

Vacuum Pump Inlet & Exhaust Filters

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



Vacuum Pump Inlet & Exhaust Filters

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 |

Vacuum Pump Inlet & Exhaust Filters

Exhaust Filters for Hazardous/Corrosive Applications

Vacuum
Pump Filters

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, Stainless Steel, 0-15 psi rating, 1/4" NPT fitting. Vacuum Pump-to-Filter Adaptors: 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.

Vacuum Pump Inlet & Exhaust Filters

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

Vacuum Pump Filters

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 |



Model 9955-12



Model R-009



Model AR-0316



Model AR-0780



Model AR-3080

Vacuum Pump Inlet & Exhaust Filters

Exhaust Filters for Non-Hazardous/Non-Corrosive Applications

Principal Specifications

| Model | Port Size | Max. Flow Rate | Materials of Construction | | | Max. Seals | Max. Temp. | Shipping Press. | Dimensions | |
|--------------|-----------|----------------|---------------------------|----------|----------------|------------|--------------|-----------------|-----------------|------------------|
| | | | Head | Bowl | Internals | | | | 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 | 1 1/2"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 Cartridges | | | Cover (2) (Optional) | No. Pressure Relief Retainers #20222 |
|------------------|-----------------------------------|-------------------------------|---------------|----------------|----------------------|--------------------------------------|
| | | Box of 3 | Box of 7 | Box of 10 | | |
| 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:

- #20222 Pressure Relief Filter Cartridge Retainer, 4-7 psig.
- #20217 Pressure Relief Valve, 3-7 psig, 1/4" NPT male fitting.
- #11010 Pressure Gage, 0-15 psig, 1/4" male fitting (incl. on Type AR Filter Assemblies)
- Vacuum pump-to-filter adaptors: refer to pages 133-134.
- #19291 Stand for AR-1680-371H, #19290 Stand for AR-3080-371H.
- #19202 Weather Cap for AR-0735-371H, AR-0780-371H.
- #A05-0097 Seal Set for AR-009-371H, AR-015-371H.

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.

Vacuum Pump Inlet & Exhaust Filters

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



CF-0118-30

Vacuum
Pump Filters

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: | 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) |
| Grade 102 Cartridges | For prevention of oil backstreaming and filtration of relatively low concentrations of solids |
| Efficiency for preventing oil backstreaming: | 99.99% |
| Life: vacuum | Approximately 1000 hours at 10 microns |
| Efficiency for solids filtration: | 99.99% at 0.1 micron |
| Materials of construction: | Molecular Sieve Type 4A adsorbent, EPR seals |
| Maximum temperature: | 100°F (38°C) |

Vacuum Pump Inlet & Exhaust Filters

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.

Vacuum
Pump Filters

| 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 |

Vacuum Pump Inlet & Exhaust Filters

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

Vacuum
Pump Filters

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

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 non-hazardous/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) |

Vacuum Pump Inlet & Exhaust Filters

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.

Vacuum Pump Inlet & Exhaust Filters

Recommended Exhaust Filters for Vacuum Pumps

Vacuum
Pump Filters

| 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 | 3.2 | NW 25 | R-009 | 14175 | CV-0112 | 14182 |
| ZM/ZT 1012A | 11 | NW 25 | R-015 | 14173 | | |
| ZM/ZT 1030 | 17 | 1" OD Tube | AR-0316 | | | |
| ZM/ZT 1033 | 27 | NW 40 | AR-0335 | 14174 | | |
| ZT 1060 | 30 | 1.63" OD Tube | AR-0335 | | | |
| ZT 1063 | 50 | NW 40 | AR-0735 | 14174 (2) | | |
| ZT 1200A | 150 | 1.63" OD Tube | AR-0780 | | | |
| ZM/ZT 2004A | 3.2 | NW 25 | R-009 | 14173 | CV-0112 | 14182 |
| ZM/ZT 2007 | 7 | NW 25 | R-009 | 14173 | CV-0118 | 14182 |
| ZM/ZT 2008A/AC | 7 | NW 25 | R-009 | 14173 | CV-0118 | 14182 |
| ZM/ZT 2012A/AC/H | 11 | NW 25 | R-015 | 14173 | | |
| UM/UT 2020 | 15.9 | NW 25 | R-015 | 14173 | | |
| ZM/ZT 2030/H | 17 | 1" OD Tube | AR-0316 | | | |
| ZM/ZT 2033/C | 27 | NW 40 | AR-0335 | 14174 | | |
| ZT 2060/H/HUS | 30 | 1.63" OD Tube | AR-0335 | | | |
| ZT 2063/C | 50 | NW 40 | AR-0735 | 14174 (2) | | |
| ZT 2100A/AC | 90 | NW 50 | AR-0735 | | | |
| 2002A | 1.4 | DN16 | 9955-12, 9956-12 | | CV-0112 | |
| 2005 | 3.8 | DN25 | R-009 | | CV-0118 | |
| 2015 | 10.6 | DN25 | R-015 | | | |
| 2021 | 14.6 | DN25 | R-015 | | | |
| 2010 | 6.8 | DN25 | R-009 | | CV-0118 | |
| AMD1 | 0.82 | DN16 | 9955-12, 9956-12 | | CV-0112 | |
| AMD4 | 2.36 | DN16 | 9955-12, 9956-12 | | CV-0112 | |
| A100L | 55.8 | DN25 | AR-0735 | | ACV-0735 | |
| Roots Vacuum Pumps | | | | | | |
| RSV 151 | 89 | ISO/DN63 | AR-0735 | | | |
| RSV 301 | 177 | ISO/DN63 | AR-0780 | | | |
| RSV 601 | 354 | ISO/DN100 | AR-1680 | | | |
| RSV 1002 | 594 | ISO/DN100 | | | | |
| RSV 1200 | ISO/DN160 | | ACV-0780(multiple) | | | |
| LRS1 | | | | | | |
| RSV 151B+RVP2033D | 106 | DN40 | AR-0780 | | | |
| RSV 301B+2033D | 212 | DN40 | AR-1280 | | | |
| RSV 301B+RVP 2063D | 212 | DN40 | AR-1280 | | | |
| LRS2 | | | | | | |
| RSV 151+RVP 2021 | 106 | DN25 | AR-0780 | | | |
| RSV 601+RVP 2033 | 424 | DN40 | AR-1680 | | | |
| MRS1 | | | | | | |
| RSV 301B+AMV 200/300 | 212 | DN50 | AR-1280 | | | |
| RSV 601B+AMV 200/300 | 212 | DN40 | 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.

