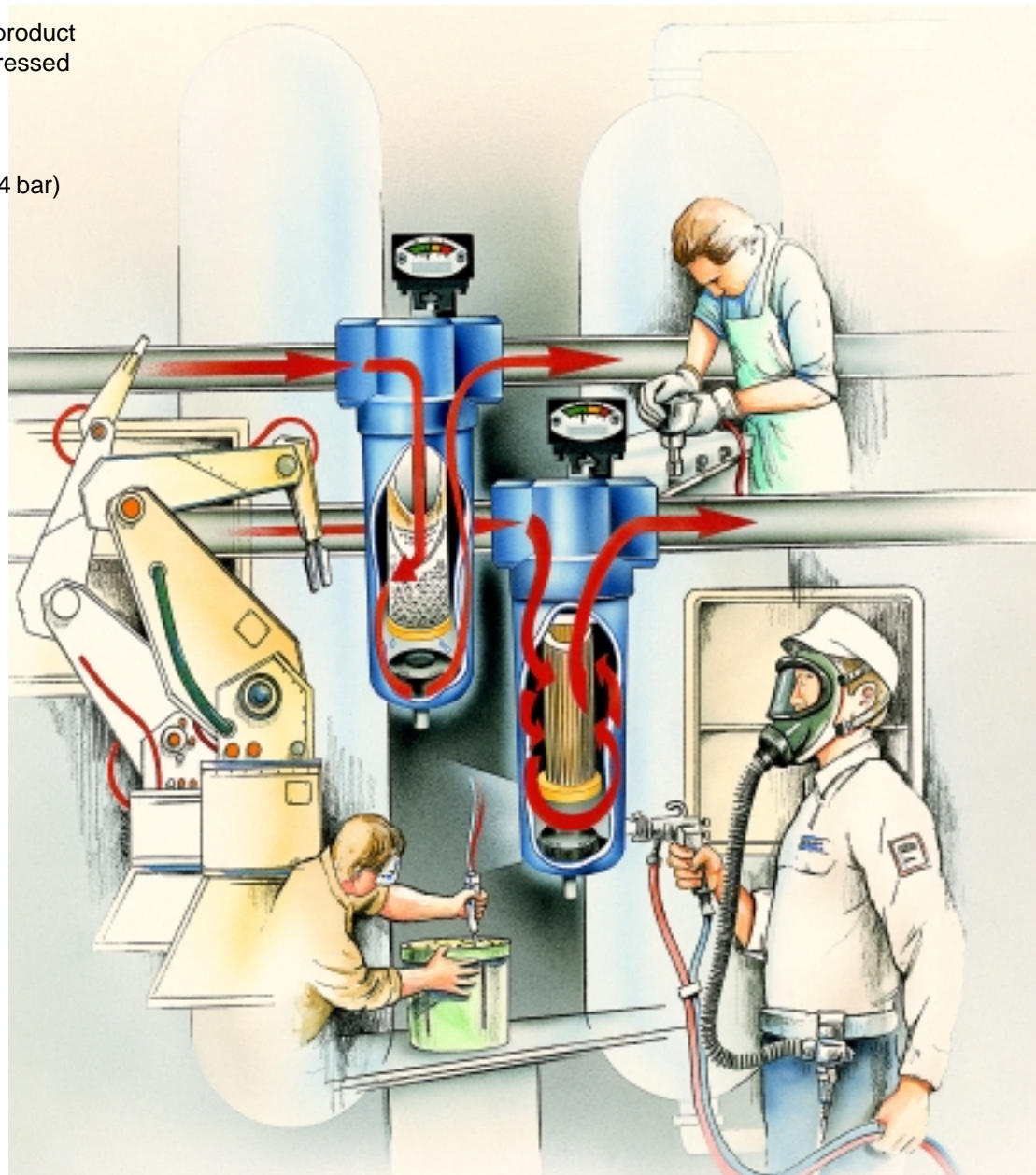


Finite Filter Division's International H-Series is the right solution for most compressed air/gas applications. The International H-Series housings are available with oil removal (coalescing), particulate and oil vapor removal elements.

This world class, world quality product can greatly improve your compressed air and gas systems.

