		0.0	0.1	0.3	0.7	1.4
C100L-TH		0.0	0.1	0.2	0.4	0.9
C150L-TH		0.0	0.1	0.2	0.4	0.8

Note 1: Standard operating pressure for Vaccon pumps is 80 PSI [5.5BAR]. Pumps can be factory modified to run at other operating pressures i.e. 60 PSI [4 BAR] etc. The values shown in the performance chart will remain the same for all operating pressures.

Note 2: Evacuation speed is linear with volume, a two cu. ft. volume will take twice as long to evacuate as a one cu. ft. volume.



Performance Data for Mid Series Threaded Cartridges

M-Series Cartridges for Medium Vacuum Applications

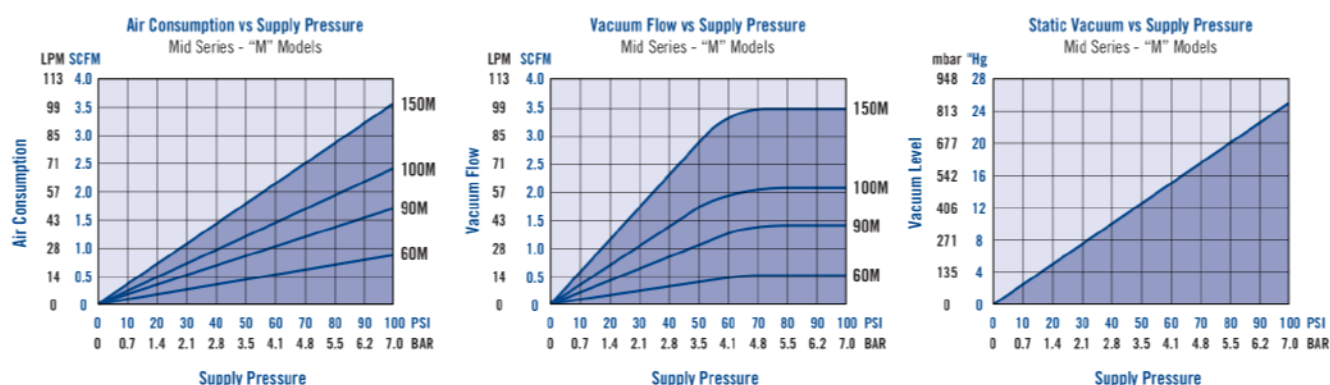
M is for "Medium" vacuum levels up to 20"Hg [677mbar] for applications involving porous materials (cardboard, wood, masonry, baked goods, textiles)

Model #	Air Consumption SCFM	Imperial – Vacuum Flow (SCFM) vs. Vacuum Level ("Hg)							
		0"Hg	3"Hg	6"Hg	9"Hg	12"Hg	15"Hg	18"Hg	20"Hg
C60M-TH	0.50	0.50	0.40	0.30	0.22	0.15	0.08	0.03	0.00
C90M-TH	1.40	1.40	1.25	1.20	1.05	0.85	0.65	0.25	0.00
C100M-TH	1.80	2.10	2.00	1.85	1.75	1.60	1.25	0.80	0.00
C150M-TH	2.80	3.50	3.20	2.95	2.75	2.50	1.80	0.95	0.00
Model #		Evacuation Time in Seconds based on 1 Cubic Foot Volume/"Hg							
		0"Hg	3"Hg	6"Hg	9"Hg	12"Hg	15"Hg	18"Hg	20"Hg
C60M-TH		0.00	12.50	25.10	43.90	68.60	99.30	153.70	227.00
C90M-TH		0.00	3.75	7.20	12.40	19.10	29.90	52.00	104.00
C100M-TH		0.00	2.65	5.80	9.90	16.20	22.90	36.20	56.60
C150M-TH		0.00	1.35	3.20	5.20	7.70	11.80	23.40	52.00

Model #	Air Consumption L/min	Metric – Vacuum Flow (L/min) vs. Vacuum Level (mbar)							
		0 mbar	102 mbar	203 mbar	305 mbar	406 mbar	508 mbar	609 mbar	677 mbar
C60M-TH	14.2	14.2	11.3	8.5	6.2	4.2	2.3	0.8	0.0
C90M-TH	39.6	39.6	35.4	34.0	29.7	24.1	18.4	7.1	0.0
C100M-TH	51.0	59.5	56.6	52.4	49.6	45.3	35.4	22.7	0.0
C150M-TH	79.3	99.1	90.6	83.5	77.9	70.8	51.0	26.9	0.0
Model #		Evacuation Time in Seconds based on 1 Liter Volume/mbar							
		0 mbar	102 mbar	203 mbar	305 mbar	406 mbar	508 mbar	609 mbar	677 mbar
C60M-TH		0.0	0.4	0.9	1.6	2.4	3.5	5.4	8.0
C90M-TH		0.0	0.1	0.23	0.4	0.7	1.1	1.8	3.7
C100M-TH		0.0	0.1	0.2	0.3	0.6	0.8	1.3	2.0
C150M-TH		0.0	0.0	0.1	0.2	0.3	0.4	0.8	1.8

Note 1: Standard operating pressure for Vaccon pumps is 80 PSI [5.5BAR]. Pumps can be factory modified to run at other operating pressures i.e. 60 PSI [4 BAR] etc.
The values shown in the performance chart will remain the same for all operating pressures.

