

Universal  
Components  
Inc.



Y-Strainers



# YSB SERIES Y - STRAINER

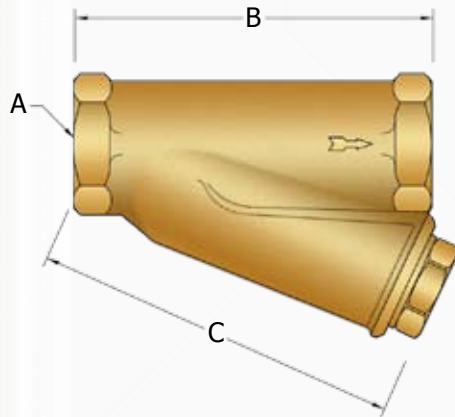


## Features:

- Bronze Y Strainer 1/4" to 4"
- 100% American Made
- Self-Aligning Screen Design
- Available NPT or Solder Connection
- Working Pressure (cold non-shock)
- 125 psi @ 350°F Steam
- 400 psi @ 150°F WOG
- CRN 0E8959.5C



## Dimensions

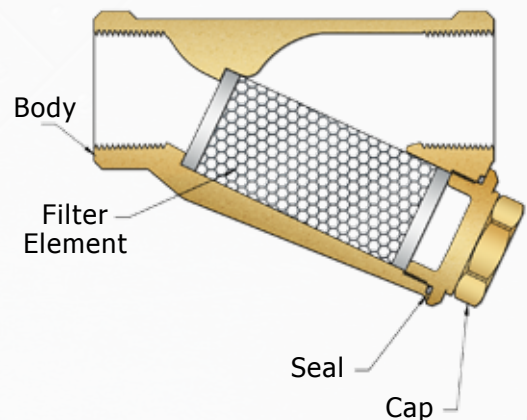


Options (Suffix)	
LF	Lead Free
CT	Tapped Cap
CTP	Tapped Cap w/Plug
20	20 Mesh (std 3/4"-2")
40	40 Mesh
50	50 Mesh (std 1/8"-1/2")
60	60 Mesh
80	80 Mesh
100	100 Mesh

PART #	A	B	C
YSB-2	1/4"	2.00	1.25
YSB-3	3/8"	2.69	2.00
YSB-4	1/2"	2.69	2.00
YSB-6	3/4"	3.87	3.25
YSB-8	1"	4.75	4.00
YSB-10	1-1/4"	5.12	4.25
YSB-12	1-1/2"	5.75	5.00
YSB-16	2"	6.75	6.00
YSB-20	2-1/2"	7.94	5.87
YSB-24	3"	9.12	6.87
YSB-32	4"	11.94	10.12

## Bill of Materials

PART #	Body	Filter Element	Seal	Cap
YSB-2	Cast Bronze ASTM B584	302 Stainless Steel (50 mesh Std)	Teflon (O-Ring)	Brass ASTM B16
YSB-3				
YSB-4				
YSB-6				
YSB-8	Cast Bronze ASTM B584	302 Stainless Steel (20 mesh Std)	PTFE (Gasket)	Brass ASTM B16
YSB-10				
YSB-12				
YSB-16				
YSB-20	Cast Bronze ASTM B584	302 Stainless Steel (20 mesh Std)	PTFE (Gasket)	Cast Bronze ASTM B584
YSB-24				
YSB-32				



# YSCS SERIES Y - STRAINER

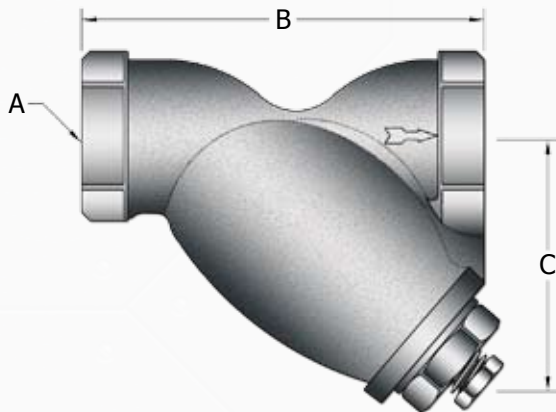


## Features:

- Carbon Steel Y Strainer 1/4" to 3"
- ANSI Class 600Lb
- Epoxy Painted Investment Casting Body & Cap
- NPT Threaded Standard
- Available in Socket Weld Consult Factory
- 1480 psi @ 100°F WOG
- 825 psi @ 800°F WOG
- 600 psi @ 489°F Saturated Steam Non-Shock



