HYGIENIC COMPONENT SOLUTIONS

Process Protection & Optimization

Product Catalog 2025

From SANI-MATIC®

HYGIENIC COMPONENT SOLUTIONS

Process Protection & Optimization

At Sani-Matic, our Hygienic Component Solutions are designed to deliver Process Protection & Optimization across diverse industries. Whether you operate in a bustling food processing plant, a tightly controlled pharmaceutical cleanroom, a personal care production facility, or a complex industrial operation, we bring unmatched industry expertise to your unique application.

Our components are more than just products—they are part of a legacy built on decades of engineering excellence and application insight. We're here to help you overcome daily process challenges with solutions that work as hard as you do.

With high inventory levels maintained at our Sun Prairie, WI facility, you can rely on Sani-Matic to deliver the component solutions you need, when you need them.

The Hygienic Component Solution Catalog is segmented into four sections:

Hygienic Components - Strainers, Spray Devices, and more for industries such as food, beverage, personal care, and nutraceutical.

High Purity Hygienic Components - Similar offerings of components designed for high purity industries like pharmaceuticals and biotech.

Digital Solutions - Hardware and software to streamline your data collection for hygienic cleaning and process applications.

Process Equipment - Quick to deliver, custom engineered hygienic process tanks.

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Minimum order value applies. Contact smi-orders@sanimatic.com for inquiries and orders.
Specifications and pricing are subject to change.

Straight-Line Strainers

Durable Strainers for Standard Flow Processes

Sani-Matic's durable Straight-Line Strainers are used when process line layouts require Straight-Line Strainers. Manufactured in the U.S., quick turnaround times are available for standard models.

Unlike our Angle-Line Strainers, the use of Straight-Line Strainers requires process lines to be disassembled for cleaning and are available only in a single flow configuration.

With a wide variety of perforated and wedgewire straining elements, Straight-Line Strainers provide product integrity and process equipment protection.

Sani-Matic's standard Straight-Line Strainers are authorized to carry a 3-A symbol when perforated elements are used.

QUICK TIPS

Did you know strainer clips and elastomers are consumable items and fatigue over time?

Clips: The fit of a clip must be checked regularly and replaced when it no longer provides a secure fit or is overly worn.

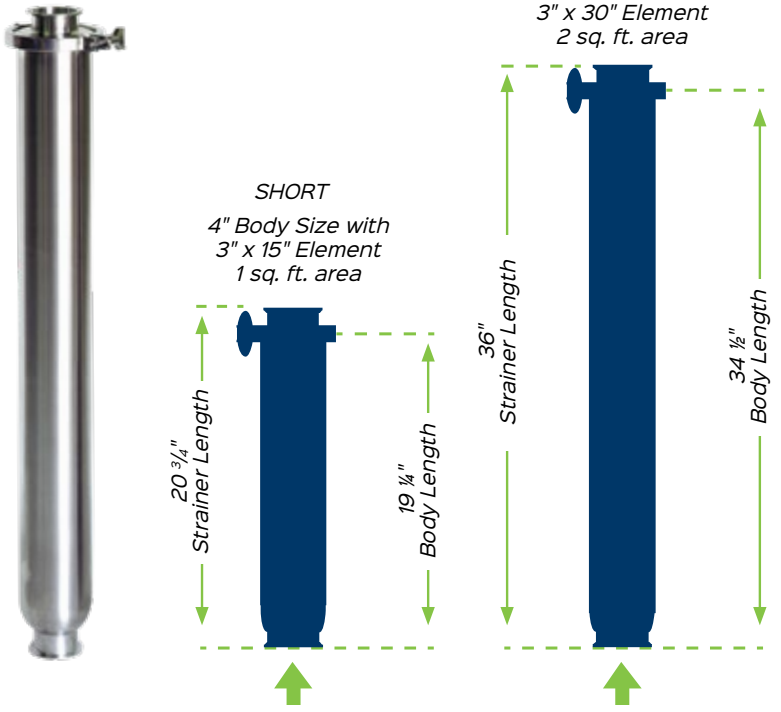
Elastomers: Plan to replace the strainer elastomers annually at a minimum.

Not sure when to clean a strainer?

Installing a pressure gauge before and after a strainer can help. When the gauge placed after the strainer drops 8 to 10 psi following the initial flow start-up, you'll know it is time to clean.

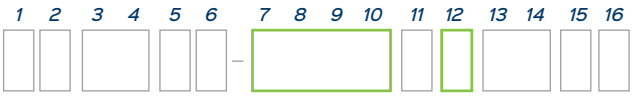
GOOD TO KNOW

- **Strainer & Element Material:** 316Lss
- **Sanitary ID Finish:** 32 µin Ra
- **Maximum Temperature Rating:** 250 °F
- **Full Assembly Maximum Pressure Rating (Standard Tri-Clamp):** 125 psi
- **Full Assembly Maximum Pressure Rating (High Pressure Tri-Clamp):** 200 psi
- Wedgewire elements have some surfaces that are bead blasted (with Ra greater than 32 µin).
- 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).
- A hot water jacket option is available in 4" strainer bodies only. Contact Sani-Matic for custom quoting.
- When shipped, strainer assemblies with a Teflon Encapsulated O-ring are not lubricated. Strainer assemblies with other O-ring materials will be lubricated with an FDA-compliant silicone grease.
- Filter tubes are FDA-compliant, and when used with perforated elements 3/32" or larger maintain overall strainer assembly 3-A authorization.
- Tuf-Flex® Gaskets are PTFE gaskets with an EPDM core that helps to reduce "stickiness" of the gasket allowing for an easier and quicker strainer element removal process.



Straight-Line Strainer Model Number Key

Example Model #: SS15T3-P125X04000



1	**Strainer Model**	
	S	Straight-Line
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)
	H	Tri-Clamp - High Pressure Clamp
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" ($^{1}/_{4}$")
	P375	Perforated / 0.375" ($^{3}/_{8}$")
	W001	Wedgewire / 0.001"
	W002	Wedgewire / 0.002"
	W005	Wedgewire / 0.005"
	W007	Wedgewire / 0.007"
	W010	Wedgewire / 0.010"
	W015	Wedgewire / 0.015"
	W020	Wedgewire / 0.020"
	W030	Wedgewire / 0.030"
	W040	Wedgewire / 0.040"
	W060	Wedgewire / 0.060"
	W187	Wedgewire / 0.1875"
11	**Flow Direction**	
	X	Standard Flow
12	**Seal Kit**	
	0	EPDM Gasket (Standard)
	T	Tuf-Flex Gasket
	1	Viton Gasket
	3	Buna-N Gasket
13, 14	**Body Size**	
	40	4.0"
15	**Option #1**	
	0	None (Standard)
16	**Option #2**	
	0	None (Standard)

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

NOTE: See page 10 for element details.

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.

Straight-Line Strainer

Connection Size	Body Size	Max. gpm	SHORT Inlet-to-Outlet (20 ¾")		LONG Inlet-to-Outlet (36")	
			Perforated Old Part #	Perforated New Model Key #	Perforated Old Part #	Perforated New Model Key #
1.5"	4"	55	S10006	SS15T3-P□X□4000	S10016	SL15T3-P□X□4000
2.0"	4"	105	S10007	SS20T3-P□X□4000	S10017	SL20T3-P□X□4000
2.5"	4"	165	S10008	SS25T3-P□X□4000	S10018	SL25T3-P□X□4000
3.0"	4"	245	S10009	SS30T3-P□X□4000	S10019	SL30T3-P□X□4000
4.0"	4"	315	S10010	SS40T3-P□X□4000	S10020	SL40T3-P□X□4000
Connection Size	**Body Size**	**Max. gpm**	**Wedgewire Old Part #**	**Wedgewire New Model Key #**	**Wedgewire Old Part #**	**Wedgewire New Model Key #**
1.5"	4"	55	S10126	SS15T3-W□X□4000	S10136	SL15T3-W□X□4000
2.0"	4"	105	S10127	SS20T3-W□X□4000	S10137	SL20T3-W□X□4000
2.5"	4"	165	S10128	SS25T3-W□X□4000	S10138	SL25T3-W□X□4000
3.0"	4"	245	S10129	SS30T3-W□X□4000	S10139	SL30T3-W□X□4000
4.0"	4"	315	S10130	SS40T3-W□X□4000	S10140	SL40T3-W□X□4000

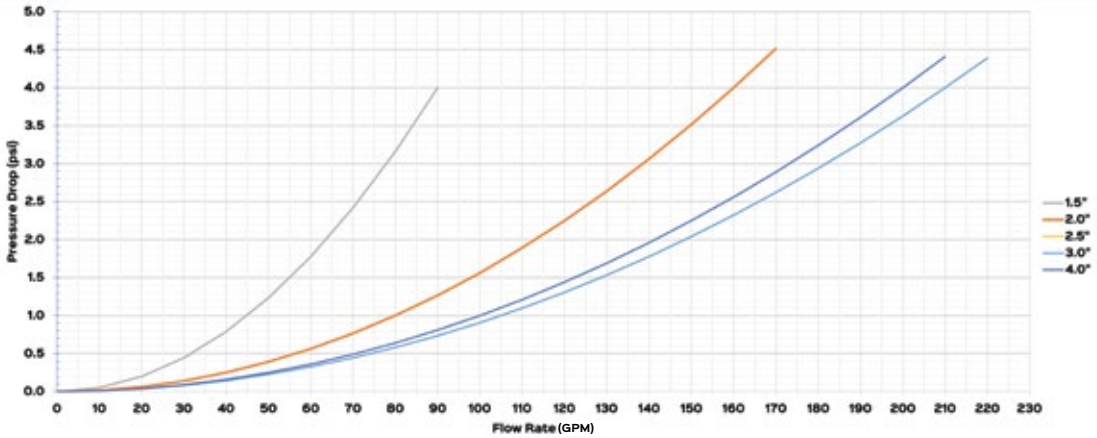
NOTE: If using filter tubes, the maximum recommended flow rate (gpm) may decrease depending on process conditions.

Cv Values & Pressure Drops for Straight-Line 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.

Strainer Length	Connection Size	Cv
SHORT & LONG (20 ¾" & 36")	1.5"	45
	2.0"	80
	2.5"	100
	3.0"	105
	4.0"	100

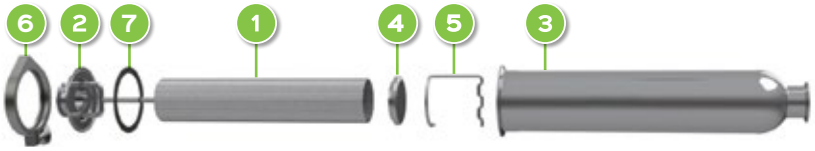
Straight-Line Strainer Pressure Drop



NOTE: Cv values and charted pressure drops can be used for perforated, wedgewire, and perforated with mesh overlays or filter tubes. 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.

Straight-Line Strainer Replacement Parts

Straight-Line Strainer



1. Strainer Element
2. Strainer Element Frame
3. Strainer Body
4. End Plug
5. Retaining Clip
6. TC Clamp
7. TC Gasket

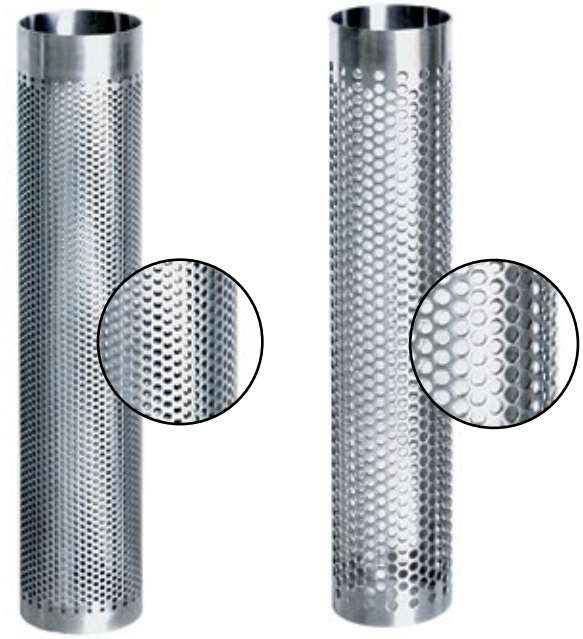
Spare Parts Kits		
4 End Plug (Stainless Steel) 5 Retaining Clip 7 TC Gasket		
Strainer Model	**Seal Material**	**Kit Part #**
Straight-Line	EPDM	**333539**
Straight-Line	Viton	**333540**
Straight-Line	Buna-N	**333541**
Straight-Line	Tuf-Flex	**333542**

1 Strainer Elements

Perforated Strainer Elements					
Strainer Body Size	**Strainer Element Size**	**Hole Size**	**Open Area**	**SHORT (15") Part #**	**LONG (30") Part #**
4"	3"	1/16"	23%	**289084**	**277628**
4"	3"	3/32"	33%	**721068**	**720972**
4"	3"	1/8"	40%	**720584**	**720585**
4"	3"	1/4"	58%	**720411**	**720412**
4"	3"	3/8"	51%	**720939**	**720940**

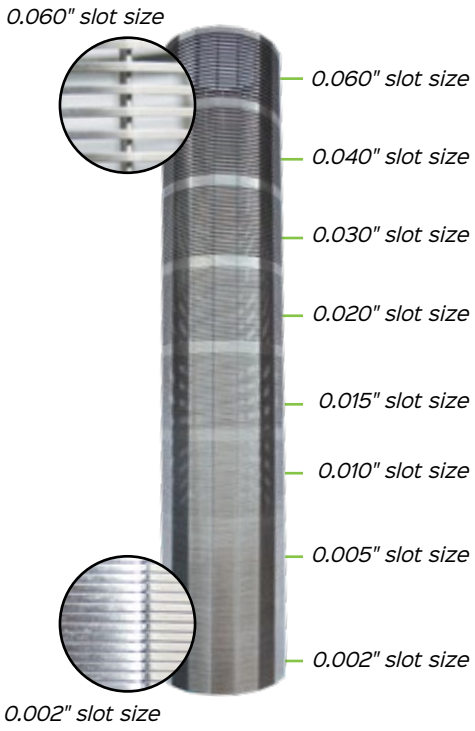
Wedgewire Strainer Elements							
Strainer Body Size	**Strainer Element Size**	**Slot Size**	**Micron Rating**	**Wire Mesh (Approx. Equiv.)**	**Open Area**	**SHORT (15") Part #**	**LONG (30") Part #**
4"	3"	0.001"	25	500	2.0%	**343603**	**346237**
4"	3"	0.002"	50	270	4.1%	**700323**	**700334**
4"	3"	0.005"	125	120	9.6%	**700324**	**700335**
4"	3"	0.007"	177	80	13.0%	**700325**	**700336**
4"	3"	0.010"	250	60	17.5%	**700326**	**700337**
4"	3"	0.015"	380	40	24.2%	**700327**	**700338**
4"	3"	0.020"	500	32	29.9%	**700328**	**700339**
4"	3"	0.030"	750	25	39.0%	**700329**	**700340**
4"	3"	0.040"	1015	17	46.0%	**700330**	**700341**
4"	3"	0.060"	1524	10	56.1%	**700331**	**700342**
4"	3"	0.1875"	4775	4	72.5%	**700333**	**700343**

NOTE: Slot size to micron rating is a nominally rated value only.
NOTE: Other perforated and wedgewire sizes are available.



⅛" Perforated Strainer Element

¼" Perforated Strainer Element



NOTE: Image is a demonstration piece highlighting the largest to smallest wedgewire slot sizes.

GOOD TO KNOW

- **Element Material:** 316Lss
- **Sanitary ID Finish:** 32 µin Ra
- Wedgewire elements have some interior surfaces greater than 32 µin Ra due to the construction process.
- Strainer elements protect your processing equipment and product integrity.
- Perforated and wedgewire elements provide different straining advantages:

Advantages of Perforated Element

- Authorized to carry a 3-A symbol when used without mesh overlay.
- Large open area ratio with lower pressure drops.
- Can capture fine particulate with wire mesh overlay and filter tubes.

Advantages of Wedgewire Element

- Simple one-piece solution (vs. using mesh overlays or filter tubes with perforated elements).
- Ability to tolerate higher differential pressures across strainer element.

Straight-Line

2 Strainer Element Frames

Straight-Line Strainers have a Standard Flow direction only

Strainer Model	Flow Direction	Strainer Element Frame Length	Strainer Element Length	Strainer Length	Connection Size	Part #
Straight-Line	End-Inlet	18 1/16"	SHORT (15")	SHORT (20 3/4")	1.5"	**740318**
Straight-Line	End-Inlet	18 1/16"	SHORT (15")	SHORT (20 3/4")	2.0"	**740325**
Straight-Line	End-Inlet	18 1/16"	SHORT (15")	SHORT (20 3/4")	2.5"	**740359**
Straight-Line	End-Inlet	18 1/16"	SHORT (15")	SHORT (20 3/4")	3.0"	**740565**
Straight-Line	End-Inlet	19 19/32"	SHORT (15")	SHORT (20 3/4")	4.0"	**740491***
Straight-Line	End-Inlet	33 1/16"	LONG (30")	LONG (36")	1.5"	**740422***
Straight-Line	End-Inlet	33 1/16"	LONG (30")	LONG (36")	2.0"	**740309**
Straight-Line	End-Inlet	33 1/16"	LONG (30")	LONG (36")	2.5"	**740305**
Straight-Line	End-Inlet	33 1/16"	LONG (30")	LONG (36")	3.0"	**740356**
Straight-Line	End-Inlet	34 19/32"	LONG (30")	LONG (36")	4.0"	**740368***

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

3 Strainer Bodies (4" Body Size)

Strainer Model	Strainer Body Length	Tri-Clamp (TC) Connection Size	Part #
Straight-Line	SHORT (19 1/4")	1.5"	**740843**
Straight-Line	SHORT (19 1/4")	2.0"	**740844**
Straight-Line	SHORT (19 1/4")	2.5"	**740845**
Straight-Line	SHORT (19 1/4")	3.0"	**740846**
Straight-Line	SHORT (19 1/4")	4.0"	**741141***
Straight-Line	LONG (34 1/2")	1.5"	**740847***
Straight-Line	LONG (34 1/2")	2.0"	**740848**
Straight-Line	LONG (34 1/2")	2.5"	**740849***
Straight-Line	LONG (34 1/2")	3.0"	**740850**
Straight-Line	LONG (34 1/2")	4.0"	**741142***

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

4 End Plugs

Body Size	Material	Part #
4"	316Lss	**118582**
4"	Teflon	**720988**
4"	Nylon*	**720419**

NOTE: 316Lss end plugs are standard.
**Nylon end plugs cannot be used as part of a 3-A authorized strainer.*

Teflon End Plug

316Lss End Plug

Nylon End Plug

5 Retaining Clips

Body Size	Flow Direction	Part #
4"	End-Inlet (Standard Flow)	**740295**

6 Tri-Clamp (TC) Clamps

Clamp Type	Body Size	Part #
Standard	4"	**020225**
High Pressure	4"	**020916**

Standard Clamp

High Pressure Clamp

7 Tri-Clamp (TC) Gaskets

Material	Body Size	Part #
EPDM	4"	**021031**
Viton	4"	**020474**
Buna-N	4"	**020226**
Tuf-Flex	4"	**046739**

ID Tag

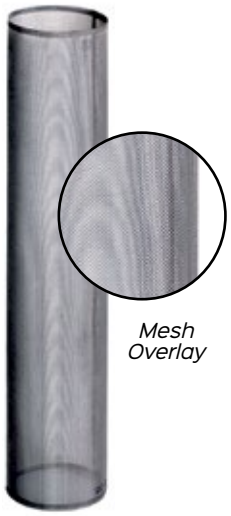
Custom tag your components with an engraved stainless steel tag, affixed to the component using ball chain. Up to 10 characters can be specified.

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

Straight-Line Strainer Accessories

Mesh Overlays (For perforated elements only) 316ss Wire

Mesh Size US	Micron (Approx. Equiv.)	Opening Width in Inches (Approx. Equivalent)	Open Area	Part # (14.63" OAL) For SHORT Body	Part # (29.63" OAL) For LONG Body
8	2360	0.0970"	60%	**035251**	**029664**
10	2000	0.0750"	56%	**000717**	**000701**
12	1700	0.0603"	52%	**035252**	**029665**
20	850	0.0340"	46%	**000712**	**000702**
30	600	0.0213"	41%	**000713**	**000703**
40	425	0.0150"	36%	**000714**	**000704**
50	300	0.0110"	30%	**000715**	**000705**
60	250	0.0092"	31%	**000716**	**000706**
80	180	0.0070"	31%	**000718**	**000708**
100	150	0.0060"	36%	**000711**	**000710**
120	125	0.0046"	31%	**000720**	**000707**
150	98	0.0041"	37%	**021276**	**021274**
200	75	0.0029"	34%	**021275**	**10000048**



Mesh Overlay

Filter Tube: 4" Body Size x 19 ¼" Body Length Strainers • 50/Box

4 7/8" x 17" Filter Tubes (For 1.5", 2", 2.5", 3", and 4" connections). Fits 3" x 15" Perforated Element.

Material	Width	Length (SHORT)	Max. Temperature (°F)	Micron	Part #
Polyester	4 7/8"	17"	400	25	**032789**
Polyester	4 7/8"	17"	400	40	**048602**
Polyester Multifilament	4 7/8"	17"	270 continuous, 455 short term	80	**041235**
Nylon Multifilament	4 7/8"	17"	185 continuous, 455 short term	150	**031264**
Polyester Knit	4 7/8"	17"	270 continuous, 455 short term	225	**033922**
Polyester Monofilament	4 7/8"	17"	270 continuous, 455 short term	250	**036985**
Plain Weave Cotton Cloth	4 7/8"	17"	300	270	**028476**
Nylon Monofilament	4 7/8"	17"	270 continuous, 455 short term	400	**048603**
Nylon Monofilament	4 7/8"	17"	185 continuous, 455 short term	800	**031133**
Nylon Multifilament	4 7/8"	17"	185 continuous, 455 short term	1000	**028335**

Filter Tube: 4" Body Size x 34 ½" Body Length Strainers • 50/Box

4 7/8" x 33 ½" Filter Tubes (For 1.5", 2", 2.5", 3", and 4" connections). Fits 3" x 30" Perforated Element.

Material	Width	Length (LONG)	Max. Temperature (°F)	Micron	Part #
Non-Woven Polyester	4 7/8"	33 1/2"	400	25	**028390**
Polyester	4 7/8"	33 1/2"	400	40	**028857**
Polyester Multifilament	4 7/8"	33 1/2"	270 continuous, 455 short term	80	**029075**
Nylon Multifilament	4 7/8"	33 1/2"	185 continuous, 455 short term	150	**028395**
Polyester Monofilament	4 7/8"	33 1/2"	270 continuous, 455 short term	225	**040565**
Polyester Monofilament	4 7/8"	33 1/2"	270 continuous, 455 short term	250	**030951**
Plain Weave Cotton Cloth	4 7/8"	33 1/2"	300	270	**028797**
Polyester Multifilament	4 7/8"	33 1/2"	270 continuous, 455 short term	400	**023864**
Cotton Flannel	4 7/8"	33 1/2"	300	500	**029190**
Nylon Monofilament	4 7/8"	33 1/2"	275	500	**041618**
Nylon Multifilament	4 7/8"	33 1/2"	185 continuous, 455 short term	800	**10000044**

SaniClean™ Strainers

The SaniClean™ Strainer by Newark Wire Cloth Company is a direct replacement for a Tri-Clover style strainer. This strainer is constructed of 316L stainless steel and maintains an ID finish of 25 µin Ra and OD of 35 µin Ra. It is an alternative for your in-line (or straight-line) strainer needs. Wire mesh overscreens with longitudinal seams fit over the perforated support cores (or elements) to ensure a consistent diameter for the full length of the cylinder. Hemmed seams are tacked in place to provide a smooth, finished edge.

Complete In-line (or Straight-Line) Strainer Assemblies

Assemblies Include: Filter Body, Outlet Assembly, Distributor Cap, Spring, Clamp, Gasket (Buna-N), and Perforated Support Core (or Element).

Tri-Clamp Connections, 4" Body Size x 15.75", 3" Support Core (Element)

Connection Size	Body Size	Body Length	Perf. Size	Element Size	Part #
1.0"	4.0"	SHORT (15.75")	1/8"	3.0" x 10 7/8"	**5009005**
1.0"	4.0"	SHORT (15.75")	1/4"	3.0" x 10 7/8"	**5009000**
1.5"	4.0"	SHORT (15.75")	1/8"	3.0" x 10 7/8"	**5009015**
1.5"	4.0"	SHORT (15.75")	1/4"	3.0" x 10 7/8"	**5009010**
2.0"	4.0"	SHORT (15.75")	1/8"	3.0" x 10 7/8"	**5009025**
2.0"	4.0"	SHORT (15.75")	1/4"	3.0" x 10 7/8"	**5009020**

Tri-Clamp Connections, 4.5" Body Size x 15.75", 3.5" Support Core (Element)

Connection Size	Body Size	Body Length	Perf. Size	Element Size	Part #
2.5"	4.5"	SHORT (15.75")	1/8"	3.5" x 10 7/8"	**5009035**
2.5"	4.5"	SHORT (15.75")	1/4"	3.5" x 10 7/8"	**5009030**
3.0"	4.5"	SHORT (15.75")	1/8"	3.5" x 10 7/8"	**5009045**
3.0"	4.5"	SHORT (15.75")	1/4"	3.5" x 10 7/8"	**5009040**

Tri-Clamp Connections, 4" Body Size x 35.38", 3" Support Core (Element)

Connection Size	Body Size	Body Length	Perf. Size	Element Size	Part #
1.0"	4.0"	LONG (35.38")	1/8"	3.0" x 30 3/4"	**5009055**
1.0"	4.0"	LONG (35.38")	1/4"	3.0" x 30 3/4"	**5009050**
1.5"	4.0"	LONG (35.38")	1/8"	3.0" x 30 3/4"	**5009065**
1.5"	4.0"	LONG (35.38")	1/4"	3.0" x 30 3/4"	**5009060**
2.0"	4.0"	LONG (35.38")	1/8"	3.0" x 30 3/4"	**5009075**
2.0"	4.0"	LONG (35.38")	1/4"	3.0" x 30 3/4"	**5009070**

Tri-Clamp Connections, 4.5" Body Size x 35.38", 3.5" Support Core (Element)

Connection Size	Body Size	Body Length	Perf. Size	Element Size	Part #
2.5"	4.5"	LONG (35.38")	1/8"	3.5" x 30 3/4"	**5009085**
2.5"	4.5"	LONG (35.38")	1/4"	3.5" x 30 3/4"	**5009080**
3.0"	4.5"	LONG (35.38")	1/8"	3.5" x 30 3/4"	**5009095**
3.0"	4.5"	LONG (35.38")	1/4"	3.5" x 30 3/4"	**5009090**

SaniClean™ Strainer Replacement Parts

Spare Parts Kits			
1 Clamp 3 Gasket 6 Spring			
Strainer Model	**Seal Material**	**Kit Part # (1.0" / 1.5" / 2.0" Connection Sizes)**	**Kit Part # (2.5" / 3.0" Connection Sizes)**
SaniClean	EPDM	**333543**	**333547**
SaniClean	Viton	**333544**	**333548**
SaniClean	Buna-N	**333545**	**333549**
SaniClean	Tuf-Flex	**333546**	**333550**

1 Clamp

Connection Size	Body Size	Part #
1.0" / 1.5" / 2.0"	4.0"	**5000750**
2.5" / 3.0"	4.5"	**5000850**

2 Outlet Assembly

Clamped Connection Size	Part #	Bevel Seat Connection Size	Part #
1.0"	**5000700**	1.0"	**5000705**
1.5"	**5000800**	1.5"	**5000805**
2.0"	**5000900**	2.0"	**5000905**
2.5"	**5001000**	2.5"	**5001005**
3.0"	**5002000**	3.0"	**5002005**

3 Gaskets

Description	Connection Size	4" Body Size Part #	Connection Size	4.5" Body Size Part #
Buna-N (Standard)	1.0" / 1.5" / 2.0"	**5000760**	2.5" / 3.0"	**5000765**
Silicone	1.0" / 1.5" / 2.0"	**5000770**	2.5" / 3.0"	**5000775**
EPDM	1.0" / 1.5" / 2.0"	**5000780**	2.5" / 3.0"	**5000785**
Viton-SFY	1.0" / 1.5" / 2.0"	**5000790**	2.5" / 3.0"	**5000795**

4 Perforated Support Cores (Elements)

Connection Size	Body Size	Perf. Size	Body Length	Support Core (Element)	Part #
1.0" / 1.5" / 2.0"	4.0"	1/8"	SHORT (15.75")	3.0" x 10 7/8"	**5005010**
1.0" / 1.5" / 2.0"	4.0"	1/4"	SHORT (15.75")	3.0" x 10 7/8"	**5005030**
1.0" / 1.5" / 2.0"	4.0"	1/8"	LONG (35.38")	3.0" x 30 3/4"	**5005050**
1.0" / 1.5" / 2.0"	4.0"	1/4"	LONG (35.38")	3.0" x 30 3/4"	**5005070**
Connection Size	**Body Size**	**Perf. Size**	**Body Length**	**Support Core (Element)**	**Part #**
2.5" / 3.0"	4.5"	1/8"	SHORT (15.75")	3.5" x 10 7/8"	**5006090**
2.5" / 3.0"	4.5"	1/4"	SHORT (15.75")	3.5" x 10 7/8"	**5006100**
2.5" / 3.0"	4.5"	1/8"	LONG (35.38")	3.5" x 30 3/4"	**5006120**
2.5" / 3.0"	4.5"	1/4"	LONG (35.38")	3.5" x 30 3/4"	**5006130**

5 Distributor Cap

Connection Size	Body Size	Part #
1.0" / 1.5" / 2.0"	4.0"	**5000730**
2.5" / 3.0"	4.5"	**5001030**

6 Spring

Connection Size	Body Size	Part #
1.0" / 1.5" / 2.0"	4.0"	**5000740**
2.5" / 3.0"	4.5"	**5001040**

7 Strainer Body

Connection Size	SHORT Body Part #	LONG Body Part #
1.0"	**5000710**	**5000720**
1.5"	**5000810**	**5000820**
2.0"	**5000910**	**5000920**
2.5"	**5001010**	**5001020**
3.0"	**5002010**	**5002020**

SaniClean™ Strainer Accessories

Retaining Rings

Retaining Rings Hold Filter Tubes' Support Cores (Elements). The part numbers below include one retaining ring - two rings are required to hold both ends of the filter tube to the support core.

Description	Part #
Retaining Ring (Buna-N) - to fit 3" dia. Perforated Element	**3100108**
Retaining Ring (Viton-SFY) - to fit 3" dia. Perforated Element	**3100114**
Retaining Ring (EPDM) - to fit 3" dia. Perforated Element	**3100130**
Retaining Ring (Buna-N) - to fit 3.5" dia. Perforated Element	**3100109**
Retaining Ring (Viton-SFY) - to fit 3.5" dia. Perforated Element	**3100124**
Retaining Rings (EPDM) - to fit 3.5" dia. Perforated Element	**3100131**

Filter Tube: 4" Body Size x 15.75" Body Length Strainers • 50/Box

4 7/8" x 17" Filter Tubes (For 1", 1.5", and 2" connections). Fits 3.0" x 10 7/8" Perforated Support Core (Element).

Material	Width	Length (SHORT)	Max. Temperature (°F)	Micron	Part #
Polyester	4 7/8"	17"	400	25	**032789**
Polyester	4 7/8"	17"	400	40	**048602**
Polyester Multifilament	4 7/8"	17"	270 continuous, 455 short term	80	**041235**
Nylon Multifilament	4 7/8"	17"	185 continuous, 455 short term	150	**031264**
Polyester Knit	4 7/8"	17"	270 continuous, 455 short term	225	**033922**
Polyester Monofilament	4 7/8"	17"	270 continuous, 455 short term	250	**036985**
Plain Weave Cotton Cloth	4 7/8"	17"	300	270	**028476**
Nylon Monofilament	4 7/8"	17"	270 continuous, 455 short term	400	**048603**
Nylon Monofilament	4 7/8"	17"	185 continuous, 455 short term	800	**031133**
Nylon Multifilament	4 7/8"	17"	185 continuous, 455 short term	1000	**028335**

Filter Tube: 4" Body Size x 35.38" Body Length Strainers • 50/Box

4 7/8" x 33 ½" Filter Tubes (For 1", 1.5", and 2" connections). Fits 3.0" x 30 ¾" Perforated Support Core (Element).

Material	Width	Length (LONG)	Max. Temperature (°F)	Micron	Part #
Non-Woven Polyester	4 7/8"	33 1/2"	400	25	**028390**
Polyester	4 7/8"	33 1/2"	400	40	**028857**
Polyester Multifilament	4 7/8"	33 1/2"	270 continuous, 455 short term	80	**029075**
Nylon Multifilament	4 7/8"	33 1/2"	185 continuous, 455 short term	150	**028395**
Polyester Monofilament	4 7/8"	33 1/2"	270 continuous, 455 short term	225	**040565**
Polyester Monofilament	4 7/8"	33 1/2"	270 continuous, 455 short term	250	**030951**
Plain Weave Cotton Cloth	4 7/8"	33 1/2"	300	270	**028797**
Polyester Multifilament	4 7/8"	33 1/2"	270 continuous, 455 short term	400	**023864**
Cotton Flannel	4 7/8"	33 1/2"	300	500	**029190**
Nylon Monofilament	4 7/8"	33 1/2"	275	500	**041618**
Nylon Multifilament	4 7/8"	33 1/2"	185 continuous, 455 short term	800	**10000044**

Filter Tubes: 4.5" Body Size x 15.75" Body Length Strainers • 50/Box

5 5/8" x 13 1/2" Filter Tubes (For 2.5", 3", and 4" Connections). Fits 3.5" x 10 7/8" Perforated Support Core (Element)

Material	Width	Length (SHORT)	Micron	Part #
Polyester	5 5/8"	13 1/2"	40	**031840**
Polyester Multifilament	5 5/8"	13 1/2"	80	**048624**
Nylon Multifilament	5 5/8"	13 1/2"	150	**048625**
Polyester Knit	5 5/8"	13 1/2"	225	**048626**
Polyester Multifilament	5 5/8"	13 1/2"	250	**048627**
Plain Weave Cotton Cloth	5 5/8"	13 1/2"	300	**029189**
Nylon Monofilament	5 5/8"	13 1/2"	300	**048628**
Nylon Monofilament	5 5/8"	13 1/2"	400	**048629**
Cotton Flannel	5 5/8"	13 1/2"	500	**033778**
Nylon Monofilament	5 5/8"	13 1/2"	500	**048630**
Nylon Multifilament	5 5/8"	13 1/2"	765	**048631**

Filter Tubes: 4.5" Body Size x 35.38" Body Length Strainers • 50/Box

5 5/8" x 33 1/2" Filter Tubes (For 2.5", 3", and 4" Connections). Fits 3.5" x 30 3/4" Perforated Support Core (Element)

Material	Width	Length (LONG)	Micron	Part #
Polyester	5 5/8"	33 1/2"	25	**029473**
Polyester	5 5/8"	33 1/2"	40	**030660**
Polyester Multifilament	5 5/8"	33 1/2"	80	**048604**
Nylon Multifilament	5 5/8"	33 1/2"	150	**035341**
Polyester Knit	5 5/8"	33 1/2"	225	**038186**
Polyester Monofilament	5 5/8"	33 1/2"	250	**035342**
Plain Weave Cotton Cloth	5 5/8"	33 1/2"	300	**032668**
Nylon Multifilament	5 5/8"	33 1/2"	300	**048605**
Nylon Monofilament	5 5/8"	33 1/2"	400	**039161**
Polyester Multifilament	5 5/8"	33 1/2"	400	**048606**
Cotton Flannel	5 5/8"	33 1/2"	500	**048607**
Nylon Monofilament	5 5/8"	33 1/2"	500	**048608**
Nylon Multifilament	5 5/8"	33 1/2"	765	**048609**

Mesh Overscreens for SaniClean™ Strainers

Description 3" Dia. x 10 7/8" Length (SHORT)	Mesh Size	Part #
Wire Mesh Overscreen	10	**5000010**
Wire Mesh Overscreen	12	**5000020**
Wire Mesh Overscreen	14	**5000030**
Wire Mesh Overscreen	16	**5000040**
Wire Mesh Overscreen	18	**5000050**
Wire Mesh Overscreen	20	**5000060**
Wire Mesh Overscreen	24	**5000070**
Wire Mesh Overscreen	30	**5000080**
Wire Mesh Overscreen	40	**5000090**
Wire Mesh Overscreen	50	**5000095**
Wire Mesh Overscreen	60	**5000100**
Wire Mesh Overscreen	80	**5000110**
Wire Mesh Overscreen	100	**5000120**
Wire Mesh Overscreen	120	**5000130**
Wire Mesh Overscreen	150	**5000140**
Wire Mesh Overscreen	200	**5000150**

Description 3" Dia. x 30 3/4" Length (LONG)	Mesh Size	Part #
Wire Mesh Overscreen	10	**5000510**
Wire Mesh Overscreen	12	**5000520**
Wire Mesh Overscreen	14	**5000530**
Wire Mesh Overscreen	16	**5000540**
Wire Mesh Overscreen	18	**5000550**
Wire Mesh Overscreen	20	**5000560**
Wire Mesh Overscreen	24	**5000570**
Wire Mesh Overscreen	30	**5000580**
Wire Mesh Overscreen	40	**5000590**
Wire Mesh Overscreen	50	**5000595**
Wire Mesh Overscreen	60	**5000600**
Wire Mesh Overscreen	80	**5000610**
Wire Mesh Overscreen	100	**5000620**
Wire Mesh Overscreen	120	**5000630**
Wire Mesh Overscreen	150	**5000640**
Wire Mesh Overscreen	200	**5000650**

Description 3 ½" Dia. x 10 ⅞" Length (SHORT)	Mesh Size	Part #
Wire Mesh Overscreen	10	**5000160**
Wire Mesh Overscreen	12	**5000170**
Wire Mesh Overscreen	14	**5000180**
Wire Mesh Overscreen	16	**5000190**
Wire Mesh Overscreen	18	**5000200**
Wire Mesh Overscreen	20	**5000210**
Wire Mesh Overscreen	24	**5000220**
Wire Mesh Overscreen	30	**5000230**
Wire Mesh Overscreen	40	**5000240**
Wire Mesh Overscreen	50	**5000245**
Wire Mesh Overscreen	60	**5000250**
Wire Mesh Overscreen	80	**5000260**
Wire Mesh Overscreen	100	**5000270**
Wire Mesh Overscreen	120	**5000280**
Wire Mesh Overscreen	150	**5000290**
Wire Mesh Overscreen	200	**5000300**

Description 3 ½" Dia. x 30 ¾" Length (LONG)	Mesh Size	Part #
Wire Mesh Overscreen	10	**5000310**
Wire Mesh Overscreen	12	**5000320**
Wire Mesh Overscreen	14	**5000330**
Wire Mesh Overscreen	16	**5000340**
Wire Mesh Overscreen	18	**5000350**
Wire Mesh Overscreen	20	**5000360**
Wire Mesh Overscreen	24	**5000370**
Wire Mesh Overscreen	30	**5000380**
Wire Mesh Overscreen	40	**5000390**
Wire Mesh Overscreen	50	**5000395**
Wire Mesh Overscreen	60	**5000400**
Wire Mesh Overscreen	80	**5000410**
Wire Mesh Overscreen	100	**5000420**
Wire Mesh Overscreen	120	**5000430**
Wire Mesh Overscreen	150	**5000440**
Wire Mesh Overscreen	200	**5000450**

Angle-Line Strainers

Sani-Matic Angle-Line Strainers allow operators to clean the strainer element without removing the strainer body from the process line, which significantly increases production uptime.

Sani-Matic offers several Angle-Line Strainer configurations, including the standard 4" Body Size Angle-Line Strainers, High-Capacity Angle-Line Strainers (6" Body Size) for higher volume process straining, Magnetic Trap Strainers for ferromagnetic capture, and strainers with sight-glass and sample / drain ports.

Our Angle-Line Strainers provide the option between an end-inlet or side-inlet flow direction by simply changing a few internal parts.

Multi-Angle-Line Strainer Assemblies can be used to reduce downtime by allowing one or more strainers to be valved open and operational, while the other strainer(s) are closed for cleaning and/or maintenance. They can also be configured as parallel components and used simultaneously, which provides the ability to split a process flow rate between two or more strainers.

Angle-Line Strainers are authorized to carry a 3-A symbol when using perforated elements.

QUICK TIPS Did you know strainer clips and elastomers are consumable items and fatigue over time?

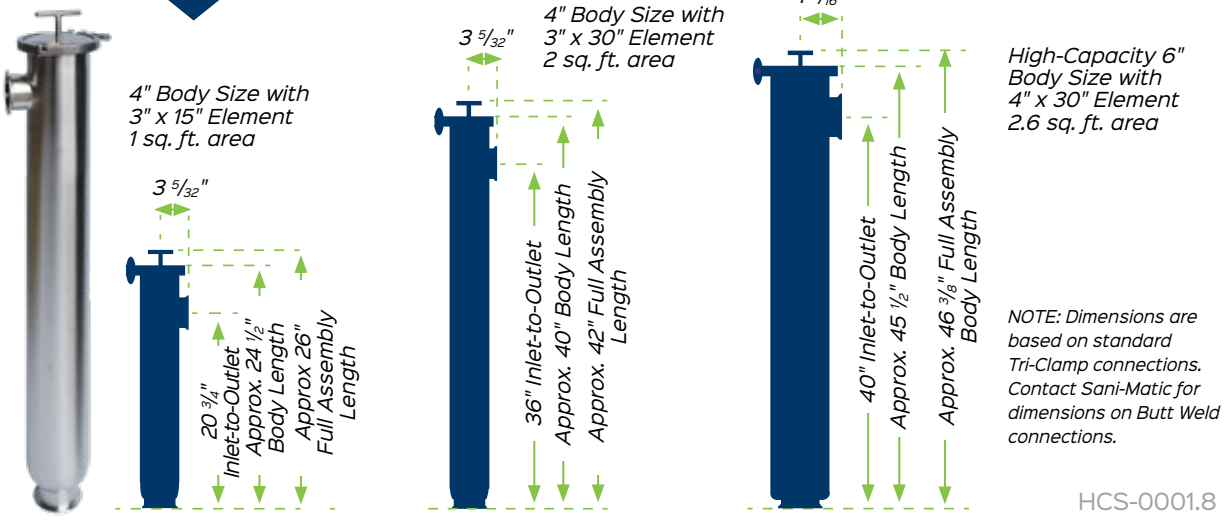
Clips: The fit of a clip must be checked regularly and replaced when it no longer provides a secure fit or is overly worn.

Elastomers: Plan to replace the strainer elastomers annually at a minimum.

Not sure when to clean a strainer? Installing a pressure gauge before and after a strainer can help. When the gauge placed after the strainer drops 8 to 10 psi following the initial flow start-up, you'll know it is time to clean.

GOOD TO KNOW

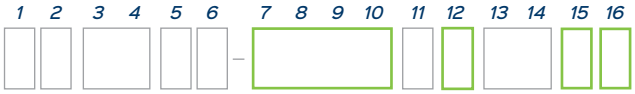
- **Strainer & Element Material:** 316Lss
- **Sanitary ID Finish:** 32 µin Ra
- **CRN Registered Maximum Pressure Rating (Standard Tri-Clamp):** 100 psi (4" body)
- **Full Assembly Maximum Pressure Rating (Standard Tri-Clamp):** 125 psi (4" body), 75 psi (6" body)
- **Full Assembly Maximum Pressure Rating (High Pressure Tri-Clamp):** 200 psi (4" & 6" body)
- **Maximum Temperature Rating:** 250 °F
- Wedgewire elements have some interior surfaces greater than 32 µin Ra due to the construction process.
- 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).
- A hot water jacket option is available for 4" strainer bodies, contact Sani-Matic for custom quoting.
- When shipped, strainer assemblies with a Teflon Encapsulated O-ring are not lubricated. Strainer assemblies with other O-ring materials will be lubricated with an FDA-compliant silicone grease.
- High-Capacity Angle-Line Strainers have a 6" Body Size and are ideal for higher-volume processes.
- Sample / Drain Ports are 0.5" tri-clamp ports added to the frame tri-clamp cap (for magnetic trap strainers, they are added to the strainer body). They drain a majority of the liquid, but are not 100% drainable. *NOTE: A cap or sample valve is not included in the assembly.*
- End-Inlet Strainers are Standard Flow and Side-Inlet Strainers are Reverse Flow.
- Filter tubes are FDA-compliant, and when used with perforated elements 3/32" or larger maintain overall strainer assembly 3-A authorization.
- Tuf-Flex® Gaskets are PTFE gaskets with an EPDM core that helps to reduce "stickiness" of the gasket allowing for an easier and quicker strainer element removal process.



NOTE: Dimensions are based on standard Tri-Clamp connections. Contact Sani-Matic for dimensions on Butt Weld connections.

Angle-Line Strainer Model Number Key

Example Model #: AS15T3-P125S54000



1	**Strainer Model**	
	A	Angle-Line
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)
	H	Tri-Clamp - High Pressure Clamp
	W	Butt Weld*
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" ($^{1}/_{4}$")
	P375	Perforated / 0.375" ($^{3}/_{8}$")
	W001	Wedgewire / 0.001"
	W002	Wedgewire / 0.002"
	W005	Wedgewire / 0.005"
	W007	Wedgewire / 0.007"
	W010	Wedgewire / 0.010"
	W015	Wedgewire / 0.015"
	W020	Wedgewire / 0.020"
	W030	Wedgewire / 0.030"
	W040	Wedgewire / 0.040"
	W060	Wedgewire / 0.060"
	W187	Wedgewire / 0.1875"
11	**Flow Direction**	
	S	End-Inlet (Standard Flow)
	R	Side-Inlet (Reverse Flow)
12	**Seal Kit**	
	5	EPDM Gasket / Teflon Encapsulated Silicone O-Ring (Standard)
	6	Viton Gasket / Teflon Encapsulated Silicone O-Ring
	8	Buna-N Gasket / Teflon Encapsulated Silicone O-Ring
	9	Silicone Gasket / Teflon Encapsulated Silicone O-Ring
	T	Tuf-Flex Gasket / Teflon Encapsulated Silicone O-Ring
	0	EPDM Gasket / EPDM O-Ring
	1	Viton Gasket / Viton O-Ring
	3	Buna-N Gasket / Buna-N O-Ring
13, 14	**Body Size**	
	40	4.0"
15	**Option #1**	
	0	None (Standard)
	M	Magnetic Trap**
16	**Option #2**	
	0	None (Standard)
	2	Dual Sight Glass*
	D	Drain / Sample Port*
	3	Dual Sight Glass & Drain / Sample Port*

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

NOTE: See page 34 for element details.

***Magnetic Trap option only available with End-Inlet (Standard Flow) strainers and for 1.5" - 3.0" connection sizes.*

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 tables below.

Angle-Line End-Inlet (Standard Flow)

Connection Size	Body Size	Max. gpm	SHORT (20 3/4" Inlet-to-Outlet)		LONG (36" Inlet-to-Outlet)	
			Perforated Old Part #	Perforated New Model Key #	Perforated Old Part #	Perforated New Model Key #
1.5"	4"	55	S10026	AS15T3-P□S□40□□	S10036	AL15T3-P□S□40□□
2.0"	4"	105	S10027	AS20T3-P□S□40□□	S10037	AL20T3-P□S□40□□
2.5"	4"	165	S10028	AS25T3-P□S□40□□	S10038	AL25T3-P□S□40□□
3.0"	4"	245	S10029	AS30T3-P□S□40□□	S10039	AL30T3-P□S□40□□
4.0"	4"	330	S10030	AS40T3-P□S□400□	S10040	AL40T3-P□S□40□□
Connection Size	**Body Size**	**Max. gpm**	**Wedgewire Old Part #**	**Wedgewire New Model Key #**	**Wedgewire Old Part #**	**Wedgewire New Model Key #**
1.5"	4"	55	S10146	AS15T3-W□S□40□□	S10156	AL15T3-W□S□40□□
2.0"	4"	105	S10147	AS20T3-W□S□40□□	S10157	AL20T3-W□S□40□□
2.5"	4"	165	S10148	AS25T3-W□S□40□□	S10158	AL25T3-W□S□40□□
3.0"	4"	245	S10149	AS30T3-W□S□40□□	S10159	AL30T3-W□S□40□□
4.0"	4"	330	S10150	AS40T3-W□S□400□	S10160	AL40T3-W□S□40□□

NOTE: Magnetic Trap option is not available with 4.0" Connection Size.

NOTE: If using filter tubes, the maximum recommended flow rate (gpm) may decrease depending on process conditions.

Angle-Line Side-Inlet (Reverse Flow)

Connection Size	Body Size	Max. gpm	SHORT (20 3/4" Inlet-to-Outlet)		LONG (36" Inlet-to-Outlet)	
			Perforated Old Part #	Perforated New Model Key #	Perforated Old Part #	Perforated New Model Key #
1.5"	4"	55	X10026	AS15T3-P□R□400□	X10036	AL15T3-P□R□400□
2.0"	4"	105	X10027	AS20T3-P□R□400□	X10037	AL20T3-P□R□400□
2.5"	4"	165	X10028	AS25T3-P□R□400□	X10038	AL25T3-P□R□400□
3.0"	4"	245	X10029	AS30T3-P□R□400□	X10039	AL30T3-P□R□400□
4.0"	4"	430	X10030	AS40T3-P□R□400□	X10040	AL40T3-P□R□400□
Connection Size	**Body Size**	**Max. gpm**	**Wedgewire Old Part #**	**Wedgewire New Model Key #**	**Wedgewire Old Part #**	**Wedgewire New Model Key #**
1.5"	4"	55	X10146	AS15T3-W□R□400□	X10156	AL15T3-W□R□400□
2.0"	4"	105	X10147	AS20T3-W□R□400□	X10157	AL20T3-W□R□400□
2.5"	4"	165	X10148	AS25T3-W□R□400□	X10158	AL25T3-W□R□400□
3.0"	4"	245	X10149	AS30T3-W□R□400□	X10159	AL30T3-W□R□400□
4.0"	4"	430	X10150	AS40T3-W□R□400□	X10160	AL40T3-W□R□400□

NOTE: Magnetic Trap option is not available with Reverse Flow.

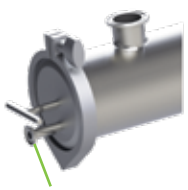
NOTE: If using filter tubes, the maximum recommended flow rate (gpm) may decrease depending on process conditions.

Angle-Line Strainer Options

The Drain / Sample Port helps operators drain strainers before removing the element for cleaning. Air relief sample valves are recommended for the Drain / Sample Port option.

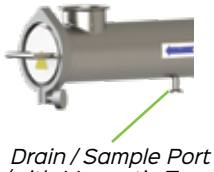
Strainer sight glasses provide visual access to particulate buildup levels.

