Balston Vacuum Pump Filters

Balston Vacuum Pump Exhaust Filters remove 99.9% of 0.1 micron oil mist and smoke particles. Balston Grade 30 Vacuum Pump Inlet Filters remove 90% of all 0.1 micron particles and droplets. Balston Grade 102 Vacuum Pump Inlet Filters prevent oil backstreaming from the pump to the evacuated chamber, and protect the pump from damage by submicron particles (at relatively low concentrations).

All Balston filters are available for hazardous and non-hazardous applications, and offer superior chemical and solvent resistance. Balston Vacuum Pump Filters increase productivity by eliminating costly shutdown time and maintenance.



Product Features:

- Exhaust filters eliminate oil mist and smoke from vacuum pump exhaust
- Prevent oil backstreaming
- Prevent oil accumulation in ductwork
- Protect vacuum pumps and reduce costly maintenance
- Easy to install and maintain

Small Scale Laboratory Vacuum Pumps

Specialized Vacuum Electronics Manufacturing

High Volume Vacuum for Process Packaging



Exhaust Filters for Hazardous/Corrosive Applications

Eliminate 99.9% oil mist and smoke from vacuum pump exhaust

Prevent oil accumulation in ductwork

Recover expensive lubricating oils, and automatically return filtered oil to pump

Eliminate potential OSHA and EPA violations



CV-0118

Balston Vacuum Pump Exhaust Filters

Balston Vacuum Pump Exhaust Filters remove all visible oil mist and smoke from vacuum pump exhaust, even when it is saturated with oil. The high efficiency filter cartridge continuously drains the collected liquid, allowing the user to recover expensive lubricating fluid.

How To Select The Filter

For most applications, simply select the filter assembly which has a flow capacity equal to or greater than the vacuum pump exhaust flow output (see chart on the next page). The Filter Assemblies are shipped with filter cartridges, and final filter pad. Optional adaptors are available for KF and NW connections. Filter Selection Chart (for hazardous/corrosive applications)

Max. Pump Flow Rate (CFM)	Recommended Filter Model Number
3	CV-0112-371H
9	CV-0118-371H



Exhaust Filters for Hazardous/Corrosive Applications

Principal Specifications		
Model	CV-0112-371H	CV-0118-371H
Port Size	1/2" NPT	3/4" NPT
Max. Flow Rate	3 CFM	9 CFM
Materials of Construction		
Head		_
Bowl	304 SS	304 SS
Internals	304 SS	304 SS
Seals	None	None
Maximum Temperature	250°F (121°C)	250°F (121°C)
Maximum Pressure	15 psig	15 psig
Shipping Weight	0.5 lbs. (0.2 kg)	0.8 lbs. (0.4 kg)
Dimensions	2.9"Dia. X 4.2"H (7cm X 11cm)	4.0"Dia. X 5.3"H (10cm X 13cm)

Ordering Information

For assistance, call toll-free at 1-800-343-4048 8AM to 5PM Eastern Time

Model	CV-0112-371H (1)	CV-0118-371H (1)
Number of Filter Cartridges Required		_
Replacement Filter Cartridges		
Box of 3		
Box of 7		
Box of 10		
Number of Pressure Relief Retainers #20222		_
Optional Accessories:	#11015 Back Pressure Gage, Stainles rating,1/4" NPT fitting. Vacuum Pump Please refer to Pages 133 - 134.	

Notes:

1 Filter cartridge is permanently sealed into housing. The entire unit is disposable. Pressure relief filter tube retainer not available in these models.



111

Exhaust Filters for Non-Hazardous/Non-Corrosive Applications

Eliminate 99% oil mist and smoke from vacuum pump exhaust

Prevent oil accumulation in ductwork

Recover expensive lubricating oils, and automatically return filtered oil to pump

Eliminate potential OSHA and EPA violations

Balston Vacuum Pump Exhaust Filters

Balston Vacuum Pump Exhaust Filters remove all visible oil mist and smoke from vacuum pump exhaust, even when it is saturated with oil. The high efficiency filter cartridge continuously drains the collected liquid, allowing the user to recover expensive lubricating fluid. Filters are available for pumps with flow ratings ranging from 3 to 850 cfm.

How To Select The Filter

For most applications, simply select the filter assembly which has a flow capacity equal to or greater than the vacuum pump exhaust flow output (see chart below). The filter assemblies are shipped with filter cartridges, pressure gage (20 cfm and larger), and final filter pad. Optional adaptors are available for KF and NW connections.

Filter Selection Chart (for non-hazardous/non-corrosive applications)				
Max. Pump Flow Rate (CFM)	Recommended Filter Model Number			
3	9955-12-371H, 9956-12-371H			
9	AR-009-371H			
15	AR-015-371H			
20	AR-0316-371H			
43	AR-0335-371H			
100	AR-0735-371H			
200	AR-0780-371H			
300	AR-1280-371H			
450	AR-1680-371H			
850	AR-3080-371H			





Vacuum Pump Inlet & Exhaust Filters Exhaust Filters for Non-Hazardous/Non-Corrosive Applications

Principal Specifications										
Model	PortSize	Max.Flow Rate	Materialsof Head	fConstruction Bowl	on Internals	Max. Seals	Max. Temp.	Shipping Press.	Dimensions Wt.	
9955-12-371H	1/2"NPT	3CFM		Nylon	Nylon	None	250°F(121°C)	15PSIG	.25lbs(0.1kg)	2"Dia.X3.7"H
9956-12-371H	KF-16	3CFM		Nylon	Nylon	None	250°F(121°C)	15PSIG	.25lbs(0.1kg)	2"Dia.X3.7"H
AR-009-371H	3/4"NPT	9CFM	Aluminum	Aluminum	Alum./SS/Nylon	Viton	300°F(149°C)	15PSIG	1.0lbs((0.45kg)	3.95"Dia.X5.13"H
AR-015-371H	3/4"NPT	15CFM	Aluminum	Aluminum	Alum./SS/Nylon	Viton	300°F(149°C)	15PSIG	1.25lbs(0.57kg)	3.95"Dia.X8.13"H
AR-0316-371H	1"NPT	20CFM	Steel	Steel	Anod.Alum.	Buna/Neo	300°F(149°C)	15PSIG	8lbs(4kg)	7.4"Dia.X8.8"H
AR-0335-371H	11/2"NPT	43CFM	Steel	Steel	Anod.Alum.	Buna/Neo	300°F(149°C)	15PSIG	11lbs(5kg)	7.4"Dia.X15"H
AR-0735-371H	3"NPT	100CFM	Steel	Steel	Anod.Alum.	Buna/Neo	300°F(149°C)	15PSIG	17lbs(8kg)	10"Dia.X18"H
AR-0780-371H	3"NPT	200CFM	Steel	Steel	Anod.Alum.	Buna/Neo	300°F(149°C)	15PSIG	23lbs(10kg)	10"Dia.X28"H
AR-1280-371H	4"Flg.(1)	300CFM	Steel	Steel	Anod.Alum.	Buna/Neo	300°F(149°C)	15PSIG	90lbs(41kg)	19"Dia.X43"H(5)
AR-1680-371H	4"Flg.(1)	450CFM	Steel	Steel	Anod.Alum.	Buna/Neo	300°F(149°C)	15PSIG	100lbs(45kg)	19"Dia.X43"H(5)
AR-3080-371H	6"Flg.(1)	850CFM	Steel	Steel	Anod.Alum.	Buna/Neo	300°F(149°C)	15PSIG	150lbs(68kg)	23"Dia.X43"H(5)

Ordering Information

For assistance, call toll-free at 1-800-343-4048 8AM to 5PM Eastern Time

Model	No. of Filter Cartridges Required	Replacement Filter Cartr Box of 3	idges Box of 7	Box of 10	Cover (2) (Optional)	No. Pressure Relief Retainers #20222
9955-12-371H (3)	1	3/9955-12-371H		9955-12-371H		(4)
9956-12-371H (3)	1	3/9956-12-371H		9956-12-371H		(4)
AR-009-371H	1	2/BE200-168-371H (6)		BE200-168-371H		(4)
AR-015-371H	1	2/BE200-248-371H (6)		BE200-248-371H		(4)
AR-0316-371H	3	3/200-16-371H			19158	1
AR-0335-371H	3	3/200-35-371H			19158	1
AR-0735-371H	7		7/200-35-371H		19206	2
AR-0780-371H	7		7/200-80-371H		19206	2
AR-1280-371H	12			200-80-371H	Included	4
AR-1680-371H	16			200-80-371H	Included	4
AR-3080-371H	30			200-80-371H	Included	6
Optional Accessories:	#20217 Pressure Relief #11010 Pressure Gage, Vacuum pump-to-filter a #19291 Stand for AR-16 #19202 Weather Cap for	Filter Cartridge Retainer, 4-7 Valve, 3-7 psig, 1/4" NPT ma 0-15 psig, 1/4" male fitting (i daptors: refer to pages 133- i80-371H, #19290 Stand for , r AR-0735-371H, AR-0780-3 AR-009-371H, AR-015-371H	ale fitting. ncl. on Type AR Filter 134. AR-3080-371H. 71H.	Assemblies)		

Notes:

1 ANSI 150 lb. hole pattern.

2 Cover does not provide leak tight seal.

3 Filter cartridge is permanently sealed into housing. The entire unit is disposable.

4 Pressure relief filter tube retainer not available in these models.

5 Height dimension represents filter housing alone. When assembled with a stand, the height is adjustable from 46" to 56" (117cm to 142 cm).