Note 2: Evacuation speed is linear with volume, a two cu. ft. volume will take twice as long to evacuate as a one cu. ft. volume.



Performance Data for Mid Series Threaded Cartridges

H-Series Cartridges for High Vacuum Applications

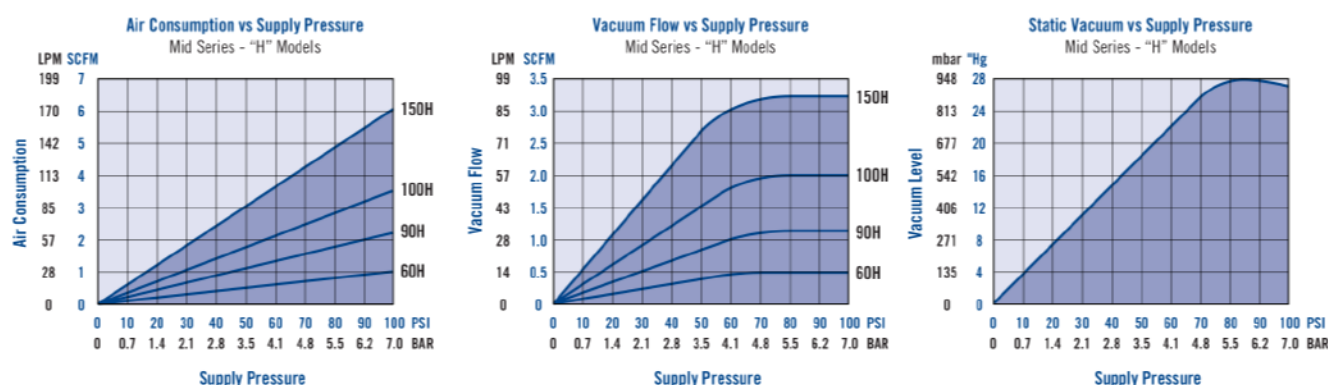
H is for “High” vacuum levels up to 28”Hg [948mbar] for applications involving non-porous materials (steel, plastic, glass, etc.). The high vacuum level provides high vacuum force for lifting heavy materials and holding them securely.

Model #	Air Consumption SCFM	Imperial – Vacuum Flow (SCFM) vs. Vacuum Level (“Hg)										
		0”Hg	3”Hg	6”Hg	9”Hg	12”Hg	15”Hg	18”Hg	21”Hg	24”Hg	27”Hg	28”Hg
C60H-TH	0.80	0.50	0.38	0.32	0.30	0.27	0.23	0.20	0.13	0.05	0.02	0.00
C90H-TH	1.80	1.20	1.00	0.95	0.90	0.85	0.75	0.70	0.52	0.47	0.20	0.00
C100H-TH	2.80	2.00	1.85	1.75	1.57	1.40	1.25	1.05	0.84	0.70	0.35	0.00
C150H-TH	4.80	3.20	2.80	2.50	2.30	2.00	1.60	1.40	1.20	0.80	0.50	0.00
Model #		Evacuation Time in Seconds based on 1 Cubic Foot Volume/”Hg										
		0”Hg	3”Hg	6”Hg	9”Hg	12”Hg	15”Hg	18”Hg	21”Hg	24”Hg	27”Hg	28”Hg
C60H-TH		0.00	15.00	29.80	50.60	74.50	102.80	135.90	183.20	245.90	410.20	790.80
C90H-TH		0.00	6.50	12.30	18.90	32.50	47.00	65.40	92.20	130.00	222.20	281.30
C100H-TH		0.00	2.70	6.50	11.20	17.50	25.80	38.40	55.20	79.20	166.70	251.80
C150H-TH		0.00	2.30	3.80	6.50	10.20	14.20	21.30	44.90	55.00	81.00	125.00

Model #	Air Consumption L/min	Metric – Vacuum Flow (L/min) vs. Vacuum Level (mbar)										
		0 mbar	102 mbar	203 mbar	305 mbar	406 mbar	508 mbar	609 mbar	711 mbar	813 mbar	914 mbar	948 mbar
C60H-TH	22.7	14.2	10.8	9.1	8.5	7.6	6.5	5.7	3.7	1.4	0.6	0.0
C90H-TH	51.0	34.0	28.3	26.9	25.5	24.1	21.2	19.8	14.7	13.3	5.7	0.0
C100H-TH	79.3	56.6	52.4	49.6	44.5	39.6	35.4	29.7	23.8	19.8	9.9	0.0
C150H-TH	135.9	90.6	79.3	70.8	65.1	56.6	45.3	39.6	34.0	22.7	14.6	0.0
Model #		Evacuation Time in Seconds based on 1 Liter Volume/mbar										
		0 mbar	102 mbar	203 mbar	305 mbar	406 mbar	508 mbar	609 mbar	711 mbar	813 mbar	914 mbar	948 mbar
C60H-TH		0.0	0.5	1.1	1.8	2.6	3.6	4.8	6.5	8.7	14.5	27.9
C90H-TH		0.0	0.2	0.4	0.7	1.1	1.7	2.3	3.3	4.6	7.8	9.9
C100H-TH		0.0	0.1	0.2	0.4	0.6	0.9	1.4	1.9	2.8	5.9	8.9
C150H-TH		0.0	0.1	0.1	0.2	0.3	0.5	0.8	1.6	1.9	2.9	4.4

