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Hygienic Components

Basket Strainers

High Volume, High Performance

Sani-Matic Basket Strainers are specially constructed to strain particles out of a high-volume process stream. The innovative, durable design includes a side-inlet, which allows you to easily remove the basket strainer element for cleaning without disconnecting the line.

Our Basket Strainers can be equipped with wedgewire or perforated strainer elements. Filter bag kits provide the option of using disposable filter bags, which are available in a variety of media materials and provide the ability to strain products down to one micron.

The strainer's lid and hand knob closure are rated for higher pressures than clamp-style covers, which improves operator safety.

Multi-Basket Strainers can be used to minimize downtime for heavy straining requirements, where one strainer can be serviced and cleaned while the other is valved open and operational. In addition, both strainers can be used simultaneously for applications such as high viscosity products where larger pressure drop across a single strainer is a concern.



Sani-Matic's standard Basket Strainers are authorized to carry a 3-A symbol when used with a perforated element.



QUICK TIPS

Are filter bags 3-A authorized?

Sani-Matic perforated element basket strainers are authorized to 3-A standard 42 In-Line Strainers. This standard covers metal strainers only. Using a filter bag does not negate the 3-A rating, however, our filters are not explicitly authorized under 3-A standard 10 Filters using Single Service Filter Media.

When there is a heavy soil load, how can we remove the strainer element?

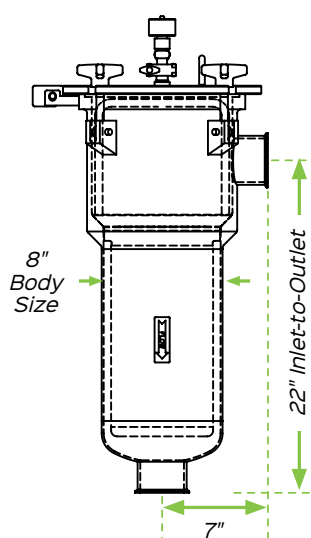
An overhead crane may be needed to remove strainers containing heavy soil.

Why is the standard sample / air relief vent valve important?

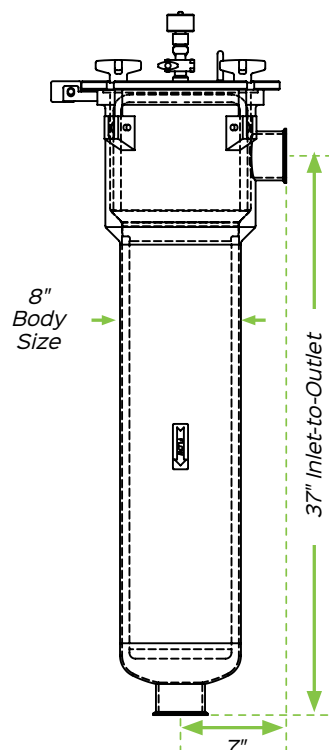
The sample / air relief vent valve is used to relieve line pressure prior to opening the basket strainer cover for safety.

GOOD TO KNOW

- **Material:** Cast and heavy gauge 316Lss
- **Pressure Rating:** 125 psi max @ 300 °F (liquid service only)
- **ID Finish:** 32 μ in Ra (Strainer Body and Perforated Elements). Wedgewire elements have bead blasted finish.
- **SHORT Body Length Approximate Weight:** 110 lbs.
- **LONG Body Length Approximate Weight:** 130 lbs.
- A complete assembly includes a strainer body, element, cover O-Ring, element O-Ring, sample valve, and vent valve clamp & gasket.
- Each of the basket strainers manufactured is pressure tested using a hydrostatic test for quality assurance.
- For wedgewire element sizing, it is recommended that the slot size is 30-50% smaller than the particle size to increase capture efficiency (e.g., to capture a 0.010" particle, use 0.005" or 0.007" wedgewire).



