



# PVC & CPVC Y-STRAINERS

YS-2-0406

## In-Line Protection of Process Equipment



Spears® Y-type sediment strainers are the perfect choice for in-line removal of suspended solids, sediment, dirt and debris. Convenient removable strainer allows quick cleaning with an assortment of screen mesh sizes to meet a variety of application needs. Spears® Y-Strainers are produced from PVC Gray, PVC Clear for fluid visibility and CPVC Gray for higher temperatures. Available with socket, Special Reinforced (SR) threads, flanged, or True Union socket and SR threaded end connectors in IPS sizes 1/2" - 4".

### In-Line Horizontal or Vertical Installation

Line fluid flow is diverted through the interior of the strainer to fully entrap sediment, dirt and debris in either horizontal or vertical installation.

### Rugged PVC or CPVC Construction

Computer engineered design places strength where it's needed most. PVC or higher heat handling CPVC materials provide exceptional chemical and corrosion resistance.

### Special PVC Clear-Body Option

Allows visibility of internal flow and easy monitoring of sediment accumulation in the strainer.

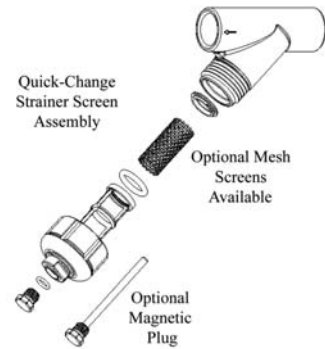
### Convenient Removable Strainer Basket

Strainer easily unscrews from Y-body for quick cleaning of strainer screen.

#### Sample Engineering Specification

All sediment strainers shall be Y-type constructed from PVC Type I, ASTM D 1784 Cell Classification 12454 or CPVC Type IV, or ASTM D 1784 Cell Classification 23447. All O-rings shall be EPDM or FKM. All Y-strainers shall have replaceable PVC, CPVC or Type 316 stainless steel screens and O-ring sealed drain plugs with magnetic drain plug option. All threaded Y-Strainers shall have Special Reinforced (SR) threads. All Y-Strainers, sizes 1/2" - 2" shall be pressure rated to 150 psi, sizes 3" - 4" to 90 psi for water at 73° F, as manufactured by Spears® Manufacturing Company.

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### EPDM or FKM O-ring Options

Choice of high grade EPDM or FKM O-rings allows application specific selection for optimum chemical resistance.

### Full Service Pressure Rating

Sizes 1/2" - 2" Pressure Rated to 150 psi @ 73° F  
Sizes 3" - 4" to 90 psi @ 73° F

### PVC, CPVC and Stainless Steel Strainer Screen Assortment Options

Standard Y-Strainers are assembled with 1/32" perforation (20 Mesh) PVC screens for PVC Strainers and CPVC Screens for CPVC Strainers. Optional perforation sizes and 316 Stainless Steel Mesh Screens are available.

### Standard or Optional Magnetic Drain Plug for Quick Flushing

Standard plug easily removes for quick flushing of strainer or installation of a bleed-off valve. Optional magnetic plug traps ferrous metal particles inside strainer.



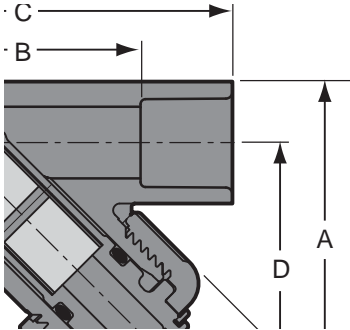
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## Strainer Screen Mesh Options

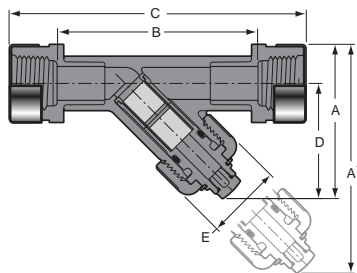
Stock Y-Strainers are assembled with standard 1/32" (20 mesh) perforated PVC or CPVC Screens. Type 316 stainless steel screws are available. PVC and CPVC screens are perforated; stainless steel screens are wire mesh. Additional stainless steel mesh screen sizes can be custom ordered, down to 400 mesh.

Mesh	Sieve Opening Size (in.)	Perforation Designation (inch)
8 Mesh	0.094	3/32
12 Mesh	0.062	1/16
20 Mesh	0.033	1/32
30 Mesh	0.024	Use Mesh No.