Note 1: Standard operating pressure for Vaccon pumps is 80 PSI [5.5BAR]. Pumps can be factory modified to run at other operating pressures i.e. 60 PSI [4 BAR] etc. The values shown in the performance chart will remain the same for all operating pressures.

Note 2: Evacuation speed is linear with volume, a two cu. ft. volume will take twice as long to evacuate as a one cu. ft. volume.



Performance Data for Max Series Threaded Cartridges

L-Series Cartridges for Low Vacuum Applications

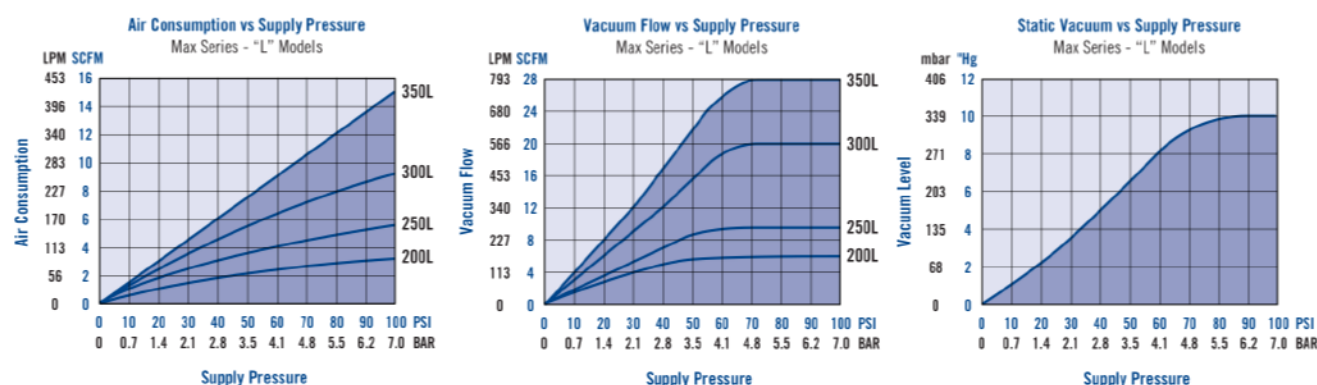
L is for “Low” vacuum levels up to 10”Hg [339 mbar] for applications handling delicate parts, thin walled materials and for process control.

Model #	Air Consumption SCFM	Imperial – Vacuum Flow (SCFM) vs. Vacuum Level (“Hg)				
		0”Hg	3”Hg	6”Hg	9”Hg	10”Hg
C200L-TH	2.80	6.00	5.80	4.30	1.70	0.00
C250L-TH	4.80	9.50	7.90	5.70	2.20	0.00
C300L-TH	7.80	20.00	14.00	9.50	3.50	0.00
C350L-TH	12.50	28.00	18.00	12.30	4.50	0.00
Model #		Evacuation Time in Seconds based on 1 Cubic Foot Volume/”Hg				
		0”Hg	3”Hg	6”Hg	9”Hg	10”Hg
C200L-TH		0.00	0.77	2.05	4.62	13.34
C250L-TH		0.00	0.52	1.28	3.08	7.95
C300L-TH		0.00	0.26	0.77	1.80	4.10
C350L-TH		0.00	0.00	0.52	1.28	2.82

Model #	Air Consumption L/min	Metric – Vacuum Flow (L/min) vs. Vacuum Level (mbar)				
		0 mbar	102 mbar	203 mbar	305 mbar	339 mbar
C200L-TH	79.3	169.9	164.2	121.8	48.1	0.0
C250L-TH	135.9	269.0	223.7	161.4	62.3	0.0
C300L-TH	220.9	566.3	396.4	269.0	99.1	0.0
C350L-TH	354.0	792.9	509.7	348.3	127.4	0.0
Model #		Evacuation Time in Seconds based on 1 Liter Volume/mbar				
		0 mbar	102 mbar	203 mbar	305 mbar	339 mbar
C200L-TH		0.0	0.0	0.1	0.2	0.5
C250L-TH		0.0	0.0	0.0	0.1	0.3
C300L-TH		0.0	0.0	0.0	0.1	0.1
C350L-TH		0.0	0.0	0.0	0.0	0.1

Note 1: Standard operating pressure for Vaccon pumps is 80 PSI [5.5BAR]. Pumps can be factory modified to run at other operating pressures i.e. 60 PSI [4 BAR] etc. The values shown in the performance chart will remain the same for all operating pressures.