SHORT Body Length
Surface Area: 1.6 ft²



LONG Body Length
Surface Area: 3.7 ft²

Basket Strainer Model Number Key

Example Model #: BS15T3-P125X08000

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Strainer Model																
	B Basket																
2	Body Length																
	S SHORT Body																
	L LONG Body																
3, 4	Connection Size																
	15 1.5"																
	20 2.0"																
	25 2.5"																
	30 3.0"																
	40 4.0"																
5	Connection Type																
	T Tri-Clamp (Standard)																
6	Finish / Polish																
	3 32 µin Ra / Mechanical Polish (Standard)																
	1 20 µin Ra / Mechanical Polish*																
	8 32 µin Ra / Electropolish*																
	4 15 µin Ra / Electropolish*																
7-10	Element Type / Size																
	P062 Perforated / 0.0625" (1/16")*																
	P093 Perforated / 0.09375" (3/32")*																
	P125 Perforated / 0.125" (1/8")																
	P250 Perforated / 0.25" (1/4")																
	W005 Wedgewire / 0.005" (Bead Blasted Finish)																
	W015 Wedgewire / 0.015" (Bead Blasted Finish)																
	W030 Wedgewire / 0.030" (Bead Blasted Finish)																
	W060 Wedgewire / 0.060" (Bead Blasted Finish)																
11	Flow Direction																
	X Standard Flow																
12	Seal Kit																
	0 EPDM (Standard)																
	1 Viton																
13, 14	Body Size																
	80 8.0"																
15	Option #1																
	0 Vertical Installation (Standard)																
	H Horizontal Installation*																
16	Option #2																
	0 None (Standard)																

**Non-stock product option. Longer lead times apply. Non-returnable.*

Reference: Former Part Number & New Model Number Comparison

Reference Model Number Key for selections to be made. Selections are designated by empty **green** boxes in the table below.

Perforated Strainer Element				
Connection Size	Body Length	Max. gpm	Old Part #	New Model Key #
1.5"	SHORT (22")	55	S10501	BS15T3-P <input type="text"/> X <input type="text"/> 80 <input type="text"/> 0
2.0"	SHORT (22")	105	S10502	BS20T3-P <input type="text"/> X <input type="text"/> 80 <input type="text"/> 0
2.5"	SHORT (22")	165	S10503	BS25T3-P <input type="text"/> X <input type="text"/> 80 <input type="text"/> 0
3.0"	SHORT (22")	240	S10504	BS30T3-P <input type="text"/> X <input type="text"/> 80 <input type="text"/> 0
4.0"	SHORT (22")	430	S10520	BS40T3-P <input type="text"/> X <input type="text"/> 80 <input type="text"/> 0
1.5"	LONG (37")	55	S10505	BL15T3-P <input type="text"/> X <input type="text"/> 80 <input type="text"/> 0
2.0"	LONG (37")	105	S10506	BL20T3-P <input type="text"/> X <input type="text"/> 80 <input type="text"/> 0
2.5"	LONG (37")	165	S10507	BL25T3-P <input type="text"/> X <input type="text"/> 80 <input type="text"/> 0
3.0"	LONG (37")	240	S10508	BL30T3-P <input type="text"/> X <input type="text"/> 80 <input type="text"/> 0
4.0"	LONG (37")	430	S10509	BL40T3-P <input type="text"/> X <input type="text"/> 80 <input type="text"/> 0
Wedgewire Strainer Element				
Connection Size	Body Length	Max. gpm	Old Part #	New Model Key #
1.5"	SHORT (22")	55	S10510	BS15T3-W <input type="text"/> X <input type="text"/> 80 <input type="text"/> 0
2.0"	SHORT (22")	105	S10511	BS20T3-W <input type="text"/> X <input type="text"/> 80 <input type="text"/> 0
2.5"	SHORT (22")	165	S10512	BS25T3-W <input type="text"/> X <input type="text"/> 80 <input type="text"/> 0
3.0"	SHORT (22")	240	S10513	BS30T3-W <input type="text"/> X <input type="text"/> 80 <input type="text"/> 0
4.0"	SHORT (22")	430	S10514	BS40T3-W <input type="text"/> X <input type="text"/> 80 <input type="text"/> 0
1.5"	LONG (37")	55	S10515	BL15T3-W <input type="text"/> X <input type="text"/> 80 <input type="text"/> 0
2.0"	LONG (37")	105	S10516	BL20T3-W <input type="text"/> X <input type="text"/> 80 <input type="text"/> 0
2.5"	LONG (37")	165	S10517	BL25T3-W <input type="text"/> X <input type="text"/> 80 <input type="text"/> 0
3.0"	LONG (37")	240	S10518	BL30T3-W <input type="text"/> X <input type="text"/> 80 <input type="text"/> 0
4.0"	LONG (37")	430	S10519	BL40T3-W <input type="text"/> X <input type="text"/> 80 <input type="text"/> 0