See Magnetic Trap Strainer section for more details on that option.



Drain / Sample Port

Dual Sight Glass



Drain / Sample Port (with Magnetic Trap)

Cv Values & Pressure Drops for Angle-Line Strainers

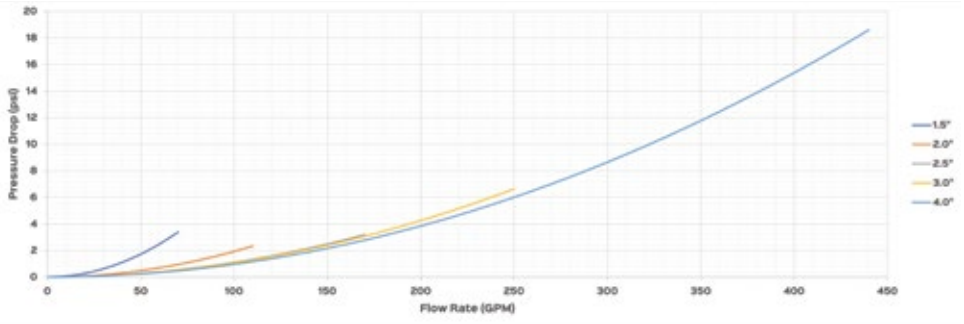
Cv values or the provided pressure drop tables can be used to estimate the pressure drop across a strainer at a given flow rate. Cv values are for water at 70 °F. Contact Sani-Matic for inquiries on pressure drops for fluids with other viscosities.

Cv Values

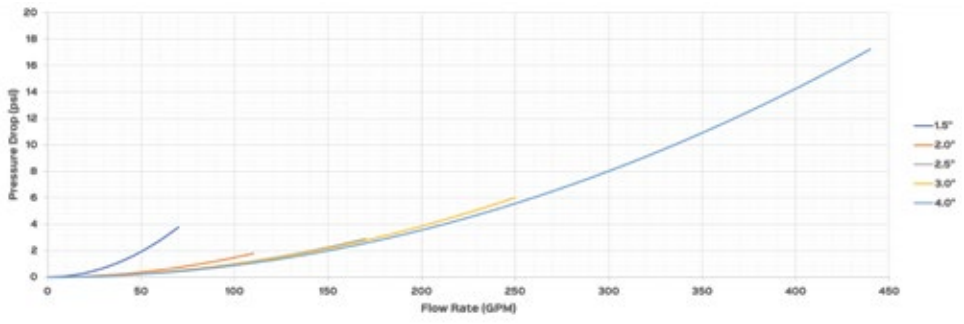
Body Size	Body Length	Flow Configuration	Connection Size	Cv
4.0"	LONG (36")	End-Inlet (Standard Flow)	1.5"	38
			2.0"	72
			2.5"	95
			3.0"	97
			4.0"	102
	SHORT (20 ¾")		1.5"	36
			2.0"	82
			2.5"	100
			3.0"	102
			4.0"	106
	LONG (36")	Side-Inlet (Reverse Flow)	1.5"	36
			2.0"	77
			2.5"	112
			3.0"	125
			4.0"	155
	SHORT (20 ¾")		1.5"	39
			2.0"	77
			2.5"	120
			3.0"	142
			4.0"	160
6.0"	LONG (36")	End-Inlet (Standard Flow)	3.0"	196
			4.0"	214
			6.0"	250
		Side-Inlet (Reverse Flow)	3.0"	186
			4.0"	233
			6.0"	266

NOTE: Cv values and charted pressure drops can be used for perforated, wedgewire, and perforated with mesh overlays or filter tubes. 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.

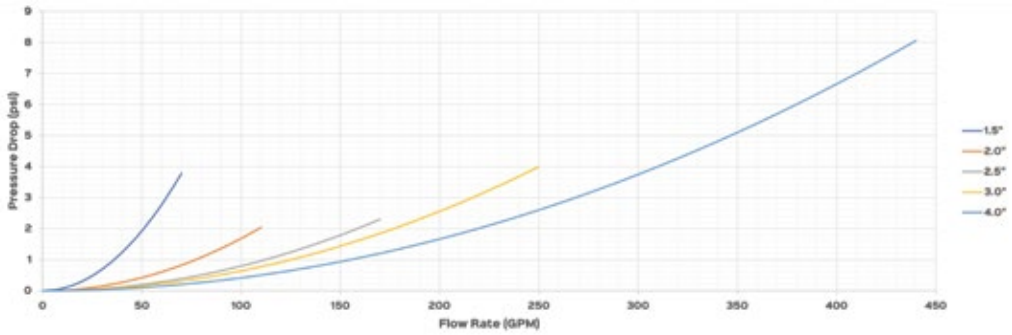
Angle-Line Strainer Pressure Drop: 4.0" Body, End-Inlet (Standard Flow), LONG Body (36")



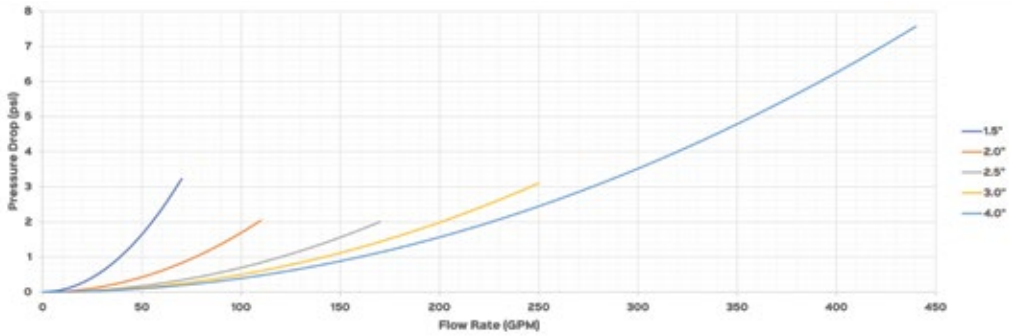
Angle-Line Strainer Pressure Drop: 4.0" Body, End-Inlet (Standard Flow), SHORT Body (20 ¾")



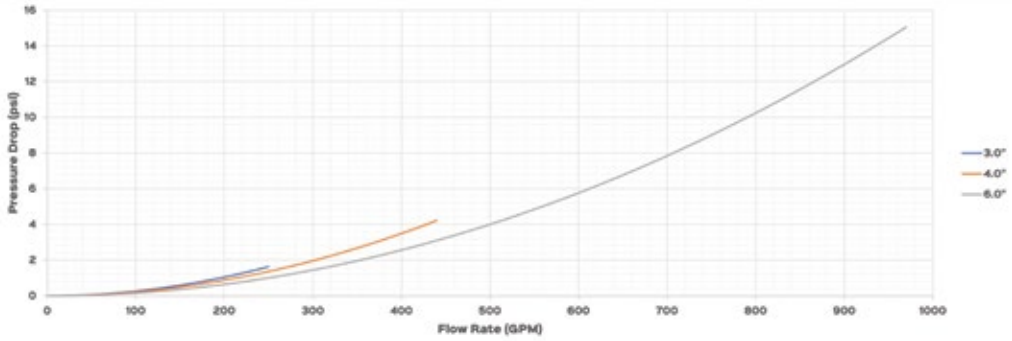
Angle-Line Strainer Pressure Drop: 4.0" Body, Side-Inlet (Reverse Flow), LONG Body (36")



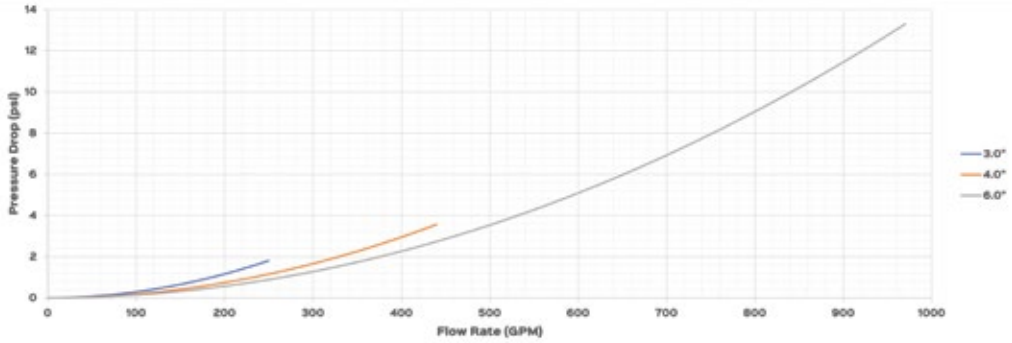
Angle-Line Strainer Pressure Drop: 4.0" Body, Side-Inlet (Reverse Flow), SHORT Body (20 ¾")



Angle-Line Strainer Pressure Drop: 6.0" Body (High-Capacity), End-Inlet (Standard Flow)

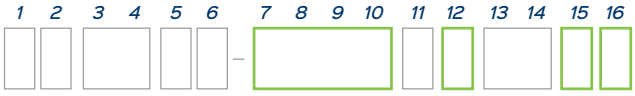


Angle-Line Strainer Pressure Drop: 6.0" Body (High-Capacity), Side-Inlet (Reverse Flow)



High-Capacity Angle-Line Strainer Model Number Key

Example Model #: HL40T3-P125S56000



1	**Strainer Model**	
	H	Angle-Line, High-Capacity
2	**Body Length**	
	L	LONG Body
3, 4	**Connection Size**	
	30	3.0"
	40	4.0"
	60	6.0"
5	**Connection Type**	
	T	Tri-Clamp (Standard)
	H	Tri-Clamp - High Pressure Clamp
	W	Butt Weld*
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" ($^{1}/_{4}$")
	W001	Wedgewire / 0.001"*
	W002	Wedgewire / 0.002"*
	W005	Wedgewire / 0.005"
	W007	Wedgewire / 0.007"*
	W010	Wedgewire / 0.010"*
	W015	Wedgewire / 0.015"
	W020	Wedgewire / 0.020"*
	W030	Wedgewire / 0.030"
	W040	Wedgewire / 0.040"*
	W060	Wedgewire / 0.060"
	W187	Wedgewire / 0.1875"*
11	**Flow Direction**	
	S	End-Inlet (Standard Flow)
	R	Side-Inlet (Reverse Flow)
12	**Seal Kit**	
	5	EPDM Gasket / Teflon Encapsulated Silicone O-Ring (Standard)
	6	Viton Gasket / Teflon Encapsulated Silicone O-Ring
	8	Buna-N Gasket / Teflon Encapsulated Silicone O-Ring*
	9	Silicone Gasket / Teflon Encapsulated Silicone O-Ring*
	T	Tuf-Flex Gasket / Teflon Encapsulated Silicone O-Ring*
	0	EPDM Gasket / EPDM O-Ring
	1	Viton Gasket / Viton O-Ring
	3	Buna-N Gasket / Buna-N O-Ring*
13, 14	**Body Size**	
	60	6.0"
15	**Option #1**	
	0	None (Standard)
	M	Magnetic Trap*
16	**Option #2**	
	0	None (Standard)
	2	Dual Sight Glass*
	D	Drain / Sample Port*
	3	Dual Sight Glass & Drain / Sample Port*

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

NOTE: See page 34 for element details.

NOTE: Magnetic Trap option is only available with End-Inlet (Standard Flow).

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 tables below.

High-Capacity Angle-Line End-Inlet (Standard Flow)

Connection Size	Body Size	Max. gpm	LONG (40" Inlet-to-Outlet)	
			Perforated Old Part #	Perforated New Model Key #
4.0"	6"	465	S10176	HL40T3-P□S□60□
Connection Size	**Body Size**	**Max. gpm**	**Wedgewire Old Part #**	**Wedgewire New Model Key #**
4.0"	6"	465	S10175	HL40T3-W□S□60□

Recommended Maximum Flows for 3.0" and 6.0" Connection Sizes are 245 gpm and 790 gpm.

High-Capacity Angle-Line Side-Inlet (Reverse Flow)

Connection Size	Body Size	Max. gpm	LONG (40" Inlet-to-Outlet)	
			Perforated Old Part #	Perforated New Model Key #
4.0"	6"	510	X10176	HL40T3-P□R□600□
Connection Size	**Body Size**	**Max. gpm**	**Wedgewire Old Part #**	**Wedgewire New Model Key #**
4.0"	6"	510	X10175	HL40T3-W□R□600□

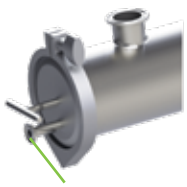
Recommended Maximum Flows for 3.0" and 6.0" Connection Sizes are 245 gpm and 840 gpm.

High-Capacity Angle-Line Strainer Options

High-capacity strainers are ideal for higher-volume processes.

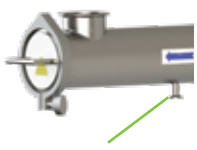
The Drain / Sample Port helps operators drain the majority of liquid from the strainers before removing the element for cleaning. Air relief sample valves are recommended for the Drain / Sample Port option.

Strainer sight glasses provide visual access to particulate buildup levels.



Drain / Sample Port

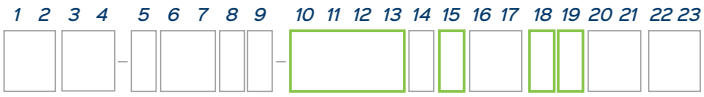
Dual Sight Glass



Drain / Sample Port (with Magnetic Trap)

Multi-Angle-Line Strainer Model Number Key

Example Model #: MADV-S15T3-P125S540M2MBPG



1, 2	**Strainer Model**	
	MA	Multi-Angle-Line
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" (1/16")*
	P093	Perforated / 0.09375" (3/32")
	P125	Perforated / 0.125" (1/8")
	P250	Perforated / 0.25" (1/4")
	P375	Perforated / 0.375" (3/8")
	W001	Wedgewire / 0.001"
	W002	Wedgewire / 0.002"
	W005	Wedgewire / 0.005"
	W007	Wedgewire / 0.007"
	W010	Wedgewire / 0.010"
	W015	Wedgewire / 0.015"
	W020	Wedgewire / 0.020"
	W030	Wedgewire / 0.030"
	W040	Wedgewire / 0.040"
	W060	Wedgewire / 0.060"
	W187	Wedgewire / 0.1875"
14	**Flow Direction**	
	S	End-Inlet (Standard Flow)
	R	Side-Inlet (Reverse Flow)
15	**Seal Kit**	
	5	EPDM Gasket / Teflon Encapsulated Silicone O-Ring (Standard)
	6	Viton Gasket / Teflon Encapsulated Silicone O-Ring
	8	Buna-N Gasket / Teflon Encapsulated Silicone O-Ring
	9	Silicone Gasket / Teflon Encapsulated Silicone O-Ring
	T	Tuf-Flex Gasket / Teflon Encapsulated Silicone O-Ring
	0	EPDM Gasket / EPDM O-Ring
	1	Viton Gasket / Viton O-Ring
	3	Buna-N Gasket / Buna-N O-Ring
16, 17	**Body Size**	
	40	4.0"
18	**Option #1**	
	0	None (Standard)
	M	Magnetic Trap**
19	**Option #2**	
	0	None (Standard)
	2	Dual Sight Glass*
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*

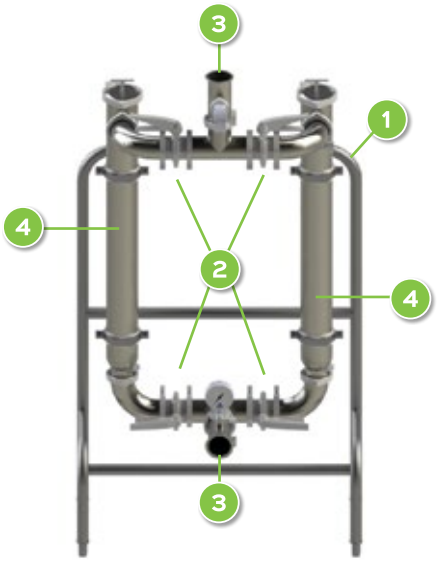
Non-stock product option. Longer lead times apply. Non-returnable. *NOTE: See page 34 for element details.*

***NOTE: Magnetic Trap option only available with End-Inlet (Standard Flow) strainers and for 1.5"-3.0" connection sizes.*

NOTE: Stand is included in all above configs.

NOTE: Pneumatically Operated Butterfly Valves option requires air supply and automation controls (by others). See page 32 for details.

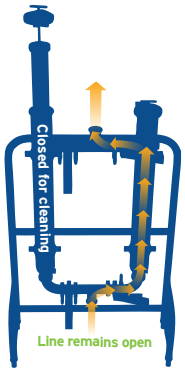
NOTE: Pressure Transmitters option requires electrical supply and automation controls (by others). See page 32 for details.



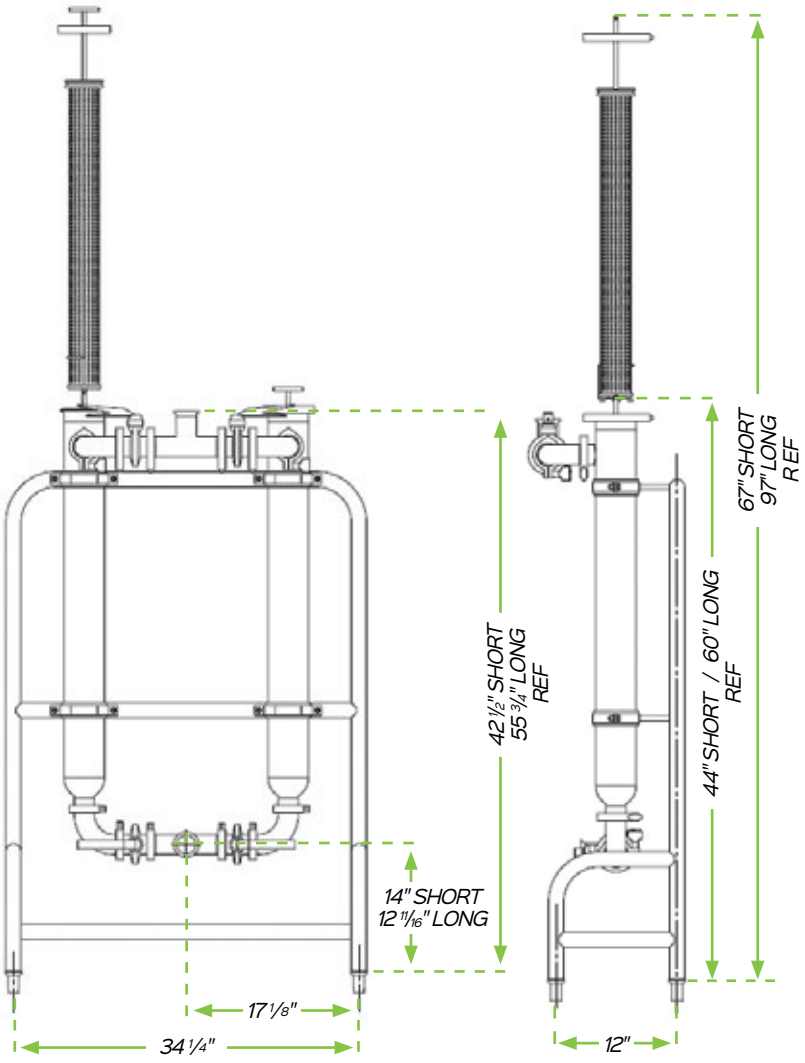
Multi-Angle-Line Strainers
Dual Strainers - Vertical
Complete Assembly

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

NOTE: Replacement parts shown on page 32.



NOTE: The above diagram highlights End-Inlet (Standard Flow) strainers, but Dual Angle-Line Strainer Assemblies can be configured as Side-Inlet (Reverse Flow).



NOTE: Image shown references LONG strainer assemblies. Differences in SHORT and LONG strainer dimensions are noted.

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

Multi-Angle-Line Strainer Replacement Parts

1 Dual Vertical Angle-Line/ALB Strainer Stands

Connection Size	Body Size	SHORT (20 3/4")	LONG (36")
1.5"	4"	**254212**	**257979**
2.0"	4"	**258021**	**258010**
2.5"	4"	**258030**	**258017**
3.0"	4"	**258031**	**257599**
4.0"	4"	**348193**	**254256**

NOTE: Stands are approximately 35 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.

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)*
- *-4 °F to 250 °F Operating Temperature*

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**

3 Pressure Kits

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.

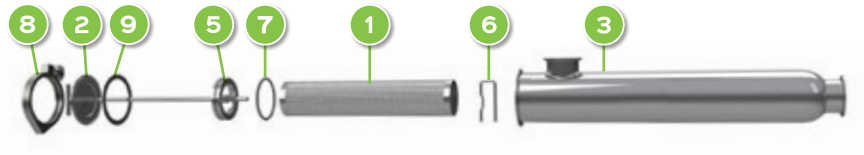
NOTE: Pressure Transmitters require a 24V DC power source and output a 4-20mA signal.

Pressure Gauge

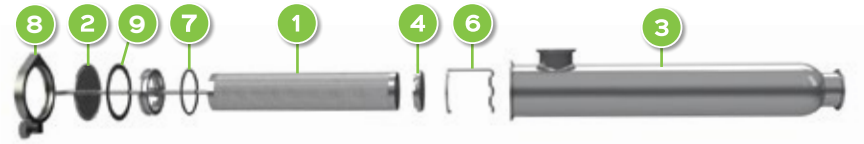
Pressure Transmitter

Angle-Line Strainer Replacement Parts

Angle-Line Side-Inlet Strainer (Reverse Flow)



Angle-Line End-Inlet Strainer (Standard Flow)



1. Strainer Element
2. Strainer Element Frame
3. Strainer Body
4. End Plug
5. O-Ring Retainer
6. Retaining Clip
7. O-Ring
8. TC Clamp
9. TC Gasket

Spare Parts Kits

6 Retaining Clip
7 O-Ring
9 TC Gasket

Strainer Model	Seal Material	Kit Part # End-Inlet (Standard Flow)	Kit Part # Side-Inlet (Reverse Flow)
Angle-Line Strainer (4" Body)	EPDM Gasket / Teflon Encapsulated Silicone O-Ring	333551	333560
Angle-Line Strainer (4" Body)	Viton Gasket / Teflon Encapsulated Silicone O-Ring	333552	333561
Angle-Line Strainer (4" Body)	Buna-N Gasket / Teflon Encapsulated Silicone O-Ring	333553	333562
Angle-Line Strainer (4" Body)	Silicone Gasket / Teflon Encapsulated Silicone O-Ring	333554	333563
Angle-Line Strainer (4" Body)	Tuf-Flex Gasket / Teflon Encapsulated Silicone O-Ring	333555	333564
Angle-Line Strainer (4" Body)	EPDM Gasket / EPDM O-Ring	333556	333565
Angle-Line Strainer (4" Body)	Viton Gasket / Viton O-Ring	333558	333566
Angle-Line Strainer (4" Body)	Buna-N Gasket / Buna-N O-Ring	333559	333567

Strainer Model	Seal Material	Kit Part # End-Inlet (Standard Flow)	Kit Part # Side-Inlet (Reverse Flow, New Design After 2024)	Kit Part # Side-Inlet (Reverse Flow, Pre-2024 Design)
High-Capacity Angle-Line Strainer (6" Body)	EPDM Gasket / Teflon Encapsulated Silicone O-Ring	333569	333705	333579
High-Capacity Angle-Line Strainer (6" Body)	Viton Gasket / Teflon Encapsulated Silicone O-Ring	333570	333706	333580
High-Capacity Angle-Line Strainer (6" Body)	Buna-N Gasket / Teflon Encapsulated Silicone O-Ring	333571	333707	333581
High-Capacity Angle-Line Strainer (6" Body)	Silicone Gasket / Teflon Encapsulated Silicone O-Ring	333572	333708	333582
High-Capacity Angle-Line Strainer (6" Body)	Tuf-Flex Gasket / Teflon Encapsulated Silicone O-Ring	333573	333709	333583
High-Capacity Angle-Line Strainer (6" Body)	EPDM Gasket / EPDM O-Ring	333574	333710	333584
High-Capacity Angle-Line Strainer (6" Body)	Viton Gasket / Viton O-Ring	333575	333712	333585
High-Capacity Angle-Line Strainer (6" Body)	Buna-N Gasket / Buna-N O-Ring	333576	333713	333586

Flow Direction Conversion Kits

Conversion Kits allow for easy re-configuration of a strainer's flow direction. Order a Spare Parts Kit in addition to a Conversion Kit to complete a re-configuration.

2 Strainer Element Frame — Flow Direction Arrow Sticker
4 5 End Plug OR O-Ring Retainer

4" Body Angle-Line Strainers			
Flow Direction Conversion Kit	**Connection Size(s)**	**SHORT Length Part #**	**LONG Length Part #**
End-Inlet to Side-Inlet	1.5" - 4.0"	**346241**	**346244**
Side-Inlet to End-Inlet	1.5" - 3.0"	**346242**	**346245**
	4.0"	**346243**	**346246**

1 Strainer Elements

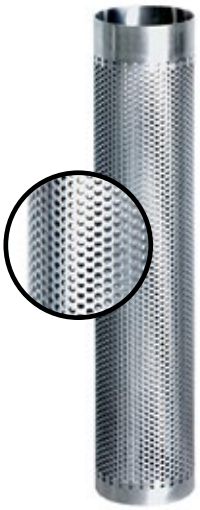
Perforated Strainer Elements					
Strainer Body Size	**Strainer Element Size**	**Hole Size**	**Open Area**	**SHORT (15") Part #**	**LONG (30") Part #**
4"	3"	1/16"	23%	**289084**	**277628**
4"	3"	3/32"	33%	**721068**	**720972**
4"	3"	1/8"	40%	**720584**	**720585**
4"	3"	1/4"	58%	**720411**	**720412**
4"	3"	3/8"	51%	**720939**	**720940**
Perforated High-Capacity Strainer Elements					
6"	4"	1/16"	23%	**N/A**	**289088***
6"	4"	3/32"	33%	**N/A**	**720890***
6"	4"	1/8"	40%	**N/A**	**720799**
6"	4"	1/4"	58%	**N/A**	**720800**

Wedgewire Strainer Elements							
Strainer Body Size	**Strainer Element Size**	**Slot Size**	**Micron Rating**	**Wire Mesh (Approx. Equiv.)**	**Open Area**	**SHORT (15") Part #**	**LONG (30") Part #**
4"	3"	0.001"	25	500	2.0%	**343603**	**346237**
4"	3"	0.002"	50	270	4.1%	**700323**	**700334**
4"	3"	0.005"	125	120	9.6%	**700324**	**700335**
4"	3"	0.007"	177	80	13.0%	**700325**	**700336**
4"	3"	0.010"	250	60	17.5%	**700326**	**700337**
4"	3"	0.015"	380	40	24.2%	**700327**	**700338**
4"	3"	0.020"	500	32	29.9%	**700328**	**700339**
4"	3"	0.030"	750	25	39.0%	**700329**	**700340**
4"	3"	0.040"	1015	17	46.0%	**700330**	**700341**
4"	3"	0.060"	1524	10	56.1%	**700331**	**700342**
4"	3"	0.1875"	4775	4	72.5%	**700333**	**700343**
Wedgewire High-Capacity Strainer Elements							
6"	4"	0.001"	25	500	2.0%	**N/A**	**343605**
6"	4"	0.002"	50	270	4.1%	**N/A**	**700481***
6"	4"	0.005"	125	120	9.6%	**N/A**	**700482**
6"	4"	0.007"	177	80	13.0%	**N/A**	**700483***
6"	4"	0.010"	250	60	17.5%	**N/A**	**700484***
6"	4"	0.015"	380	40	24.2%	**N/A**	**700485**
6"	4"	0.020"	500	32	29.9%	**N/A**	**700486***
6"	4"	0.030"	750	25	39.0%	**N/A**	**700487**
6"	4"	0.040"	1015	17	46.0%	**N/A**	**700488***
6"	4"	0.060"	1524	10	56.1%	**N/A**	**700489**
6"	4"	0.1875"	4775	4	72.5%	**N/A**	**700490***

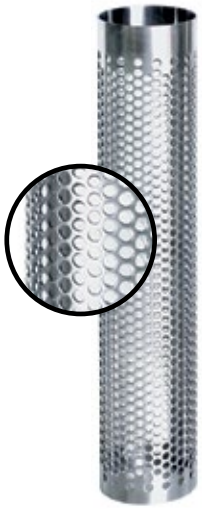
Non-stock product option. Longer lead times apply. Non-returnable.

NOTE: Slot size to micron rating is a nominally rated value only.

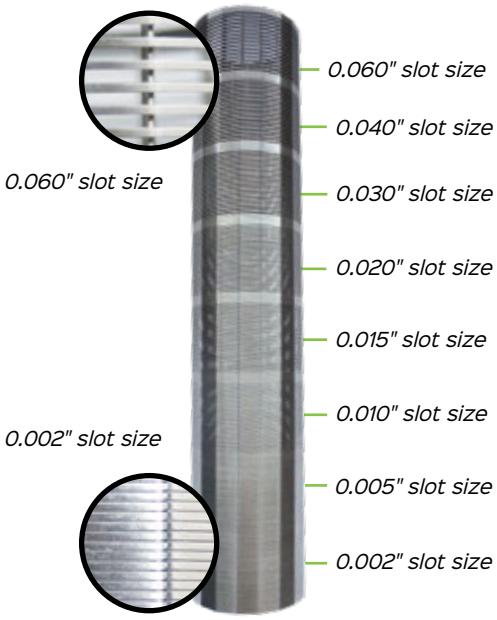
NOTE: Other perforated and wedgewire sizes are available.



⅛" Perforated Strainer Element



¼" Perforated Strainer Element



NOTE: Image is a demonstration piece highlighting the largest to smallest wedgewire slot sizes.

GOOD TO KNOW

- **Element Material:** 316Lss
- **Element Sanitary ID Finish:** 32 µin Ra
- Wedgewire elements have some interior surfaces greater than 32 µin Ra due to the construction process.
- End-Inlet Strainers are Standard Flow and Side-Inlet Strainers are Reverse Flow.
- Perforated and wedgewire elements provide different straining advantages:

Advantages of Perforated Elements

- Authorized to carry a 3-A symbol when used without mesh overlay
- Large open area ratio with lower pressure drops
- Can capture fine particulate with wire mesh overlay and filter tubes

Advantages of Wedgewire Elements

- Simple one-piece solution (vs. using mesh overlays or filter tubes with perforated elements)
- Ability to handle higher differential pressures across strainer element

Angle-Line Side-Inlet (Reverse Flow)

Angle-Line Side-Inlet (Reverse Flow) - With Drain Port

Angle-Line End-Inlet (Standard Flow)

Angle-Line End-Inlet (Standard Flow) - With Magnetic Trap

2 Strainer Element Frames

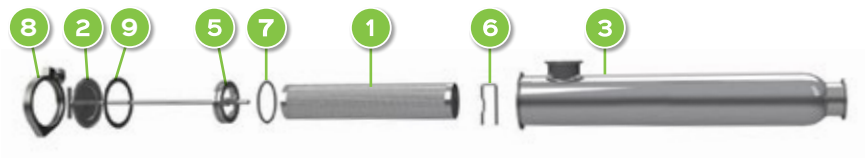
NOTE: End-Inlet Strainers are Standard Flow and Side-Inlet Strainers are Reverse Flow.

Strainer Model	Flow Direction	Strainer Element Length	Strainer Body Length (Inlet-to-Outlet)	Body Size	Strainer Element Frame Length**	Connection Size	Part # (No Drain Port)	Part # (With Drain Port)
Angle-Line	Side-Inlet (Reverse Flow)	SHORT (15")	SHORT (20 3/4")	4.0"	18 1/2"	1.5" - 4.0"	**740320**	**238819**
Angle-Line	Side-Inlet (Reverse Flow)	LONG (30")	LONG (36")	4.0"	33 1/2"	1.5" - 4.0"	**740348**	**245133**
Angle-Line	End-Inlet (Standard Flow)	SHORT (15")	SHORT (20 3/4")	4.0"	24 5/8"	1.5" - 3.0"	**700544**	**268279**
Angle-Line	End-Inlet (Standard Flow)	LONG (30")	LONG (36")	4.0"	40"	1.5" - 3.0"	**700546**	**268276**
Angle-Line	End-Inlet (Standard Flow)	SHORT (15")	SHORT (20 3/4")	4.0"	26 5/16"	4.0"	**700552**	**333105***
Angle-Line	End-Inlet (Standard Flow)	LONG (30")	LONG (36")	4.0"	41 11/16"	4.0"	**700549**	**285288***
Angle-Line w/ Magnetic Trap	End-Inlet (Standard Flow)	SHORT (15")	SHORT (20 3/4")	4.0"	24 5/8"	1.5" - 3.0"	**288850**	**N/A**
Angle-Line w/ Magnetic Trap	End-Inlet (Standard Flow)	LONG (30")	LONG (36")	4.0"	40"	1.5" - 3.0"	**288856**	**N/A**
Strainer Model	**Flow Direction**	**Strainer Element Length**	**Strainer Body Length (Inlet-to-Outlet)**	**Body Size**	**Strainer Element Frame Length****	**Connection Size**	**Part #**	**Part # (With Drain Port)**
High-Capacity Angle-Line (New 2024 Design)	Side-Inlet (Reverse Flow)	LONG (30")	LONG (40")	6.0"	33 11/16"	3.0" - 6.0"	**325950**	**336380***
High-Capacity Angle-Line (Pre-2024 Design)	Side-Inlet (Reverse Flow)	LONG (30")	LONG (40")	6.0"	33 3/4"	3.0" - 6.0"	**110123***	**294614***
High-Capacity Angle-Line	End-Inlet (Standard Flow)	LONG (30")	LONG (40")	6.0"	43 1/8"	3.0" - 6.0"	**740622**	**284167***
High-Capacity Angle-Line w/ Magnetic Trap	End-Inlet (Standard Flow)	LONG (30")	LONG (40")	6.0"	43 3/16"	3.0" - 6.0"	**334222***	**N/A**

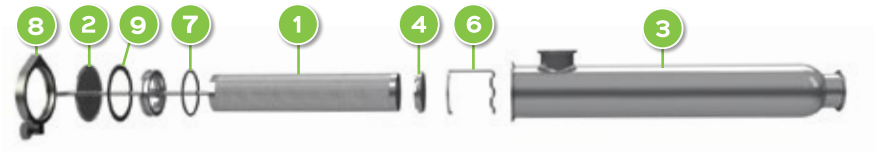
Non-stock product option. Longer lead times apply. Non-returnable.

***Overall minimum required length for removal clearance.*

Angle-Line Side-Inlet Strainer (Reverse Flow)



Angle-Line End-Inlet Strainer (Standard Flow)



1. Strainer Element
2. Strainer Element Frame
3. Strainer Body
4. End Plug
5. O-Ring Retainer
6. Retaining Clip
7. O-Ring
8. TC Clamp
9. TC Gasket

3 Strainer Bodies (4" Body Size)

Strainer Model	Strainer Body Length (Inlet-to-Outlet)	Tri-Clamp (TC) Connection Size	Part #
Angle-Line	SHORT (20 3/4")	1.5"	**740835**
Angle-Line	SHORT (20 3/4")	2.0"	**740836**
Angle Line	SHORT (20 3/4")	2.5"	**740837**
Angle-Line	SHORT (20 3/4")	3.0"	**740838**
Angle-Line	SHORT (20 3/4")	4.0"	**741143**
Angle-Line	LONG (36")	1.5"	**740839**
Angle-Line	LONG (36")	2.0"	**740840**
Angle-Line	LONG (36")	2.5"	**740841**
Angle-Line	LONG (36")	3.0"	**740842**
Angle-Line	LONG (36")	4.0"	**740986**

3 Strainer Bodies (6" Body Size, High-Capacity)

Strainer Model	Strainer Body Length (Inlet-to-Outlet)	Tri-Clamp (TC) Connection Size	Part #
High-Capacity Angle-Line	LONG (40")	3.0"	**741244**
High-Capacity Angle-Line	LONG (40")	4.0"	**741078**
High-Capacity Angle-Line	LONG (40")	6.0"	**741179**

4 End Plugs

Use with Angle-Line End-Inlet (Standard Flow) Strainers

Body Size	Material	Part #
4"	316Lss	**118582**
4"	Teflon	**720988**
4"	Nylon*	**720419**
High-Capacity Body Size	**Material**	**Part #**
6"	316Lss	**118583**
6"	UHMW	**720616**

Teflon End Plug

316Lss End Plug

Nylon End Plug

NOTE: 316Lss end plugs are standard.
**Nylon end plugs cannot be used as part of a 3-A authorized strainer.*

5 O-Ring Retainers (Loose) Use with Angle-Line Side-Inlet (Reverse Flow) and Magnetic Trap Strainers

Body Size	Part #
4"	**721488**
High-Capacity Body Size	**Part #**
6" (New Design)	**325471**
6" (Pre-2024 Design)	**226783***

NOTE: End-Inlet O-Ring Retainers are welded to the Strainer Element Frame.
O-Ring Retainer 226783 is not compatible with Magnetic Trap Strainers.
**Non-stock product option. Longer lead times apply. Non-returnable.*

4" and 6" (New Design) O-Ring Retainer

6" O-Ring Retainer (Pre-2024 Design)

6 Retaining Clips Use with all Angle-Line Strainers

Body Size	Flow Direction	Part #
4"	Side-Inlet (Reverse Flow)	**720408**
4"	End-Inlet (Standard Flow)	**740295**
High-Capacity Body Size	**Flow Direction**	**Part #**
6"	Side-Inlet (Reverse Flow) - (New Design)	**330468**
6"	Side-Inlet (Reverse Flow) - (Pre-2024 Design)	**320033**
6"	End-Inlet (Standard Flow)	**740623**

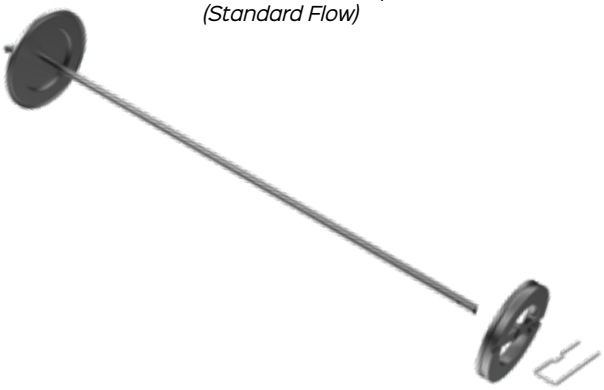
4" Side Inlet Clip
6" Side Inlet Clip (New Design) (Reverse Flow)

6" Side Inlet Clip (Pre-2024 Design) (Reverse Flow)

4" and 6" End-Inlet Clip (Standard Flow)

High-Capacity Angle-Line Side-Inlet (Reverse Flow) Strainer Retainer Upgrade Kit	
2 Strainer Element Frame 5 O-Ring Retainer 6 Retaining Clip	
Strainer Model	**Upgrade Kit Part #**
High-Capacity (6" Body) Angle-Line Strainer Retainer Upgrade Kit, Side-Inlet (Reverse Flow)	**333714**

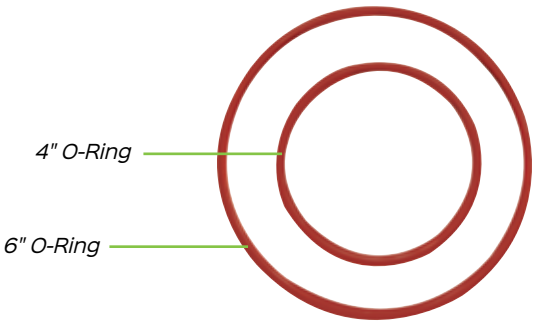
NOTE: This upgrade kit includes the latest design strainer element frame, O-Ring retainer, and retaining clip to use with reverse flow high-capacity angle-line strainers. The design provides an upgraded sealing design.



7 O-Rings Use with all Angle-Line Strainers

Body Size	Material	Part #
4"	EPDM	**020503**
4"	Viton	**020236**
4"	Teflon Encapsulated Silicone	**024020**
4"	Buna-N	**020234**
High-Capacity Body Size	**Material**	**Part #**
6"	EPDM	**022416**
6"	Viton	**036747**
6"	Teflon Encapsulated Silicone	**034355**
6"	Buna-N	**020222**

NOTE: Teflon Encapsulated Silicone is O-Ring standard.
Other materials require lubrication.



8 Tri-Clamp (TC) Clamps

Clamp Type	Part #			
	0.50" / 0.75"	2.5"	8 4.0"	8 6.0"
	For Sample Valve / TC Cap	For Sight Glass	For Strainer Body	For High-Capacity Strainer Body
Standard	020224	020083	020225	020976
High Pressure	022235	020914	020916	025686

Standard Clamp

High Pressure Clamp

Tri-Clamp (TC) Gaskets

Material	Part #				
	0.50"	0.75"	2.5"	9 4.0"	9 6.0"
	For TC Cap	For Sample Valve	For Sight Glass	For Strainer Body	For High-Capacity Strainer Body
EPDM (Standard)	021036	021037	021029	021031	022975
Viton	028724	028725	028729	020474	023847
Silicone	022352	022353	023184*	024582	025683*
Buna-N	031690*	020230*	020091	020226	020263*
Tuf-Flex	046732	046733	046737	046739	046740*

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

Sight Glass Replacements

Description	Part #
VL-3A Sight Glass Assembly, 2.5" TC	056231

NOTE: VL-3A Sight Glass Assemblies come with the sight glass lens, sight glass ferrule, and sight glass gasket.

Sample Valve

Description	Part #
Sample Valve, TC, 0.50"/0.75" Process Connection, 0.5" Sample Connection	060887

NOTE: Air relief sample valves are recommended for the Drain / Sample Port option.

Tri-Clamp (TC) Caps

TC Caps can be used on Drain / Sample Port to cap the port.

Description	Part #
TC Cap, 0.50" / 0.75", 316Lss	020529

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.

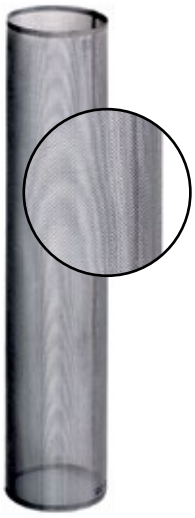
Description	Part #
ID Tag, 2.0" x 0.5", 304ss	720826

Angle-Line Strainer Accessories

Mesh Overlays (For perforated elements only) 316ss Wire

Mesh Size US	Body Size	Micron (Approx. Equiv.)	Opening Width in Inches (Approx. Equivalent)	Open Area	Part # (14.63" OAL) SHORT Body	Part # (29.63" OAL) LONG Body
8	4.0"	2360	0.0970"	60%	**035251**	**029664**
10	4.0"	2000	0.0750"	56%	**000717**	**000701**
12	4.0"	1700	0.0603"	52%	**035252**	**029665**
20	4.0"	850	0.0340"	46%	**000712**	**000702**
30	4.0"	600	0.0213"	41%	**000713**	**000703**
40	4.0"	425	0.0150"	36%	**000714**	**000704**
50	4.0"	300	0.0110"	30%	**000715**	**000705**
60	4.0"	250	0.0092"	31%	**000716**	**000706**
80	4.0"	180	0.0070"	31%	**000718**	**000708**
100	4.0"	150	0.0060"	36%	**000711**	**000710**
120	4.0"	125	0.0046"	31%	**000720**	**000707**
150	4.0"	98	0.0041"	37%	**021276**	**021274**
200	4.0"	75	0.0029"	34%	**021275**	**10000048**
High-Capacity Mesh Overlays						
20	6.0"	850	0.0340"	46%	**N/A**	**037929***
40	6.0"	425	0.0150"	36%	**N/A**	**048637***
50	6.0"	300	0.0110"	30%	**N/A**	**055640***
60	6.0"	250	0.0092"	31%	**N/A**	**044369***
80	6.0"	180	0.0070"	31%	**N/A**	**044368***
100	6.0"	150	0.0060"	36%	**N/A**	**038981***
120	6.0"	125	0.0046"	31%	**N/A**	**035514***
150	6.0"	100	0.0041"	37%	**N/A**	**000719**

Non-stock product option. Longer lead times apply. Non-returnable. Minimum order quantity of (2) units.



Mesh Overlay

Filter Tube: 4" Body Size x 20 ½" Body Length Strainers • 50/Box

4 ⅞" x 17" Filter Tubes (For 1.5", 2", 2.5", 3", and 4" connections). Fits 3" x 15" Perforated Element.

Material	Width	Length (SHORT)	Max. Temperature (°F)	Micron	Part #
Polyester	4 7/8"	17"	400	25	**032789**
Polyester	4 7/8"	17"	400	40	**048602**
Polyester Multifilament	4 7/8"	17"	270 continuous, 455 short term	80	**041235**
Nylon Multifilament	4 7/8"	17"	185 continuous, 455 short term	150	**031264**
Polyester Knit	4 7/8"	17"	270 continuous, 455 short term	225	**033922**
Polyester Monofilament	4 7/8"	17"	270 continuous, 455 short term	250	**036985**
Plain Weave Cotton Cloth	4 7/8"	17"	300	270	**028476**
Nylon Monofilament	4 7/8"	17"	270 continuous, 455 short term	400	**048603**
Nylon Monofilament	4 7/8"	17"	185 continuous, 455 short term	800	**031133**
Nylon Multifilament	4 7/8"	17"	185 continuous, 455 short term	1000	**028335**

Filter Tube: 4" Body Size x 40" Body Length Strainers • 50/Box

4 ⅞" x 33 ½" Filter Tubes (For 1.5", 2", 2.5", 3", and 4" connections). Fits 3" x 30" Perforated Element.

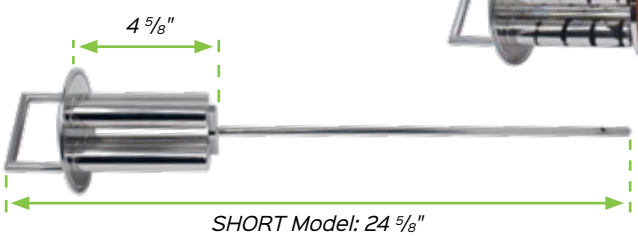
Material	Width	Length (LONG)	Max. Temperature (°F)	Micron	Part #
Non-Woven Polyester	4 7/8"	33 1/2"	400	25	**028390**
Polyester	4 7/8"	33 1/2"	400	40	**028857**
Polyester Multifilament	4 7/8"	33 1/2"	270 continuous, 455 short term	80	**029075**
Nylon Multifilament	4 7/8"	33 1/2"	185 continuous, 455 short term	150	**028395**
Polyester Monofilament	4 7/8"	33 1/2"	270 continuous, 455 short term	225	**040565**
Polyester Monofilament	4 7/8"	33 1/2"	270 continuous, 455 short term	250	**030951**
Plain Weave Cotton Cloth	4 7/8"	33 1/2"	300	270	**028797**
Polyester Multifilament	4 7/8"	33 1/2"	270 continuous, 455 short term	400	**023864**
Cotton Flannel	4 7/8"	33 1/2"	300	500	**029190**
Nylon Monofilament	4 7/8"	33 1/2"	275	500	**041618**
Nylon Multifilament	4 7/8"	33 1/2"	185 continuous, 455 short term	800	**10000044**

Magnetic Trap Strainers

The Sani-Matic Angle-Line Magnetic Trap Strainer doubles as a strainer and magnetic trap to ensure product integrity and equipment protection against metal particles, such as iron, 304 stainless steel, and shed metal-detectable gaskets, while also straining process particles such as seeds, pulp, and more. The magnetic trap's location within the strainer body eliminates the need for a second process line cut.

Current Standard Flow, Angle-Line Strainer bodies can easily become a Magnetic Trap Strainer by adding a Magnetic Trap Element Frame and the corresponding angle-line element retaining parts.

Magnetic Trap Strainer Element Frame



Full Magnetic Trap Strainer Element Assembly + Element. (Captured Iron Filings Shown)

QUICK TIPS

Oh my Gauss! How strong is that magnet? Magnet flux density, or intensity, is measured in Gauss. It can be measured via Pull Tests and Gauss Meters. A pull test shows the pull force of a magnet by the amount of force required to break free of the magnet.

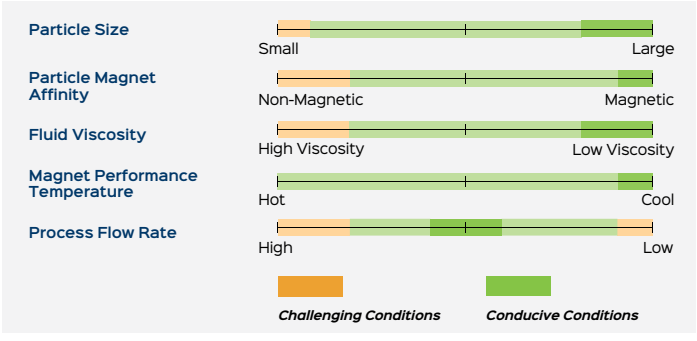
Strong but not unbreakable. While the magnets maintain a strong hold, they are not unbreakable. If not handled with care, the strainer element frame's magnets can shatter and lose efficacy.

Are there safety considerations? The magnets have a powerful pull. Working with metal tools next to the magnetic trap may pinch hands, and the magnets may be harmful to ID wearers and people with pacemakers.

GOOD TO KNOW

- **Magnetic Rating Range:** 9,500 - 11,500 Gauss
- **Maximum Temperature:** 220 °F (custom high temperature versions are available)
- **Finish:** 32 µin Ra
- **Magnet:** Neodymium rare-earth element
- Standard Flow Only
- Is not authorized to carry a 3-A symbol
- Gauss certificate is provided
- Magnetic Trap captures magnetic items; the Element captures the other product debris (pulp, seeds, etc.)
- Adding magnetic trap capabilities adds minimal pressure drop (approx. 5% increase)
- Sani-Matic provides a recertification service where old units can be sent in for testing to ensure magnetic strength is sufficient, or if replacement is needed

Metal Fines Capture Efficacy Conditions

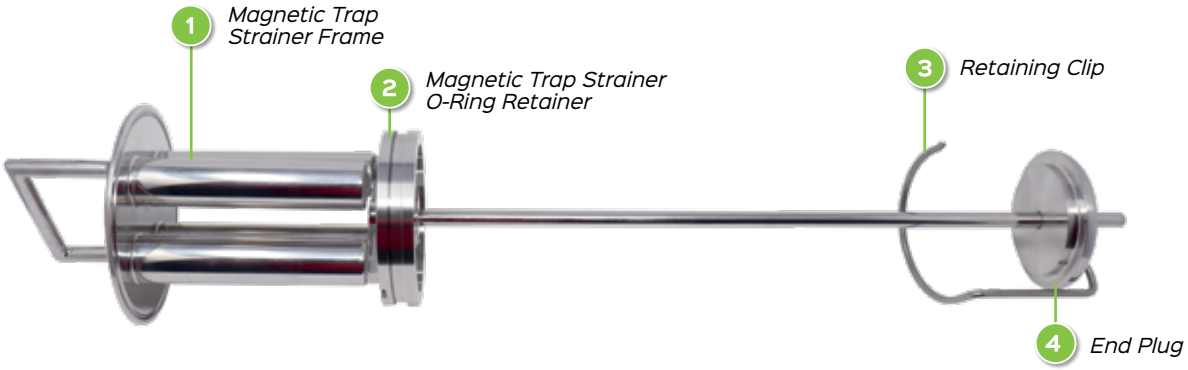


See the Magnetic Strainer Capture 304ss Particles

Magnetic Trap Strainer Frame Assemblies

Includes Frame, O-Ring Retainer, End Plug, and Retaining Clip

Strainer Model	Flow Direction	Strainer Element Length	Strainer Body Length (Inlet-to-Outlet)	Body Size	Strainer Element Frame Length	Connection Size	Part #
Angle-Line w/ Magnetic Trap	End-Inlet (Standard Flow)	SHORT (15")	SHORT (20 3/4")	4"	24 5/8"	1.5" - 3.0"	**334219**
Angle-Line w/ Magnetic Trap	End-Inlet (Standard Flow)	LONG (30")	LONG (36")	4"	40"	1.5" - 3.0"	**334220**



Watch how to easily retrofit the Magnetic Trap Strainer!