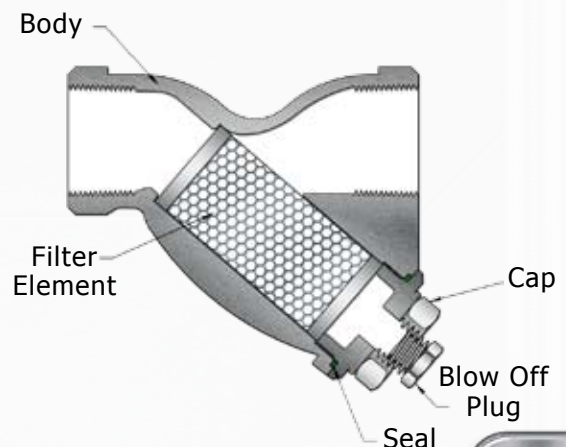
## Dimensions



PART #	A	B	C	Cv
YSCS-2	1/4"	2.93	2.37	7
YSCS-3	3/8"	2.93	2.37	7
YSCS-4	1/2"	2.93	2.37	9.4
YSCS-6	3/4"	3.68	2.81	18
YSCS-8	1"	4.56	3.68	30
YSCS-10	1-1/4"	4.93	4.12	45
YSCS-12	1-1/2"	5.56	4.75	63
YSCS-16	2"	6.93	6.00	98
YSCS-20	2-1/2"	12.0	10.50	130
YSCS-24	3"	12.0	10.50	180

## Bill of Materials

PART #	Body & Cap	Filter Element	Seal	Blow Off Plug
YSCS-2	ASTM B216 WEB	304 Stainless Steel Std Screens: Water Screens- 0.062 Steam Screens- 0.033 (other options available, consult factory)	Spiral Wound Stainless Steel Non- Asbestos	Cast Steel
YSCS-3				
YSCS-4				
YSCS-6				
YSCS-8				
YSCS-10				
YSCS-12				
YSCS-16				
YSCS-20				
YSCS-24				



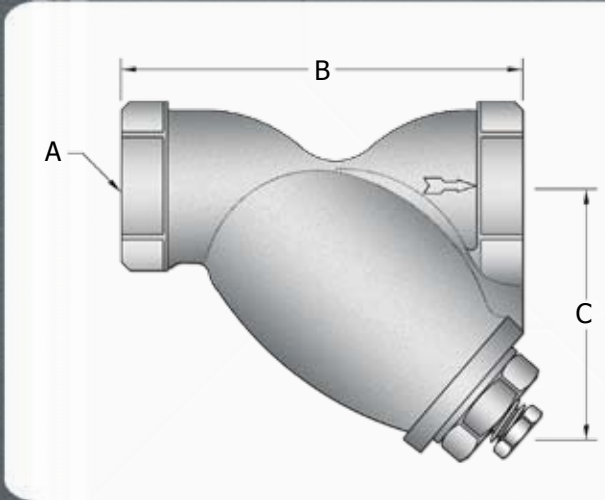


# YSSS SERIES Y - STRAINER



## Features:

- Stainless Steel Y Strainer 1/4" to 3"
- ANSI Class 600Lb
- Investment Casting Body & Cap
- NPT Threaded Standard
- Available in Socket Weld Consult Factory
- 1440 psi @ 100°F WOG
- 700 psi @ 1000°F WOG
- 600 psi @ 489°F Saturated Steam Non-Shock