NOTE: If using filter bags, see page 75 for information on maximum flow rates.

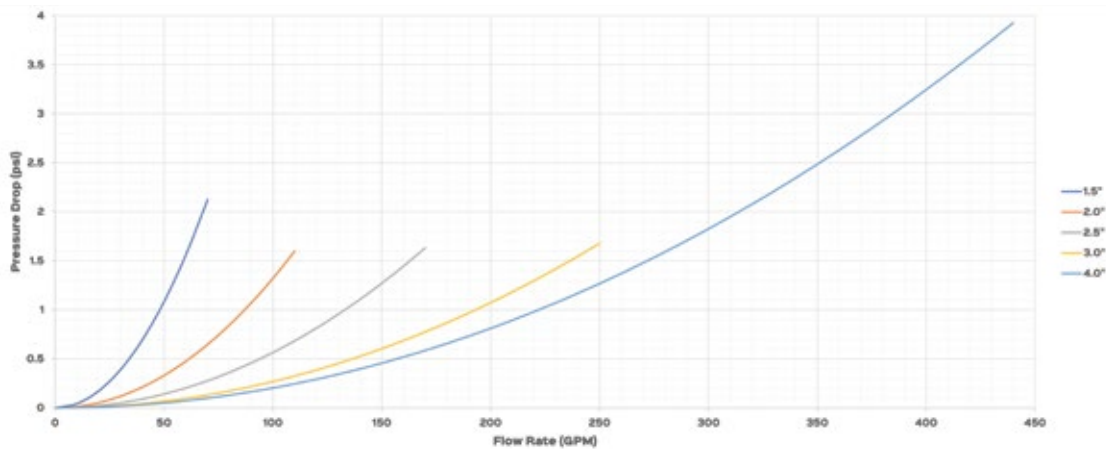


Cv Values & Pressure Drops for Basket Strainers

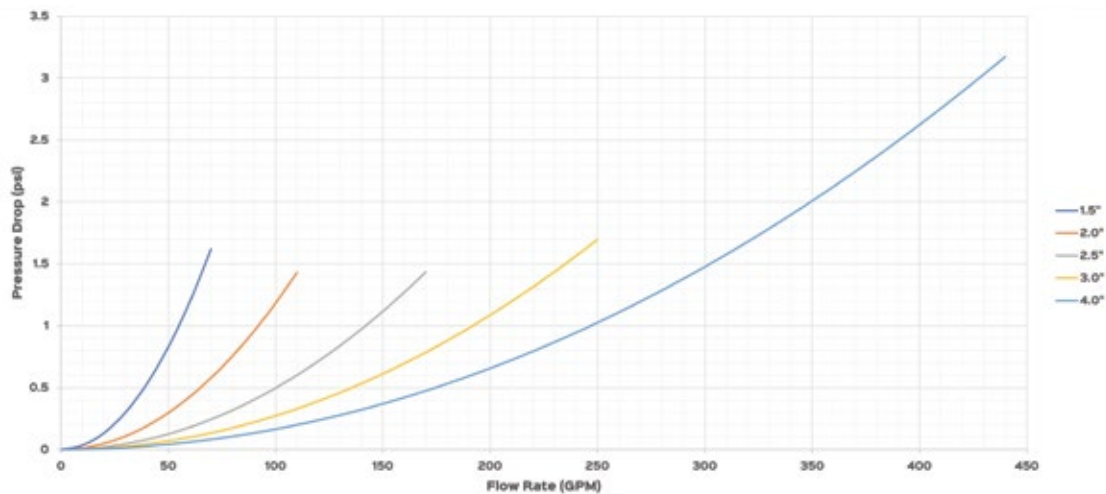
Cv values or the provided pressure drop tables can be used to estimate the pressure drop across a strainer at a given flow rate. Cv values are for water at 70 °F. Contact Sani-Matic for inquiries on pressure drops for fluids with other viscosities.

