

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. The Balston filters are also extremely effective at reducing the noise levels of the vacuum pump outlets.

Models 9955-12, 9956-12, 18/18, AR-0316

These models are used for pump flow rate of 3-20 CFM. The recommended filter is based upon the flow capacity equal to or less than the rated flow of the vacuum pump. The filter assemblies are shipped with filter cartridges and final filter pad.

Consult factory for larger pump applications.

For easy installation, pump-to-filter adaptors are available, see pages 10 and 11.



18/18



9955-12



AR-0316

Principal Specifications

Model #	9955-12-371H	9956-12-371H	18/18-371H	AR-0316-371H
Port Size	1/2" NPT	KF-16	3/4" NPT	1" NPT
Max. Flow Rate	3 CFM	3 CFM	9 CFM	20 CFM
Mat'l of Construction				
Head	---	---	---	Steel
Bowl	Nylon	Nylon	Steel	Steel
Internals	Nylon	Nylon	Steel	Anodized Aluminum
Seals	None	None	Viton	Buna/Neo
Max. Temperature	250°F (121°C)	250°F (121°C)	300°F (149°C)	300°F (149°C)
Max. Pressure	15 psig	15 psig	15 psig	15 psig
Shipping Weight	.25 lb. (0.1 kg)	.25 lb. (0.1 kg)	.8 lb. (0.4 kg)	8 lb. (4 kg)
Dimensions	2" Dia. x 3.7"H	2" Dia. x 3.7"H	3.5" Dia. x 5.4"H	7.4" Dia. x 8.8"H

Notes:

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

Ordering Information To order, simply select a filter assembly above with a flow rate capacity equal to or greater than the maximum flow capacity of your vacuum pump. For high flow rates, call Tech Support at 1-800-343-4048.

Model #	9955-12-371H	9956-12-371H	18/18-371H	AR-0316-371H
Number of Filter Cartridges Required	1	1	1	3
Replacement Filter Cartridges				
Box of 3	3/9955-12-371H	3/9956-12-371H	---	3/200-16-371H
Box of 7	---	---	---	---
Box of 10	9955-12-371H	9956-12-371 H	---	---
Cover (1), Optional	---	---	---	19158
No. Pressure Relief Retainers #20222	(2)	(2)	(2)	---

Vacuum Pump Inlet Filters

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

These 304 stainless steel housings are welded with KF flange inlet and outlet ports for high vacuum applications. They are designed to be used with grade 102 adsorbent cartridges for prevention of oil backstreaming*. 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 housing for liquid removal in vacuum applications. The Grade 30 cartridges are ideal for protecting the vacuum pump from contaminants that could cause pump damage and failure.



CF-0118-30

* Backstreaming is the migration of oil molecules from the vacuum pump to the vacuum chamber.

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 Preventing Oil Backstreaming	99.99%
Life	Approx. 10000 hrs at 10 microns vacuum
Efficiency for solids filtration	99.99% at 0.1 micron
Materials of Construction	Molecular Sieve Type 4A adsorbent, EPR Seals

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
Mat'l of Construction		
Head	304 Stainless Steel	304 Stainless Steel
Bowl	304 Stainless Steel	304 Stainless Steel
Internals	304 Stainless Steel	304 Stainless Steel
Seals	None	None
Max. Temperature	180°F (82°C) (1)	180°F (82°C) (1)
Shipping Weight	0.5 lb. (0.2 kg)	0.8 lb. (0.4 kg)
Dimensions	2.9"W x 4.4"L (7 cm x 11 cm)	3.9"W x 5.9"L (10 cm x 15 cm)

Notes:

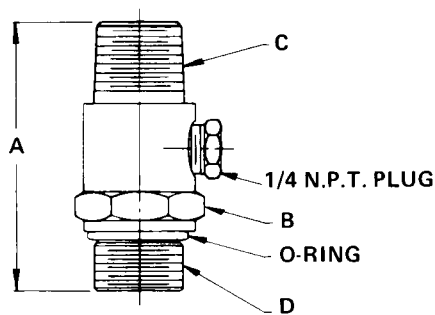
- 1 Maximum temperature grade 102 cartridge is 100°F (38°C)
- 2 Filter cartridge is permanently sealed into housing. The entire unit is disposable.

Ordering Information To order, simply select a filter assembly above with a flow rate capacity equal to or greater than the max. flow capacity of your vacuum pump. For higher flow rates, call Tech Support at 1-800-343-4048.