Replacement Parts

1 Magnetic Trap Strainer Frames

Strainer Model	Flow Direction	Strainer Element Length	Strainer Body Length (Inlet-to-Outlet)	Body Size	Strainer Element Frame Length**	Connection Size	Part #
Angle-Line w/ Magnetic Trap	End-Inlet (Standard Flow)	SHORT (15")	SHORT (20 3/4")	4.0"	24 5/8"	1.5" - 3.0"	**288850**
Angle-Line w/ Magnetic Trap	End-Inlet (Standard Flow)	LONG (30")	LONG (36")	4.0"	40"	1.5" - 3.0"	**288856**
High-Capacity Angle-Line w/ Magnetic Trap	End-Inlet (Standard Flow)	LONG (30")	LONG (40")	6.0"	43 3/16"	3.0" - 6.0"	**334222***

Non-stock product option. Longer lead times apply. Non-returnable.
***Overall allowable length for removal clearance.*

2 Magnetic Trap Strainer O-Ring Retainer

Body Size	Flow Direction	Part #
4"	End-Inlet (Standard Flow)	**721488**
6"	End-Inlet (Standard Flow) (New Design)	**325471**

3 Retaining Clips

Body Size	Flow Direction	Part #
4"	End-Inlet (Standard Flow)	**740295**
6"	End-Inlet (Standard Flow)	**740623**

4 End Plug

Body Size	Material	Part #
4"	316Lss	**118582**
6"	316Lss	**118583**

Services (Magnetic Trap)

Magnetic traps can be sent into Sani-Matic for re-verification of pull strength & Gauss measurements.

Description	Part #
Magnetic Trap Recertification	**MAGNETIC TRAP RECERTIFICATION**

Angle-Line Basket (ALB) Strainers

Cutaway strainer body shown

Convenient and Cost Effective Solution

Sani-Matic Angle-Line Basket Strainers provide a Basket Strainer-style solution within the frame of an Angle-Line Strainer. This unique design allows for particles to be captured within the basket element for quick, complete, and easy removal.

Our Angle-Line Basket Strainers are available with perforated elements. Mesh underlays can be used for finer straining applications and are available in a variety of micron / mesh sizes.

The unique patent-pending strainer element end cap is designed to be removable, allowing for easy flushing of the basket element, reducing downtime. The end cap is constructed of an FDA-compliant plastic to reduce internal strainer body scratching during servicing of the strainer. The Angle-Line design provides the ability to remove the element / insert without any process line disassembly.

Sani-Matic's standard Angle-Line Basket Strainers are authorized to carry a 3-A symbol when using perforated elements without mesh underlays.

QUICK TIPS

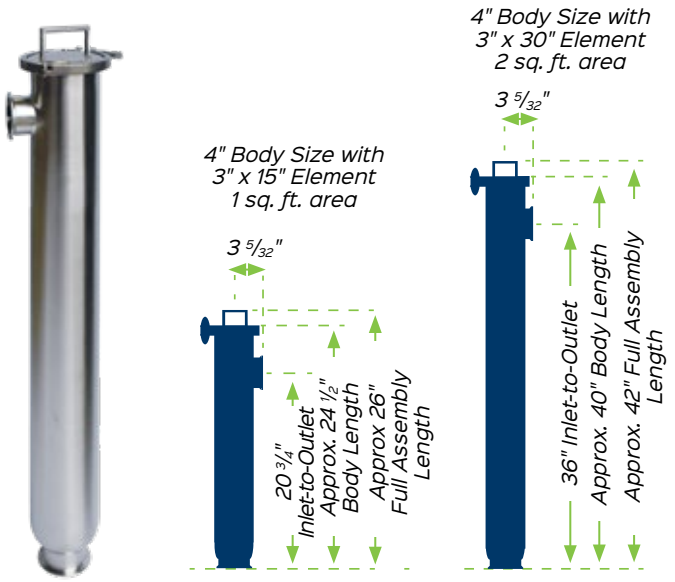
How much particulate can the Angle-Line Basket Strainer capture?

Strainer Length	Angle-Line Basket Strainer	Compared to	
		Angle-Line Strainer (4" Body)	Basket Strainer
SHORT	76 cu.in.	51 cu.in.	300 cu.in.
LONG	168 cu.in.	105 cu.in.	700 cu.in.

GOOD TO KNOW

- **Strainer & Element Material:** 316Lss
- **End Cap Material:** Polyetheretherketone (PEEK)
- **Sanitary ID Finish:** 32 µin Ra
- **Full Assembly Maximum Pressure Rating (Standard Tri-Clamp):** 125 psi
- **Full Assembly Maximum Pressure Rating (High Pressure Tri-Clamp):** 200 psi
- **Maximum Temperature Rating:** 250 °F
- Particles are captured inside of the basket for easy removal.
- Patent-pending end cap makes cleaning easy - simply twist off and flush out captured particulates.
- Plastic end cap eliminates any gouging or scratching of the internal surfaces of the body.
- Retrofittable in Sani-Matic Angle-Line Strainers Side-Inlet (Reverse Flow).
- **Recommended Maximum Flows:**

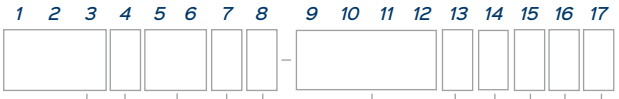
Connection Size	Recommended Max Flow (gpm)
1.5"	55
2.0"	105
2.5"	165
3.0"	235
4.0"	220



NOTE: Dimensions are based on standard Tri-Clamp connections. Contact Sani-Matic for dimensions on Butt Weld connections.

Angle-Line Basket Strainer Model Number Key

Example Model #: ALBS30T3-P250S0000



1-3	**Strainer Model**	
	ALB	Angle-Line Basket
4	**Body Length**	
	S	SHORT Body
	L	LONG Body
5-6	**Connection Size**	
	15	1.5"
	20	2.0"
	25	2.5"
	30	3.0"
	40	4.0"
7	**Connection Type**	
	T	Tri-Clamp (Standard)
	H	Tri-Clamp - High Pressure Clamp
	W	Butt Weld*
8	**Finish / Polish**	
	3	32 µin Ra / Mechanical Polish (Standard)
9-12	**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" ($^{1}/_{4}$")
13	**Flow Direction**	
	S	Side-Inlet (Standard)
14	**Seal Kit**	
	0	EPDM TC & End Cap Gaskets / Teflon Encapsulated Silicone O-Ring (Standard)
	1	Tuf-Flex TC Gaskets / EPDM End Cap Gasket / Teflon Encapsulated Silicone O-Ring
	2	Viton TC & End Cap Gaskets / Teflon Encapsulated Silicone O-Ring
	3	Tuf-Flex TC Gaskets / Viton End Cap Gasket / Teflon Encapsulated Silicone O-Ring
15	**Option #1**	
	0	None (Standard)
	2	Dual Sight Glass*
	D	Drain / Sample Port*
	3	Dual Sight Glass & Drain / Sample Port*
16	**Option #2**	
	0	None (Standard)
	1	Differential Pressure Connections (Capped Ports)*
	2	Differential Pressure Connections with Pressure Gauges (0-160 psig)*
	3	Differential Pressure Connections with Pressure Gauges (0-200 psig)*
17	**Option #3**	
	0	None (Standard)

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

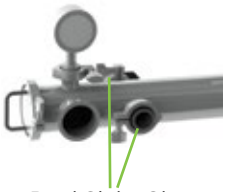
See a demonstration of the ALB Strainer and how to retrofit to existing Angle-Line strainers!

Angle-Line Basket Strainer Options

The Drain / Sample Port helps operators drain strainers before removing the element for cleaning. Air relief sample valves are recommended for the Drain / Sample Port option.

Differential Pressure ports allow operators to compare the pressure upstream and downstream of the element to help determine when to service the strainer.

Drain / Sample Port



Dual Sight Glass

Differential Pressure Connections with Pressure Gauges

Strainer sight glasses provide visual access to particulate buildup levels.

Cv Values & Pressure Drops for ALB Strainers

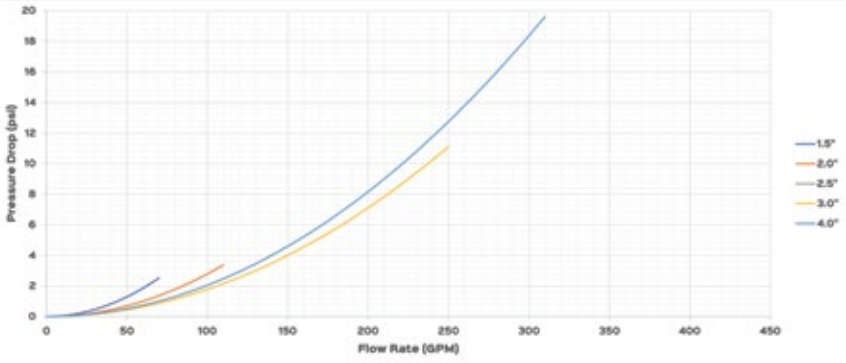
Cv values or the provided pressure drop tables can be used to estimate the pressure drop across a strainer at a given flow rate. Cv values are for water at 70 °F. Contact Sani-Matic for inquiries on pressure drops for fluids with other viscosities.

Cv Values

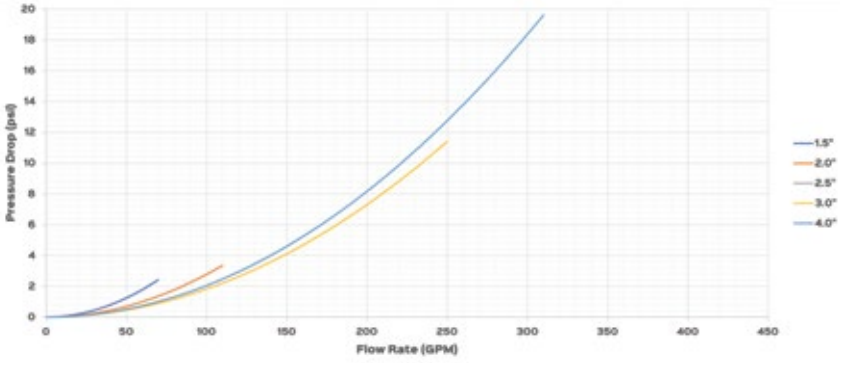
Body Length	Connection Size	Cv
LONG (36")	1.5"	44
	2.0"	60
	2.5"	70
	3.0"	75
	4.0"	70
SHORT (20 ¾")	1.5"	45
	2.0"	60
	2.5"	70
	3.0"	74
	4.0"	70

NOTE: Cv values and charted pressure drops can be used for perforated, wedgewire, and perforated with mesh overlays or filter tubes. 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.

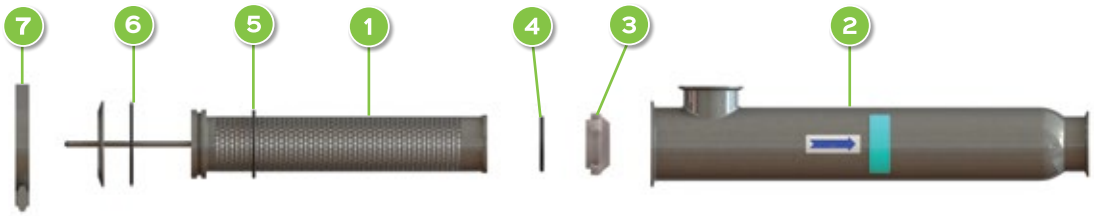
Angle-Line Basket Strainer Pressure Drop: 4.0" Body, Standard Flow, LONG Body (36")



Angle-Line Basket Strainer Pressure Drop: 4.0" Body, Standard Flow, SHORT Body (20 ¾")



Angle-Line Basket Strainer Replacement Parts



1. Strainer Element Frame
2. Strainer Body
3. End Cap
4. End Cap O-Ring
5. Element O-Ring
6. TC Gasket
7. TC Clamp

Spare Parts Kits		
4 End Cap O-Ring 5 Element O-Ring 6 TC Gasket		
Strainer Model	**Seal Material (Element O-Ring / TC Gasket / End Cap O-Ring)**	**Kit Part #**
ALB Strainer	Teflon Encapsulated Silicone / EPDM / EPDM	**323954**
ALB Strainer	Teflon Encapsulated Silicone / Tuf-Flex / EPDM	**333688**
ALB Strainer	Teflon Encapsulated Silicone / Viton / Viton	**333689**
ALB Strainer	Teflon Encapsulated Silicone / Tuf-Flex / Viton	**333691**

1 Strainer Elements

Perforated Strainer Elements					
Hole Size	**Open Area**	**1.5" - 3.0" TC Connection Size**		**4.0" TC Connection Size**	
		SHORT (15") Part #	**LONG (30") Part #**	**SHORT (15") Part #**	**LONG (30") Part #**
1/16"	23%	**324357***	**324554***	**324572***	**324579***
3/32"	33%	**324363**	**324399**	**324571**	**324578**
1/8"	40%	**324356**	**324381**	**324568**	**324577**
1/4"	58%	**323816**	**324367**	**324558**	**324576**

Longer lead times will apply.

¼" ALB Strainer Perforated Strainer Element

DID YOU KNOW?

The Angle-Line Basket Strainer element is retrofittable in Sani-Matic Angle-Line Strainers.

Any 4.0" Angle-Line Strainer body can be retrofitted to be used with an ALB Strainer insert. The primary requirement is for the flow configuration to be Side-Inlet (Reverse Flow) direction - with this flow direction in place, the ALB Strainer insert can be swapped for the internals of the Angle-Line Strainer. The element and frame assembly can be replaced with an Angle-Line Basket Strainer element, allowing soils to be captured within the removable basket.

2 Strainer Bodies (4" Body Size)

Strainer Model	Strainer Body Length (Inlet-to-Outlet)	Tri-Clamp (TC) Connection Size	Part #
Angle-Line	SHORT (20 3/4")	1.5"	**740835**
Angle-Line	SHORT (20 3/4")	2.0"	**740836**
Angle Line	SHORT (20 3/4")	2.5"	**740837**
Angle-Line	SHORT (20 3/4")	3.0"	**740838**
Angle-Line	SHORT (20 3/4")	4.0"	**741143**
Angle-Line	LONG (36")	1.5"	**740839**
Angle-Line	LONG (36")	2.0"	**740840**
Angle-Line	LONG (36")	2.5"	**740841**
Angle-Line	LONG (36")	3.0"	**740842**
Angle-Line	LONG (36")	4.0"	**740986**

3 End Cap

For use only with Angle-Line Basket Strainer Elements

Body Size	Material	Part #
4"	PEEK	**345348**

4 End Cap O-Ring

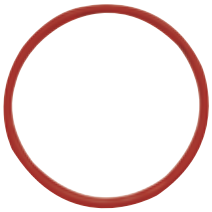
For use only with Angle-Line Basket Strainer End Caps

Body Size	Material	Part #
4"	EPDM	**043834**
4"	Viton	**058204**

5 Element O-Ring

For use on Angle-Line Basket Strainer Element Frames

Body Size	Material	Part #
4"	Teflon Encapsulated Silicone	**024020**



6 Tri-Clamp (TC) Gaskets

Body Size	Material	Part #
4"	EPDM	**021031**
4"	Viton	**020474**
4"	Tuf-Flex	**046739**

7 Tri-Clamp (TC) Clamps

Clamp Type	4" Body Size Part #
Standard	**020225**
High Pressure	**020916**

Standard Clamp

High Pressure Clamp

Angle-Line Basket Strainer Accessories

Sight Glass Replacements

Description	Part #
VL-3A Sight Glass Assembly, 2.5" TC	**056231**
Clamp, 2.5"	**020083**
Gasket, 2.5", EPDM	**021029**

NOTE: VL-3A Sight Glass Assemblies come with the sight glass lens, sight glass ferrule, and sight glass gasket.

Sample 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**
Gasket, Tri-Clamp, EPDM, 0.75"	**021037**

NOTE: Air relief sample valves are recommended for the Drain / Sample Port option.

Pressure Gauges

Gauge connection size is 1.5" TC. ALB strainers use two (2) pressure gauges to monitor pressure across the element.

Pressure Range	Part #
0-160 psig	**058250**
0-200 psig	**058251**

Pressure Gauge

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**

Mesh Underlays (For perforated elements only) 316ss Wire

Mesh Size US	Micron (Approx. Equiv.)	Opening Width in Inches (Approx. Equivalent)	SHORT (15") Part #	LONG (30") Part #
20	850	0.0340"	**324583**	**324580**
40	425	0.0150"	**324584**	**058080**
60	250	0.0092"	**324585**	**324581**
100	150	0.0060"	**324586**	**324582**

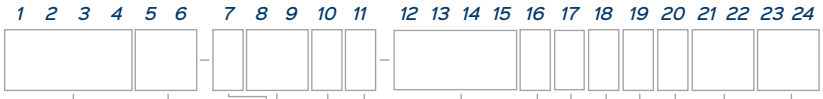
60 Mesh Underlay

ALB End Cap Removal Tool (For use with 345348 end cap)

Description	Part #
ALB End Cap Removal Tool, 304ss	**346908**

Multi-Angle-Line Basket Strainer Model Number Key

Example Model #:
MALBDV-S30T3-P250S00000000

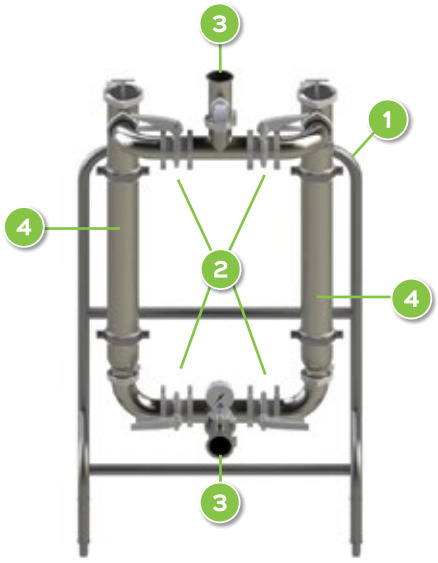


1-4	**Strainer Model**	
	MALB	Multi-Angle-Line Basket
5, 6	**Configuration Type**	
	DV	Dual Strainers - Vertical
7	**Body Length**	
	S	SHORT Body
	L	LONG Body
8, 9	**Connection Size**	
	15	1.5"
	20	2.0"
	25	2.5"
	30	3.0"
	40	4.0"
10	**Connection Type**	
	T	Tri-Clamp (Standard)
11	**Finish / Polish**	
	3	32 µin Ra / Mechanical Polish (Standard)
12-15	**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")
16	**Flow Direction**	
	S	Side Inlet (Standard)
17	**Seal Kit**	
	0	EPDM TC & End Cap Gaskets / Teflon Encapsulated Silicone O-Ring (Standard)
	1	Tuf-Flex TC Gaskets / EPDM End Cap Gasket / Teflon Encapsulated Silicone O-Ring
	2	Viton TC & End Cap Gaskets / Teflon Encapsulated Silicone O-Ring
	3	Tuf-Flex TC Gaskets / Viton End Cap Gasket / Teflon Encapsulated Silicone O-Ring
18	**Option #1**	
	0	None (Standard)
	2	Dual Sight Glass*
	D	Drain / Sample Port*
	3	Dual Sight Glass & Drain / Sample Port*
19	**Option #2**	
	0	None (Standard)
20	**Option #3**	
	0	None (Standard)
21, 22	**Valve Kits**	
	00	None
	MB	Manually Operated Butterfly Valves
	PB	Pneumatically Operated Butterfly Valves*
23, 24	**Pressure Kits**	
	00	None
	PG	Pressure Gauges
	PT	Pressure Transmitters*

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

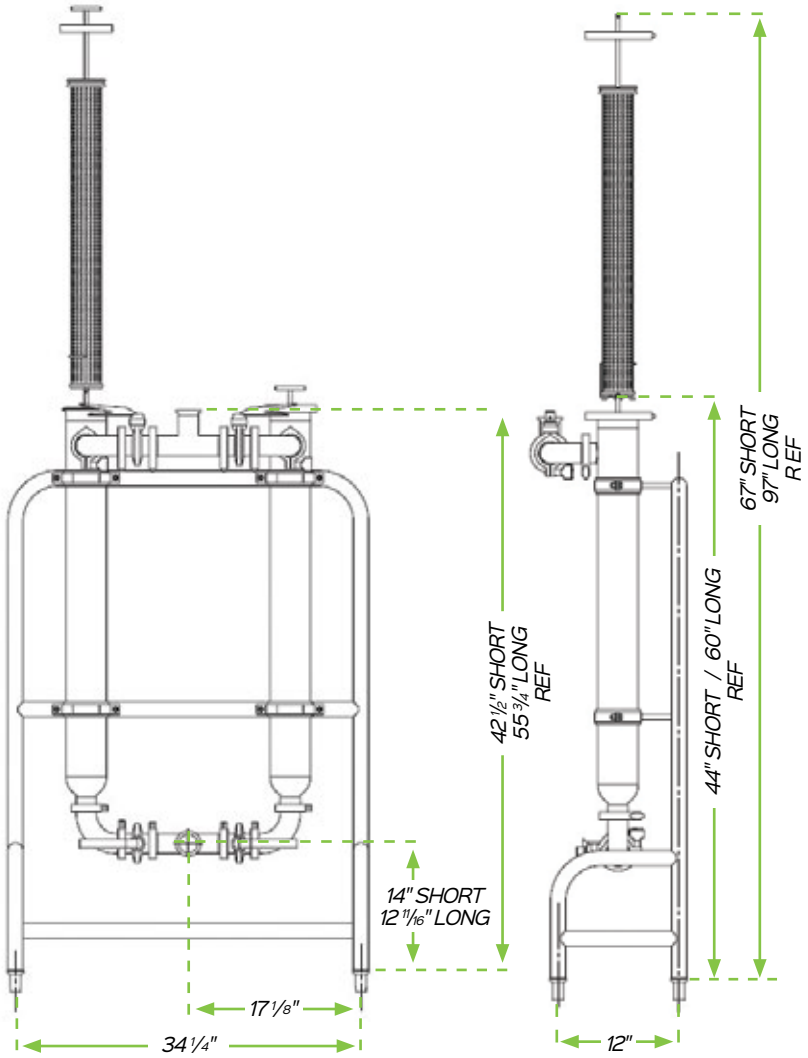
NOTE: Pneumatically Operated Butterfly Valves option requires air supply and automation controls (by others). See page 53 for details.

NOTE: Pressure Transmitters option requires electrical supply and automation controls (by others). See page 53 for details.



Complete Assembly

1. Dual Vertical Angle-Line / ALB Strainer Stand
2. Valve Kit
3. Pressure Gauge Kit
4. ALB Strainers (2)



NOTE: Image shown references LONG strainer assemblies. Differences in SHORT and LONG strainer dimensions are noted.

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

Multi-Angle-Line Basket Strainer Replacement Parts

1 Dual Vertical Angle-Line / ALB Strainer Stands

Connection Size	Body Size	SHORT (20 3/4")	LONG (36")
1.5"	4"	**254212**	**257979**
2.0"	4"	**258021**	**258010**
2.5"	4"	**258030**	**258017**
3.0"	4"	**258031**	**257599**
4.0"	4"	**348193**	**254256**

NOTE: Stands are approximately 35 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.

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)*
- *-4 °F to 250 °F Operating Temperature*

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**

3 Pressure Kits

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

Tee-Line Strainers

Protect Your Pumps and Equipment

Sani-Matic Tee-Line Strainers are designed to keep materials out of your pumps and process equipment.

Engineered with durability and simplicity in mind, the tri-clamp connection allows for quick Element Insert removal and easy cleaning. Add the Alignment Pin option to "fool proof" the installation of the strainer and eliminate any possibility of incorrectly positioning the Element Insert.

Purchasing the complete assembly — tee, insert, gasket, and tri-clamp — is recommended to ensure a proper fit.

QUICK TIPS

Want an economical and easy way to prolong the life of your equipment?

Install Tee-Line Strainers at the suction end of the pump to protect the pump, process equipment, and valves from foreign materials, such as gasket pieces, bolts, and other items.

How should the insert be positioned?

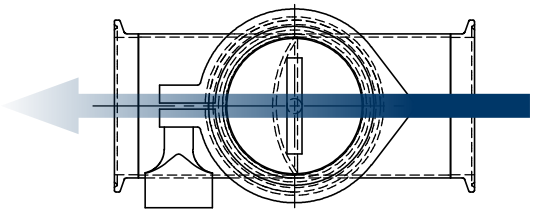
The concave side of the insert (or scooped side) should be positioned facing the incoming flow. The insert handle should be positioned perpendicular to the line.

Add the Alignment Pin option to "fool proof" the installation of the strainer and eliminate any possibility of incorrectly positioning the Element.

GOOD TO KNOW

- **Strainer & Element Material:** 316Lss
- **Full Assembly Maximum Pressure Rating (Standard Tri-Clamp):** 125 psi (up to 4" body) / 75 psi (6" body)
- **Full Assembly Maximum Pressure Rating (High Pressure Tri-Clamp):** 200 psi
- **Maximum Temperature Rating:** 250 °F
- The open area of perforation exceeds the line size diameter.
- The Tee-Line Strainer with alignment pin keeps the insert properly positioned.
- Connection size and body size are always equal.
- Tuf-Flex® Gaskets are PTFE gaskets with an EPDM core - they help reduce "stickiness" of the gasket allowing for an easier and quicker strainer element removal process.
- **Recommended Maximum Flows:**

Connection Size	Recommended Max. Flow (gpm)
1.5"	55
2.0"	105
2.5"	165
3.0"	240
4.0"	430
6.0"	980



Recommended process line installation positioning.

Tee-Line Strainer Model Number Key

Example Model #: TX15T7-P125X01500

1	**Strainer Model**	
	T	Tee-Line
2	**Body Length**	
	X	Standard Body
3, 4	**Connection Size**	
	15	1.5"
	20	2.0"
	25	2.5"
	30	3.0"
	40	4.0"
	60	6.0"*
5	**Connection Type**	
	T	Tri-Clamp (Standard)
	H	Tri-Clamp - High Pressure Clamp
	W	Butt Weld*
6	**Finish / Polish**	
	7	Bead Blast Insert & 32 µin Ra / Mechanical Polish Body (Standard)
	3	32 µin Ra / Mechanical Polish Body & Insert*
	8	32 µin Ra / Electropolish Body & Insert*
7-10	**Element Type / Size**	
	P062	Perforated / 0.0625" (1/16")*
	P125	Perforated / 0.125" (1/8")
	P250	Perforated / 0.25" (1/4")
11	**Flow Direction**	
	X	Standard Flow
12	**Seal Kit**	
	0	EPDM (Standard)
	T	Tuf-Flex Gasket
	1	Viton
	3	Buna-N
13, 14	**Body Size**	
	15	1.5"
	20	2.0"
	25	2.5"
	30	3.0"
	40	4.0"
	60	6.0"*
15	**Option #1**	
	A	Alignment Pin (Standard)
	0	No Alignment Pin
16	**Option #2**	
	0	None (Standard)

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

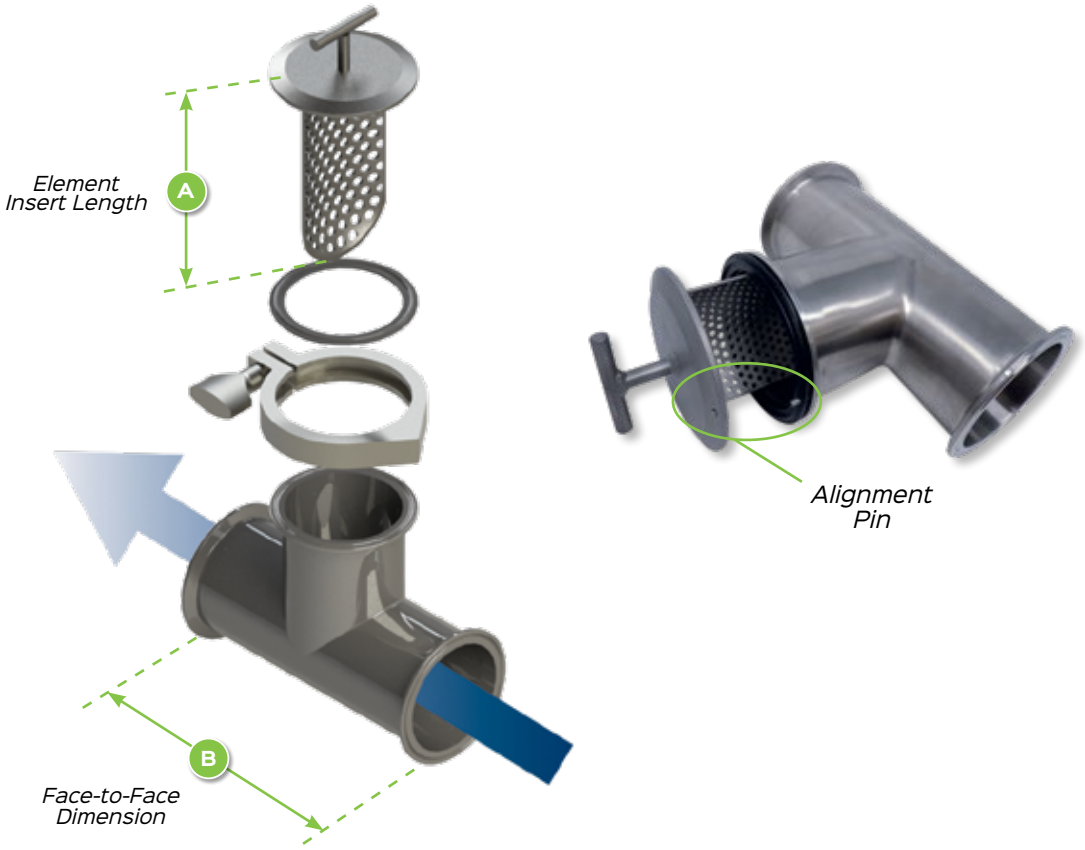
NOTE: Connection size and body size are always equal.

Reference: Part Number & New Model Number Comparison

Connection Size	Perforated Hole Size	Element Insert Length (A)	Face-to-Face Tee Dimension (B)	Tee-Line Part #	Tee-Line New Model Key #	Tee-Line w/ Alignment Pin Part #	Tee-Line w/ Alignment Pin New Model Key #
1.5"	1/8"	3.50"	5.5"	105712	TX15T7-P125X01500	112278	TX15T7-P125X015A0
1.5"	1/4"	3.50"	5.5"	105727	TX15T7-P250X01500	242321	TX15T7-P250X015A0
2.0"	1/8"	4.50"	7.0"	105719	TX20T7-P125X02000	110840	TX20T7-P125X020A0
2.0"	1/4"	4.50"	7.0"	105730	TX20T7-P250X02000	157689	TX20T7-P250X020A0
2.5"	1/8"	4.75"	7.0"	105721	TX25T7-P125X02500	204996	TX25T7-P125X025A0
2.5"	1/4"	4.75"	7.0"	105732	TX25T7-P250X02500	114697	TX25T7-P250X025A0
3.0"	1/8"	5.25"	7.5"	105723	TX30T7-P125X03000	119119	TX30T7-P125X030A0
3.0"	1/4"	5.25"	7.5"	105734	TX30T7-P250X03000	117029	TX30T7-P250X030A0
4.0"	1/8"	6.50"	9.0"	105725	TX40T7-P125X04000	178006	TX40T7-P125X040A0
4.0"	1/4"	6.50"	9.0"	105736	TX40T7-P250X04000	179119	TX40T7-P250X040A0
6.0"	1/8"	9.375"	13.0"	110165	TX60T7-P125X06000*	284367	TX60T7-P125X060A0*
6.0"	1/4"	9.375"	13.0"	110166	TX60T7-P250X06000*	276900	TX60T7-P250X060A0*

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

NOTE: Butt weld connection "B" dimension is different, see replacement part section for details.

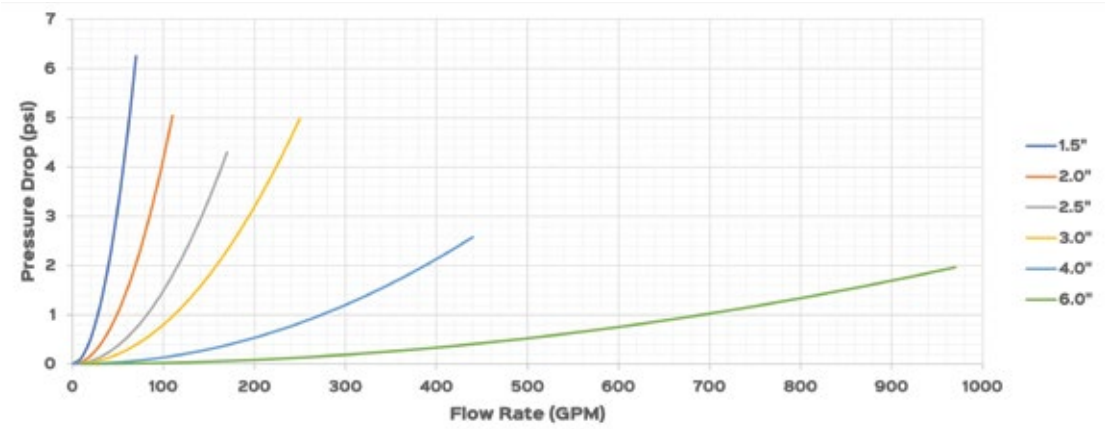


Cv Values & Pressure Drops for Tee-Line Strainers

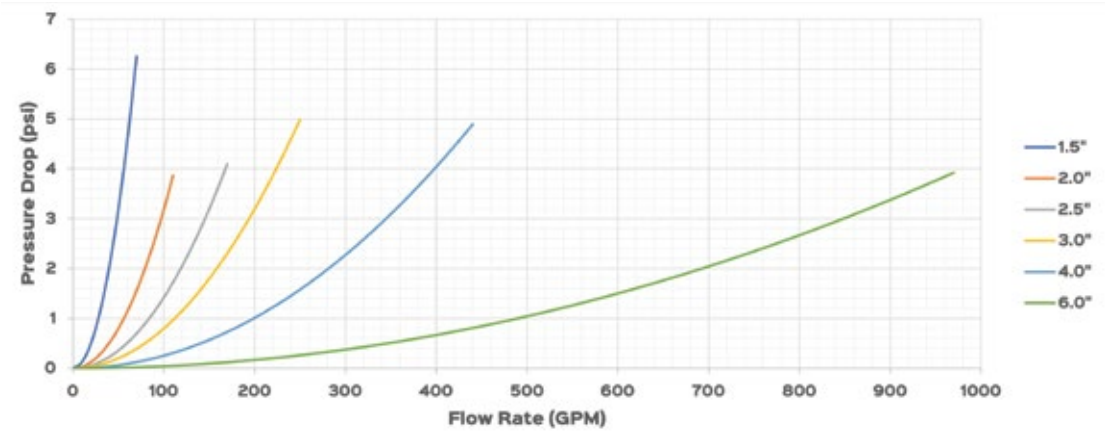
Cv values or the provided pressure drop tables can be used to estimate the pressure drop across a strainer at a given flow rate. Cv values are for water at 70 °F. Contact Sani-Matic for inquiries on pressure drops for fluids with other viscosities.

Perforated Element Size	Connection Size	Cv
1/8"	1.5"	28
	2.0"	49
	2.5"	82
	3.0"	112
	4.0"	274
	6.0"	692
1/4"	1.5"	28
	2.0"	56
	2.5"	84
	3.0"	112
	4.0"	199
	6.0"	490

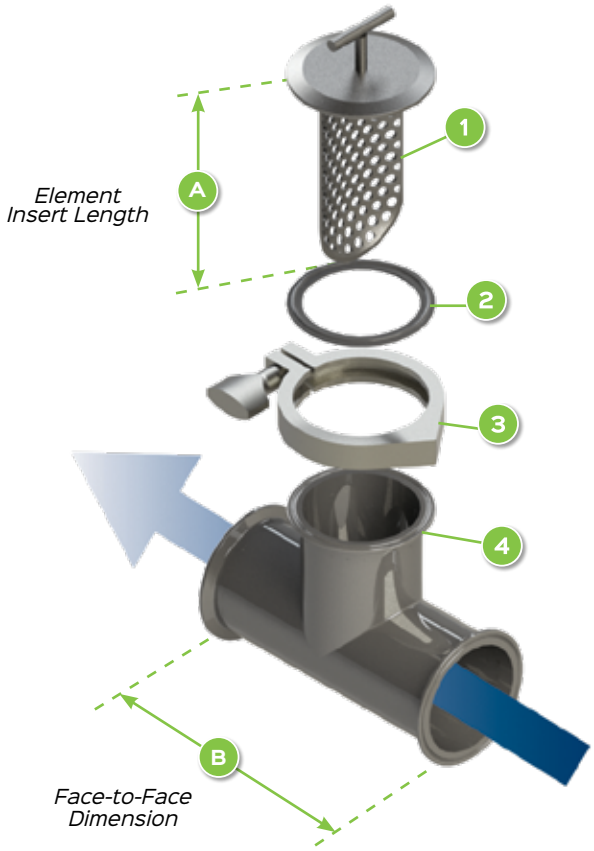
Tee-Line Strainer Pressure Drop - 1/8" Perforated



Tee-Line Strainer Pressure Drop - 1/4" Perforated



Tee-Line Strainer Replacement Parts



1. Element Insert
2. TC Gasket
3. TC Clamp
4. Strainer Body

1 Element Inserts

Connection Size	Perforated Hole Size	Element Insert Length (A)	Insert w/o Alignment Pin Part #	Insert w/ Alignment Pin Part #
1.5"	1/16"	3.50"	**740749***	**289398***
1.5"	1/8"	3.50"	**740754**	**285880**
1.5"	1/4"	3.50"	**740759**	**285881**
2.0"	1/16"	4.50"	**740750***	**289399***
2.0"	1/8"	4.50"	**740755**	**285882**
2.0"	1/4"	4.50"	**740760**	**158017**
2.5"	1/16"	4.75"	**740751***	**289400***
2.5"	1/8"	4.75"	**740756**	**285883**
2.5"	1/4"	4.75"	**740761**	**285857**
3.0"	1/16"	5.25"	**740752***	**289401***
3.0"	1/8"	5.25"	**740757**	**285013**
3.0"	1/4"	5.25"	**740762**	**269047**
4.0"	1/16"	6.50"	**740753***	**289402***
4.0"	1/8"	6.50"	**740758**	**285884**
4.0"	1/4"	6.50"	**740763**	**285885**
6.0"	1/16"	9.375"	**289393***	**289403***
6.0"	1/8"	9.375"	**740991***	**285886***
6.0"	1/4"	9.375"	**741035***	**285887***

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

NOTE: If not using Sani-Matic Tee-Line Strainer body, customer must supply a tee-line strainer body to match insert length.

NOTE: Other perforated hole sizes are available.

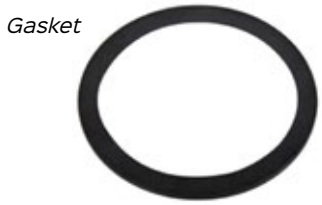
2 Tri-Clamp (TC) Gaskets

Connection Size	EPDM		Tuf-Flex		Viton		Buna-N	
	Standard Gasket	Gasket w/ Alignment Pin Hole	Standard Gasket	Gasket w/ Alignment Pin Hole	Standard Gasket	Gasket w/ Alignment Pin Hole	Standard Gasket	Gasket w/ Alignment Pin Hole
1.5"	021027	020455	046735	334132	028727	334124	020089	334129
2.0"	021028	258816	046736	334133	028728	295294	020090	328673
2.5"	021029	277242	046737	334136	028729	295586	020091	317192
3.0"	021030	277243	046738	334137	028730	300883	020092	334130
4.0"	021031	277244	046739	334138	020474	294209	020226	323099
6.0"	022975	277245	046740*	334145*	023847	334127	020263*	334131*

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

3 Tri-Clamp (TC) Clamps

Connection Size	Standard Clamp Part #	High Pressure Clamp Part #
1.5"	020081	020912
2.0"	020082	020913
2.5"	020083	020914
3.0"	020084	020915
4.0"	020225	020916
6.0"	020976	025686



Gasket

Standard Clamp

High Pressure Clamp

4 Strainer Body

Tri-Clamp (TC) Connection Size	Face-to-Face Tee Dimension (TC Connections) B	Face-to-Face Tee Dimension (Butt Weld Connections) B	Tee-Line Body w/o Alignment Pin Part #	Tee-Line Body w/ Alignment Pin Part #
1.5"	5.5"	4.5"	020901	288162
2.0"	7.0"	6.0"	020902	288163
2.5"	7.0"	6.0"	020903	288164
3.0"	7.5"	6.5"	020904	288165
4.0"	9.0"	8.0"	020905	288166
6.0"	13.0"	11.25"	034337*	288167*

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

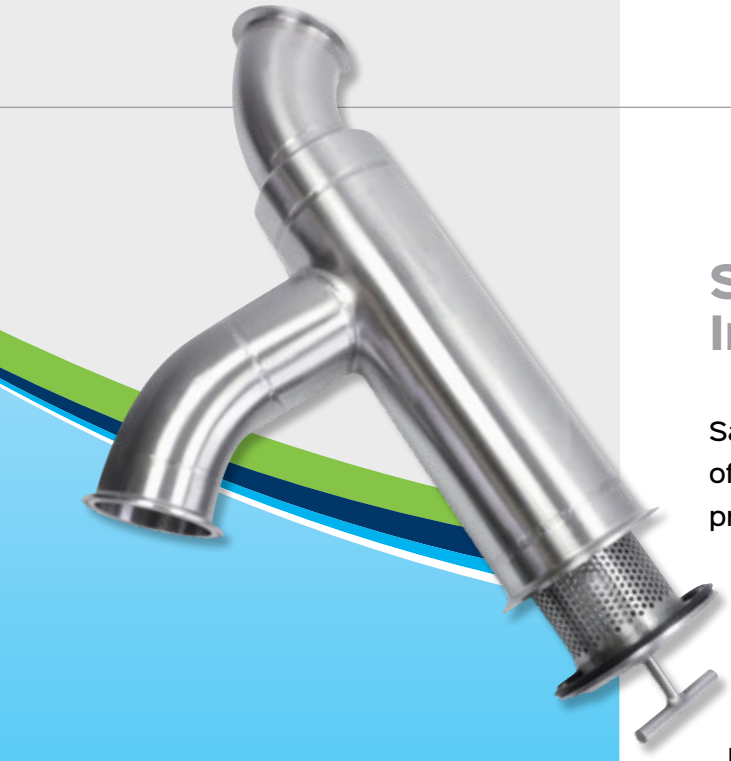
Face-to-Face Dimension

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

Y-Strainers



Small Footprint, Big Increase in Productivity

Sani-Matic Y-Strainers are designed to solve a variety of system requirements. Whether your process is pre-existing, if piping revisions / modifications aren't an option, or maybe space simply doesn't provide the room for any other option, our Y-Strainers are an excellent consideration to address the needs of your application.

Sani-Matic Y-Strainers are engineered and manufactured with a close-tolerance fit (0.010") at the base of the Element and do not require an O-Ring (unless a filter tube is used). Fewer parts result in simpler maintenance and less downtime – increasing production performance and saving you time and money.

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

QUICK TIPS

How do you install a Y-Strainer?

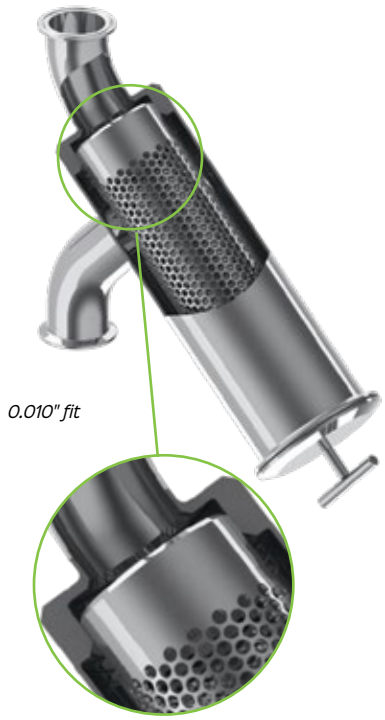
The Y-Strainer should be installed in the process line with the Element's handle pointing toward the floor.

Why are Y-Strainers perfect for manufacturing chocolate?

The Y-Strainer's hot water jacket option can help keep confectionery products, such as chocolate, flowing through the production lines.

GOOD TO KNOW

- **Strainer & Element Material:** 316Lss
- **Sanitary ID Finish:** 32 µin Ra
- **Maximum Temperature Rating:** 250 °F
- **Full Assembly Maximum Pressure Rating (Standard Tri-Clamp):** 125 psi (4" Body) / 75 psi (6" Body)
- **Full Assembly Maximum Pressure Rating (High Pressure Tri-Clamp):** 200 psi (4" and 6" body)
- **Hot Water Jacket Maximum Temperature and Pressure Rating:** 125 psi @ 250 °F
- Wedgewire elements have some interior surfaces greater than 32 µin Ra due to the construction process.
- Hot water jacket is available in 4" body size and 1.5"-3.0" connection sizes.
- 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).
- Perforated or wedgewire strainer elements are interchangeable.
- Filter tubes are FDA-compliant, and when used with perforated elements 3/32" or larger maintain overall strainer assembly 3-A authorization.
- Tuf-Flex® Gaskets are PTFE gaskets with an EPDM core - they help reduce "stickiness" of the gasket allowing for an easier and quicker strainer element removal process.
- Y-Strainer filter tubes require a custom strainer element to hold the filter tube in place.



Y-Strainer Model Number Key

Example Model #: YX15T3-P125X04000

1	**Strainer Model**	
	Y	Y-Strainers
2	**Body Length**	
	X	Standard 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)
	H	Tri-Clamp - High Pressure Clamp
	W	Butt Weld*
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")
	F125	Perforated / 0.125" (1/8") / For Use with Filter Tubes*
	F250	Perforated / 0.25" (1/4") / For Use with Filter Tubes*
	W010	Wedgewire / 0.010"
	W015	Wedgewire / 0.015"
	W020	Wedgewire / 0.020"*
	W030	Wedgewire / 0.030"
	W040	Wedgewire / 0.040"*
	W060	Wedgewire / 0.060"
11	**Flow Direction**	
	X	Standard Flow
12	**Seal Kit**	
	0	EPDM (Standard)
	T	Tuf-Flex Gasket
	1	Viton
	3	Buna-N
13, 14	**Body Size**	
	40	4.0"
	60	6.0"
15	**Option #1**	
	0	None (Standard)
	H	Hot Water Jacket
16	**Option #2**	
	0	None (Standard)
	2	Dual Sight Glass*
	D	Drain / Sample Port*
	3	Dual Sight Glass & Drain / Sample Port*

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

NOTE: 4.0" Connection Size is the only size that uses a 6.0" Body Size.

NOTE: Filter Tube Elements include a Silicone O-Ring.

NOTE: The Hot Water Jacket option cannot be combined with a 6.0" Body Size or any of the Sight Glass Options.

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 Elements						
Strainer Body Size	Connection Size	Old Part #	New Model Key #	Max. gpm	Y-Strainer w/ Dual Sight Glass Old Part #	Y-Strainer w/ Dual Sight Glass New Model Key #
4"	1.5"	Y10015	YX15T3-P□X□400□	70	Y10115	YX15T3-P□X□4002
4"	2.0"	Y10020	YX20T3-P□X□400□	130	Y10120	YX20T3-P□X□4002
4"	2.5"	Y10025	YX25T3-P□X□400□	205	Y10125	YX25T3-P□X□4002
4"	3.0"	Y10030	YX30T3-P□X□400□	300	Y10130	YX30T3-P□X□4002
6"	4.0"	Y10040	YX40T3-P□X□600□	450	Y10140	YX40T3-P□X□6002
Wedgewire Strainer Elements						
Strainer Body Size	Connection Size	Old Part #	New Model Key #	Max. gpm	Y-Strainer w/ Dual Sight Glass Old Part #	Y-Strainer w/ Dual Sight Glass New Model Key #
4"	1.5"	Y20015	YX15T3-W□X□400□	70	Y20115	YX15T3-W□X□4002
4"	2.0"	Y20020	YX20T3-W□X□400□	130	Y20120	YX20T3-W□X□4002
4"	2.5"	Y20025	YX25T3-W□X□400□	205	Y20125	YX25T3-W□X□4002
4"	3.0"	Y20030	YX30T3-W□X□400□	300	Y20130	YX30T3-W□X□4002
6"	4.0"	Y20040	YX40T3-W□X□600□	450	Y20140	YX40T3-W□X□6002

NOTE: 4.0" Connection Size is the only size that uses a 6.0" Body Size.

NOTE: If using filter tubes, the maximum recommended flow rate (gpm) may decrease depending on process conditions.

Y-Strainer Options

The **Drain / Sample Port** helps operators drain the majority of liquid from the strainers before removing the element for cleaning. Adding a sample valve with this option is recommended to easily drain or sample.

Dual Sight Glasses provide visual access to particulate buildup levels.

The **Hot Water Jacket** option adds a 304ss jacket with 0.75" FNPT inlet and outlet connections to the outside of the Y-strainer body. Hot water can be circulated through the jacket to maintain product temperatures within the strainer for applications such as chocolate, corn syrup, and more. Hot water jackets have a heat transfer surface area of approximately 143 in^2.