Body Length	Connection Size	Cv
LONG (37")	1.5"	48
	2.0"	87
	2.5"	133
	3.0"	193
	4.0"	222
SHORT (22")	1.5"	55
	2.0"	92
	2.5"	142
	3.0"	192
	4.0"	247

Basket Strainer Pressure Drop - Standard Flow - LONG Body (37")



Basket Strainer Pressure Drop - Standard Flow - SHORT Body (22")

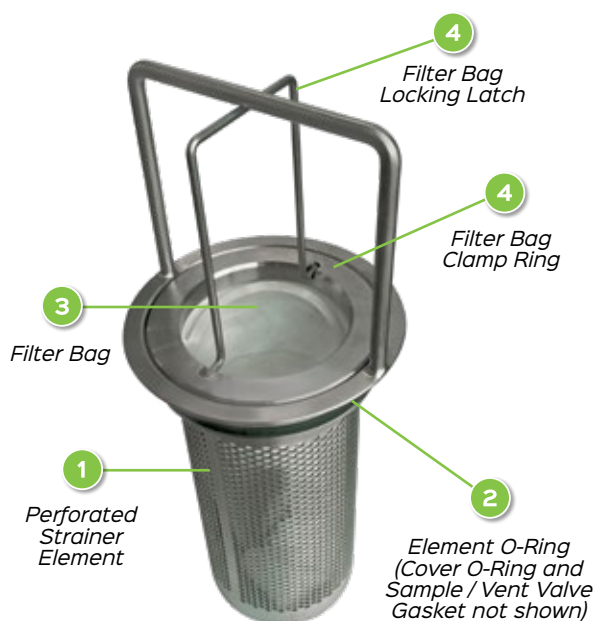


NOTE: Cv values and charted pressure drops can be used for perforated, wedgewire, or perforated with filter bags. The clean pressure drop is minimally impacted by the element configuration in most cases. For worst-case calculations, add 20% to the calculated pressure drop.

Basket Strainer Replacement Parts



NOTE: Cover O-Ring and Vent Valve Gasket are not shown in image.



1 Strainer Elements

Perforated Strainer Element		
Hole Size	Body Length (SHORT) Part #	Body Length (LONG) Part #
1/16"	278388*	278391*
3/32"	163596*	124828*
1/8"	741039	741052
1/4"	741051	741054
Wedgewire Strainer Element		
Slot Size	Body Length (SHORT) Part #	Body Length (LONG) Part #
0.005"	741022	741047
0.015"	741030	741048
0.030"	741046	741049
0.060"	167384	198957

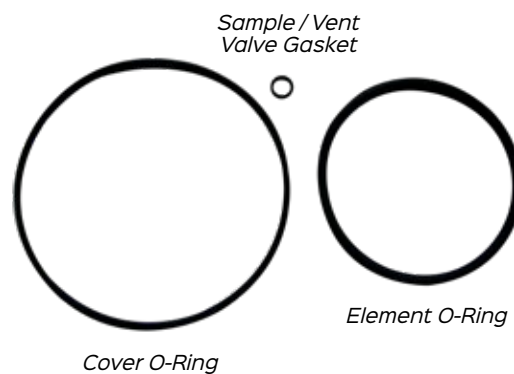
*Non-stock product option. Longer lead times will apply.

NOTE: Listed Strainer Elements are for vertical installation. Contact Sani-Matic for horizontal installation replacements.



