

Strainers

Armstrong



Armstrong®

Tight seating

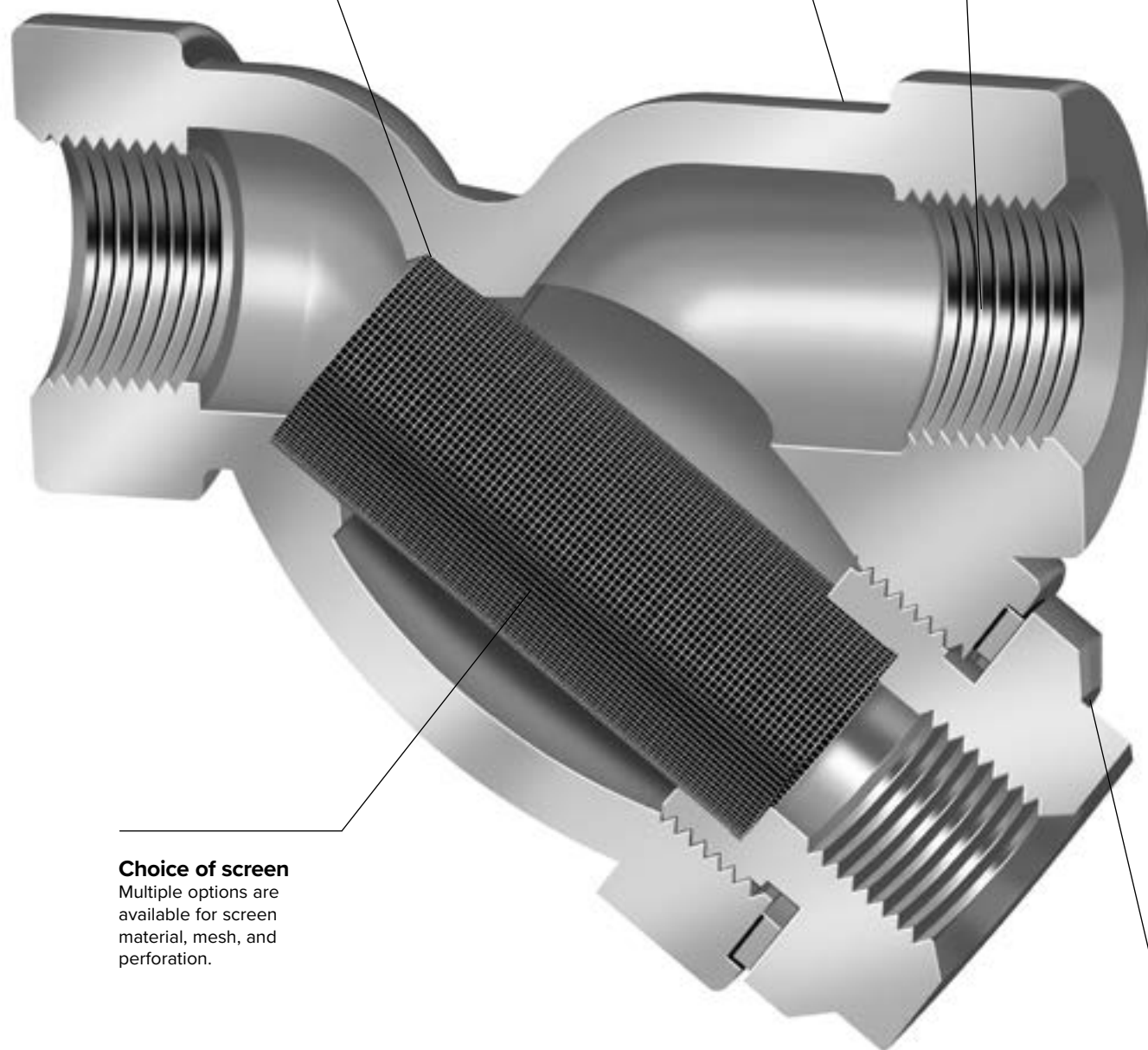
Both ends of the chamber are precisely machined to provide perfectly round and smooth seating surfaces as well as fixed chamber length. The screen seats snugly on the machined surface so no particle larger than the screen opening can escape around the end of the screen.

Choice of body materials

Cast iron, carbon steel, chrome moly, forged steel, stainless steel, bronze.

Connection configurations available

Select screwed, socketweld or flanged.



Choice of screen

Multiple options are available for screen material, mesh, and perforation.

Easy-in, easy-out screwed screen retainers

Straight threads mean less torque is required to obtain a tight seal with proper gasket compression, and less torque is required to remove the retainer. The danger of “freezing in” is considerably less than with hard-to-break tapered pipe threads.

Armstrong Y-Type Strainers

Design Advantages

No-Leak, No-Crush Screen Chambers are assured by precise machining of both ends of the chamber to provide perfectly round and smooth seating surfaces as well as fixed chamber length. The screen seats snugly on the machined surface so no particle larger than the screen opening can escape around the end of the screen.

Easy-In, Easy-Out Screwed Screen Retainers have straight threads. Less torque is required to obtain a tight seal with proper gasket compression. Less torque is required to remove the retainer. The danger of "freezing in" is considerably less than with hard-to-break tapered pipe threads.

Off-Center Blowdown Connections for 2-1/2" and 3" size strainers. The off-center drain permits nearly complete removal of liquid and dirt when blowing down the strainer. And less liquid spills when removing the screen retainer.

How To Order

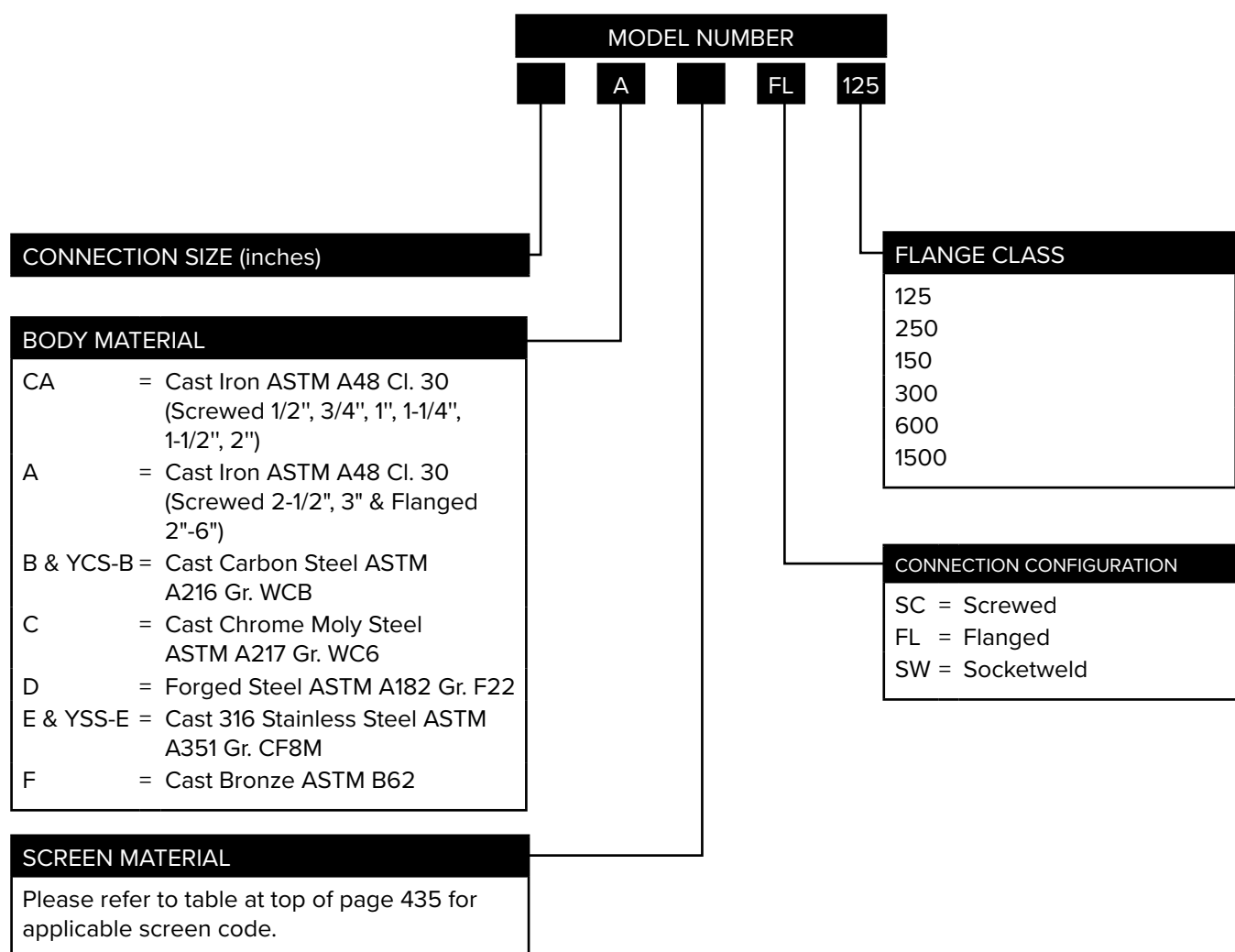
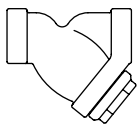
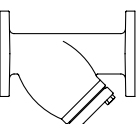
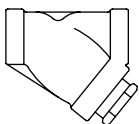
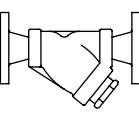
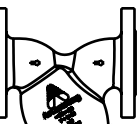
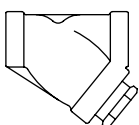
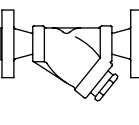
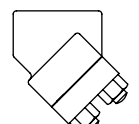
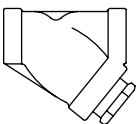
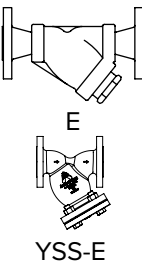
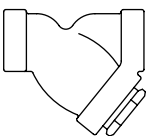