- ◆ **Pressure To:** 500 PSIG (34 bar)
- ◆ **Porting:** 1/4" - 3" (NPT - BSPF - BSPT)
- ◆ **Flows:** 10 - 1600 SCFM (17-2822 m³/hr)
- ◆ **Construction:** All aluminum with powder paint finish
- ◆ **Design:** In-line threaded bowl to head



Typical Applications

Coalescing (Oil Removal)

- ◆ Dryer protection
- ◆ Paint spray booths
- ◆ Breathing air
- ◆ Tool protection
- ◆ Valve protection
- ◆ Cylinder protection
- ◆ Compressed air system protection

Interceptor (Particulate Removal)

- ◆ Desiccant dryer afterfilter
- ◆ Prefilter for coalescer
- ◆ Systems with high particulate concentration
- ◆ Particulate protection for non lubricated systems

Adsorber (Vapor Removal)

- ◆ Odor removal
- ◆ Breathing air
- ◆ Food packaging machines
- ◆ High purity laboratory gases

Media Selection Chart

Find your (or similar) application in the chart below or from the basic application circuits on the previous page. Determine media grade, media type, and end seal required.

Coalescing (Oil Removal) Filter Media

Coalescing elements are wrapped in color netting corresponding to media grades below.

Media Grade
Media Type
End Seal

2

APPLICATIONS: Extremely fine particulate and "last trace" aerosol coalescing filtration; for lighter molecular weight gases and aerosols at higher pressures. Coalescing of electronic grade gases and critical purge gases.

4

APPLICATIONS: Very high-efficiency coalescer; for medium elevated pressures between **150 & 500 psig** (10 & 34 bar) or lighter weight aerosols. Protection of fluidic systems and critical modulating systems such as flow and temperature controllers.

6

APPLICATIONS: General air coalescing applications when total removal of liquid aerosols and suspended fines is required in all pressure ranges. Protection of air gauging, air logic, modulating systems, critical air conveying, most breathing air systems, etc.

8

APPLICATIONS: Good air coalescing efficiency in combination with high flow rate and long element life. Protection of non-critical circuit components such as valves, cylinders, etc.

10

APPLICATIONS: Pre-coalescer or pre-filter for Grade 6 to remove gross amounts of water and oil, or tenacious aerosols which are difficult to drain. Upgrading existing particulate equipment to coalescing without increase in pressure drop.

Media Specifications (Grades 2, 4 and 6 are .01 micron filters)

Grade Designation	Coalescing Efficiency .3 to .6 Micron Particles	Maximum Oil Carryover ¹ PPM w/w	Pressure Drop (PSID) ² @ Rated Flow	
			Media Dry	Media Wet With 10-20 wt. oil
2	99.999%	.001	1.5	4-6
4	99.995%	.003	1.25	3-4
6	99.97%	.008	1.0	2-3
8	98.5%	.2	.5	1-1.5
10	95%	.83	.5	.5-1

¹Tested per BCAS 860900 at 40 ppm inlet.

²Add dry + wet for total pressure drop.

Media Type

C: Micro-glass coalescer

Q: Coalescer with built-in pre-filter

D: High -Temperature **450°F** (232°C) micro-glass

End Seal

Blank: 1/4" to 1" No end seals - standard.

U: Molded Urethane, standard on all 1 1/4" to 3" filters and all coalescers with built-in pre-filters, optional on other sizes.

S: Molded Silicone used for high-temperature **450°F** (232°C) seal.

Interceptor (Particulate Removal) Filter Media

3PU

APPLICATIONS: Particulate removal where very high dirt-holding capacity is required. Safety afterfilter for desiccant dryer, pore matched prefilter for coalescer or as general use for final instrument air protection.

Media Specifications

Grade Designation	Absolute Efficiency Rating	Pressure Drop (PSID) @ Rated Flow Media Dry
3P	3µm	.25

Media Type (P): Pleated cellulose.

End Seal (U): Molded urethane, standard on all pleated cellulose filters.