6 This model comes in box of 2, not box of 3.





Inlet Filters for Vacuum Service to 10⁻⁶ Torr

Protect vacuum pumps from damage by solids and liquids

Prevent loss of valuable or hazardous materials

Prevent oil backstreaming



Model CF-0112 and CF-0118 for Vacuum Service to 10⁻⁶ Torr

Stainless steel housings with welded KF flange inlet and outlet ports and no drain ports. They are designed to be used primarily with the Grade 102 adsorbent cartridges for prevention of oil backstreaming (see cartridge selection chart to the right). They may also be used with Grade 30 cartridges for removal of high concentrations of solids, but the absence of drain ports precludes the use of CF housings for liquid removal in vacuum applications.

Filter Selection Chart	
Grade 30 Cartridges	For removal of relatively high concentrations of solids
Efficiency: Loss in pumping speed: Materials of construction: Maximum temperature:	90% at 0.1 micron 9% at maximum flow rate Polypropylene cartridge, EPR seals 180°F (82°C)
Grade 102 Cartridges	For prevention of oil backstreaming and filtra- tion of relatively low concentrations of solids
Efficiency for preventing oil backstreaming: Life: vacuum Efficiency for solids filtration: Materials of construction: Maximum temperature:	99.99% Approximately 1000 hours at 10 microns 99.99% at 0.1 micron Molecular Sieve Type 4A adsorbent, EPR seals 100°F (38°C)



Inlet Filters for Vacuum Service to 10⁻⁶ Torr

Principal Specifications		
Model	CF-0112	CF-0118
Recommended Vacuum Service	10 ⁻⁶ Torr	10 ⁻⁶ Torr
Max. Flow Rating of Vacuum Pump	3 CFM	9 CFM
Inlet and Outlet Ports	KF-25	KF-25
Materials of Construction		
Head	304 SS	304 SS
Bowl	304 SS	304 SS
Internals	304 SS	304 SS
Seals	None	None
Maximum Temperature	180°F (82°C) (1)	180°F (82°C) (1)
Shipping Weight	0.5 lbs. (0.2 kg)	0.8 lbs. (0.4 kg)
Dimensions	2.9"W X 4.4"L (7cm X 11cm)	3.9"W X 5.9"L (10cm X 15cm)

Notes:

1 Maximum temperature grade 102 Cartridge is 100°F (38°F).

2 Filter Cartridge is permanently sealed into housing. The entire unit is disposable.

Ordering Information					
For assistance, call toll-free at 1-800-343-4048 8AM to 5PM Eastern Time					
Assembly with Grade 30 Particulate Filter	Assembly with Grade 102 Backstreaming Filter	Number of Filter Cartridges Required (2)			
CF-0112-30	CF-0112-102	N/A			
CF-0118-30	CF-0118-102	N/A			





Inlet Filters for Vacuum Service to 2 Torr

Protect vacuum pumps from damage by solids and liquids

Prevent loss of valuable or hazardous materials

Prevent oil backstreaming





R-009-30

R-015-30

Models CV-0112-30 and CV-0118-30 for hazardous/corrosive applications and low flow applications

Pump Filters

Stainless steel housings with NPT inlet, outlet and drain ports. Used only with Grade 30 filter cartridges.

Models R-009-30 and R-015-30 for nonhazardous/non-corrosive applications and higher flow applications

Steel housing with NPT inlet, outlet and drain ports. Used only with Grade 30 filter cartridges.

Filter Selection Chart	
Grade 30 Cartridges	For removal of relatively high concentrations of solids and liquids
Efficiency:	90% at 0.1 micron
Loss in pumping speed:	9% at maximum flow rate
Materials of construction:	Polypropylene cartridge, EPR seals
Maximum temperature:	180°F (82°C)



Inlet Filters for Vacuum Service to 2 Torr

Principal Specifications				
Model	CV-0112-30	CV-0118-30	R-009-30	R-015-30
Recommended Vacuum Service	2 Torr	2 Torr	2 Torr	2 Torr
Max. Flow Rating of Vacuum Pump	3 CFM	9 CFM	9 CFM	15 CFM(1)
Inlet and Outlet Ports	1/2" NPT	3/4" NPT	3/4" NPT	3/4" NPT
Drain Port	1/8" NPT (2)	1/8" NPT (2)	1/8" NPT (2)	1/8" NPT (2)
Materials of Construction				
Head	304 SS	304 SS	Aluminum	Aluminum
Bowl	304 SS	304 SS	Aluminum	Aluminum
Internals	304 SS	304 SS	Aluminum/SS/Nylon	Aluminum/SS/Nylon
Seals	None	None	Viton	Viton
Maximum Temperature	180°F (82°C)	180°F (82°C)	180°F (82°C)	180°F (82°C)
Shipping Weight	0.5 lbs. (0.2 kg)	0.8 lbs. (0.4 kg)	1.0 lbs. (0.45 kg)	1.25 lbs. (0.57 kg)
Dimensions	2.9"W X 4.4"L (7cm X 11cm)	3.9"W X 5.9"L (10cm X 15cm)	3.95"W X 5.13"L (10cm X 13cm)	3.95"W X 8.13"L (10cm X 21cm)

Ordering Information

For assistance, call toll-free at 1-800-343-4048 8AM to 5PM Eastern Time					
Assembly with Grade 30 Particulate Filter	Number of Filter Cartridges Required	Box of 2	Box of 10		
CV-0112-30	(3)				
CV-0118-30	(3)				
R-009-30	1	2/100-163-30	100-163-30		
R-015-30	1	2/100-235-30	100-235-30		

Notes:

1 For higher flow capacity inlet filters, please consult factory.

2 Drain port must be downward for liquid removal.

3 Filter cartridge is permanently sealed

into housing. The entire unit is disposable.



Recommended Exhaust Filters for Vacuum Pumps

Pump Model No.	Pump Rating CFM (Free Air)	Pump Exhaust (NPT Female Unless Otherwise Noted)	Recommended Balston Filter Non-Hazardous Non-Corrosive Applications	Balston Anodized Aluminum Pump-To- Filter Adaptor (1)	Recommended Balston Filter Hazardous and Corrosive Applications	Balston Stainless Steel Pump-To- Filter Adaptor (1)
Alcatel Pumps						
ZM/ZT 1004A/AC ZM/ZT 1012A ZM/ZT 1030 ZM/ZT 1033 ZT 1060 ZT 1063 ZT 1200A	3.2 11 17 27 30 50 150	NW 25 NW 25 1" OD Tube NW 40 1.63" OD Tube NW 40 1.63" OD Tube	R-009 R-015 AR-0316 AR-0335 AR-0335 AR-0735 AR-0780	14175 14173 14174 14174 (2)	CV-0112	14182
ZM/ZT 2004A ZM/ZT 2007 ZM/ZT 2008A/AC ZM/ZT 2012A/AC/H UM/UT 2020 ZM/ZT 2030/H ZM/ZT 2033/C ZT 2060/H/HUS ZT 2063/C ZT 2100A/AC	3.2 7 7 11 15.9 17 27 30 50 90	NW 25 NW 25 NW 25 NW 25 NW 25 1" OD Tube NW 40 1.63" OD Tube NW 40 NW 50	R-009 R-009 R-015 R-015 AR-0316 AR-0335 AR-0335 AR-0735 AR-0735	14173 14173 14173 14173 14173 14174 14174 (2)	CV-0112 CV-0118 CV-0118	14182 14182 14182
2002A 2005 2015 2021 2010 AMD1 AMD4 A100L	1.4 3.8 10.6 14.6 6.8 0.82 2.36 55.8	DN16 DN25 DN25 DN25 DN25 DN16 DN16 DN25	9955-12, 9956-12 R-009 R-015 R-015 R-009 9955-12, 9956-12 9955-12, 9956-12 AR-0735		CV-0112 CV-0118 CV-0118 CV-0112 CV-0112 ACV-0735	
Roots Vaccuum RSV 151 RSV 301 RSV 601 RSV 1002 RSV 1200 LRS1	89 177 354 594 ISO/DN160	ISO/DN63 ISO/DN63 ISO/DN100 ISO/DN100	AR-0735 AR-0780 AR-1680 ACV-0780(multiple)			
RSV 151B+RVP2033D RSV 301B+2033D RSV 301B+RVP 2063D LRS2	106 212 212	DN40 DN40 DN40	AR-0780 AR-1280 AR-1280			
RSV 151+RVP 2021 RSV 601+RVP 2033 MRS1 RSV 301B+AMV 200/300 RSV 601B+AMV 200/300	106 424 212 212	DN25 DN40 DN50 DN40	AR-0780 AR-1680 AR-1280 AR-1280			
RSV 1002AMV200/300	424	DN40	AR-1680			

Notes:

1 If no part number is listed, adaptor is not supplied by Parker. In most cases, customer can assemble adaptor from standard pipe fittings. Refer to pages 133-134.