2 Basket Strainer Seal Kit Parts

Cover O-Ring	Part #	Spare Parts Kits		
EPDM (Standard)	021378	Includes Cover O-Ring, Element O-Ring, and Sample / Vent Valve Gasket		
Viton	021144			
Element O-Ring	Part #	Strainer Model	Seal Material	Kit Part #
EPDM (Standard)	021356	Basket Strainer	EPDM	105844
Viton	021143	Basket Strainer	Viton	105918
Sample / Vent Valve Gasket	Part #			
EPDM (Standard)	021037			
Viton	028725			



3 Filter Bags • 50/box

22" SHORT Basket Strainers (#1 Bags)		
Micron	Material	Part #
1	Polypropylene	029244
5	Polypropylene	029245
10	Polypropylene	029246
10	Polyester Felt	031955
25	Polyester	040134
25	Polypropylene	029247
50	Polypropylene	029237
100	Polypropylene	029248
150	Nylon	029249
250	Nylon	060424
300	Nylon	060425
400	Nylon	040903
400	Polypropylene Monofilament	045387
600	Nylon Mesh	043768
800	Nylon	029250
1500	Polyester	029251
37" LONG Basket Strainers (#2 Bags)		
Micron	Material	Part #
1	Polypropylene	029252
5	Polypropylene	029253
10	Polypropylene	029254
25	Polypropylene	029255
50	Polypropylene	029256
50	Polyester	034820
100	Polypropylene	029257
100	Nylon	031268
150	Nylon	029259
250	Nylon	026262
300	Nylon	024098
400	Nylon	042110
600	Polypropylene	036642
800	Nylon	029261
1500	Polyester	029262

NOTE: Filter bags are non-stock. Longer lead times apply.



Filter Bag Notes:

- Filter bags require Clamp Ring and Locking Latch for installation
- Filter bags are 7" diameter
- Sewn-in, stainless steel ring in top
- #1 bags are used for SHORT (22") strainers
- #2 bags are used for LONG (37") strainers
- Filter bags require a media clamp ring & locking latch
- All bags are FDA-compliant
- Micron rating is industry standard nominal rating with 75% efficiency
- 95% efficiency filter bags are available for some micron ratings upon request
- Filter bags are disposable and intended for single use
- The maximum pressure drop (ΔP) across a filter bag is recommended to be no more than 25 psig. This is a guideline only and depends on many variables including temperature and flow rate of process, product characteristics, and other variables.

Basket Strainer Filter Bag Maximum Flow Rates

Filter Bag Micron Rating	Max Flow Rate (gpm)	
	SHORT (#1 Bag)	LONG (#2 Bag)
≥ 100 Micron	60	120
25 - 50 Micron	50	100
5 - 10 Micron	40	80
1 Micron	25	50

4 Filter Bag Clamp Parts

Description	Part #
Filter Bag Kit ¹	105937
Clamp Ring	641110
Locking Latch	621766

¹Includes Clamp Ring and Locking Latch

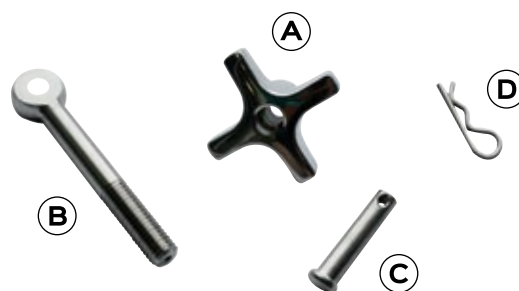


Clamp Ring

Locking Latch

5 Cover Hold-Down Parts

Spare Parts Kits			
Strainer Model	Component	Qty.	Kit Part #
Basket Strainer	Ⓐ Threaded Knob	4	333702
	Ⓑ Swing Bolt	4	
	Ⓒ Swing Bolt Clevis Pin (1.81" OAL)	4	
	Ⓒ Cover Hinge Clevis Pin (2.31" OAL)	1	
	Ⓓ Clip, Hair Pin	5	



6 Sample Port Vent Valve

Description	Part #
Sample Valve, TC, 0.50" / 0.75" Process Connection, 0.5" Sample Connection	060887
Clamp, Tri-Clamp, Standard, 0.5" / 0.75"	020224



7 Basket Strainer Body

Includes body and cover with cover hold down parts. Pressure relief (e.g., with Sample Port Vent Valve) is required at the cover vent connection.