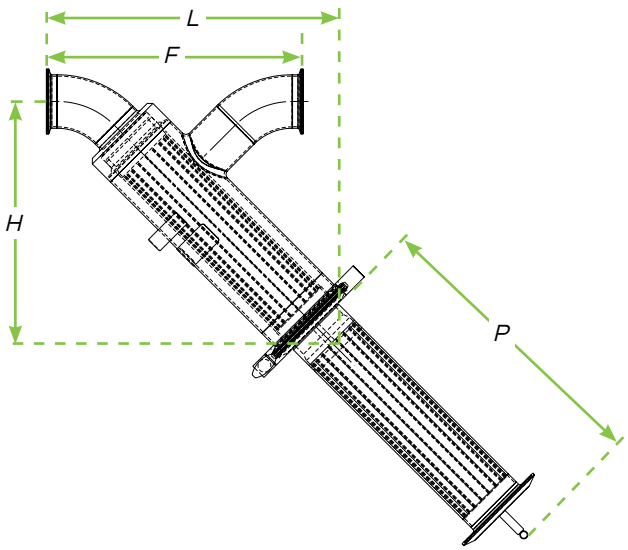
Drain / Sample Port

Dual Sight Glass

Hot Water Jacket

Y-Strainer Dimensions				
Connection Size	F	H	L	P
1.5"	10"	11 1/32"	12 15/32"	14"
2.0"	11"	11 9/32"	13 1/32"	14"
2.5"	12"	11 1/2"	13 9/16"	14"
3.0"	14"	11 23/32"	14 3/32"	14"
4.0"	17"	12 9/32"	15 13/32"	14"

NOTE: Face-to-Face Dimension (F) is for Tri-Clamp connection type. Contact Sani-Matic for Butt Weld dimensional information.

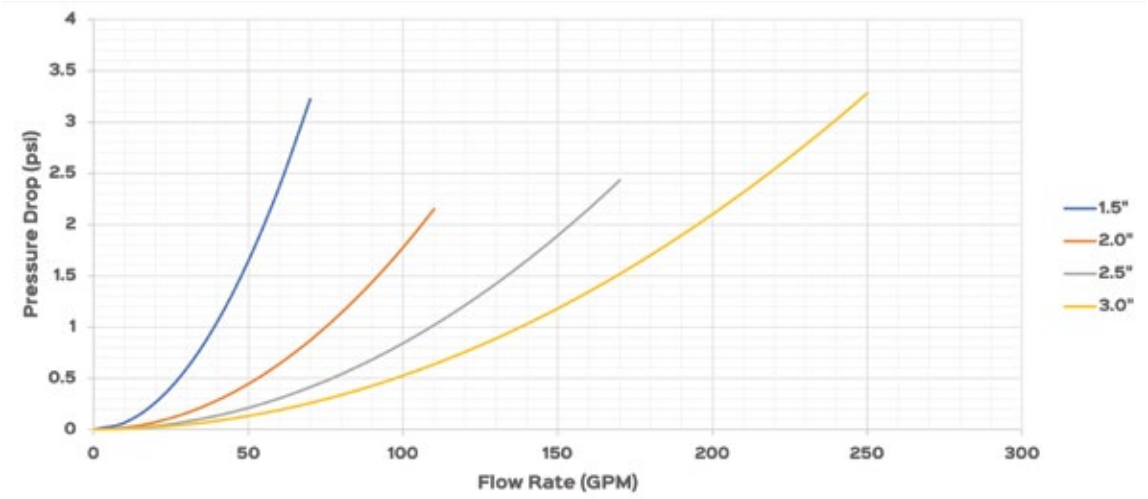


Cv Values & Pressure Drops for Y-Strainers

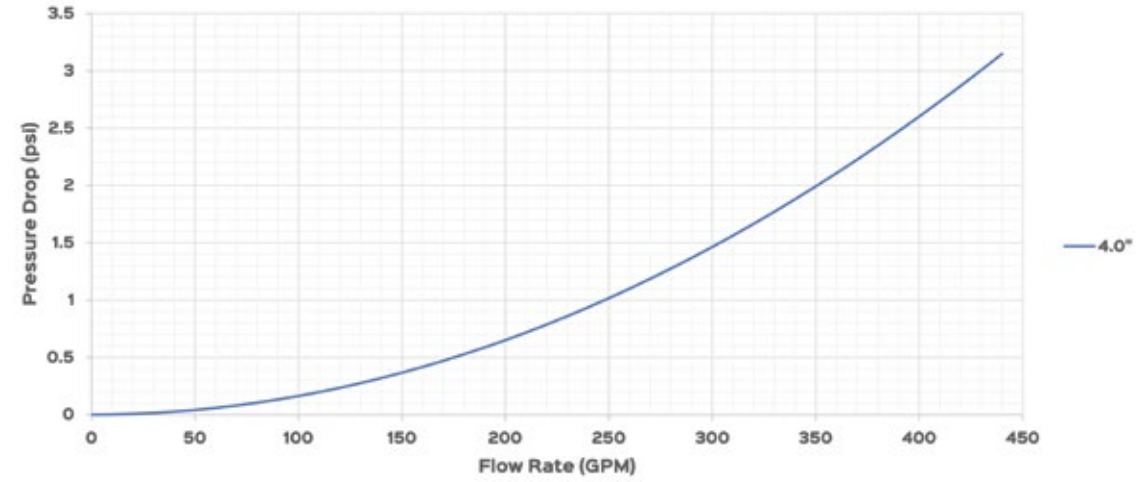
Cv values or the provided pressure drop tables can be used to estimate the pressure drop across a strainer at a given flow rate. Cv values are for water at 70 °F. Contact Sani-Matic for inquiries on pressure drops for fluids with other viscosities.

Strainer Body Size	Connection Size	Cv
4.0"	1.5"	39
	2.0"	75
	2.5"	109
	3.0"	138
6.0"	4.0"	248

Y-Strainer Pressure Drop: 4.0" Body



Y-Strainer Pressure Drop: 6.0" Body



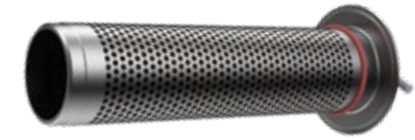
NOTE: Cv values and charted pressure drops can be used for perforated, wedgewire, and perforated with mesh overlays or filter tubes. The clean pressure drop is minimally impacted by the element configuration in most cases. For worst-case calculations, add 20% to the calculated pressure drop.

Y-Strainer Replacement Parts

1. Strainer Element
2. TC Clamp
3. TC Gasket
4. Strainer Body
5. Sight Glass Replacement (Optional)
6. O-Ring (Only with Perforated Elements for Filter Tubes)

1 Strainer Elements

Perforated Element		
Hole Size	For 4" Strainer Body Size[1] Part #	For 6" Strainer Body Size[2] Part #
1/16"	287512*	Inquire for Info
3/32"	171904*	Inquire for Info
1/8"	700226	700513
1/8"	240959	700524
Perforated Element - For Use with Filter Tubes		
Hole Size	For 4" Strainer Body Size[1] Part #	For 6" Strainer Body Size[2] Part #
1/8"	346575*	346528*
1/4"	346576*	346522*
Wedgewire Element		
Slot Size	For 4" Strainer Body Size[1] Part #	For 6" Strainer Body Size[2] Part #
0.010"	700232	700504
0.015"	700164	700505
0.020"	700234	700506*
0.030"	700236	700507
0.040"	700238*	700508*
0.060"	700240	700509



[1] *These elements measure 3.0" OD.*
[2] *These elements measure 4.0" OD.*
Non-stock product option. Longer lead times apply.

2 Tri-Clamp (TC) Clamps

Clamp Type	Part #			
	0.50" / 0.75"	2.5"	2 4.0"	2 6.0"
	For Sample Valve / TC Cap	For Sight Glass	For Strainer Body	For High-Capacity Strainer Body
Standard	020224	020083	020225	020976
High Pressure	022235	020914	020916	025686

Standard Clamp

High Pressure Clamp

Tri-Clamp (TC) Gaskets

Material	Part #				
	0.50"	0.75"	2.5"	3 4.0"	3 6.0"
	For TC Cap	For Sample Valve	For Sight Glass	For Strainer Body	For High-Capacity Strainer Body
EPDM (Standard)	021036	021037	021029	021031	022975
Viton	028724*	028725	028729	020474	023847
Buna-N	031690*	020230*	020091	020226	020263*
Tuf-Flex	046732	046733	046737	046739	046740*

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

4 Strainer Body

Connection Size	Part #		
	4" Body Size - Standard	4" Body Size - Sight Glass	4" Body - Hot Water Jacket
1.5"	700249	103786*	183152
2.0"	700243	103779*	138591
2.5"	700245	103801*	252287
3.0"	700247	103805*	167880
Connection Size	**6" Body Size - Standard**	**6" Body Size - Sight Glass**	**6" Body - Hot Water Jacket**
4.0"	700471	103810*	N/A

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

Standard *Sight Glass*

Hot Water Jacket

5 Sight Glass Replacements

Description	Part #
VL-3A Sight Glass Assembly, 2.5" TC	056231

NOTE: VL-3A Sight Glass Assemblies come with the sight glass lens, sight glass ferrule, and sight glass gasket.

VL-3A Sight Glass

6 O-Rings Only used with perforated elements for filter tubes.

Material	4" Strainer Body Size Part #	6" Strainer Body Size Part #
Silicone	037218*	060755*

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

Sample Valve

Description	Part #
Sample Valve, TC, 0.50" / 0.75" Process Connection, 0.5" Sample Connection	**060887**

NOTE: Air relief sample valves are recommended for the Drain / Sample Port option.

Tri-Clamp (TC) Caps

TC Caps can be used on sample/drain port to cap the port.

Description	Part #
TC Cap, 0.50" / 0.75", 316Lss	**020529**

ID Tag

Custom tag 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**

Y-Strainer Accessories

Filter Tubes: 4" Body Size • 50/Box

4 7/8" x 13 1/2" Filter Tubes (For 1.5", 2", 2.5", and 3" connections). Fits 3" x 11" Perforated Element.

NOTE: Y-Strainer filter tubes require the F125 / F150 specified filter tube element which is built for use with filter tubes.

Material	Width	Length	Max. Temperature (°F)	Micron	Part #
Nylon Multifilament	4 7/8"	13 1/2"	185 continuous, 455 short term	150[1]	**043742***
Polyester Monofilament	4 7/8"	13 1/2"	270 continuous, 455 short term	250[1]	**042234***
Plain Weave Cotton Cloth	4 7/8"	13 1/2"	300	270	**048601***
Nylon Monofilament	4 7/8"	13 1/2"	275	400	**031126***
Polyester Multifilament	4 7/8"	13 1/2"	270 continuous, 455 short term	400	**043743***

[1] Due to the 0.010" fit of the Y-Strainer Element, 150 and 250 micron filter tubes may not capture the particles intended with finer size filter tubes.

NOTE: Other micron sizes are available.

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

Mesh Overlays (For Y-Strainers using perforated elements) 316ss Wire

Mesh Overlay - 4" Body Size		Mesh Overlay - 6" Body Size	
Mesh Size	Part #	Mesh Size	Part #
10	**032867**	10	**032876***
20	**032868**	20	**032877***
30	**032869***	30	**032878***
40	**032870**	40	**032879***
50	**032871***	50	**032880***
60[1]	**032872**	60[1]	**032881***
80[1]	**032873***	80[1]	**032882***
100[1]	**032874**	100[1]	**032883***
120[1]	**032875**	120[1]	**032884***

[1] Due to the 0.010" fit of the Y-Strainer Element, mesh sizes 60 to 120 may not capture the particles intended with finer mesh.

NOTE: Use of wire mesh overlay is not compliant with 3-A.

***Non-stock product option. Longer lead times apply. Non-returnable. Minimum order quantity of (2) units.**

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?

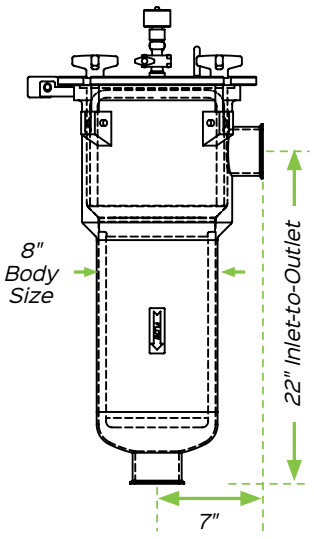
An overhead crane may be needed to remove strainers containing heavy soil.

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

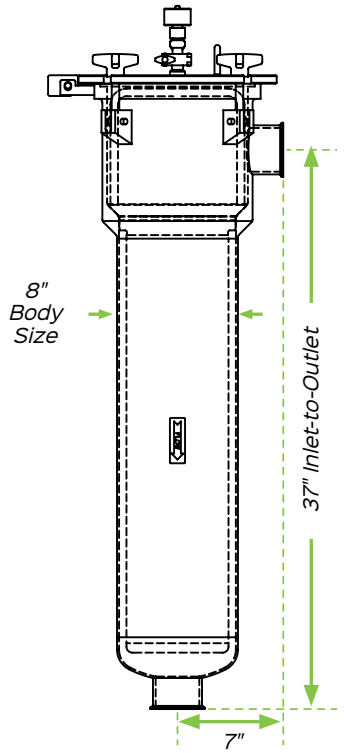
The sample / air relief vent valve is used to relieve line pressure prior to opening the basket strainer cover for safety.

GOOD TO KNOW

- **Material:** Cast and heavy gauge 316Lss
- **Pressure Rating:** 125 psi max @ 300 °F (liquid service only)
- **ID Finish:** 32 µin 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).



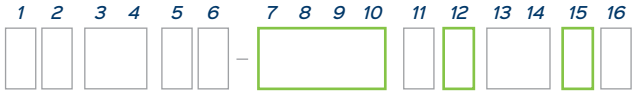
SHORT Body Length
Surface Area: 1.6 ft²



LONG Body Length
Surface Area: 3.7 ft²

Basket Strainer Model Number Key

Example Model #: BS15T3-P125X08000



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

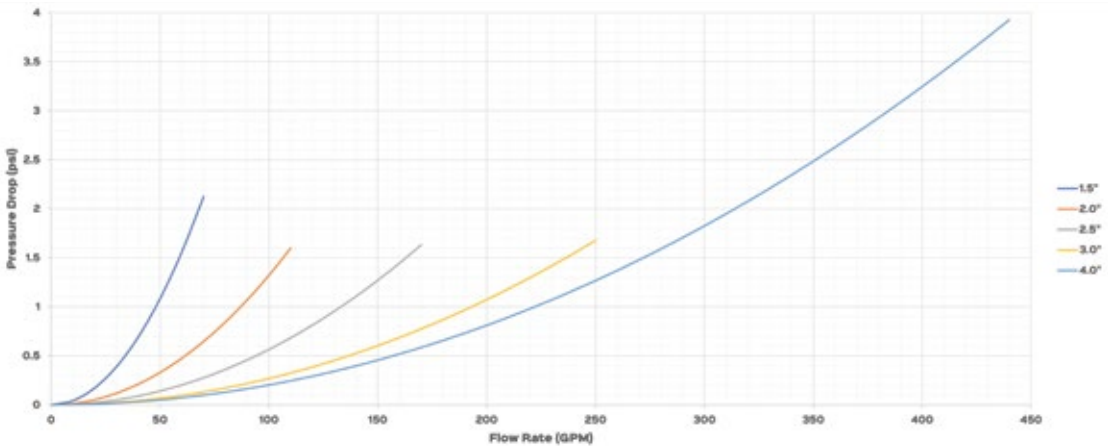
NOTE: If using filter bags, see page 75 for information on maximum flow rates.

Cv Values & Pressure Drops for Basket Strainers

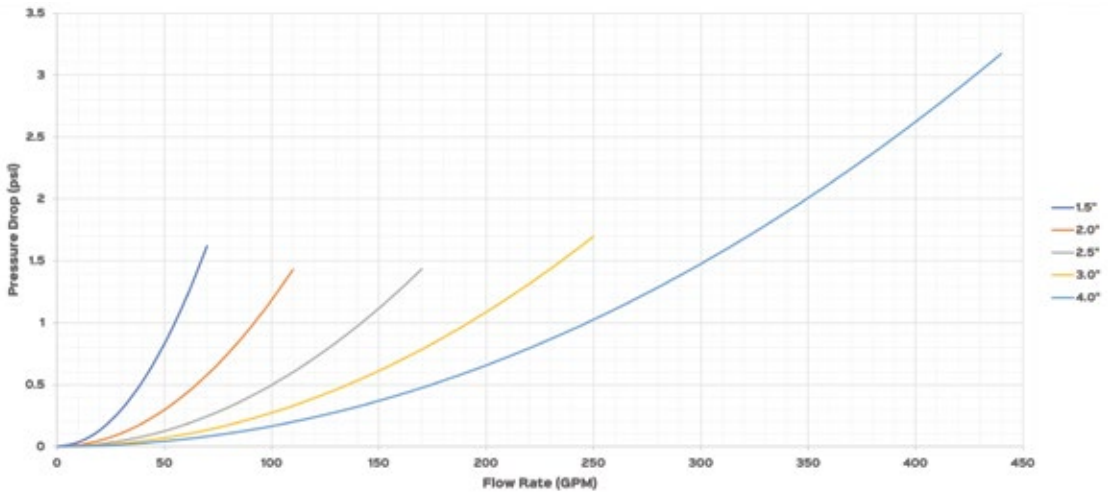
Cv values or the provided pressure drop tables can be used to estimate the pressure drop across a strainer at a given flow rate. Cv values are for water at 70 °F. Contact Sani-Matic for inquiries on pressure drops for fluids with other viscosities.

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")

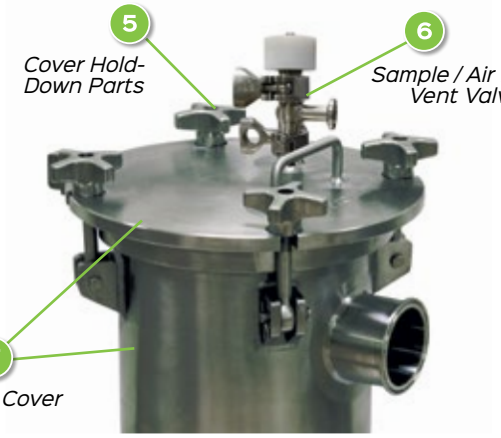


Basket Strainer Pressure Drop - Standard Flow - SHORT Body (22")



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.

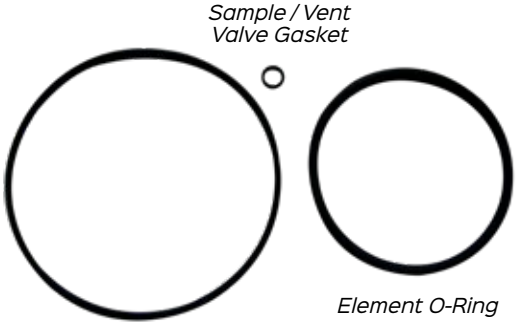
SHORT Wedgewire Element

LONG Perforated Element

2 Basket Strainer Seal Kit Parts

Cover O-Ring	Part #
EPDM (Standard)	**021378**
Viton	**021144**
Element O-Ring	**Part #**
EPDM (Standard)	**021356**
Viton	**021143**
Sample / Vent Valve Gasket	**Part #**
EPDM (Standard)	**021037**
Viton	**028725**

Spare Parts Kits		
Includes Cover O-Ring, Element O-Ring, and Sample / Vent Valve Gasket		
Strainer Model	**Seal Material**	**Kit Part #**
Basket Strainer	EPDM	**105844**
Basket Strainer	Viton	**105918**



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

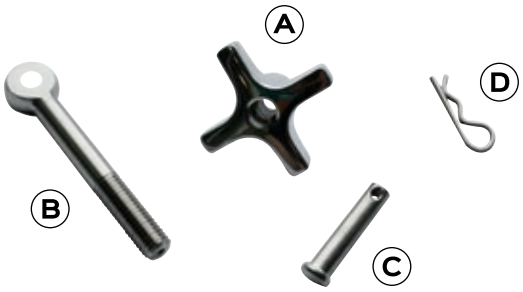
Description	Part #
Filter Bag Kit[1]	**105937**
Clamp Ring	**641110**
Locking Latch	**621766**

[1]*Includes 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.

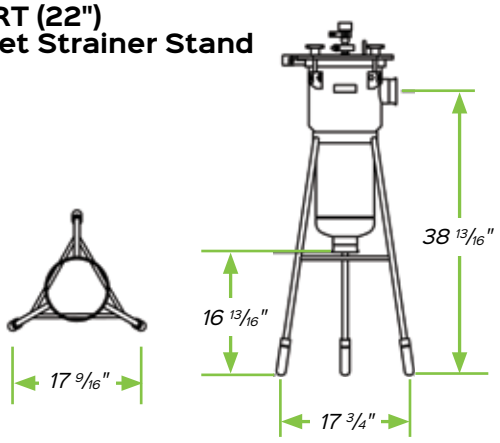
Description	Part #
ID Tag, 2.0" x 0.5", 304ss	**720826**

Basket Strainer Accessories

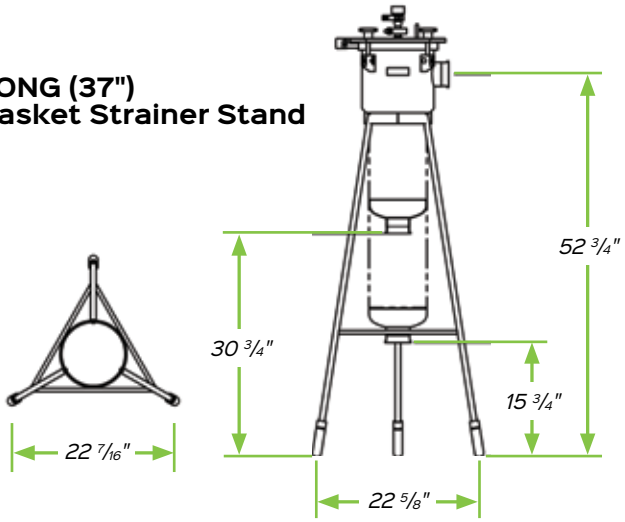
Basket Strainer Stand

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

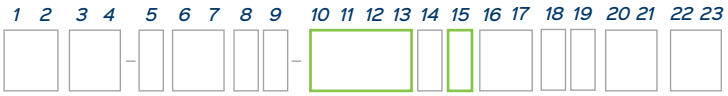


LONG (37")
Basket Strainer Stand



Multi-Basket Strainer Model Number Key

Example Model #:
MBDV-S15T3-P125X08000MBPG

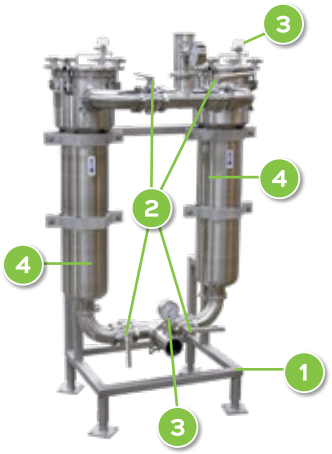


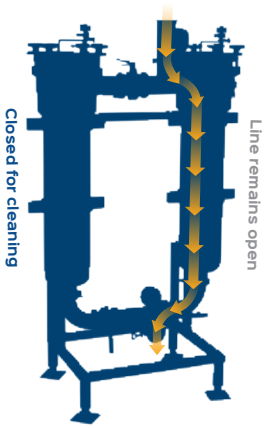
1, 2	**Strainer Model**	
	MB	Multi-Basket Strainers
3, 4	**Configuration Type**	
	DV	Dual Strainers - Vertical
5	**Body Length**	
	S	SHORT Body
	L	LONG Body
6, 7	**Connection Size**	
	15	1.5"
	20	2.0"
	25	2.5"
	30	3.0"
	40	4.0"
8	**Connection Type**	
	T	Tri-Clamp (Standard)
9	**Finish / Polish**	
	3	32 µin Ra / Mechanical Polish (Standard)
10-13	**Element Type / Size**	
	P062	Perforated / 0.0625" (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)
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

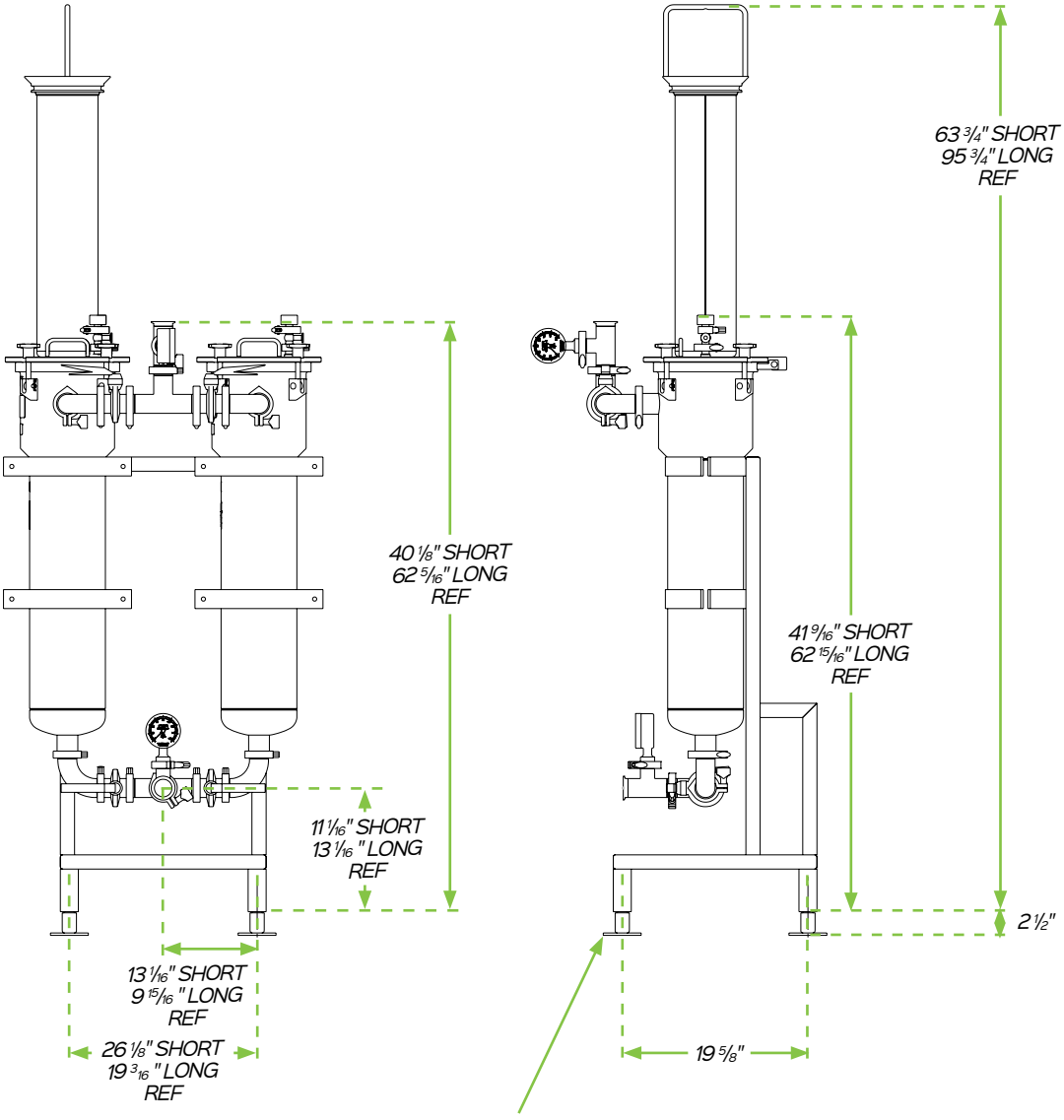




Multi-Basket Strainers
Dual Strainers - Vertical
Complete Assembly

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

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



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

Spray Devices

Complete Spray Solutions for Your Process

Sani-Matic has decades of experience in spray technology for the food & beverage, bio-pharm, personal care, and nutraceutical industries.

Sani-Matic experts evaluate applications and soils, from water-soluble to hard-to-clean, to determine whether a static spray ball, rotary, or jet spray device will best target equipment or process vessel soils. The team will design and manufacture static spray devices in our Wisconsin manufacturing center with the appropriate flows, pressures, and spray patterns to ensure efficient and dependable cleaning. If rotary or jet spray impingement solutions are required, we offer high-quality, German-manufactured products from AWH, Armaturenwerk Hötensleben GmbH, a member of NEUMO-Ehrenberg Group.

Many of Sani-Matic's standard static spray balls are designed and authorized to the 78-03 (Spray Cleaning Devices Intended to Remain in Place) 3-A standard. When considering a custom static spray ball that requires 3-A authorization, contact a Sani-Matic Representative.

Spray Device Offerings

Static Spray Balls

SB-1

SB-2

SB-4

SB-5

SB-6

SB-7

Rotary Spray Devices

Free Rotation

TANKO® RB

TANKO® S

TANKO® SF40

TANKO® RF

Controlled Rotation

TANKO® CP

Jet Spray Devices

TANKO® MX

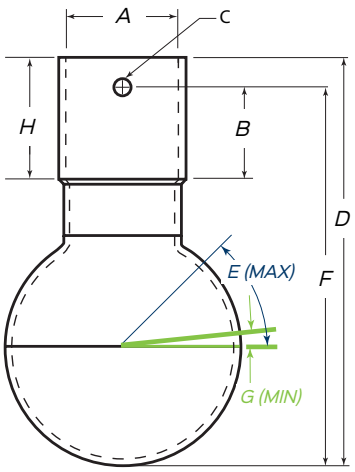
TANKO® JM

Static Spray Balls

Static spray balls clean tanks and vessels by saturating them with a significant amount of fluid with high flow, and relatively low pressure. The solution cascades down the tank's sidewalls eroding water-soluble soils.

Spherical Static Spray Ball Type Dimensions

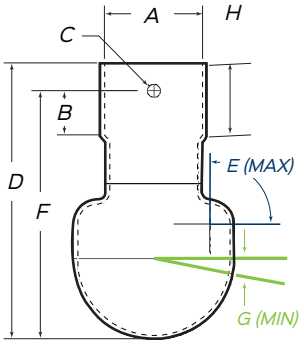
Ball Diameter	A	B	C	D	E (MAX)	F	G (MIN)	H
4.0"	Ø 2 1/2"	1"	Ø 13/64"	6 1/16"	48°	5 9/16"	11°	1 1/2"
	Ø 2"	1"	Ø 13/64"	5 15/16"	55°	5 1/2"	11°	1 7/16"
	Ø 1 1/2"	11/16"	Ø 13/64"	5 7/8"	62°	5 7/16"	11°	1 1/8"
	Ø 1"	3/8"	Ø 9/64"	5 3/8"	70°	5"	11°	3/4"
3.0"	Ø 2 1/2"	1"	Ø 13/64"	4 3/4"	32°	4 1/4"	11°	1 1/2"
	Ø 2"	1"	Ø 13/64"	4 13/16"	42°	4 3/8"	11°	1 7/16"
	Ø 1 1/2"	3/4"	Ø 13/64"	4 13/16"	55°	4 3/8"	11°	1 3/16"
	Ø 1"	3/8"	Ø 9/64"	4 5/16"	67°	3 15/16"	11°	3/4"
2.5"	Ø 2"	1"	Ø 13/64"	4 3/16"	32°	3 3/4"	11°	1 7/16"
	Ø 1 1/2"	3/4"	Ø 13/64"	4 1/4"	48°	3 13/16"	11°	1 3/16"
	Ø 1"	3/8"	Ø 9/64"	3 3/4"	62°	3 3/8"	11°	3/4"
	Ø 3/4"	1/4"	Ø 9/64"	3 5/8"	68°	3 3/16"	11°	5/8"
2.0"	Ø 1 1/2"	11/16"	Ø 13/64"	3 11/16"	35°	3 1/4"	11°	1 1/8"
	Ø 1"	3/8"	Ø 9/64"	3 1/4"	55°	2 7/8"	11°	3/4"
	Ø 3/4"	1/4"	Ø 9/64"	3 1/16"	62°	2 11/16"	11°	5/8"
1.5"	Ø 1"	3/8"	Ø 9/64"	2 11/16"	40°	2 5/16"	15°	3/4"
	Ø 3/4"	1/4"	Ø 9/64"	2 1/2"	52°	2 1/8"	15°	5/8"
	Ø 1/2"	3/16"	Ø 5/64"	2 9/16"	61°	2 1/16"	15°	11/16"
1.25"	Ø 1"	1/4"	Ø 9/64"	2 3/8"	30°	2"	15°	5/8"
	Ø 3/4"	1/4"	Ø 9/64"	2 1/4"	42°	1 7/8"	15°	5/8"
	Ø 1/2"	3/16"	Ø 5/64"	2 5/16"	57°	1 13/16"	15°	11/16"



Tangential Static Spray Ball Type Dimensions

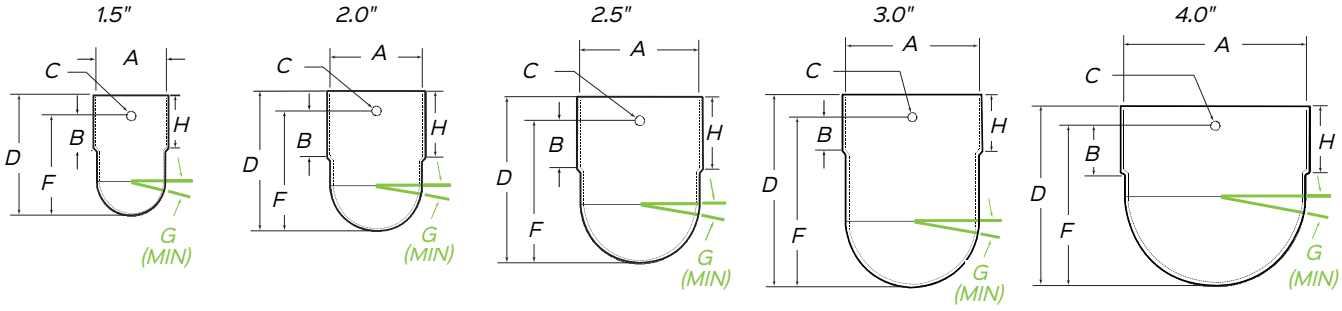
Ball Diameter	A	B	C	D	E (MAX)	F	G (MIN)	H
2.5"	Ø 1 1/2"	3/4"	Ø 3/16"	4 5/16"	90°	3 7/8"	11°	1 3/16"
1.5"	Ø 3/4"	1/4"	Ø 9/64"	2 13/16"	90°	2 7/16"	15°	5/8"

NOTE: Other slip collar connection sizes are available as a special request. Dimensions will vary.



Spray Bubble Spray Ball Type Dimensions

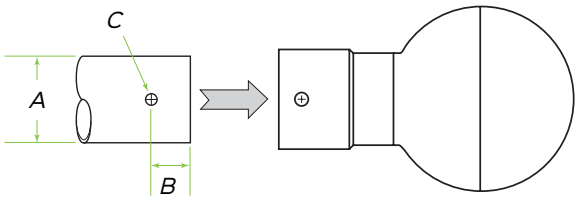
Ball Diameter	A	B	C	D	F	G (MIN)	H
4.0"	Ø 4.05"	0.95"	Ø 13/64"	4.00"	3.56"	11°	1.39"
3.0"	Ø 3.02"	0.75"	Ø 13/64"	4.34"	3.84"	11°	1.25"
2.5"	Ø 2.52"	1.0"	Ø 13/64"	3.50"	3.0"	11°	1.50"
2.0"	Ø 2.02"	1.0"	Ø 13/64"	3.06"	2.63"	11°	1.44"
1.5"	Ø 1.52"	0.69"	Ø 13/64"	2.63"	2.19"	15°	1.13"



NOTE: Spray ball drawings and dimensions on this page are shown for slip collar connections - contact Sani-Matic for other connection style dimensions.

Supply Tube Pinhole Location for Proper Fit with Spray Ball

Tube A (OD)	Distance B	Drill Diameter C
1/2"	3/16"	5/64"
3/4"	3/16"	9/64"
1"	5/16"	9/64"
1 1/2"	11/16"	13/64"
2"	15/16"	13/64"



QUICK TIPS Calculate the recommended minimum spray ball flow rate required for cleaning process vessels by entering the tank diameter:

$$\frac{\text{(Spray Ball Flow in gpm)}}{\text{(Tank Diameter in feet)}} = \text{x } 9.5$$

A minimum flow rate of 3 gallons per minute (gpm) for every foot of tank circumference is required to produce sufficient turbulent flow to cascade solution down vessel walls.

Choosing a Spray Ball Type:

Spherical: Most common spray ball; ideal for general patterns.

Tangential: The 90 degree / perpendicular flat area at the "top" of a tangential spray ball allows for a vertical spray pattern. This can help provide maximum spray coverage to the top of a tank.

Spray Bubble: These are size-on-size sprays (hemisphere to supply tube) and ideal for saving space. Although it is a space saving design, it's important to recognize that the design also eliminates any "upward" spray coverage, assuming a vertical supply tube application. It's essentially one half of a spray ball (one hemisphere), attached to end of tube with the same diameter.


Spherical


Tangential


Spray Bubble

Strainer Sizing:

Use the below recommendations for sizing a strainer to use upstream of static spray balls. This will keep debris from being collected inside the spray ball which would reduce effectiveness of cleaning.

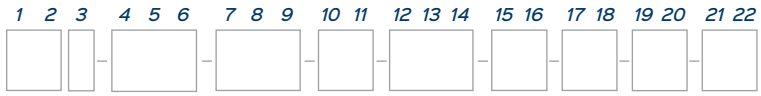
Wedgewire Element: 0.015" or smaller
Mesh Overlay: 40 mesh or higher
Filter Tubes: 425 micron or smaller

GOOD TO KNOW

- **Spray Ball Material:** 316Lss
- **Maximum Operating Pressure:** 70 psi
- Wraparound clips are standard.
- Material Test Reports (MTRs) are available.
- Hastelloy and AL-6XN material options are available for some spray balls.
- Custom spray balls require longer lead times.
- A 1/16" drain hole is standard for all spray balls.
- A clip is included with every spray ball with slip collar connection.
- **Cleaning Distance:** A static spray device's cleaning radius (the distance away that it can provide solution for cleaning) depends on many variables including pressure and spray ball hole size and angle. As a general rule of thumb, if operating in pressure ranges of 10-20 psi, the cleaning radius is 4-6 feet. If operating in pressure ranges above 20 psi, the cleaning radius is 5-7 feet.

Static Spray Ball Model Number Key

Example Model #:
SB5-200-150-SC-040-25-32-MP-SP



1, 2	**Component Model**	
	SB	Static Spray Ball
3	**Drill Pattern**	
	0	No Holes (Except 1/16" Drain Hole)
	1	180° Up - Vertical Mount
	2	180° Up - Double Ball
	3	Special Spray Pattern
	4	180° Down - Vertical Mount
	5	360° Full Coverage
	6	180° Up - Horizontal Mount
	7	270° Up - Vertical Mount
4-6	**Ball Diameter**	
	125	1.25" Ball Diameter
	150	1.50" Ball Diameter
	200	2.00" Ball Diameter
	250	2.50" Ball Diameter
	300	3.00" Ball Diameter
	400	4.00" Ball Diameter
7-9	**Connection Size**	
	050	0.50" - 12 gpm Max. Flow[1]
	075	0.75" - 25 gpm Max. Flow
	100	1.00" - 40 gpm Max. Flow
	150	1.50" - 100 gpm Max. Flow
	200	2.00" - 240 gpm Max. Flow
	250	2.50" - 400 gpm Max. Flow
10, 11	**Connection Style**	
	SC	Slip Collar - Clip Included (Standard)
	BW	Butt Weld
	FL	Flare (No Connection)
	TC	Tri-Clamp[1]
	HC	Half Coupling (FNPT)[1]
	PN	Pipe Nipple (MNPT)[1]
12-14	**Flow**	
	040	40 gpm (Standard)
	000	0 gpm (No Holes)
	###	Custom Flow (gpm)
15, 16	**Pressure**	
	25	25 psi (Standard)
	00	0 psi (No Holes)
	##	Custom Pressure (psi)
17, 18	**Finish**	
	32	32 µin Ra (Standard)
	20	20 µin Ra*
	15	15 µin Ra*
19, 20	**Polish**	
	MP	Mechanical Polish (Standard)
	EP	Electropolish*
21, 22	**Ball Type**	
	SP	Spherical
	TG	Tangential
	BB	Bubble

***Longer lead times apply.**

 # Specify custom flow and custom pressure values when ordering.

[1] Does not conform to 3-A standard.

NOTE: Some constraints exist that limit selecting certain options together. Sani-Matic will advise if issues exist with a specified model #.

NOTE: Flare connection is a weld pullout connection directly at the upper hemisphere of the spray ball. Butt Weld connection adds 1.5" of tubing to this flare.

NOTE: One clip is included with every spray ball with slip collar connection.

NOTE: Non-stock spray balls are built to order and are non-returnable.

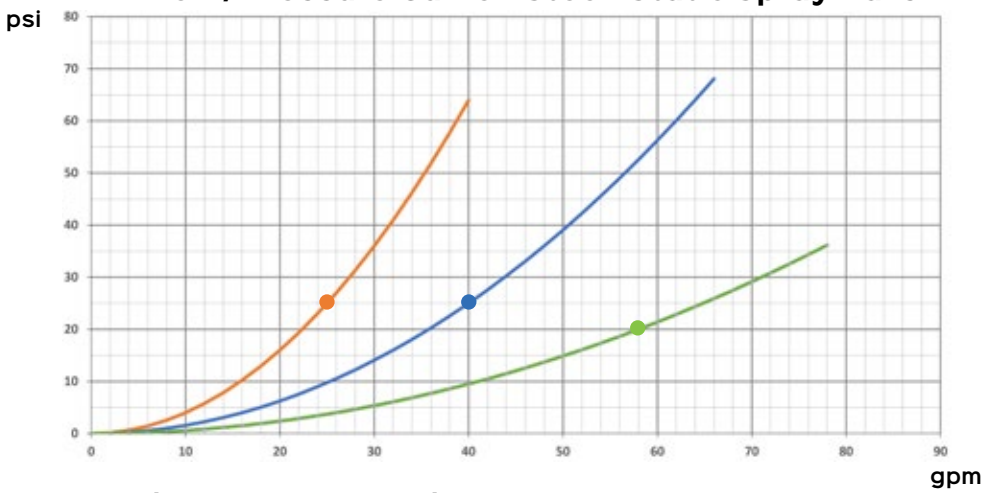
Standard Static Spray Ball Products

Stock Static Spray Balls - 316Lss

Model	Drill Pattern	Ball Diameter	Connection Size	Connection Style	Flow (gpm)	Pressure (psi)	Finish	Ball Type	Part #	New Model Key #
SB-1	180° Up - Vertical Mount	2.50"	1.50"	SC	40	25	32 µin Ra	Spherical	128271	SB-1-250-150-SC-040-25-32-MP-SP
SB-1	180° Up - Vertical Mount	3.00"	1.50"	SC	40	25	32 µin Ra	Spherical	131028	SB-1-300-150-SC-040-25-32-MP-SP
SB-2	180° Up - Double Ball (each ball)	4.00"	1.50"	SC	40	25	32 µin Ra	Spherical	128272	SB-2-400-150-SC-040-25-32-MP-SP
SB-5	360° Full Coverage	1.50"	0.75"	SC	25	25	32 µin Ra	Spherical	154624	SB-5-150-075-SC-025-25-32-MP-SP
SB-5	360° Full Coverage	1.50"	1.00"	SC	40	25	32 µin Ra	Spherical	199108	SB-5-150-100-SC-040-25-32-MP-SP
SB-5	360° Full Coverage	2.00"	1.00"	SC	40	25	32 µin Ra	Spherical	128276	SB-5-200-100-SC-040-25-32-MP-SP
SB-5	360° Full Coverage	2.00"	1.50"	SC	40	25	32 µin Ra	Spherical	199102	SB-5-200-150-SC-040-25-32-MP-SP
SB-5	360° Full Coverage	2.50"	1.00"	PN	58	20	32 µin Ra	Spherical	117503	SB-5-250-100-PN-058-20-32-MP-SP
SB-5	360° Full Coverage	2.50"	1.50"	SC	40	25	32 µin Ra	Spherical	128275	SB-5-250-150-SC-040-25-32-MP-SP
SB-5	360° Full Coverage	3.00"	1.50"	SC	40	25	32 µin Ra	Spherical	128274	SB-5-300-150-SC-040-25-32-MP-SP
SB-5	360° Full Coverage	4.00"	1.50"	SC	40	25	32 µin Ra	Spherical	128273	SB-5-4.00-1.50-SC-040-25-32-MP-SP
SB-5	360° Full Coverage	2.50"	1.50"	SC	40	25	32 µin Ra	Tangential	219549	SB-5-250-150-SC-040-25-32-MP-TG

NOTE: One clip is included with every spray ball with slip collar connection.

Flow / Pressure Curve - Stock Static Spray Balls



NOTE: These are estimated theoretical flow and pressure values at operating points other than the listed design flow and pressure point. The listed design flow and pressure point is marked.

- 25 GPM @ 25 psig
- 40 GPM @ 25 psig
- 58 GPM @ 20psig

Services (Static Spray Ball)

The following services can be added to a static spray ball order.

Description	Part #
Passivation, Static Spray Ball	**PASSIVATION-SB**
Custom Etching, Static Spray Ball	**ETCHING-SB**

NOTE: Custom Etching has a 20 character limit.

Custom Etching Example

Static Spray Ball Clips (316ss)

Description	Part #
Hair Pin Clip for 0.50" SC[1]	**321443**
Wraparound Clip for 0.75" SC	**321554**
Wraparound Clip for 1.00" SC	**321555**
Wraparound Clip for 1.50" SC	**321556**
Wraparound Clip for 2.00" SC	**321557**
Wraparound Clip for 2.50" SC	**321658**

[1]0.50" Clip diameter does not conform to 3-A standard.

NOTE: One clip is included with every spray ball with slip collar connection.

Slip Collars (316Lss)

Slip Collar Size	Overall Length	Part #
0.50"	1 1/32"	**320955**
0.75"	1 1/16"	**320747**
1.00"	1 5/16"	**320627**
1.50"	1 7/8"	**320085**
2.00"	2 1/16"	**320383**

NOTE: Slip Collar Size is size of sanitary tubing (nominal) that fits in slip collar. The opposite end is a butt-weld connection.

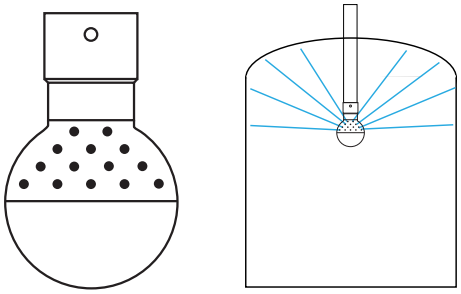
NOTE: See "Spherical Static Spray Ball Type Dimensions" table for more detailed slip collar dimensions.

1.00" Slip Collar

Static Spray Ball Drill Patterns

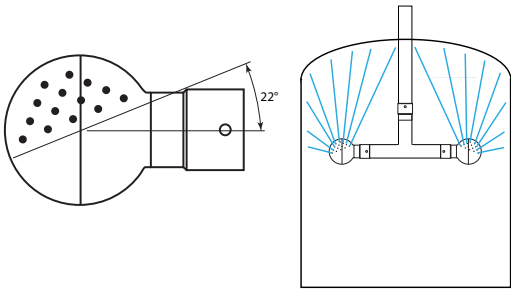
SB-1

180° Up - Vertical Mount



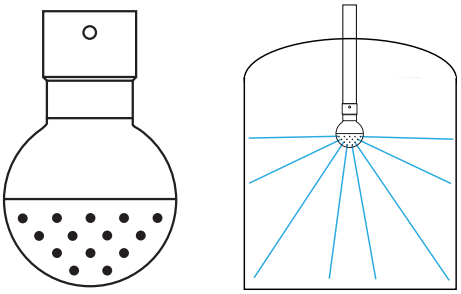
SB-2

180° Up - Double Ball



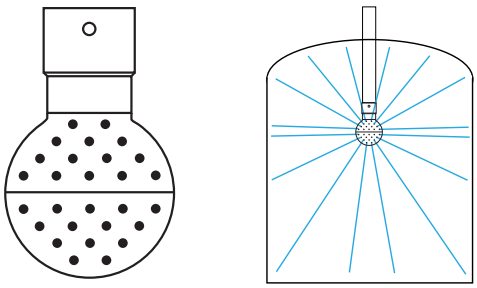
SB-4

180° Down - Vertical Mount



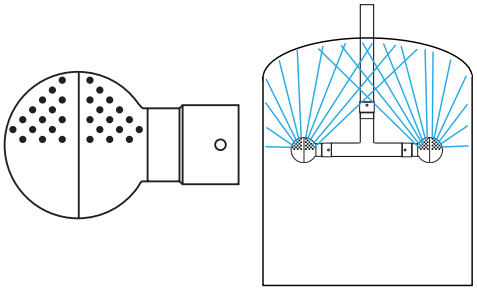
SB-5

360° - Full Coverage



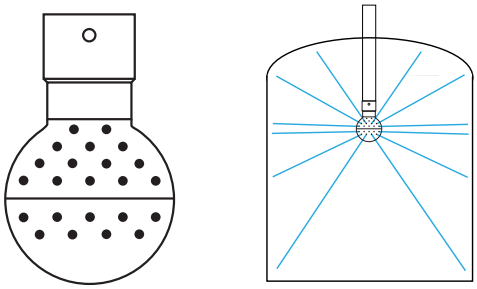
SB-6

180° Down - Horizontal Mount



SB-7

270° Up - Vertical Mount



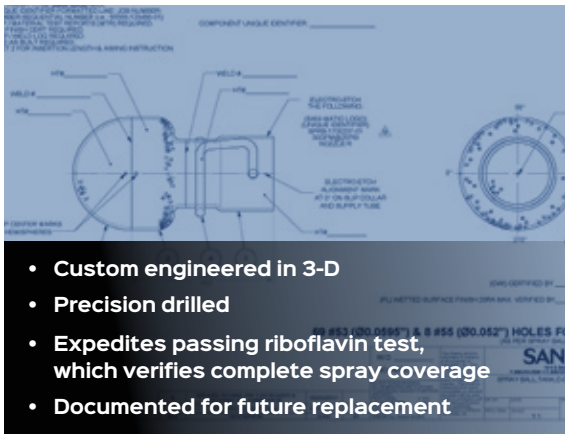
Custom Spray Assemblies

Custom-Engineered Solutions for Special Spray Patterns

Sani-Matic creates 3-D models of your process vessel to engineer effective static spray device drill patterns for proper coverage of all ports and surfaces.

We may request the following information to best understand your application:

- Tank drawings indicating agitators, dip tubes, anti-foams, and spray ball connections
- Available CIP flow and pressure



- **Custom engineered in 3-D**
- **Precision drilled**
- **Expedites passing riboflavin test, which verifies complete spray coverage**
- **Documented for future replacement**

Successful riboflavin testing verifies complete spray coverage.

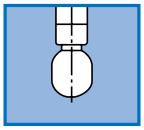
Rotary Spray Devices

Rotary spray devices are used when faster wetting is required, harder-to-clean soils are present, or water savings is important. Sani-Matic provides several types of rotating spray devices (rotating spray balls, spate cleaners, and controlled jet sprays, etc.) from AWH, Armaturenwerk Hötensleben GmbH, a member of NEUMO-Ehrenberg Group. These dynamic spray devices can provide additional cleaning impact from rotation when compared to the cascading cleaning action of static spray devices.