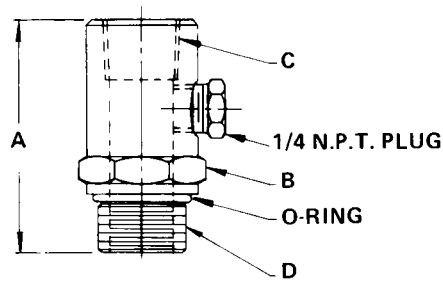
Model #	CF-0112	CF-0118
Assembly with Grade 30 Particulate Filter	CF-0112-30	CF-0118-30
Assembly with Grade 102 Backstreaming Filter	CF-0112-102	CF-0118-102
Number of Filter Cartridges Required (2)	N/A	N/A

Pump to Filter Adaptors

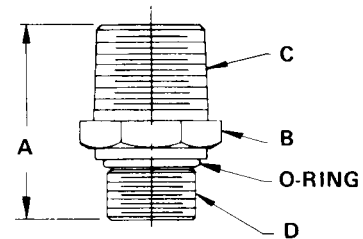
Straight Thread to NPT Thread



Style 1



Style 2



Style 3

Principal Specifications

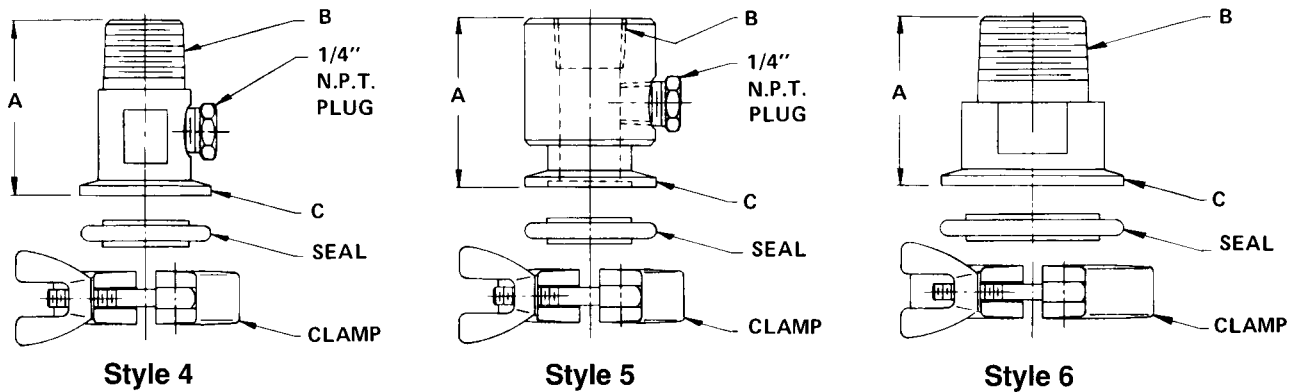
Type	14168	14166	14165	14164	14163	14162	14160	14159	14158	14157
Adaptor Style	1	2	2	3	3	1	3	1	2	2
Materials of Construction		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Adaptor		Buna-N	Buna-N	Buna-N	Buna-N	Buna-N	Buna-N	---	---	---
Seals										
Dimensions (inches)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

Notes:

1 Female NPT - all others male.

Pump to Filter Adaptors

Flange to NPT Thread



Principal Specifications

Type	14184	14183	14182	14181	14180	14179	14178	14177	14176	14175	14174	14173	14172
Adaptor Style	6	6	4	4	6	6	6	6	6	5	6	4	4
Materials of Construction													
Adaptor	Stain. St.	Alum.	Stain. St.	Stain. St.	Alum.	Stain. St.	Stain. St.	Stain. St.	Stain. St.	Alum.	Alum.	Alum.	Alum.
Clamp	Alum.	Alum.	Alum.	Alum.	Alum.	Alum.	Alum.	Alum.	Alum.	Alum.	Alum.	Alum.	Alum.
Seals	Viton	Viton	Viton	Viton	Viton	Viton	Viton	Viton	Viton	Viton	Viton	Viton	Viton
Dimensions (inches)													
A - Height	2.0	2.38	2.06	2.12	2.0	2.62	2.38	2.0	2.0	2.0	2.0	2.06	2.12
B - NPT Thread	1	1 1/2	1/2	1/2	1	1 1/2	1 1/2	1	1	1/2 F (1)	1	3/4	1/2
C - KF Flange	KF-40	KF-25	KF-25	KF-16	KF-16	KF-50	KF-40	KF-25	KF-16	KF-25	KF-40	KF-25	KF-16
D - Thread	3/4"x1/2"										1 1/2"x1"	1"x3/4"	1/2" coupling
Other Fittings Included	Reducing Bushing										Reducing Bushing	Reducing Bushing	3/4"x1/2" Reducing

Notes:

1 Female NPT - all others male.