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## Hygienic Components

# 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

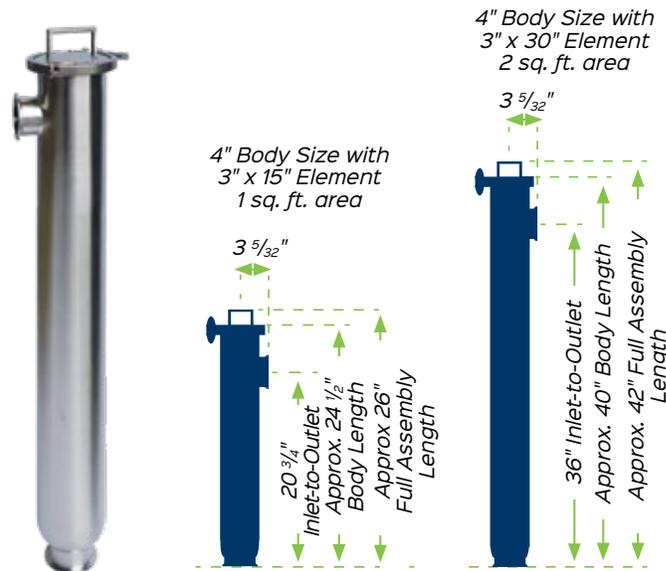
### How much particulate can the Angle-Line Basket Strainer capture?

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  $\mu$ in 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:**

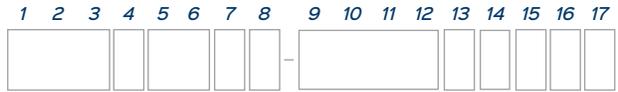
Connection Size	Recommended Max Flow (gpm)
1.5"	55
2.0"	105
2.5"	165
3.0"	235
4.0"	220



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



<b>1-3</b>	<b>Strainer Model</b>	ALB Angle-Line Basket
<b>4</b>	<b>Body Length</b>	S SHORT Body L LONG Body
<b>5-6</b>	<b>Connection Size</b>	15 1.5" 20 2.0" 25 2.5" 30 3.0" 40 4.0"
<b>7</b>	<b>Connection Type</b>	T Tri-Clamp (Standard) H Tri-Clamp - High Pressure Clamp W Butt Weld*
<b>8</b>	<b>Finish / Polish</b>	3 32 µin Ra / Mechanical Polish (Standard)
<b>9-12</b>	<b>Element Type / Size</b>	P062 Perforated / 0.0625" (1/16")* P093 Perforated / 0.09375" (3/32") P125 Perforated / 0.125" (1/8") P250 Perforated / 0.25" (1/4")
<b>13</b>	<b>Flow Direction</b>	S Side-Inlet (Standard)
<b>14</b>	<b>Seal Kit</b>	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
<b>15</b>	<b>Option #1</b>	0 None (Standard) 2 Dual Sight Glass* D Drain / Sample Port* 3 Dual Sight Glass & Drain / Sample Port*
<b>16</b>	<b>Option #2</b>	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)*
<b>17</b>	<b>Option #3</b>	0 None (Standard)

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

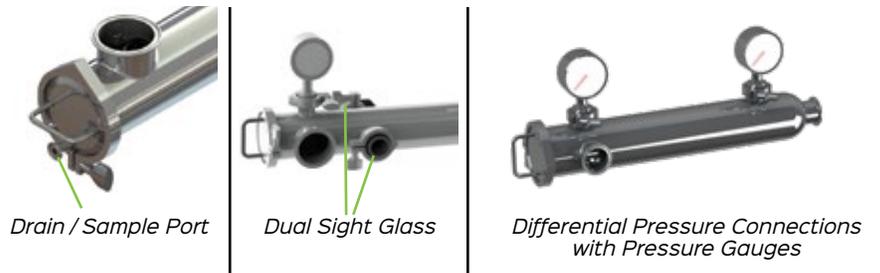


See a demonstration of the ALB Strainer and how to retrofit to existing Angle-Line strainers!

