Multi-Basket Strainers and Multi-Bag Filters

These multi-basket strainers and bag filters offer a wide range of flow capacities and contaminant-holding capabilities. They contain from 2 to 23 baskets.

To serve as a strainer, a unit is ordered with perforated stainless steel baskets (mesh-lined if desired). When ordered as a filter, it's fitted with perforated stainless steel baskets designed to hold disposable or cleanable filter bags. Accepts industry-standard #1 and #2 size filter bags, or 500 series pleated cartridges (see page 150).

The standard pressure rating for all models is 150 psi. All housings can be supplied with an ASME code stamp, if required.

Features

- Multiple housing styles available (standard, quick access, low profile, hinged)
- Permanently piped housings are opened without tools and without disturbing the piping
- Machined cover gasket groove provides positive O-ring sealing
- Carbon steel, 304 or 316 stainless steel construction housings
- Large-area, 30 inch deep, heavy-duty, 9/64 inch perforated baskets
- Easy to clean
- Low pressure drop
- Four cover seal materials: Buna N, Ethylene Propylene, Viton®, and Teflon®
- Pressure rating 150 psi
- Flanged connections for 2 through 12 inch pipe
- Vent, drain and gage connections

Options

- ASME code stamp
- NSF 61 Certification
- Higher pressure ratings
- Corrosion allowances
- Steam jackets
- Special connection locations
- Bag hold down assembly (standard on QII design)
- Inner baskets for dual-stage straining or filtering
- Cleanable wire mesh lined or perforated strainer baskets
- Special alloy materials
- Hydraulic cover lifting assembly
- Sanitary fittings
- Differential pressure indicators

NSF®
Certified to NSF/ANSI 61

Duplex Systems

All multi-basket models described here are also available as duplex systems. Two units come piped together with valves to permit continuous use of either unit while servicing the other. One lever actuates all valves simultaneously or it can be ordered for automatic service. See page 82.

Choose Housing Style

Designed to suit your requirements

The versatility of Rosedale Products provides a choice of several different designs.

- **Standard Housing Design (STD)** is durable and economic. It includes a davit arm and handwheel to facilitate cover removal. It is our most versatile housing design offering a variety of options, including our low profile design.

- **Spring Access Cover Design (HLP)** opens and closes without effort. Simply loosen the swing bolts and lift the cover up to open. An automatic cover stop is provided. See page 46 for details.

- **Quick Access Cover (QII)** features a unique counter weight design that makes opening, closing, and change-out, fast, easy, and simple. This will significantly reduce change-out time and lower operating costs. The QAC is rated to 150 PSI and constructed to meet ASME code requirements. Built-in safety features ensure that the cover cannot be opened unless the internal pressure is first released. The QII is offered with our low profile design making bags more accessible and easy to remove.

- **Low Profile Design (SLP) Housings** are compact and space saving, allowing for ease of bag change-out. Standard operating height is reduced, resulting in a safe design by eliminating platforms and ladders. The SLP is manufactured in any housing version, including our standard davit arm cover, QAC design, and spring assisted hinged cover.

Standard Davit Arm

Spring Access Cover

QII Quick Access Cover

Low Profile Design

Choose Baskets That Strain or Filter

Whatever your needs dictate

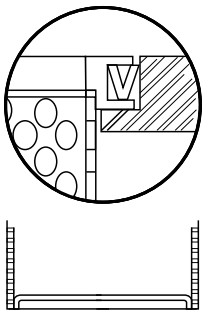
Strainer baskets are cleanable, reusable.

A seal is supplied on any strainer basket. It forms a seal between basket and housing to prevent dirty fluid bypass. Choose between various perforation sizes or wire mesh. Strainer baskets have flat, non-perforated bottoms and contain heavy-duty handles.

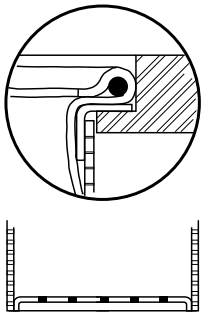
Filter bag baskets hold disposable filter bags.