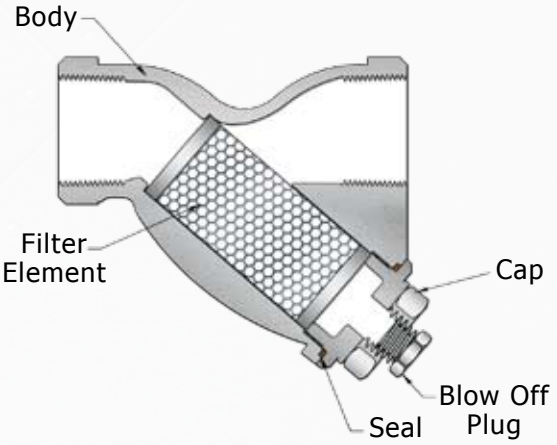


## Dimensions

PART #	A	B	C	Cv
YSSS-2	1/4"	2.93	2.37	7
YSSS-3	3/8"	2.93	2.37	7
YSSS-4	1/2"	2.93	2.37	9.4
YSSS-6	3/4"	3.68	2.81	18
YSSS-8	1"	4.56	3.68	30
YSSS-10	1-1/4"	4.93	4.12	45
YSSS-12	1-1/2"	5.56	4.75	63
YSSS-16	2"	6.93	6.00	98
YSSS-20	2-1/2"	12.0	10.50	130
YSSS-24	3"	12.0	10.50	180

## Bill of Materials

PART #	Body & Cap	Filter Element	Seal	Blow Off Plug
YSSS-2	ASTM A351 CF8M/316	304 Stainless Steel Std Screens: Water Screens- 0.062 Steam Screens- 0.033 (other options available, consult factory)	Spiral Wound Stainless Steel Non- Asbestos	316 Stainless Steel
YSSS-3				
YSSS-4				
YSSS-6				
YSSS-8				
YSSS-10				
YSSS-12				
YSSS-16				
YSSS-20				
YSSS-24				



# YSCI SERIES Y - STRAINER

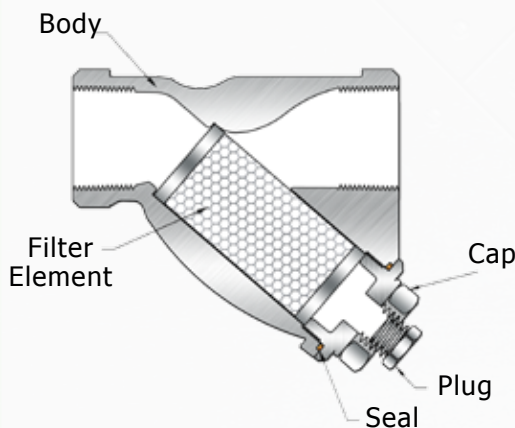
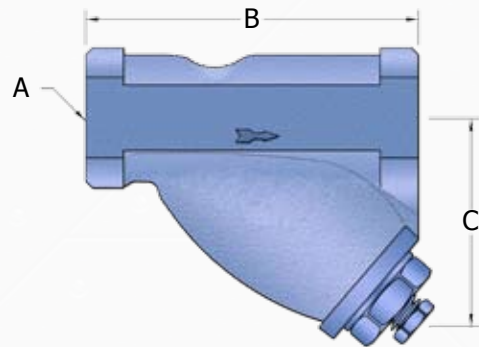


## Features:

- Cast Iron Y Strainer 1/4" to 3"
- ANSI Class 250Lb
- Epoxy Painted Cast Iron Body & Cap
- NPT Threaded Standard
- 400 psi @ 150°F WOG Non-Shock
- 250 psi @ 406°F Saturated Steam Non-Shock
- 250 psi @ 450°F WOG Max Liquid

## Dimensions

PART #	A	B	C	Cv
YSCI-2	1/4"	3.18	2.06	0.7
YSCI-3	3/8"	3.18	2.06	2
YSCI-4	1/2"	3.18	2.06	8
YSCI-6	3/4"	3.75	2.43	15
YSCI-8	1"	4.00	2.62	22
YSCI-10	1-1/4"	5.00	3.37	38
YSCI-12	1-1/2"	5.75	3.87	42
YSCI-16	2"	7.00	4.75	70
YSCI-20	2-1/2"	9.25	5.87	110
YSCI-24	3"	10.00	6.00	160