Note 2: Evacuation speed is linear with volume, a two cu. ft. volume will take twice as long to evacuate as a one cu. ft. volume.



Performance Data for Max Series Threaded Cartridges

M-Series Cartridges for Medium Vacuum Applications

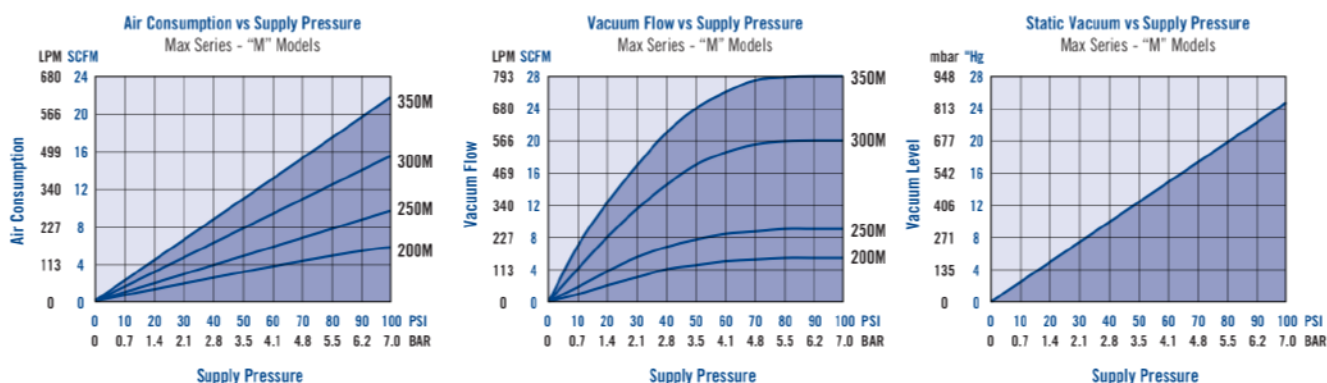
M is for “Medium” vacuum levels up to 20”Hg [667 mbar] for applications involving porous materials (cardboard, wood, masonry, baked goods, textiles)

Model #	Air Consumption SCFM	Imperial – Vacuum Flow (SCFM) vs. Vacuum Level (“Hg)							
		0”Hg	3”Hg	6”Hg	9”Hg	12”Hg	15”Hg	18”Hg	20”Hg
C200M-TH	4.80	6.00	5.30	4.90	4.00	3.50	2.50	1.10	0.00
C250M-TH	7.80	9.50	9.20	8.30	7.00	4.70	3.40	2.20	0.00
C300M-TH	12.50	20.00	19.00	16.30	13.80	8.10	5.50	3.30	0.00
C350M-TH	22.00	28.00	24.00	19.40	16.80	14.50	11.20	4.80	0.00
Model #		Evacuation Time in Seconds based on 1 Cubic Foot Volume/”Hg							
		0”Hg	3”Hg	6”Hg	9”Hg	12”Hg	15”Hg	18”Hg	20”Hg
C200M-TH		0.00	0.75	1.90	3.20	5.30	8.70	17.10	42.60
C250M-TH		0.00	0.45	1.10	2.40	3.80	6.00	9.70	15.40
C300M-TH		0.00	0.00	0.00	1.10	1.80	2.70	4.60	8.70
C350M-TH		0.00	0.00	0.00	1.00	1.50	2.10	4.30	8.40

Model #	Air Consumption L/min	Metric – Vacuum Flow (L/min) vs. Vacuum Level (mbar)							
		0 mbar	102 mbar	203 mbar	305 mbar	406 mbar	508 mbar	609 mbar	677 mbar
C200M-TH	135.9	169.9	150.1	138.8	113.3	99.1	70.8	31.1	0.0
C250M-TH	220.9	269.0	260.5	235.0	198.2	133.1	96.3	62.3	0.0
C300M-TH	354.0	566.3	538.0	461.6	390.8	229.4	155.7	93.4	0.0
C350M-TH	623.0	792.9	679.6	549.3	475.7	410.6	317.1	135.9	0.0
Model #		Evacuation Time in Seconds based on 1 Liter Volume/mbar							
		0 mbar	102 mbar	203 mbar	305 mbar	406 mbar	508 mbar	609 mbar	677 mbar
C200M-TH		0.0	0.0	0.1	0.1	0.2	0.3	0.6	1.5
C250M-TH		0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.5
C300M-TH		0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.3
C350M-TH		0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.3

Note 1: Standard operating pressure for Vaccon pumps is 80 PSI [5.5BAR]. Pumps can be factory modified to run at other operating pressures i.e. 60 PSI [4 BAR] etc.
The values shown in the performance chart will remain the same for all operating pressures.

Note 2: Evacuation speed is linear with volume, a two cu. ft. volume will take twice as long to evacuate as a one cu. ft. volume.



