



250Y SERIES CAST IRON, BRONZE, DUCTILE IRON Y STRAINERS NPT, FLANGED

PRESSURES TO 500 PSIG (34.5 BARG)
TEMPERATURES TO 450°F (232°C)

- ANSI 250 PSIG rated strainers
- NPT and FF Flanges in accordance with ANSI 16.1, 16.15 and 16.4
- One piece cast body
- Upper and lower machined seats
- Generous screen area and properly proportioned straining chamber to minimize initial pressure drop while maximizing time between cleanings
- Drain/Blow-off connection furnished with plug

APPLICATIONS

- Steam, liquid, gas and oil service
- Power Industry
- Pulp & Paper
- Process Equipment
- Chemical Industry
- Metal & Mining
- Water & Waste

OPTIONS

- Other perforated screens and mesh liners
- Other drain connections and gasket materials
- Oxygen cleaning
- Special internal / external coatings and linings
- Contact Factory for other Options

APPLICABLE CODES

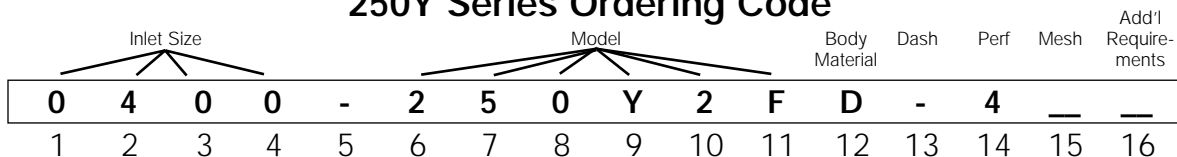
- ANSI B16.1
- ANSI B16.4
- ANSI B16.15

MODELS

- 250Y1T – Bronze or Cast Iron, NPT, Threaded Cover
- 250Y2F - Ductile Iron, Flanged, Bolted Cover

Canadian Registration OEO591.9C BRZ & CI 250Y1 CI

250Y Series Ordering Code



<p>Inlet Size - Position 1 - 4</p> <p>0038 - 3/8" 0050 - 1/2" 0075 - 3/4" 0100 - 1" 0125 - 1 1/4" 0150 - 1 1/2" 0200 - 2" 0250 - 2 1/2" 0300 - 3" 0400 - 4" 0500 - 5" 0600 - 6" 0800 - 8" 1000 - 10" 1200 - 12" 1400 - 14" 1600 - 16"</p>	<p>Dash - Position 5</p> <p>Model - Position 6 - 11</p> <p>250Y1T 250Y2F</p> <p>Body Material - Position 12</p> <p>I - Cast Iron B - Bronze D - Ductile Iron</p> <p>Dash - Position 13</p>	<p>Perf¹ - Position 14</p> <p>304SS Material²</p> <p>A - No Perf (std Y1T Bz All - std Y1T CI <=2")</p> <p>1 - 1/32" B - 3/64" 4 - 1/8" 2 - 1/16" 3 - 3/32" 5 - 5/32" 6 - 3/16" 7 - 7/32" 8 - 1/4" 9 - 3/8"</p>	<p>Mesh^{1,2} - Position 15</p> <p>Leave Blank If not Required (std Y2F)</p> <p>1 - 10 2 - 20 3 - 30 4 - 40 5 - 50 6 - 60 7 - 80 8 - 100 9 - 120</p>	<p>Add'l Requirements - Position 16</p> <p>Leave Blank If not Required</p> <p>D - Special Drain Size F - Silicon Free G - Special Gaskets T - Special Testing X - Oxygen Cleaning Y - Other and / or Multiple Specials</p> <p>Indicate Specials Clearly On the Order</p>
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1. Standard Screens: Y1 Cast Iron 1/4"-2"—20 mesh, Y1 Cast Iron 2 1/2"-3"—3/64" perf, Y1 Bronze 1/2"-1"—30 mesh, Y1 Bronze 1 1/4"-3"—20 mesh, Y2 Ductile Iron 2"-3"—3/64" perf, Y2 Ductile Iron 4"-12"—1/8" perf.