Vacuum Pump Inlet & Exhaust 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) |
|-------------------------|----------------------------|--|---|--|---|--|
| Balzers Pumps | | | | | | |
| UNO/DUO 1.5A | 1.0 | KF10 | 9955-12 | | CV-0112 | |
| UNO/DUO 004A/B | 2.7 | KF25 | 9955-12 | 14175 | CV-0112 | 14182 |
| UNO/DUO 008A/B | 5.2 | KF25 | R-009 | 14173 | CV-0118 | 14182 |
| UNO/DUO 012A | 8.2 | KF25 | R-009 | 14173 | CV-0118 | 14182 |
| UNO/DUO 016B | 10.6 | KF25 | R-015 | 14173 | | |
| UNO/DUO 030A | 19.7 | KF40 | AR-0316 | 14174 | | |
| UNO/DUO 060A | 39.3 | KF40 | AR-0335 | 14174 | | |
| UNO/DUO 250A | 157 | ISO 100 | AR-0780 | | | |
| UNO 100 | 56 | 32mm OD Tube (4) | AR-0735 | | | |
| DUO 100 | 57 | 32mm OD Tube (4) | AR-0735 | | | |
| UNO/DUO 120A | 75.3 | ISO 63 | AR-0735 | | | |
| UNO 170 | 91.2 | 32mm OD Tube (4) | AR-0735 | | | |
| DUO 170 | 100 | 32mm OD Tube (4) | AR-0735 | | | |
| BA 251 | 158.9 | ISO 63 | AR-0780 | | | |
| BA 501 | 320.7 | ISO 100 | AR-1680 | | | |
| UNO 2.5 | 1.7 | DN16 | 9955-12, 9956-12 | | CV-0112 | |
| UNO 6 | 3.5 | G 3/8 | R-009 | | CV-0118 | |
| UNO 20 | 12.4 | ISO-KF25 | R-015 | | | |
| UNO 60 | 36.5 | | AR-0735 | | | |
| UNO 90 | 55.3 | DN40 | AR-0735 | | | |
| UNO 200 | 123.6 | DN | AR-1280 | | | |
| UNO 240 | 158.9 | DN | AR-1280 | | | |
| UNO 400 | 270.7 | DN63 ISO-F | AR-3080 | | | |
| UNO 630 | 400.2 | DN63 ISO-F | AR-3080 | | | |
| DUO 5 | 3.5 | DN16 | R-009 | | CV-0118 | |
| DUO 10 | 7 | DN25 | R-015 | | CV-0118 | |
| DUO 20 | 14.1 | DN25 | R-015 | | | |
| DUO 35 | 21.2 | DN40 | AR-0335 | | | |
| DUO 65 | 41.2 | DN100 | AR-0735 | | | |
| DUO 120 | 84.7 | DN63 | AR-0780 | | | |
| DUO 250 | 176.6 | DN100 | AR-1280 | | | |
| Beach-Russ Pumps | | | | | | |
| SS 1 | 6 | 3/4" | R-009 | | CV-0118 | |
| SS 1 1/2 | 9 | 3/4" | R-009 | | CV-0118 | |
| SS 2 | 15 | 3/4" | R-015 | | | |
| SS 3 | 28 | 1" | AR-0335 | | | |
| SS 4 | 45 | 1 1/4" | AR-0735 | | | |
| SS 5 | 60 | 1 1/2" | AR-0735 | | | |
| RP/RV 6 | 8.5 | 1/2" | R-009 | | CV-0118 | |
| SS 6 | 75 | 1 1/2" | AR-0735 | | | |
| SS 7 | 110 | 2" | AR-0780 | | | |
| SS 8 | 150 | 2 1/2" | AR-0780 | | | |
| SS 9 | 225 | 4" | AR-1280 | | | |
| SS 10 | 375 | 6" | AR-1680 | | | |
| RP/RV 12 | 18 | 3/4" | AR-0316 | | | |
| RP 15 | 30 | 1 1/2" | AR-0335 | | | |
| RP 15-6 | 30 | 1" | AR-0335 | | | |
| RP 30 | 50 | 1 1/2" | AR-0735 | | | |
| RP 30-6 | 50 | 1" | AR-0735 | | | |
| RP 50/50-6 | 80 | 2" | AR-0735 | | | |

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.

Vacuum Pump Inlet & Exhaust Filters

Recommended Exhaust Filters for Vacuum Pumps

Vacuum
Pump Filters

| Pump Model No. | Pump Rating CFM (Free Air) | Recommended Pump Exhaust (NPT Female Unless Otherwise Noted) | Balston Filter Non-Hazardous Non-Corrosive Applications | Recommended 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 | 1.5" | AR-0735 | | | |
| OTL/VP50 | 80 | 2" | AR-0735 | | | |
| OTL/VP135 | 140 | 3" | AR-0780 | | | |
| OTL/VP150 | 175 | 3" | AR-0780 | | | |
| OTL/VP250 | 310 | 5" | AR-1680 | | | |
| OTL/VP325 | 375 | 5" | AR-1680 | | | |
| 3P | 48 | 1.5" | AR-0735 | | | |
| 4P | 73 | 1.5" | AR-0735 | | | |
| 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 | | | |
| 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.