Adsorption (Vapor Removal) Filter Media

AU

APPLICATIONS: Polishing gas stream of final trace amounts of hydrocarbon contaminants, usually .5 to 2 ppm inlet concentrations. Preparation for breathing air; hydrocarbon vapor removal.

Media Specifications

Grade Designation	Oil Vapor Removal Efficiency	Pressure Drop (PSID) @ Rated Flow Media Dry
AU	99%+	1

Media Type (A): Activated charcoal adsorber.

End Seal (U): Molded urethane, standard on all activated charcoal filters.

Special Note: Activated charcoal adsorbers should always be preceded by a coalescer.

Housing Selection Chart

Rated Flows: SCFM @ 100 PSIG (m³/hr @ 7 bar) ±10%
See page 8 for other pressures

Housing Assembly	Port Size	2	4	STANDARD 6 C/CU/QU/DS	8	10	AU Adsorbers	3PU Interceptors
		←				→		
H□1S	1/4"	8 (14)	11 (19)	15 (26)	20 (34)	25 (43)	15 (26)	25 (43)
H□15S	3/8"	11 (19)	15 (26)	20 (34)	27 (46)	33 (56)	20 (34)	33 (56)
H□2S	1/2"	14 (24)	19 (32)	25 (43)	34 (58)	42 (71)	25 (43)	42 (71)
H□1L	1/4"	16 (27)	23 (39)	30 (51)	41 (68)	50 (85)	30 (51)	50 (85)
H□15L	3/8"	22 (37)	30 (51)	40 (68)	55 (94)	66 (112)	40 (68)	66 (112)
H□2L	1/2"	27 (46)	38 (65)	50 (85)	68 (116)	83 (141)	50 (85)	83 (141)
H□3S	3/4"	44 (75)	61 (104)	80 (136)	109 (185)	133 (226)	80 (136)	133 (226)
H□4S	1"	55 (94)	76 (129)	100 (170)	136 (231)	166 (282)	100 (170)	166 (282)
H□4L	1"	76 (129)	106 (180)	140 (238)	191 (325)	232 (394)	140 (238)	232 (394)
H□5S	1 1/4"	135 (230)	190 (323)	250 (425)	330 (461)	415 (706)	250 (425)	415 (706)
H□6S	1 1/2"	190 (323)	260 (442)	350 (595)	465 (791)	600 (1020)	350 (595)	600 (1020)
H□8S	2"	245 (417)	340 (578)	450 (765)	600 (1020)	750 (1275)	450 (765)	750 (1275)
H□8L	2"	335 (570)	470 (799)	625 (1063)	830 (1411)	1035 (1760)	625 (1063)	1035 (1760)
H□0L	2 1/2"	430 (731)	600 (1020)	800 (1360)	1060 (1802)	1330 (2261)	800 (1360)	1330 (2261)
H□12L	3"	545 (927)	750 (1275)	1000 (1700)	1330 (2261)	1660 (2822)	1000 (1700)	1660 (2822)

Pre-Installed Accessory Options

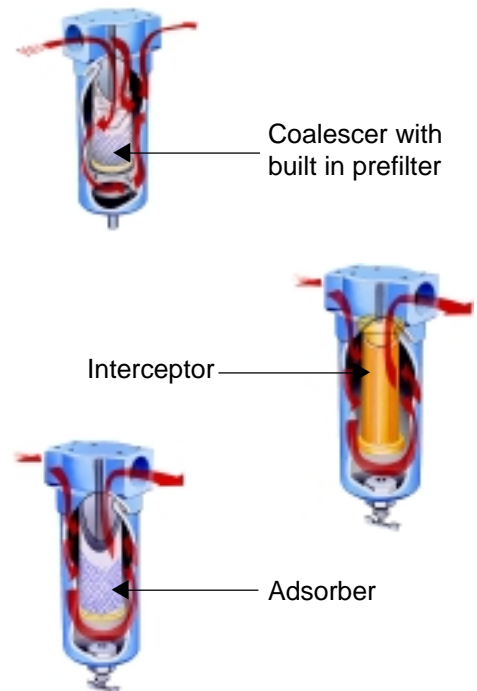
Accessory Designator	Auto Drain	DPI Indicator	DPG Gauge	High Temp	DP Ports	Viton Seals	No Accessories	Pressure/Temp		Pressure/Temp	
								PSIG	Degrees F	bar	Degrees C
A								250	175	17	79
D								250	175	17	79
G								500	175	34	79
J								250	450	17	232
N								500	175	34	79
P								250	175	17	79
V								500	175	34	79
W								250	175	17	79
X								250	175	17	79
Y								250	175	17	79