## Bill of Materials

PART #	Body, Cap & Plug	Filter Element	Seal
YSCI-2	Epoxy Coated Cast Iron ASTM B126 GR B	304 Stainless Steel Std. Screens	Garlock 3200 Non-Asbestos
YSCI-3			
YSCI-4		WOG:	
YSCI-6		1/4" to 2" - 20 Mesh	
YSCI-8		2 1/2" to 3"-1/16"Perf	
YSCI-10		Steam:	
YSCI-12		1/4" to 2" - 30 Mesh	
YSCI-16		2 1/2" to 3"-3/64"Perf	
YSCI-20		(other options available consult factory)	
YSCI-24			



## YS150SS/CS SERIES Y - STRAINER

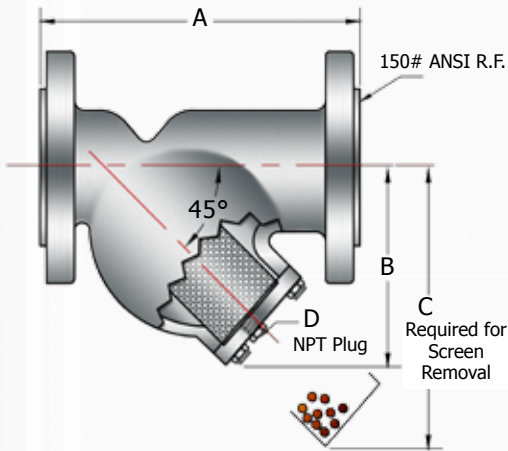
ANSI 150 Class



### Features:

- ANSI Class 150 Flange
- Available in Stainless or Carbon Steel
- Sizes 1/2" Thru 24" (above 12" C/F)
- 275 psi @ 100°F WOG
- 150 psi @ 366°F Saturated Steam

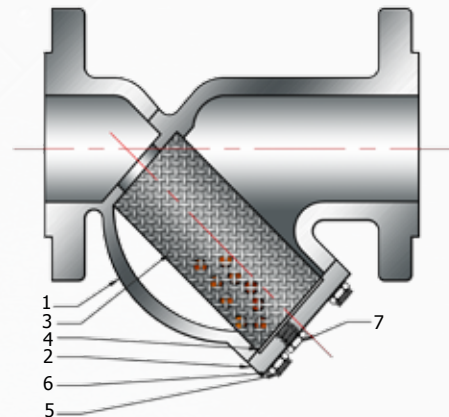
### Dimensions



Size	PART # Stainless Steel	PART # Carbon Steel	A	B	C	D	Lbs	Cv
1/2"	YS150SS-4	YS150CS-4	6.50	3.50	5.00	3/8"	5.5	C/F
3/4"	YS150SS-6	YS150CS-6	7.37	3.75	5.00	1/2"	10.3	C/F
1"	YS150SS-8	YS150CS-8	7.37	3.75	5.00	1/2"	10.3	C/F
1-1/4"	YS150SS-10	YS150CS-10	7.00	4.75	7.00	1/2"	9.8	C/F
1-1/2"	YS150SS-12	YS150CS-12	7.12	4.75	7.00	1/2"	12.5	42
2"	YS150SS-16	YS150CS-16	7.87	5.25	7.00	1/2"	18.0	69
2-1/2"	YS150SS-20	YS150CS-20	9.75	6.50	9.75	1"	28.0	120
3"	YS150SS-24	YS150CS-24	10.06	7.00	10.00	1"	34.0	160
3-1/2"	YS150SS-28	YS150CS-28	12.12	8.25	12.00	1-1/2"	55.0	210
4"	YS150SS-32	YS150CS-32	12.12	8.25	12.00	1-1/2"	55.0	260
5"	YS150SS-40	YS150CS-40	15.62	11.25	20.00	2"	90.0	390
6"	YS150SS-48	YS150CS-48	18.50	13.50	20.00	2"	138.0	550
8"	YS150SS-64	YS150CS-64	21.37	15.50	22.75	2"	220.0	940
10"	YS150SS-80	YS150CS-80	26.00	18.50	28.00	2"	302.0	1700
12"	YS150SS-96	YS150CS-96	29.87	22.25	30.00	2"	550.0	2300