Illustration	Model	Connection Size	Connection Type	Body Material	Pressure Temperature Ratings		Located on Page
					Steam Non-shock	Cold Non-shock	
	CA	1/2", 3/4", 1", 1-1/4", 1-1/2", 2"	Screwed	Cast Iron ASTM-A48 Class 30	250 psig @ 406°F	400 psig @ 150°F	465
	A	2-1/2", 3"					465
	A	2"	125 Flanged		125 psig @ 353°F	175 psig @ 150°F	466
	A	2-1/2" - 6"					466
	A	2"	250 Flanged		250 psig @ 400°F	400 psig @ 150°F	466
	A	2-1/2" - 6"					466
	B	1/2", 3/4", 1"	Screwed & Socketweld 900 lb	Cast Carbon Steel ASTM-A216 Gr. WCB	1 635 psig @ 609°F	2 220 psig @ 100°F	467
	B	1-1/4", 1-1/2", 2", 3"	Screwed & Socketweld 600 lb		1 135 psig @ 562°F	1 480 psig @ 100°F	467
 B	B	1/2", 3/4", 1"	Class 150 Flanged		205 psig @ 390°F	285 psig @ 100°F	468
	B	1-1/4", 1-1/2"					468
	YCS-B	2" - 12"					469
 YCS-B	B	1/2", 3/4", 1"	Class 300 Flanged		605 psig @ 490°F	740 psig @ 100°F	468
	B	1-1/4", 1-1/2"					468
	YCS-B	2" - 12"					469
	B	1/2", 3/4", 1"	Class 600 Flanged		1 135 psig @ 562°F	1 480 psig @ 100°F	468
	B	1-1/4", 1-1/2"					468
	YCS-B	2" - 12"					469
	C	1/2", 3/4", 1"	Screwed & Socketweld 1 500 lb	Cast Chrome Moly Steel ASTM-A217 Gr. WC6	2 090 psig @ 643°F	3 000 psig @ 100°F	470
	C	1-1/4", 1-1/2", 2"			2 515 psig @ 670°F	3 600 psig @100°F	470
	C	1/2", 3/4", 1"	Class 1 500 Flanged		2 090 psig @ 643°F	3 000 psig @ 100°F	470
	C	1-1/4", 1-1/2", 2"			2 515 psig @ 670°F	3 600 psig @ 100°F	470
	D	1/2", 3/4", 1", 1-1/4", 1-1/2", 2"	Socketweld 2 500 lb	Forged Steel ASTM-A182 Gr. F22	2 500 psig @ 1 025°F	6 000 psig @ 100°F	471

Strainers ID Charts

Illustration	Model	Connection Size	Connection Type	Body Material	Pressure Temperature Ratings		Located on Page
					Steam Non-shock	Cold Non-shock	
	E	1/2", 3/4", 1"	Screwed & Socketweld 1 500 lb	Cast Stainless Steel ASTM-A351 Gr. CF8M	2 090 psig @ 643°F	3 000 psig @ 100°F	472
	E	1-1/4", 1-1/2", 2", 3"	Screwed & Socketweld 600 lb		935 psig @ 538°F	1 140 psig @ 100°F	472
 E YSS-E	E	1/2", 3/4", 1"	Class 150 Flanged		200 psig @ 386°F	275 psig @ 100°F	473
	E	1-1/2"					473
	YSS-E	2" - 12"					474
	E	1/2", 3/4", 1"	Class 300 Flanged		495 psig @ 467°F	720 psig @ 100°F	473
	E	1-1/2"					473
	YSS-E	2" - 12"					474
	E	1/2", 3/4", 1"	Class 600 Flanged		935 psig @ 540°F	1 440 psig @ 100°F	473
	E	1-1/2"					473
YSS-E	2" - 12"	474					
	F	1/2", 3/4", 1", 1-1/4"	Screwed 300 lb	Cast Bronze ASTM-B62	300 psig @ 422°F	500 psig @ 150°F	475
	F	1-1/2", 2"					475

Screen Data

Screen Material Availability and Particle Retention Size							
Screen Specification		Particle Retention, Inches	Back-Up Screen Required	Materials			
				304 SS	Monel	Brass	316 SS
Perforated	1/64"	0.016	3" - 10"	Code 10	Code 18	—	—
	1/32"	0.031	None	Code 11	Code 19	—	Code 31
	.045 (3/64")	0.045	None	Code 1	Code 3	Code 4	Code 7
	1/16"	0.062	None	Code 12	—	—	Code 32
	1/8"	0.125	None	Code 8	Code 21	Code 28	Code 33
	3/16"	0.188	None	Code 13	Code 22	—	Code 34
	1/4"	0.25	None	Code 14	Code 23	—	Code 35
Mesh	20 x 20	0.034	6" - 10"	Code 15	Code 5*	—	—
	24 x 110	0.0056	5" - 10"	—	Code 24	—	Code 2
	40 x 40	0.015	1-1/2" - 10"	Code 16	Code 6	—	Code 37
	100 x 100	0.0055	All sizes	Code 9	Code 25	—	Code 38
	150 x 150	0.0041	All sizes	Code 40	—	—	—
	200 x 200	0.0029	All sizes	Code 17	—	—	Code 39

*Except 6" - 125 lb cast iron

**On Code 5—2-1/2" thru 10" require back-up screens

Shade indicates only available screen choices for CA Series Strainers.

(1) A back-up screen is required for all YCS-B and YSS-E strainers with mesh screens. No back ups are used on perforated screens for the YCS-B and YSS-E.

(2) 24 x 110 mesh screen not available for YCS-B and YSS-E Strainers.

Ratio of Open Area of Screen to Inside Area of Pipe														
Strainer Size	Total Screen Area, sq in	Inside Area of Pipe, sq in	Ratio—Perforated Screens							Ratio—Wire Mesh Screens				
			1/64"	1/32"	.045"	1/16"	1/8"	3/16"	1/4"	24 x 110	20 x 20	40 x 40	100 x 100	200 x 200
1/2"	7.2	0.30	5.2	5	6.4(5)	5.2	6.9(5.4)	8.8	10	4.8(3.8)	6.6	5.2(4.1)	2.2(1.8)	2.5
3/4"	7.2	0.53	4	3.9	5	4	5.4	6.9	7.8	3.8	5.3	4.1	1.8	2
1"	11	0.86	3.8	3.7	4.7	3.8	5.1	6.5	7.4	3.7	5.2	4	1.7	1.9
1-1/4"	15.9	1.49	3.2	3	3.9	3.2	4.2	5.4	6.1	3.2	4.4	3.4	1.5	1.6
1-1/2"	23.6	2.03	3.4	3.3	4.3	3.4	4.6	5.9	6.7	3.5	4.8	2.8	1.6	1.8
2"	34.4	3.35	3	2.9	3.8	3	4.1	5.2	5.9	3.2	4.4	2.6	1.5	1.6
2-1/2"	54.4	4.78	3.4	3.3	4.2	3.4	4.5	5.8	6.6	3.3	3.5 [†]	2.7	1.7	1.9
3" 125#	74	7.39	1.7	2.9	3.7	3	4	5.1	5.8	2.9	3.1 [†]	2.3	1.5	1.7
3" 250#	87	7.39	2	3.4	4.3	3.5	4.7	6	6.8	3.5	3.8 [†]	2.8	1.8	2
4" 125#	123	12.7	1.7	2.8	3.5	2.9	3.8	4.9	5.6	2.8	3 [†]	2.3	1.5	1.6
4" 250#	145	12.7	2	3.3	4.2	3.4	4.5	5.8	6.6	3.4	3.7 [†]	2.1	1.8	2
6" 125#	272	28.9	1.6	2.7	3.4	2.8	3.1	4.8	5.4	1.6	3	1.8	1.5	1.6
6" 250#	317	28.9	1.9	3.1	4	3.2	4.3	5.5	6.3	1.9	2.7	2.1	1.7	1.9
Percentage Open Area			30%*	29%	37%	30%	40%	51%	58%	33%*	46%*	36%*	—	—

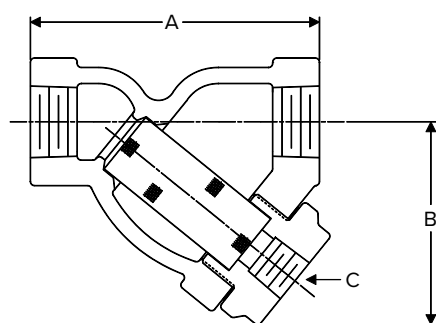
NOTES: Cast steel, stainless steel and bronze strainers have the same ratios as 250 lb cast iron. This table does not apply to the YCS-B, Forged Steel F22, and YSS-E strainers (pages 440, 442, and 445).