How To Order

H	N	1 2	L - 6	C	U	G	
Series Name	Port Type	Port Size	Bowl	Element Grade	Element Type	End Seal	Accessories
N - NPT F - BSPF T - BSPT*	1 - 1/4" 15 - 3/8" 2 - 1/2" 3 - 3/4" *3/4" - 3" only	4 - 1" 5 - 1 1/4" 6 - 1 1/2" 8 - 2" 0 - 2 1/2" 12 - 3"	S - Standard L - Long	2 4 6 8 10 3 Leave Blank for Adsorber	C - Coalescer Q - Coalescer w/built-in prefilter D - High Temp I - Inner Ret. (1/4" - 1") P - Pleated Cellulose A - Adsorber	Blank - No end seal Standard on 1/4" - 1" U - Urethane Standard on 1 1/4" & up S - Silicone	A - Auto Drain D - DPI Indicator (1/4" - 1/2") G - DPG Gauge (Std. on 3/4" & up) J - High Temp. N - No Accessories P - 1/8" Differential (3/4" & up) Sensing Ports V - Viton Seals W - A + D X - A + P Y - A + G

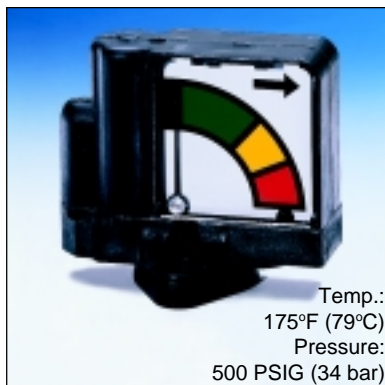
Replacement Element Part Numbers

Housing Assembly	Media Type (* Insert selected grade 2, 4, 6, 8, 10)			
	Coalescer	Coalescer w/ built-in prefilter	Interceptor	Adsorber
H□ 1S	*C10-025	*QU10-025	3PU10-025	AU10-025
H□ 15S	*C10-025	*QU10-025	3PU10-025	AU10-025
H□ 2S	*C10-025	*QU10-025	3PU10-025	AU10-025
H□ 1L	*C10-050	*QU10-050	3PU10-050	AU10-050
H□ 15L	*C10-050	*QU10-050	3PU10-050	AU10-050
H□ 2L	*C10-050	*QU10-050	3PU10-050	AU10-050
H□ 3S	*C15-060	*QU15-060	3PU15-060	AU15-060
H□ 4S	*C15-060	*QU15-060	3PU15-060	AU15-060
H□ 4L	*C15-095	*QU15-095	3PU15-095	AU15-095
H□ 5S	*CU25-130	*QU25-130	3PU25-130	AU25-130
H□ 6S	*CU25-130	*QU25-130	3PU25-130	AU25-130
H□ 8S	*CU25-187	*QU25-187	3PU25-187	AU25-187
H□ 8L	*CU25-235	*QU25-235	3PU25-235	AU25-235
H□ 0L	*CU35-280	*QU35-280	3PU35-280	AU35-280
H□ 12L	*CU35-280	*QU35-280	3PU35-280	AU35-280



Note: Ports on head are marked 1 and 2. Coalescers flow from Port 1 to Port 2. Adsorbers and interceptors flow from Port 2 to Port 1.