TANKO® RB

The TANKO® RB is an entry-level rotating spray device. Typical applications are similar to those using static spray balls. A major advantage of the rotating ball is its ability to maintain its cleaning function as a static spray ball if the device stops rotating. When rotating, the device's rotating spray jets also create some bounce back or deflective cleaning.

All AWH Spray Devices come with a Material Test Report (MTR).



360°

QUICK TIPS

Will the TANKO RB work if a spray hole is clogged?

If individual spray holes become blocked, the device's rotation allows the remaining spray holes to compensate. This ensures continued complete wetting of the tank walls.

What if the device stops rotating?

Rotating balls can stop working. The TANKO RB will continue performing as a static spray ball if the bearings jam. Operators can troubleshoot by cleaning blocked openings and checking for worn bearings.

Strainer Sizing

Use the below recommendations for sizing a strainer to use upstream of rotary and jet spray devices.

Wedgewire Element: 0.007" or smaller
Mesh Overlay: 80 mesh or higher
Filter Tube: 180 micron or smaller

GOOD TO KNOW

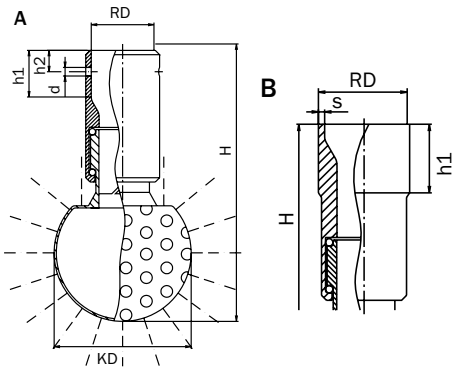
- **Material:** Body (316Lss), Ball Bearing (316) stainless steel
- **Maximum Working Temperature:** 446 °F
- Designed with a double ball bearing allowing horizontal installation.
- Faster wetting capabilities can lead to shorter cleaning cycle times dependent on the application.
- The fluid-driven TANKO RB functions by using larger volume flow rates at lower pressure.
- Additional models (RB40 and RB90) with varying flow and pressures are available; contact Sani-Matic Representatives for more information.
- Available in Hastelloy and other high alloy metals.

TANKO RB Rotary Spray Device

Model	Spray Pattern	Connection Size	Connection Style	Flow (gpm)	Pressure (psi)	Max. Cleaning Radius (ft)	Finish	Part #
TANKO RB30	360° Full Coverage	0.50"	SC	11 - 14	15 - 44	2.5	32 µin Ra	**053604**
TANKO RB30	360° Full Coverage	0.75"	BW	11 - 14	15 - 44	2.5	32 µin Ra	**053603**
TANKO RB64	360° Full Coverage	1.00"	BW	48 - 66	15 - 44	5.0	32 µin Ra	**053607**
TANKO RB64	360° Full Coverage	1.00"	SC	48 - 66	15 - 44	5.0	32 µin Ra	**053608**

Part #	H	KD	RD	h1	h2	d	S
053604	3.07"	1.18"	0.51"	0.67"	0.31"	0.087"	-
053603	3.54"	1.18"	0.75"	1.02"	-	-	0.065"
053607	5.51"	2.52"	1.00"	1.06"	-	-	0.065"
053608	5.12"	2.52"	1.01"	0.83"	0.39"	0.157"	-

*NOTE: **Green highlighted** cells indicate stocked items.*



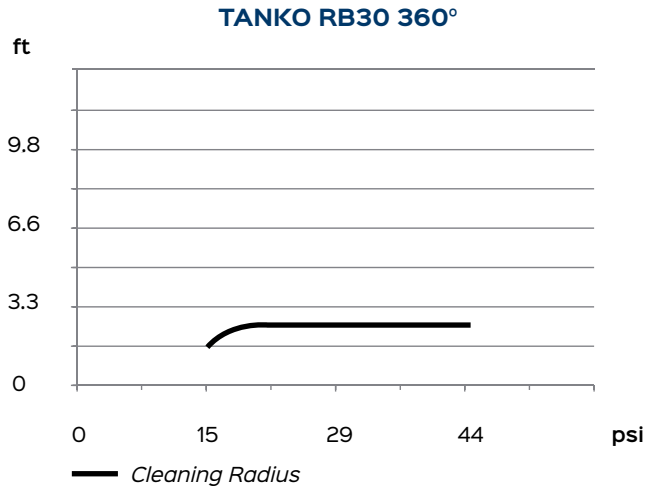
TANKO RB Dimensional Information
(A - Slip Collar, B - Butt Weld)

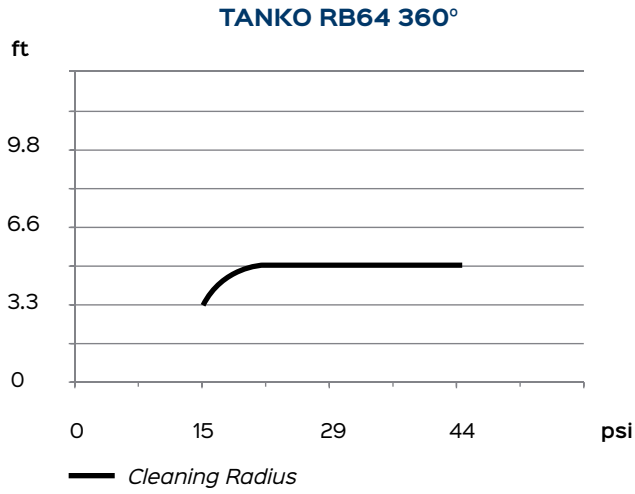
TANKO RB Replacement Parts

Model	Description	Qty.	Connection Style	Finish	Part #
TANKO RB30	Wear Parts Kit, Wire Retaining Pin	4 Pieces	SC	32 µin Ra	**053554**
TANKO RB64	Wear Parts Kit, Wire Retaining Pin	4 Pieces	SC	32 µin Ra	**053555**

*NOTE: **Green highlighted** cells indicate stocked items.*

TANKO RB Rotary Radius Charts



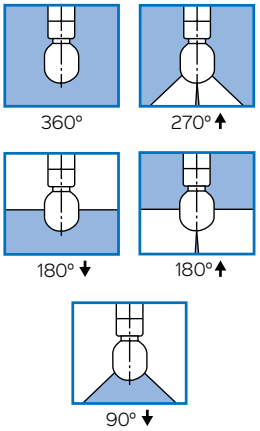


TANKO® S

TANKO® S series rotary spray devices are intended to clean light to medium soil loads to achieve a faster cleaning cycle. TANKO S devices have precision-cut slots without rough edges, which ensure large, directed water droplets provide higher impact soil erosion. The rotating spray pattern of TANKO S also provides bounce back or deflective cleaning. As with the TANKO RB, the TANKO S is designed with double ball bearings for flexible positioning.

The TANKO S also features a high flow option, the TANKO S HF. It has a wider slot size for a higher flow rate to clean hard-to-clean applications.

All AWH Spray Devices come with a Material Test Report (MTR).



QUICK TIPS

How long will a TANKO S rotary spray operate?

The TANKO S has been tested up to 300 hours but typically lasts well beyond the tested number of hours in operation.

Does the TANKO S need to be removed for cleaning?

The TANKO S is designed to be fully CIP-able and self-cleaning.

When should the high-flow version of the TANKO S40 be used?

The S40 HF uses 50% more water than the S40, and while both have the same cleaning radius, the high-flow version provides more solution for cleaning and is recommended for stickier/more difficult to remove product.

Strainer Sizing

Use the below recommendations for sizing a strainer to use upstream of rotary and jet spray devices.

Wedgewire Element: 0.007" or smaller
Mesh Overlay: 80 mesh or higher
Filter Tube: 180 micron or smaller

GOOD TO KNOW

- **Material:** Body (316Lss), Ball Bearing (316) stainless steel
- **Maximum Working Temperature:** 446 °F
- The TANKO S20 - S40 are recommended to operate at a maximum of 44 psi to avoid atomizing the spray droplets.
- Double ball bearings allow for versatile mounting (i.e. installation can occur in any orientation).
- There are five sizes of the TANKO S Series (S10, S20, S30, S40, S50).
  - The smaller TANKO S Series, such as the S20, are ideal for shadow areas in tanks.
  - The S50 is ideal for large tanks and can operate at higher flow rates.
- Available in Hastelloy and other high alloy metals.

TANKO S Rotary Spray Device

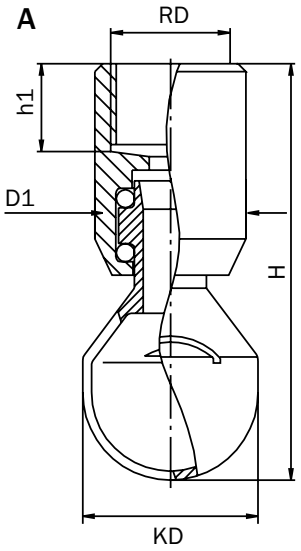
Model	Spray Pattern	Connection Size	Connection Style	Flow (gpm)	Pressure (psi)	Max. Cleaning Radius (ft)	Finish	Part #
TANKO S20	270° Upward	0.13"	FNPT	4 - 6	22 - 44	2.5	32 µin Ra	**053615**
TANKO S20	360° Full Coverage	0.13"	FNPT	4 - 6	22 - 44	2.5	32 µin Ra	**053609**
TANKO S20	180° Downward	0.50"	BW	3.5 - 5.5	22 - 44	2.5	32 µin Ra	**053614**
TANKO S20	360° Full Coverage	0.50"	BW	4 - 6	22 - 44	2.5	32 µin Ra	**053610**
TANKO S20	360° Full Coverage	0.50"	SC	4 - 6	22 - 44	2.5	32 µin Ra	**053611**
TANKO S20	180° Downward	0.50"	SC	3.5 - 5.5	22 - 44	2.5	32 µin Ra	**053543**
TANKO S30	360° Full Coverage	0.25"	FNPT	9 - 12	22 - 44	3.0	32 µin Ra	**053621**
TANKO S30	270° Upward	0.38"	FNPT	8 - 11	22 - 44	3.0	32 µin Ra	**053622**
TANKO S30	360° Full Coverage	0.38"	FNPT	9 - 12	22 - 44	3.0	32 µin Ra	**053618**
TANKO S30	270° Upward	0.75"	BW	8 - 11	22 - 44	3.0	32 µin Ra	**053624**
TANKO S30	360° Full Coverage	0.75"	BW	9 - 12	22 - 44	3.0	32 µin Ra	**053619**
TANKO S30	270° Upward	0.75"	SC	8 - 11	22 - 44	3.0	32 µin Ra	**053623**
TANKO S30	90° Downward	0.75"	SC	9 - 12	22 - 44	3.0	32 µin Ra	**053625**
TANKO S30	180° Downward	0.75"	SC	9 - 12	22 - 44	3.0	32 µin Ra	**054389**
TANKO S30	360° Full Coverage	0.75"	SC	9 - 12	22 - 44	3.0	32 µin Ra	**053617**
TANKO S40	180° Downward	0.50"	FNPT	15 - 20	22 - 44	6.7	32 µin Ra	**053636**
TANKO S40	270° Upward	0.50"	FNPT	15 - 20	22 - 44	6.7	32 µin Ra	**053638**
TANKO S40	360° Full Coverage	0.50"	FNPT	15 - 20	22 - 44	6.7	32 µin Ra	**053633**
TANKO S40	360° Full Coverage	0.75"	BW	15 - 20	22 - 44	6.7	32 µin Ra	**053640**
TANKO S40	270° Upward	0.75"	BW	15 - 20	22 - 44	6.7	32 µin Ra	**053641**
TANKO S40	270° Upward	0.75"	FNPT	15 - 20	22 - 44	6.7	32 µin Ra	**053639**
TANKO S40	180° Downward	0.75"	FNPT	15 - 20	22 - 44	6.7	32 µin Ra	**053644**
TANKO S40	360° Full Coverage	0.75"	FNPT	15 - 20	22 - 44	6.7	32 µin Ra	**053632**
TANKO S40	270° Upward	1.00"	BW	15 - 20	22 - 44	6.7	32 µin Ra	**053642**
TANKO S40	360° Full Coverage	1.00"	BW	15 - 20	22 - 44	6.7	32 µin Ra	**053631**
TANKO S40	270° Upward	1.00"	SC	15 - 20	22 - 44	6.7	32 µin Ra	**053634**
TANKO S40	180° Downward	1.00"	SC	15 - 20	22 - 44	6.7	32 µin Ra	**053637**
TANKO S40	90° Downward	1.00"	SC	15 - 20	22 - 44	6.7	32 µin Ra	**053643**
TANKO S40	360° Full Coverage	1.00"	SC	15 - 20	22 - 44	6.7	32 µin Ra	**053630**
TANKO S40 HF	360° Full Coverage, High-Flow	0.50"	FNPT	23 - 31	22 - 44	6.7	32 µin Ra	**053655**
TANKO S40 HF	360° Full Coverage, High-Flow	0.75"	BW	23 - 31	22 - 44	6.7	32 µin Ra	**053656**
TANKO S40 HF	360° Full Coverage, High-Flow	0.75"	FNPT	23 - 31	22 - 44	6.7	32 µin Ra	**053654**
TANKO S40 HF	360° Full Coverage, High-Flow	1.00"	BW	23 - 31	22 - 44	6.7	32 µin Ra	**053653**
TANKO S40 HF	360° Full Coverage, High-Flow	1.00"	SC	23 - 31	22 - 44	6.7	32 µin Ra	**053652**
TANKO S50	360° Full Coverage	1.50"	SC	58 - 80	22 - 44	10.5	32 µin Ra	**054024**
TANKO S50	360° Full Coverage	2.00"	BW	58 - 80	22 - 44	10.5	32 µin Ra	**053660**
TANKO S50	360° Full Coverage	2.00"	SC	58 - 80	22 - 44	10.5	32 µin Ra	**053661**

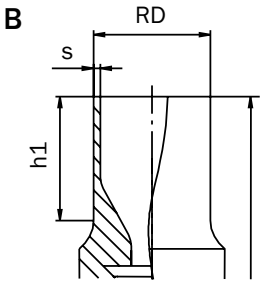
*NOTE: **Green highlighted** cells indicate stocked items.*

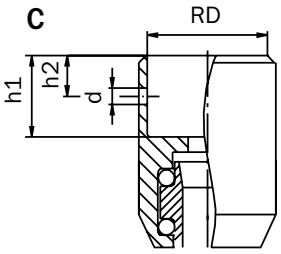
TANKO S Rotary Spray Device

Part #	H	KD	D1	RD	h1	h2	d	S
053615	1.69"	0.67"	0.57"	0.125"	0.28"	-	-	-
053609	1.69"	0.67"	0.57"	0.125"	0.28"	-	-	-
053614	2.68"	0.67"	0.57"	0.50"	1.06"	-	-	0.065"
053610	2.68"	0.67"	0.57"	0.50"	1.06"	-	-	0.065"
053611	1.77"	0.67"	0.57"	0.51"	0.28"	0.12"	0.087"	-
053543	1.77"	0.67"	0.57"	0.51"	0.28"	0.12"	0.087"	-
053621	2.36"	1.10"	0.85"	0.25"	0.41"	-	-	-
053622	2.36"	1.10"	0.85"	0.375"	0.41"	-	-	-
053618	2.36"	1.10"	0.85"	0.375"	0.41"	-	-	-
053624	3.35"	1.10"	0.85"	0.75"	1.02"	-	-	0.065"
053619	3.35"	1.10"	0.85"	0.75"	1.02"	-	-	0.065"
053623	2.36"	1.10"	0.85"	0.76"	0.41"	0.20"	0.087"	-
053625	2.36"	1.10"	0.85"	0.76"	0.41"	0.20"	0.087"	-
054389	2.36"	1.10"	0.85"	0.76"	0.41"	0.20"	0.087"	-
053617	2.36"	1.10"	0.85"	0.76"	0.41"	0.20"	0.087"	-
053636	3.66"	1.54"	1.32"	0.50"	0.75"	-	-	-
053638	3.66"	1.54"	1.32"	0.50"	0.75"	-	-	-
053633	3.66"	1.54"	1.32"	0.50"	0.75"	-	-	-
053640	4.25"	1.54"	1.32"	0.75"	1.06"	-	-	0.065"
053641	4.25"	1.54"	1.32"	0.75"	1.06"	-	-	0.065"
053639	3.66"	1.54"	1.32"	0.75"	0.75"	-	-	-
053644	3.66"	1.54"	1.32"	0.75"	0.75"	-	-	-
053632	3.66"	1.54"	1.32"	0.75"	0.75"	-	-	-
053642	4.25"	1.54"	1.32"	1.00"	1.10"	-	-	0.065"
053631	4.25"	1.54"	1.32"	1.00"	1.10"	-	-	0.065"
053634	3.66"	1.54"	1.32"	1.02"	0.75"	0.39"	0.157"	-
053637	3.66"	1.54"	1.32"	1.02"	0.75"	0.39"	0.157"	-
053643	3.66"	1.54"	1.32"	1.02"	0.75"	0.39"	0.157"	-
053630	3.66"	1.54"	1.32"	1.02"	0.75"	0.39"	0.157"	-
053655	3.66"	1.54"	1.32"	0.50"	0.75"	-	-	-
053656	4.25"	1.54"	1.32"	0.75"	1.10"	-	-	0.065"
053654	3.66"	1.54"	1.32"	0.75"	0.75"	-	-	-
053653	4.25"	1.54"	1.32"	1.00"	1.10"	-	-	0.065"
053652	3.66"	1.54"	1.32"	1.02"	0.75"	0.39"	0.157"	-
054024	6.77"	2.74"	2.34"	1.54"	1.39"	0.95"	0.217"	-
053660	7.09"	2.74"	2.34"	2.00"	1.26"	-	-	0.065"
053661	6.22"	2.74"	2.34"	2.05"	0.75"	0.39"	0.217"	-

*NOTE: **Green highlighted** cells indicate stocked items.*







TANKO S Dimensional Information (A - FNPT, B - Butt Weld, C - Slip Collar)

TANKO S Replacement Parts

Model	Description	Quantity	Connection Style	Part #
TANKO S20	Hairpin Clip	1 piece	SC	**055576**
TANKO S30	Hairpin Clip	1 piece	SC	**055577**
TANKO S40	Hairpin Clip	1 piece	SC	**055578**
TANKO S50	Hairpin Clip	1 piece	SC	**055579**
TANKO S20	Wire Retaining Pin, ATEX	4 pieces	SC	**053564**
TANKO S30	Wire Retaining Pin, ATEX	4 pieces	SC	**053562**
TANKO S40	Wire Retaining Pin, ATEX	4 pieces	SC	**053563**
TANKO S50	Wire Retaining Pin, ATEX	4 pieces	SC	**053565**

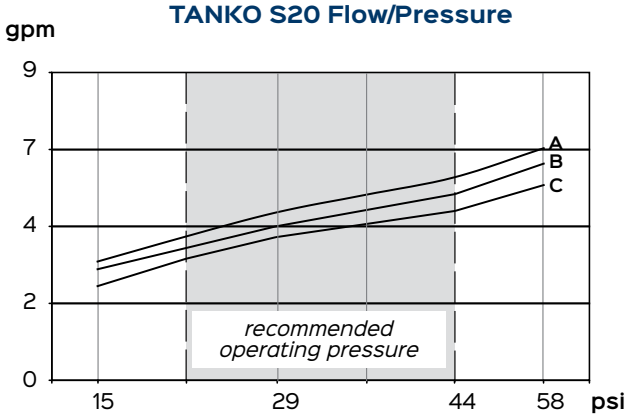
*NOTE: **Green highlighted** cells indicate stocked items.*

Watch the TANKO® S in Action!

TANKO S with ATEX Clip

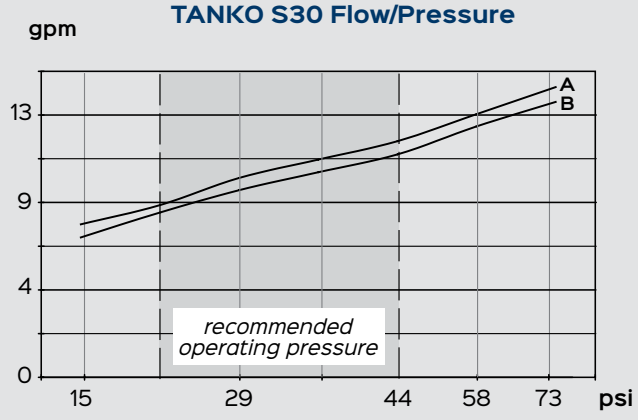
TANKO S Flow/Pressure and Cleaning Radius Charts

TANKO S20 Flow/Pressure



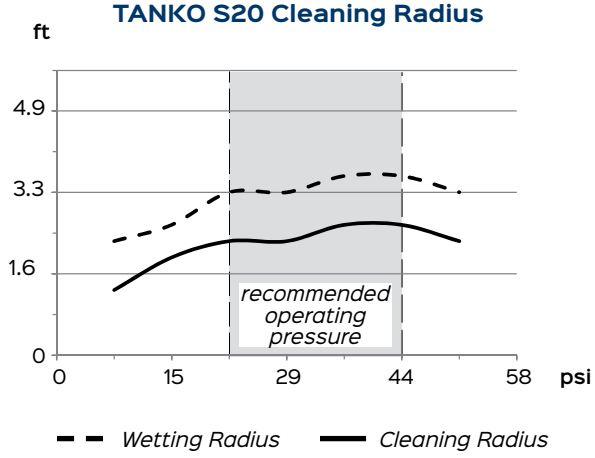
A: *360° / 270° upwards;* **B**: *180° downwards*
C: *90° downwards*

TANKO S30 Flow/Pressure

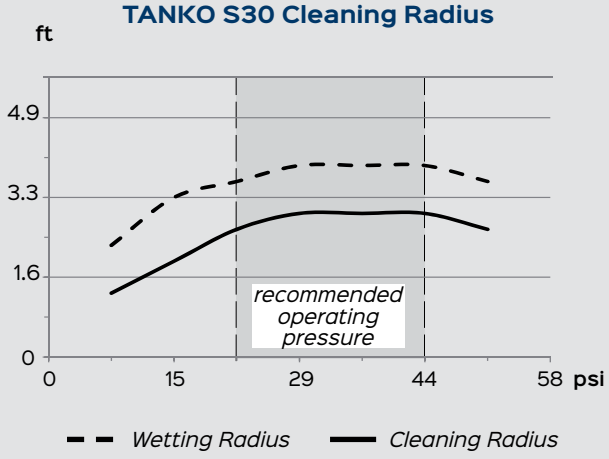


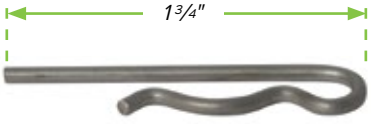
A: *360° / 180° upwards / 180° downwards / 90° downwards*
B: *270° upwards*

TANKO S20 Cleaning Radius



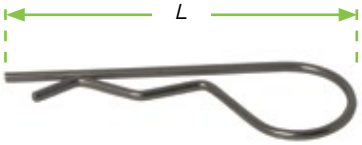
TANKO S30 Cleaning Radius





TANKO S20 Hairpin Clip

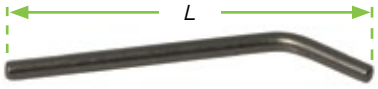
Model	"L"
Hairpin Clip, TANKO S30	2.92"
Hairpin Clip, TANKO S40	4.10"
Hairpin Clip, TANKO S50	6.70"



TANKO S30-50 Hairpin Clip

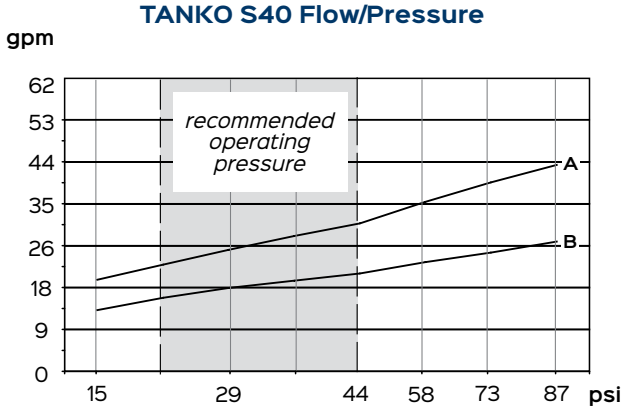
Model	"L"
Wire Retaining Pin, ATEX, TANKO S20	1.58"
Wire Retaining Pin, ATEX, TANKO S30	1.93"
Wire Retaining Pin, ATEX, TANKO S40	3.08"
Wire Retaining Pin, ATEX, TANKO S50	4.53"

NOTE: Pin is to be bent after installation onto spray device.



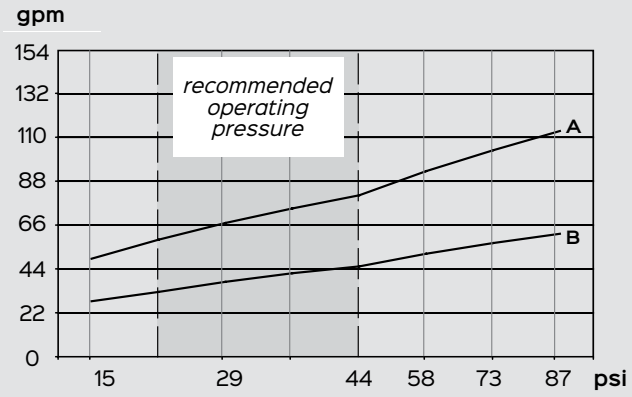
TANKO S20 - S50 ATEX Wire Retaining Pin

TANKO S40 Flow/Pressure



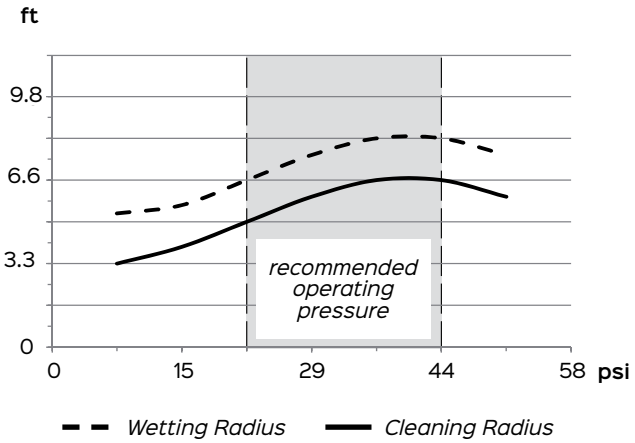
A: *360°HF;* **B**: *360° / 270° upwards / 180° upwards / 180° downwards / 90° downwards*

TANKO S50 Flow/Pressure

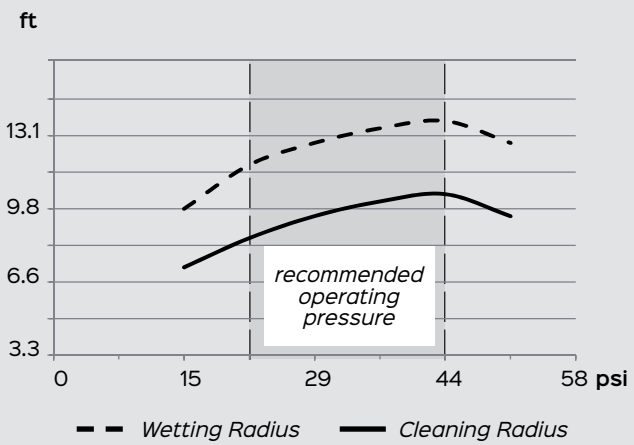


A: *360° / 270° upwards;* **B**: *180° upwards / 180° downwards*

TANKO S40 Cleaning Radius



TANKO S50 Cleaning Radius



TANKO® SF40

The AWH TANKO® SF40 is authorized to carry a 3-A symbol rotary spray device for tank and vessel cleaning. It is designed with a 270° upward spray, is self-cleaning, and easy to dismantle for inspection with only a few components.

The spray head rotates on a hydrodynamic bearing and is lubricated by the cleaning solution during the cycle. There are no oils, greases, or other lubricants needed.

All AWH Spray Devices come with a Material Test Report (MTR).

QUICK TIPS

What orientation should I mount the SF40 in?

The standard hydrodynamic bearing is intended for vertical positioning. If other installation positions are required, contact Sani-Matic for other options.

Strainer Sizing

Use the below recommendations for sizing a strainer to use upstream of rotary and jet spray devices.

Wedgewire Element: 0.007" or smaller
Mesh Overlay: 80 mesh or higher
Filter Tube: 180 micron or smaller

GOOD TO KNOW

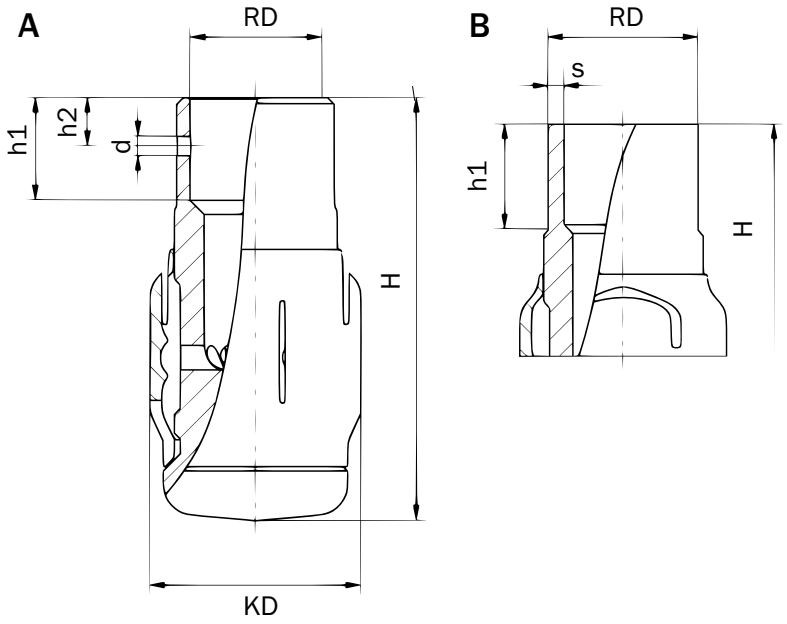
- **Materials:** 316Lss and TECAPEEK® natural
- **Maximum Working Temperature:** 203 °F
- Self-lubricating slide bearing
- Meets 3-A Standard 78-03 requirements

TANKO SF40 Rotary Spray Device

Model	Spray Pattern	Connection Size	Connection Style	Flow (gpm)	Pressure (psi)	Max. Cleaning Radius (ft)	Finish	Part #
TANKO SF40	270° Upward	0.75"	SC	16 - 22	22 - 44	4.9	32 µin Ra	**053665**
TANKO SF40	270° Upward	1.00"	BW	16 - 22	22 - 44	4.9	32 µin Ra	**053664**

Part #	H	KD	RD	h1	h2	d	S
053665	2.76"	1.38"	0.76"	0.63"	0.31"	0.13"	-
053664	2.76"	1.38"	1.00"	0.67"	-	-	0.065"

NOTE: Green highlighted cells indicate stocked items.



TANKO SF40 Dimensional Information
(A - Slip Collar, B - Butt Weld)

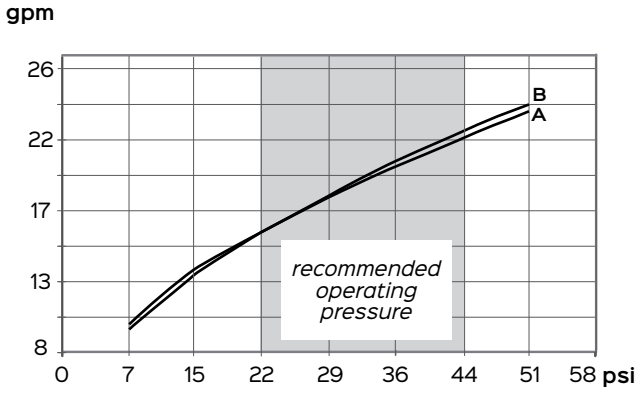
TANKO SF40 Replacement Parts

Model	Description	Qty.	Connection Style	Part #
TANKO SF40	Wear Parts Kit, Wire Retaining Pin	4 Pieces	SC	**053929**

*NOTE: **Green highlighted** cells indicate stocked items.*

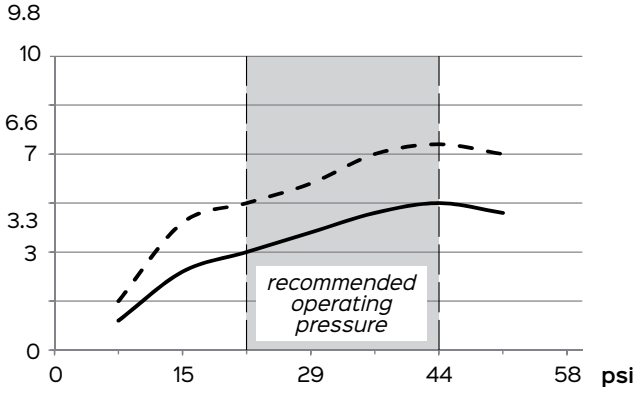
TANKO SF40 Flow/Pressure and Cleaning Radius Charts

TANKO SF40 Flow/Pressure



A: *270° Upward Weld-On* **B**: *270° Upward Clip-On*

TANKO SF40 Cleaning Radius



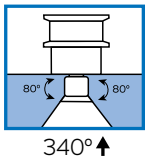
TANKO® RF

The TANKO® RF is a mini retractor with a rotary spray head that is extended during the cleaning process with the help of the cleaning solution pressure and driven with the help of the spray head.

After cleaning solution stops flowing, the spray head retracts into its housing by spring force and closes tightly with the help of the O-Ring.

Applications for the TANKO RF include the insides of larger diameter piping, spray dryers, ducting, or small containers where built-in components are not permitted.

The TANKO RF is available in two sizes - RF40 and RF50.



QUICK TIPS

What orientation can I mount the TANKO RF in?

The unit operates best when installed vertically, but can be used in other positions with some limited service life of wear parts.

Strainer Sizing

Use the below recommendations for sizing a strainer to use upstream of rotary and jet spray devices.

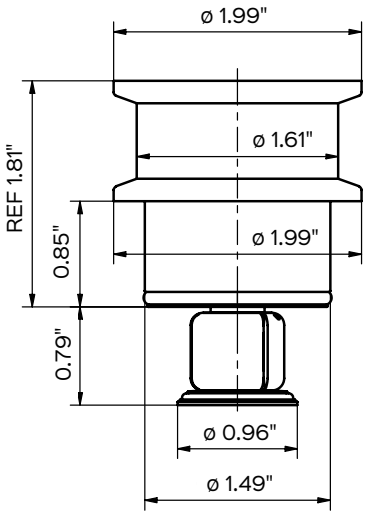
Wedgewire Element: 0.007" or smaller
Mesh Overlay: 80 mesh or higher
Filter Tube: 180 micron or smaller

GOOD TO KNOW

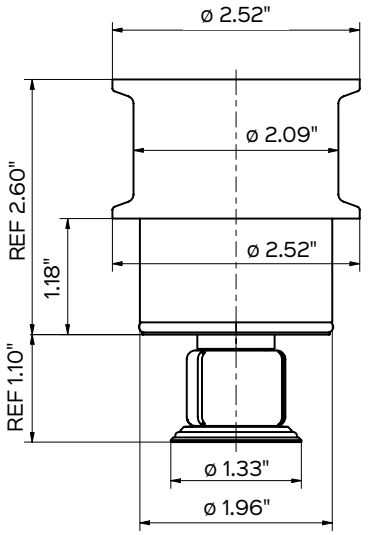
- **Materials:** 316Lss / 316ss / PEEK / EPDM
- **Maximum Working Temperature:** 203 °F
- The TANKO RF is clamped onto a special weld x tri-clamp ferrule that is welded onto the process line / tank that needs to be cleaned.
- Two (2) tri-clamps and gaskets are required (not included) to connect the TANKO RF to the supply process tubing and the weld ferrule.

TANKO RF Retractable Rotary Spray Device

Model	Spray Pattern	Connection Size	Connection Style	Flow (gpm)	Pressure (psi)	Max. Cleaning Radius (ft)	Stroke Length	Part #
TANKO RF40	340° Up	1.50" (Process & Tank)	TC (Process & Tank)	2.9 - 4.2	22 - 44	1.6	0.83"	**059682**
TANKO RF50	340° Up	2.00" (Process & Tank)	TC (Process & Tank)	5.5 - 7.3	22 - 44	3.5	1.1"	**059683**



TANKO RF40 Dimensional Information



TANKO RF50 Dimensional Information

TANKO RF Weld x TC Ferrule

Model	Description	Height	Diameter	Part #
TANKO RF40	Weld x TC Ferrule, 1.5", for TANKO RF40	1.22"	1.97"	**059684**
TANKO RF50	Weld x TC Ferrule, 2.0", for TANKO RF50	1.34"	2.52"	**059685**

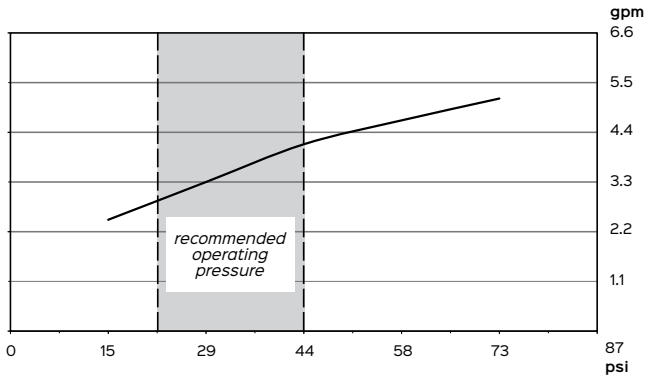
NOTE: "Diameter" refers to the cutout hole dimension on the tank/equipment required for welding installation.

TANKO RF Replacement Parts

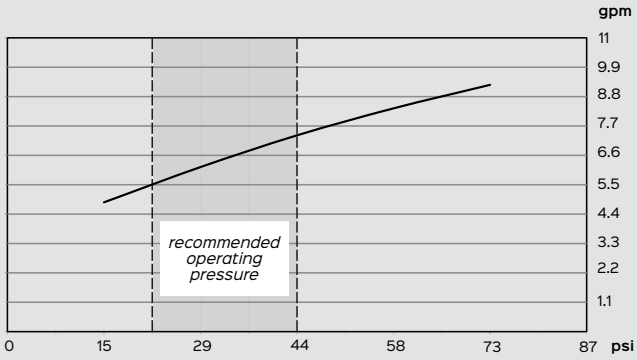
Model	Description	Part #
TANKO RF40	Spare Parts Kit, TANKO RF40	**059686**
TANKO RF50	Spare Parts Kit, TANKO RF50	**059687**

TANKO RF Flow / Pressure and Cleaning Radius Charts

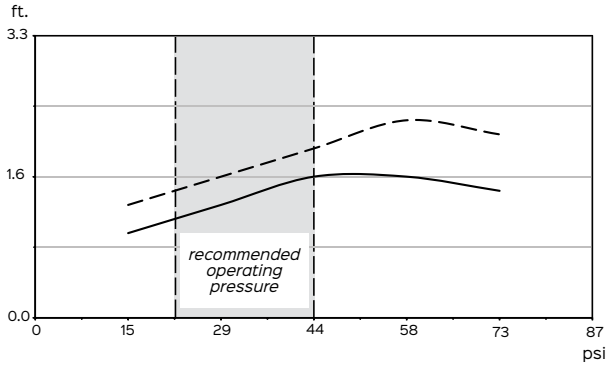
TANKO RF40 Flow/Pressure



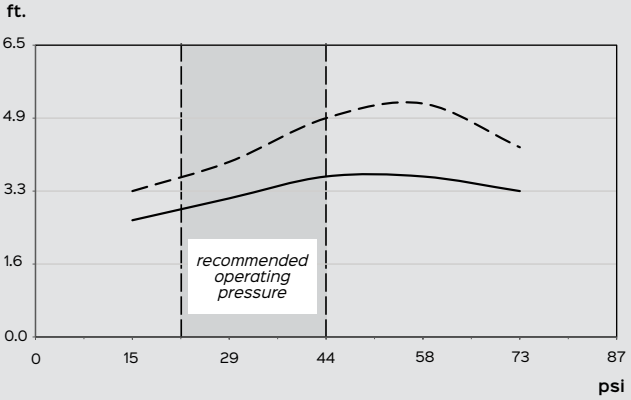
TANKO RF50 Flow/Pressure



TANKO RF40 Cleaning Radius



TANKO RF50 Cleaning Radius



Wetting Radius *Cleaning Radius*

Wetting Radius *Cleaning Radius*

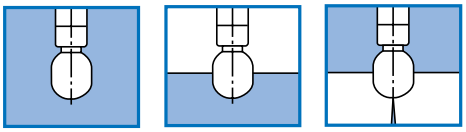
TANKO® CPS

This controlled rotary spray device delivers a high-impact spray at a slow and even rotation. The CPS series bridges the rotary and jet spray product lines, and can be a low-cost solution targeting hard-to-clean rings and tough adhesive soils. Some common "difficult-to-clean" applications include cooking kettles and fermentation tanks.

The TANKO® CPS is compact with a plain bearing system, simple structure, and only a few moving parts for easy maintenance.

With spray coverage options up to 360°, the TANKO CPS series targets heavier soils with directed spray, similar to that of Jet Spray Devices.

All AWH Spray Devices come with a Material Test Report (MTR).



QUICK TIPS

Does the TANKO CPS have a jet cleaning pattern?

The TANKO CPS is in between a rotary spray and jet spray device and doesn't have a dynamic pattern like a jet cleaning device. It produces a consistent pattern of repeating rings that hit targeted spots to loosen soils. The solution provides erosion coverage for the remainder of the tank.

How many sizes are available with the TANKO CPS Series?

The TANKO CPS Series has CP2S and CP3S options. While the CP2S provides a cleaning radius of 6.6 feet, the CP3S's cleaning radius is 9.8 feet and is ideal when a wider cleaning range is required. *(The CP3S is not featured in the catalog but is available through Sani-Matic Representatives.)*

Strainer Sizing

Use the below recommendations for sizing a strainer to use upstream of rotary and jet spray devices.

Wedgewire Element: 0.007" or smaller
Mesh Overlay: 80 mesh or higher
Filter Tube: 180 micron or smaller

GOOD TO KNOW

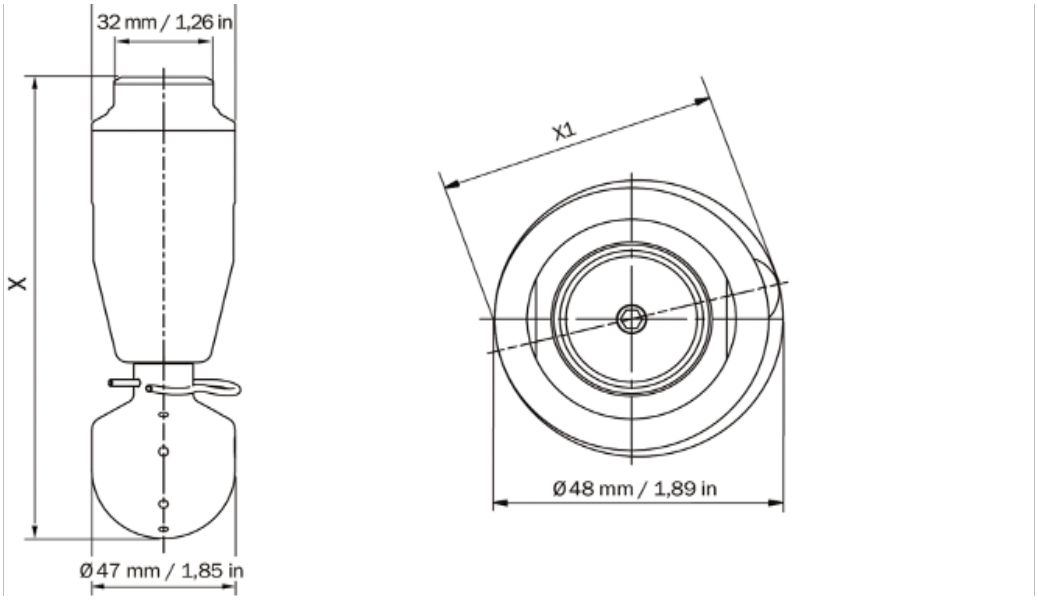
- **Materials:** Solid 316Lss and FDA-compliant PTFE
- **Maximum Working Temperature:** 203 °F
- **Rotations per Minute:** 2-30
- **Minimum Installation Opening (CP2):** 2.0" TC Port or Larger
- Controlled rotation, not a random spray pattern.
- Internal rotor design for a constant, smoother rotation for increased dwell time.
- CPS Series is a solid ball of stainless steel with no welded hemispheres and the central chamber is drilled, creating an internal nozzle.
- Available in Hastelloy and other high alloy metals.

TANKO CP2S Rotary Spray Ball

Model	Spray Pattern	Connection Size	Connection Style	Flow (gpm)	Pressure (psi)	Max. Cleaning Radius (ft)	Finish	Part #
TANKO CP2S	180° Downward	0.75"	FNPT	13 - 16	73 - 116	6.6	32 µin Ra	**053585**
TANKO CP2S	180° Upward	0.75"	FNPT	13 - 16	73 - 116	6.6	32 µin Ra	**053586**
TANKO CP2S	360° Full Coverage	0.75"	FNPT	14 - 18	73 - 116	6.6	32 µin Ra	**053581**
TANKO CP2S	360° Full Coverage	1.00"	SC	18 - 22	73 - 116	6.6	32 µin Ra	**053582**
TANKO CP2S	180° Upward	1.00"	SC	17 - 21	73 - 116	6.6	32 µin Ra	**053583**
TANKO CP2S	180° Downward	1.00"	SC	16 - 20	73 - 116	6.6	32 µin Ra	**053584**

Part #	X	X1
053585	6.10"	1.87"
053586	6.10"	1.87"
053581	6.10"	1.87"
053582	6.50"	1.87"
053583	6.50"	1.87"
053584	6.50"	1.87"

*NOTE: **Green highlighted** cells indicate stocked items.*



TANKO CP2S Dimensional Information
(Threaded Connection Shown)

Watch the TANKO® CP in Action!

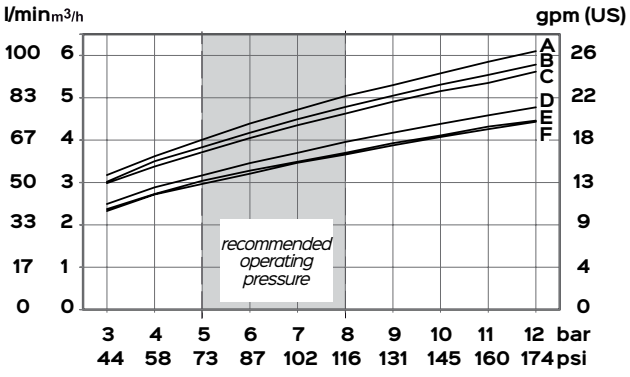
TANKO CP2S Replacement Parts

Model	Description	Part #
TANKO CP2S	Wear Parts (Includes (2) Bushings, (1) Sliding Disk, (5) Set Screws, (1) Cotter Pin)	**053550**
TANKO CP2S	Slip Collar Pin Set Replacement (Includes (1) Connection Pin, (1) Cotter Pin)	**053571**

*NOTE: **Green highlighted** cells indicate stocked items.*

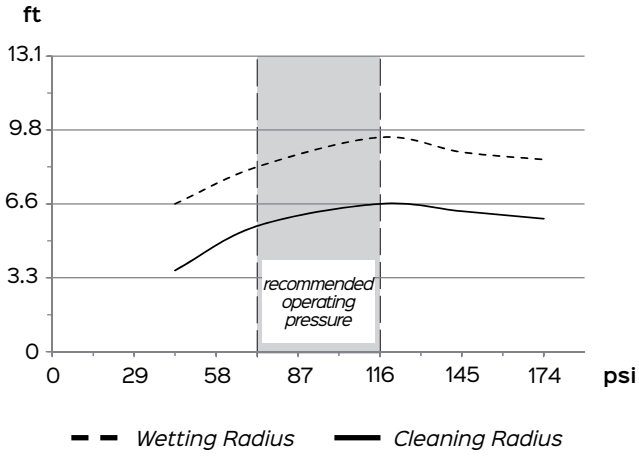
TANKO CP2S Flow/Pressure and Cleaning Radius Charts

TANKO CP2S Flow/Pressure



A: *360° slip-collar;* **B**: *180° upward slip-collar;*
C: *180° downward slip-collar;*
D: *360° threaded;* **E**: *180° upward threaded / 180° downward threaded*

TANKO CP2S Cleaning Radius



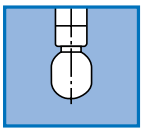
Jet Spray Devices

AWH jet spray devices generate dynamic spray patterns with powerful impingement to penetrate soils. The device rotates on 2 axis to provide 360° coverage, which ensures all tank surfaces are hit with cleaning solution. Like rotary spray devices, jet devices provide additional deflective cleaning. A jet device can complete a full rotation in three to five minutes, dependent on cleaning medium.

The jet spray devices maintain a plain bearing and planetary gear system to provide repeatable results. They also have low water consumption requirements and a hygienic design to allow for self-cleaning.

TANKO® MX

The AWH TANKO MX Series of Jet Spray Devices are fluid-driven with internal gears for controlled rotation and higher efficiency. With two models, a variety of nozzle sizes, and maximum cleaning radii of 13 feet and 24 feet, the MX series is ideal for cleaning larger vessels with moderate to heavy soils.


360°

The TANKO MX generates approximately 44 horizontal rotations to complete one cycle, bringing it back to its starting position. At about the middle of the recommended range of operating pressure (80 psi), one cycle requires a little over five minutes to complete.

All AWH Spray Devices come with a Material Test Report (MTR).

TANKO MX125

- **Materials:** 316Lss, C-PTFE, PEEK+PTFE (FDA-compliant)
- **Maximum Working Temperature:** 203 °F
- **Minimum Installation Opening:** 5.0"
- **Rotation Speed (RPM):** Approx. 5-14 rpm dependent on pressure
- **Weight:** Approx. 7.0 lbs
- **Design:** 4 nozzles
- **Spray Pattern:** Multi-axis 360° jet spray
- 5.8 minute cleaning cycle at 80 psi

TANKO MX150-G14

- **Materials:** 316Lss, C-PTFE, PEEK+PTFE (FDA-compliant)
- **Maximum Working Temperature:** 203 °F
- **Minimum Installation Opening:** 6.0"
- **Rotation Speed (RPM):** Approx. 5-14 rpm dependent on pressure
- **Weight:** Approx. 7.9 lbs
- **Design:** 4 nozzles
- **Spray Pattern:** Multi-axis 360° jet spray
- 5.8 minute cleaning cycle at 80 psi

QUICK TIPS

Is there a way to monitor rotation?