Vacuum Pump Inlet & Exhaust 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) |
|---------------------|----------------------------|--|---|--|---|--|
| Busch Pumps | | | | | | |
| 002-192 | 1.4 | KF-16 | 9956-12 | | CV-0112 | 14181 |
| 004-192 | 2.8 | KF-16 | 9956-12 | | CV-0112 | 14181 |
| 008-192 | 5.6 | KF-16 | R-009 | 14172 | CV-0118 | 14181 (4) |
| 010-112/118 | 6 | 3/4" | R-009 | | CV-0118 | |
| 016-192 | 11.2 | KF-16 | R-015 | 14180 | | |
| 016-112/118 | 8 | 3/4" (3) | R-009 | | CV-0118 | |
| 021-336/338 | 15 | 3/4" (3) | R-015 | | | |
| 025-132/138 | 20 | 1 1/4" (3) | AR-0316 | | | |
| 040-132/138 | 28 | 1 1/4" (3) | AR-0335 | | | |
| 063-132/138 | 41 | 1 1/4" (3) | AR-0335 | | | |
| 110-132/138 | 63 | 1 1/4" (3) | AR-0735 | | | |
| 160-112/118/132/138 | 117 | 2" (3) | AR-0780 | | | |
| 216-002 | 125 | 2" | AR-0780 | | | |
| 225-002 | 200 | 2" | AR-0780 | | | |
| 240-002 | 300 | 2" | AR-1280 | | | |
| 250-112/118/132/138 | 174 | 2" (3) | AR-0780 | | | |
| 263-002 | 500 | 2" | AR-3080 | | | |
| 400-212/218 | 300 | 2" | AR-1280 | | | |
| 630-212/218 | 430 | 3" (3) | AR-1680 | | | |
| 1000-212/228 | 650 | 6" (3) | AR-3080 | | | |
| 1600-212/228 | 1100 | 6" (3) | AR-3080 (2) | | | |
| 429 | 125 | 2" | AR-0780 | | | |
| 433 | 200 | 2" | AR-0780 | | | |
| 437 | 310 | 2" | AR-1280 | | | |
| 441 | 580 | 2" | AR-3080 | | | |
| 445 | 780 | 6" (3) | AR-3080 | | | |
| 0004 | 3.3 | 3/8" | R-009 | | CV-0118 | |
| 0006 | 4.2 | 3/8" | R-009 | | CV-0118 | |
| 0012 | 7.1 | 3/4" | R-009 | | CV-0118 | |
| 0016 | 11.2 | 3/4" | R-015 | | | |
| 0100 | 63 | 3/4" | AR-0735 | | | |
| 0165 | 117 | 2" | AR-0780 | | | |
| 0205 | 141 | 2" | AR-0780 | | | |
| 0255 | 180 | 2" | AR-0780 | | | |
| 0305 | 212 | 2" | AR-1280 | | | |
| 0400 | 330 | 3" | AR-1680 | | | |
| 0502 | 413 | 3" | AR-1680 | | | |
| 0630 | 490 | 3" | AR-3080 | | | |
| 1000 | 704 | 6"(ASA) | AR-3080 | | | |
| 1600 | 1130 | 6(ASA) | AR-3080(2) | | | |
| HO 0429 | 113 | 2" | AR-0780 | | | |
| HO 0433 | 176 | 2" | AR-0780 | | | |
| HO 0437 | 282 | 3" | AR-1280 | | | |
| HO 0441 | 444 | 3" | AR-1680 | | | |
| LC 0030 | 20.6 | G1 | AR-0335 | | | |
| LC0060 | 38.3 | G1 | AR-0335 | | | |
| LC0080 | 54.1 | DIN40 | AR-0735 | | | |
| LC0110 | 74.7 | DIN40 | AR-0735 | | | |
| LC0150 | 100 | DIN40 | AR-0735 | | | |
| LC0220 | 153 | DIN50 | AR-0780 | | | |
| LC0280 | 200 | DIN65 | AR-0780 | | | |
| LC0400 | 271 | DIN65 | AR-1280 | | | |

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.

Vacuum Pump Inlet & Exhaust Filters

Recommended Exhaust Filters for Vacuum Pumps

Vacuum
Pump Filters

| 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 Scientific Pumps (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 (91506, 91502) | 2.79 | 1/2" | 9955-12 | | CV-0112 | |
| 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 | | | |
| MEGAVAC (92003) | 2.0 | 1/2" | 9955-12 | | CV-0112 | |
| PRESSOVAC (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 | | | |
| HYVAC30L | 1.1 | | 9955-12, 9956-12 | | CV-0112 | |
| HYVAC50L | 2 | | 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 | | | |
| 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 | 1" | AR-0735 | | | |
| SUPRVAC160 | 110 | 2" | AR-0780 | | | |
| SUPRVAC250 | 150 | 2" | AR-0780 | | | |
| 0505 | 9.5 | 1" | R-015 | | | |
| 1505 | 19 | 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.