Filter bags have an interference fit between the bags top rim and the housing causing a positive seal to prevent fluid bypass. Filter bag baskets have flat perforated bottoms.

Filter bags are available in a wide variety of felt, micro-fiber, monofilament and multifilament mesh materials. They are detailed completely on pages 150.



Model 24 with Strainer Baskets



Model 24 shown with PL Series Cartridge

DUAL-STAGE– Dual-stage action will increase strainer or filter life and reduce servicing needs. This straining/filtering action can be achieved by ordering a second, inner basket. It is supported on the top flange of the outer basket. Both baskets can be utilized as strainers (with or without wire mesh linings), filter bag baskets, or a combination of strainer and bag basket.

Basket Data

Surface area of each 30 in. basket: 4.4 sq. ft.

Volume of each 30 in. basket: 0.6 cu. ft.

Basket Construction

For cleanable strainer baskets, choose from the following perforation diameters: 1/4, 3/16, 9/64, 3/32, or 1/16 inch (for other not shown consult factory).

Any perforated basket can also be ordered lined with wire mesh. Stainless steel wire is used in mesh sizes 20, 30, 40, 50, 60, 70, 80, 100, 150, or 200.

Filter bag baskets, have standard 9/64 inch diameter perforations that are 51% open area. A wire mesh can also be utilized with bag baskets for two advantages:

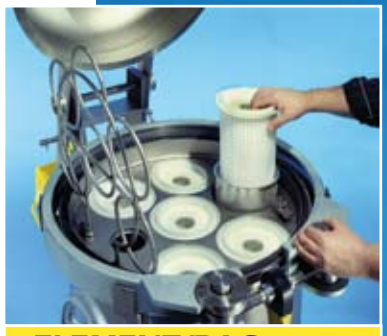
1. Fiber migration is minimized.
2. In the unlikely event of bag rupture, the wire mesh better contains the contaminant.