2. For other screen material, consult factory.

250Y1 SERIES CAST IRON Y STRAINERS NPT

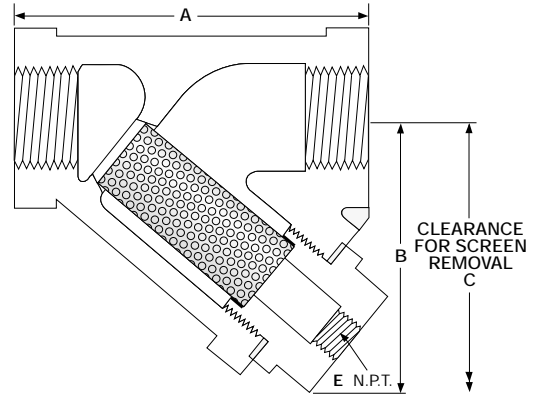
SPECIFICATION

Y Strainer shall be straight flow design with NPT inlet/outlet connections. The strainer shall be rated to ANSI 250 PSIG rating in accordance with ANSI B16.4. The Strainer shall be cast iron body and the screen shall be size _____ perf / mesh 304 SS. The strainer shall have an inlet size of _____ and Open Area Ratio of _____. The Y Strainer shall be SSI 250Y1 Series.

MATERIALS OF CONSTRUCTION

BodyA126-B
 Cap/CoverA126-B
 Screen¹304 SS
 Plug²A126-B
 Gasket¹Graphite

1. Recommended Spare Parts
2. Materials of equivalent strength may be substituted

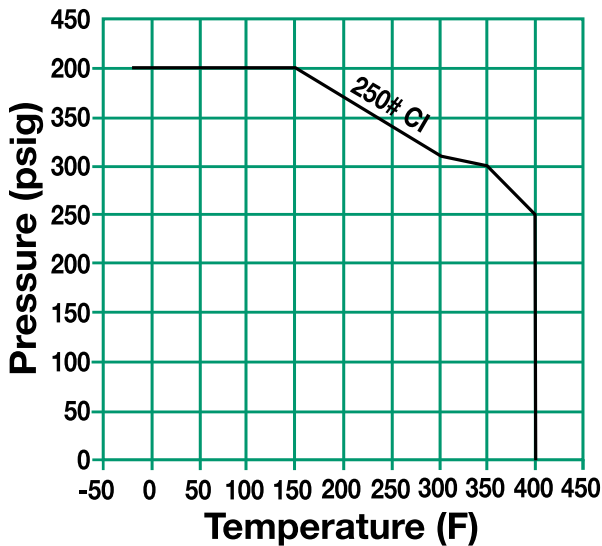


Connections: 1/4" - 3" NPT

SCREEN OPENINGS

SIZE	STANDARD SCREEN	MATERIALS
1/4" - 2"	20 Mesh	304 SS
2 1/2" - 3"	3/64" Perf	304 SS

PRESSURE/TEMPERATURE CHART
ASME B16.4



DIMENSIONS inches (mm) AND WEIGHTS pounds (kg)

SIZE	A	B	C	E	WEIGHT
1/4 (8)	3 3/16 (81)	2 (50)	3 1/8 (80)	1/4 (8)	1.50 (.70)
3/8 (10)	3 3/16 (81)	2 (50)	3 1/8 (80)	1/4 (8)	1.50 (.70)
1/2 (15)	3 3/16 (81)	2 (50)	3 1/8 (80)	1/4 (8)	1.50 (.70)
3/4 (20)	3 3/4 (95)	2 1/16 (68)	3 1/16 (94)	5/16 (10)	2.50 (.50)
1 (25)	4 (102)	3 (62)	3 1/16 (94)	3/8 (10)	3.00 (1.4)
1 1/4 (32)	5 (127)	3 3/16 (87)	5 1/8 (129)	1/2 (20)	6.00 (1.4)
1 1/2 (40)	5 3/4 (146)	3 25/64 (96)	5 3/4 (146)	3/4 (20)	8.00 (3.6)
2 (50)	7 (178)	4 11/64 (110)	7 1/4 (184)	1 (25)	14.00 (3.6)
2 1/2 (65)	9 1/4 (235)	6 3/64 (155)	8 3/4 (222)	1 1/2 (40)	29.0 (10)
3 (80)	10 (254)	7 13/64 (188)	9 (2.29)	1 1/2 (40)	38.0 (13.6)

Dimensions shown are subject to change.
 Contact factory for certified prints when required.