Vacuum Pump Inlet & Exhaust 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) |
|----------------------------------|----------------------------|--|---|--|---|--|
| Edwards High Vacuum 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 | 14.5 | 1/2" | R-015 | | | |
| E2M30 | 30 | KF25 | AR-0335 | 14183 | | |
| E1/E2M40 | 30 | KF25 | AR-0335 | 14183 | | |
| ED/ES 50 | 3.5 | 1/4" | R-009 | | CV-0118 | |
| ED/ES65 | 2.3 | 1/4" (2) | 9955-12 | | CV-0112 | |
| E1/E2M80 | 57 | KF25 | AR-0735 | 14183 (4) | | |
| 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 | 275 | 2 1/2" | AR-1280 | | | |
| RV3 | 2.7 | 3/4" | 9955-12 | (4) | CV-0112 | (4) |
| RV5 | 4.1 | NW25 | R-009 | 14173 | CV-0118 | 14182 |
| RV8 | 6.9 | NW25 | R-009 | 14173 | CV-0118 | 14182 |
| RV12 | 10.0 | NW25 | R-015 | 14173 | | |
| 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 | | | |
| 1065 | 8.3 | 1/2" | R-009 | | CV-0118 | |
| 1550 | 11.5 | 1/2" | R-015 | | | |
| 2065 | 17.0 | 3/4" | AR-0316 | | | |
| 2067 | 17.0 | 3/4" | AR-0316 | | | |
| 2565 | 21.0 | 3/4" | AR-0335 | | | |
| 3040 | 31.0 | 1" | AR-0335 | | | |
| 4565 | 48.0 | 3/4" | AR-0735 | | | |
| 5565 | 55.0 | 1" | 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

Vacuum Pump Inlet & Exhaust Filters

Recommended Exhaust Filters for Vacuum Pumps

Vacuum
Pump Filters

| 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 | 1.8 | 1/2" | 9955-12 | | CV-0112 | |
| 4AB-1-G482X | 1.8 | 1/2" | 9955-12 | | CV-0112 | |
| 4BA-1-G492X | 1.8 | 1/2" | 9955-12 | | CV-0112 | |
| 4BA-1-G499 | 1.8 | 1/2" | 9955-12 | | CV-0112 | |
| 4BA-1-G511X | 1.8 | 1/2" | 9955-12 | | CV-0112 | |
| 4BA-1-G538X | 1.8 | 1/2" | 9955-12 | | CV-0112 | |
| 5BA-1-G482X | 3.5 | 1/2" | R-009 | | CV-0118 | |
| 5AB-1-G482X | 3.5 | 1/2" | R-009 | | CV-0118 | |
| 5BB-1-G482X | 3.5 | 1/2" | R-009 | | CV-0118 | |
| 6BA-1-G535X | 7.0 | 1" | R-009 | | | |
| 6AB-1-G504X | 7.0 | 1" | R-009 | | | |
| 7BA-1-G506X | 10.6 | 1" | R-015 | | | |
| 7AB-1-G506X | 10.6 | 1" | R-015 | | | |
| 8BA-1-G506X | 14.1 | 1 1/4" | R-015 | | | |
| 8AB-G506X | 14.1 | 1 1/4" | R-015 | | | |
| 1531 | 1.5 | 1/8" | 9955-12, 9956-12 | | CV-0112 | |
| 0532 | 0.6 | 1/8" | 9955-12, 9956-12 | | CV-0112 | |
| 1032 | 1.1 | 1/4" | 9955-12, 9956-12 | | CV-0112 | |
| 1532 | 1.5 | 1/4" | 9955-12, 9956-12 | | CV-0112 | |
| 2032 | 2.5 | 1/4" | 9955-12, 9956-12 | | CV-0112 | |
| 3032 | 2.6 | 1/4" | 9955-12, 9956-12 | | CV-0112 | |
| 0211 | 1.3 | 1/4" | 9955-12, 9956-12 | | CV-0112 | |
| 2070 | 20 | 1" | AR-0335 | | | |
| 0323-1423 | 13 | 3/4" | AR-0316 | | | |
| 0533 | 0.6 | 1/4" | 9955-12, 9956-12 | | CV-0112 | |
| 1033 | 1.1 | 1/4" | 9955-12, 9956-12 | | CV-0112 | |
| 1034 | 1.6 | 1/4" | 9955-12, 9956-12 | | CV-0112 | |
| 1534 | 2.2 | 1/4" | 9955-12, 9956-12 | | CV-0112 | |
| 0240-0740 | 6 | 3/8" | R-009 | | CV-0118 | |
| 0456 | 4 | 3/8" | R-009 | | CV-0118 | |
| 0765 | 6 | 3/8" | R-009 | | CV-0118 | |
| 1550 | 14.5 | 1/2" | R-015 | | | |
| 1065-2565 | 8.5-21 | 3/4" | AR-0335 | | | |
| 2067-2567 | 17-21 | 3/4" | AR-0335 | | | |
| 3040 | 40 | 3/4" | AR-0335 | | | |
| 4565 | 47.5 | 1" | AR-0735 | | | |
| 5565 | 55 | 1" | AR-0735 | | | |
| 6066 | 55 | 1" | AR-0735 | | | |
| 1290 | 112 | 1" | AR-0780 | | | |
| Hitachi Pumps | | | | | | |
| SVF 10F | 3.6 | M24 x 1 | R-009 | 14168 | CV-0118 | |
| SVR 16F | 5.7 | M24 x 1 | R-009 | 14168 | CV-0118 | |
| 100 VPS | 3.6 | M24 x 1 | R-009 | 14168 | CV-0118 | |
| 160 VPD/VPS | 5.7 | M24 x 1 | R-009 | 14168 | CV-0118 | |
| 16 VP | 5.7 | M24 x 1 | R-009 | 14168 | CV-0118 | |
| 3 VPC | 1.8 | M14 x 1 | 9955-12 | | CV-0112 | |
| 4 VPC | 3.5 | M14 x 1 | R-009 | | 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 Inlet & Exhaust 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 | 2.7 | 3/8" | 9955-12 | | CV-0112 | |
| BV/BVX2 | 5.4 | 3/8" | R-009 | | CV-0118 | |
| V23A/V23AX7 | 9 | 3/4" | R-009 | | CV-0118 | |
| V235/V235X1 | 18 | 1" | AR-0316 | | | |
| V244/V244X2 | 32 | 1 1/4" | AR-0335 | | | |
| V255/V255X3 | 60 | 1 1/2" | AR-0735 | | | |
| V255X5 | 60 | 1 1/2" | AR-0735 | | | |
| 7V/7VX5 | 99 | 1 1/2" | AR-0735 | | | |
| 15V/15VX7 | 133 | 2" | AR-0780 | | | |
| 20VX10 | 214 | 2 1/2" | AR-1280 | | | |
| 20V/20VX15 | 294 | 2 1/2" | AR-1280 | | | |
| 15VD7.5 | 132 | 2" | AR-0780 | | | |
| 20VX15 | 214 | 2.5" | AR-1280 | | | |
| 2V235D1.5 | 36 | | AR-0335 | | | |
| 2-V244D2 | 36 | | AR-0335 | | | |
| 2-V255031D5 | 120 | | AR-0780 | | | |
| 2-7E7.5 | 198 | | AR-0780 | | | |
| 2-15VE7.5 | 264 | | AR-1280 | | | |
| 2-20VA15 | 428 | | AR-1680 | | | |
| 2-20VA20 | 588 | | AR-3080 | | | |
| 255 | 60 | 1.5" | AR-0735 | | | |
| ITT Pneumotive (Leiman Brothers) | | | | | | |
| B | 10 | 3/4" | R-015 | | | |
| C | 18 | 1" | AR-0316 | | | |
| 29-3J | 20 | 1" | AR-0316 | | | |
| 195-2 | 20 | 3/4" | AR-0316 | | | |
| C-3 | 22 | 1" | AR-0335 | | | |
| 30-3 | 35 | 1" | AR-0335 | | | |
| C-6 | 37 | 1 1/2" | AR-0335 | | | |
| 29-6J | 50 | 1 1/2" | AR-0735 | | | |
| 30-6 | 60 | 1 1/2" | AR-0735 | | | |
| 100 | 112 | 1 1/2" | AR-0780 | | | |
| 100J | 125 | 1 1/2" | AR-0780 | | | |
| 107/107J | 200 | 3" | 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.