Connection Size	Part # (SHORT Body)	Part # (LONG Body)
1.5" TC	317872	346897
2.0" TC	346883	346900
2.5" TC	346886	317869
3.0" TC	346887	346902
4.0" TC	346896	346903

ID Tag

Custom tag your components with an engraved stainless steel tag, affixed to the component using ball chain. Up to 10 characters can be specified.

Description	Part #
ID Tag, 2.0" x 0.5", 304ss	720826

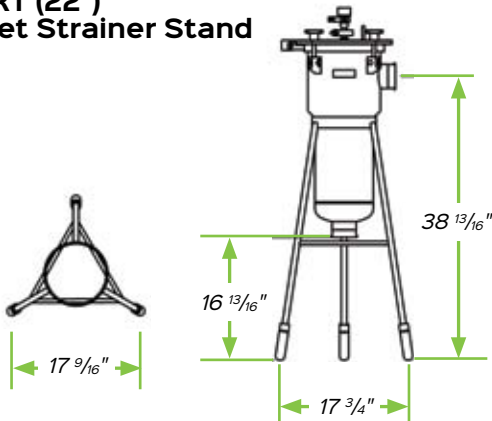


Basket Strainer Accessories

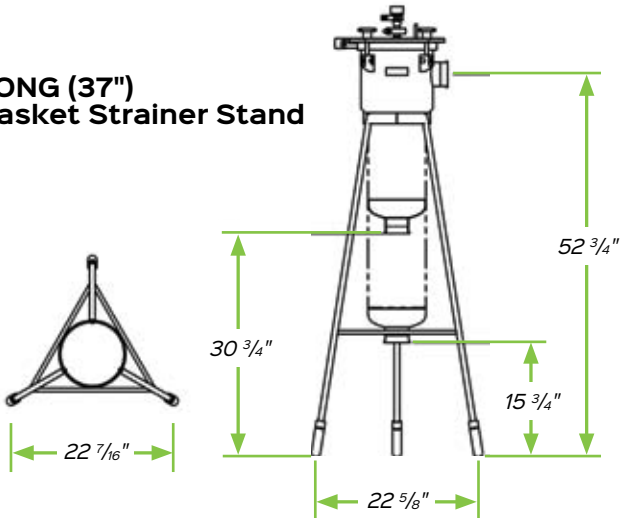
Basket Strainer Stand

Description	Material	Part #
Basket Strainer Stand, SHORT (22"), Floor Mount	304ss	101998
Basket Strainer Stand, LONG (37"), Floor Mount	304ss	741065

SHORT (22")
Basket Strainer Stand



LONG (37")
Basket Strainer Stand



Multi-Basket Strainer Model Number Key

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	Example Model #: MBDV-S15T3-P125X08000MBPG																							
1, 2	Strainer Model																							
	MB Multi-Basket Strainers																							
3, 4	Configuration Type																							
	DV Dual Strainers - Vertical																							
5	Body Length																							
	S SHORT Body																							
	L LONG Body																							
6, 7	Connection Size																							
	15 1.5"																							
	20 2.0"																							
	25 2.5"																							
	30 3.0"																							
	40 4.0"																							
8	Connection Type																							
	T Tri-Clamp (Standard)																							
9	Finish / Polish																							
	3 32 µin Ra / Mechanical Polish (Standard)																							
10-13	Element Type / Size																							
	P062 Perforated / 0.0625" ($\frac{1}{16}$ ")*																							
	P093 Perforated / 0.09375" ($\frac{3}{32}$ ")*																							
	P125 Perforated / 0.125" ($\frac{1}{8}$ ")																							
	P250 Perforated / 0.25" ($\frac{1}{4}$ ")																							
	W005 Wedgewire / 0.005" (Bead Blasted Finish)																							
	W015 Wedgewire / 0.015" (Bead Blasted Finish)																							
	W030 Wedgewire / 0.030" (Bead Blasted Finish)																							
	W060 Wedgewire / 0.060" (Bead Blasted Finish)																							
14	Flow Direction																							
	X Standard Flow																							
15	Seal Kit																							
	0 EPDM (Standard)																							
	1 Viton																							
16, 17	Body Size																							
	80 8.0"																							
18	Option #1																							
	0 None (Standard)																							
19	Option #2																							
	0 None (Standard)																							
20, 21	Valve Kits																							
	00 None																							
	MB Manually Operated Butterfly Valves																							
	PB Pneumatically Operated Butterfly Valves*																							
22, 23	Pressure Kits																							
	00 None																							
	PG Pressure Gauges																							
	PT Pressure Transmitters*																							