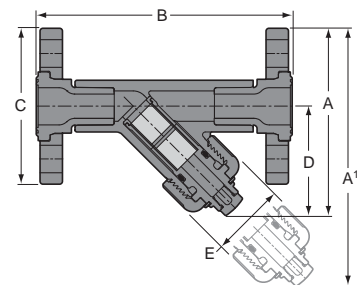
## Socket Y-Strainer Dimensions & Weights

Nominal Size	Dimension Reference (inches, ± 1/16)						Approx. Wt. (Lbs.)	
	A'	A	B	C	D	E	Socket	
							PVC	CPVC
1/2	5	3-1/16	1-9/16	3-3/8	2-9/16	1-5/8	.31	.33
3/4	5-3/4	3-11/16	2	4	3	2	.50	.53
1	6-7/8	4-7/16	2-1/2	4-3/4	3-5/8	2-1/4	.85	.90
1-1/4	8-5/32	5-5/16	3-1/16	5-9/16	4-1/4	2-13/16	1.21	1.28
1-1/2	9-1/8	6	3-9/16	6-5/16	4-7/8	3-3/16	1.66	1.76
2	11-3/4	7-5/8	4-1/2	7-1/2	6-3/16	3-1/2	2.96	3.10
3	15	9-11/16	6-9/16	10-5/16	7-5/8	5-1/8	5.34	5.64
4	19-11/16	12-1/2	8-5/8	13-1/8	9-7/8	6-9/16	9.97	10.45



## SR Threaded Y-Strainer Dimensions & Weights

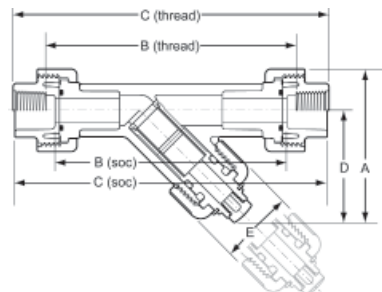
Nominal Size	Dimension Reference (inches, ± 1/16)						Approx. Wt. (Lbs.)	
	A'	A	B	C	D	E	SR Threaded	
							PVC	CPVC
1/2	6-1/2	4-11/16	3-5/8	5-1/16	4	2-3/8	.31	.33
3/4	7-5/8	5-7/16	4-3/8	5-13/16	4-9/16	2-3/8	.50	.53
1	8-5/8	6-1/8	5-3/16	7	5-1/8	2-3/8	.85	.90
1-1/4	11-1/8	7-3/4	6	7-15/16	6-1/2	3-1/2	1.21	1.28
1-1/2	12-1/4	8-7/8	6-15/16	8-13/16	7-1/2	3-1/2	1.66	1.76
2	14-1/16	10-3/16	8-1/8	10-1/8	8-1/2	3-1/2	2.96	3.10
3	20	14-13/16	11	14-1/4	12-7/16	6-5/8	5.34	5.64
4	25-13/16	18-1/2	14	14-3/4	15-5/8	7-15/16	9.97	10.45



## Flanged Y-Strainer Dimensions & Weights

Nominal Size	Dimension Reference (inches, ± 1/16)						Approx. Wt. (Lbs.)	
	A'	A	B	C	D	E	Flanged	
							PVC	CPVC
1/2	5-13/16	4-3/16	5-11/16	3-1/2	2-1/2	1-5/8	.82	.85
3/4	7-1/8	5	6-7/16	3-7/8	3-1/8	2	1.23	1.28
1	8-3/16	5-3/4	7-1/4	4-1/4	3-5/8	2-1/4	1.70	1.81
1-1/4	9-7/16	6-9/16	8-1/8	4-5/8	4-9/32	2-13/16	2.40	2.52
1-1/2	10-7/16	7-3/8	9-3/16	5	4-7/8	3-3/16	3.07	3.25
2	13-1/4	9-1/8	10-3/8	6	6-3/16	3-1/2	5.20	5.42
3	16-21/32	11-3/8	12-1/32	7-1/2	7-5/8	5-1/8	9.44	10.07
4	21-19/32	14-5/16	14-9/16	9-1/16	9-7/8	6-9/16	14.87	16.15

Note: 4" flanged Y-strainer uses split flange ring



## True Union Y-Strainer Dimensions & Weights

Nominal Size	Dimension Reference (inches, ± 1/16)						Approx. Wt. (Lbs.)			
	A'	A	B		C		D	E	Union	
			Socket	SR Thread	Socket	SR Thread			PVC	CPVC
1/2	5	3-7/16	5-1/8	5-1/2	6-7/8	7	2-1/2	1-5/8	.49	.53
3/4	6-3/16	4-1/8	5-7/8	6-7/16	7-7/8	7-7/8	3	2	.80	.85
1	7-5/16	4-7/8	6-1/2	7-3/8	8-3/4	9	3-5/8	2-1/4	1.13	1.20
1-1/4	8-5/8	5-13/16	7-7/16	6-3/16	9-15/16	10-1/8	4-1/4	2-13/16	1.84	1.90
1-1/2	9-3/4	6-5/8	8-3/16	9	10-15/16	10-15/16	4-7/8	3-3/16	2.44	2.52
2	12-7/16	8-15/16	9-7/16	10-13/16	12-7/16	12-13/16	6-3/16	3-1/2	4.33	4.45
3	16-1/6	10-3/4	12-3/16	13-15/16	16	16-3/4	7-5/8	5-1/8	10.35	10.55
4	20-15/16	13-3/4	15-5/16	17-1/2	19-13/16	20-1/2	9-7/8	6-9/16	18.51	18.80



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