QII

SAFETY VALVE MECHANISM

COUNTER BALANCED COVER

HANDWHEEL OPERATION OF TURNBUCKLE MECHANISM



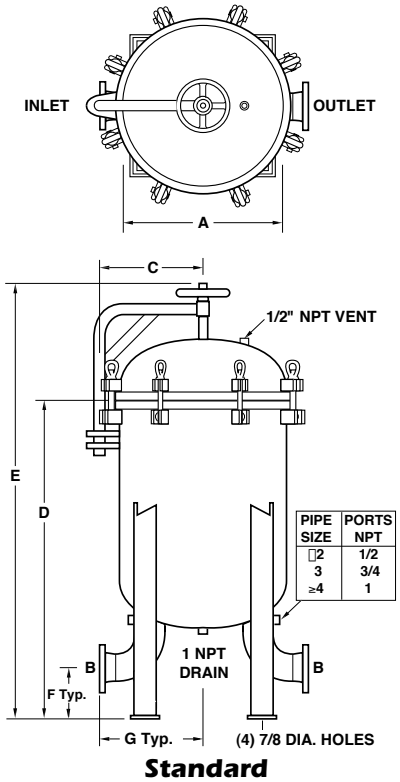
ELEMENT/BAG RETAINING DEVICE

MODEL NUMBER & Dim. A	Pipe Sizes B	Leg Bolt Circle Dia.	Standard C	D	E	F	G	Weight, lb (Approx)	Low Profile H	I	J	K	L
16	2	14.0	10.9	40.1	57.1	4.50	10.5	400	37.9	54.9	8.00	15.0	13.0
	3			42.5	59.5	5.25	12.3	425	38.3	55.3	9.00	17.0	14.0
	4			44.9	61.9	6.00	14.0	450	N/A	N/A	N/A	N/A	N/A
18	2	16.0	11.9	40.5	58.0	4.50	11.1	450	39.6	58.5	8.00	15.0	14.0
	3			42.9	60.4	5.25	12.9	475	40.0	58.9	9.00	17.0	15.0
	4			45.3	62.8	6.00	14.6	500	N/A	N/A	N/A	N/A	N/A
22	2	20.0	14.0	41.4	60.0	4.50	11.9	485	39.5	58.0	8.00	15.0	16.0
	3			43.9	62.4	5.25	13.7	500	40.0	58.5	9.00	17.0	17.0
	4			46.2	64.7	6.00	15.4	515	39.5	58.0	9.00	19.0	18.0
	6			50.4	69.0	7.00	18.9	560	N/A	N/A	N/A	N/A	N/A
24	2	22.0	15.0	41.7	60.7	4.50	13.1	675	41.2	61.6	8.00	15.0	17.0
	3			44.1	63.1	5.25	14.8	700	41.6	62.0	9.00	17.0	18.0
	4			46.5	65.5	6.00	16.6	725	41.1	61.5	9.00	19.0	19.0
	6			50.7	69.7	7.00	20.1	750	N/A	N/A	N/A	N/A	N/A
30	2	28.0	18.0	42.8	63.3	4.50	15.2	635	41.3	61.9	8.00	15.0	20.5
	3			45.2	65.7	5.25	17.0	650	41.8	62.4	9.00	17.0	21.0
	4			47.6	68.1	6.00	18.7	665	41.3	61.9	9.00	19.0	22.5
	6			51.9	72.4	7.00	22.2	705	41.2	61.8	10.0	17.0	23.0
	8			56.4	76.8	8.25	25.7	850	N/A	N/A	N/A	N/A	N/A
36	3	34.0	21.0	46.4	68.4	5.25	18.8	840	43.3	64.5	9.00	17.0	24.0
	4			48.8	70.8	6.00	20.6	860	43.2	64.5	9.50	19.0	25.0
	6			53.1	75.1	7.00	24.1	870	43.2	64.4	10.5	17.0	26.0
	8			57.6	79.6	8.25	27.6	1010	43.2	64.4	11.5	17.0	27.0
	10			62.1	84.1	9.50	30.6	1150	N/A	N/A	N/A	N/A	N/A
42	4	40.0	24.0	50.0	73.5	6.00	22.6	1840	45.9	70.7	9.50	19.0	28.0
	6			54.3	77.8	7.00	26.1	1870	45.9	70.6	10.5	17.0	28.0
	8			58.8	82.3	8.25	29.6	1960	45.9	70.6	11.5	17.0	29.5
	10			63.3	86.8	9.50	32.6	2070	45.8	70.5	12.5	17.0	30.0
	12			68.0	91.5	11.0	36.1	2200	N/A	N/A	N/A	N/A	N/A
48	4	46.0	27.0	51.0	76.0	6.00	24.8	2015	46.5	71.5	9.50	19.0	32.0
	6			55.4	80.4	7.00	28.3	2075	46.4	71.4	10.5	17.0	32.0
	8			60.0	85.0	8.25	31.8	2200	46.4	71.4	11.5	17.0	32.5
	10			64.4	89.4	9.50	34.8	2350	46.4	71.4	12.5	17.0	33.0
	12			69.2	94.2	11.0	38.3	2530	N/A	N/A	N/A	N/A	N/A

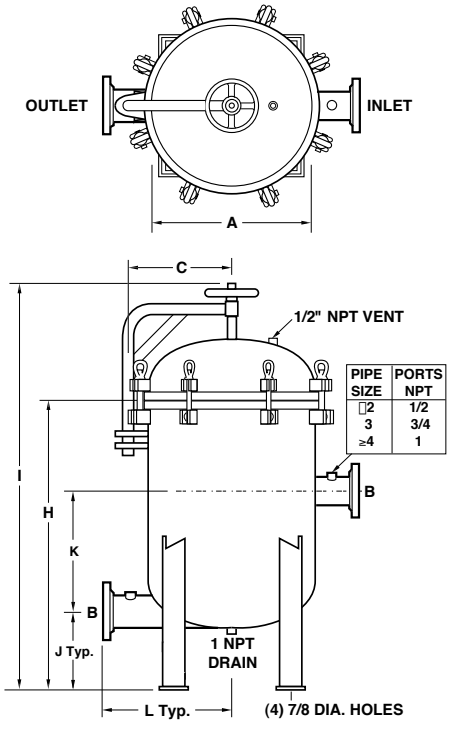
Dimensions (IN)

(30-inch deep basket)

Dimensions are reference only and should not be used for hard plumbing. Consult factory for certified drawings.