Numbers in parentheses apply to CA cast iron series only. A back-up screen is required for all YCS-B and YSS-E strainers with mesh screens.

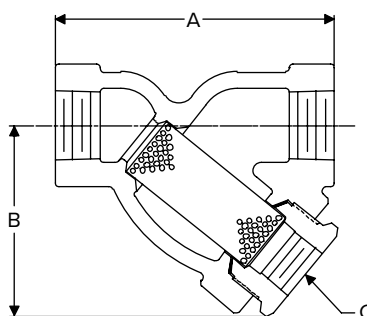
*For unbacked screens.

[†]Back-up required, Monel only.

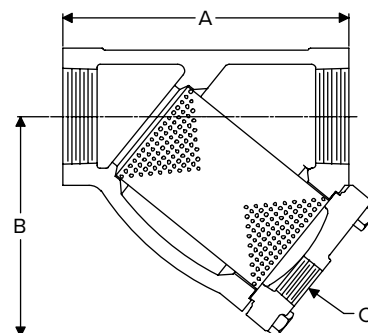
Shade indicates that back-up screens are required.



CA1SC 1/2", 3/4", 1", 1-1/2", 2"



CA1SC 1-1/4"

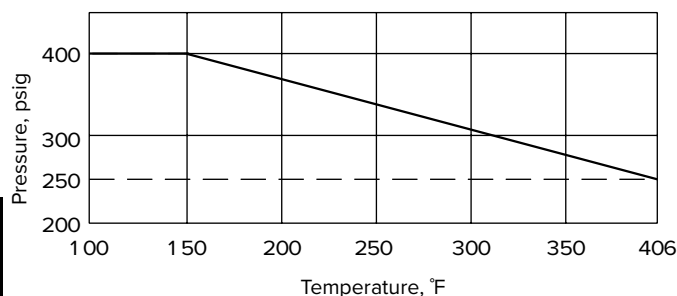


A1SC 2-1/2", 3"

For a fully detailed certified drawing, refer to:
CA1SC 1/2", 3/4", 1", 1-1/4", 1-1/2", 2"
A1SC 2-1/2", 3"

CD #1111
CD #1043

Pressure/Temperature Rating



Materials: 250 lb Screwed 1/2" - 3" (15 - 80 mm)

Connections Size		Body	Standard Screen	Screen Retainer	Gasket	Bolting	
in	mm						
1/2, 3/4	15, 20	ASTM A48 Class 30 Cast Iron	304 SS .045" perforated†	ASTM A48 Class 30 Cast Iron	Spiral Wound	N/A	
1, 1-1/2, 2	25, 40, 50				Soft Steel		
1-1/4	32		304 SS .045" perforated†		Non-asbestos	Cap Screws ASTM A193 Gr. B7	
2-1/2, 3	65, 80						

†NOTE: Other screen materials available. See page 435.

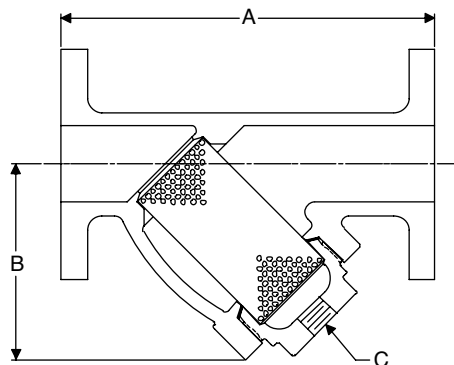
Physical Data: 250 lb Screwed 1/2" - 3" (15 - 80 mm)

Size		Ordering Code, Standard Screen	Weight		Dimensions						Maximum Pressure				Screen Retainer Type	Connections
					A		B		C		Saturated Steam		150°F (66°C) non-shock			
in	mm		lb	kg	in	mm	in	mm	in	mm	psig	barg	psig	barg		
1/2	15	CA1SC	3	1.4	4-1/4	108	3	76	3/8	9.5	250	17	400	28	Threaded	ANSI B1.20.1 Screwed
3/4	20															
1	25		4-1/2	2	5	127	3-3/4	95	1/2	15						
1-1/4	32		7	3	5-1/2	140	3-7/8	98								
1-1/2	40		10	4.5	6-5/16	160	4-7/16	113								
2	50		15	6.8	7-1/2	191	5-7/16	138								
2-1/2	65	A1SC	24-1/2	11	8-1/2	216	6-7/16	164	3/4	20					Bolted	
3	80		45-1/2	21	10-1/2	267	8	203	1-1/4	32						

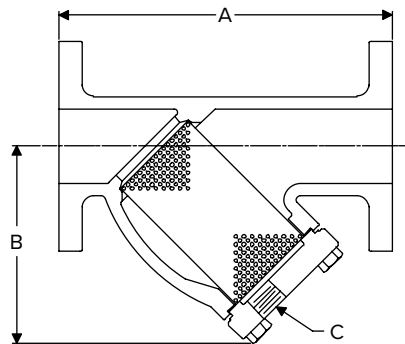
Designs, materials, weights and performance ratings are approximate and subject to change without notice. Visit armstronginternational.com for up-to-date information.

Cast Iron

Class 125 Flanged 2"- 6" and Class 250 Flanged 2" - 6"



2" Class 125 or 250 Flanged



2-1/2" - 6" Class 125 Flanged, 2-1/2" - 6" Class 250 Flanged

For a fully detailed certified drawing, refer to list below:

2" Class 125 or 250 Flanged	CD #1044
2-1/2" - 6" Class 125 Flanged	CD #1045
2-1/2" - 6" Class 250 Flanged	CD #1046



Materials: Class 125 Flanged 2" - 6" (50 - 150 mm) and Class 250 Flanged 2" - 6" (50 - 150 mm)

Connection Size		Body	Screen Retainer	Gasket	Bolting	Standard Screen
in	mm					
2	50	ASTM A48 Class 30 Cast Iron		Soft Steel	N/A	304 SS .045" perforated*
2-1/2, 3, 4, 6	65, 80, 100, 150			Non-asbestos	Cap Screws ASTM A193	

*NOTE: Other screen materials available. See page 435.

Physical Data: Class 125 Flanged 2" - 6" (50 - 150 mm) and Class 250 Flanged 2" - 6" (50 - 150 mm)

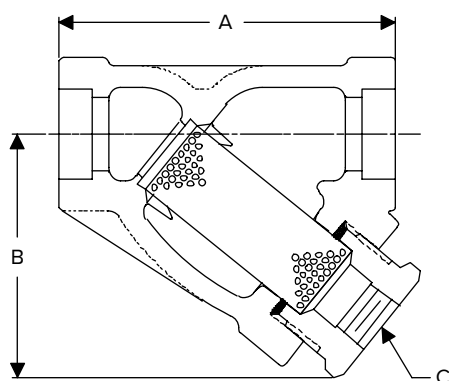
Size		Ordering Code, Standard Screen	Weight		Dimensions						Maximum Pressure				Screen Retainer Type	Conn.
					A		B		C		Saturated Steam		150°F (66°C) non-shock			
in	mm		lb	kg	in	mm	in	mm	in	mm	psig	barg	psig	barg		
2	50	A1FL125	22	10	9-3/4	248	5-1/8	130	1/2	15	125	8.6	175	12	Threaded	Class 125 ANSI B16.1 Flat Faced
2-1/2	65		36	16	11-1/16	281	6-7/16	164	3/4	20					Bolted	
3	80		49	22	12-1/4	311	7-1/4	184	1-1/4	32						
4	100		83	38	14-7/8	378	9-1/2	241	1-1/4	32						
6	150		187	85	20-7/16	519	13-7/8	353	1-1/2	40						
2	50	A1FL250	25	11	10-1/4	260	5-1/8	130	1/2	15	250	17	400	28	Threaded	Class 250 ANSI B16.1 1/16" RF
2-1/2	65		42	19	11-11/16	297	6-7/16	164	3/4	20					Bolted	
3	80		70	32	14-1/8	283	8-1/2	216	1-1/4	32						
4	100		125	57	17-1/8	435	10-3/4	273	1-1/4	32						
6	150		294	133	23-1/2	597	15-3/4	400	1-1/2	40						

Designs, materials, weights and performance ratings are approximate and subject to change without notice. Visit armstronginternational.com for up-to-date information.