2 Requires 3" Male x 1 1/2" Female reducing bushing supplied by customer.



Recommended Exhaust Filters for Vacuum Pumps

Pump Model No.	Pump Rating CFM (Free Air)	Pump Exhaust (NPT Female Unless Otherwise Noted)	Recommended Balston Filter Non-Hazardous Non-Corrosive Applications	Balston Anodized Aluminum Pump-To- Filter Adaptor (1)	Recommended Balston Filter Hazardous and Corrosive Applications	Balston Stainless Steel Pump-To- Filter Adaptor (1)
Balzers Pumps						
UNO/DUO 1.5A UNO/DUO 004A/B UNO/DUO 008A/B UNO/DUO 012A UNO/DUO 016B UNO/DUO 030A UNO/DUO 060A UNO/DUO 250A UNO 100 DUO 100 UNO/DUO 120A UNO 170 DUO 170 BA 251	1.0 2.7 5.2 8.2 10.6 19.7 39.3 157 56 57 75.3 91.2 100 158.9	KF10 KF25 KF25 KF25 KF25 KF40 KF40 ISO 100 32mm OD Tube (4) ISO 63 32mm OD Tube (4) ISO 63	9955-12 9955-12 R-009 R-015 AR-0316 AR-0335 AR-0780 AR-0735 AR-0735 AR-0735 AR-0735 AR-0735 AR-0735 AR-0735 AR-0735 AR-0735 AR-0780	14175 14173 14173 14173 14174 14174	CV-0112 CV-0112 CV-0118 CV-0118	14182 14182 14182
BA 501 UNO 2.5 UNO 6 UNO 20 UNO 60 UNO 90 UNO 200 UNO 200 UNO 240 UNO 400 UNO 630	320.7 1.7 3.5 12.4 36.5 55.3 123.6 158.9 270.7 400.2	ISO 100 DN16 G 3/8 ISO-KF25 DN40 DN DN DN63 ISO-F DN63 ISO-F	AR-1680 9955-12, 9956-12 R-009 R-015 AR-0735 AR-0735 AR-1280 AR-1280 AR-3080 AR-3080		CV-0112 CV-0118	
DUO 5 DUO 10 DUO 20 DUO 35 DUO 65 DUO 120 DUO 250	400.2 3.5 7 14.1 21.2 41.2 84.7 176.6	DN03 130-1 DN16 DN25 DN25 DN40 DN100 DN63 DN100	R-009 R-015 R-015 AR-0335 AR-0735 AR-0780 AR-1280		CV-0118 CV-0118	
Beach-Russ Pu	mps					
SS 1 SS 1 1/2 SS 2 SS 3 SS 4	6 9 15 28 45	3/4" 3/4" 3/4" 1" 1 1/4"	R-009 R-009 R-015 AR-0335 AR-0735		CV-0118 CV-0118	
SS 5 RP/RV 6 SS 6 SS 7 SS 8 SS 9 SS 10 RP/RV 12 RP 15 RP 15-6 RP 30 RP 30-6 RP 50/50-6	60 8.5 75 110 150 225 375 18 30 30 30 50 50 80	1 1/2" 1/2" 2 1/2" 4" 6" 3/4" 1 1/2" 1" 1 1/2" 1" 2"	AR-0735 R-009 AR-0735 AR-0780 AR-0780 AR-1280 AR-1680 AR-0316 AR-0335 AR-0335 AR-0335 AR-0735 AR-0735 AR-0735		CV-0118	

Notes:

3 Requires 2" Male x 1 1/2" Female reducing bushing supplied by customer.

4 Exhaust port is horizontal. Customer should provide elbow so that filter is mounted vertically.

5 Requires 1" Male x 1 1/2" Female bushing supplied by customer.

6 Multiple filters piped in parallel are required.



Recommended Exhaust Filters for Vacuum Pumps

		Recommended		Recommended		
Pump Model No.	Pump Rating CFM (Free Air)	Pump Exhaust (NPT Female Unless Otherwise Noted)	Balston Filter Non-Hazardous Non-Corrosive Applications	Balston Anodized Aluminum Pump-To- Filter Adaptor (1)	Balston Filter Hazardous and Corrosive Applications	Balston Stainless Steel Pump-To- Filter Adaptor (1)
Beach-Russ	Pumps					
RP 135/135-12	140	3"	AR-0780			
RP-150/150-12	175	3"	AR-0780			
RP 250	310	5"	AR-1280			
RP 250-12	310	4"	AR-1280			
RP 325	375	5"	AR-1680			
RP 325-12	375	4"	AR-1680			
RP 375	500	6"	AR-3080			
RP 375-50	500	4"	AR-3080			
RP 750	900	8"	AR-1680 (2)			
RP 750-50	900	5"	AR-1680 (2)			
RP 1000	1100	8"	AR-3080 (2)			
RP 1000-50	1100	5"	AR-3080 (2)			
84-A-RVF	250		AR1280			
98-A-RVF	410		AR1680			
14	8.5	4"	R-009		CV-0118	
20	12	4"	R-015			
25	17	4"	AR-0316			
42	25	4"	AR-0335			
60	38	4"	AR-0335			
82	49	4"	AR-0735			
128	75	4"	AR-0735			
170	103	4"	AR-0780			
240	141	4"	AR-0780			
320	189	4"	AR-0780			
480	285	4"	AR1280			
642	378	4"	AR1680			
910	540	4"	AR-3080			
1210	710	4"	AR-3080			
OTL/VP30	50	4 1.5"	AR-0735			
OTL/VP50	80	2"	AR-0735			
OTL/VP135	140	3"	AR-0780			
OTL/VP150	140	3"	AR-0780 AR-0780			
OTL/VP150	310	5 5"	AR-1680			
	310	5 5"	AR-1680 AR-1680			
OTL/VP325 3P	375 48	5 1.5"	AR-1680 AR-0735			
		1.5 1.5"	AR-0735 AR-0735			
4P	73					
5P	100	2.5"	AR-0780			
6P	125	2.5"	AR-0780			
7P	175	3"	AR-0780			
8P	225	3"	AR-1280			
9P	300	4"	AR-1280		01/04/0	
0	1	1/4"	9955-12, 9956-12		CV-0112	
1	2	1/4"	9955-12, 9956-12		CV-0112	

Notes:

1 If no part number is listed, adaptor is not supplied by Parker. In most cases, customer can assemble adaptor from standard pipe fittings. Refer to pages 133-134.