### Bill of Materials

NO.	PART #	YS150CS	YS150SS
1	Body	ASTM A216 GR. WCB	ASTM A351 GR. CF8M
2	Cover	ASTM A216 GR. WCB	ASTM A351 GR. CF8M
3	Screen	Type 304 Stainless Steel	
4	Gasket	Type 304 Stainless Steel Spiral Wound Non-Asbestos	
5	Studs	ASTM A193 GR. B7	ASTM A193 GR. B8 AISI 304
6	Nuts	ASTM A194 GR. 2H	ASTM A194 GR. 8 AISI 304
7	Plug	ASTM A105	ASTM A182 GR. F316



# YS300SS/CS SERIES Y - STRAINER



## Features:

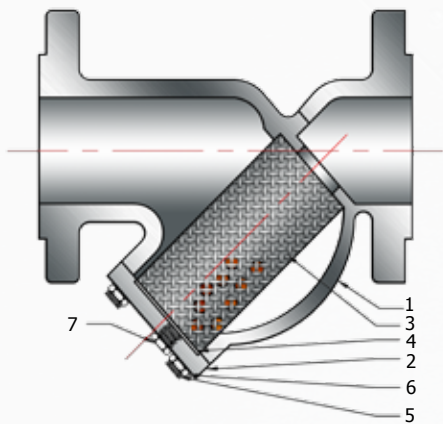
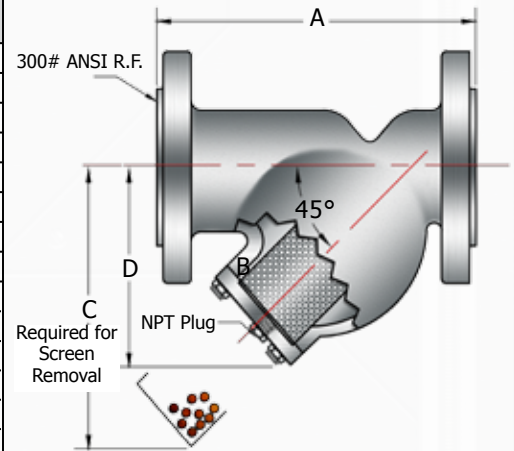
- ANSI Class 300 Flange
- Available in Stainless or Carbon Steel
- Sizes 1/2" Thru 12"
- 720 psi @ 100°F WOG
- 300 psi @ 420°F Saturated Steam

ANSI 300 Class



## Dimensions

Size	PART # Stainless Steel	PART # Carbon Steel	A	B	C	D	Lbs	Cv
1/2"	YS300SS-4	YS300CS-4	6.62	3.50	5.00	3/8"	7.0	C/F
3/4"	YS300SS-6	YS300CS-6	8.31	3.75	5.00	1/2"	10.0	C/F
1"	YS300SS-8	YS300CS-8	8.31	3.75	5.00	1/2"	13.5	C/F
1-1/4"	YS300SS-10	YS300CS-10	10.12	5.50	8.00	1/2"	26.0	C/F
1-1/2"	YS300SS-12	YS300CS-12	10.25	5.50	8.00	1/2"	26.0	42
2"	YS300SS-16	YS300CS-16	9.62	5.25	7.00	1/2"	25.0	70
2-1/2"	YS300SS-20	YS300CS-20	10.62	6.50	9.75	1"	40.0	110
3"	YS300SS-24	YS300CS-24	12.00	7.00	10.00	1"	52.5	160
3-1/2"	YS300SS-28	YS300CS-28	N/A	N/A	N/A	N/A	N/A	N/A
4"	YS300SS-32	YS300CS-32	14.5	8.25	12.00	1-1/2"	90.5	260
5"	YS300SS-40	YS300CS-40	19.31	11.25	17.00	2"	161.5	400
6"	YS300SS-48	YS300CS-48	19.31	13.50	20.00	2"	185.5	570
8"	YS300SS-64	YS300CS-64	23.37	15.50	22.75	2"	300.0	950
10"	YS300SS-80	YS300CS-80	27.37	18.50	28.00	2"	480.0	1600
12"	YS300SS-96	YS300CS-96	32.00	21.75	30.00	2"	728.0	2200



## Bill of Materials

NO.	PART #	YS300CS	YS300SS
1	Body	ASTM A216 GR. WCB	ASTM A351 GR. CF8M
2	Cover	ASTM A216 GR. WCB	ASTM A351 GR. CF8M
3	Screen	Type 304 Stainless Steel	
4	Gasket	Type 304 Stainless Steel Spiral Wound Non-Asbestos	
5	Studs	ASTM A193 GR. B7	ASTM A193 GR. B8 T316SS
6	Nuts	ASTM A194 GR. 2H	ASTM A194 GR. 8 T316SS
7	Plug	ASTM A105	A182 GR. F316