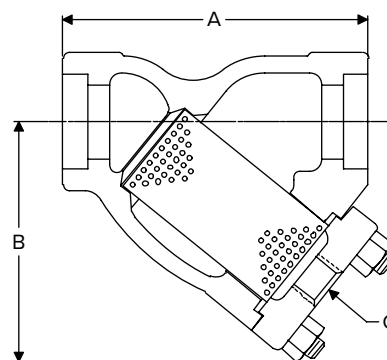


Cast Carbon Steel (WCB)

600 lb and 900 lb Screwed or Socketweld 1/2" - 3"



900 lb—B1SC/B1SW 1/2", 3/4", 1"



600 lb—B1SC/B1SW 1-1/4", 1-1/2", 2", 3"

For a fully detailed certified drawing, refer to:

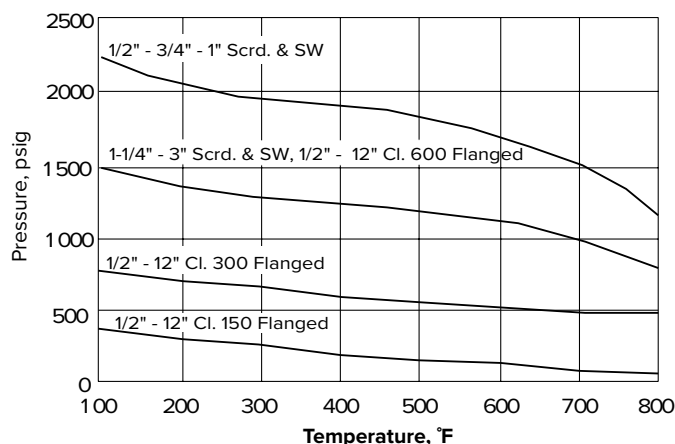
900 lb—B1SC/B1SW 1/2", 3/4", 1"

CD #1047

600 lb—B1SC/B1SW 1-1/4", 1-1/2", 2", 3"

CD #1048

Pressure/Temperature Rating



Materials: 600 lb and 900 lb Screwed or Socketweld 1/2" - 3" (15 - 80 mm)

Connection Size		Body	Screen Retainer	Gasket	Bolting	Standard Screen
in	mm					
1/2, 3/4	15, 20	ASTM A216 Gr. WCB	ASTM A108 Gr. 1045	Soft Steel	N/A	304 SS .045" perforated†
1	25		ASTM A108 Gr. 1040			
1-1/4, 1-1/2, 2	32, 40, 50		ASTM A216 Gr. WCB	304 SS Spiral Wound Non-asbestos	Studs ASTM A193 Gr. B7 Nuts ASTM A194 Gr. 2H	
3	80			Non-asbestos	Cap Screws ASTM A193 Gr. B7	

†NOTE: Other screen materials available. See page 435.

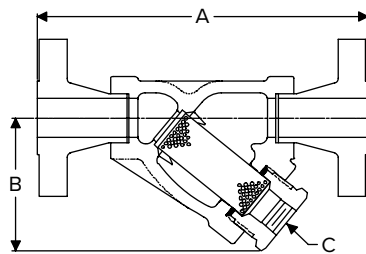
Physical Data: 600 lb and 900 lb Screwed or Socketweld 1/2" - 3" (15 - 80 mm)

Size		Ordering Code Standard Screen		Weight		Dimensions						Maximum Pressure				Screen Retainer Type	Connections
						A		B		C		Saturated Steam		100°F (38°C) non-shock			
in	mm	Scr'd	SW	lb	kg	in	mm	in	mm	in	mm	psig	barg	psig	barg		
1/2	15	B1SC	B1SW	2-1/2	1	3-3/4	95	2-11/16	68	3/8	9.5	1 635	113	2 220	153	Threaded	ANSI B1.20.1 Screwed
3/4	20			3-1/2	1.6	4-3/16	106	2-15/16	75	1/2	15						
1	25			6	2.7	5	127	3-1/2	89								
1-1/4	32			9	4	5-1/2	140	4-3/16	106			1135	78	1 480	102	Bolted	ANSI B16.11 Socketweld
1-1/2	40			11	5	6-5/16	160	4-13/16	122								
2	50			19	9	7-3/4	197	5-5/8	143								
3	80					46	21	11-3/8	289	8-3/16	208	1-1/4	32				

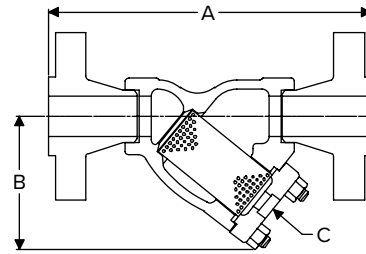
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Cast Carbon Steel (WCB)

Class 150, 300 Flanged, and 600 Flanged 1/2" - 1-1/2"



B1FL 1/2", 3/4", 1"



B1FL 1-1/4", 1-1/2"

For a fully detailed certified drawing, refer to:

B1FL 1/2", 3/4", 1" CD #1050

B1FL 1-1/4", 1-1/2" CD #1051

Materials: Class 150, 300, and 600 Flanged 1/2" - 1-1/2" (15 - 40 mm)

Connection Size		Body	Screen Retainer	Gasket	Bolting	Standard Screen
in	mm					
1/2, 3/4	15, 20	ASTM A216 Gr. WCB	ASTM A108 Gr. 1045	Soft Steel	N/A	304 SS .045" perforated†
1	25		ASTM A216 Gr. WCB	304 SS Spiral Wound Non-asbestos	Studs ASTM A193 Gr. B7 Nuts ASTM A194 Gr. 2H	
1-1/4, 1-1/2	32, 40					

†NOTE: Other screen materials available. See page 435.

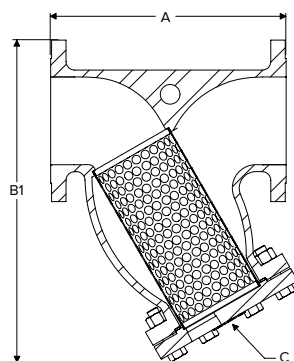
Physical Data: Class 150, 300, and 600 Flanged 1/2" - 1-1/2" (15 - 40 mm)

Size		Ordering Code, Standard Screen	Weight		Dimensions						Maximum Pressure				Screen Retainer Type	Flanges
					A		B		C		Saturated Steam		100°F (38°C) non-shock			
in	mm		lb	kg	in	mm	in	mm	in	mm	psig	barg	psig	barg		
1/2	15	B1FL 150	5	2.3	6-7/8	175	2-11/16	68	3/8	9.5	205	14	285	20	Threaded	Class 150 ANSI B16.5 1/16" RF
3/4	20		10	4.5	7-3/8	187	2-15/16	75	1/2	15						
1	25		10-1/2	4.8	8-1/2	216	3-1/2	89								
1-1/4	32		15	7	9	229	4-3/16	106								
1-1/2	40		20	9	10-1/4	260	4-13/16	122								
1/2	15	B1FL 300	6-1/2	3	7-1/4	184	2-11/16	68	3/8	9.5	605	42	740	51	Threaded	Class 300 ANSI B16.5 1/16" RF
3/4	20		12	5	7-3/4	197	2-15/16	75	1/2	15						
1	25		13-1/2	6	8-7/8	226	3-1/2	89								
1-1/4	32		17-1/2	8	9-5/8	244	4-3/16	106								
1-1/2	40		26	12	10-3/4	273	4-13/16	122								
1/2	15	B1FL 600	11	5	7-11/16	195	2-11/16	68	3/8	9.5	1135	78	1480	102	Threaded	Class 600 ANSI B16.5 1/4" RF
3/4	20		12	5.4	8-1/4	210	2-15/16	75	1/2	15						
1	25		13-1/2	6	9-3/8	238	3-1/2	89								
1-1/4	32		18-1/2	8.5	10-1/4	260	4-3/16	106								
1-1/2	40		28	13	11-5/16	287	4-13/16	122								

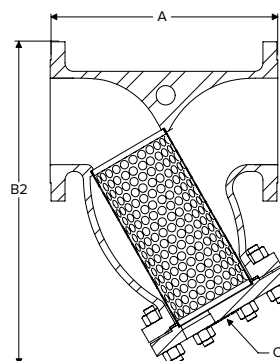
NOTE: For pressure/temperature ratings, see page 438.

Cast Carbon Steel (WCB)

Class 150, 300 Flanged, and 600 Flanged 2" - 12"



YCS-B 2"-12" (Bolts)



YCS-B 2"-12" (Studs)

Materials: Class 150, 300, and 600 Flanged 2" - 12" (50 - 300 mm)

Connection Size		Body	Screen Retainer	Gasket	Bolting (B ₁) / Studs (B ₂)	Standard Screen
in	mm					
2 - 12	50 - 300	ASTM A216 Gr. WCB	ASTM A105N	304 SS Spiral Wound Graphite	Bolts / Studs ASTM A193 Gr. B7 Nuts ASTM A194 2H Zinc Plated	304 SS .045" perforated†

†NOTE: Other screen materials available. See page 435.