Because the TANKO MX is geared and media-driven, it can be monitored with sensors for proof of rotation. The AWH CIPGuard (TCG-ZR) is available for monitoring proof of rotation.

Strainer Sizing

Use the below recommendations for sizing a strainer to use upstream of rotary and jet spray devices.

Wedgewire Element: 0.007" or smaller
Mesh Overlay: 80 mesh or higher
Filter Tube: 180 micron or smaller

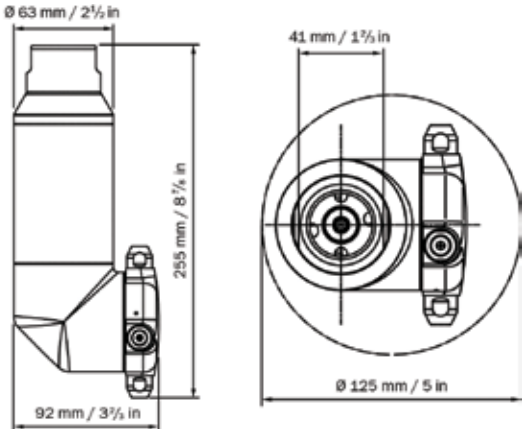
GOOD TO KNOW

- Vertical positioning is recommended to avoid reduced service life.
- Fully drainable in a vertical or horizontal position.
- The MX150-G12 is an available option within the TANKO MX Series. It has two nozzles and is used in applications which might have a relatively small insertion port but require a longer spray throw distance. *(This item is not featured in the catalog but is available through Sani-Matic Representatives.)*
- Cleaning cycle times are dependent on operating pressure - the higher the pressure, the higher the RPM, and the shorter the overall cleaning cycle.
- Surface finish of materials of construction are 32 µin Ra, however some surfaces may not be measurable or accessible due to the design.

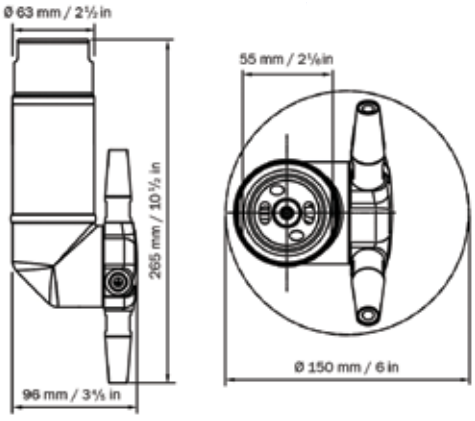
TANKO MX Jet Spray Device

Model	Spray Pattern	Spray Nozzle	Connection Size	Connection Style	Flow (gpm)	Pressure (psi)	Max. Cleaning Radius (ft)	Part #
TANKO MX125	360° Full Coverage Nozzle Spray	Four (4) 5.0 MM Nozzles	1.00"	FNPT	25 - 29	58 - 116	11.5	**053597**
TANKO MX125	360° Full Coverage Nozzle Spray	Four (4) 6.0 MM Nozzles	1.00"	FNPT	32 - 41	58 - 116	13.0	**053598**
TANKO MX150-G14	360° Full Coverage Nozzle Spray	Four (4) 7.0 MM Nozzles	1.50"	FNPT	51 - 68	58 - 116	22.5	**053600**
TANKO MX150-G14	360° Full Coverage Nozzle Spray	Four (4) 8.0 MM Nozzles	1.50"	FNPT	56 - 81	58 - 116	24.0	**053599**

*NOTE: **Green highlighted** cells indicate stocked items.*



TANKO MX125 Dimensional Information



TANKO MX150-G14 Dimensional Information

TANKO MX Replacement Parts

Model	Description	Part #
TANKO MX125 / MX150	Wear Parts Kit	**053553**

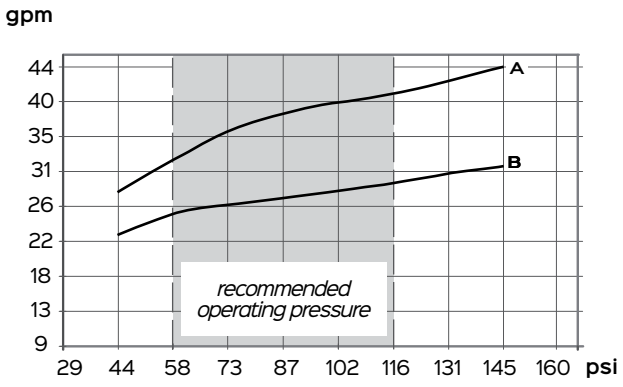
*NOTE: **Green highlighted** cells indicate stocked items.*

TANKO MX Accessories

For proof of rotation sensor, see CIPGuard® product on page 111.

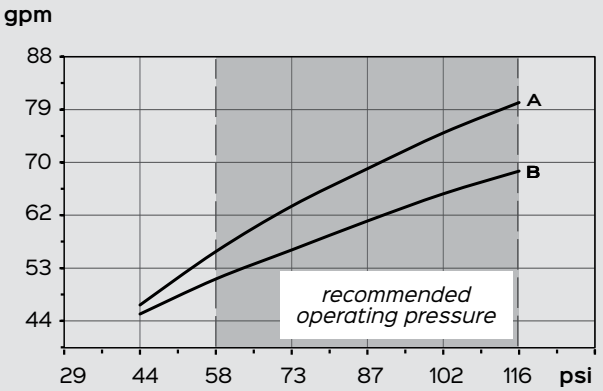
TANKO MX Flow/Pressure and Cleaning Radius Charts

TANKO MX125 Flow/Pressure



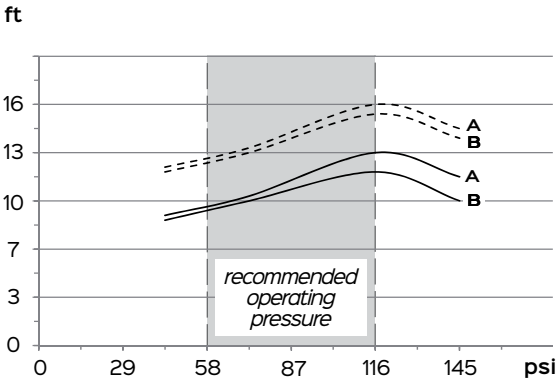
A: *4 x Ø 6.0 mm;* **B**: *Ø 5.0 mm*

TANKO MX150 Flow/Pressure



A: *4 x Ø 8.0 mm;* **B**: *Ø 7.0 mm*

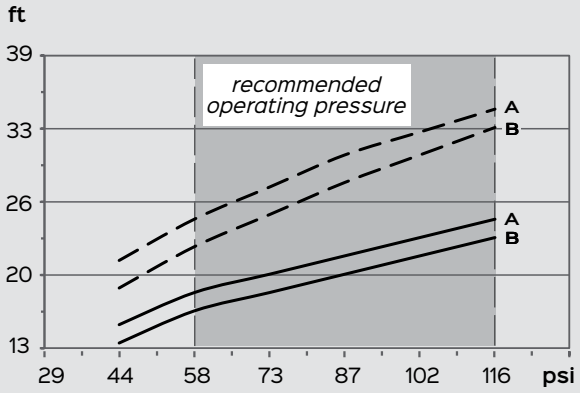
TANKO MX125 Cleaning Radius



A: *4 x Ø 6.0 mm;* **B**: *Ø 5.0 mm*

Wetting Radius *Cleaning Radius*

TANKO MX150 Cleaning Radius

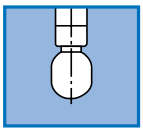


A: *4 x Ø 8.0 mm;* **B**: *Ø 7.0 mm*

Wetting Radius *Cleaning Radius*

TANKO® JM

TANKO® JM jet spray devices have a sturdy, external bevel gear which is readily accessible for easy inspection and cleaning. These jet spray devices are commonly used in applications that require high-impingement cleaning and can be configured to adjust the spray volume for optimal process effectiveness. AWH jet spray devices have low water consumption requirements which helps to reduce the amount of water needed for a given application.


360°

All AWH Spray Devices come with a Material Test Report (MTR) certificate.

TANKO JM100

- **Materials:** 316Lss, 304ss, PTFE, PEEK
- **Maximum Working Temperature:** 203 °F
- **Minimum Installation Opening:** 4"
- **Rotation Speed (RPM):** Approx. 5-20 rpm
- **Weight:** Approx. 3 lbs 13 oz
- **Design:** Two, two-nozzle sprays
- **Spray Pattern:** Multi-axis 360° jet spray
- Slide bearings for horizontal or vertical mounting
- 6.5 minute cleaning cycle at 80 psi

TANKO JM500

- **Materials:** 316Lss, 304ss, PTFE, PEEK
- **Maximum Working Temperature:** 203 °F
- **Minimum Installation Opening:** 8.5"
- **Rotation Speed (RPM):** Approx. 5-20 rpm
- **Weight:** Approx. 13 lbs 3 oz
- **Design:** Two, two-nozzle sprays
- **Spray Pattern:** Multi-axis 360° jet spray
- Slide bearings for horizontal or vertical mounting
- 5.5 minute cleaning cycle at 80 psi

TANKO JM800

- **Materials:** 316Lss, 304ss, PTFE, PEEK
- **Maximum Working Temperature:** 203 °F
- **Minimum Installation Opening:** 12"
- **Rotation Speed (RPM):** Approx. 5-20 rpm
- **Weight:** Approx. 18 lbs 6 oz
- **Design:** Three nozzles. Concentrated spray can throw jets of water farther
- **Spray Pattern:** Multi-axis 360° jet spray
- Vertical mounting
- 7.5 minute cleaning cycle at 80 psi

QUICK TIPS

How are the external gears cleaned?

The hygienic design includes intentional “leaks,” or weep holes, allowing water to clean the external gears throughout the cycle.

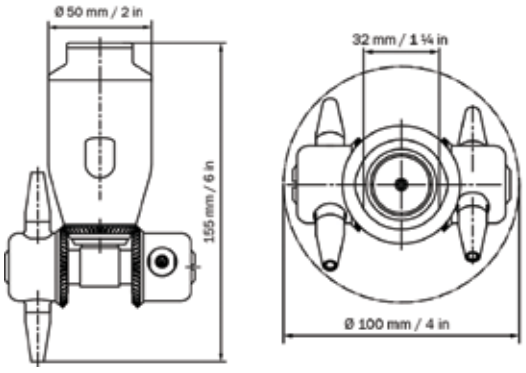
GOOD TO KNOW

- Proof of rotation is possible when paired with the FDA-compliant CIPGuard (TCG-ZR) rotation sensor.
- Cleaning cycle times are dependent on operating pressure - the higher the pressure, the higher the RPM, and the shorter the overall cleaning cycle.

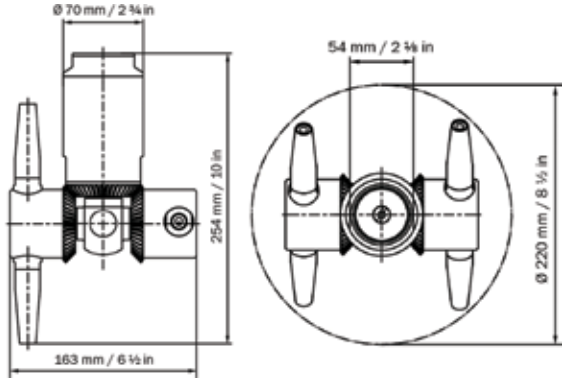
TANKO JM Jet Spray Device

Model	Spray Pattern	Spray Nozzle	Connection Size	Connection Style	Flow (gpm)	Pressure (psi)	Max. Cleaning Radius (ft)	Material	Finish	Part #
TANKO JM100	360° Full Coverage Nozzle Spray	Four (4) 3.7 MM Nozzles	0.75"	FNPT	10-18	44-145	7.6	304/316	32 µin Ra	**053591**
TANKO JM100	360° Full Coverage Nozzle Spray	Four (4) 4.3 MM Nozzles	0.75"	FNPT	11-19	44-145	7.6	304/316	32 µin Ra	**053590**
TANKO JM500	360° Full Coverage Nozzle Spray	Four (4) 6.5MM Nozzles	1.50"	FNPT	29-70	44-189	18.7	316	32 µin Ra	**053592**
TANKO JM500	360° Full Coverage Nozzle Spray	Four (4) 8.0 MM Nozzles	1.50"	FNPT	46-100	44-189	18.7	316	32 µin Ra	**053593**
TANKO JM500	360° Full Coverage Nozzle Spray	Four (4) 9.5 MM Nozzles	1.50"	FNPT	62-130	44-189	18.7	316	32 µin Ra	**053594**
TANKO JM800	360° Full Coverage Nozzle Spray	Three (3) 8.0 MM Nozzles	1.50"	FNPT	63-94	73-189	22.3	316	32 µin Ra	**053596**
TANKO JM800	360° Full Coverage Nozzle Spray	Three (3) 9.5 MM Nozzles	1.50"	FNPT	77-120	73-189	22.3	316	32 µin Ra	**053595**

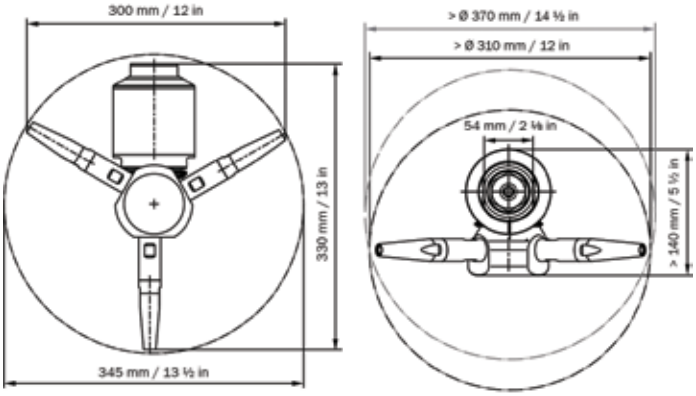
*NOTE: **Green highlighted** cells indicate stocked items.*



TANKO JM100 Dimensional Information



TANKO JM500 Dimensional Information



TANKO JM800 Dimensional Information

Watch the TANKO® JM in Action!

TANKO JM Replacement Parts

Model	Description	Part #
TANKO JM100	Wear Parts Kit	**053552**
TANKO JM100	Repair Kit, Tool, Rotor, Installation-Removal	**053570**
TANKO JM100 TANKO JM500 TANKO JM800	Repair Kit, Work Holders, 2 Assembly Jaws	**053569**
TANKO JM500 TANKO JM800	Wear Parts	**053566**
TANKO JM500 TANKO JM800	Repair Kit, Tool, Rotor, Installation-Removal	**053567**
TANKO JM500 TANKO JM800	Repair Kit, Special Key for Gear Wheel Installation	**053568**

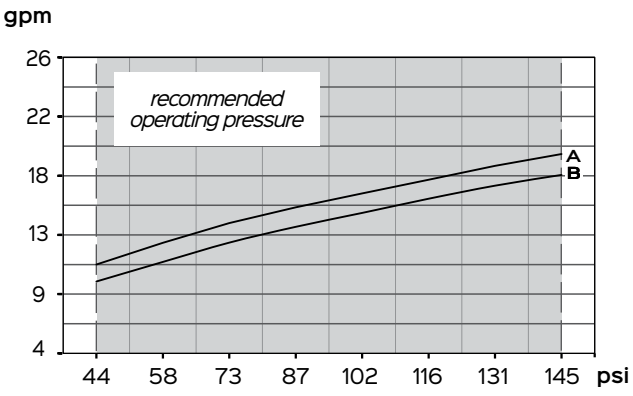
*NOTE: **Green highlighted** cells indicate stocked items.*

TANKO JM Accessories

For proof of rotation sensor, see CIPGuard® product on page 111.

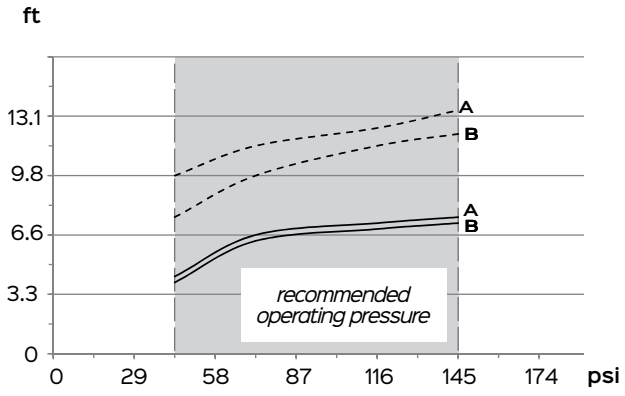
TANKO JM Flow/Pressure and Cleaning Radius Charts

TANKO JM100 Flow/Pressure



A: *4 x Ø 4.3 mm;* **B**: *Ø 3.7 mm*

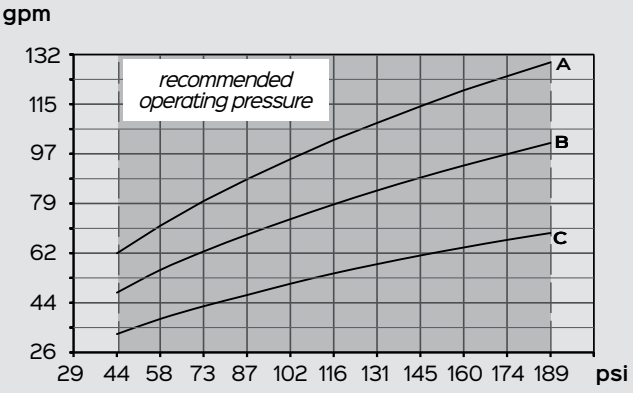
TANKO JM100 Cleaning Radius



A: *4 x Ø 4.3 mm;* **B**: *Ø 3.7 mm*

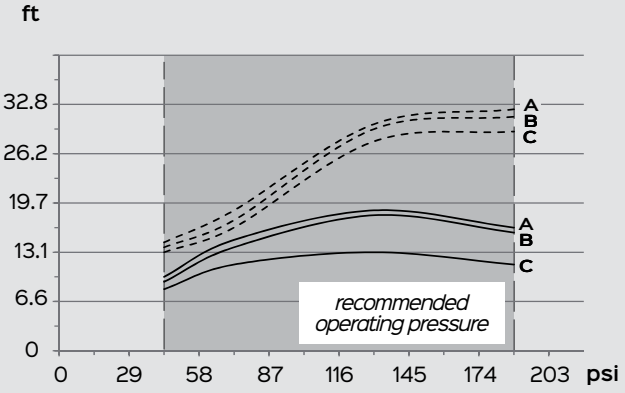
Wetting Radius — *Cleaning Radius*

TANKO JM500 Flow/Pressure



A: *4 x Ø 9.5 mm;* **B**: *Ø 8.0 mm;* **C**: *Ø 6.5 mm*

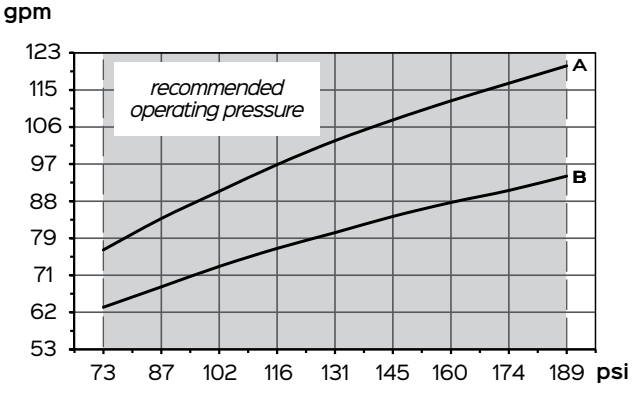
TANKO JM500 Cleaning Radius



A: *4 x Ø 9.5 mm;* **B**: *Ø 8.0 mm;* **C**: *Ø 6.5 mm*

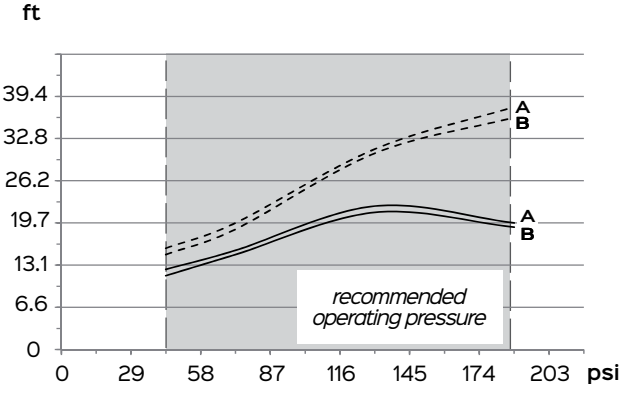
Wetting Radius — *Cleaning Radius*

TANKO JM800 Flow/Pressure



A: *4 x Ø 9.5 mm;* **B**: *Ø 8.0 mm*

TANKO JM800 Cleaning Radius



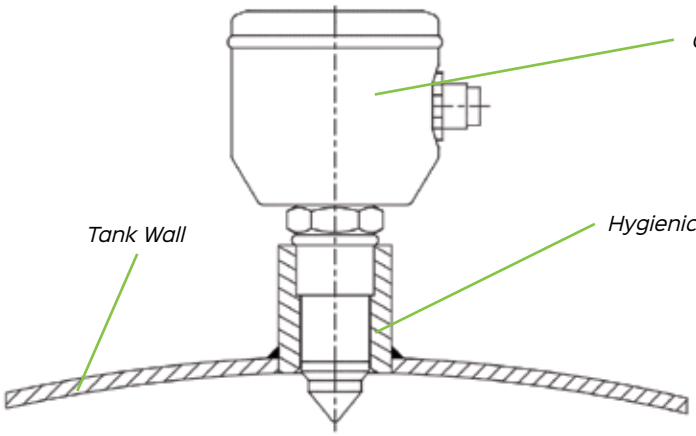
A: *4 x Ø 9.5 mm;* **B**: *Ø 8.0 mm*

Wetting Radius — *Cleaning Radius*

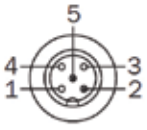
CIPGuard®

The CIPGuard® is an accessory available for monitoring proof of rotation for rotating spray devices. The CIPGuard can be installed centrally in the top of a tank head or tri-clamp port, and setup occurs via a connected PC to set rotation frequency and impact force parameters. When the unit is operating within set parameters, a digital PNP output signal can be sent to a connected PLC, confirming that the unit is within the rotation frequency and impact force parameters.

Image	Description	Part #	Key Technical Data
	CIPGuard Sensor	**053549**	Wetted Materials of Construction - PEEK G 1/2" Connection - use with welded sleeve 24V DC Supply Voltage 145 psi / 100 °C max process temperature
	PC Interface Cable, CIPGuard	**053544**	Required for initial CIPGuard Sensor setup or parameter adjustment USB connection for PC x M12 Adapter Free PC setup software available at http://www.awh.eu
	CIPGuard Interface Cable, CIPGuard	**053548**	Required for initial CIPGuard Sensor setup or parameter adjustment 8 pin connection for CIPGuard Sensor x M12 Adapter
N/A	Hygienic Weld-In Sleeve, CIPGuard	**053547**	Wetter Materials of Construction - 316Lss G 1/2" Connection - use with CIPGuard Sensor Can be welded directly onto vessel or onto tri-clamp cap
	M12 Cable, Angled, 10 meters	**052066**	Angled M12 Connection For use with CIPGuard Sensor



CIPGuard Installation Example



1 +VDC
2 Tx (only connectible via a prog. adapter)
3 GND
4 OUT/PNP
5 Rx (only connectible via a prog. adapter)

CIPGuard Wiring Diagram

Additional Rotary & Jet Spray Devices

Germany-based AWH, Armaturenwerk Hötensleben GmbH, a member of NEUMO-Ehrenberg Group, has a century of experience making high-quality products at attractive prices. In addition to its more common rotary and jet spray devices, many other unique spray devices and accessories are available through Sani-Matic.

TANKO® CR

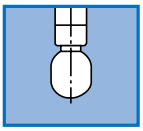
The TANKO® CR is a chemically resistant rotary spray device. It is constructed of a modified, second-generation PTFE that is a smoother and more hygienic surface than conventional PTFE, and resistant to aggressive chemicals.

The series operates at a constant speed under different operating conditions with focused fan jets for fast wetting and effective cleaning.

The TANKO CR series rotates in a slow, defined manner on a hydrodynamic plain bearing. The bearing is flushed throughout operation avoiding wear and shaving, as well as allowing for a variety of installation angles.

The TANKO CR is also suitable for Steam-In-Place (SIP) vessel sterilization, and is only available with a BSP fitting.

All AWH Spray Devices come with a Material Test Report (MTR).



360°

GOOD TO KNOW

- **Material:** Modified, second-generation PTFE
- **Maximum Working Temperature:** 250 °F
- **Minimum Installation Opening:** 1.85"
- **Flow Rate:** 11.9 - 20.7 gpm
- **Connection Size:** ½" BSP female thread. The TANKO weld-on adapter is required.
- **Cleaning Radius:** 6.6 feet
- **Steam-In-Place Compatible:** Suitable for SIP Sterilization

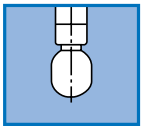
TANKO® JX

The TANKO® JX is a Jet Spray Assembly which is driven with an electric motor, safely positioned on the external side of the tank/ vessel. This greatly reduces water usage, compared to hydraulically driven devices, and allows the operator to easily change the rotation speed without increasing or decreasing the flow rate. The JX70 and JX75 each create a 360° spray pattern and, while the “standard option” models are designed with two nozzles (which allow for a 4.0" diameter fixed installation), each of these versatile machines can be customized with one, three, and four nozzle configurations, and a variety of nozzle diameters.

All AWH Spray Devices come with a Material Test Report (MTR).

TANKO JX70

Complete TANKO JX Jet Spray Device



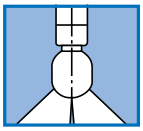
360°

TANKO® RT

The TANKO® RT has an extending and retracting spray arm ideal for vessels with projecting agitators or other internal fittings that create space constraints for traditional spray devices. The design allows the spray arm to rest outside of the vessel within its housing during process operations and pneumatically extends into the vessel for cleaning.

A slotted rotating spray device resides near the end of the spray arm designed with a 270° upward spray. It is available in stroke lengths of 4, 6, 10, and 20 inches.

All AWH Spray Devices come with a Material Test Report (MTR).



270°

TANKO RT

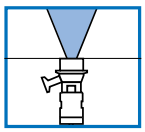
TANKO® GC

The compact TANKO® GC spray device is designed for the targeted cleaning of the insides of tanks and their internal components.

The key design feature of the TANKO GC is its flush mounting to the inside of the vessel, making it completely unobtrusive during the production process with no risk of collision with agitators, mixers, or scraper blades. It also allows for a variety of mounting positions which would not be possible with conventional cleaning devices.

The TANKO GC spray device is suitable for use as a stand-alone device but can be used along with existing static, rotary, and jet sprays that are cleaning a tank to target cleaning of specific, hard-to-reach areas of the process.

TANKO GC



Inside Tank

Outside Tank

TANKO® AN

The TANKO® AN weld-on adapter allows an AWH device with a BSP connection to be welded to a supply tube. This adapter provides an internal turbulence zone for self cleaning and a lip that reduces contamination at the connection point.

The TANKO AN weld-on adapter comes with a Material Test Report (MTR).

Tank Cleaning Trolly (JM-C1)

Description	Part #	Material	Inlet Connection	Jet Spray Connection	Weight	Size
Tank Cleaning Trolly (JM-C1)	**055085**	316Lss	DN50 Male DIN11851[1]	1.0" MNPT or 1.5" FNPT[2]	28 lbs	Approx. 21" L x 12.5" W x 7" H

[1] *See Accessories table for TC adapter.*

[2] *Includes bushing.*

Tank Cleaning Trolly (JM-C1) Accessories / Spare Parts

Description	Part #
Wheels, Tank Cleaning Trolly (set of 4)	**055501**
Adapter, 2.0" Female DIN 11851 x 2.0" TC	**056066**

Supply Tubes

Precise Spray Ball Placement for a Complete Clean

Determining the proper supply tube for your spraying system is critical for thorough cleaning.

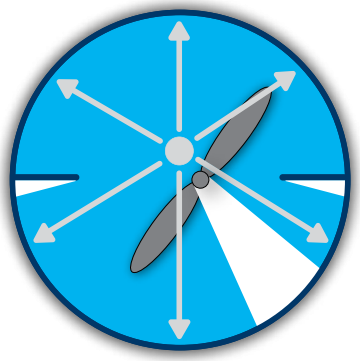
Even though the spray device is a major part of your tank/vessel cleaning solution, all spray devices must be properly positioned to maximize their effectiveness. All Sani-Matic Supply Tubes are made to order, which allows for precise spray device placement. Our Supply Tubes are also highly customizable and can be created with multiple device options, pass-through spray balls, reducers, and more. We make all our Supply Tubes in our Sun Prairie, WI facility, allowing for a quick delivery.

Sani-Matic is authorized to carry a 3-A symbol for our Supply Tube design, but let your Sani-Matic Representative know if your application requires 3-A to ensure your custom spray assembly meets these requirements.

QUICK TIPS

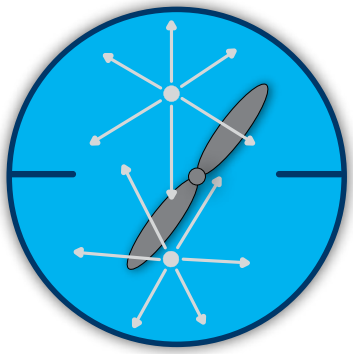
How do you properly clean tanks with baffles or agitators?

When tanks have baffles or agitators, a shadowing effect occurs within the tank and leaves areas without full spray coverage. Using multiple spray assemblies for full spray coverage combats shadowing.



Shadowing

This top view of a tank with baffles and an agitator shows the shadowing of spray due to obstructions within the tank.



Multiple Spray Assemblies

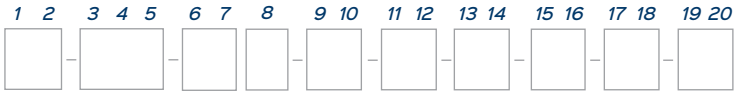
For complete coverage, multiple spray sources are needed to compensate for the shadowing effect.

GOOD TO KNOW

- **Material:** 316Lss
- Supply tubes may require longer lead times if engineering for specific tank requirements.
- Sani-Matic supply tubes are used with static spray balls, rotary, and jet spray devices.
- With double ball tees, flow rate is divided between both spray balls.

Supply Tube Model Number Key

Example Model #:
ST-150-300-SC-TC-12-0S-32-MP



1, 2	**Component Model**	
	ST	Supply Tube
3-5	**Tube Diameter**	
	050	0.50" Tube Diameter [1]
	075	0.75" Tube Diameter
	100	1.00" Tube Diameter
	150	1.50" Tube Diameter
	200	2.00" Tube Diameter
	250	2.50" Tube Diameter
6, 7	**Tank Connection Size**	
	00	No Connection
	15	1.50" Tank Connection
	20	2.00" Tank Connection
	25	2.50" Tank Connection
	30	3.00" Tank Connection
	40	4.00" Tank Connection
	60	6.00" Tank Connection
8	**Tank Connection Type**	
	0	Tri-Clamp (Standard)
	X	No Connection
9, 10	**Spray Ball Connection Type**	
	SC	Slip Collar (Standard)
	AW	Slip Collar (AWH)
	CS	Slip Collar (Custom)
	BW	Butt Weld
	TC	Tri-Clamp [1]
	HC	Half Coupling (FNPT) [1]
	PN	Pipe Nipple (MNPT) [1]
11, 12	**External Connection Type**	
	TC	Tri-Clamp (Standard)
	BW	Butt Weld
	HC	Half Coupling (FNPT) [1]
	PN	Pipe Nipple (MNPT) [1]
13, 14	**Internal Length**	
	##	Custom Internal Length (inches)
15, 16	**External Length**	
	0S	Standard Length (Standard)
	##	Custom Length (inches)
17, 18	**Finish**	
	32	32 µin Ra (Standard)
	20	20 µin Ra*
	15	15 µin Ra*
19, 20	**Polish**	
	MP	Mechanical Polish (Standard)
	EP	Electropolish*

Non-stock product option. Longer lead times apply.

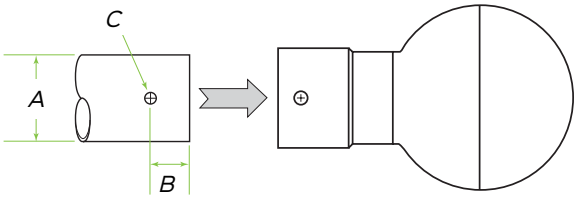
 # Specify custom length values when ordering.

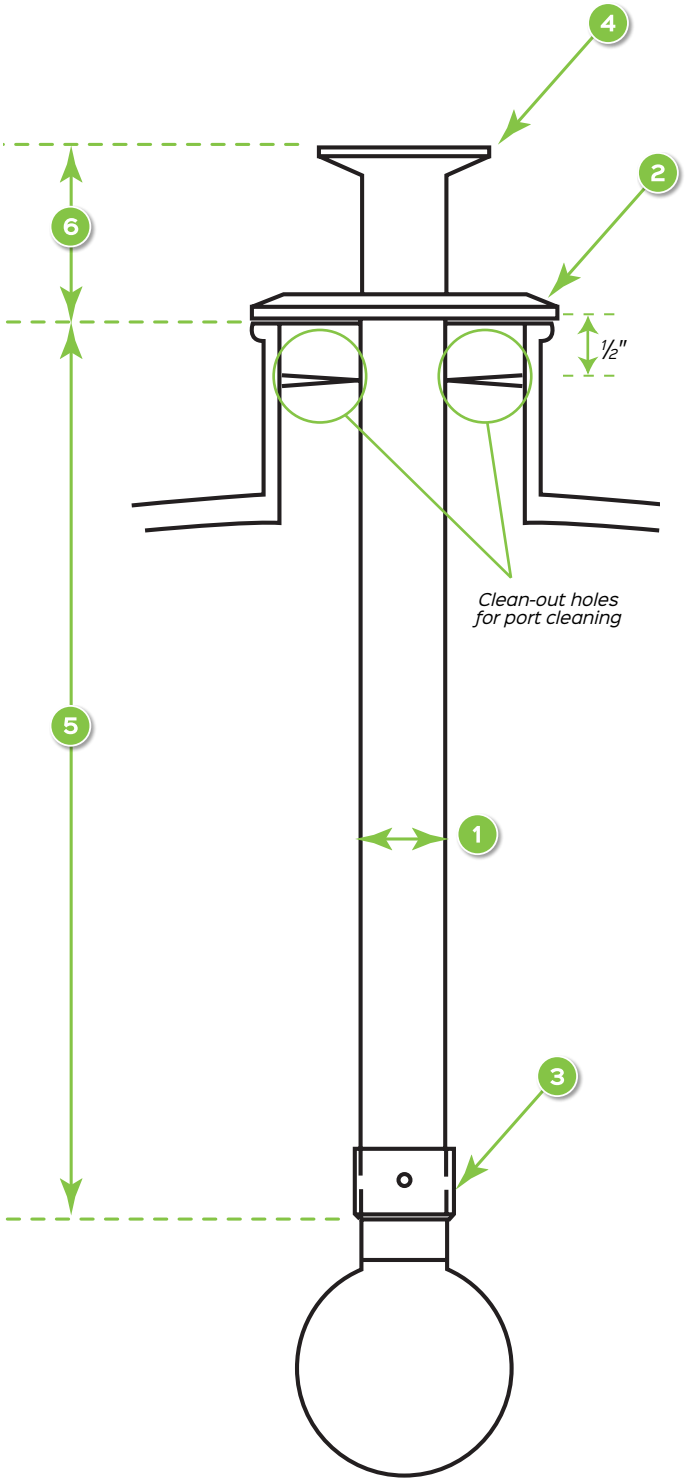
[1] Does not conform to 3-A standard.

NOTE: Supply Tubes are built to order and are non-returnable.

Supply Tube Hole Information - For Slip Collar (Standard) Spray Ball Connection Type

Tube A (OD)	Distance B	Drill Diameter C
1/2"	3/16"	5/64"
3/4"	3/16"	9/64"
1"	5/16"	9/64"
1 1/2"	11/16"	13/64"
2"	15/16"	13/64"





1. Tube Diameter
2. Tank Connection
3. Spray Ball Connection
4. External Connection
5. Internal Length (Length of tube within the tank)
6. External Length (Length of tube outside the tank)

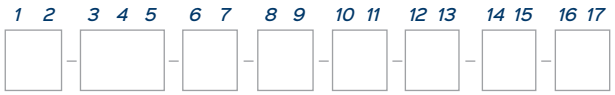
Standard External Lengths

The below table lists out the 6 External Length which varies based on 2 Tank Connection size.

2 Tank Connection Size	6 External Length
1.5" - 3.0"	1 3/4"
4.0"	1 13/16"
6.0"	1 15/16"

Double Ball Tee Model Number Key

Example Model #:
DT-150-SC-12-12-32-MP



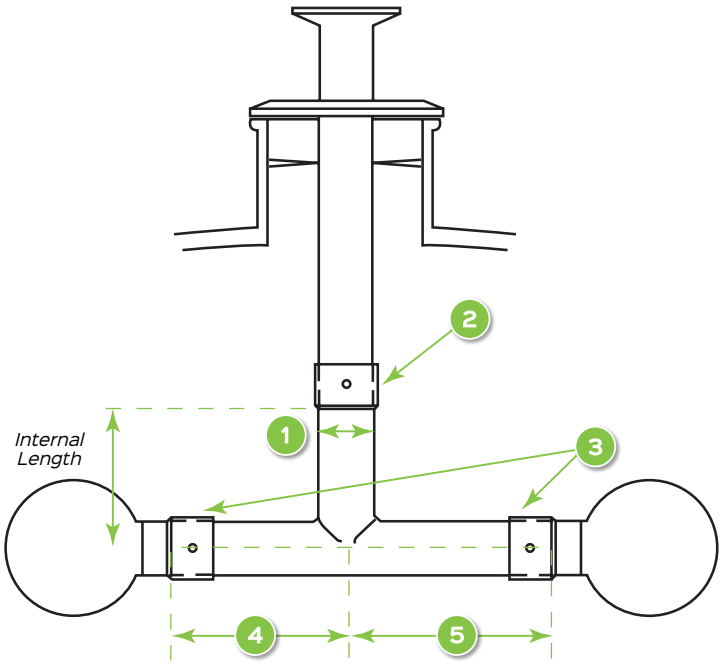
1, 2	**Component Model**	
	DT	Double Ball Tee
3-5	**Tube Diameter**	
	075	0.75" Tube Diameter
	100	1.00" Tube Diameter
	150	1.50" Tube Diameter
	200	2.00" Tube Diameter
6, 7	**Supply Tube Connection Type**	
	SC	Slip Collar (Standard)
	BW	Butt Weld
	TC	Tri-Clamp
8, 9	**Spray Ball Connection Type**	
	SC	Slip Collar (Standard)
	BW	Butt Weld
10, 11	**Right Leg Length**	
	##	Custom Length (inches)
12, 13	**Left Leg Length**	
	##	Custom Length (inches)
14, 15	**Finish**	
	32	32 µin Ra (Standard)
	20	20 µin Ra*
	15	15 µin Ra*
16, 17	**Polish**	
	MP	Mechanical Polish (Standard)
	EP	Electropolish*

Non-stock product option. Longer lead times apply.

 # Specify custom length values when ordering.

NOTE: No clips are included with double ball tee assemblies and are to be ordered separately as required.

NOTE: Double Ball Tees are built to order and are non-returnable.



1. Tube Diameter
2. Supply Tube Connection
3. Spray Ball Connection
4. Left Leg Length
5. Right Leg Length

Tube Diameter (selection ①)	Standard Internal Length
0.75"	1.0"
1.0"	1 11/16"
1.5"	2 13/32"
2.0"	2 11/16"

NOTE: Prior to 2021, dimension bubble numbers 4 and 5 (corresponding to model key #'s 10-13) were measured to center of spray device.

Supply Tube & Double Ball Tee Accessories

Static Spray Ball Clips (316ss)

Description	Part #
Hair Pin Clip for 0.50" SC[1]	**321443**
Wraparound Clip for 0.75" SC	**321554**
Wraparound Clip for 1.00" SC	**321555**
Wraparound Clip for 1.50" SC	**321556**
Wraparound Clip for 2.00" SC	**321557**
Wraparound Clip for 2.50" SC	**321658**

[1]0.50" Clip diameter does not conform to 3-A standard.
NOTE: One clip is included with every spray ball with slip collar connection.

Static Spray Ball Clip

Tri-Clamp (TC) Clamps

Connection Size	Standard Clamp Part #
0.50" / 0.75"	**020224**
1.5"	**020912**
2.0"	**020913**
2.5"	**020914**
3.0"	**020915**
4.0"	**020916**
6.0"	**025686**

Standard Clamp

Tri-Clamp (TC) Gaskets

Connection Size	EPDM Material Part #
0.50"	**021036**
0.75"	**021037**
1.5"	**021027**
2.0"	**021028**
2.5"	**021029**
3.0"	**021030**
4.0"	**021031**
6.0"	**022975**

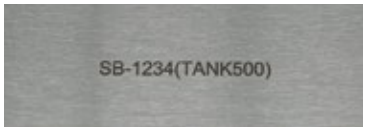
Gasket

Services (Supply Tube & Double Ball Tee)

The following services can be added to a supply tube or double ball tee order.

Description	Part #
Passivation, Supply Tube	**PASSIVATION-ST**
Custom Etching, Supply Tube	**ETCHING-ST**
Passivation, Double Ball Tee	**PASSIVATION-DT**
Custom Etching, Double Ball Tee	**ETCHING-DT**

NOTE: Custom Etching has a 20 character limit.



Custom Etching Example

Tank Components

Improve Your Tank's Process and Operation

In addition to spray devices and supply tubes to make sure your tank is easily cleaned through automated CIP, Sani-Matic can help improve operation of your tank with varying sanitary processing accessories.

Ensure adequate tank venting with options like our mushroom or gooseneck vents, and prevent CIP spray overflow through those vents with our patented Hygienic Spray Deflector.

Achieve better visibility within your tank with 3-A authorized sight glasses and process lighting with our long lasting VessaLite® sanitary process light.

Looking for quick heating of fluids within your process tanks? Steam spargers and regulators can achieve fast heating of process liquids through means of direct steam injection.

Hygienic Spray Deflector

The Solution To Spray Overflow

Sani-Matic's patented Hygienic Spray Deflector features a tri-clamp connected vent housing with an interior reversed dish designed to deflect spray solution and keep it from exiting a tank.

The Hygienic Spray Deflector is designed for vessels where spray devices are used to clean the interior. These vessels include CIP and process tanks.

It redirects sprayed solution back into the process tank, without inhibiting tank port cleaning. When following a recommended spray device's operating requirements, the Hygienic Spray Deflector's design reduces solution from exiting open-to-atmosphere tanks.

QUICK TIPS

How much water will this save?

Vent water loss will vary depending on installation and operating conditions, but a typical CIP operation for a single process tank in 1 year can lead to upwards of 1,000 gallons of water and 20 gallons of chemical being lost out of a leaking tank vent.

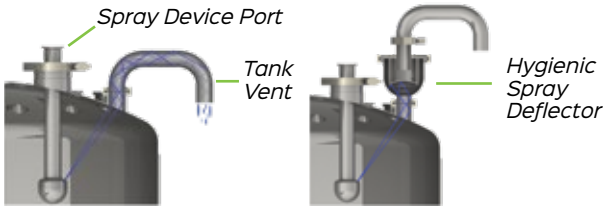
What are the benefits?

Sani-Matic's patented Hygienic Spray Deflector reduces solution spray out of vent ports during CIP process, helping to minimize wasted CIP solution and improve plant floor safety.

GOOD TO KNOW

- **Material:** 316Lss
- **Sanitary ID Finish:** 32 µin Ra
- **Cleaning:** Easily removable for inspection and COP cleaning
- Common applications include process tanks, mixing tanks and CIP tanks

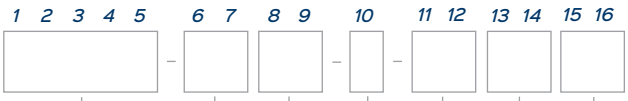
Watch the Hygienic Spray Deflector in Action!

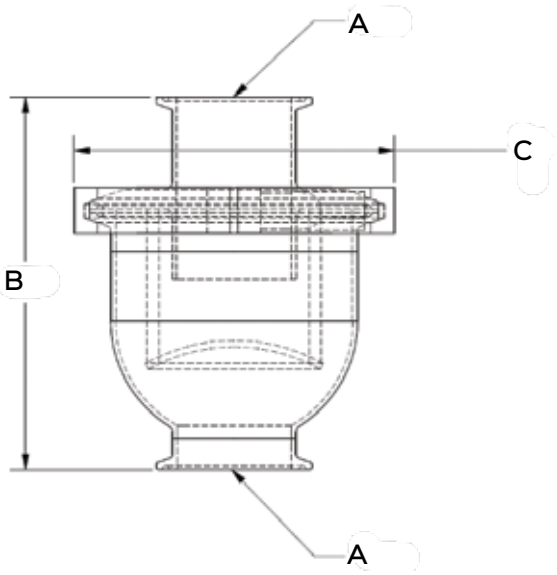


Hygienic Spray Deflector Model Number Key

Example Model #: HSDFB-TC20-E-3232MP

1-5	**Component**	
	HSDFB	Hygienic Spray Deflector
6, 7	**Connection Type**	
	TC	Tri-Clamp (Standard)
8, 9	**Connection Size**	
	20	2.0"
	30	3.0"
	40	4.0"
10	**Gasket Material**	
	E	EPDM (Standard)
	V	Viton
11, 12	**ID Finish**	
	32	32 µin Ra (Standard)
13, 14	**OD Finish**	
	32	32 µin Ra (Standard)
15, 16	**Polish**	
	MP	Mechanical Polish (Standard)





Connection Size "A"	Height "B"	Max. Clamp Width (REF) "C"
2.0" TC	6 1/32"	5 3/16"
3.0" TC	7 1/32"	7 1/4"
4.0" TC	7 3/16"	9 1/4"

Hygienic Spray Deflector Replacement Parts

HSD Connection Size (Body Size)	Part	Material	Part #
2.0" (4.0" Body Size)	Gasket	EPDM	**021031**
	Gasket	Viton	**020474**
	Clamp	--	**020225**
3.0" (6.0" Body Size)	Gasket	EPDM	**022975**
	Gasket	Viton	**023847**
	Clamp	--	**020976**
4.0" (8.0" Body Size)	Gasket	EPDM	**027764***
	Gasket	Viton	**038233***
	Clamp	--	**027655***

Non-stock product option. Longer lead times apply.

NOTE: Gasket and clamp parts are for listed body size.

1. TC Clamp
2. TC Gasket

Cv Values for Hygienic Spray Deflectors

Cv values are provided for both airflow out of the tank (Venting Out) and for airflow into tank (Venting In). Values are valid for air at sub-critical flow velocities.

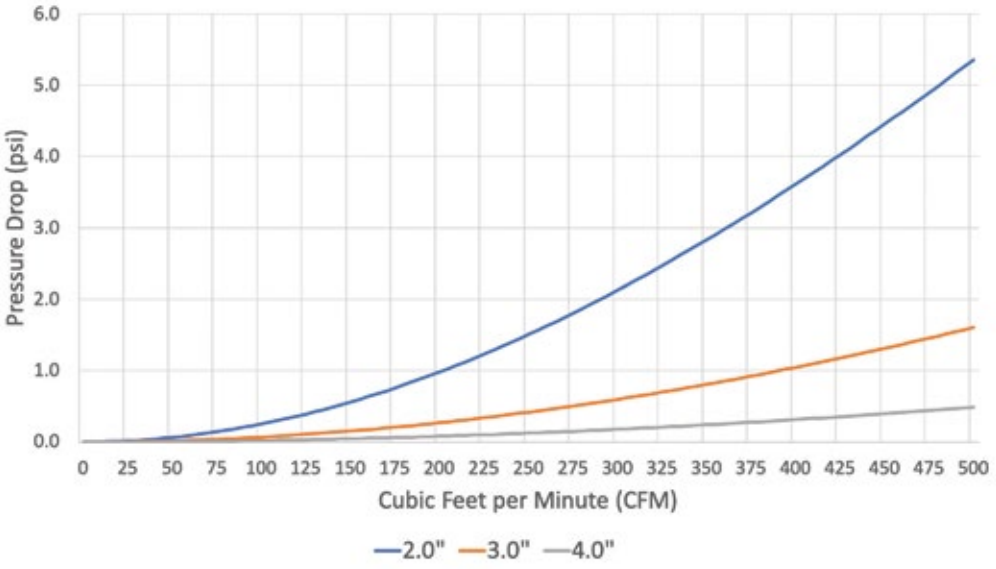
Connection Size	Cv (Venting Out)	Cv (Venting In)
2.0"	53	60
3.0"	102	223
4.0"	188	212

Sub-Critical Flow when $P_1 < 2 \times P_2$

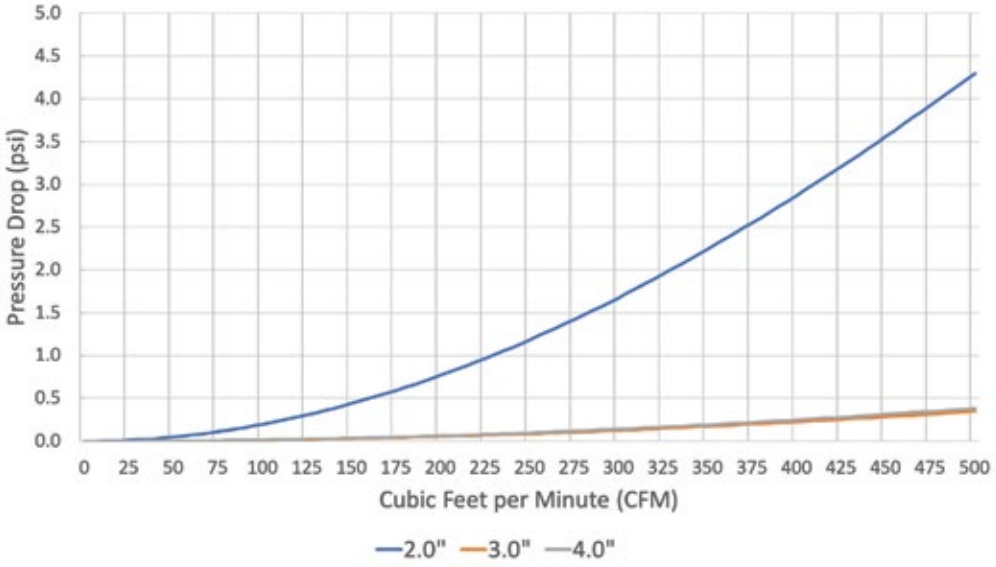
$$Q_G = 962 \times Cv \sqrt{\frac{(P_1^2 - P_2^2)}{(S.G. \times T)}}$$

QG = Gas Flow in Standard Cubic Feet per Hour
T = Absolute temperature in °R (°F + 460)
P1 = Upstream (Inlet) pressure in psia
P2 = Downstream (Outlet) pressure in psia
psia = Absolute pressure. This is psig (gauge pressure) plus 14.7 (atmospheric pressure)
S.G. = Specific Gravity of medium where air at 70 °F and 14.7 psia = 1.0

Hygienic Spray Deflector - Venting Out



Hygienic Spray Deflector - Venting In



VL-3A Sanitary Sight Glass

Add Visibility To Your Process

The VL-3A Sanitary Sight Glass easily adds visibility to any process line or equipment. Utilizing a standard tri-clamp connection, the sight glass can be added to any equipment with an available tri-clamp port, allowing for inspection of the process.