## 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.



Strainer sight glasses provide visual access to particulate buildup levels.

## Cv Values & Pressure Drops for ALB Strainers

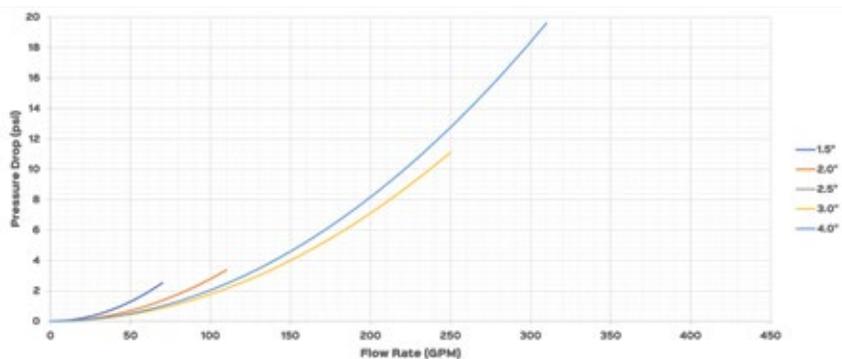
Cv values or the provided pressure drop tables can be used to estimate the pressure drop across a strainer at a given flow rate. Cv values are for water at 70 °F. Contact Sani-Matic for inquiries on pressure drops for fluids with other viscosities.

### Cv Values

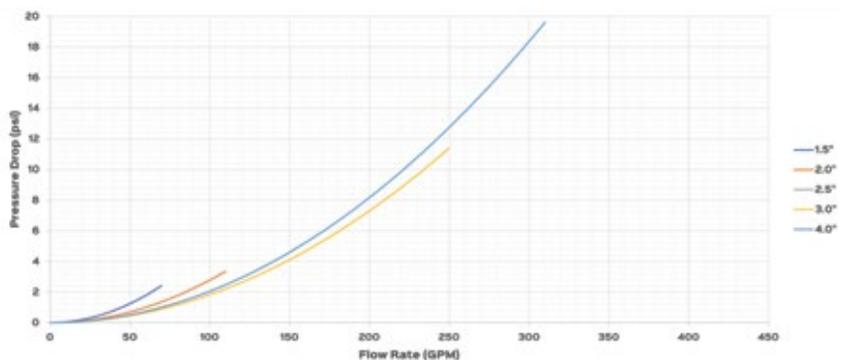
Body Length	Connection Size	Cv
LONG (36")	1.5"	44
	2.0"	60
	2.5"	70
	3.0"	75
	4.0"	70
SHORT (20 3/4")	1.5"	45
	2.0"	60
	2.5"	70
	3.0"	74
	4.0"	70

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.

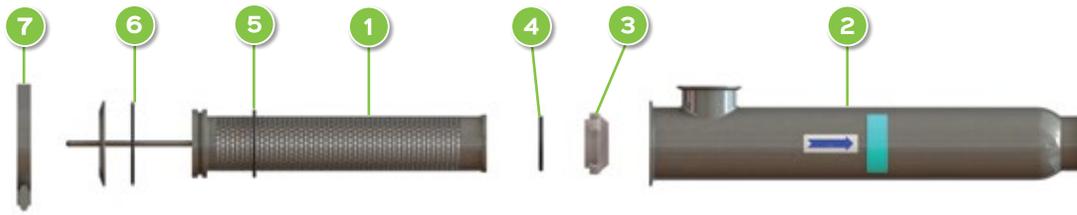
**Angle-Line Basket Strainer Pressure Drop: 4.0" Body, Standard Flow, LONG Body (36")**