2 Multiple filters piped in parallel are required.



Recommended Exhaust Filters for Vacuum Pumps

Pump Model No.	Pump Rating CFM (Free Air)	Pump Exhaust (NPT Female Unless Otherwise Noted)	Recommended Balston Filter Non-Hazardous Non-Corrosive Applications	Balston Anodized Aluminum Pump-To- Filter Adaptor (1)	Recommended Balston Filter Hazardous and Corrosive Applications	Balston Stainless Steel Pump-To- Filter Adaptor (1)
Busch Pumps						
Busch Pumps 002-192 004-192 008-192 010-112/118 016-192 016-112/118 021-336/338 025-132/138 040-132/138 100-112/118/132/138 160-112/118/132/138 160-112/118/132/138 225-002 240-002 250-112/118/132/138 263-002 400-212/218 630-212/218 1000-212/228 1600-212/228 1600-212/228 1600-212/228 1600-212/228 1600-212/228 1600-212/228 1600-212/228 1600-212/228 1600-212/208 1000 0016 0012 0016 0100 0165 0205 0255 0305 0400 0502 0630 1000 1600 HO 0429 HO 0433 HO 0437 HO 0441 LC 0030 LC0100 LC0150 LC0200 LC0280 LC0400	1.4 2.8 5.6 6 11.2 8 15 20 28 41 63 117 125 200 300 430 650 1100 125 200 310 580 780 3.3 4.2 7.1 11.2 63 1177 141 180 212 330 413 490 704 1130 113 176 282 444 20.6 38.3 54.1 74.7 100 153 200 271	KF-16 KF-16 3/4" KF-16 3/4" (3) 3/4" (3) 1 1/4" (3) 1 1/4" (3) 1 1/4" (3) 1 1/4" (3) 2" (3) 2" 2" 2" 2" 2" 2" 2" 2" 2" 2" 2" 2" 2"	9956-12 9956-12 R-009 R-015 R-009 R-015 AR-0316 AR-0335 AR-0730 AR-0780 AR-1280 AR-1280 AR-1280 AR-3080 AR-1280 AR-1280 AR-1280 AR-1280 AR-1280 AR-1280 AR-0780 AR-0780 AR-0780 AR-1280 AR-1280 AR-1280 AR-1680 AR-3080(2) AR-0780 AR-1280 AR-1280 AR-1680 AR-1280 AR-1680 AR-0735 AR-0735 AR-0735 AR-0	14172 14180	CV-0112 CV-0118 CV-0118 CV-0118 CV-0118 CV-0118 CV-0118 CV-0118	14181 14181 14181 (4)

Notes:

1 If no part number is listed, adaptor is not supplied by Parker. In most cases, customer can assemble adaptor from standard pipe fittings. Refer to pages 133-134.

2 Multiple filters piped in parallel are required.

3 Requires flange to NPT adaptor from pump manufacturer.

4 Requires 3/4" Male x 1/2" Female reducing bushing supplied by customer.



Recommended Exhaust Filters for Vacuum Pumps

Pump Model No.	Pump Rating CFM (Free Air)	Pump Exhaust (NPT Female Unless Otherwise Noted)	Recommended Balston Filter Non-Hazardous Non-Corrosive Applications	Balston Anodized Aluminum Pump-To- Filter Adaptor (1)	Recommended Balston Filter Hazardous and Corrosive Applications	Balston Stainless Steel Pump-To- Filter Adaptor (1)
Central Scienti	fic Pump	s (Cenco, Boekel,	HYVAC)			
HYVAC 1 (91105)	0.35	3/8"	9955-12		CV-0112	
HYVAC 2 (91305/8)	0.88	1/2"	9955-12		CV-0112	
HYVAC 4 (91482)	1.70	1/2"	9955-12		CV-0112	
HYVAC 7	2.79	1/2"	9955-12		CV-0112	
(91506, 91502)						
HYVAC 7S (91138)	2.79	1/2"	9955-12		CV-0112	
HYVAC 14 (91705)	5.6	3/4"	R-009		CV-0118	
HYVAC 14S (91140)	5.6	3/4"	R-009		CV-0118	
HYVAC 28 (91905)	10.6	1 1/2"	R-015			
HYVAC 28S (91142)	10.6	1 1/2"	R-015			
HYVAC 45 (91955)	17.7	1 1/2"	AR-0316			
HYVAC 150 (91957)	53	3"	AR-0735			
HYVAC 300 (91960)	106	3"	AR-0780		01/01/0	
MEGAVAC (92003)	2.0	1/2"	9955-12		CV-0112	
PRESSOVAC	4.00		0055.40		01/04/0	
(90510/15/16)	1.23	3.8" OD Tube	9955-12		CV-0112	
DIRECT DRIVE (90703)	1.9	3/8"	9955-12		CV-0112	
DIRECT DRIVE (90700)	1.06	3/8"	9955-12		CV-0112	
2120	4.4	KF25	R-009		CV-0118	
2200	7.3	KF25	R-009		CV-0118	
HYPERVAC400	13.4	NW25	R-015			
HYPERVAC600	21	NW25	AR-0335			
HYPERVAC1000	32	NW40	AR-0335			
HYPERVAC1500	53	NW40	AR-0735		01/04/0	
HYVAC30L	1.1		9955-12, 9956-12		CV-0112	
HYVAC50L	2	E (0)	9955-12, 9956-12		CV-0112	
PRESSOVAC(90510)	1.2	5/8"	9955-12, 9956-12		CV-0112	
MEGAVAC92001	2	1/2"	9955-12, 9956-12		CV-0112	
MEGAVAC1500	50	PORTS ADAPTABLE	AR-0735			
MEGAVAC2500	88	PORTS ADAPTABLE	AR-0735			
MEGAVAC4500	150	PORTS ADAPTABLE	AR-0780			
MEGAVAC7500	250	PORTS ADAPTABLE	AR-1280			
MEGAVAC15000	300	PORTS ADAPTABLE	AR-1280		01/0119	
SUPRVAC012	7.5	1/2" FNPT	R-009		CV-0118	
SUPRVAC021	15	1/2" FNPT	R-015			
SUPRVAC025	20	1"	AR-0335			
SUPRVAC040	30	1"	AR-0335			
SUPRVAC063	45	1"	AR-0735			
SUPRVAC100	70 110	1" O"	AR-0735 AR-0780			
SUPRVAC160	110	2"				
SUPRVAC250	150	2" 4"	AR-0780			
0505	9.5 19	1"	R-015			
1505		1"	AR-0316			
2010	27	1"	AR-0335			
7530	59	2"	AR-0735			
10030	84	2"	AR-0735			

Notes:

1 If no part number is listed, adaptor is not supplied by Parker. In most cases, customer can assemble adaptor from standard pipe fittings. Refer to pages 133-134.

2 Exhaust port is horizontal. Customer should provide elbow so that filter is mounted vertically.

3 Multiple filters piped in parallel are required.

4 Reducing bushing required. Customer to provide.



Recommended Exhaust Filters for Vacuum Pumps

Pump Model No.	Pump Rating CFM (Free Air)	Pump Exhaust (NPT Female Unless Otherwise Noted)	Recommended Balston Filter Non-Hazardous Non-Corrosive Applications	Balston Anodized Aluminum Pump-To- Filter Adaptor (1)	Recommended Balston Filter Hazardous and Corrosive Applications	Balston Stainless Steel Pump-To- Filter Adaptor (1)
Edwards Higl	h Vacuum F	Pumps				
SPEEDIVAC 2	1.9	3/8 BSPT	9955-12	14157	CV-0112	
E2M1	1.3	3/8 BSPT	9955-12	14157	CV-0112	
E2M2	2	3/4 BSPT	9955-12	14158	CV-0112	
E1/E2M5	4	3/4 BSPT	R-009	14159	CV-0118	
EDM6	5	1/2"	R-009		CV-0118	
E1/E2M8	6.7	3/4 BSPT	R-009	14159	CV-0118	
EDM12	10.3	1/2"	R-015			
E1/E2M18	14.7	3/4"	R-015			
EDM20 E2M30	14.5 30	1/2" KF25	R-015 AR-0335	14183		
E1/E2M40	30	KF25 KF25	AR-0335 AR-0335	14183		
ED/ES 50	3.5	1/4"	R-009	14105	CV-0118	
ED/ES65	2.3	1/4" (2)	9955-12		CV-0112	
E1/E2M80	57	KF25	AR-0735	14183 (4)	000112	
ED/ES100	3.5	1/4" (2)	R-009		CV-0118	
E1/E2M175	125	1 1/2"	AR-0780			
ED/ES200	6.7	3/8" (2)	R-009		CV-0118	
E1/E2M275	145	1 1/2"	AR-0780			
ES330	11.8	3/8" (2)	R-015			
ISC 450	19.6	1/2"	AR-0316			
ED 500	17.7	1/2"	AR-0316			
ED660	23.3	1/2" (2)	AR-0335			
ISC 900	39.2	3/4"	AR-0335			
ES2000	71	1 1/2"	AR-0735			
ES4000	145	1 1/2"	AR-0780			
ES7500 RV3	275 2.7	2 1/2" 3/4"	AR-1280 9955-12	(4)	CV-0112	(4)
RV5	4.1	5/4 NW25	9955-12 R-009	(4) 14173	CV-0112 CV-0118	(4) 14182
RV8	6.9	NW25 NW25	R-009	14173	CV-0118	14182
RV12	10.0	NW25	R-015	14173	00-0110	14102
Gast Pumps						
0211	1.1	1/4"	9955-12		CV-0112	
0240	1.9	1/4"	9955-12		CV-0112	
0322	2.5	1/4"	9955-12		CV-0112	
0440	4.0	1/4"	R-009		CV-0118	
0465	4.0	3/8"	R-009		CV-0118	
0522	4.0	1/4"	R-009		CV-0118	
0740	5.9	3/8"	R-009		CV-0118	
0765	5.9	3/8"	R-009		CV-0118	
0822	7.2	3/8"	R-009		CV-0118	
1022	10.0	3/8"	R-015		0)/ 0//0	
1065	8.3	1/2"	R-009		CV-0118	
1550 2065	11.5 17.0	1/2" 3/4"	R-015 AR-0316			
2065 2067	17.0	3/4 3/4"	AR-0316 AR-0316			
2565	21.0	3/4"	AR-0335			
LUUJ						
	31.0		AR-0.3.35			
3040 4565	31.0 48.0	1" 3/4"	AR-0335 AR-0735			

Notes:

1 If no part number is listed, adaptor is not supplied by Parker. In most cases, customer can assemble adaptor from standard pipe fittings. Refer to pages 133-134.