Vacuum Pump Inlet & Exhaust Filters

Recommended Exhaust Filters for Vacuum Pumps

Vacuum
Pump Filters

| 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 | 14 | 3/4" | R-015 | | | |
| KC-15 | 15 | 1 1/4" | 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 | 107 | 2" (2) | AR-0780 | | | |
| KDH-130 | 134 | 2" | AR-0780 | | | |
| KDH-150 | 165 | 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 Pumps | | | | | | |
| 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 | 30 | 1 1/4" | AR-0335 | | | |
| 04133/04233 | 50 | 1 1/4" | AR-0735 | | | |
| 05131/05231 | 75 | 2" | 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 | | | |

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.

Vacuum Pump Inlet & Exhaust 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) |
|------------------------------|----------------------------|--|---|--|---|--|
| Leybold Heraeus 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 | 20.9 | | AR-0335 | | | |
| SV16B | 11.2 | | AR-0316 | | | |
| SV25B | 18.3 | 1/2" NPT | AR-0136 | | | |
| SV65B | 41.8 | | AR-0335 | | | |
| SV100B | 68.9 | | AR-0735 | | | |
| SV200 | 129.5 | | AR-0780 | | | |
| SV300 | 200 | 2" BSP | AR-0780 | | | |
| SV500 | 336 | | AR-1680 | | | |
| SV630 | 494.8 | | AR-3080 | | | |
| SV1200 | 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 Inlet & Exhaust Filters