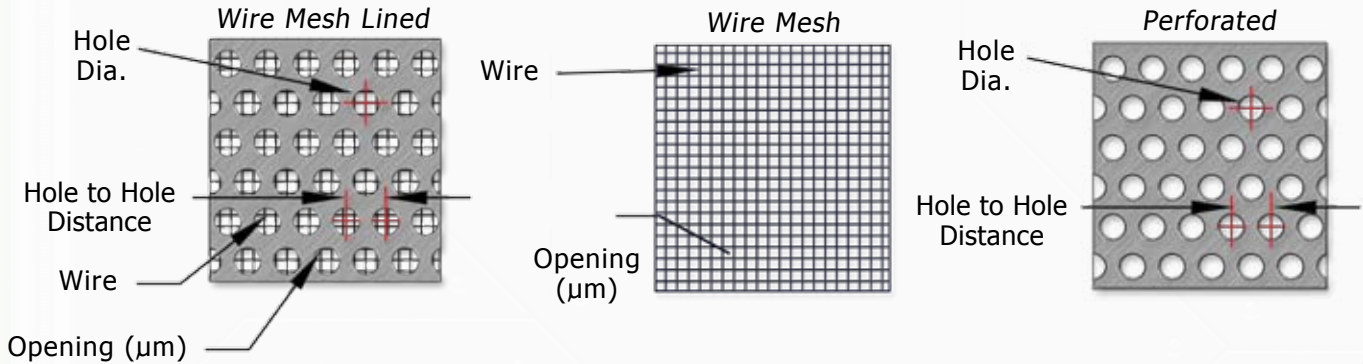


# Y-Strainer Filter Material Data

## General Recommended Sizes By Application

Pipe Size	Filtering Grade	Media					
		Air/Gas	Oil			Steam	Water
			Low Viscosity	Medium Viscosity	High Viscosity		
1/2" Through 2"	Coarse	1/32" Perf	1/16" Perf	1/10" Perf	1/8" Perf	1/32" Perf	1/32" Perf
	Medium	60 Mesh	1/32" Perf	1/16" Perf	1/10" Perf	30 Mesh	20 Mesh
	Fine	100 Mesh	30 Mesh	20 Mesh	1/16" Perf	60 Mesh	30 Mesh
2-1/2" Through 4"	Coarse	1/16" Perf	3/16" Perf	1/4" Perf	3/8" Perf	3/64" Perf	1/8" Perf
	Medium	3/64" Perf	1/8" Perf	3/16" Perf	1/4" Perf	1/32" Perf	1/16" Perf
	Fine	60 Mesh	3/16" Perf	1/8" Perf	3/16" Perf	30 Mesh	3/64" Perf

## Screen Types



### Standard Perf. Sizes

Hole Diameter	Distance hole to hole	% Open Area
1/32"	.055	28
3/64"	.066	36
1/16"	.093	41
1/8"	.187	40
5/32"	.187	63
1/4"	.312	58

### Standard Mesh Sizes

Mesh (Linear in)	Micron (µm)	Wire Diameter
20	914	.014
30	566	.011
40	381	.010
60	246	.007
80	190	.005
100	139	.0045

### NOTES:

- 1.) Unsupported wire mesh strainers are recommended for 2" and under line size not exceeding 200 psi. Anything over these values should use wire mesh lined strainer elements. The most common backing is 5/32" perf.
- 2.) To determine strainer rating, consult engineer. Single strainer applications should be approx. 1/2 opening size of largest projected particle to be strained. However, a good rule of thumb is to not exceed 20 psi drop across a strainer. If exceeding this value, straining may need to be staged with more than one strainer in line. Start with coarse straining and integrate finer additional strainers with finer elements down stream.
- 3.) All strainer mesh and perforated screen 304 stainless steel. Other materials available upon request. (316 SS, Monel)
- 4.) A wide array of nonstandard mesh and perf sizes are available. consult factory for more information.

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