Performance Data for Max Series Threaded Cartridges

H-Series Cartridges for High Vacuum Applications

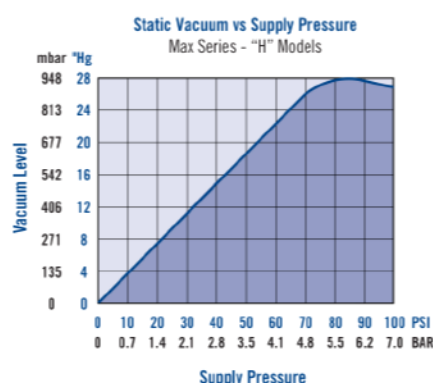
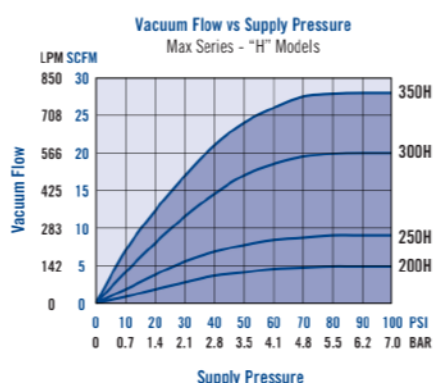
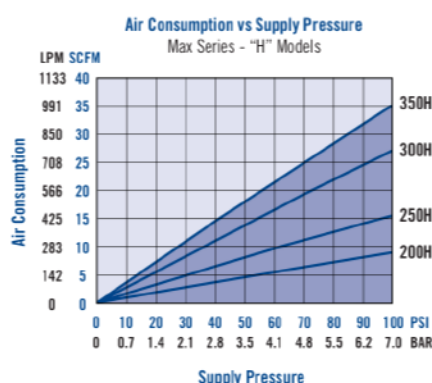
H is for “High” vacuum levels up to 28”Hg [948mbar] for applications involving non-porous materials (steel, plastic, glass, etc.) The high vacuum level provides high vacuum force for lifting heavy materials and holding them securely.

Model #	Air Consumption SCFM	Imperial – Vacuum Flow (SCFM) vs. Vacuum Level (“Hg)										
		0”Hg	3”Hg	6”Hg	9”Hg	12”Hg	15”Hg	18”Hg	21”Hg	24”Hg	27”Hg	28”Hg
C200H-TH	7.80	5.40	4.70	3.85	3.30	3.00	2.60	2.10	1.60	1.20	0.60	0.00
C250H-TH	12.50	9.00	8.50	7.85	7.00	6.50	5.30	3.90	2.50	1.80	0.90	0.00
C300H-TH	22.00	20.00	17.00	14.00	12.70	12.00	10.00	7.40	4.90	2.70	1.30	0.00
C350H-TH	28.00	28.00	22.00	18.70	15.90	14.50	11.80	8.10	5.70	4.50	2.25	0.00
Model #		Evacuation Time in Seconds based on 1 Cubic Foot Volume/”Hg										
		0”Hg	3”Hg	6”Hg	9”Hg	12”Hg	15”Hg	18”Hg	21”Hg	24”Hg	27”Hg	28”Hg
C200H-TH		0.00	1.20	2.10	3.40	5.20	7.70	11.50	20.00	33.50	62.60	98.10
C250H-TH		0.00	0.75	1.30	2.20	3.50	5.60	9.10	17.40	30.10	56.00	76.00
C300H-TH		0.00	0.00	0.80	1.20	2.00	2.80	3.90	5.90	11.10	32.70	60.00
C350H-TH		0.00	0.00	0.00	1.20	1.90	2.30	3.40	5.30	8.80	26.00	44.00

Model #	Air Consumption L/min	Metric – Vacuum Flow (L/min) vs. Vacuum Level (mbar)										
		0 mbar	102 mbar	203 mbar	305 mbar	406 mbar	508 mbar	609 mbar	711 mbar	814 mbar	914 mbar	948 mbar
C200H-TH	220.9	152.9	133.1	109.0	93.4	85.0	73.6	59.5	45.3	34.0	17.0	0.0
C250H-TH	354.0	254.9	240.7	222.3	198.2	184.1	150.1	110.4	70.8	51.0	25.5	0.0
C300H-TH	623.0	566.3	481.4	396.4	359.6	339.8	238.2	209.5	138.8	76.5	36.8	0.0
C350H-TH	792.9	792.9	623.0	529.5	450.2	410.6	334.1	229.4	161.4	127.4	63.7	0.0
Model #		Evacuation Time in Seconds based on 1 Liter Volume/mbar										
		0 mbar	102 mbar	203 mbar	305 mbar	406 mbar	508 mbar	609 mbar	711 mbar	814 mbar	914 mbar	948 mbar
C200H-TH		0.0	0.0	0.1	0.1	0.2	0.3	0.4	0.7	1.2	2.2	3.5
C250H-TH		0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.6	1.1	2.0	2.7
C300H-TH		0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.4	1.2	2.1
C350H-TH		0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.3	0.9	1.6

Note 1: Standard operating pressure for Vaccon pumps is 80 PSI [5.5BAR]. Pumps can be factory modified to run at other operating pressures i.e. 60 PSI [4 BAR] etc. The values shown in the performance chart will remain the same for all operating pressures.