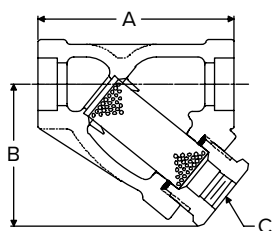
Physical Data: Class 150, 300, and 600 Flanged 2" - 12" (50 - 300 mm)

Size				Weight		Dimensions						Maximum Pressure				Screen Retainer Type	Flanges
						A		B ₁ (bolts)		B ₂ (studs)		C		Saturated Steam			
in	mm	lb	kg	in	mm	in	mm	in	mm	in	mm	psig	barg	psig	barg		
2	50	40	18	8	203	8-3/32	205	8-19/32	218	1/2	15	205	14	285	20	Bolted	Class 150 ANSI B16.5 1/16" RF
3	80	55	25	9-1/2	241	9-19/32	245	9-29/32	252	1	25						
4	100	104	47	11-1/2	292	11-19/32	294	11-15/16	303	1-1/2	40						
6	150	173	78	16	406	16-13/32	417	17	432	2	50						
8	200	299	135	19-1/2	495	20-13/16	529	21-1/4	540								
10	250	458	208	24-1/2	622	24-19/32	625	25-1/8	638								
12	300	767	348	27-1/2	699	29	736	29-19/32	752								
2	50	45	21	10-1/2	267	8-7/32	207	8-1/2	216	1/2	15	605	42	740	51	Bolted	Class 300 ANSI B16.5 1/16" RF
3	80	77	35	12-1/2	318	10-3/32	256	10-13/32	264	1	25						
4	100	135	61	14	356	11-13/16	300	12-7/32	310	1-1/2	40						
6	150	254	115	17-1/2	445	16-23/32	424	17-1/8	435	2	50						
8	200	446	202	22	559	21-13/32	543	21-7/8	555								
10	250	650	295	24-1/2	622	25-7/32	639	25-10/16	651								
12	300	981	445	28	711	29-13/16	757	30-11/32	771								
2	50	64	29	11-1/2	292	9-3/32	230	9-13/32	239	1/2	15	1135	78	1480	102	Bolted	Class 600 ANSI B16.5 1/4" RF
3	80	106	48	14	356	11-7/32	284	11-23/32	298	1	25						
4	100	211	96	17	432	13-1/2	342	14	356	1-1/2	40						
6	150	453	205	22	559	19-7/32	487	19-23/32	501	2	50						
8	200	721	327	26	660	23	585	24-1/4	603								
10	250	1227	556	31	787	27-13/16	707	28-15/32	723								
12	300	1663	754	33	838	32-29/32	835	33-10/16	854								

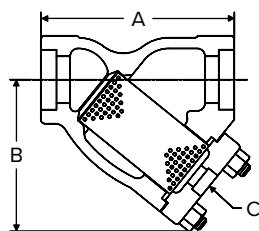
NOTE: For pressure/temperature ratings, see page 438.

Cast Chrome Moly Steel (WC6)

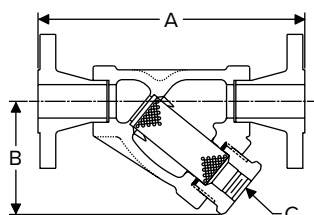
1 500 lb Screwed, Socketweld and Cl. 1 500 Flanged 1/2"- 2" Armstrong®



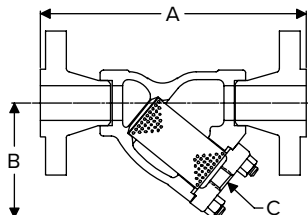
C1SC/C1SW 1/2", 3/4", 1"



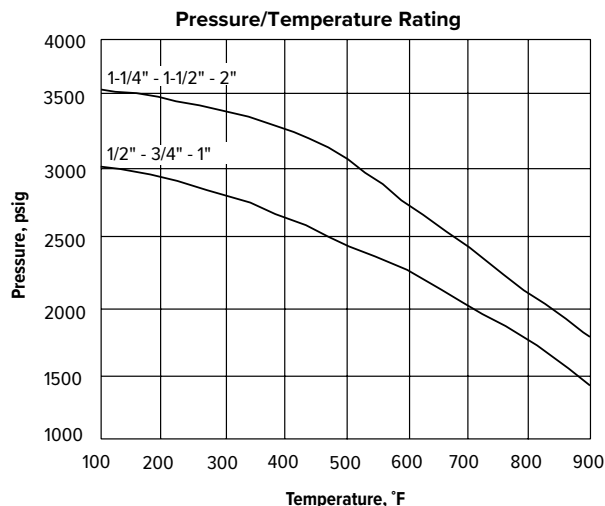
C1SC/C1SW 1-1/4", 1-1/2", 2"



C1FL 1/2", 3/4", 1"



C1FL 1-1/4", 1-1/2", 2"



For a fully detailed certified drawing, refer to list below:

C1SC/C1SW 1/2", 3/4", 1"	CD #1055
C1SC/C1SW 1-1/4", 1-1/2", 2"	CD #1056
C1FL 1/2", 3/4", 1"	CD #1057
C1FL 1-1/4", 1-1/2", 2"	CD #1058

Materials: 1 500 lb Screwed, Socketweld and Cl. 1 500 lb Flanged 1/2" - 2" (15 - 50 mm)

Connection Size		Body	Screen Retainer	Gasket	Bolting	Standard Screen
in	mm					
1/2, 3/4, 1	15, 20, 25	ASTM A217 Gr. WC6	ASTM A276	Soft Steel	N/A	304 SS .045" perforated†
1-1/4, 1-1/2, 2	32, 40, 50		ASTM A217 Gr. WC6	316L SS Spiral Wound Non-asbestos	Studs ASTM A193 Gr. B16 Nuts ASTM A194 Gr. 2H	

†NOTE: Other screen materials available. See page 435.

Physical Data: 1 500 lb Screwed, Socketweld and Cl. 1 500 lb Flanged 1/2" - 2" (15 - 50 mm)

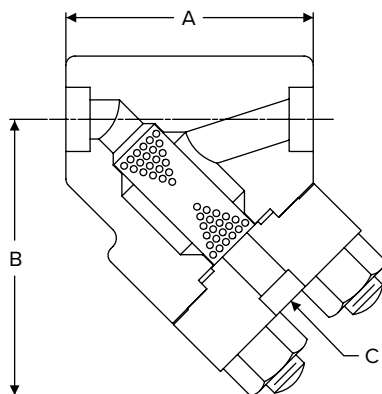
Size		Ordering Code Standard Screen		Weight		Dimensions						Maximum Pressure				Screen Retainer Type	Connections
						A		B		C		Saturated Steam		100°F (38°C) non-shock			
in	mm	Scr'd	SW	lb	kg	in	mm	in	mm	in	mm	psig	barg	psig	barg		
1/2	15	C1SC	C1SW	2-1/2	1.1	3-3/4	95	2-11/16	68	3/8	9.5	2 090	144	3 000	207	Threaded	ANSI B1.20.1 Screwed
3/4	20	C1SC	C1SW	3-1/2	1.6	4-3/16	106	2-15/16	75	1/2	15						
1	25	C1SC	C1SW	5-1/2	2.5	5	127	3-1/2	89	1/2	15	2 515	173	3 600	248	Bolted	ANSI B16.11 Socketweld
1-1/4	32	C1SC	C1SW*	17	8	6-3/4	171	6	152	3/4	20						
1-1/2	40	C1SC	C1SW*	17	8	6-3/4	171	6	152	3/4	20						
2	50	C1SC	C1SW*	25	11	8-1/4	210	7-7/16	189	1	25						
1/2	15	C1FL1500		12	5	8-1/4	210	2-11/16	68	3/8	9.5	2 090	144	3 000	207	Threaded	Class 1500 ANSI B16.5 1/4" RF
3/4	20	C1FL1500		15-1/2	7	9-3/8	238	2-15/16	75	1/2	15						
1	25	C1FL1500		22-1/2	10	10-1/4	260	3-1/2	89	1/2	15	2 515	173	3 600	248	Bolted	
1-1/4	32	C1FL1500*		37	17	12-1/8	308	6	152	3/4	20						
1-1/2	40	C1FL1500*		45	20	12-7/8	327	6	152	3/4	20						
2	50	C1FL1500*		78	35	15-5/8	397	7-7/16	189	1	25						

*Socketweld Blowdown Connections.

Designs, materials, weights and performance ratings are approximate and subject to change without notice. Visit armstronginternational.com for up-to-date information.