2 Exhaust port is horizontal. Customer should provide elbow so that filter is mounted vertically.

3 Multiple filters piped in parallel are required.

4 Reducing bushing required. Customer to provide.

Vacuum Pump Filters

Recommended Exhaust Filters for Vacuum Pumps

Pump Model No.	Pump Rating CFM (Free Air)	Pump Exhaust (NPT Female Unless Otherwise Noted)	Recommended Balston Filter Non-Hazardous Non-Corrosive Applications	Balston Anodized Aluminum Pump-To- Filter Adaptor (1)	Recommended Balston Filter Hazardous and Corrosive Applications	Balston Stainless Steel Pump-To- Filter Adaptor (1)
Gast Pumps						
4BA-1-G482X 4AB-1-G492X 4BA-1-G492X 4BA-1-G499 4BA-1-G511X 4BA-1-G511X 4BA-1-G538X 5BA-1-G482X 5AB-1-G482X 5BB-1-G482X 6BA-1-G506X 7AB-1-G506X 7AB-1-G506X 8BA-1-G506X 8BA-1-G506X 8BA-1-G506X 8BA-1-G506X 8BA-1-G506X 1531 0532 1032 1532 2032 3032 0211 2070 0323-1423 0533 1033 1034 1534 0240-0740 0456 0765 1550 1065-2565 2067-2567 3040 4565 5565 5665	$\begin{array}{c} 1.8\\ 1.8\\ 1.8\\ 1.8\\ 1.8\\ 1.8\\ 3.5\\ 3.5\\ 3.5\\ 3.5\\ 7.0\\ 7.0\\ 10.6\\ 10.6\\ 10.6\\ 14.1\\ 14.1\\ 14.1\\ 1.5\\ 2.5\\ 2.6\\ 1.3\\ 20\\ 13\\ 0.6\\ 1.1\\ 1.6\\ 2.2\\ 6\\ 4\\ 6\\ 14.5\\ 8.5-21\\ 17-21\\ 40\\ 47.5\\ 55\\ 55\\ 55\\ \end{array}$	1/2" 1/2" 1/2" 1/2" 1/2" 1/2" 1/2" 1/2" 1/2" 1/2" 1/2" 1/2" 1/4" 1/2" 3/4" 1" 1"	9955-12 9955-12 9955-12 9955-12 9955-12 9955-12 R-009 R-009 R-009 R-009 R-015 R-015 R-015 R-015 P955-12, 9956-12 9955-12, 9956-12 P955-12, 9956-12 P955-12, 9956-12 P955-12, 9956-12 P955-12, 9956-12 R-009 R-009 R-009 R-009 R-015 AR-0335 AR-0335 AR-0735 AR-0735 AR-0735		CV-0112 CV-0112 CV-0112 CV-0112 CV-0112 CV-0112 CV-0118 CV-0118 CV-0118 CV-0118 CV-0112 CV-0113 CV-0118 CV-018 CV-008 CV-008 CV-008 CV-008 CV-008 CV-008 CV-008 CV-008	
1290 Hitachi Pumps	112	1"	AR-0780			
-			D 000	11100	01/0//0	
SVF 10F SVR 16F 100 VPS 160 VPD/VPS 16 VP 3 VPC 4 VPC	3.6 5.7 3.6 5.7 5.7 1.8 3.5	M24 x 1 M24 x 1 M24 x 1 M24 x 1 M24 x 1 M14 x 1 M14 x 1	R-009 R-009 R-009 R-009 R-009 9955-12 R-009	14168 14168 14168 14168 14168 14168	CV-0118 CV-0118 CV-0118 CV-0118 CV-0118 CV-0112 CV-0118	

Notes:

1 If no part number is listed, adaptor is not supplied by Parker. In most cases, customer can assemble adaptor from standard pipe fittings. Refer to pages 133-134.

2 Multiple filters piped in parallel are required.



Vacuum Pump Filters

Recommended Exhaust Filters for Vacuum Pumps

Pump Model No.	Pump Rating CFM (Free Air)	Pump Exhaust (NPT Female Unless Otherwise Noted)	Recommended Balston Filter Non-Hazardous Non-Corrosive Applications	Balston Anodized Aluminum Pump-To- Filter Adaptor (1)	Recommended Balston Filter Hazardous and Corrosive Applications	Balston Stainless Steel Pump-To- Filter Adaptor (1)
Ingersoll-Rand	Pumps					
AV/AVX2 BV/BVX2 V23A/V23AX7 V235/V235X1 V244/V244X2 V255/V255X3 V255X5 7V/7VX5 15V/15VX7 20VX10 20V/20VX15 15VD7.5 20VX15 2V235D1.5 2-V244D2 2-V255031D5 2-7E7.5 2-15VE7.5 2-20VA15 2-20VA20 255	2.7 5.4 9 18 32 60 60 99 133 214 294 132 214 36 36 120 198 264 428 588 60	3/8" 3/4" 1" 1 1/4" 1 1/2" 1 1/2" 1 1/2" 2" 2 1/2" 2 1/2" 2" 2.5"	9955-12 R-009 R-009 AR-0316 AR-0335 AR-0735 AR-0735 AR-0735 AR-0780 AR-1280 AR-1280 AR-1280 AR-0780 AR-0335 AR-0335 AR-0335 AR-0780 AR-0780 AR-1280 AR-1280 AR-1280 AR-1280 AR-1680 AR-3080 AR-3080 AR-0735		CV-0112 CV-0118 CV-0118	
ITT Pneumotiv	e (Leiman	Brothers)				
B C 29-3J 195-2 C-3 30-3 C-6 29-6J 30-6 100 100J 100J 107/107J	10 18 20 22 35 37 50 60 112 125 200	3/4" 1" 3/4" 1" 1 1/2" 1 1/2" 1 1/2" 1 1/2" 1 1/2" 1 1/2" 3'	R-015 AR-0316 AR-0316 AR-0335 AR-0335 AR-0335 AR-0335 AR-0735 AR-0735 AR-0780 AR-0780 AR-0780			

Notes:

1 If no part number is listed, adaptor is not supplied by Parker. In most cases, customer can assemble adaptor from standard pipe fittings. Refer to pages 133-134.

2 Multiple filters piped in parallel are required.



Recommended Exhaust Filters for Vacuum Pumps

Pump Model No.	Pump Rating CFM (Free Air)	Pump Exhaust (NPT Female Unless Otherwise Noted)	Recommended Balston Filter Non-Hazardous Non-Corrosive Applications	Balston Anodized Aluminum Pump-To- Filter Adaptor (1)	Recommended Balston Filter Hazardous and Corrosive Applications	Balston Stainless Steel Pump-To- Filter Adaptor (1)
Kinney Pumps	;					
KC/KVS/KVC-2	2	3/4"	9955-12		CV-0112	
KC/KVC-3	3	3/4"	9955-12		CV-0112	
KC-5	5	3/4"	R-009		CV-0118	
KVC-6	5.8	3/4"	R-009		CV-0118	
KC-8	8	3/4"	R-009			
KS-13	13	1 1/4"	R-015			
TCS-14 KC-15	14 15	3/4" 1 1/4	R-015 R-015			
KS-15	15	1 1/4"	R-015			
KTC-21	21	1"	AR-0335			
TCS-21	21	3/4"	AR-0335			
KD-30	33	1 1/4"	AR-0335			
TCS-35	30	1 1/4"	AR-0335	14174		
KD-50	52	1 1/4"	AR-0735			
TCS-55	54	1 1/2"	AR-0735			
KTC-60	60	1 1/2" (2)	AR-0735			
KDH-65	69	1 1/2"	AR-0735			
TCS-70	71	1 1/2"	AR-0735			
KDH-80	83	1 1/2"	AR-0735			
TCS-90	88	2"	AR-0735			
KTC-112 KDH-130	107 134	2" (2)	AR-0780 AR-0780			
KDH-150	165	2" 2"	AR-0780			
KT-150	144	2" (2)	AR-0780			
KTC-225	221	3" (2)	AR-1280			
KT-300	296	3" (2)	AR-1280			
KT-500	494	3" (2)	AR-3080			
KT-850	778	4" Flange	AR-3080			
KT-170LP	100	2"	AR-0735			
KT-275LP	162	2"	AR-0780			
KT-505LP	300	3"	AR1680			
KT-840FP	490	4"	AR-3080			
KT-135VFP	780	5"	AR-3080			
Lammert Pum	ps					
10301	2	1/2"	9955-12		CV-0112	
10302	2	1/2"	9955-12		CV-0112	
10305/01131	5	3/4"	R-009		CV-0118	
10307/01133	7.5	1"	R-009		CV-0118	
10310/02131	10	1"	R-015			
02133	15	3/4"	R-015			
03131/03231	20	1 1/4"	AR-0316			
04231/04131	30	1 1/4"	AR-0335			
03133/03233 04133/04233	30 50	1 1/4 1 1/4"	AR-0335 AR-0735			
05131/05231	50 75	2"	AR-0735 AR-0735			
06231/05133/05233	100	2"	AR-0735			
07231	125	3"	AR-0780			
06233/08231	150	3"	AR-0780			
07233	200	3"	AR-0780			
08233/09231	250	3"	AR-1280			
09233	350	3"	AR-1680			