Note 2: Evacuation speed is linear with volume, a 2 cu. ft. volume will take twice as long to evacuate as a one cu. ft. volume.



Performance Data for Max Series Threaded Cartridges

L-Series Cartridges for Low Vacuum Applications

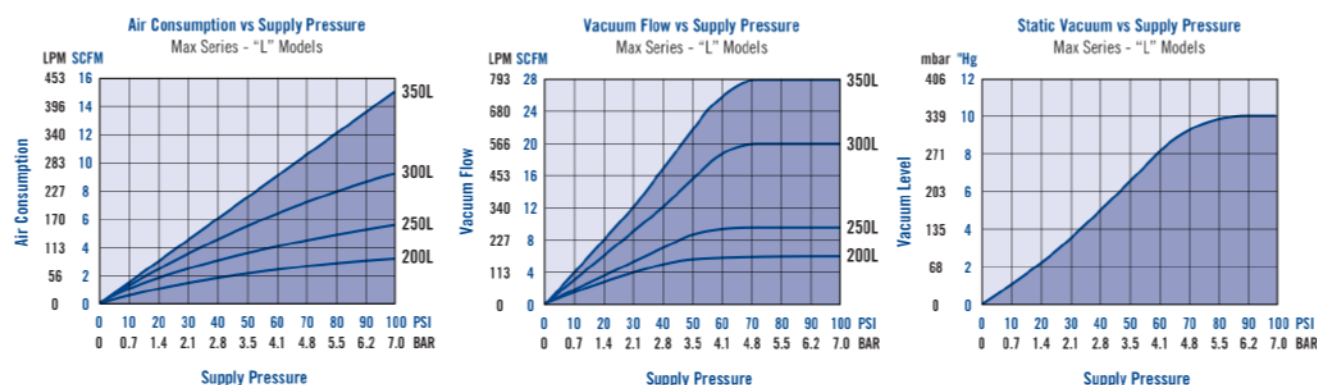
L is for “Low” vacuum levels up to 10”Hg [339 mbar] for applications handling delicate parts, thin walled materials and for process control.

Model #	Air Consumption SCFM	Imperial – Vacuum Flow (SCFM) vs. Vacuum Level (“Hg)				
		0”Hg	3”Hg	6”Hg	9”Hg	10”Hg
C200L-TH	2.80	6.00	5.80	4.30	1.70	0.00
C250L-TH	4.80	9.50	7.90	5.70	2.20	0.00
C300L-TH	7.80	20.00	14.00	9.50	3.50	0.00
C350L-TH	12.50	28.00	18.00	12.30	4.50	0.00
Model #		Evacuation Time in Seconds based on 1 Cubic Foot Volume/”Hg				
		0”Hg	3”Hg	6”Hg	9”Hg	10”Hg
C200L-TH		0.00	0.77	2.05	4.62	13.34
C250L-TH		0.00	0.52	1.28	3.08	7.95
C300L-TH		0.00	0.26	0.77	1.80	4.10
C350L-TH		0.00	0.00	0.52	1.28	2.82

Model #	Air Consumption L/min	Metric – Vacuum Flow (L/min) vs. Vacuum Level (mbar)				
		0 mbar	102 mbar	203 mbar	305 mbar	339 mbar
C200L-TH	79.3	169.9	164.2	121.8	48.1	0.0
C250L-TH	135.9	269.0	223.7	161.4	62.3	0.0
C300L-TH	220.9	566.3	396.4	269.0	99.1	0.0
C350L-TH	354.0	792.9	509.7	348.3	127.4	0.0
Model #		Evacuation Time in Seconds based on 1 Liter Volume/mbar				
		0 mbar	102 mbar	203 mbar	305 mbar	339 mbar
C200L-TH		0.0	0.0	0.1	0.2	0.5
C250L-TH		0.0	0.0	0.0	0.1	0.3
C300L-TH		0.0	0.0	0.0	0.1	0.1
C350L-TH		0.0	0.0	0.0	0.0	0.1

Note 1: Standard operating pressure for Vaccon pumps is 80 PSI [5.5BAR]. Pumps can be factory modified to run at other operating pressures i.e. 60 PSI [4 BAR] etc. The values shown in the performance chart will remain the same for all operating pressures.

Note 2: Evacuation speed is linear with volume, a two cu. ft. volume will take twice as long to evacuate as a one cu. ft. volume.