250Y SERIES
STRAINERS

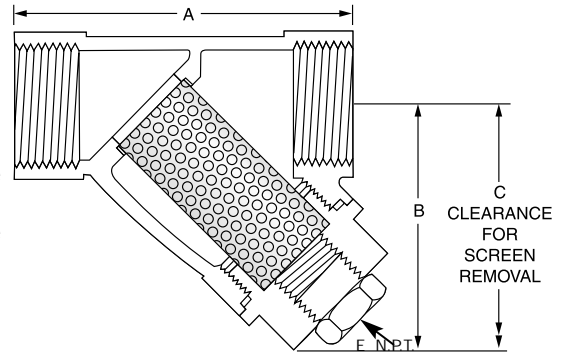
250Y1 SERIES BRONZE Y STRAINERS NPT

SPECIFICATION

Y Strainer shall be straight flow design with NPT inlet/outlet connections. The strainer shall be rated to ANSI 250 PSIG rating in accordance with ANSI B16.15. The Strainer shall be bronze body and the screen shall be size _____ mesh 304 SS. The strainer shall be have an inlet size of _____ and Open Area Ratio of _____. The Y Strainer shall be SSI 250Y1 Series.

MATERIALS OF CONSTRUCTION

Body B584
 Cap B584
 Screen¹ 304 SS
 Plug B584
 Gasket¹ Silicone
 1. Recommended Spare Parts

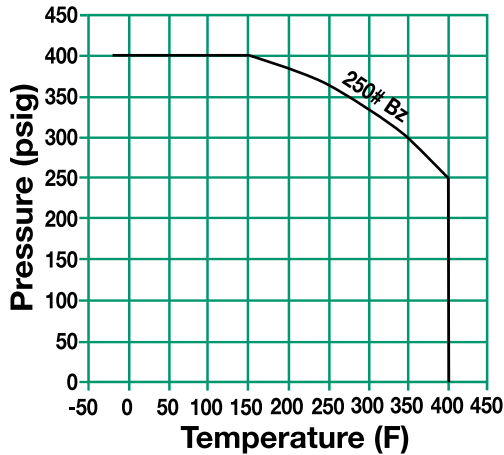


Connections: 1/2" – 3" NPT

SCREEN OPENINGS

SIZE	STANDARD SCREEN	MATERIALS
1/2" - 1"	30 Mesh	304 SS
1 1/4" - 3"	20 Mesh	304 SS

PRESSURE/TEMPERATURE CHART
ANSI B16.15



DIMENSIONS inches (mm) AND WEIGHTS pounds (kg)

SIZE	A	B	C	E	WEIGHT
1/2 (15)	2 ¹⁵ / ₁₆ (75)	2 ¹ / ₈ (54)	3 ¹ / ₂ (89)	³ / ₈ (10)	.9 (0.4)
3/4 (20)	3 ³ / ₈ (86)	2 ³ / ₈ (60)	4 ¹ / ₂ (114)	³ / ₈ (10)	1.3 (0.6)
1 (25)	4 ¹ / ₈ (103)	3 (76)	5 (127)	³ / ₄ (20)	2.1 (1.0)
1 1/4 (32)	4 ¹⁵ / ₁₆ (125)	3 ⁷ / ₈ (87)	5 ³ / ₈ (146)	³ / ₄ (20)	3.0 (1.4)
1 1/2 (40)	5 ³ / ₄ (146)	3 ¹³ / ₁₆ (97)	6 ³ / ₈ (162)	³ / ₄ (20)	4.0 (1.8)
2 (50)	6 ¹¹ / ₁₆ (170)	4 ⁷ / ₈ (116)	9 ⁷ / ₈ (230)	³ / ₄ (20)	7.1 (3.2)
2 1/2 (64)	7 ¹ / ₂ (191)	4 ⁷ / ₈ (124)	10 (254)	1 ¹ / ₄ (32)	10.1 (4.6)
3 (76)	8 ¹ / ₂ (216)	5 ¹ / ₂ (140)	10 ³ / ₈ (264)	1 ¹ / ₄ (32)	13.3 (6.1)