Standard

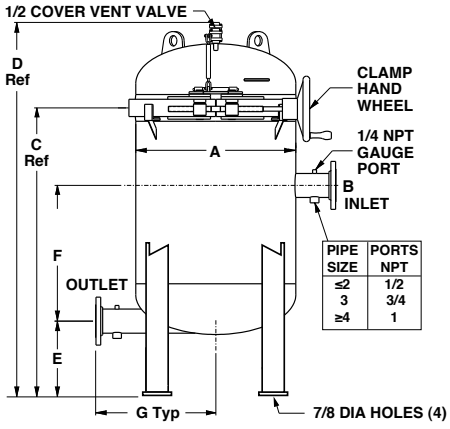


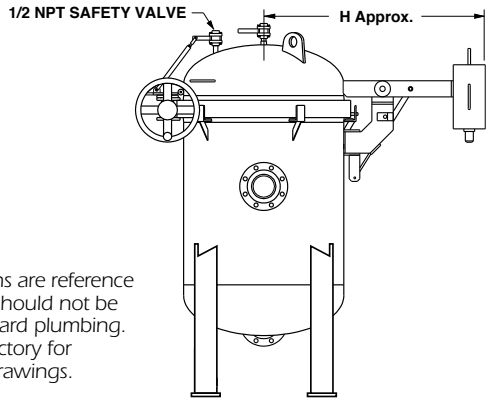
Low Profile

QII Low Profile

MODEL NUMBER & Dim. A	Leg Bolt Circle Dia.	A	Pipe Size B	C	D	E	F	G	H
16 & 18	16.0	18.0	2	40.0	53.2	8.00	15.0	14.0	35.5
			3	40.4	53.6	9.00	17.0	15.0	
22	22.0	24.0	2	41.5	56.2	8.00	15.0	16.0	35.5
			3	41.9	56.6	9.00	17.0	17.0	
			4	41.4	56.1	9.00	19.0	18.0	
24	22.0	24.0	2	41.5	56.2	8.00	15.0	17.0	38.5
			3	41.9	56.6	9.00	17.0	18.0	
			4	41.4	56.1	9.00	19.0	19.0	
30	28.0	30.0	2	43.0	59.2	8.00	15.0	20.5	41.5
			3	43.4	59.6	9.00	17.0	21.0	
			4	42.9	59.1	9.00	19.0	22.5	
			6	42.9	59.1	10.00	17.0	23.0	
36	34.0	36.0	3	44.9	62.6	9.00	17.0	24.0	44.5
			4	44.9	62.6	9.50	19.0	25.0	
			6	44.9	62.6	10.5	17.0	29.5	
			8	44.9	62.6	11.5	17.0	27.0	
42	40.0	42.0	4	46.4	65.6	9.5	19.0	28.0	47.5
			6	46.4	65.6	10.5	17.0	28.0	
			8	46.4	65.6	11.5	17.0	29.5	
			10	46.3	65.5	12.5	17.0	30.0	
48	46.0	48.0	4	47.9	68.6	9.5	19.0	32.0	50.5
			6	47.9	68.6	10.5	17.0	32.0	
			8	47.9	68.6	11.5	17.0	32.5	
			10	47.8	68.5	12.5	17.0	33.0	

Dimensions (IN)





Dimensions are reference only and should not be used for hard plumbing. Consult factory for certified drawings.

QII **Low Profile**

Model Selection (For all housings)

Model No.	Number of Baskets	Straining, Filtering Area, ft2	Nominal Flow Rate (gpm)**	Inlet/ Outlet Size (in)
16	2	8.8	200	2,3,4*
18	3	13.2	300	2,3,4*
22	4	17.6	400	2,3,4,6*
24	6	26.4	600	2,3,4,6*
30	8	35.2	800	2,3,4,6,8*
36	12	52.8	1200	2,3,4,6,8,10*
42	17	74.8	1700	2,3,4,6,8,10,12*
48	23	101.2	2300	2,3,4,6,8,10,12*

* Not available on SLP, HLP, and QII styles.