Applications include process tanks and equipment, process lines, parts washers, process components, or any other sanitary process where visibility inside the equipment is required.

The sight glass is authorized to carry a 3-A symbol, ensuring a sanitary and cleanable design.

QUICK TIPS

Handle carefully!

When taking off the tri-clamp gasket and clamp, handle with care - the remaining assembly includes a body, additional gasket, and the sight glass itself - all separate components that come apart and can be damaged if dropped.

Can the sight glass be left in for Clean-In-Place (CIP)?

Yes! The unit is fully CIP-able.

Is this unit 3-A authorized?

Yes - the unit is authorized to carry a 3-A symbol to the 65-01 (Sight and/or Light Windows and Sight Indicators in Contact with Product) standard.

GOOD TO KNOW

Connection Size	Maximum Operating Conditions
1.5" TC	250 psi @ 250 °F
2.0" TC	250 psi @ 250 °F
2.5" TC	200 psi @ 250 °F
3.0" TC	150 psi @ 250 °F
4.0" TC	125 psi @ 250 °F

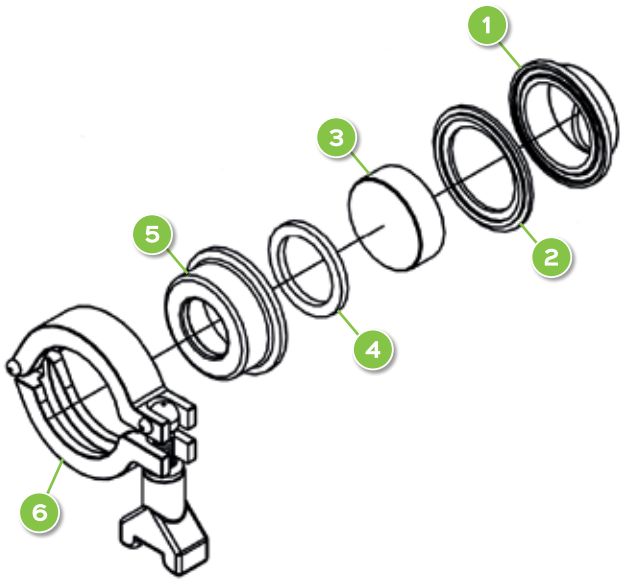
VL-3A Sight Glass Assembly

Connection Size	Description	Part #
1.5"	VL-3A Sight Glass Assembly, 1.5" TC	**060759**
2.0"	VL-3A Sight Glass Assembly, 2.0" TC	**055630**
2.5"	VL-3A Sight Glass Assembly, 2.5" TC	**056231**
3.0"	VL-3A Sight Glass Assembly, 3.0" TC	**055631**
4.0"	VL-3A Sight Glass Assembly, 4.0" TC	**055632**

NOTE: VL-3A Sight Glass Assemblies come with the sight glass lens, sight glass ferrule, and EPDM sight glass gasket. If additional tri-clamps or tri-clamp gaskets are needed, see the replacement parts section.

VL-3A Sight Glass Assembly

VL-3A Sight Glass Replacement Parts



1. TC Ferrule
2. TC Gasket
3. Sight Glass Lens
4. Sight Glass Gasket
5. Sight Glass Ferrule
6. TC Clamp

NOTE: Only items 3-5 are included with the VL-3A Sight Glass Assembly on page 128.

1 Tri-Clamp (TC) Ferrule

Connection Size	Description	Part #
1.5"	Ferrule, Tri-Clamp, 316Lss, 1.5", Short	**020535**
2.0"	Ferrule, Tri-Clamp, 316Lss, 2.0", Short	**020536**
2.5"	Ferrule, Tri-Clamp, 316Lss, 2.5", Short	**020537**
3.0"	Ferrule, Tri-Clamp, 316Lss, 3.0", Short	**020538**
4.0"	Ferrule, Tri-Clamp, 316Lss, 4.0", Short	**020539**

NOTE: This short, weld-on Tri-Clamp Ferrule is the connection onto which the sight glass is clamped. It is likely not needed for existing installations.

2 Tri-Clamp (TC) Gasket

Connection Size	Description	Part #
1.5"	Gasket, Tri-Clamp, EPDM, 1.5"	**021027**
2.0"	Gasket, Tri-Clamp, EPDM, 2.0"	**021028**
2.5"	Gasket, Tri-Clamp, EPDM, 2.5"	**021029**
3.0"	Gasket, Tri-Clamp, EPDM, 3.0"	**021030**
4.0"	Gasket, Tri-Clamp, EPDM, 4.0"	**021031**

3 Sight Glass Lens

Connection Size	Description	Part #
1.5"	Lens, Sight Glass, Borosilicate, 1.5"	**060760**
2.0"	Lens, Sight Glass, Borosilicate, 2.0"	**056512**
2.5"	Lens, Sight Glass, Borosilicate, 2.5"	**056513**
3.0"	Lens, Sight Glass, Borosilicate, 3.0"	**056514**
4.0"	Lens, Sight Glass, Borosilicate, 4.0"	**056515**

4 Sight Glass Gasket

Connection Size	Description	Part #
1.5"	Gasket, Sight Glass, EPDM, 1.5"	**060761**
2.0"	Gasket, Sight Glass, EPDM, 2.0"	**056508**
2.5"	Gasket, Sight Glass, EPDM, 2.5"	**056509**
3.0"	Gasket, Sight Glass, EPDM, 3.0"	**056510**
4.0"	Gasket, Sight Glass, EPDM, 4.0"	**056511**

5 Sight Glass Ferrule

Connection Size	Description	Part #
1.5"	Ferrule, Sight Glass, 316Lss, 1.5"	**060762**
2.0"	Ferrule, Sight Glass, 316Lss, 2.0"	**056516**
2.5"	Ferrule, Sight Glass, 316Lss, 2.5"	**056517**
3.0"	Ferrule, Sight Glass, 316Lss, 3.0"	**056518**
4.0"	Ferrule, Sight Glass, 316Lss, 4.0"	**056519**

6 Tri-Clamp (TC) Clamps

Connection Size	Description	Part #
1.5"	Clamp, Tri-Clamp, 1.5"	**020081**
2.0"	Clamp, Tri-Clamp, 2.0"	**020082**
2.5"	Clamp, Tri-Clamp, 2.5"	**020083**
3.0"	Clamp, Tri-Clamp, 3.0"	**020084**
4.0"	Clamp, Tri-Clamp, 4.0"	**020225**

VessaLite®

Don't Keep Your Process In The Dark

The VessaLite® Sanitary Sight Glass Light helps illuminate process lines and equipment, using an LED process light, sight glass, and integrated mounting onto tri-clamp connections for an easy way to shed light on your process equipment, making for an easier inspection process.

The long lasting and durable LED light is compact, easy to install, and comes in various sanitary tri-clamp connection sizes to adapt to your process.

Applications include process tanks and equipment, parts washers, sight glasses, process components, or any other sanitary process where increased visibility inside the equipment is required.

QUICK TIPS

Can I order just the sight glass?

Yes - the VL-3A sight glass is a cost effective solution for high operating temperatures and pressures that can be used for any sanitary process sight glass need.

Can I use this as a combination sight glass and light?

The 4.0" TC model's light is offset from center and has enough visible sight glass space for using as a combination sight glass and light. Smaller sizes are intended for process lighting only and a secondary source for viewing (e.g., manway, additional sight glass) is required.

Is this unit 3-A authorized?

The VL-3A model sight glass used in the VessaLite® assembly is authorized to carry a 3-A symbol, which is the only process contact part of the assembly.

Can I use the light with another or existing sight glass?

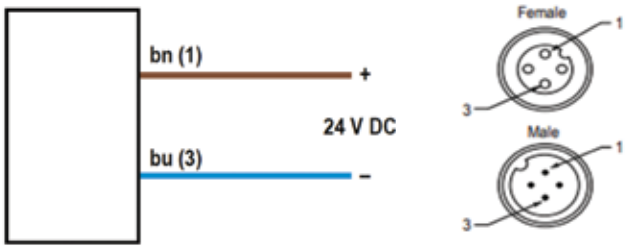
Yes - if using with an existing sight glass, the dimensions of the sight glass opening, process connection, and height of sight glass will need to be supplied to make sure the light tri-clamp bracket will work.

GOOD TO KNOW

· **Maximum Operating Conditions (Sight Glass / Process Slide):**

Connection Size	Maximum Operating Conditions
2.0" TC	250 psi @ 250 °F
2.5" TC	200 psi @ 250 °F
3.0" TC	150 psi @ 250 °F
4.0" TC	125 psi @ 250 °F

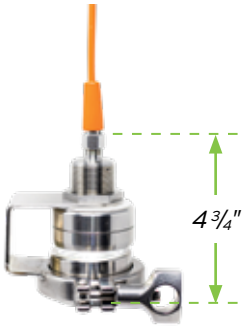
· **Sight Glass Materials of Construction:** Borosilicate Lens / EPDM Gaskets
· **Operating Temperature (Light / Non-Process Slide):** 4 °F - 212 °F
· **Environmental Rating:** IP69k
· **Light Material of Construction:** Borosilicate Lens / 316ss Housing / Silicone Mounting Gasket (FDA Approved)
· **Light Characteristics:** 200 Lumens, 5000K Daylight White
· **Light Electrical Specifications:** UL Approved, 400 mA Max Current Draw, 4 Pin M12 Connection
· **Light Useful Life:** Output will decrease less than 30% after 36,000 hours
· **Wiring Diagram:**



VessaLite® Full Assemblies

Process Connection Size	Description	Part #
2.0"	VessaLite® Sanitary Sight Glass Light, 2.0" TC, with VL-3A Sight Glass	**304699**
2.5"	VessaLite® Sanitary Sight Glass Light, 2.5" TC, with VL-3A Sight Glass	**309922**
3.0"	VessaLite® Sanitary Sight Glass Light, 3.0" TC, with VL-3A Sight Glass	**299389**
4.0"	VessaLite® Sanitary Sight Glass Light, 4.0" TC, with VL-3A Sight Glass	**307723**

NOTE: Full Assembly includes 10 meter 90" M12 Cable, Light, Light Tri-Clamp Bracket, VL-3A Sight Glass Assembly and EPDM Gaskets.



VessaLite® Replacement Parts

VessaLite Light

Description	Part #
VessaLite® Light (Light Unit Only)	**311313**

M12 Cable

Description	Part #
Cable, Female, M12, 10 m, 90 deg, Washdown	**052066**

Light Tri-Clamp Bracket

Process Connection Size	Description	Part #
2.0"	Light Tri-Clamp Bracket, 2.0" TC	**309967**
2.5"	Light Tri-Clamp Bracket, 2.5" TC	**309969**
3.0"	Light Tri-Clamp Bracket, 3.0" TC	**309971**
4.0"	Light Tri-Clamp Bracket, 4.0" TC	**309973**

VL-3A Sight Glass Assembly

Process Connection Size	Description	Part #
2.0"	VL-3A Sight Glass Assembly, 2.0" TC	**055630**
2.5"	VL-3A Sight Glass Assembly, 2.5" TC	**056231**
3.0"	VL-3A Sight Glass Assembly, 3.0" TC	**055631**
4.0"	VL-3A Sight Glass Assembly, 4.0" TC	**055632**

NOTE: VL-3A Sight Glass Assemblies come with the sight glass lens, sight glass ferrule, EPDM tri-clamp and sight glass gaskets, tri-clamp (NOTE: This is a standard tri-clamp; if the light tri-clamp bracket is required, it should be ordered in addition to this), and a tri-clamp short weld ferrule. See the VL-3A section for more information.

Additional Tank Components

Anti-Siphons

The anti-siphon is constructed of 316L stainless steel and eliminates the siphoning of water from the tank back into the process water.

Height (Face-to-Face Dimensions): 3 3/4"

Tank Connection	Process Connection	Flow Capacity	Part #
3.0" TC	1.5" TC	100 gpm	**123416**
3.0" TC	2.0" TC	240 gpm	**129208**

Mushroom Vents

These vents are used on process tanks for air venting while preventing foreign materials from entering the tank. Construction of the vent is a solid radiused and panned top with underside surface made of 1/8" perforated material.

Connection Size	Material/ Finish	Diameter (OD)	Height (H)	Part #
1.5" TC	316Lss / Bead Blasted	3 1/8"	1 13/16"	**740828**
2.0" TC	316Lss / Bead Blasted	5"	1 13/16"	**740829**
2.5" TC	316Lss / Bead Blasted	5"	1 13/16"	**740830***
3.0" TC	316Lss / Bead Blasted	6"	1 13/16"	**740831**
4.0" TC	316Lss / Bead Blasted	7 3/4"	1 13/16"	**740832**
6.0" TC	316Lss / Bead Blasted	10"	2 3/8"	**741502**

NOTE: Tank vent sizing is the responsibility of the installing user.
Non-stock product option. Longer lead times apply.

Gooseneck Vents

These vents are used on process tanks for air venting. Construction of the vent is of 316L stainless steel fittings with all interior and exterior welds ground & polished. The outlet connection is butt-weld and can be welded to if downtubes or other process piping is desired to be added to the open vent outlet.

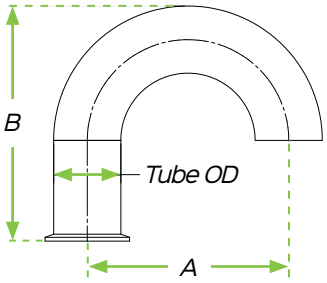
Description	Finish	Tank Connection	Part #
Gooseneck Vent	32 Ra	1.5" TC	**323518**
		2.0" TC	**323519**
		2.5" TC	**323520**
		3.0" TC	**323521**
		4.0" TC	**323522**
		6.0" TC	**323523**

NOTE: Tank vent sizing is the responsibility of the installing user.

NOTE: See High Purity page 175 for 20 Ra Gooseneck Vents.

Dimensional Information

Tank Connection	"A"	"B"
1.5" TC	4.5"	6.0"
2.0" TC	6.0"	7.0"
2.5" TC	7.5"	8.0"
3.0" TC	9.0"	10"
4.0" TC	12"	12"
6.0" TC	18"	18"



Sample Valves

Process sample valves allow for taking manual samples of small volumes of fluid from your process for quality verification. These can be used on tanks or on process lines.

Description	Process Connection	Sample Connection	Part #
Sample Valve	0.50" TC / 0.75" TC	0.50" TC	**060887**
	1.0" TC / 1.5" TC	0.50" TC	**060888**
	2.0" TC	0.50" TC	**060889**

0.50" TC / 0.75" TC Sample Valve

GOOD TO KNOW

- **Wetted Materials:** 316Lss, PTFE Seat, Viton Elastomers
- **ID Finish:** 15 µin Ra EP
- **Max Pressure Rating:** 125 psi
- **Max Temperature Rating:** 248 °F
- **Certifications:** 3-A Authorized

Steam Injection

Steam Injection Assembly

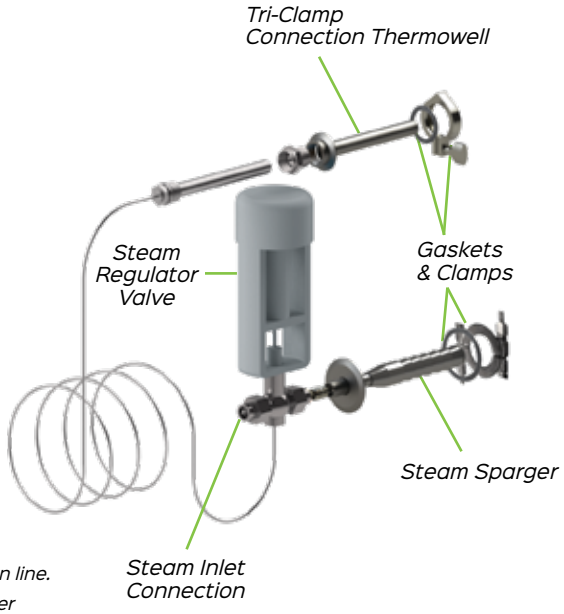
All the components for automatically controlling the temperature of your process with steam.

See the Steam Sparger, Steam Regulator Valve, and Thermowell tables for replacements parts for this assembly.

Description	Steam Inlet Connection	Reference Steam Capacity (@ 50 psig Steam)	Part #
Steam Injection Assembly, Steam Sparger, Thermowell, Clamps/Gaskets, Regulating Valve	0.50" FNPT	377 lbs/hr	**315526**
	0.75" FNPT	742 lbs/hr	**315527**
	1.0" FNPT	1,272 lbs/hr	**315528**

NOTE: Maximum pressure for mixer/sparger is determined by the incoming connection line.

NOTE: Thermowell connection is an EPDM gasket and standard clamp. Steam Sparger connection is a Tuf-Steel gasket and a high-pressure clamp.



Steam Sparger

The steam sparger efficiently mixes steam with water directly into a process tank, line, or equipment. Steam spargers can be attached to tank sidewall ports or directly into process piping.

Description	Steam Inlet Connection	Process Connection	Length	Part #
In-Tank Steam Sparger, 316Lss	0.5" MNPT	3.0" TC	8.69"	**252795**
	0.75" MNPT	3.0" TC	9.44"	**252790**
	1.0" MNPT	3.0" TC	8.13"	**252792**

GOOD TO KNOW

- **Example Duty Point:** 1,730 lbs/hr @ 15 psig Steam
- **Noise Levels (Approximate):** 90 dB

Steam Regulator Valve

The steam regulator automatically controls the temperature of your process without the use of external power. With a vapor pressure thermal system, the steam regulator senses temperature change and positions the valve plug to regulate the heating or cooling medium to maintain a desired temperature.

Description	Connection	Part #
Steam Regulator Valve, SS/Bronze	0.5" FNPT	**056816**
	0.75" FNPT	**056817**
	1.0" FNPT	**056818**

NOTE: Temperature setpoint range is 105 °F - 195 °F.

Tri-Clamp x FNPT Fitting Thermowell

Thermowell

Description	Thermal Bulb Connection	Process Connection	Overall Length	Insertion Length	Part #
Thermowell for Steam Regulator Thermal Bulb, 316Lss, for Watson McDaniel Regulator	0.75" FNPT	2.0" TC	10.19"	8.44"	**314729**
Thermowell for Steam Regulator Thermal Bulb, 316Lss/321ss, for Powers Regulator	1.0" FNPT	2.0" TC	9.25"	8.25"	**221907**

NOTE: The Powers Regulator thermowell with 1.0" FNPT Thermal Bulb Connection is for replacements of older units used prior to 2022.

Level Control

Control level in your process tanks or other equipment with level probes or transmitters.

Level transmitters allow for continuous level reading within the range listed, while the 3-point probe provides 3 points of discrete level feedback.

Description	Process Connection	Suggested Installation Location	Wetted Materials	Cable	Supply Voltage	Part #
3-Point Level Probe, 2.0" TC, Cut-To-Length Probes	2.0" TC	Top of Tank	316Lss / PVC / Silicon	12' Cord (3 Wire)	N/A (Used with Level Control Relays)	**220293**
Level Transmitter, 2.0" TC, 4-20mA = 0-40" W.C.	2.0" TC	Bottom Sidewall of Tank	316Lss / EPDM	10m Cable (M12)	24V DC	**224353**
Level Transmitter, 2.0" TC, 4-20mA = 0-100" W.C.	2.0" TC	Bottom Sidewall of Tank	316Lss / EPDM	10m Cable (M12)	24V DC	**292377**

NOTE: 3-Point Level Probes are cut to length (74" max length). For replacement probes, measure and provide the length of each probe.

Level Transmitter

3-Point Level Probe

Relays for Level Control

Description	Part #
Level Control Relay, 24V DC	**035104**

NOTE: Two (2) level control relays are required for each 3-Point Level Probe.

Open Plant Cleaning (OPC)

Improving Your Manual Open Plant Cleaning Processes

Cleaning your process equipment and processing areas using OPC technology has never been more important. Sani-Matic's Washdown Equipment includes a variety of city and boosted water cleaning stations, and portable belt cleaning equipment, ready to help your operators clean equipment that needs rinsing, chemical foaming, and sanitizing that cannot be cleaned with more automated methods like CIP and COP.

Cleaning Stations

Cleaning Stations - City Water

City water cleaning stations provide a combination of rinse, foam, and sanitize capabilities to your facility. Install these units where these cleaning and sanitizing activities happen.

Use directly with the listed city water pressure range, incorporate other utilities (e.g., compressed air, chemicals) as required, and better equip your operators for more efficient cleaning processes.

Descrip.	Water Inlet Connection	Compressed Air Inlet Connection	Chem. Supply	Inlet Water Pressure (psi)	Max. Temp. (°F)	Product Details	Flow Rate (gpm) @40 psi			Part #
							Rinse	Foam	Sanitize	
Rinse Station	0.75" FNPT	-	-	35 - 125	180	Mounting Bracket/Station, 50' Hose, Rinse Nozzle with Shutoff Valve	7.2	-	-	**023650**
Foam Station	0.50" FNPT	0.25" FNPT	Suction Tube	35 - 125	180	Mounting Bracket/Station, Chemical Injection Assembly, 50' Hose, Foam Wand with Shutoff Valve	-	1.34	-	**056125**
Sanitize Station	0.50" FNPT	-	Suction Tube	35 - 125	180	Mounting Bracket/Station, Chemical Injection Assembly, 50' Hose, Sanitize Wand with Shutoff Valve	-	-	5.4	**056126**
Rinse / Foam Station	0.75" FNPT	0.25" FNPT	Suction Tube	35 - 125	160	Mounting Bracket/Station, Chemical Injection Assembly, 50' Hose, Sanitize Wand with Shutoff Valve	7.2	1.34	-	**056127**
Foam / Sanitize Station	0.75" FNPT	0.25" FNPT	Suction Tube (x2)	35 - 125	180	Mounting Bracket/Station, Chemical Injection Assembly (x2), 50' Hose (x2), Foam Wand with Shutoff Valve, Sanitize Wand with Shutoff Valve	-	1.34	5.4	**056128**
Rinse / Foam / Sanitize Station	0.75" FNPT	0.25" FNPT	Suction Tube (x2)	35 - 125	180	Mounting Bracket/Station, Chemical Injection Assembly (x2), 50' Hose (x3), Rinse Nozzle with Shutoff Valve, Foam Wand with Shutoff Valve, Sanitize Wand with Shutoff Valve	7.2	1.34	5.4	**056129**

Cleaning Stations - City Water

Rinse Station - City Water

Foam Station - City Water

Rinse / Foam Station - City Water

Rinse / Foam / Sanitize Station - City Water

Cleaning Stations - Boosted Pressure Water

Boosted pressure water cleaning stations provide a combination of rinse, foam, and sanitize capabilities to your facility. Install these units where these cleaning and sanitizing activities happen.

Use with a boosted water pressure source with inlet pressures between 125-350 psig, incorporate other utilities (e.g., compressed air, chemicals) as required, and better equip your operators for more efficient cleaning processes.

Descrip.	Water Inlet Connection	Compressed Air Inlet Connection	Chem. Supply	Inlet Water Pressure (psi)	Max. Temp. (°F)	Product Details	Flow Rate (gpm) @ 250 psi			Part #
							Rinse	Foam	Sanitize	
Rinse Station	0.50" FNPT	-	-	125 - 350	180	Mounting Bracket/Station, 50' Hose, Rinse Spray Gun	13.43	-	-	**045862**
Foam Station	0.375" FNPT	0.25" FNPT	Suction Tube	125 - 350	180	Mounting Bracket/Station, Chemical Injection Assembly, 50' Hose, Foam Wand (Requires Upstream Shutoff Valve)	-	2.97	-	**056130**
Sanitize Station	0.50" FNPT	-	-	125 - 350	180	Mounting Bracket/ Station, Chemical Injection Assembly, 50' Hose, Sanitize Spray Gun	-	-	5.62	**056131**
Rinse / Foam Station	0.50" FNPT	0.25" FNPT	Suction Tube	125 - 350	180	Mounting Bracket/Station, Chemical Injection Assembly, 50' Hose (x2), Rinse Spray Gun, Foam Wand	13.43	2.97	-	**056132**
Foam / Sanitize Station	0.50" FNPT	0.25" FNPT	Suction Tube (x2)	125 - 350	180	Mounting Bracket/Station, Chemical Injection Assembly (x2), 50' Hose (x2), Foam Wand, Sanitize Spray Gun	-	2.97	5.62	**056133**
Rinse / Foam / Sanitize Station	0.75" FNPT	0.25" FNPT	Suction Tube (x2)	125 - 350	180	Mounting Bracket/Station, Chemical Injection Assembly (x2), 50' Hose (x2), Rinse/Sanitize Spray Gun, Foam Wand (Rinse/Sanitize connections use same hose/spray gun)	13.43	2.97	5.62	**048467**

Cleaning Stations - Boosted Pressure Water

(Trigger gun not to scale with unit)

Rinse Station - Boosted Pressure Water

Sanitize Station - Boosted Pressure Water

Rinse / Foam / Sanitize - Boosted Pressure Water

Conveyor Belt Cleaning

Conveyor Belt Cleaning

These portable conveyor belt cleaning units provide foaming or sanitizing capabilities for cleaning process belt systems in place.

Use directly with the listed city water pressure range, incorporate other utilities (e.g., compressed air, chemicals) as required, and better equip your operators for more efficient conveyor belt cleaning processes.

Descrip.	Water Inlet Connection	Compressed Air Inlet Connection	Chem. Supply	Inlet Water Pressure (psi)	Max. Temp. (°F)	Product Details	Flow Rate (gpm) @40 psi		Part #
							Foam	Sanitize	
Portable Conveyor Belt Foamer 2-Arm (Up to 32" Wide) - City Water	0.50" FNPT	0.25" FNPT	Suction Strainer	35 - 125	160	Portable Cart with Wheels, Integrated 5 gal. Chemical Jug Rack, Pressure Gauges for Incoming Air/Water, Chemical Injection Assemblies (Top/Bottom Belt), 360° Adjustable Spreader Nozzles™ for foam coverage: 6" overhead distance = 12" wide coverage 12" overhead distance = 20" wide coverage 24" overhead distance = 32" wide coverage	0.65	-	**056139**
Portable Conveyor Belt Foamer 2-Arm (Up to 48" Wide) - City Water	0.50" FNPT	0.25" FNPT	Suction Strainer	35 - 125	160	Portable Cart with Wheels, Integrated 5 gal. Chemical Jug Rack, Pressure Gauges for Incoming Air/Water, Chemical Injection Assemblies (Top/Bottom Belt), 360° Adjustable Spreader Nozzles™ for foam coverage: 12" overhead distance = 30" wide coverage 24" overhead distance = 48" wide coverage	1.34	-	**056140**
Portable Conveyor Belt Sanitizer 2-Arm (Up to 48" Wide) - City Water	0.75" FNPT	-	Suction Strainer	35 - 125	160	Portable Cart with Wheels, Integrated 5 gal. Chemical Jug Rack, Pressure Gauges for Incoming Water, Chemical Injection Assemblies (Top/Bottom Belt), 360° Adjustable Spreader Nozzles™ for foam coverage: 28" overhead distance = 48" wide coverage	-	4.0	**056141**

Portable Conveyor Belt Foamer 2-Arm

Portable Conveyor Belt Sanitizer 2-Arm

Cleaning Station Accessories

Accessories

Hose racks, chemical jug holders, and lids can be paired with cleaning stations to create an efficient process setup.

Description	Chemical Supply	Product Details	Part #
Hose Rack, SS, Small	-	Wall Mount, Up to 50' of ¾" ID Hose	**056134**
Hose Rack, SS, Large	-	Wall Mount, Up to 75' of 1" ID Hose	**036241**
Hose Rack, SS, XL	-	Wall Mount, Up to 100' of 1" ID Hose	**056135**
Chemical Jug Rack, SS, 1 Gallon, Round/Square	-	Approx. 6.75" x 6.63" Opening for Chemical Jugs	**056136**
Chemical Jug Rack, SS, 2 ½ Gallon	-	Approx. 8.75" x 10.75" Opening for Chemical Jugs	**033382**
Chemical Jug Rack, SS, 5 Gallon, Round/Square	-	Approx. 13" x 13" Opening for Chemical Jugs	**056137**
Lid, Polypropylene, 1 Gallon Jug w/ Strainer	0.25" Hose Barb	Hose Barb Chemical Connection, Screwed Lid, 14" Suction Tubing, Hastelloy Strainer	**056138**

Hose Rack, SS, Large

Chemical Jug Rack, SS, 1 Gallon, Round / Square

Lid, Polypropylene, 1 Gallon Jug w/ Strainer (Chemical Jug not included)

Chemical Jug Rack, SS, 2 ½ Gallon

Chemical Jug Rack, SS, 5 Gallon, Round / Square

Model TS-4

Model TS-5

Tanker Spray Washers

Reliable Spray Options for Small to Large Tankers

Sani-Matic provides two different models of drop-in style tanker spray washers for tanks transporting bulk food grade liquids. The TS-4 static spray washer and TS-5 impingement spray washer are capable of cleaning a variety of soils, including dairy, juice, and more.

The TS-4 is designed to thoroughly clean tankers up to 44 feet in length. It features a center-positioned, static spray ball with a top-to-bottom spray pattern. The top of the tanker is sprayed directly with the solution, which then cascades down the sides of the tank removing soil. It also includes two multi-bore jet nozzles to reach all product contact surfaces.

The TS-5 is ideal for cleaning larger tankers, as well as tanks that require high-impact cleaning for tough soils. Its S-shaped manifold positions the rotary spray device's nozzle for 360° spray coverage without obstruction, cleaning all product contact surfaces inside the tank.

QUICK TIPS

Did you know Tanker Spray Washers do not need to be 3-A authorized?

There is not a 3-A standard for tank cleaning devices that are removed. The only 3-A standard for tank cleaning is standard number 78-03 for Spray Cleaning Devices Intended to Remain in Place. 3-A standard number 05-15 for Automotive Transportation Tanks for Bulk Delivery and Farm Pick-Up Service, allows for these tanks to be cleaned by impingement or flowing cleaning solutions over the surface, but gives no other stipulation.

GOOD TO KNOW

Model TS-4

The TS-4 features a center spray ball for a top spray pattern and two multi-bore jet nozzles for tank end washing. The vented manway cover has a bail handle and two hold downs with gasket.

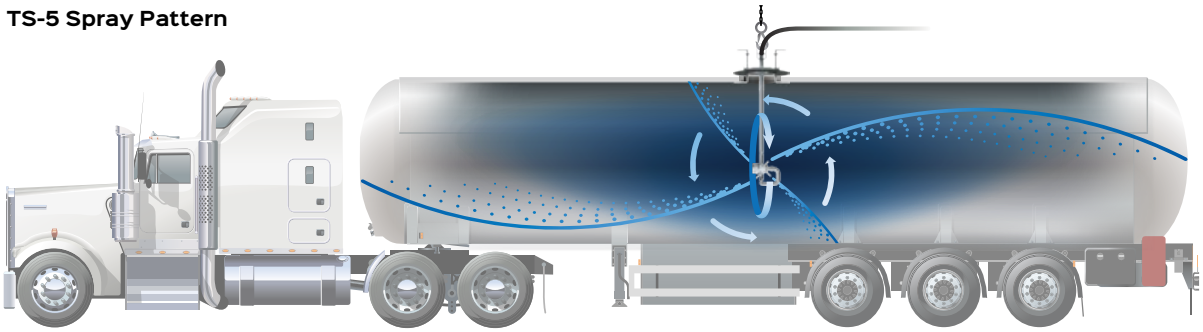
Model TS-5

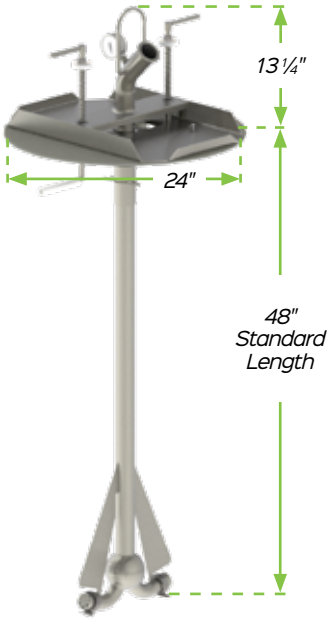
The S-shaped manifold doubles the spray volume to the ends of the tanker. Combined with the rotary spray device, it creates 360° spray coverage allowing direct impingement of the cleaning solution to the entire tank. High-pressure nozzles provide the reach needed to clean long tankers.

- Material Test Reports (MTRs) are not available for TS-4 and TS-5 spray assemblies.
- The cycle time (time requiring full pattern of spray) for the TS-5 is approximately 12 minutes at the 60 psi operating pressure. Cycle time varies based on operating pressure and the time required to clean will vary depending on the product within the tank.

TS-4 Spray Pattern

TS-5 Spray Pattern



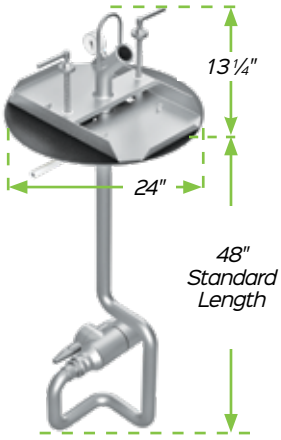


Model TS-4 Complete Assembly

Drop-in style washer is ideal for 44' tankers. The TS-4 spray assembly requires a 13" or larger manway for insertion.

Connection Description	Connection Size	Flow Requirements	Approximate Weight	Max. Temperature Rating	Materials of Construction	Part #
Tri-Clamp	2.0"	120 gpm @ 55 psi	50 lbs	212 °F	304ss / bead blast finish	**153190**
Bevel Seat	2.0"	120 gpm @ 55 psi	50 lbs	212 °F	304ss / bead blast finish	**S10090**

NOTE: Temperature rating is with a neoprene manway gasket.

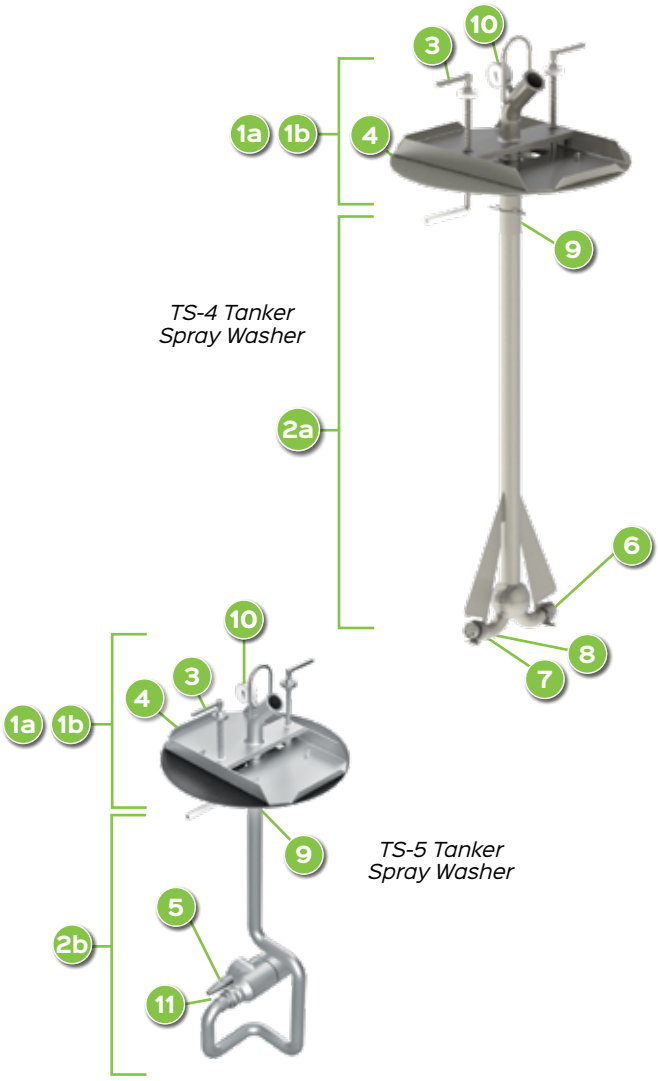


Model TS-5 Complete Assembly

Drop-in style washer is ideal for large tankers, having an impact throw length of 50' at the listed operating conditions. The TS-5 spray assembly requires an 18" or larger manway for insertion.

Connection Description	Connection Size	Flow & Pressure Requirements	Approximate Weight	Max. Temperature Rating	Materials of Construction	Part #
Tri-Clamp	2.0"	82 gpm @ 60 psi	70 lbs	208 °F	304ss / bead blast finish	**299209**
Bevel Seat	2.0"	82 gpm @ 60 psi	70 lbs	208 °F	304ss / bead blast finish	**299210**

Tanker Spray Washer Replacement Parts



Replacement Parts	Part #
1a Top only (bevel seat)	360004
1b Top only (tri-clamp)	138806
2a Bottom only – TS-4	360075
2b Bottom only – TS-5 (no spray)	298663
3 Arm/Spring Assembly (set of 2)	S10093
4 TS-4/TS-5 Manway Gasket (Neoprene, standard, 212 °F max)	320053
5 TS-5 Spray Nozzle	055000
6 TS-4 Nozzle	321793
7 TS-4 Nozzle Gasket (EPDM)	020455
8 Nozzle Clamp	020473
9 Clip	320068
10 Pressure Gauge (0-100 psi)	060763
11 Adapter Kit	299883
Old Model TS-5 Replacement Parts	**Part #**
2b Bottom only – TS-5 (no spray)	138890
5 TS-5 Spray Nozzle	048812

NOTE: "Old Model TS-5 Replacement Parts" are for TS-5 assemblies bought prior to 2021.

TS-5 Spray Nozzle Spare Parts

Kits include service parts to service & repair a TS-5 spray nozzle.

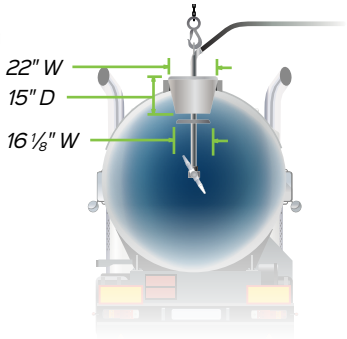
Description	Part #
Spare Parts Kit, Minor Kit, for TS-5 Spray Assembly (#055000)	060651
Spare Parts Kit, Major Kit, for TS-5 Spray Assembly (#055000)	060652

Accessories: Equipment for Drop-In Handling

Tapered Manway Assembly

For use with rotating spray heads. Used in applications where impingement cleaning is required to remove heavily soiled products.

Connection Size	Approximate Weight	Part #
1.5" MNPT (both supply and nozzle connections)	72 lbs	360115



Accessories

Sanitary Accessories to Meet Your Process Needs

Whether manufactured in Wisconsin by our dedicated craftsmen or sourced from long-trusted suppliers, our lineup of accessories are available to help you meet your cleaning, process, and sanitation goals — and make your work day easier.

From chemical delivery solutions to COP parts baskets, we offer the accessories needed for a sanitary cleaning process.

GOOD TO KNOW

The air eliminator is constructed of 316L stainless steel and installed at the suction of a CIP return pump to remove air from CIP return solution and prevent air lock in a centrifugal pump.

The weight of the air eliminator ball ensures that when air is passing it should stay in the open position. Once there is liquid in the line, the ball will float and seal. When this occurs you will have some solution escape out of the device; this is common. In addition, some chattering noise while the ball passes air and then re-seals is also common.

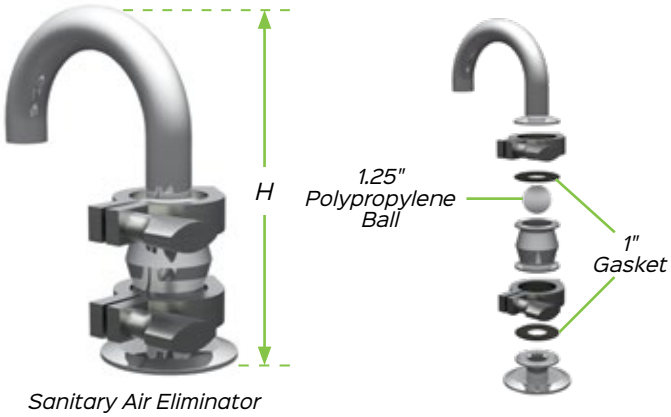
NOTE: If the pump is used during processing to transfer product, the air eliminator is usually removed and the port is capped.

Sanitary Air Eliminator

Connection Size	Overall Height (H)	Part #
1.5"	8.125"	**740636***
2.0"	7.625"	**740637**
2.5"	7.750"	**740638***
3.0"	7.625"	**740639***
4.0"	7.625"	**740640***

Replacement Parts	Part #
1" Gaskets (Buna-N, Qty. 2 Required)	**020388**
Polypropylene Ball (1.25")	**020280**

Non-stock product option. Longer lead times apply.



Sanitary Air Eliminator

CIP Return Pump Air Vent

The return pump air vent is installed to expel air, avoiding cavitation and air lock that can cause wash program disruption. Ball valve shut-off is available.

Description	Part #
304 stainless steel, 1/4" MNPT	**720001***

Non-stock product option. Longer lead times apply.

COP Parts Baskets

Sani-Matic COP Parts Baskets allow for thorough cleaning, while reducing the number of damaged and lost parts. Baskets make it easy and safe for workers to handle valuable components. The second number listed in the model designates the basket's handle height (e.g., URWB-7-18 has an 18" handle height).

Model	Description	Part #	Basket	Handle Height (inches)	COP Without Cover				COP With Cover			
					UW	RW	PW	TW	UW	RW	PW	TW
URWB-1 (Standard)	**Placement:** Tank bottom, non-stacking **Common Uses:** Small Parts **Construction:** 316Lss sheet, 3/8" diameter perforations, bead blast finish	**460030**	19.00 x 15.00 x 3.50	17.50	✓	✓	✓	✓	✓	✓	✓	✓
URWB-2 (Standard)	**Placement:** Tank bottom, non-stacking **Common Uses:** Fittings **Construction:** 316Lss round bar, 1" spacing, electropolished finish	**020132**	19.75 x 15.00 x 4.00	15.75	✓	✓	✓	✓	✓	✓	✓	✓
URWB-5-17 (Standard)	**Placement:** Edge of tank (hanger style) **Common Uses:** Small parts **Construction:** 316Lss sheet, 3/16" diameter perforations, electropolished finish	**020139**	12.00 x 6.00 x 10.00	17.63	✓	✓	✓	✓	✓	✓	✓	✓
URWB-5-19	**Placement:** Tank bottom, non-stacking **Common Uses:** Small parts **Construction:** 316Lss sheet, 3/16" diameter perforations, electropolished finish	**221298**	12.00 x 6.00 x 10.00	19.00	✓	✓	✓	✓	-	✓	✓	✓
URWB-6-24 (Standard)	**Placement:** Tank bottom, non-stacking **Common Uses:** Small parts **Construction:** 316Lss round bar, 1" spacing electropolished finish	**020136**	22.00 x 10.50 x 10.00	24.00	✓	✓	✓	✓	-	-	✓	-
URWB-6-15	**Placement:** Tank bottom, non-stacking **Common Uses:** Small parts **Construction:** 316Lss round bar, 1" spacing electropolished finish	**218495**	22.00 x 10.50 x 10.00	15.00	✓	✓	✓	✓	✓	✓	✓	✓
URWB-6-19	**Placement:** Tank bottom, non-stacking **Common Uses:** Small parts **Construction:** 316Lss round bar, 1" spacing electropolished finish	**218496**	22.00 x 10.50 x 10.00	19.00	✓	✓	✓	✓	-	✓	✓	✓
URWB-7-29 (Standard)	**Placement:** Tank bottom, non-stacking **Common Uses:** Large parts **Construction:** 316Lss round bar, 1" spacing, electropolished finish	**440021**	22.00 x 22.00 x 18.00	29.00	-	✓	✓	✓	-	-	✓	-
URWB-7-18	**Placement:** Tank bottom, non-stacking **Common Uses:** Large parts **Construction:** 316Lss round bar, 1" spacing, electropolished finish	**221293**	22.00 x 22.00 x 18.00	18.00	-	✓	✓	✓	-	✓	✓	✓

NOTE: Non-standard basket lead times may be longer.
NOTE: Custom baskets are available. Contact a Sani-Matic Representative.

URWB-1

URWB-2

URWB-5-17

URWB-6-24

URWB-7-29

Chemical Delivery

Chemical delivery assemblies provide easy-to-specify, all-inclusive packages for any application that requires chemical injection (e.g., CIP, COP, chemical dosing, neutralization). Both wall mount assemblies for installation over larger containers and stand-alone day tank options are available. Various pump types and sizes allow for selection for your specific application.

Diaphragm Pumps are turned on and off through a compressed air supply, which is enabled by opening of an included electrical solenoid valve.

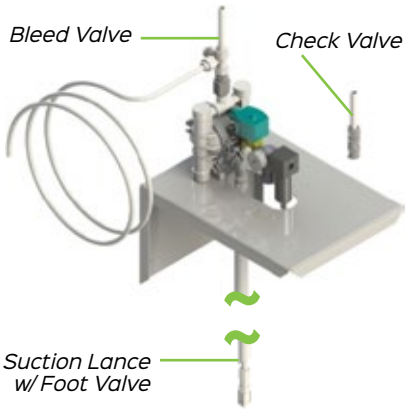
Metering pumps are electrically operated, and can be manually turned on and off or automatically controlled through a 4-20 mA signal.

The Day Tank Skids also include an integrated (2) point level float switch (24V DC powered) for feedback on low and high chemical level in the tank.

Description	Applications	Installation / Operating Conditions	Flow Rate / Pressure (Example Duty Points)	Process Connection (Chemical Injection)	Wetted Materials	Chemical Container	Compressed Air Usage (Based on Example Duty Points)	Electric	Part #
Wall Mount Assembly, Diaphragm Pump (Wilden P.025)	Intermediate Flow Rates / Volumes (e.g., Caustic Chemical for COP)	Installed Above Large Containers (e.g., 55 gal. Chemical Drum)	1.0 GPM @ 85 psig 4.0 GPM @ 20 psig	0.25" MNPT or FNPT	PP / PTFE / Neoprene / Polyethylene / 316Lss / FKM	Not Supplied	1.0 SCFM @ 100 psig 4.0 SCFM @ 100 psig	24V DC	**109640**
								120V AC	**760504***
Wall Mount Assembly, Diaphragm Pump (Wilden P1)	Larger Flow Rates / Volumes (e.g., Caustic Chemical for CIP)		4.0 GPM @ 85 psig 12.0 GPM @ 20 psig				7.0 SCFM @ 100 psig 12.0 SCFM @ 80 psig	24V DC	**109211**
								120V AC	**760455**
Wall Mount Assembly, Metering Pump (Pulsafeeder LPH8)	Smaller Flow Rates / Volumes (e.g., Sanitizer Chemical for COP)		25 GPH (0.42 GPM) @ 30 psig (Maximum)		PTFE / GFPPL / PVC / Polyethylene / 316Lss / FKM		Not Required	120V AC	**113424***
Day Tank Skid, Diaphragm Pump (Wilden P.025)	Intermediate Flow Rates / Volumes (e.g., Caustic Chemical for COP)	Floor Mount Day Tank (Re-Filled Periodically)	1.0 GPM @ 85 psig 4.0 GPM @ 20 psig		PP / PTFE / Neoprene / Polyethylene / 316Lss / FKM	15 gal.	1.0 SCFM @ 100 psig 4.0 SCFM @ 100 psig	24V DC	**343239**
Day Tank Skid, Metering Pump (Pulsafeeder LPH8)	Smaller Flow Rates / Volumes (e.g., Sanitizer Chemical for COP)		25 GPH (0.42 GPM) @ 30 psig (Maximum)		PTFE / GFPPL / PVC / Polyethylene / 316Lss / FKM		Not Required	120V AC	**346480**

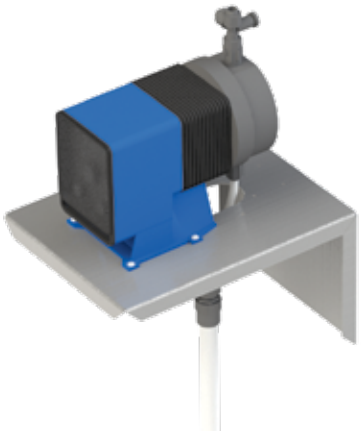
Non-stock product option. Longer lead times apply.

NOTE: Wall mount pump assemblies include a wall mount bracket.
NOTE: All chemical delivery solutions include 30' of polyethylene (PE) tubing with injection check valve, bleed valve with 8' PE tubing, and chemical pickup (suction) PE tubing and foot valve.
NOTE: Process connection is FNPT with an included coupler which can be removed to provide for a MNPT connection.