Forged Steel (F22)

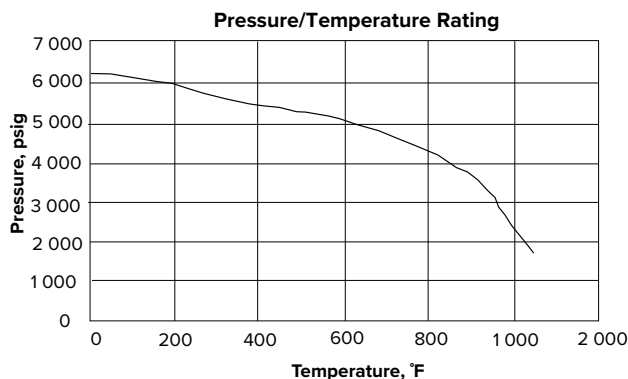
2 500 lb Socketweld 1/2" - 2"



D1SW 1/2" - 2"



For a fully detailed certified drawing, refer to CD #1059.



Materials: 2 500 lb Socketweld 1/2" - 2" (15 - 50 mm)

Connection Size		Body	Screen Retainer	Gasket	Bolting	Standard Screen
in	mm					
1/2, 3/4, 1, 1-1/4, 1-1/2, 2	15, 20, 25, 32, 40, 50	ASTM A182 Gr. F22	ASTM A182 Gr. F22	347 SS Spiral Wound Non-asbestos	Studs ASTM A193 Gr. B16 Nuts ASTM A194 Gr. 2H	304 SS .045" perforated†

†NOTE: Other screen materials available. See page 435.

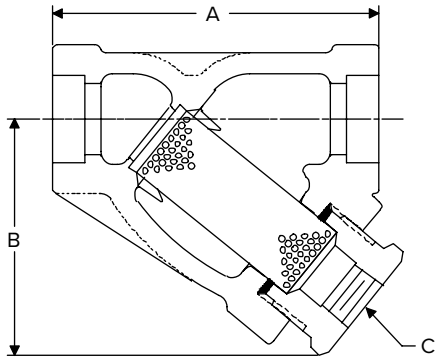
Physical Data: 2 500 lb Socketweld 1/2" - 2" (15 - 50 mm)

Size		Ordering Code, Standard Screen	Weight		Dimensions						Maximum Pressure				Screen Retainer Type	Connections
					A		B		C*		Saturated Steam		100°F (38°C) non-shock			
in	mm		lb	kg	in	mm	in	mm	in	mm	psig	barg	psig	barg		
1/2	15	D1SW	26	12	5-1/8	130	5-5/8	143	1/2	15	2 500	172	6 000	414	Bolted	ANSI B16.11 Socketweld
3/4	20															
1	25															
1-1/4	32															
1-1/2	40															
2	50															
			56	25	6-5/8	168	7-3/8	187								

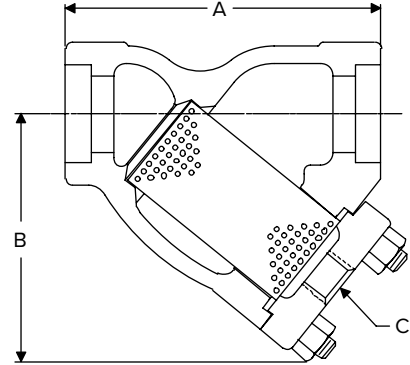
*Socketweld blowdown connections for 1/2" (15 mm) pipe.

Cast Stainless Steel (CF8M)

1 500 lb and 600 lb Screwed, Socketweld 1/2" - 3"

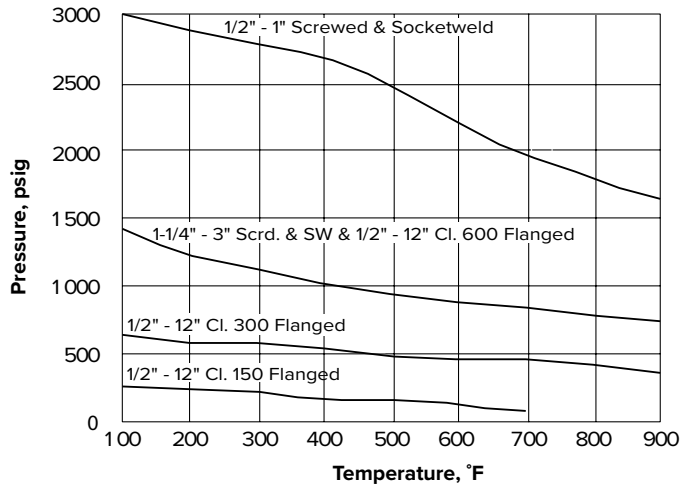


1500 Lb. E7SC/E7SW 1/2", 3/4", 1"



600 Lb. E7SC/E7SW 1-1/4", 1-1/2", 2", 3"

Pressure/Temperature Rating



For a fully detailed certified drawing, refer to:
E7SC/E7SW 1/2", 3/4", 1" CD #1060
E7SC/E7SW 1-1/4", 1-1/2", 2", 3" CD #1061



Strainers

Materials: 1 500 lb and 600 lb Screwed or Socketweld 1/2" - 3" (15 - 80 mm)						
Connection Size		Body	Screen Retainer	Gasket	Bolting	Standard Screen
in	mm					
1/2, 3/4, 1	15, 20, 25	ASTM A351 Gr. CF8M	ASTM A276	316 SS Flat	N/A	316 SS .045" perforated†
1-1/4, 1-1/2, 2	32, 40, 50		ASTM A351 Gr. CF8M	304 SS Spiral Wound Non-asbestos	Studs ASTM A193 Gr. B7 Nuts ASTM A194 Gr. 2H	
3	80			Non-asbestos	Cap Screws ASTM A193 Gr. B7	

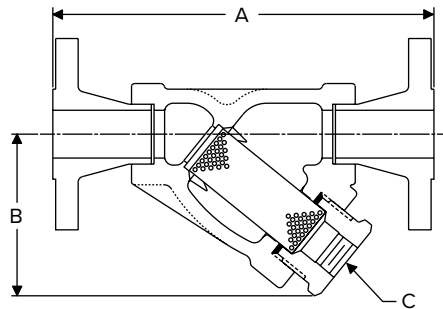
†NOTE: Other screen materials available. See page 435.

Physical Data: 1 500 lb and 600 lb Screwed or Socketweld 1/2" - 3" (15 - 80 mm)																	
Size		Ordering Code Standard Screen		Weight		Dimensions						Maximum Pressure				Screen Retainer Type	Connections
						A		B		C		Saturated Steam		100°F (38°C) non-shock			
in	mm	Scr'd	SW	lb	kg	in	mm	in	mm	in	mm	psig	barg	psig	barg		
1/2	15	1500# E7SC	1500# E7SW	2-1/2	1.1	3-3/4	95	2-11/16	68	3/8	9.5	2 090	144	3 000	207	Threaded	ANSI B1.20.1 Screwed
3/4	20			3-1/2	1.6	4-3/16	106	2-15/16	75	1/2	15						
1	25			6	3	5	127	3-1/2	89								
1-1/4	32	600# E7SC	600# E7SW	9	4	5-1/2	140	4-3/16	106	1/2	15	935	64	1 440	99	Bolted	ANSI B16.11 Socketweld
1-1/2	40			11	5	6-5/16	160	4-13/16	122								
2	50			19	9	7-3/4	197	5-5/8	143								
3	80			50	23	11-3/8	289	8-3/16	208								

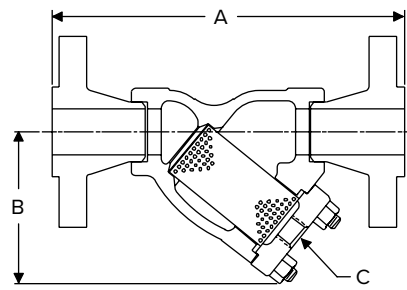
Designs, materials, weights and performance ratings are approximate and subject to change without notice. Visit armstronginternational.com for up-to-date information.

Cast Stainless Steel (CF8M)

Cl. 150, 300, and 600 Flanged 1/2" - 1-1/2"



E7FL 1/2", 3/4", 1"



E7FL 1-1/2"

For a fully detailed certified drawing, refer to list below:

E7FL 1/2", 3/4", 1"

CD #1071

E7FL 1-1/2"

CD #1063

Materials: Class 150, 300, and 600 Flanged 1/2" - 1-1/2" (15 - 40 mm)

Connection Size		Body	Screen Retainer	Gasket	Bolting	Standard Screen
in	mm					
1/2, 3/4, 1	15, 20, 25	ASTM A351 Gr. CF8M	ASTM A276	316 SS Flat	N/A	316 SS .045" perforated [†]
1-1/2	40		ASTM A351 Gr. CF8M	304 SS Spiral Wound Non-asbestos	Studs ASTM A193 Gr. B7 Nuts ASTM A194 Gr. 2H	

[†]NOTE: Other screen materials available. See page 435.