International H-Series Accessories



DPG-15 Differential Pressure Gauge



AD-12 Automatic Drain Valve (Internal)



VS-50 Visual Sump Drain



MS-50 Metal Sump Drain (External)

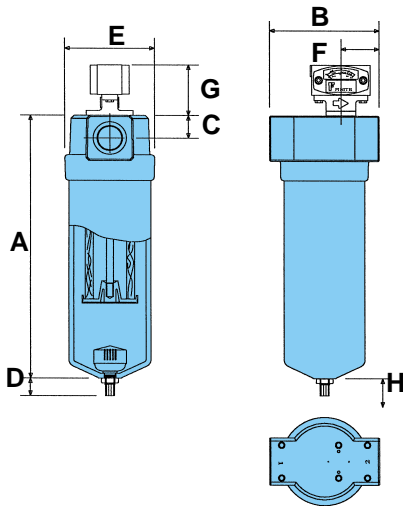


TV-98 Timed Drain Valve



ZLD-10 Zero Loss Drain

1/4" to 1" Housings



Specifications

Max. Pressure: **500 psig** (34 bar)
 Safety Factor: Max. operating to burst 4:1
 Max Temp.: **175°F** (79°C) with option to **450°F** (232°C)
 Seals: Nitrile Std./Viton optional
 Materials: Aluminum - 380 Die cast heads;
 6061 Drawn bowls
 Coatings: Chromated heads and bowls;
 Powder painted exterior
 Design: In-line threaded bowl to head

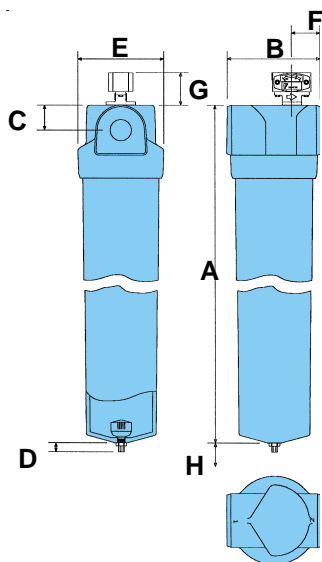
Note: Manual Drain Port is 1/8" FNPT when tee valve is removed from drain bushing.

Model	A	B	C	D	E	F	G	H*	Sump (ml)	Weight
H□1S	7.13 (181)	3.11 (79)	.55 (14)	.79 (20)	2.87 (73)	1.56 (39.5)	2.28 (58)	2.99 (76)	150	1.49 (.68)
H□15S	7.13 (181)	3.11 (79)	.55 (14)	.79 (20)	2.87 (73)	1.56 (39.5)	2.28 (58)	2.99 (76)	150	1.47 (.66)
H□2S	7.13 (181)	3.11 (79)	.55 (14)	.79 (20)	2.87 (73)	1.56 (39.5)	2.28 (58)	2.99 (76)	150	1.44 (.65)
H□1L	9.61 (244)	3.11 (79)	.55 (14)	.79 (20)	2.87 (73)	1.56 (39.5)	2.28 (58)	5.51 (140)	140	1.89 (.86)
H□15L	9.61 (244)	3.11 (79)	.55 (14)	.79 (20)	2.87 (73)	1.56 (39.5)	2.28 (58)	5.51 (140)	140	1.87 (.85)
H□2L	9.61 (244)	3.11 (79)	.55 (14)	.79 (20)	2.87 (73)	1.56 (39.5)	2.28 (58)	5.51 (140)	140	1.85 (.84)
H□3S	10.75 (273)	4.65 (118)	.98 (25)	.79 (20)	3.68 (93.5)	1.73 (44)	2.28 (58)	6.5 (165)	270	3.56 (1.61)
H□4S	10.75 (273)	4.65 (118)	.98 (25)	.79 (20)	3.68 (93.5)	1.73 (44)	2.28 (58)	6.5 (165)	270	3.29 (1.49)
H□4L	14.25 (362)	4.65 (118)	.98 (25)	.79 (20)	3.68 (93.5)	1.73 (44)	2.28 (58)	10.00 (254)	270	4.11 (1.86)

Special Note: Dimensions are in **inches** (millimeters); weight is in **pounds** (kilograms).

* Clearance required to remove bowl.

1 1/4" to 3" Housings



Specifications

Max. Pressure: **500 psig** (34 bar)
 Safety Factor: Max. operating to burst 4:1
 Max Temp.: **175°F** (79°C) with option to **450°F** (232°C)
 Seals: Nitrile Std./Viton optional
 Materials: Aluminum - 356 Sand cast heads;
 6061 Drawn bowls
 Coatings: Chromated heads and bowls;
 Powder painted exterior
 Design: In-line threaded bowl to head

Note: Manual Drain Port is 1/8" FNPT when tee valve is removed from drain bushing.