** Nominal flow rate is based on water @ 1 psi ΔP. A lower fluid velocity is best for optimum filtering effectiveness (under 10 ft/sec is recommended).

Pressure Drop Data

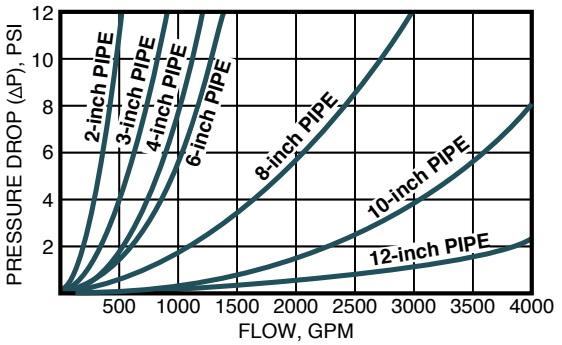
Basket strainers and bag filters are usually selected so that the pressure drop does not exceed 2 psi, when they are clean. Higher pressure drops may be tolerated when contaminant loading is low.

Determining housing pressure drop:

The pressure drops shown on the graph are reliable for all multi-basket housings, including strainer baskets or bag filter (perforated only or mesh lined). The pressure drop of any housing is governed by the size of the inlet and outlet, not the vessel itself.

1. Using the desired pipe size and approximate flow rate, determine the basic pressure drop from the graph.
2. Multiply the pressure drop obtained in step 1 by the viscosity correction factor found in the accompanying table.
3. You now have the pressure drop for a clean multi-basket unit. If bag filters are employed, you must add the pressure drop they incur to get a true pressure drop for the assembly.

Note: Filter bags are specified separately.
See page 150.



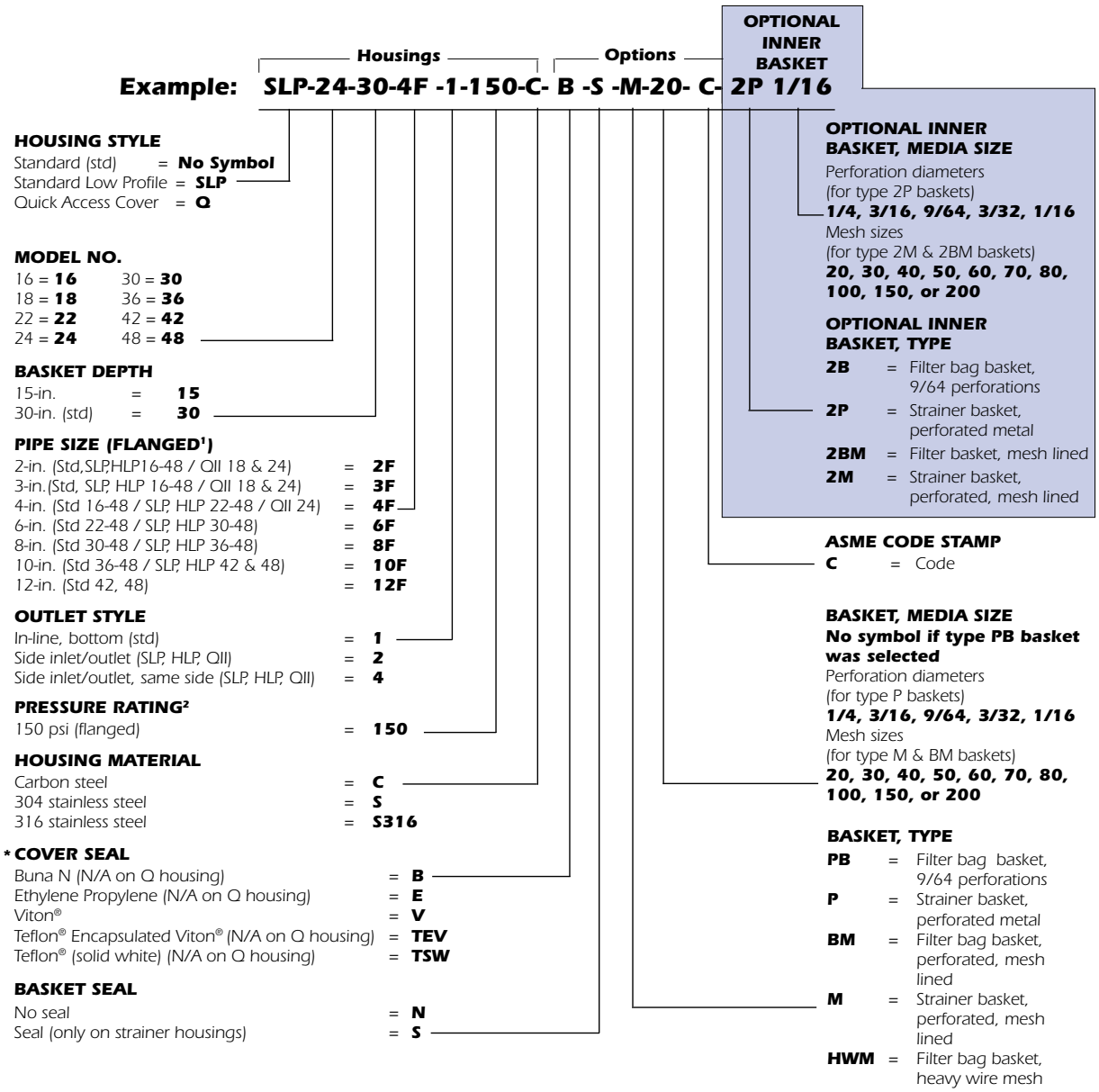
Recommended flow rates are based on housing only. Fluid viscosity, filter bag used, and expected dirt load should be considered when sizing a filter.