Recommended Exhaust Filters for Vacuum Pumps

Vacuum
Pump Filters

| 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 | 1.06 | 3/8" | 9955-12 | | CV-0112 | |
| A-2 | 1.06 | 3/8" | 9955-12 | | CV-0112 | |
| A-10 | 1.6 | 3/8" | 9955-12 | | CV-0112 | |
| A-20 | 1.6 | 3/8" | 9955-12 | | CV-0112 | |
| A-222 | 3.5 | 1/2" | R-009 | | CV-0118 | |
| B-2 | 2.65 | 1/2" | 9955-12 | | CV-0112 | |
| B-3 | 5.5 | 3/4" | R-009 | | CV-0118 | |
| B-6 | 20 | 1 1/4" | AR-0316 | | | |
| B-20 | 3.53 | 1/2" | R-009 | | CV-0118 | |
| B-30 | 8.8 | 1" | R-009 | | CV-0118 | |
| B-222 | 7 | 3/4" | R-009 | | CV-0118 | |
| R-10 | 1.5 | 3/8" | 9955-12 | | CV-0112 | |
| R-20 | 1.5 | 3/8" | 9955-12 | | CV-0112 | |
| R-22 | 2.65 | 3/8" | 9955-12 | | CV-0112 | |
| R-55 | 5.5 | 3/8" | R-009 | | CV-0118 | |
| Maxima Pumps (Fisher Scientific) | | | | | | |
| D2A (01-057-2A) | 2.2 | KF 16 | 9956-12 | | CV-0112 | 14181 |
| D4A (01-057-4A) | 4.5 | KF 16 | R-009 | 14172 | CV-0118 | 14181 (3) |
| D8A (01-057-8A) | 7.0 | KF 25 | R-009 | 14173 | CV-0118 | 14182 |
| D16A (01-057-16A) | 14.1 | KF 25 | AR-0316 | 14173 | | |
| D30A (01-057-30A) | 26.8 | KF 40 | AR-0335 | 14174 | | |
| D60A (01-057-60A) | 36.7 | KF 40 | AR-0335 | 14174 (4) | | |
| D90A (01-057-90A) | 55 | KF 40 | AR-0735 | | | |
| M4C | 2.6 | | 9955-12, 9956-12 | | CV-0112 | |
| M6C | 3.4 | | R-009 | | CV-0118 | |
| M8C | 6.1 | | R-009 | | CV-0118 | |
| Precision Scientific Pumps | | | | | | |
| DD-20 | 0.7 | 3/4" | 9955-12 | | CV-0112 | |
| D-25 | 0.9 | 3/4" | 9955-12 | | CV-0112 | |
| S/PV-35 | 1.25 | 3/4" | 9955-12 | | CV-0112 | |
| DD-50 | 1.77 | 3/4" | 9955-12 | | CV-0112 | |
| D-75 | 2.7 | 3/4" | 9955-12 | | CV-0112 | |
| DD-90 | 3.2 | 3/4" | R-009 | | CV-0118 | |
| DD-100 | 3.54 | 3/4" | R-009 | | CV-0118 | |
| D-150 | 5.3 | 3/4" | R-009 | | CV-0118 | |
| DD/DDC-195 | 7 | 3/4" | R-009 | | CV-0118 | |
| S/D-300 | 10.6 | 1" | R-015 | | | |
| DD/DDC 310 | 11 | 3/4" | R-015 | | | |
| DD/DDC 475 | 17 | 3/4" | AR-0316 | | | |
| S/D-500 | 17.6 | 1 1/4" | AR-0316 | | | |
| S/D-1000 | 35.3 | 1 1/2" | AR-0335 | | | |
| S/D-1500 | 53 | 1 1/2" | 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 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.

Vacuum Pump Inlet & Exhaust 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) |
|---------------------|----------------------------|--|---|--|---|--|
| Quincy Pumps | | | | | | |
| QSVB-10 | 79 | 1 1/4" | AR-0735 | | | |
| QSVB-20 | 134 | 1 1/4" | AR-0780 | | | |
| QSVI-20 | 159 | 2 1/2" | AR-0780 | | | |
| QSVI-40 | 315 | 2 1/2" | AR-1280 | | | |
| QV-.75 | 8.5 | .5" NPT | R-009 | | CV-0118 | |
| QV-1 | 12 | .5" NPT | R-015 | | | |
| QV-1.5 | 25 | .75" NPT | AR-0335 | | | |
| QV-2 | 38 | 1" NPT | AR-0335 | | | |
| QV-3 | 50 | 1" NPT | AR-0735 | | | |
| QV-5 | 75 | 1.5" NPT | AR-0735 | | | |
| QV-5.5 | 103 | 1.5" NPT | AR-0780 | | | |
| QV-7.5 | 141 | 2" NPT | AR-0780 | | | |
| QV-10 | 189 | 2" NPT | AR-0780 | | | |
| QV-15 | 245 | 3" NPT | AR-1280 | | | |
| QV-20 | 378 | 3" NPT | AR-1680 | | | |
| QV-30 | 540 | 4" NPT | AR-3080 | | | |
| QV-40 | 716 | 4" NPT | 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.

Vacuum Pump Inlet & Exhaust Filters

Recommended Exhaust Filters for Vacuum Pumps

Vacuum
Pump Filters

| 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 Pumps | | | | | | |
| 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 | 16.9 | 3/4" | AR-0316 | | | |
| VL/VLV 40 | 30 | NW 25 | AR-0335 | 14183 | | |
| VF/VFE 41 | 27 | 3/4" | AR-0335 | | | |
| 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 | 67 | NW 65 | AR-0735 | | | |
| CLF/CLFE 141 | 94 | 1 1/2" | AR-0735 | | | |
| VFH/VFEH 161 | 108 | 2" | AR-0780 | | | |
| 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 | 18 | | AR-0316 | | | |
| VLV40-2 | 28 | 3/4" NPT | AR-0335 | | | |
| VLV40-3 | 28 | | AR-0335 | | | |
| VWZ702 | 494 | | AR-3080 | | | |
| VWZ1002 | 706 | | AR-3080 | | | |
| VG10 | 7 | | R-009 | | CV-0118 | |
| VG15 | 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 | 49 | 1-1/4" NPT | AR-0735 | | | |
| VC100 | 71 | 1-1/2" NPT | AR-0735 | | | |
| VC150 | 105 | 1-1/2" NPT | AR-0780 | | | |
| 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.