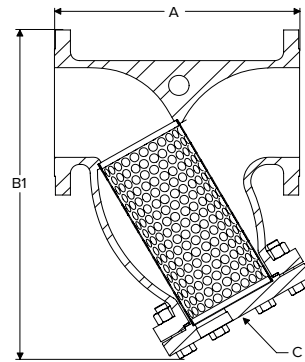
Physical Data: Class 150, 300, and 600 Flanged 1/2" - 1-1/2" (15 - 40 mm)

Size		Ordering Code, Standard Screen	Weight		Dimensions						Maximum Pressure				Screen Retainer Type	Flanges	
					A		B		C		Saturated Steam		100°F (38°C) non-shock				
in	mm		lb	kg	in	mm	in	mm	in	mm	psig	barg	psig	barg			
1/2	15		E7FL 150	5	2.3	6-7/8	175	2-11/16	68	3/8	9.5	200	14	275	19	Threaded	ANSI B16.5 1/16" RF
3/4	20			10	4.5	7-3/8	187	2-15/16	75	1/2	15						
1	25	11		5	8-3/8	213	3-1/2	89	Bolted								
1-1/2	40	20		9	10-1/8	257	4-13/16	122									
1/2	15	E7FL 300	6-1/2	3	7-1/4	184	2-11/16	68	3/8	9.5	495	34	720	50	Threaded	ANSI B16.5 1/16" RF	
3/4	20		9-1/2	4.3	7-3/4	197	2-15/16	75	1/2	15							
1	25		13-1/2	6	8-7/8	226	3-1/2	89							Bolted		
1-1/2	40		22	10	10-3/4	273	4-13/16	122									
1/2	15	E7FL 600	8-1/2	4	7-11/16	195	2-11/16	68	3/8	9.5	935	64	1 440	99	Threaded	ANSI B16.5 1/4" RF	
3/4	20		9-1/2	4.3	8-1/4	210	2-15/16	75	1/2	15							
1	25		13-1/2	6	9-3/8	238	3-1/2	89							Bolted		
1-1/2	40		27	12	11-5/16	287	4-13/16	122									

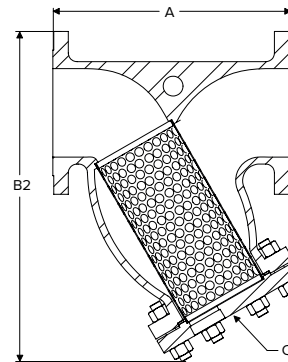
NOTE: For pressure/temperature ratings, see page 443.

Cast Stainless Steel (CF8M)

Class 150, 300 Flanged, and 600 Flanged 2" - 12"



YSS-E 2"-12" (Bolts)



YSS-E 2"-12" (Studs)

Materials: Class 150, 300, and 600 Flanged 2" - 12" (50 - 300 mm)

Connection Size		Body	Screen Retainer	Gasket	Bolting (B ₁) / Studs (B ₂)	Standard Screen
in	mm					
2 - 12	50 - 300	ASTM A351 Gr. CF8M	ASTM A182 Gr. F316	304 SS Spiral Wound Graphite	Bolts ASTM A193 Gr. B7 Zinc Plated Nuts ASTM A194 2H Zinc Plated Studs ASTM A193 B8M Nuts ASTM A194 8M	316 SS .045" perforated [†]

[†]NOTE: Other screen materials available. See page 435.

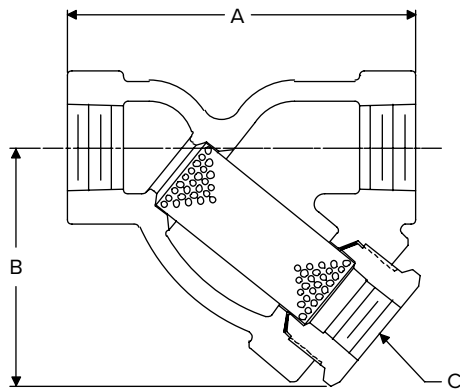
Physical Data: Class 150, 300, and 600 Flanged 2" - 12" (50 - 300 mm)

Size		Weight		Dimensions								Maximum Pressure				Screen Retainer Type	Flanges
				A		B ₁ (bolts)		B ₂ (studs)		C		Saturated Steam		100°F (38°C) non-shock			
in	mm	lb	kg	in	mm	in	mm	in	mm	in	mm	psig	barg	psig	barg		
2	50	40	18	8	203	8-3/32	205	8-19/32	218	1/2	15	200	14	275	19	Bolted	Class 150 ANSI B16.5 1/16" RF
3	80	55	25	9-1/2	241	9-19/32	245	9-29/32	252	1	25						
4	100	104	47	11-1/2	292	11-19/32	294	11-15/16	303	1-1/2	40						
6	150	173	78	16	406	16-13/32	417	17	432	2	50						
8	200	299	135	19-1/2	495	20-13/16	529	21-1/4	540								
10	250	458	208	24-1/2	622	24-19/32	625	25-1/8	638								
12	300	767	348	27-1/2	699	29	736	29-19/32	752								
2	50	45	21	10-1/2	267	8-7/32	207	8-1/2	216	1/2	15	495	34	720	50	Bolted	Class 300 ANSI B16.5 1/16" RF
3	80	77	35	12-1/2	318	10-3/32	256	10-13/32	264	1	25						
4	100	135	61	14	356	11-13/16	300	12-7/32	310	1-1/2	40						
6	150	254	115	17-1/2	445	16-23/32	424	17-1/8	435	2	50						
8	200	446	202	22	559	21-13/32	543	21-7/8	555								
10	250	650	295	24-1/2	622	25-7/32	639	25-10/16	651								
12	300	981	445	28	711	29-13/16	757	30-11/32	771								
2	50	64	29	11-1/2	292	9-3/32	230	9-13/32	239	1/2	15	935	64	1 440	99	Bolted	Class 600 ANSI B16.5 1/4" RF
3	80	106	48	14	356	11-7/32	284	11-23/32	298	1	25						
4	100	211	96	17	432	13-1/2	342	14	356	1-1/2	40						
6	150	453	205	22	559	19-7/32	487	19-23/32	501	2	50						
8	200	721	327	26	660	23	585	24-1/4	603								
10	250	1 227	556	31	787	27-13/16	707	28-15/32	723								
12	300	1 663	754	33	838	32-29/32	835	33-10/16	854								

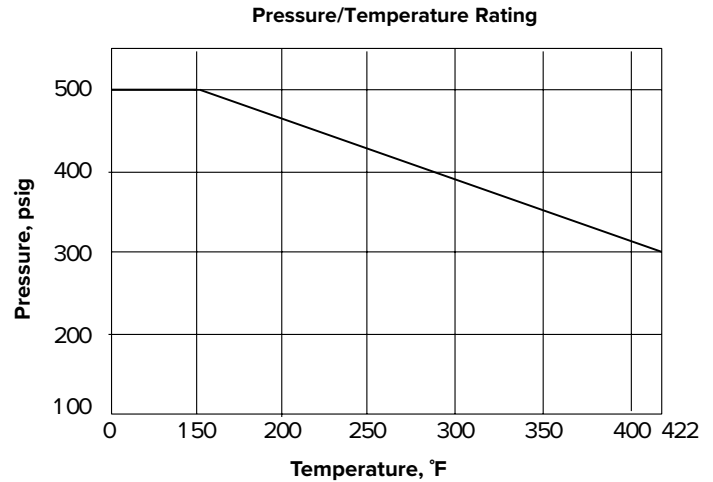
NOTE: For pressure/temperature ratings, see page 443.



Cast Bronze 300 lb Screwed 1/2" - 2"



F4SC 1/2" - 2"



For a fully detailed certified drawing, refer to CD #1064.



Materials: 300 lb Screwed 1/2" - 2" (15 - 50 mm)

Connection Size		Body	Screen Retainer	Gasket	Bolting	Standard Screen
in	mm					
1/2, 3/4, 1, 1-1/4, 1-1/2, 2	15, 20, 25, 32, 40, 50	ASTM B62	Brass C	Copper	N/A	Brass .045" perforated†