Viscosity Factors

CPS NUMBER								
1 (H_2O)	50	100	200	400	600	800	1000	2000
.65	.85	1.00	1.10	1.20	1.40	1.50	1.60	1.80

How To Order

Build an ordering code as shown in the example



1. Flanges provided with the housing match the pressure rating of the vessel. Housings rated 150 psi have 150 class flanges. Housings rated 300 psi have 300 class flanges. Other styles and classes available. ANSI B16.5 Pressure-Temperature rating tables determine flange class for ASME code housings. Consult factory.
2. Higher pressure ratings available. Consult factory.
3. NSF 61 Certification Optional: Consult Factory.

***Note: Because of its unique Quick Access Cover, the Q (QII) housing style is available only with a Viton cover seal.**

HLP Series Multi-Basket Strainers and Multi-Bag Filters with Spring-Access Cover

These multi-basket strainers and bag filters offer a wide range of flow capacities and contaminant-holding capabilities. They contain from 2 to 23 baskets/bags. Larger units that hold more baskets/bags are available, consult Rosedale.

▪ Low Profile Design Housings are compact and space saving, allowing for ease of bag change-out. Standard operating height is reduced, eliminating platforms and ladders.

▪ Spring Assisted Hinged Cover opens and closes without effort. Simply loosen the swing bolts and lift the cover up to open. An automatic cover stop is provided.

▪ The units meet ASME code requirements for 150 PSI ratings. Rosedale is an ISO 9000 facility.

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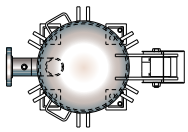
Features

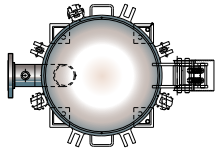
- Permanently piped housings are opened without disturbing the piping
- Machined cover seal groove provides positive sealing
- Carbon steel, 304 or 316 stainless steel construction housings (wetted parts)
- Large-area, 30-inch deep, heavy-duty, 9/64-inch perforated baskets
- Easy to clean
- Low pressure drop
- Three cover seal materials: Buna N, Ethylene Propylene, and Viton®
- Pressure rating 150 psi
- Flanged connections for 2 through 8-inch pipe
- Vent, drain and gage connections
- Bag hold down assembly