Performance Data for Max Series Threaded Cartridges

M-Series Cartridges for Medium Vacuum Applications

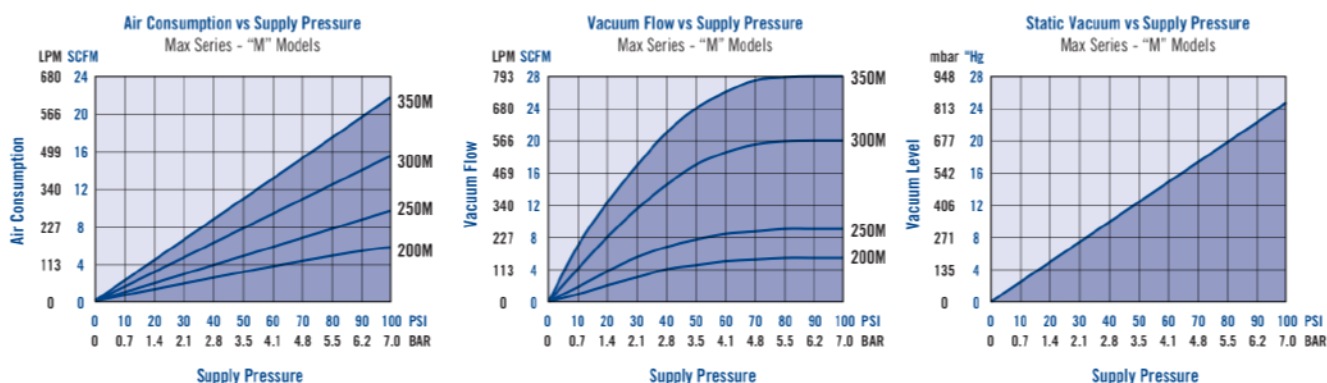
M is for “Medium” vacuum levels up to 20”Hg [667 mbar] for applications involving porous materials (cardboard, wood, masonry, baked goods, textiles)

Model #	Air Consumption SCFM	Imperial – Vacuum Flow (SCFM) vs. Vacuum Level (“Hg)							
		0”Hg	3”Hg	6”Hg	9”Hg	12”Hg	15”Hg	18”Hg	20”Hg
C200M-TH	4.80	6.00	5.30	4.90	4.00	3.50	2.50	1.10	0.00
C250M-TH	7.80	9.50	9.20	8.30	7.00	4.70	3.40	2.20	0.00
C300M-TH	12.50	20.00	19.00	16.30	13.80	8.10	5.50	3.30	0.00
C350M-TH	22.00	28.00	24.00	19.40	16.80	14.50	11.20	4.80	0.00
Model #		Evacuation Time in Seconds based on 1 Cubic Foot Volume/”Hg							
		0”Hg	3”Hg	6”Hg	9”Hg	12”Hg	15”Hg	18”Hg	20”Hg
C200M-TH		0.00	0.75	1.90	3.20	5.30	8.70	17.10	42.60
C250M-TH		0.00	0.45	1.10	2.40	3.80	6.00	9.70	15.40
C300M-TH		0.00	0.00	0.00	1.10	1.80	2.70	4.60	8.70
C350M-TH		0.00	0.00	0.00	1.00	1.50	2.10	4.30	8.40

Model #	Air Consumption L/min	Metric – Vacuum Flow (L/min) vs. Vacuum Level (mbar)							
		0 mbar	102 mbar	203 mbar	305 mbar	406 mbar	508 mbar	609 mbar	677 mbar
C200M-TH	135.9	169.9	150.1	138.8	113.3	99.1	70.8	31.1	0.0
C250M-TH	220.9	269.0	260.5	235.0	198.2	133.1	96.3	62.3	0.0
C300M-TH	354.0	566.3	538.0	461.6	390.8	229.4	155.7	93.4	0.0
C350M-TH	623.0	792.9	679.6	549.3	475.7	410.6	317.1	135.9	0.0
Model #		Evacuation Time in Seconds based on 1 Liter Volume/mbar							
		0 mbar	102 mbar	203 mbar	305 mbar	406 mbar	508 mbar	609 mbar	677 mbar
C200M-TH		0.0	0.0	0.1	0.1	0.2	0.3	0.6	1.5
C250M-TH		0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.5
C300M-TH		0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.3
C350M-TH		0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.3

Note 1: Standard operating pressure for Vaccon pumps is 80 PSI [5.5BAR]. Pumps can be factory modified to run at other operating pressures i.e. 60 PSI [4 BAR] etc.
The values shown in the performance chart will remain the same for all operating pressures.

Note 2: Evacuation speed is linear with volume, a two cu. ft. volume will take twice as long to evacuate as a one cu. ft. volume.