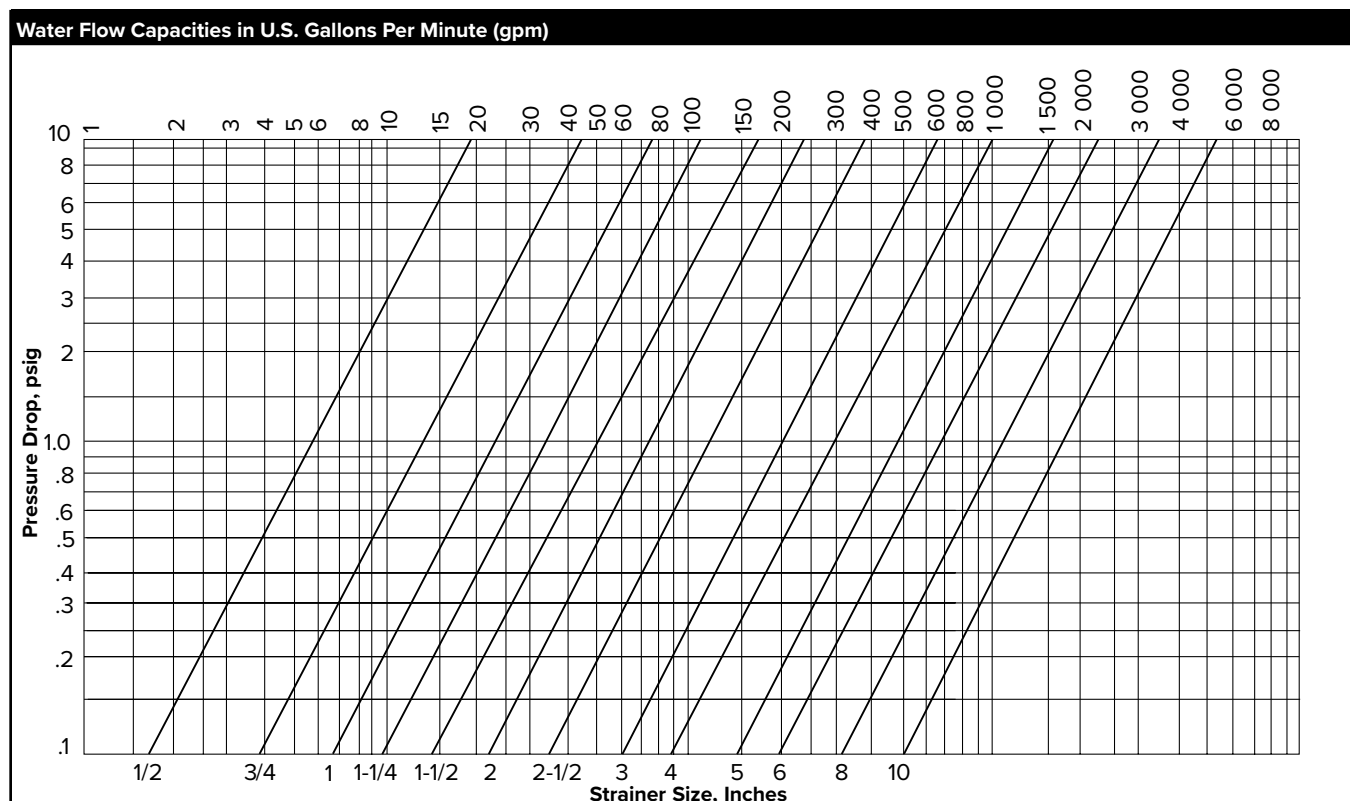
†NOTE: Other screen materials available. See page 435.

Physical Data: 300 lb Screwed 1/2" - 2" (15 - 50 mm)

Size		Ordering Code, Standard Screen	Weight		Dimensions						Maximum Pressure				Screen Retainer Type	Connections
					A		B		C		Saturated Steam		150°F (66°C) non-shock			
in	mm		lb	kg	in	mm	in	mm	in	mm	psig	barg	psig	barg		
1/2	15	F4SC	1-1/2	0.68	3-1/2	89	2-1/2	64	3/8	9.5	300	21	500	34	Threaded	ANSI B1.20.1 Screwed
3/4	20		2	0.91	4	102	2-7/8	73	1/2	15						
1	25		3-1/2	1.6	4-3/4	121	3-5/16	84								
1-1/4	32		5	2.3	5-1/4	133	4	102								
1-1/2	40		7-1/2	3.4	6	152	4-3/8	111								
2	50		12	5.4	7	178	5-1/2	140								

Designs, materials, weights and performance ratings are approximate and subject to change without notice. Visit armstronginternational.com for up-to-date information.

Water Flow Capacities



Armstrong Y-Type Strainers—Master Selection Table

Master Selection Table							
Material	Connections	Sizes		Pressure - Temperature Ratings		Pressure - Temperature Ratings	
		in	mm	Standard		Metric	
				Steam, Non-Shock	Cold, Non-Shock	Steam, Non-Shock	Cold, Non-Shock
Cast Iron ASTM A48 Class 30	Screwed - 250 lb	1/2 - 3	15 - 80	250 psig @ 406°F	400 psig @ 150°F	17 barg @ 208°C	28 barg @ 66°C
	Class 125 Flanged	2 - 6	50 - 150	125 psig @ 353°F	175 psig @ 150°F	8.6 barg @ 178°C	12 barg @ 66°C
	Class 250 Flanged	2 - 6	50 - 150	250 psig @ 406°F	400 psig @ 150°F	17 barg @ 208°C	28 barg @ 66°C
Cast Carbon Steel ASTM A216 Gr. WCB	Screwed & Socketweld - 900 lb	1/2 - 1	15 - 25	1 635 psig @ 609°F	2 200 psig @ 100°F	113 barg @ 321°C	153 barg @ 38°C
	Screwed & Socketweld - 600 lb	1-1/4 - 3	32 - 80	1 135 psig @ 562°F	1 480 psig @ 100°F	78 barg @ 294°C	102 barg @ 38°C
	Class 150 Flanged	1/2 - 12	15 - 150	205 psig @ 390°F	285 psig @ 100°F	14 barg @ 199°C	20 barg @ 38°C
	Class 300 Flanged	1/2 - 12	15 - 150	605 psig @ 490°F	740 psig @ 100°F	42 barg @ 254°C	51 barg @ 38°C
Cast Chrome Moly Steel ASTM A217 Gr. WC6	Class 600 Flanged	1/2 - 12	15 - 100	1 135 psig @ 562°F	1 480 psig @ 100°F	78 barg @ 294°C	102 barg @ 38°C
	Screwed & Socketweld - 1 500 lb	1/2 - 1	15 - 25	2 090 psig @ 643°F	3 000 psig @ 100°F	144 barg @ 339°C	207 barg @ 38°C
	Screwed & Socketweld - 1 500 lb	1-1/4 - 2	32 - 50	2 515 psig @ 670°F	3 600 psig @ 100°F	173 barg @ 354°C	248 barg @ 38°C
	Class 1 500 Flanged	1/2 - 1	15 - 25	2 090 psig @ 643°F	3 000 psig @ 100°F	144 barg @ 339°C	207 barg @ 38°C
Forged Steel ASTM A182 Gr. F22	Class 1 500 Flanged	1-1/4 - 2	32 - 50	2 515 psig @ 670°F	3 600 psig @ 100°F	173 barg @ 354°C	248 barg @ 38°C
	Socketweld - 2 500 lb	1/2 - 2	15 - 50	2 500 psig @ 1 025°F	6 000 psig @ 100°F	172 barg @ 552°C	414 barg @ 38°C
Cast SS ASTM A351 Gr. CF8M	Screwed & Socketweld - 1 500 lb	1/2 - 1	15 - 25	2 090 psig @ 643°F	3 000 psig @ 100°F	144 barg @ 339°C	207 barg @ 38°C
	Screwed & Socketweld - 600 lb	1-1/4 - 3	32 - 80	935 psig @ 538°F	1 400 psig @ 100°F	64 barg @ 281°C	97 barg @ 38°C
	Class 150 Flanged	1/2 - 12	15 - 150	200 psig @ 388°F	275 psig @ 100°F	14 barg @ 198°C	19 barg @ 38°C
	Class 300 Flanged	1/2 - 12	15 - 150	495 psig @ 467°F	720 psig @ 100°F	34 barg @ 242°C	50 barg @ 38°C
	Class 600 Flanged	1/2 - 12	15 - 100	935 psig @ 540°F	1 440 psig @ 100°F	64 barg @ 282°C	99 barg @ 38°C
Cast Bronze ASTM B62	Screwed - 300 lb	1/2 - 2	15 - 50	300 psig @ 422°F	500 psig @ 150°F	21 barg @ 217°C	34 barg @ 66°C

Designs, materials, weights and performance ratings are approximate and subject to change without notice. Visit armstronginternational.com for up-to-date information.



Y-Type Strainers - Forged/Cast

- *Class 150 lbs. up to 24"
- *Class 300 lbs. up to 24"
- *Class 600 lbs. up to 24"
- *Class 900 lbs. up to 16"
- *Class 2 500 to 4 500 lbs. up to 8"

* Larger sizes are available upon request.



Basket Strainers

Simplex or duplex type up to 96" body and 72" connections.

Sizes and classes per customer requirements.



T-Type Strainers - Carbon Steel/Stainless Steel

- *Class 150 lbs. 2" to 24"
- *Class 300 lbs. 2" to 24"
- *Class 600 lbs. 2" to 24"
- *Class 900 lbs. 2" to 24"
- *Class 1 500 lbs. 2" to 24"
- *Class 2 500 lbs. 2" to 24"

* Larger sizes are available upon request.

Strainers are designed bolted bonnet as standard, however, pressure seal design is available for class 600 lbs. and over upon request.



Conical Strainers

*Up to class 2 500 lbs. 2" up to 72"

* Larger sizes are available upon request.