**Angle-Line Basket Strainer Pressure Drop: 4.0" Body, Standard Flow, SHORT Body (20 3/4")**



# 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		
<ul style="list-style-type: none"> <li>4 End Cap O-Ring</li> <li>5 Element O-Ring</li> <li>6 TC Gasket</li> </ul>		
Strainer Model	Seal Material (Element O-Ring / TC Gasket / End Cap O-Ring)	Kit Part #
ALB Strainer	Teflon Encapsulated Silicone / EPDM / EPDM	<b>323954</b>
ALB Strainer	Teflon Encapsulated Silicone / Tuf-Flex / EPDM	<b>333688</b>
ALB Strainer	Teflon Encapsulated Silicone / Viton / Viton	<b>333689</b>
ALB Strainer	Teflon Encapsulated Silicone / Tuf-Flex / Viton	<b>333691</b>

## 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%	<b>324357*</b>	<b>324554*</b>	<b>324572*</b>	<b>324579*</b>
3/32"	33%	<b>324363</b>	<b>324399</b>	<b>324571</b>	<b>324578</b>
1/8"	40%	<b>324356</b>	<b>324381</b>	<b>324568</b>	<b>324577</b>
1/4"	58%	<b>323816</b>	<b>324367</b>	<b>324558</b>	<b>324576</b>

\*Longer lead times will apply.



*1/4" 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	<b>056231</b>
Clamp, 2.5"	<b>020083</b>
Gasket, 2.5", EPDM	<b>021029</b>

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	<b>060887</b>
Clamp, Tri-Clamp, Standard, 0.5" / 0.75"	<b>020224</b>
Gasket, Tri-Clamp, EPDM, 0.75"	<b>021037</b>

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	<b>058250</b>
0-200 psig	<b>058251</b>



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	<b>720826</b>



## 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"	<b>324583</b>	<b>324580</b>
40	425	0.0150"	<b>324584</b>	<b>058080</b>
60	250	0.0092"	<b>324585</b>	<b>324581</b>
100	150	0.0060"	<b>324586</b>	<b>324582</b>



60 Mesh Underlay

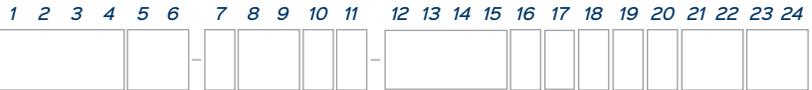
## ALB End Cap Removal Tool (For use with 345348 end cap)

Description	Part #
ALB End Cap Removal Tool, 304ss	<b>346908</b>



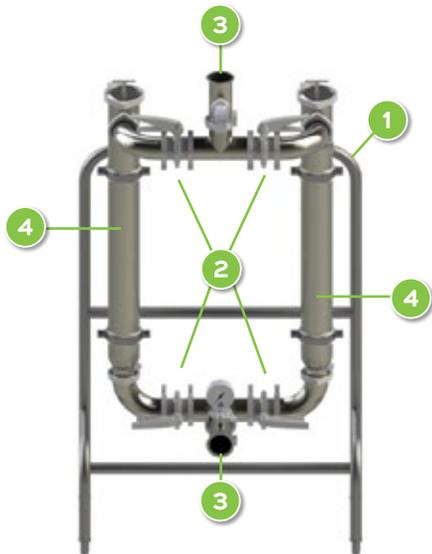
# Multi-Angle-Line Basket Strainer Model Number Key