1 If no part number is listed, adaptor is not supplied by Parker.In most cases, customer can assemble adaptor from standard pipe fittings. Refer to pages 133-134. 2 Exhaust port is horizontal. Customer should provide elbow so that filter is mounted vertically.

3 Multiple filters piped in parallel are required.

Recommended Exhaust Filters for Vacuum Pumps

Pump Model No.	Pump Rating CFM (Free Air)	Pump Exhaust (NPT Female Unless Otherwise Noted)	Recommended Balston Filter Non-Hazardous Non-Corrosive Applications	Balston Anodized Aluminum Pump-To- Filter Adaptor (1)	Recommended Balston Filter Hazardous and Corrosive Applications	Balston Stainless Steel Pump-To- Filter Adaptor (1)
Leybold Hera	ieus Pumps					
D/S 2A	2.2	KF 16	9956-12		CV-0112	14181
D/S 4A	4.5	KF 16	R-009	14172	CV-0118	14181 (3)
D/S 8A	7.0	KF 25	R-009	14173	CV-0118	14182
D 4B	3.4	KF 16	R-009	14172	CV-0118	14181 (3)
D 8B	6.9	KF 16	R-009	14172	CV-0118	14181 (3)
D/S 16A	14.1	KF 25	R-015	14173		
D25	20	KF 25	AR-0316	14173		
D/S 30A	26.8	KF 40	AR-0335	14178		
SV 40	30	1 1/4"	AR-0335			
DK 50	32	KF 50	AR-0335			
D/S 60A	36.7	KF 40	AR-0335	14178		
D 65	53	KF 40	AR-0735	14174 (4)		
SV 65	45	1 1/4"	AR-0335			
E 75	49	KF 50	AR-0735			
D/S 90A	55	KF 40	AR-0735	14174 (4)		
DK 100	65	KF 50	AR-0735			
SV 100	70	2"	AR-0735			
E 150	94	KF 50	AR-0735			
SV 180	125	2"	AR-0780			
DK 200	130	3" ASA Flange	AR-0780			
E 250	162	3" ASA Flange	AR-0780			
SV 280	200	2"	AR-0780			
SV 500	318	3"	AR-1280			
SV 580	339	3"	AR-1680			
D25BCS	20		AR-0316			
D40BCS	32.5		AR-0335			
D65BCS	53		AR-0735			
D25B SV16B	20.9 11.2		AR-0335 AR-0316			
SV16B SV25B	18.3	1/2" NPT	AR-0316 AR-0136			
SV25B SV65B	41.8		AR-0136 AR-0335			
SV05B SV100B	68.9		AR-0335 AR-0735			
SV100B SV200	129.5		AR-0735 AR-0780			
SV200 SV300	200	2" BSP	AR-0780			
SV500 SV500	336	2 DOF	AR-1680			
SV630	494.8		AR-3080			
SV030 SV1200	494.0 677		AR-3080			
SP250	177		AR-0780			
SP630	371		AR-1680			
SV40B	31.2		AR-0335			
D10E	9.3		R-015			

Notes:

1 If no part number is listed, adaptor is not supplied by Parker. In most cases, customer can assemble adaptor from standard pipe fittings. Refer to pages 133-134.

2 Requires 2" Male x 1 1/2" Female reducing bushing supplied by customer.

3 Requires 3/4" Male x 1/2" Female reducing bushing supplied by customer.

4 Requires 3" Male x 1 1/2" Female reducing bushing supplied by customer.

5 Requires Multiple Filters piped in parallel



Vacuum Pump Filters

Recommended Exhaust Filters for Vacuum Pumps

Pump Model No.	Pump Rating CFM (Free Air)	Pump Exhaust (NPT Female Unless Otherwise Noted)	Recommended Balston Filter Non-Hazardous Non-Corrosive Applications	Balston Anodized Aluminum Pump-To- Filter Adaptor (1)	Recommended Balston Filter Hazardous and Corrosive Applications	Balston Stainless Steel Pump-To- Filter Adaptor (1)
Marvac Pumps						
A-1 A-2 A-10 A-20 B-2 B-3 B-3 B-6 B-20 B-30 B-202 R-10 R-20 R-22 R-22 R-55	$ \begin{array}{r} 1.06 \\ 1.6 \\ 1.6 \\ 3.5 \\ 2.65 \\ 5.5 \\ 20 \\ 3.53 \\ 8.8 \\ 7 \\ 1.5 \\ 1.5 \\ 1.5 \\ 2.65 \\ 5.5 \\ 5.5 \\ \end{array} $	3/8" 3/8" 3/8" 1/2" 1/2" 3/4" 1 1/4" 1/2" 1" 3/4" 3/8" 3/8" 3/8" 3/8"	9955-12 9955-12 9955-12 R-009 9955-12 R-009 AR-0316 R-009 R-009 R-009 R-009 9955-12 9955-12 9955-12 R-009		CV-0112 CV-0112 CV-0112 CV-0112 CV-0118 CV-0118 CV-0118 CV-0118 CV-0118 CV-0118 CV-0118 CV-0112 CV-0112 CV-0112 CV-0112 CV-0112	
Maxima Pumps (Fisher Scien	tific)				
D2A (01-057-2A) D4A (01-057-4A) D8A (01-057-8A) D16A (01-057-16A) D30A (01-057-30A) D60A (01-057-60A) D90A (01-057-90A) M4C M6C M8C	2.2 4.5 7.0 14.1 26.8 36.7 55 2.6 3.4 6.1	KF 16 KF 25 KF 25 KF 40 KF 40 KF 40	9956-12 R-009 R-009 AR-0316 AR-0335 AR-0335 AR-0735 9955-12, 9956-12 R-009 R-009	14172 14173 14173 14174 14174 (4)	CV-0112 CV-0118 CV-0118 CV-0112 CV-0118 CV-0118	14181 14181 (3) 14182
Precision Scie	ntific Pump	S				
DD-20 D-25 S/PV-35 DD-50 D-75 DD-90 DD-100 D-150 DD/DDC-195 S/D-300 DD/DDC 310 DD/DDC 475 S/D-500 S/D-1000 S/D-1500	0.7 0.9 1.25 1.77 2.7 3.2 3.54 5.3 7 10.6 11 17 17.6 35.3 53	3/4" 3/4" 3/4" 3/4" 3/4" 3/4" 3/4" 3/4"	9955-12 9955-12 9955-12 9955-12 R-009 R-009 R-009 R-009 R-015 R-015 AR-0316 AR-0316 AR-0335 AR-0735		CV-0112 CV-0112 CV-0112 CV-0112 CV-0112 CV-0118 CV-0118 CV-0118 CV-0118	

Notes:

Vacuum Pump Filters

1 If no part number is listed, adaptor is not supplied by Parker. In most cases, customer can assemble adaptor from standard pipe fittings. Refer to pages 133-134.