| Pump Model No. | Pump Rating CFM (Free Air) | Recommended Pump Exhaust (NPT Female Unless Otherwise Noted) | Balston Filter Non-Hazardous Non-Corrosive Applications | Recommended Balston Anodized Aluminum Pump-To-Filter Adaptor (1) | Balston Filter Hazardous and Corrosive Applications | Balston Stainless Steel Pump-To-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 | 235 | 3"AR-1280 | | | | |
| 8DB | 275 | 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 | 970 | 6"AR-3080 (2) | | | | |
| 12L | 1080 | 6"AR-3080 (2) | | | | |
| 17S | 1228 | 6"AR-3080 (2) | | | | |
| 17L | 1420 | 6"AR-3080 (2) | | | | |
| 19S | 1693 | 8"AR-3080 (2) | | | | |
| 19L | 1920 | 8"AR-3080 (2) | | | | |
| 23C | 2270 | 8"AR-3080 (2) | | | | |
| 23D | 2740 | 8"AR-3080 (2) | | | | |
| 27D | 3300 | 10" | AR-3080 (2) | | | |
| 33D | 5950 | 14" | AR-3080 (2) | | | |
| Sargent-Welch Pumps | | | | | | |
| 1373 | 10.6 | 1-20 | R-015 | 14163 | | |
| 1374 | 23 | 1-3/4-20 | AR-0335 | 14164 | | |
| 1375 | 35 | Square Flange | AR-0335 | | | |
| 1376 | 10.6 | 1-20 | R-015 (3) | 14163 | | |
| 1380 | 5.6 | 1-20 | R-009 | 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 | 53 | Square Flange | AR-0735 | | | |
| 1399 | 1.2 | 3/4-20 | 9955-12 | 14165 | CV-0112 | |
| 1400 | 0.9 | 3/4-20 | 9955-12 | 14165 | 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 | 0.9 | 3/4-20 | 9955-12 | 14165 | CV-0112 | |
| 8803K/8804K | 0.7 | 3/4-20 | 9955-12 | 14165 | CV-0112 | |
| 8805 | 1.8 | 1-20 | 9955-12 | 14166 | 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 | 14175 | CV-0112 | 14182 |
| 8814 | 5.6 | NW 25 | R-009 | 14173 | CV-0112 | 14182 |
| 8815 | 5.3 | 1-20 | R-009 | 14162 | CV-0118 | |
| 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 | 35.3 | NW 50 | AR-0335 | 14179 | | |
| 8871 | 53 | NW 50 | AR-0735 | 14179 | | |
| 8890 | 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 | |
| 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.

Vacuum Pump Inlet & Exhaust Filters

Recommended Exhaust Filters for Vacuum Pumps

Vacuum
Pump Filters

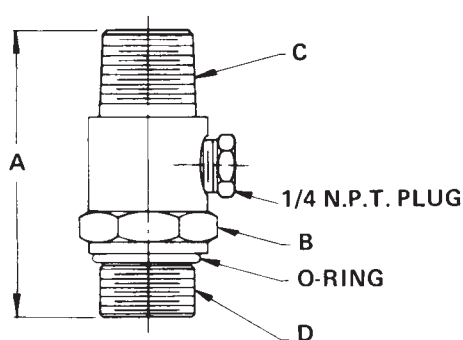
| Pump Model No. | Pump Rating CFM (Free Air) | Pump Exhaust (NPT Female Unless Otherwise Noted) | Recommended Balston Filter Non-Hazardous Non-Corrosive Applications | Balston Anodized Aluminum Pump-To-Filter Adaptor (1) | Recommended Balston Filter Hazardous and Corrosive Applications | Balston Stainless Steel Pump-To-Filter Adaptor (1) |
|---------------------|----------------------------|--|---|--|---|--|
| Stokes Pumps | | | | | | |
| V-005 | 7 | NW 25 | R-009 | 14173 | CV-0118 | 14182 |
| V-009 | 11 | NW 25 | R-015 | 14173 | | |
| V-013-2 | 20 | NW 40 | AR-0316 | 14174 | | |
| V-017-2 | 36.7 | NW 40 | AR-0335 | 14174 | | |
| V-23 | 55 | NW 40 | AR-0735 | 14174 (3) | | |
| 146H | 30 | 1 1/4" | AR-0335 | | | |
| 148H | 50 | 1 1/2" | AR-0735 | | | |
| 149H | 80 | 1 1/2" | AR-0735 | | | |
| 149HS | 100 | 1 1/2" | AR-0735 | | | |
| 212HS | 150 | 2" | AR-0780 | | | |
| 412H | 300 | 3" | AR-1280 | | | |
| 612H | 600 | 3" | AR-3080 | | | |
| 912H | 728 | 5" | AR-3080 | | | |
| 212J | 150 | 2" NPT | AR-0780 | | | |
| 412J | 300 | 3" NPT | AR-1280 | | | |
| 612J | 600 | 3" NPT | AR-3080 | | | |
| Ulvac Pumps | | | | | | |
| G-5 | 0.21 | M17 x 1 | 9955-12 | | CV-0112 | |
| G-15 | 0.63 | 3/4" | 9955-12 | | CV-0112 | |
| G/GC-25S | 0.84 | 3/4" | 9955-12 | | CV-0112 | |
| G/GC-20D | 0.84 | 3/4" | 9955-12 | | CV-0112 | |
| G-50S/D | 2.1 | 3/4" | 9955-12 | | CV-0112 | |
| GC-50D | 2.1 | 3/4" | 9955-12 | | CV-0112 | |
| G-100S/D | 4.2 | 1" | R-009 | | CV-0118 | |
| GC-100D | 4.2 | 1" | R-009 | | CV-0118 | |
| GVD-050 | 2.1 | 3/4" | 9955-12 | | CV-0112 | |
| GVD-100 | 5.6 | 1" | R-009 | | CV-0118 | |
| GVD-165 | 7 | 3/4" | R-009 | | CV-0118 | |
| DA-30S | 1.1 | 3/4" | 9955-12 | | CV-0112 | |
| DA-60S | 2.5 | 3/4" | 9955-12 | | CV-0112 | |
| D-330D | 9 | 1 1/2" | R-009 | | CV-0118 | |
| D-650D | 18 | 1 1/2" | AR-0316 | | | |
| D-950D | 27 | 2" | AR-0335 | | | |
| PKS-016 | 57 | 2" | AR-0735 | | | |
| PKS-030 | 107 | 3" | AR-0780 | | | |
| PKS-070 | 250 | 4" | AR-1280 | | | |
| PVD-180 | 6.4 | 3/4" | R-009 | | CV-0118 | |
| PDV-360 | 13 | 1" | R-015 | | | |
| Varian Pumps | | | | | | |
| CS/SS/SD-90 | 3.2 | NW 25 | R-009 | 14173 | CV-0118 | 14182 |
| EVAC 200 | 7 | 3/4" | R-009 | | CV-0118 | |
| EVAC 300 | 11 | 3/4" | R-015 | | | |
| CD/SD-200 | 7 | NW 25 | R-009 | 14173 | CV-0118 | 14182 |
| CD/SS/SD-300 | 11 | NW 25 | R-015 | 14173 | | |
| CD/SS/SD-700 | 27 | NW 40 | AR-0335 | 14174 | | |
| CD/SS/SD-1400 | 50 | NW 40 | AR-0735 | 14173 (3) | | |
| CD/SD-2500 | 90 | NW 50 | AR-0735 | 14179 (3) | | |