Wall Mount Diaphragm Pump

Day Tank Skid
Diaphragm Pump



Wall Mount Metering Pump

Day Tank Skid
Metering Pump

Chemical Pump Only

Description	Part #
Diaphragm Pump (Wilden P.025)	**900028**
Diaphragm Pump (Wilden P1)	**900510**
Metering Pump (Pulsafeeder LPH8)	**800504**

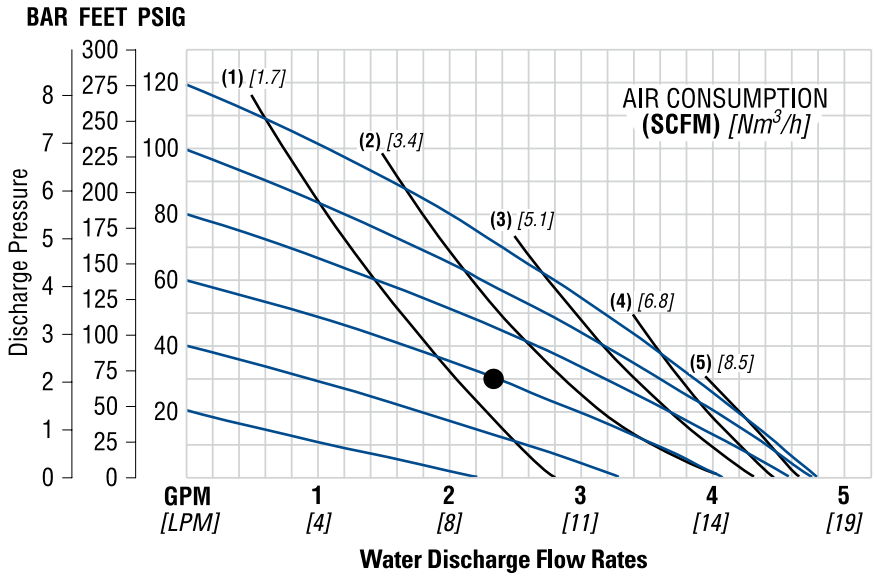
Wilden P.025

Wilden P1

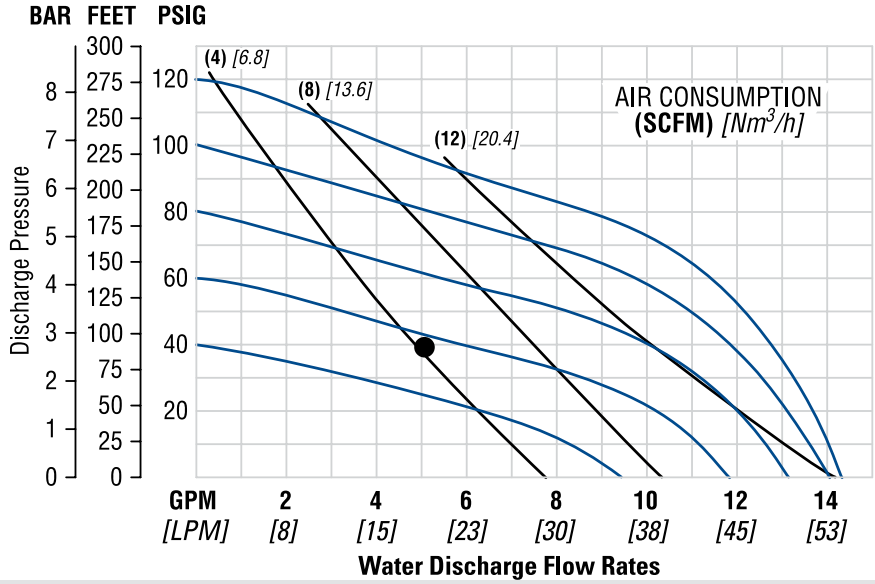
Pulsafeeder LPH8

Chemical Pump Performance Curves

Wilden P.025 Curve
(Part # 900028)



Wilden P1 Curve
(Part # 900510)



Component Documentation Packages (CDP)

Sani-Matic can provide complete component documentation packages to meet your specification and validation requirements. All documentation packages are provided electronically. Hard copy documentation packages are available at an additional cost.

Component Documentation Packages (CDP)				
Document Name	**Document Description**	**CDP - Basic**	**CDP - Standard**	**CDP - Premium**
Material Test Report (MTR)	An MTR is a quality assurance document that certifies a material's chemical and physical properties and states the product made is compliant within the specific set standards. It also states the identification number of the batch/lot of steel, which the part/material was made from at the mill.	✓	✓	✓
3-A Certificate	A 3-A certificate authorization for the supplied product (if applicable to the component).	✓	✓	✓
Sani-Matic Certificate of Conformance (CoC)	A document that specifies order information, associated heat numbers (as applicable), along with certificate of conformance (CoC) to Sani-Matic practices.	✓	✓	✓
Certified "As-Built" Drawings	Certified drawing(s) that documents the as-built conditions of the component produced in manufacturing.	-	✓	✓
Heat Map	A certified document that contains details of an assembly where each of the material's heat numbers are recorded. A heat map can stand by itself or be combined with a weld map and slope map.	-	✓	✓
Weld Map	A certified document that contains details of a piping assembly where each weld is identified with a unique number. The identifying number is used on the weld log which profiles each weld.	-	✓	✓
Weld Log	A certified document that records all welds contained in a weld map. The profile of each weld recorded includes heat numbers of the material, the detail where the weld is located, the welder's I.D., the date of the weld, the machine used to weld, and the Quality Inspector's approval sign-off.	-	✓	✓
Surface Finish Certification	Part of the as-built drawing that states Sani-Matic has verified the assembly or that the parts' surface finish meets the agreed upon requirements in the sales order.	-	✓	✓
Electropolish Certification (EP Cert)	A certified document that states that electropolishing was performed to the assembly or parts as agreed upon in the sales order.	-	-	✓
Passivation Certification	A certified document that states that citric acid passivation was performed to assemblies or parts as agreed upon in the sales order.	-	-	✓

NOTE: Indicate at time of order the need for any documentation packages. Documentation may not be available after product is delivered and may incur additional charges.

NOTE: Stocked components are only available with a CDP-Basic package. If CDP-Standard or CDP-Premium packages are required, please contact us.

NOTE: CDP-Basic is the only available documentation package for AWH Rotary Sprays, AWH Jet Sprays, and COP Baskets.

NOTE: Chemical Delivery, Sanitary Air Eliminator, CIP Return Pump Air Vent, Steam Regulator Valve, Open Plant Cleaning (OPC), and TS-4/TS-5 products do not have any documentation packages available.

Product Certifications / Standards

Product	CRN	3-A	Notes
Strainers			
Angle-Line Strainers (4" Body Size)	✓	✓	All standard 4" Angle-Line Strainers have a CRN (see website for certified Provinces) except those with a butt weld connection type, drain/sample port, sight glass, or magnetic trap options. CRN registered pressure is up to 100 psig only. Authorized to carry a 3-A symbol when using perforated elements.
ALB Strainers	-	✓	Authorized to carry a 3-A symbol when using perforated elements.
High-Capacity Angle-Line Strainers (6" Body Size)	-	✓	Authorized to carry a 3-A symbol when using perforated elements.
Angle-Line Strainer w/ Magnetic Trap	-	-	-
Straight-Line Strainers		✓	Authorized to carry a 3-A symbol when using perforated elements.
Tee-Line Strainers	-	-	-
Y-Strainers	-	✓	Authorized to carry a 3-A symbol when using perforated elements.
Basket Strainers	-	✓	Authorized to carry a 3-A symbol when using perforated elements.
Static Spray Devices			
Static Spray Balls	-	✓	Authorized to carry a 3-A symbol when tri-clamp or threaded connections are NOT used.
Supply Tubes			
Supply Tubes	-	✓	Authorized to carry a 3-A symbol when threaded connections or tri-clamp spray ball connections are NOT used.
Double Ball Tees	-	✓	Authorized to carry a 3-A symbol.
Rotary Spray Devices			
TANKO RB	-	-	-
TANKO S	-	-	-
TANKO SF40	-	✓	Authorized to carry a 3-A symbol.
TANKO CP	-	-	-
Jet Spray Devices			
TANKO MX	-	-	-
TANKO JM	-	-	-
Additional Rotary & Jet Spray Devices			
TANKO CR	-	-	-
TANKO JX	-	-	-
TANKO RT	-	-	-
Tank Components			
VL-3A	-	✓	Authorized to carry a 3-A symbol.
Sample Valves	-	✓	Authorized to carry a 3-A symbol.

Find CRN and 3-A Authorizations Here

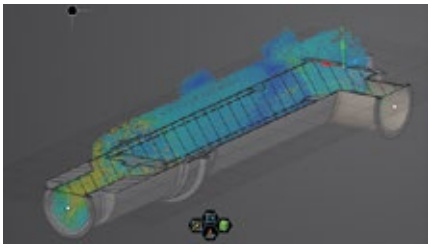
High Purity ALB Strainer

Industry Leading Process Equipment Protection

Component and equipment protection is critical to keeping biopharmaceutical processes running - the High Purity ALB Strainer protects these components during CIP and other process steps, allowing production to continue as-designed, safely, and uninterrupted.

Applications include CIP supply and return lines, utility supply lines, equipment protection, and buffer prep / media / solution / process lines.

BENEFITS



Optimized Fluid Dynamics Design with CFD Modeling

- Tangential inlet to promote adequate cleaning velocities within body for elimination of dead leg concerns.
- Unique patent-pending strainer element cap design – reduces internal body scratching during servicing of strainer.
- Standard 360° sight glass for particulate inspection without breaking process connection.
- Ergonomic designs for strainer handle and element cap removal.
- Particulates captured within the interior of the basket element for complete and contained removal.
- Removable element end cap allows for easy flushing of basket.
- Angle-line design allows for element removal without breaking process line components.
- Tuf-Flex® Tri-Clamp gaskets reduce “sticking” of seal when servicing strainer.
- Materials of construction, surface finishes, certifications, and documentation package meeting industry standards.
- Designed for low pressure drop.
- Multiple inlet orientations and sizes to meet your process needs.
- Eccentric fittings for full drainability in multiple installation orientations.
- Optional pressure gauges or ports for monitoring particulate loading.
- Optional interchangeable mesh underlays for finer straining.

GOOD TO KNOW

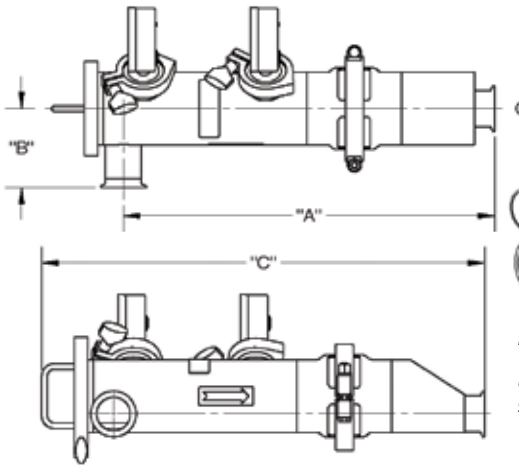
- **Hygienic ID Finish:** 20 µin Ra EP
- **Welds:** Orbitally Welded where applicable
- **Full Assembly Maximum Pressure Rating:** 125 psi
- **Maximum Temperature Rating:** 250 °F
- **Maximum Pressure Drop Rating (Across Strainer Element):** 40 psi
- **Weight:** 21-25 lbs (dependent on options)
- **Differential Pressure Connections (Optional):** 2.0" TC
- **Relief / Sample Valve (Optional):** Welded to strainer element cap with 10mm hose barb connection outlet
- **Wetted Materials:**
  - Strainer Element Holdup Volume: 66.5 in^3
  - Strainer Body and Element: 316Lss
  - End Cap Material: Polyetherimide (PEI) or polyether ether ketone (PEEK)
  - Element Retainer 0-Ring: Teflon™ Encapsulated Silicone
  - Element End Cap O-Ring: EPDM
  - Tri-Clamp Gaskets: Tuf-Flex® PTFE or EPDM
  - Sight Glass Seals: FKM
  - Underlays (Optional): 316ss
  - Relief / Sample Valve (Optional): Teflon Seat / Viton Elastomers

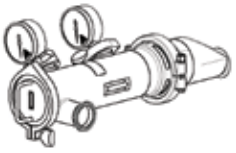
High Purity ALB Strainer Model Number Key

Example Model #:
HALBS-A20RH-P250-0SF5S300

1-5	**Component**	
	HALBS	High Purity ALB Strainer
6	**Element Length**	
	A	10.7" Element (0.7 ft² Area)
7, 8	**Connection Size**	
	15	1.5"
	20	2.0"
	25	2.5"
	30	3.0"
9, 10	**Configuration**	
	RH	Right Horizontal Inlet
	LH	Left Horizontal Inlet
	RB	Right Bottom Inlet
	LB	Left Bottom Inlet
11-14	**Element Type / Size**	
	P093	Perforated / 0.09375" (3/32")
	P125	Perforated / 0.125" (1/8")
	P250	Perforated / 0.25" (1/4")
15	**Seal Kit**	
	3	PEEK End Cap / EPDM & Teflon Encapsulated Silicone O-Rings / EPDM Gaskets / FKM Sight Glass Seal (if applicable)
	2	PEEK End Cap / EPDM & Teflon Encapsulated Silicone O-Rings / Tuf-Flex Gaskets / FKM Sight Glass Seal (if applicable)
16-18	**Finish / Polish**	
	SF5	20 µin Ra / Electropolish
19	**Option 1**	
	S	Sight Glass (Standard)
	0	No Sight Glass
20	**Option 2**	
	0	None (Standard)
	1	Differential Pressure Connections (Capped Ports)
	2	Differential Pressure Connections with Pressure Gauges (FV - 30 psig)
	3	Differential Pressure Connections with Pressure Gauges (FV - 60 psig)
	4	Differential Pressure Connections with Pressure Gauges (FV - 100 psig)
21	**Option 3**	
	0	None (Standard)
	V	Relief / Sample Valve
22	**Option 4**	
	0	None (Standard)

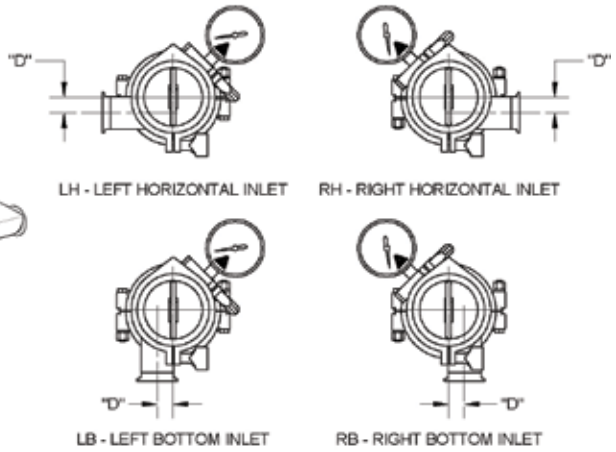
Strainer Element Assembly





Right horizontal inlet with sight glass and differential pressure gauges shown.

Configurations



NOTE: The strainer is drainable in the horizontal position, which requires draining both the inlet and outlet. For vertical or angled installation, the strainer is drainable out of the outlet when installed within 45° and 95° from horizontal.

Dimensional Information

Inlet/Outlet Size	Body Diameter	A	B	C	D	Available Configurations
1.5" TC x 1.5" TC	4"	20 3/4"	4 1/8"	24 7/16"	1 1/4"	LH, RH
2.0" TC x 2.0" TC	4"	20 1/2"	4 3/8"	24 7/16"	1"	LH, RH, LB, RB
2.5" TC x 2.5" TC	4"	20 1/4"	4 3/8"	24 7/16"	3/4"	LH, RH, LB, RB
3.0" TC x 3.0" TC	4"	20"	4 3/8"	24 7/16"	1/2"	LH, RH, LB, RB

NOTE: Lead times for LH and RB configurations are longer than RH and LB configurations.

Cv Values & Pressure Drops for High Purity ALB Strainers

Cv values are for the strainer when free of particulate loading. Cv values applicable for all perforation sizes, with or without mesh overlays (these variables have minimal impact to Cv values).

Cv Values

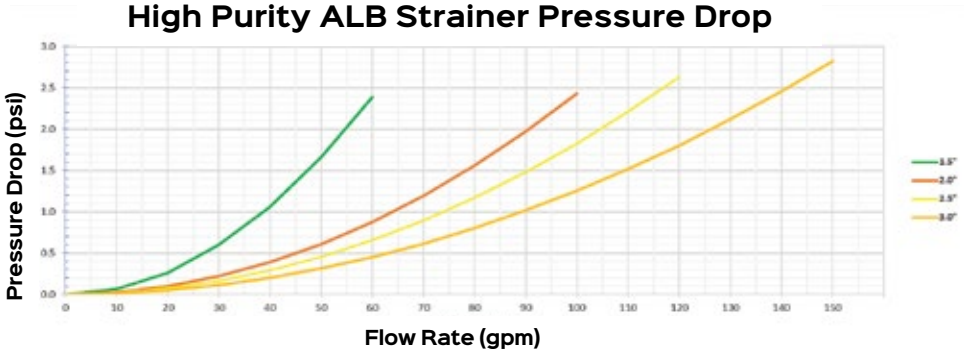
Connection Size	Cv
1.5"	39
2.0"	64
2.5"	74
3.0"	89

Cv values are for water, using the equation below:

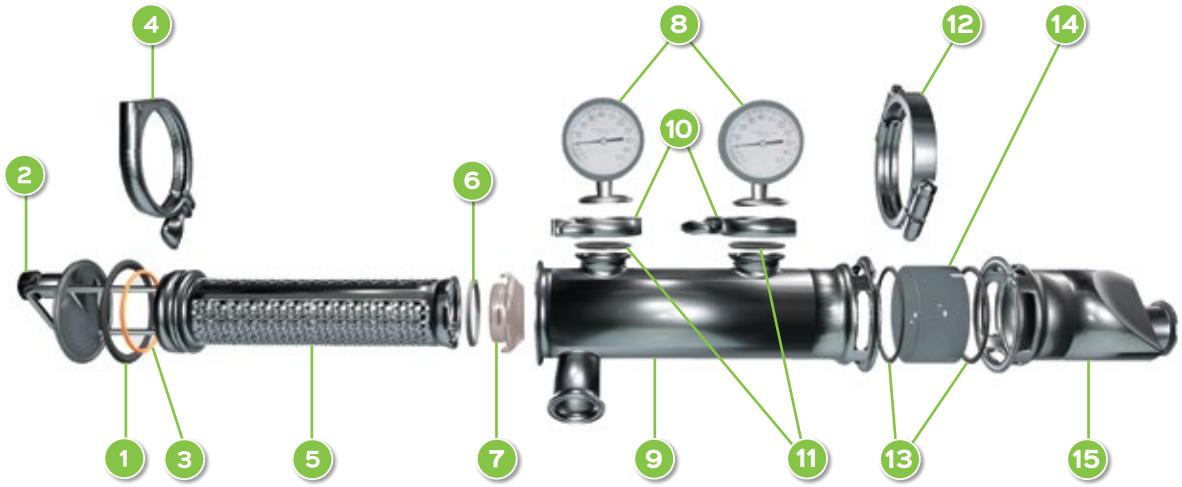
$$Cv = q\left(\frac{SG}{\Delta P}\right)^{0.5}$$

q = flow rate (gpm)
SG = specific gravity (~1.0 for water)
ΔP = pressure drop (psi)

High Purity ALB Strainer Pressure Drop



High Purity ALB Strainer Replacement Parts



Gaskets, Elastomers, Replacement & Wear Parts

Description	Item Callout	Part #
Gasket, Tri-Clamp, 4.0", EPDM	1	021031
Gasket, Tri-Clamp, 4.0", Tuf-Flex	1	046739
Sample Valve O-Ring, Stem Seal (Process Contact)	*Used Within* 2	056470
Sample Valve O-Ring, Plug/Handle Seal (Non-process Contact)	*Used Within* 2	056471
O-Ring, 4" Body Size, Teflon Encapsulated Silicone	3	024020
X-Ring, End Cap, 3.0", EPDM	6	055341
End Cap, 3.0", PEEK	7	335163
End Cap, 3.0", PEI (Pre-2025 Design)	7	301132
Pressure Gauge, 2.0" TC, Bottom Mount, 0-30 psig	8	056884
Pressure Gauge, 2.0" TC, Bottom Mount, 0-60 psig	8	056885
Pressure Gauge, 2.0" TC, Bottom Mount, 0-100 psig	8	056886
Gasket, 2.0" Connection Size, EPDM	11	021028
Gasket, 2.0" Connection Size, Tuf-Flex	11	046736
Seal Kit, Sight Glass, 2 Gaskets, FKM	13	055202
Polycarbonate Window, Sight Glass, 4.0"	14	056124

Clamps

Description	Item Callout	Part #
Clamp, 4.0" Connection Size	4	020225
Clamp, 2.0" Connection Size	10	020082
Clamp, High Pressure, High Purity ALB Strainer Sight Glass, SCH5, 4.0" TC	12	056415

NOTE: Contact Sani-Matic if strainer element or body replacements are required for items 5, 9, 15.

High Purity ALB Strainer Accessories

60 Mesh Underlay

316ss Mesh Underlays

Mesh Size	Micron (Approx. Equiv.)	Opening Width in Inches (Approx. Equiv.)	Part #
20	850	0.0340"	**055196**
40	425	0.0150"	**055197**
60	250	0.0092"	**055198**
100	150	0.0060"	**055199**

Component Documentation Packages (CDP)

Hygienic ALB Strainer		
Document Name	**Document Description**	**CDP - Premium**
Material Test Report (MTR)	An MTR is a quality assurance document that certifies a material's chemical and physical properties and states the product made is compliant within the specific set standards. It also states the identification number of the batch/lot of steel, which the part/material was made from at the mill.	✓
3-A Certificate	A 3-A certificate authorization for the supplied product (if applicable to the component).	N/A
Sani-Matic Certificate of Conformance (CoC)	A document that specifies order information, associated heat numbers (as applicable), along with certificate of conformance (CoC) to Sani-Matic practices.	✓
Certified "As-Built" Drawings	Certified drawing(s) that documents the as-built conditions of the component produced in manufacturing.	✓
Heat Map	A certified document that contains details of an assembly where each of the material's heat numbers are recorded. A heat map can stand by itself or be combined with a weld map and slope map.	✓
Weld Map	A certified document that contains details of a piping assembly where each weld is identified with a unique number. The identifying number is used on the weld log which profiles each weld.	✓
Weld Log	A certified document that records all welds contained in a weld map. The profile of each weld recorded includes heat numbers of the material, the detail where the weld is located, the welder's I.D., the date of the weld, the machine used to weld, and the Quality Inspector's approval sign-off.	✓
Surface Finish Certification	Part of the as-built drawing that states Sani-Matic has verified the assembly or that the parts' surface finish meets the agreed upon requirements in the sales order.	✓
Electropolish Certification (EP Cert)	A certified document that states that electropolishing was performed to the assembly or parts as agreed upon in the sales order.	✓
Passivation Certification	A certified document that states that citric acid passivation was performed to assemblies or parts as agreed upon in the sales order.	✓

NOTE: High Purity ALB Strainers require purchase of a CDP-Premium documentation package.
NOTE: USP Class VI certificates for wetted elastomers are included with CDP-Premium.

Directionally Drilled Spray Ball Assemblies

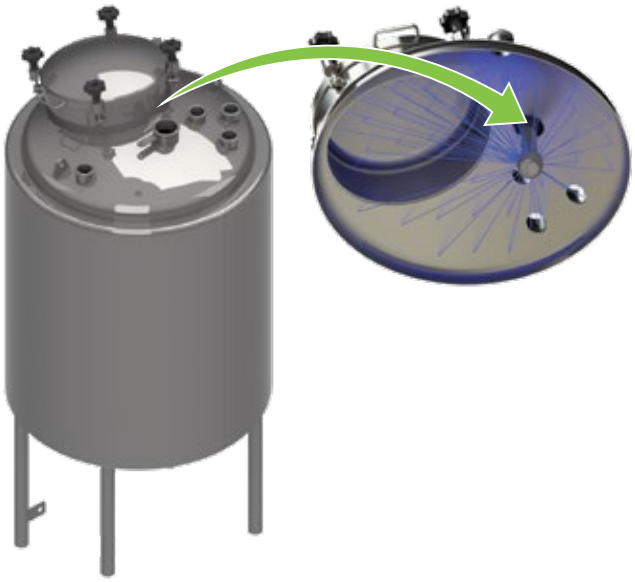
Spray Ball Assemblies for Exact, Validatable Spray Coverage

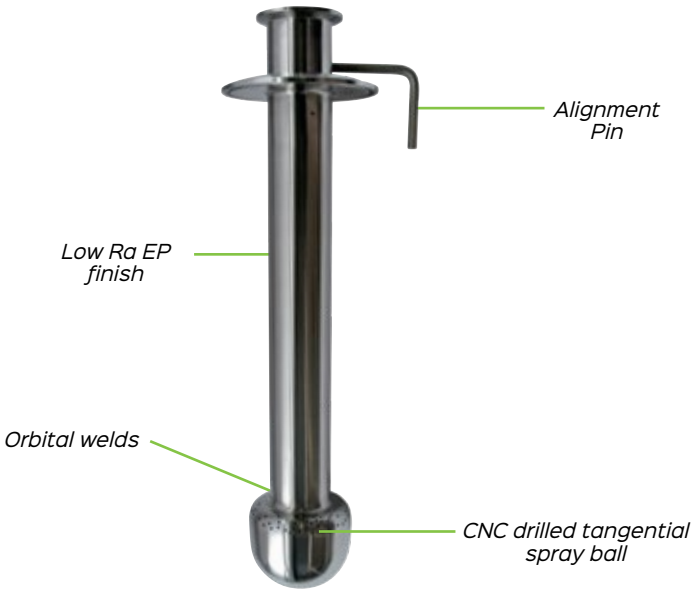
Sani-Matic has decades of experience in spray technology for high purity applications like pharmaceutical and biotech. Your application needs are closely evaluated to design and manufacture a spray solution with appropriate flows, pressures, and exact spray patterns to ensure validatable cleaning for your process vessels.

Sani-Matic's directionally drilled spray ball assemblies meet ASME BPE standards including designs for complete spray coverage, full drainability, proper finish, borescope-inspected orbital welds, and alignment pins for exact, repeatable installation.

Custom-Engineered Solutions

Sani-Matic creates 3-D models of your process vessels to engineer static spray devices with exact drill patterns for proper coverage of all ports and surfaces. With decades of experience in spray technology and CIP applications, we understand the spray dynamics required to ensure proper flow rates, pressures, and coverage.





Typical Features

- 316Lss construction
- **Hygienic wetted finish:** 15, 20 or 25 µin Ra
- **Hygienic non-wetted finish:** 32 µin Ra
- Alignment positioning pin
- Orbital welds
- CNC drilled
- Elbowed assemblies
- Electropolish (EP)
- Passivation

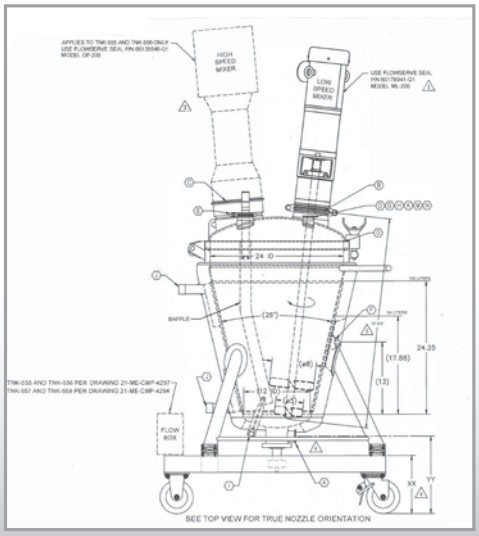
GOOD TO KNOW

At Sani-Matic, we understand the importance of preparing your process to meet validation requirements. That is why we:

- Follow ASME BPE design and testing standards for spray devices such as flow rate recommendations and riboflavin testing procedures.
- Work to understand and identify all potential component process contact surfaces to ensure surface finish specifications are accurate.
- Supply alignment pins for installation orientation and repeatable positioning.
- Design for gravity draining.

The Sani-Matic Process to Achieve Full Spray Coverage with Directionally Drilled Spray Balls

STEP 1



Option 1:
Tank Drawings

Obtain vessel drawings from the customer

Option 2:
Model Tanks

If no customer drawings are available, Sani-Matic technicians can model the tank onsite.

STEP 2

Directionally Drilled Design

- Ports identified for spray device(s)
- Spray modeling for complete coverage
- Customer Approval Drawings

STEP 3

Weld Inspection Check

Directionally Drilled Manufacturing

- CNC drilled
- Orbitally welded
- Welds are borescope-inspected to meet ASME BPE standards
- Ground, polished to meet required finish

STEP 4

Riboflavin Testing

- Testing performed at your facility by a Sani-Matic field service engineer
- Documented process targeting complete spray coverage

STEP 5

Ready for Validation Process

Component Documentation Packages (CDP)

Directionally Drilled Spray Ball Assemblies				
Document Name	**Document Description**	**CDP - Basic**	**CDP - Standard**	**CDP - Premium**
Material Test Report (MTR)	An MTR is a quality assurance document that certifies a material's chemical and physical properties and states the product made is compliant within the specific set standards. It also states the identification number of the batch/lot of steel, which the part/material was made from at the mill.	✓	✓	✓
3-A Certificate	A 3-A certificate authorization for the supplied product (if applicable to the component).	✓	✓	✓
Sani-Matic Certificate of Conformance (CoC)	A document that specifies order information, associated heat numbers (as applicable), along with certificate of conformance (CoC) to Sani-Matic practices.	✓	✓	✓
Certified "As-Built" Drawings	Certified drawing(s) that documents the as-built conditions of the component produced in manufacturing.	-	✓	✓
Heat Map	A certified document that contains details of an assembly where each of the material's heat numbers are recorded. A heat map can stand by itself or be combined with a weld map and slope map.	-	✓	✓
Weld Map	A certified document that contains details of a piping assembly where each weld is identified with a unique number. The identifying number is used on the weld log which profiles each weld.	-	✓	✓
Weld Log	A certified document that records all welds contained in a weld map. The profile of each weld recorded includes heat numbers of the material, the detail where the weld is located, the welder's I.D., the date of the weld, the machine used to weld, and the Quality Inspector's approval sign-off.	-	✓	✓
Surface Finish Certification	Part of the as-built drawing that states Sani-Matic has verified the assembly or that the parts' surface finish meets the agreed upon requirements in the sales order.	-	✓	✓
Electropolish Certification (EP Cert)	A certified document that states that electropolishing was performed to the assembly or parts as agreed upon in the sales order.	-	-	✓
Passivation Certification	A certified document that states that citric acid passivation was performed to assemblies or parts as agreed upon in the sales order.	-	-	✓

NOTE: Indicate at time of order the need for any documentation packages. Documentation may not be available after product is delivered and may incur additional charges.

Tank Components

High Purity Tank Components Ready to Integrate into Your Hygienic Process

Ensure adequate tank venting with products like high purity gooseneck vents and prevent CIP spray overflow through vents and into filter housings with the patented Hygienic Spray Deflector.

High Purity Hygienic Spray Deflector

The Solution to Spray Overflow

Sani-Matic's patented High Purity Hygienic Spray Deflector features a tri-clamp connected vent housing with an interior reversed dish designed to deflect spray solution from exiting a tank.

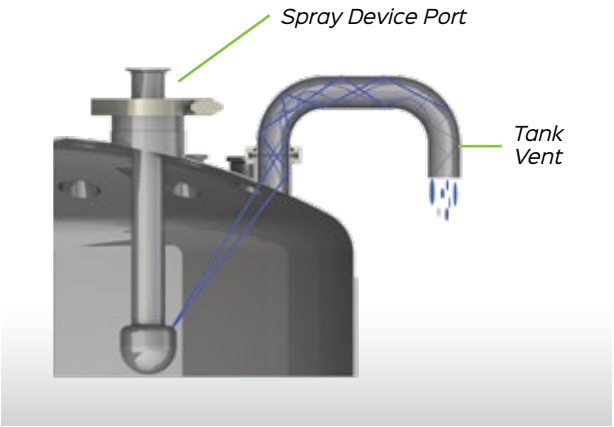
The High Purity Hygienic Spray Deflector is designed for tanks where spray devices are used to clean the interior. These vessels include CIP tanks, process tanks, bioreactors, and fermenters. It redirects sprayed solution back into the process tank, without inhibiting tank port cleaning. When following the recommended spray device operating requirements, the High Purity Hygienic Spray Deflector's design reduces solution from exiting open-to-atmosphere tanks – and reduces vent filter saturation and the potential for a burst rupture disk.

Applications include CIP tanks, process tanks, bioreactors, fermenters, and more.

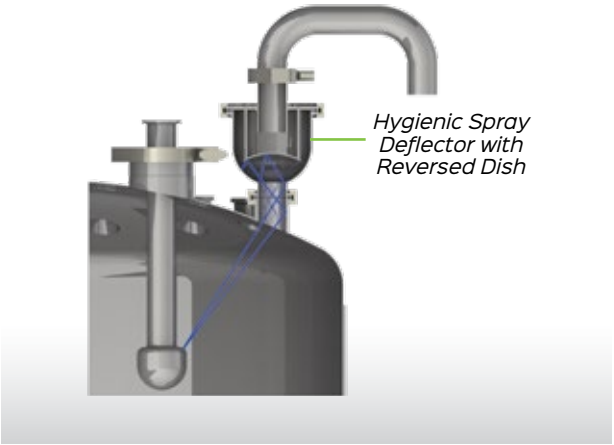
High Purity Hygienic Spray Deflectors

Reduce solution from entering your vent filter and minimize filter saturation.

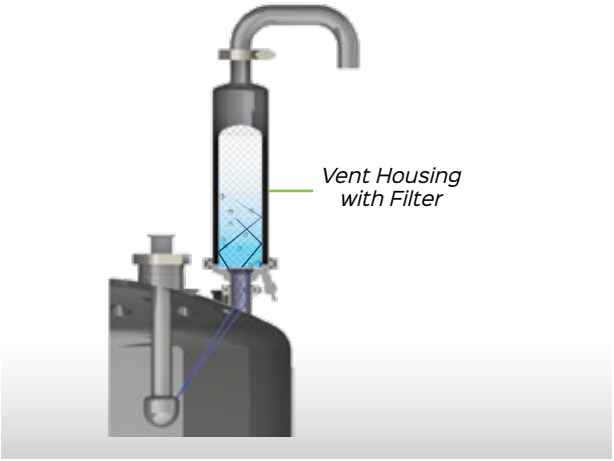
Tank Vent



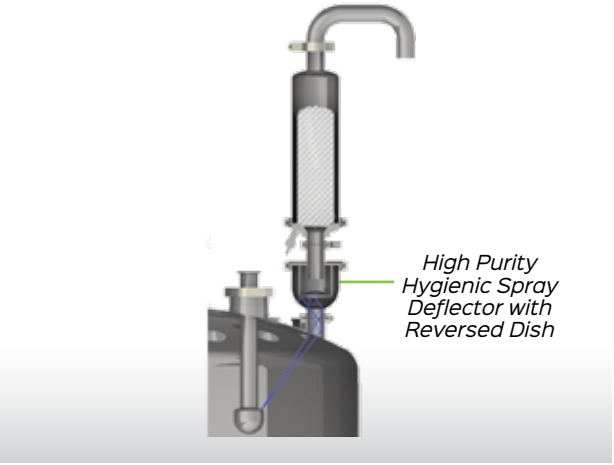
Tank Vent with High Purity HSD



Tank Vent Filter Housing



Tank Vent Filter Housing with High Purity HSD



Watch the High Purity Hygienic Spray Deflector in Action!

QUICK TIPS

Achieving Optimum Results

- Follow recommended spray device operating requirements.
- Include vent filter heating jacket where applicable.

GOOD TO KNOW

Features

Material: 316Lss
Wetted finish: 15 µin Ra
Non-wetted finish: 32 µin Ra
Face-to-face dimensions: 1.5" TC = 6.03"
Face-to-face dimensions: 2.0" TC = 5.91"

High Purity Hygienic Spray Deflector Model Number Key

Example Model #:
HSD-TC15-E-1532EP

1-3	**Component**		
	HSD	High Purity Hygienic Spray Deflector	
4, 5	**Connection Type**		
	TC	Tri-Clamp (Standard)	
6, 7	**Connection Size**		
	15	1.5"	
	20	2.0"	
8	**Gasket Material**		
	E	EPDM (Standard)	
	V	Viton	
	P	Platinum Cured Silicone	
	T	Tuf-Flex	
9, 10	**ID Finish**		
	15	15 µin Ra (Standard)	
11, 12	**OD Finish**		
	32	32 µin Ra (Standard)	
13, 14	**Polish**		
	EP	Electropolish (Standard)	

High Purity Hygienic Spray Deflector Replacement Parts

HSD Connection Size (Body Size)	Component	Material	Part #
1.5" TC and 2.0" TC (4.0" Body Size)	Gasket	EPDM	**021031**
	Gasket	Viton	**020474**
	Gasket	Platinum Cured Silicone	**024582**
	Gasket	Tuf-Flex	**046739**
	Clamp	--	**020225**

NOTE: Gasket and clamp parts are for listed body size.

1 Clamp
2 Gasket

Component Documentation Packages (CDP)

Hygienic Spray Deflectors		
Document Name	**Document Description**	**CDP - Premium**
Material Test Report (MTR)	An MTR is a quality assurance document that certifies a material's chemical and physical properties and states the product made is compliant within the specific set standards. It also states the identification number of the batch/lot of steel, which the part/material was made from at the mill.	✓
3-A Certificate	A 3-A certificate authorization for the supplied product (if applicable to the component).	N/A
Sani-Matic Certificate of Conformance (CoC)	A document that specifies order information, associated heat numbers (as applicable), along with certificate of conformance (CoC) to Sani-Matic practices.	✓
Certified "As-Built" Drawings	Certified drawing(s) that documents the as-built conditions of the component produced in manufacturing.	✓
Heat Map	A certified document that contains details of an assembly where each of the material's heat numbers are recorded. A heat map can stand by itself or be combined with a weld map and slope map.	✓
Weld Map	A certified document that contains details of a piping assembly where each weld is identified with a unique number. The identifying number is used on the weld log which profiles each weld.	N/A
Weld Log	A certified document that records all welds contained in a weld map. The profile of each weld recorded includes heat numbers of the material, the detail where the weld is located, the welder's I.D., the date of the weld, the machine used to weld, and the Quality Inspector's approval sign-off.	N/A
Surface Finish Certification	Part of the as-built drawing that states Sani-Matic has verified the assembly or that the parts' surface finish meets the agreed upon requirements in the sales order.	✓
Electropolish Certification (EP Cert)	A certified document that states that electropolishing was performed to the assembly or parts as agreed upon in the sales order.	✓
Passivation Certification	A certified document that states that citric acid passivation was performed to assemblies or parts as agreed upon in the sales order.	✓

NOTE: Hygienic Spray Deflectors require purchase of a CDP-Premium documentation package.
NOTE: USP Class VI certificates for wetted elastomers are included with CDP-Premium.

High Purity Gooseneck Vents

A Simple Tank and Vessel Venting Solution

These vents are used on process tanks for air venting. Construction of the vent is of 316L stainless steel fittings with all interior and exterior welds ground & polished. The outlet connection is butt weld, which can be welded onto if downtubes or other process piping runs to drain are required.

High Purity Gooseneck Vents

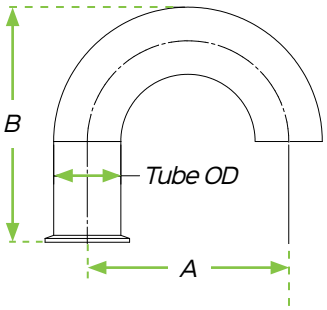
Description	Finish	Tank Connection	Part #
Gooseneck Vent - High Purity	20 Ra	1.5" TC	**323525***
		2.0" TC	**323526***
		2.5" TC	**323527***
		3.0" TC	**323528***
		4.0" TC	**323529***
		6.0" TC	**323530***

NOTE: Tank vent sizing is the responsibility of the installing user.

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

Dimensional Information

Tank Connection	"A"	"B"
1.5" TC	4.5"	6.0"
2.0" TC	6.0"	7.0"
2.5" TC	7.5"	8.0"
3.0" TC	9.0"	10"
4.0" TC	12"	12"
6.0" TC	18"	18"



Component Documentation Packages (CDP)

Gooseneck Vents - High Purity		
Document Name	**Document Description**	**CDP - Basic**
Material Test Report (MTR)	An MTR is a quality assurance document that certifies a material's chemical and physical properties and states the product made is compliant within the specific set standards. It also states the identification number of the batch/lot of steel, which the part/material was made from at the mill.	✓
3-A Certificate	A 3-A certificate authorization for the supplied product (if applicable to the component).	N/A
Sani-Matic Certificate of Conformance (CoC)	A document that specifies order information, associated heat numbers (as applicable), along with certificate of conformance (CoC) to Sani-Matic practices.	✓

NOTE: Indicate at time of order the need for any documentation packages. Documentation may not be available after product is delivered and may incur additional charges.

Digital Process Recorder (DPR)

Powered by SaniTrend® Cloud

Simplify and Improve Process Data Collection

Digital Solutions from Sani-Matic include the Digital Process Recorder (DPR), powered by SaniTrend® Cloud, an automated software solution providing secure acquisition and storage of critical process data. The DPR can replace traditional data collection methods like paper chart recorders.

The DPR provides critical data collection for applications including process equipment, Clean-In-Place (CIP), Clean-Out-of-Place (COP), and more.

Two product tiers of the DPR family are available – Charts and Reports. The Charts tier includes interactive data storage and comment/review functions, along with live dashboard views, email & text notifications, and more.

The Reports tier takes a “running signal” from the process and organizes the data into discrete reports, allowing for easier review of report-based data.

Digital Process Recorder

Item	Internet Connection	What's Included	Part #
Digital Process Recorder (DPR)	Ethernet/RJ45	All Hardware + 1 Year Software	**848413**
Digital Process Recorder (DPR)	WiFi	All Hardware + 1 Year Software	**848474**
DPR Charts (Annual Renewal)	N/A	1 Year Software	**SANITREND CLOUD DPR CHARTS RENEWAL**
DPR Reports (Annual Renewal)	N/A	1 Year Software	**SANITREND CLOUD DPR REPORTS RENEWAL**

Industry Standards

✓ **Meets FSMA and HACCP** requirement for reporting.

✓ **Meets PMO** requirements for electronic records [Appendix H, Section V (Criteria for the Evaluation of Electronic Data Collection, Storage, and Reporting)].

SaniTrend® Cloud DPR Tier Comparison

Features	Charts	Reports
Cloud Access - Unlimited Users	✓	✓
Store and Forward Capabilities	✓	✓
Cloud Documentation Storage	✓	✓
Live Dashboard Views	✓	✓
Email & SMS (Text) Notifications	✓	✓
Analog & Digital Data Trending	✓ *with Comment Feature*	✓
Cycle Based Report		✓
Report Comment & Approval Feature		✓

Applications

COP

CIP

Pasteurizer

Freezers

Process Data Recording

Capabilities
The Digital Process Recorder can handle up to **Eight (8) Analog Input Signals** and up to **Twelve (12) Digital Input Signals**.
Store and Forward Capabilities - allow for local data storage when internet is unavailable. When internet is re-connected, data is pushed to the SaniTrend Cloud online data storage portal.
Connection Status is shown within the online portal and locally at the DPR's HMI.

Installation & Operating Requirements

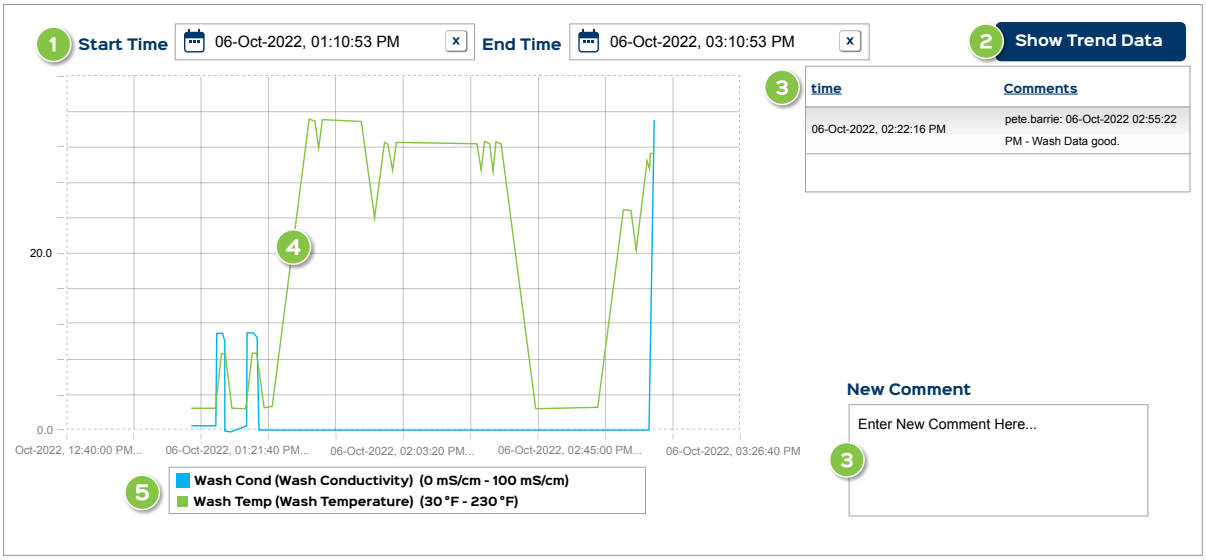
· **Control Panel Requirements**
- Installation of DPR Control Panel (NEMA 4X, 16" W x 20" H x 8" D) on frame or wall
- 120V AC / 6 Amp Power
- Broadband Internet Access (Ethernet/RJ45 or WiFi - WiFi requires optional WiFi access module)
- DPR Reports Requires Hard Wired Running Signal or Communication (Ethernet/RJ45) to Plant Equipment/ Network for Running Signal*

· **Internet Browser (for SaniTrend Cloud online portal access)**
- Chrome (recommended) with Screen Size - 1920x1080 (recommended)

**NOTE: Digital Process Recorder (DPR) requires the use of an Allen-Bradley CompactLogix or ControlLogix PLC processor for communication.*

SaniTrend Cloud Online Portal

Digital Process Recorder - Charts

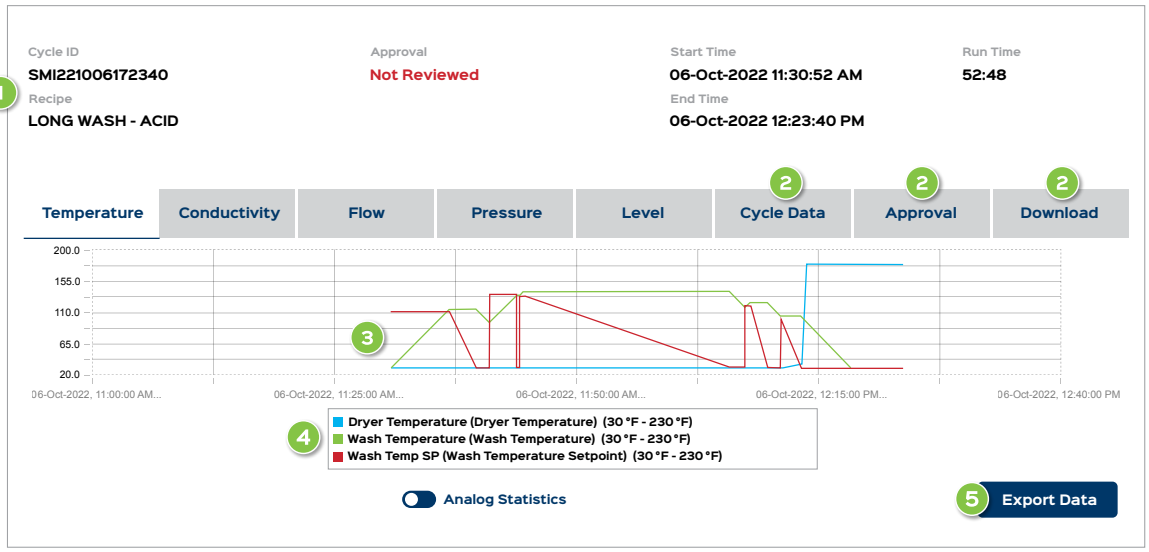


1. **Date and Time Based Data Review:** Review data from any date/time range.
2. **Review or Export Data:** Review a table of trend data and export into a .csv file.
3. **Electronic Comment:** Add text comments that are electronically saved with date/time stamp, date/time of commented period, and username capture.
4. **Charted Data:** Interactive charts show digital and analog data.
5. **Customizable Legend:** Customize your process data name, description, and range.

Learn More on the Digital Process Recorder

Dashboards, Live System Status, and Charts or Reports - Accessible Anytime, Anywhere

Digital Process Recorder - Reports



1. **Date and Time Based Data Review:** Review data that is grouped together based on the running signal of the equipment - including a unique ID, text based name of operation (if provided by equipment), approval status, start/stop time, and run time.
2. **Electronic Comments, Cycle Data, Reports:** Review a table of trend data, add text comments and change approval status that are electronically saved with date/time stamp, date/time of commented period, and username capture, and download a report of this run time data.
3. **Charted Data:** Multiple interactive charts show digital and analog data.
4. **Customizable Legend:** Customize your process data name, description, and range.
5. **Export Data:** Export data into a .csv file.

Process Tanks

Tanks Designed for Your Process

Sani-Matic has manufactured high-quality tanks for the food & beverage industries for decades. Our tanks can be designed and manufactured to meet specific industry standards upon request.

All Sani-Matic standard tanks, from 135 gallons up to 1,075 gallons, are manufactured in Sun Prairie, WI, which allows for quick turnaround times on our high-quality tanks. Tanks can be made for various processes like CIP, Process, Holding, Surge, Mixing, and more. With a variety of standard sized tanks that can be customized with various features, Sani-Matic tanks will be sure to fit your process needs.

Standard food & beverage grade tanks are available in two tank head variations – Pan & Radius Heads or Flanged & Dished Heads.

QUICK TIPS

Improve your tank with an innovative line of components and accessories.

Whether you want to keep your tank clean by including a Spray Device & Supply Tube or are looking to add visibility to your process with a VL-3A Sanitary Sight Glass, or VessaLite®, Sani-Matic has the tank components you need.

Standard Tank Sizes & Details

Volume (Nominal)	Working Volume (Without Spray Device)	Working Volume (With Spray Device)	Tank ID	Sidewall Height	Thickness (Ga)
Pan & Radius Heads					
135 gal	130 gal	110 gal	30.00"	47"	14
225 gal	210 gal	180 gal	38.25"	47"	14
485 gal	460 gal	420 gal	45.50"	71"	12
700 gal	660 gal	575 gal	55.00"	71"	12
940 gal	900 gal	810 gal	55.00"	94"	10*
Flanged & Dished Heads					
160 gal	155 gal	130 gal	30.00"	47"	14
275 gal	250 gal	225 gal	38.25"	47"	14
550 gal	530 gal	495 gal	45.50"	71"	12
850 gal	775 gal	715 gal	55.00"	71"	12
1075 gal	1010 gal	950 gal	55.00"	94"	10

**NOTE: Bottom head is 7 Ga*

Standard Features
• 304ss wetted surfaces
• 32 µin Ra ID wetted surfaces
• ID welds color cleaned
• OD welds color cleaned or bead blasted
• Non-sealing lift off cover
• Heavy duty 304ss tubular or pipe legs
• Sanitary tri-clamp type ports

Custom Options
• 316ss wetted surfaces
• 20 or 25 µin Ra ID wetted surfaces
• ID welds ground & polished
• OD welds ground & polished
• Gasketed manway (for tanks with spray devices)
• Passivation
• Material Test Reports (MTRs)
• Adjustable tank feet
• Insulated sidewalls
• Anti-siphon for water inlet
• Anti-vortex device
• Other ports types (beveled, flanged, NPT, etc.)
• Sidewall overflow or center skimmer overflow
• Vents - mushroom or gooseneck

HYGIENIC COMPONENT SOLUTIONS

2025

Process Protection & Optimization

sanimatic.com

Sani-Matic, Inc. **(p)** 800-356-3300 **(f)** 608-222-5348 HCS-0001.8