2 Multiple filters piped in parallel are required.

3 Requires 1 1/2" Male x 1" Female reducing bushing supplied by customer.

4 Requires 3" Male x 1 1/2" Female reducing bushing supplied by customer.

5 Requires 2" Male x 1 1/2" Female reducing bushing supplied by customer.



Recommended Exhaust Filters for Vacuum Pumps

Pump Model No.	Pump Rating CFM (Free Air)	Pump Exhaust (NPT Female Unless Otherwise Noted)	Recommended Balston Filter Non-Hazardous Non-Corrosive Applications	Balston Anodized Aluminum Pump-To- Filter Adaptor (1)	Recommended Balston Filter Hazardous and Corrosive Applications	Balston Stainless Steel Pump-To- Filter Adaptor (1)
Quincy Pum	ips					
QSVB-10 QSVB-20 QSVI-20 QSVI-40 QV-75 QV-1 QV-1.5 QV-2 QV-2 QV-3 QV-5 QV-5 QV-5.5 QV-5.5 QV-7.5	79 134 159 315 8.5 12 25 38 50 75 103 141	1 1/4" 1 1/4" 2 1/2" 2 1/2" .5" NPT .5" NPT .75" NPT 1" NPT 1.5" NPT 1.5" NPT 2" NPT	AR-0735 AR-0780 AR-0780 R-009 R-015 AR-0335 AR-0335 AR-0735 AR-0735 AR-0735 AR-0780		CV-0118	
QV-10 QV-15 QV-20 QV-30 QV-40	189 245 378 540 716	2" NPT 3" NPT 3" NPT 4" NPT 4" NPT	AR-0780 AR-1280 AR-1680 AR-3080 AR-3080			

Notes:

1 If no part number is listed, adaptor is not supplied by Parker. In most cases, customer can assemble adaptor from standard pipe fittings. Refer to pages 133-134.

2 Multiple filters piped in parallel are required.

3 Requires 1 1/2" Male x 1" Female reducing bushing supplied by customer.

4 Requires 3" Male x 1 1/2" Female reducing bushing supplied by customer.

5 Requires 2" Male x 1 1/2" Female reducing bushing supplied by customer.



Recommended Exhaust Filters for Vacuum Pumps

Pump Model No.	Pump Rating CFM (Free Air)	Pump Exhaust (NPT Female Unless Otherwise Noted)	Recommended Balston Filter Non-Hazardous Non-Corrosive Applications	Balston Anodized Aluminum Pump-To- Filter Adaptor (1)	Recommended Balston Filter Hazardous and Corrosive Applications	Balston Stainless Steel Pump-To- Filter Adaptor (1)
Rietschle Pum						
VAL/VL/VE 10	6.8	NW 25	R-009	14173	CV-0118	14182
VF/VFE/CLFG 11	6.8	1/2"	R-009		CV-0118	
VF/VFE 16	10.2	1/2"	R-015			
CLFG/CLF/CLFE 16	10.2	1/2"	R-015			
VAL/VL/VLV 25	16.9	NW 25	AR-0316	14173		
VF/VFE 26	16.9	3/4"	AR-0316			
CLFG/CLF/CLFE 26 VL/VLV 40	16.9 30	3/4" NW 25	AR-0316 AR-0335	14183		
VF/VFE 41	30 27	3/4"	AR-0335 AR-0335	14103		
CLFG/CLF/CLFE 41	27	3/4"	AR-0335			
VL/VLV 60	40	3/4"	AR-0335			
VF/VFE 61	40	3/4"	AR-0335			
CLFG/CLF/CLFE 61	40	3/4"	AR-0335			
VL/VLV 80	54	NW 40	AR-0735	14174 (4)		
VF/VFE 81	54	1	AR-0735			
CLFG/CLF/CLFE 81	54	1	AR-0735			
VL/VLV 100	67	NW 40	AR-0735	14174 (4)		
VF/VFE 101	67	1 1/4"	AR-0735			
CLFG/CLF/CLFE 101	67	1 1/4"	AR-0735			
VWZ 102 CLF/CLFE 141	67 94	NW 65 1 1/2"	AR-0735 AR-0735			
VFH/VFEH 161	108	2	AR-0735			
VWZ 162	108	NW 65	AR-0780			
CLF/CLFE 181	108	2"	AR-0780			
VWZ 252	169	NW 65	AR-0780			
CLFH/CLFEH 341	230	3"	AR-1280			
VWZ 402	270	NW 65	AR-1280			
CLFH/CLFEH 501	338	3"	AR-1680			
CLFH/CLFEH 631	426	3"	AR-1680			
CLFH/CLFEH 1001	677	3"	AR-3080			
VLV25-2	18	3/4" NPT	AR-0316			
VLV25-3 VLV40-2	18 28	3/4" NPT	AR-0316 AR-0335			
VLV40-2 VLV40-3	28	3/4 INF I	AR-0335			
VWZ702	494		AR-3080			
VWZ1002	706		AR-3080			
VGD10	7		R-009		CV-0118	
VGD15	11		R-015			
VCE15	11	1/2" NPT	R-015			
VCE25	18	3/4" NPT	AR-0316			
VCE40	28	1" NPT	AR-0335			
VC50	35	1-1/4" NPT	AR-0335			
VCE60	42	1" NPT	AR-0335			
VC75 VC100	49 71	1-1/4" NPT 1-1/2" NPT	AR-0735 AR-0735			
VC100 VC150	105	1-1/2 NPT 1-1/2" NPT	AR-0735 AR-0780			
VC150 VC200	141	2" NPT	AR-0780			
VC300	212	2" NPT	AR-1280			
VC400	282	3" NPT	AR-1280			
VC500	388	3" NPT	AR-1680			
VC700	494	3" NPT	AR-3080			
VC900	636	4" NPT	AR-3080			
VC1100	777	4" NPT	AR-3080			
VC1300	918	4" NPT				
VLR100	72	1-1/2" NPT	AR-0735			
VLR250	166	2" NPT	AR-0780			
VL5300	212	2" NPT	AR-1280			
VLR400	272	3" NPT	AR-1280			
VLR500	353	3" NPT	AR-1680			

Notes:

1 If no part number is listed, adaptor is not supplied by Parker. In most cases, customer can assemble adaptor from standard pipe fittings. Refer to pages 133-134.

2 Multiple filters piped in parallel are required. 3 Requires 1 1/2" Male x 1" Female reducing bushing supplied by customer. 4 Requires 3" Male x 1 1/2" Female reducing bushing supplied by customer. 5 Requires 2" Male x 1 1/2" Female reducing bushing supplied by customer.

Recommended				Recommended				
	Pump Rating	Pump Exhaust (NPT Female	Balston Filter Non-Hazardous	Balston Anodized	Balston Filter Hazardous and	Balston Stainless		
Pump	CFM	Unless Otherwise	Non-Corrosive	Aluminum Pump-To-	Corrosive	Steel Pump-To-		
Model No.	(Free Air)	Noted)	Applications	Filter Adaptor (1)	Applications	Filter Adaptor (1)		
RO-FLO Pumps (Allis-Chalmers)								
5CCA	55	1 1/2"	AR-0735					
5CCB	86	1 1/2"	AR-0735					
7DB	151	3"AR-0780						
7DC 8DB	235 275	3"AR-1280 3"AR-1280						
8DE	345	3"AR-1680						
10GB	411	4"AR-1680						
10GC	593	4"AR-3080						
11S	738	5"AR-3080						
11L	838	5"AR-3080						
12S 12L	970 1080	6"AR-3080 (2)						
17S	1228	6"AR-3080 (2) 6"AR-3080 (2)						
175 17L	1420	6"AR-3080 (2)						
195	1693	8"AR-3080 (2)						
19L	1920	8"AR-3080 (2)						
23C	2270	8"AR-3080 (2)						
23D	2740	8"AR-3080 (2)						
27D 33D	3300 5950	10" 14"	AR-3080 (2) AR-3080 (2)					
			/ ((0000 (2)					
Sargent-We	Ich Pumps							
1373	10.6	1-20	R-015	14163				
1374	23	1-3/4-20	AR-0335	14164				
1375	35	Square Flange	AR-0335	44400				
1376 1380	10.6 5.6	1-20 1-20	R-015 (3) R-009	14163 14162	CV-0118			
1392	0.9	3/4-20	9955-12	14165	CV-0112			
1395	71	Square Flange	AR-0735					
1396	100	Square Flange	AR-0735					
1397	17.7	1-3/4-20	AR-0316	14160				
1398 1399	53 1.2	Square Flange 3/4-20	AR-0735 9955-12	14165	CV-0112			
1400	0.9	3/4-20	9955-12	14165	CV-0112 CV-0112			
1402	5.6	1-20	R-009	14162	CV-0118			
1403	3.5	1-20	R-009	14162	CV-0118			
1405	2.1	3/4-20	9955-12	14165	CV-0112			
1410	0.7	1/2" Hose	9955-12		CV-0112			
8802	0.9	3/4-20	9955-12	14165	CV-0112			
8803B/8804B 8803K/8804K	0.9 0.7	3/4-20 3/4-20	9955-12 9955-12	14165 14165	CV-0112 CV-0112			
8805	1.8	1-20	9955-12	14166	CV-0112 CV-0112			
8806B/K	1.8	NW 25	9955-12	14175	CV-0112	14182		
8810	3.5	1-20	9955-12	14166	CV-0118			
8811B	3.5	NW 25	R-009	14173	CV-0118	14182		
8811K	2.9	NW 25	9955-12 P 000	14175	CV-0112	14182		
8814 8815	5.6 5.3	NW 25 1-20	R-009 R-009	14173 14162	CV-0112 CV-0118	14182		
8816B/K	5.3	NW 25	R-009	14173	CV-0118	14182		
8821	7.4	NW 25	R-009	14173	CV-0118	14182		
8830	10.6	1-3/4-20	R-015	14160				
8834	12	NW 40	R-015	14174				
8851	18	NW 40	AR-0316	14174				
8861 8871	35.3 53	NW 50 NW 50	AR-0335 AR-0735	14179 14179				
8871	53 7.7	3/4-20	R-009	14173	CV-0118	14182		
8905	1.8	NW 16	9956-12		CV-0112	14181		
8910	3.8	NW 16	R-009	14172	CV-0118	14181 (4)		
8910A	3.1	NW 16	R-009	14172	CV-0118	14181 (4)		
8915	5.6	1-20	R-009	14162	CV-0118	44400		
8920	7.7	NW 25	R-009	14173	CV-0118	14182		