Performance Data for Max Series Threaded Cartridges

H-Series Cartridges for High Vacuum Applications

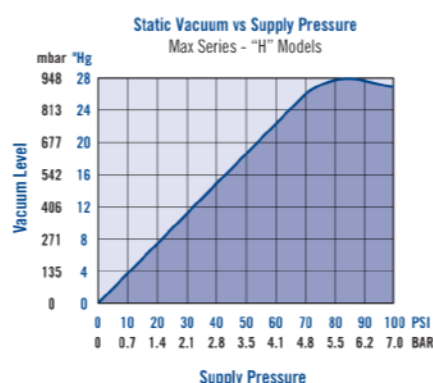
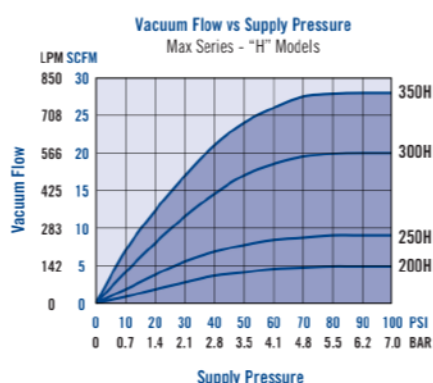
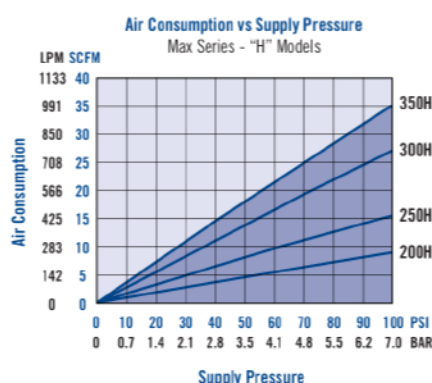
H is for “High” vacuum levels up to 28”Hg [948mbar] for applications involving non-porous materials (steel, plastic, glass, etc.) The high vacuum level provides high vacuum force for lifting heavy materials and holding them securely.

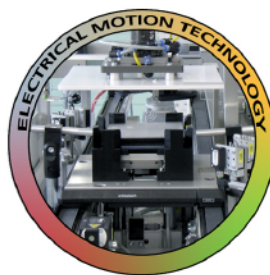
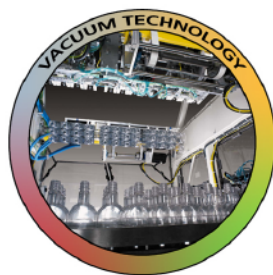
Model #	Air Consumption SCFM	Imperial – Vacuum Flow (SCFM) vs. Vacuum Level (“Hg)										
		0”Hg	3”Hg	6”Hg	9”Hg	12”Hg	15”Hg	18”Hg	21”Hg	24”Hg	27”Hg	28”Hg
C200H-TH	7.80	5.40	4.70	3.85	3.30	3.00	2.60	2.10	1.60	1.20	0.60	0.00
C250H-TH	12.50	9.00	8.50	7.85	7.00	6.50	5.30	3.90	2.50	1.80	0.90	0.00
C300H-TH	22.00	20.00	17.00	14.00	12.70	12.00	10.00	7.40	4.90	2.70	1.30	0.00
C350H-TH	28.00	28.00	22.00	18.70	15.90	14.50	11.80	8.10	5.70	4.50	2.25	0.00
Model #		Evacuation Time in Seconds based on 1 Cubic Foot Volume/”Hg										
		0”Hg	3”Hg	6”Hg	9”Hg	12”Hg	15”Hg	18”Hg	21”Hg	24”Hg	27”Hg	28”Hg
C200H-TH		0.00	1.20	2.10	3.40	5.20	7.70	11.50	20.00	33.50	62.60	98.10
C250H-TH		0.00	0.75	1.30	2.20	3.50	5.60	9.10	17.40	30.10	56.00	76.00
C300H-TH		0.00	0.00	0.80	1.20	2.00	2.80	3.90	5.90	11.10	32.70	60.00
C350H-TH		0.00	0.00	0.00	1.20	1.90	2.30	3.40	5.30	8.80	26.00	44.00

Model #	Air Consumption L/min	Metric – Vacuum Flow (L/min) vs. Vacuum Level (mbar)										
		0 mbar	102 mbar	203 mbar	305 mbar	406 mbar	508 mbar	609 mbar	711 mbar	814 mbar	914 mbar	948 mbar
C200H-TH	220.9	152.9	133.1	109.0	93.4	85.0	73.6	59.5	45.3	34.0	17.0	0.0
C250H-TH	354.0	254.9	240.7	222.3	198.2	184.1	150.1	110.4	70.8	51.0	25.5	0.0
C300H-TH	623.0	566.3	481.4	396.4	359.6	339.8	238.2	209.5	138.8	76.5	36.8	0.0
C350H-TH	792.9	792.9	623.0	529.5	450.2	410.6	334.1	229.4	161.4	127.4	63.7	0.0
Model #		Evacuation Time in Seconds based on 1 Liter Volume/mbar										
		0 mbar	102 mbar	203 mbar	305 mbar	406 mbar	508 mbar	609 mbar	711 mbar	814 mbar	914 mbar	948 mbar
C200H-TH		0.0	0.0	0.1	0.1	0.2	0.3	0.4	0.7	1.2	2.2	3.5
C250H-TH		0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.6	1.1	2.0	2.7
C300H-TH		0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.4	1.2	2.1
C350H-TH		0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.3	0.9	1.6

Note 1: Standard operating pressure for Vaccon pumps is 80 PSI [5.5BAR]. Pumps can be factory modified to run at other operating pressures i.e. 60 PSI [4 BAR] etc. The values shown in the performance chart will remain the same for all operating pressures.

Note 2: Evacuation speed is linear with volume, a 2 cu. ft. volume will take twice as long to evacuate as a one cu. ft. volume.





***Vous avez l'idée, nous la concrétisons.
Wij verheugen ons op uw aanvraag.
We look forward to your application.***



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