Model	A	B	C	D	E	F	G	H*	Sump (ml)	Weight
H□5S	18.23 (463)	6.0 (152)	1.65 (42)	.83 (21)	5.67 (144)	1.85 (47)	2.28 (58)	13.50 (343)	440	12.11 (5.49)
H□6S	18.23 (463)	6.0 (152)	1.65 (42)	.83 (21)	5.67 (144)	1.85 (47)	2.28 (58)	13.50 (343)	440	11.97 (5.43)
H□BS	24.29 (617)	6.0 (152)	1.65 (42)	.83 (21)	5.67 (144)	1.85 (47)	2.28 (58)	19.25 (489)	530	14.00 (6.35)
H□BL	29.33 (745)	6.0 (152)	1.65 (42)	.83 (21)	5.67 (144)	1.85 (47)	2.28 (58)	24.02 (610)	620	15.99 (7.25)
H□DL	35.98 (914)	8.0 (203)	2.4 (61)	.83 (21)	7.24 (184)	2.36 (60)	2.28 (58)	28.50 (724)	880	35.00 (15.87)
H□12L	35.98 (914)	8.0 (203)	2.4 (61)	.83 (21)	7.24 (184)	2.36 (60)	2.28 (58)	28.50 (724)	880	34.14 (15.48)

Special Note: Dimensions are in **inches** (millimeters); weight is in **pounds** (kilograms).

* Clearance required to remove bowl.

Sizing Chart for Grade 6

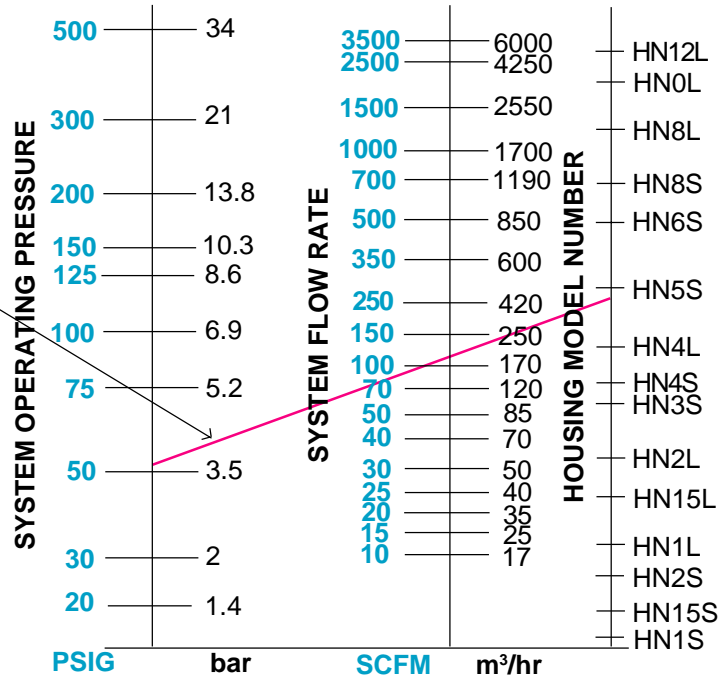
For pressures other than
100 PSIG/7 bar

Instructions for Sizing Chart

1. Locate system pressure in PSIG or bar.
2. Locate system flow in SCFM or m³/hr.
3. Lay straight edge on pressure through flow points (see example).
4. Locate filter housing model number.

For grades other than 6C, 6Q or AU, multiply flow rate by these factors first:

- 2C - 1.83
- 4C - 1.32
- 8C - .73
- 10C - .6
- 3P - .6



Finite Sizing Equation

$$\text{System Flow Rate} \times \frac{100 \text{ PSIG} + 14.7}{\text{System Pressure} + 14.7} \times \frac{\text{System Temp } ^\circ\text{F} + 460}{530} = \text{Adjusted Flow Rate (At 100 PSIG)}$$

! WARNING

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