Example Model #: **MALBDV-S30T3-P250S00000000**



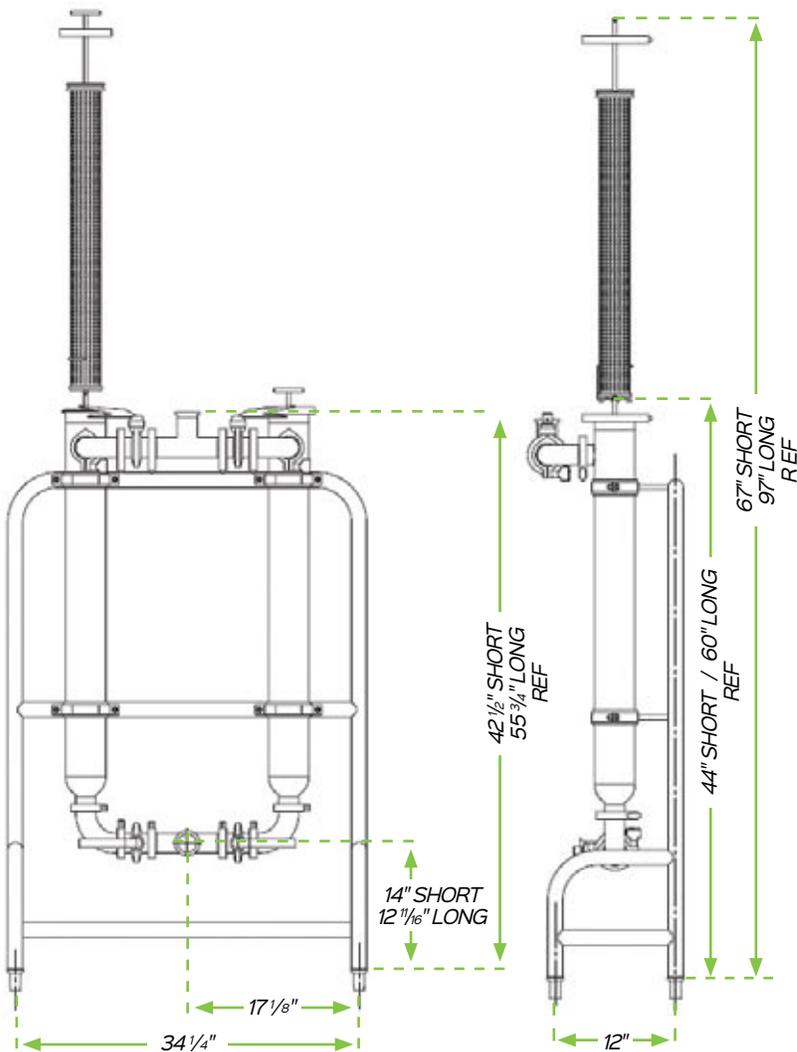
<b>1-4</b>	<b>Strainer Model</b>	MALB Multi-Angle-Line Basket
<b>5, 6</b>	<b>Configuration Type</b>	DV Dual Strainers - Vertical
<b>7</b>	<b>Body Length</b>	S SHORT Body L LONG Body
<b>8, 9</b>	<b>Connection Size</b>	15 1.5" 20 2.0" 25 2.5" 30 3.0" 40 4.0"
<b>10</b>	<b>Connection Type</b>	T Tri-Clamp (Standard)
<b>11</b>	<b>Finish / Polish</b>	3 32 µin Ra / Mechanical Polish (Standard)
<b>12-15</b>	<b>Element Type / Size</b>	P062 Perforated / 0.0625" (1/16")* P093 Perforated / 0.09375" (3/32") P125 Perforated / 0.125" (1/8") P250 Perforated / 0.25" (1/4")
<b>16</b>	<b>Flow Direction</b>	S Side Inlet (Standard)
<b>17</b>	<b>Seal Kit</b>	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
<b>18</b>	<b>Option #1</b>	0 None (Standard) 2 Dual Sight Glass* D Drain / Sample Port* 3 Dual Sight Glass & Drain / Sample Port*
<b>19</b>	<b>Option #2</b>	0 None (Standard)
<b>20</b>	<b>Option #3</b>	0 None (Standard)
<b>21, 22</b>	<b>Valve Kits</b>	00 None MB Manually Operated Butterfly Valves PB Pneumatically Operated Butterfly Valves*
<b>23, 24</b>	<b>Pressure Kits</b>	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