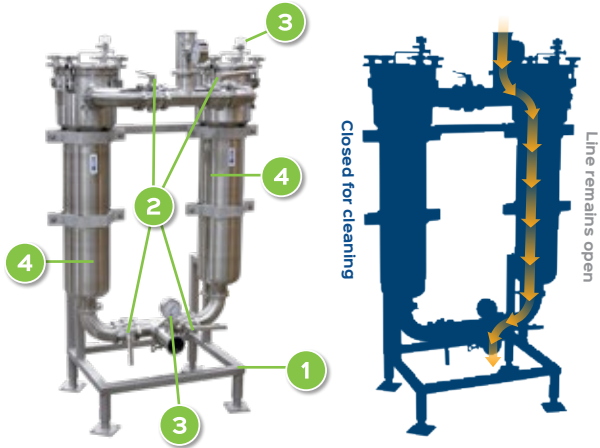
***Non-stock product option. Longer lead times apply. Non-returnable.**

NOTE: The stand is included in all above configurations.

NOTE: Pneumatically Operated Butterfly Valves option requires air supply and automation controls (by others). See page 80 for details.

NOTE: Pressure Transmitter option requires electrical supply and automation controls (by others). See page 80 for details.

Multi-Basket Strainer Replacement Parts

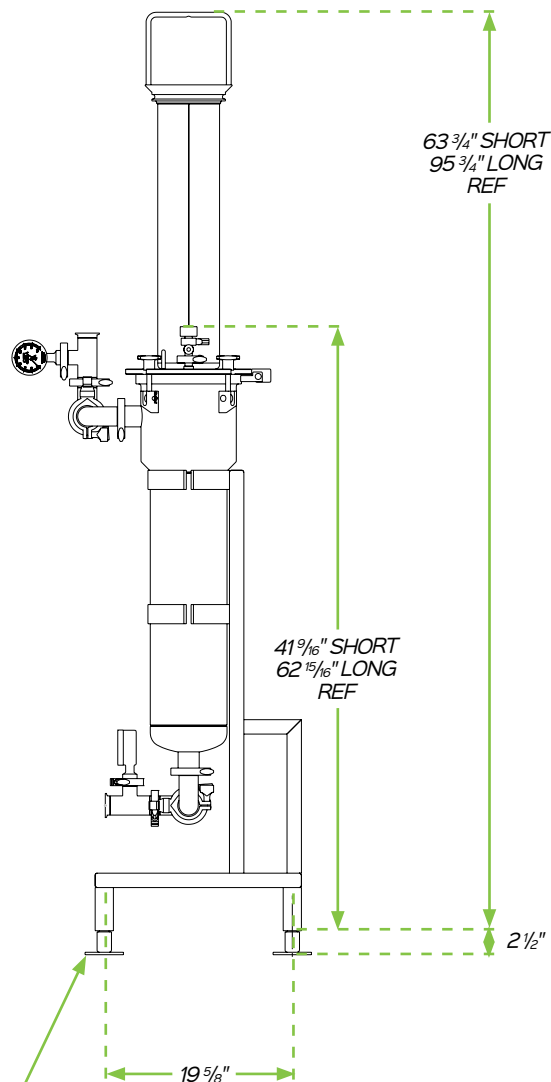
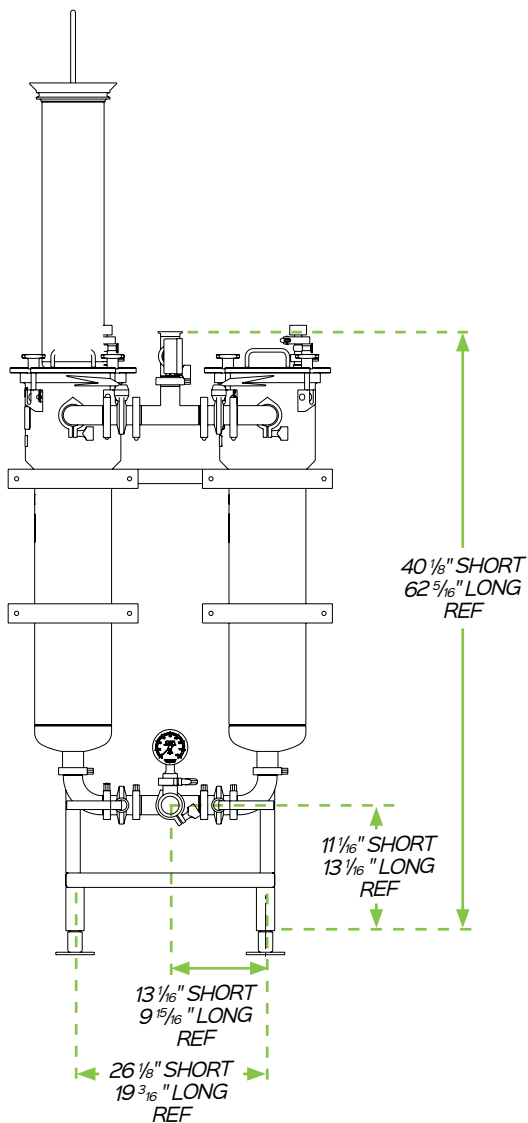