Notes:

1 If no part number is listed, adaptor is not supplied by Parker. In most cases, customer can assemble adaptor from standard pipe fittings. Refer to pages 133-134.

2 Multiple filters piped in parallel are required. 3 Consult factory for piping considerations. 4 Requires 3/4" male x 1/2" female reducing bushing supplied by customer.

Recommended Exhaust Filters for Vacuum Pumps

Pump Model No.	Pump Rating CFM (Free Air)	Pump Exhaust (NPT Female Unless Otherwise Noted)	Recommended Balston Filter Non-Hazardous Non-Corrosive Applications	Balston Anodized Aluminum Pump-To- Filter Adaptor (1)	Recommended Balston Filter Hazardous and Corrosive Applications	Balston Stainless Steel Pump-To- Filter Adaptor (1)			
Stokes Pumps									
V-005 V-009 V-013-2 V-23 146H 148H 149H 149HS 212HS 412H 612H 912H 212J 412J 612J	7 11 20 36.7 55 30 50 80 100 150 300 600 728 150 300 600	NW 25 NW 25 NW 40 NW 40 1 1/4" 1 1/2" 1 1/2" 1 1/2" 1 1/2" 2" 3" 3" 3" 5" 2" NPT 3" NPT 3" NPT	R-009 R-015 AR-0316 AR-0335 AR-0735 AR-0735 AR-0735 AR-0735 AR-0735 AR-0780 AR-1280 AR-3080 AR-3080 AR-1280 AR-3080	14173 14173 14174 14174 14174 (3)	CV-0118	14182			
Ulvac Pumps									
G-5 G-15 G/GC-25S G/GC-20D G-505/D GC-500D GC-100D GVD-050 GVD-050 GVD-100 GVD-165 DA-30S DA-60S D-330D D-650D D-950D PKS-016 PKS-030 PKS-070 PVD-180 PDV-360	0.21 0.63 0.84 2.1 2.1 4.2 4.2 2.1 5.6 7 1.1 2.5 9 18 27 57 107 250 6.4 13	M17 x 1 3/4" 3/4" 3/4" 3/4" 1" 1" 3/4" 1" 3/4" 3/4" 1 1/2" 2" 2" 3" 4" 3/4" 1"	9955-12 9955-12 9955-12 9955-12 9955-12 P955-12 R-009 R-009 9955-12 R-009 P955-12 P955-12 P955-12 P955-12 R-009 AR-0316 AR-0335 AR-0735 AR-0735 AR-0735 AR-0780 AR-1280 R-009 R-015		CV-0112 CV-0112 CV-0112 CV-0112 CV-0112 CV-0112 CV-0118 CV-0118 CV-0118 CV-0118 CV-0118 CV-01118 CV-0112 CV-01118 CV-01118				
Varian Pum	ps								
CS/SS/SD-90 EVAC 200 EVAC 300 CD/SD-200 CD/SS/SD-300 CD/SS/SD-700 CD/SS/SD-1400 CD/SD-2500	3.2 7 11 7 11 27 50 90	NW 25 3/4" 3/4" NW 25 NW 25 NW 25 NW 40 NW 40 NW 50	R-009 R-009 R-015 R-009 R-015 AR-0335 AR-0735 AR-0735	14173 14173 14173 14174 14173 (3) 14179 (3)	CV-0118 CV-0118 CV-0118	14182 14182			

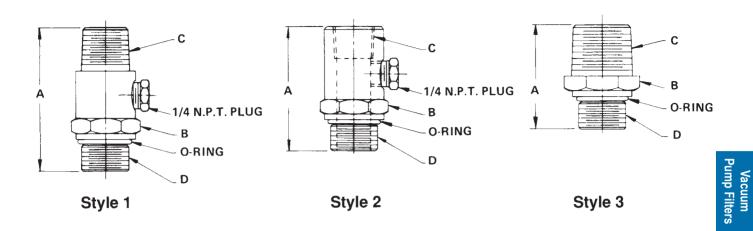
1 If no part number is listed, adaptor is not supplied by Parker. In most cases, customer can assemble adaptor from standard pipe fittings. Refer to pages 133-134.

2 Multiple filters piped in parallel are required.

3 Requires 3" Male x 1 1/2" Female reducing bushing supplied by customer.

4 Requires 2" Male x 1 1/2" Female reducing bushing supplied by customer.

Pump to Filter Adaptors - Straight Thread to NPT Thread



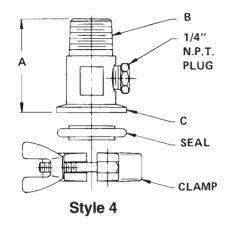
		Materials of Construction		Dimensions (Inches)				
Туре	Adaptor Style	Adaptor	Seals	(A) Height	(B) Hex Size	(C) NPT Thread	(D) Thread	
14168	1	Alum.	Buna-N	3.0	1.25	3/4	M24 x 1	
14166	2			2.6		1/2 F (1)	1-20	
14165	2			2.44	↓	1/2 F (1)	3/4-20	
14164	3			2.88	2.0	1 1/2	1 3/4-20	
14163	3			2.19	1.38	1	1-20	
14162	1			3.0	1.25	3/4	1-20	
14160	3		↓ ↓	2.3	2.0	1	1 3/4-20	
14159	1		_	3.15	1.25	3/4	3/4 BSPT	
14158	2		_	2.80		1/2 F (1)	3/4BSPT	
14157	2	↓ ·		2.56	↓ ↓	1/2 F (1)	3/8 BSPT	

Notes:

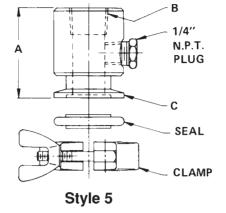
1 Female NPT - all others Male

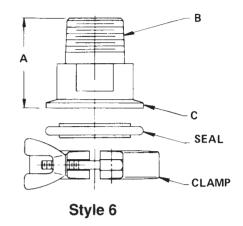


Pump to Filter Adaptors - Flange to NPT Thread



Vacuum Pump Filters





Principal Specifications										
		Materials of Construction			Dimensions	0//				
Туре	Adaptor Style	Adaptor	Clamp	Seals	(A) Height (inches)	(B) NPT Thread (Inches)	(C) KF Flange (2)	Other Fittings Included		
14184	6	Stain. St.	Alum.	Viton	2.0	1	KF-40			
14183	6	Alum.			2.38	1 1/2	KF-25			
14182	4	Stain. St.			2.06	1/2	KF-25	3/4" x 1/2" Reducing Bushing		
14181	4	Stain. St.			2.12	1/2	KF-16			
14180	6	Alum.			2.0	1	KF-16			
14179		Stain. St.			2.62	1 1/2	KF-50			
14178					2.38	1 1/2	KF-40			
14177					2.0	1	KF-25			
14176	↓	•				1	KF-16			
14175	5	Alum.				1/2 F (1)	KF-25			
14174	6				↓	1	KF-40	1 1/2" x 1" Reducing Bushing		
14173	4				2.06	3/4	KF-25	1" x 3/4" Reducing Bushing		
14172	4	Ļ	Ļ	¥	2.12	1/2	KF-16	1/2" coupling and 3/4" x 1/2" Reducing Bushing		

Notes:

1 Female NPT - all others are Male

2 The designation "KF" and "NW" are

interchangeable