Notes:

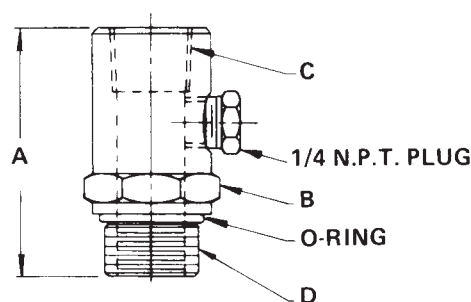
- 1 If no part number is listed, adaptor is not supplied by Parker. In most cases, customer can assemble adaptor from standard pipe fittings. Refer to pages 133-134.
- 2 Multiple filters piped in parallel are required.
- 3 Requires 3" Male x 1 1/2" Female reducing bushing supplied by customer.
- 4 Requires 2" Male x 1 1/2" Female reducing bushing supplied by customer.

Vacuum Pump Inlet & Exhaust Filters

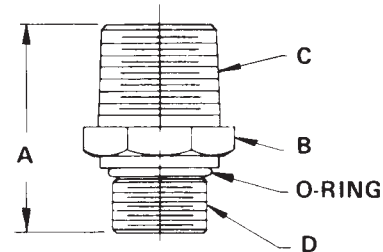
Pump to Filter Adaptors - Straight Thread to NPT Thread



Style 1



Style 2



Style 3

Vacuum
Pump Filters

Principal Specifications

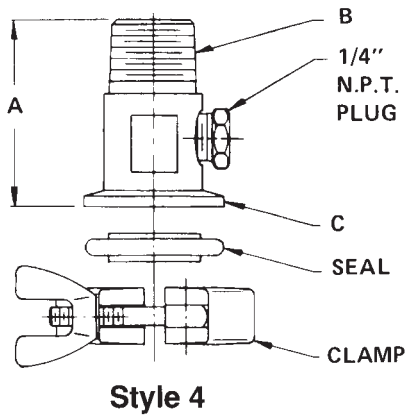
| Type | Adaptor Style | Materials of Construction | | Dimensions (Inches) | | | |
|-------|---------------|---------------------------|--------|---------------------|--------------|----------------|------------|
| | | Adaptor | Seals | (A) Height | (B) Hex Size | (C) NPT Thread | (D) Thread |
| 14168 | 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) | 3/4 BSPT |
| 14157 | 2 | | | 2.56 | | 1/2 F (1) | 3/8 BSPT |

Notes:

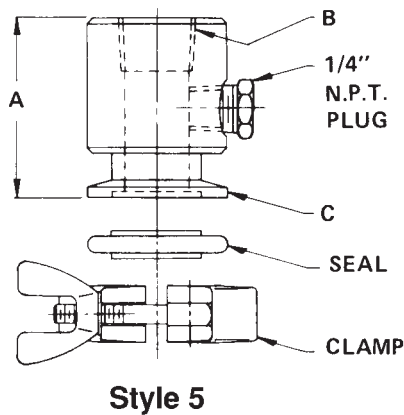
1 Female NPT - all others Male

Vacuum Pump Inlet & Exhaust Filters

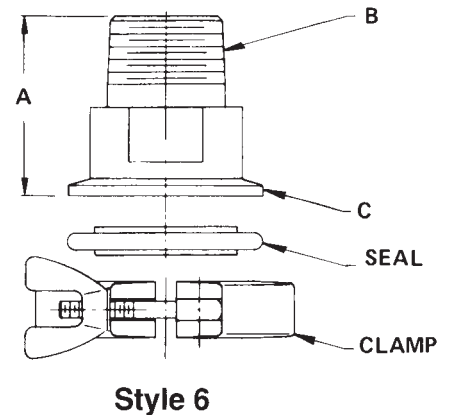
Pump to Filter Adaptors - Flange to NPT Thread



Style 4



Style 5



Style 6

Vacuum
Pump Filters

Principal Specifications

| Type | Adaptor Style | Materials of Construction | | | Dimensions | | | Other Fittings Included |
|-------|---------------|---------------------------|-------|-------|---------------------|-------------------------|-------------------|--|
| | | Adaptor | Clamp | Seals | (A) Height (inches) | (B) NPT Thread (Inches) | (C) KF Flange (2) | |
| 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 | | | | 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

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7. Special Tooling: A tooling charge may be imposed for any special tooling, including without limitation, dies, fixtures, molds and patterns, acquired to manufacture items sold pursuant to this contract. Such special tooling shall be and remain Seller's property notwithstanding payment of any charges by Buyer. In no event will Buyer acquire any interest in apparatus belonging to Seller which is utilized in the manufacture of the items sold hereunder, even if such apparatus has been specially converted or adapted for such manufacture and notwithstanding any charges paid by Buyer. Unless otherwise agreed, Seller shall have the right to alter, discard or otherwise dispose of any special tooling or other property in its sole discretion at any time.

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