Multi-Basket Strainers
Dual Strainers - Vertical
Complete Assembly



- 1 Dual Vertical Basket Strainer Stand
- 2 Valve Kit
- 3 Pressure Gauge Kit
- 4 Basket Strainers (2)

NOTE: Contact Sani-Matic for custom applications such as fully automated assemblies.



NOTE: Frame provided with adjustable feet that has +/- 1" of adjustability.

1 Dual Vertical Basket Strainer Stands

Connection Size	SHORT (22") Part #	LONG (37") Part #
1.5"	258688	258855
2.0"	258731	258861
2.5"	258845	258863
3.0"	258847	258868
4.0"	258849	258876

NOTE: Stands are approximately 80 lbs.



2 Valve Kits

Kit includes: Four (4) Elbows, two (2) Tees, four (4) Butterfly Valves (Manual or Pneumatic), twelve (12) Clamps, and twelve (12) Gaskets.

Material: 316Lss

NOTE: Alternative valves available.

NOTE: Strainers are not included in the valve kit, they are sold separately.

Connection Size	Manual Valve Kit Part #	Pneumatic Valve Kit Part #
1.5"	291142	324869
2.0"	291143	324870
2.5"	291144	324871
3.0"	291145	324872
4.0"	291146	324873

NOTE: Pneumatic Valves have the following requirements:
 · 1/8" NPT air fitting ports
 · 80 to 100 psi Air Supply Pressure (120 psi Maximum Pressure Rating)

3 Sensor Kit

Kit includes: Two (2) Pressure Gauges or Transmitters, two (2) Tees, four (4) Gaskets, and four (4) Clamps.

Connection Size	Pressure Gauge Kit Part #	Pressure Transmitter Kit Part #
1.5"	158581	324874
2.0"	158585	324875
2.5"	158591	324876
3.0"	158593	324877
4.0"	158596	324878

NOTE: Install before and after the strainer assembly.

NOTE: Strainers are not included in the sensor kit, they are sold separately.

NOTE: All Pressure Gauge and Pressure Transmitter options use 1.5" Tri-Clamp connections.

NOTE: Pressure Gauges are Sanitary Diaphragm-type with a 0 to 160 psi range.

NOTE: Pressure Transmitters require a 24V DC power source and output a 4-20mA signal.



Pressure Gauge



Pressure Transmitter

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