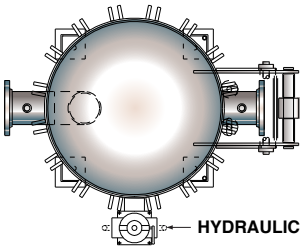
Options

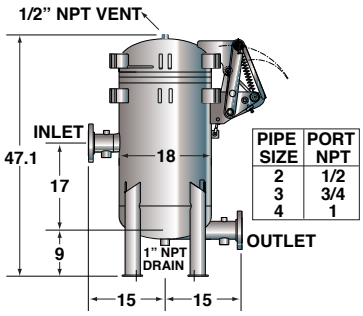
- ASME code stamp
- Special connection locations
- Inner baskets for dual-stage straining or filtering
- Cleanable wire mesh lined or perforated strainer baskets
- Special alloy materials
- Sanitary fittings
- Bag or cartridge design
- Differential pressure indicators
- Safety pressure release
- Steam jackets (body jacket only)

Dimensions

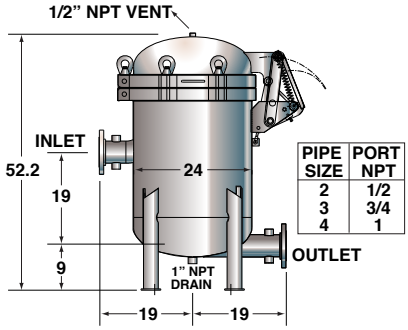




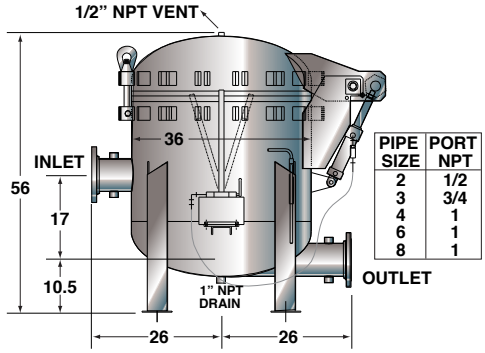




Model 18



Model 24



Model 36

Dimensions are reference only and should not be used for hard plumbing. Consult factory for certified drawings.

How To Order

Build an ordering code as shown in the example

Example: HLP18-30-4F-2- 150-C- B- S- M-20-C

(Housings: HLP18-30-4F-2- 150-C- | Options: B- S- M-20-C)

MODEL NO.
18 = **HLP18** (3-Bag Unit)
24 = **HLP24** (6-Bag Unit)
36 = **HLP36** (12-Bag Unit)

BASKET DEPTH

OUTLET STYLE
Side inlet/outlet = **2**
Side inlet/outlet (same side) = **4**

PRESSURE RATING[2]
150 psi (flanged) = **150**

HOUSING MATERIAL
Carbon steel = **C**
304 stainless steel = **S**
316 stainless steel = **S316**

ASME CODE STAMP
C = Code

BASKET, MEDIA SIZE No symbol if type B basket was selected
Perforation diameters (for type P baskets)
1/4, 3/16, 9/64, 3/32, 1/16
Mesh sizes (for type M & BM baskets)
20, 30, 40, 50, 60, 70, 80, 100, 150, or 200

BASKET, TYPE
= Filter bag basket, 9/64 perforations
= Strainer basket, perforated metal
= Filter bag basket, perforated, mesh lined
= Strainer basket, perforated, mesh lined
HWM = Filter bag basket, heavy wire mesh

BASKET SEAL
N = No seal
S = Seal (only on strainer housings)

COVER SEAL
B = Buna N
E = Ethylene Propylene
V = Viton®

1. Flanges provided with the housing match the pressure rating of the vessel.
2. Housings rated 150 psi have 150 class flanges.
   Other styles and classes available.
   ANSI B16.5 Pressure-Temperature rating tables determine flange class for ASME code housings. Consult factory.
3. NSF 61 Certification Optional: Consult Factory.