* Consult factory for dimensions.
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250Y SERIES
STRAINERS

250Y2 SERIES DUCTILE IRON Y STRAINERS FLANGED

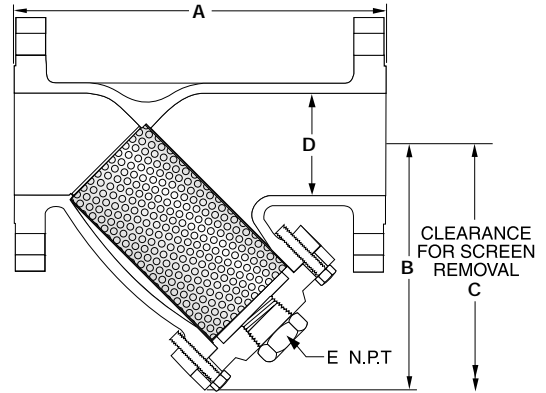
SPECIFICATION

Y Strainer shall be straight flow design with RF Flanged inlet/outlet connections. The strainer shall be rated to ANSI 250 PSIG rating in accordance with ANSI B16.1. The Strainer shall be Ductile Iron and the screen shall be size _____ perf 304 SS. The strainer shall have an inlet size of _____ and Open Area Ratio of _____. The Y Strainer shall be SSI 250Y2 Series.

MATERIALS OF CONSTRUCTION

Body	Ductile Iron A536
Cap	Ductile Iron A536
Screen ¹	304 SS
Plug	A126-B
Gasket ¹	Graphite
Bolt/Stud ²	A307-B
Nut ²	A563

1. Recommended Spare Parts
2. Materials of equivalent strength may be substituted

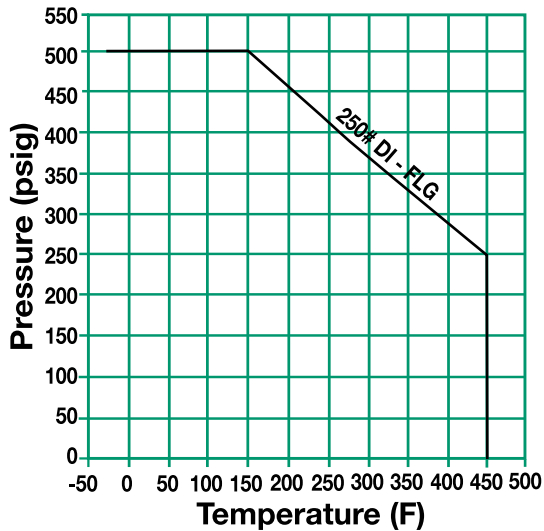


Connections: 2" - 12" RF Flanges

SCREEN OPENINGS

SIZE	STANDARD SCREEN	MATERIALS
2" - 3"	3/64" Perf.	304 SS
4" - 12"	1/8" Perf.	304 SS

PRESSURE/TEMPERATURE CHART
ANSI B16.1



DIMENSIONS inches (mm) AND WEIGHTS pounds (kg)

SIZE	A	B	C	D	E	WEIGHT
2 (50)	8 1/8 (226)	6 1/8 (156)	9 1/8 (232)	2 (51)	1/2 (15)	28 (13)
2 1/2 (65)	10 3/8 (273)	8 1/8 (205)	9 1/8 (251)	2 1/2 (64)	1 (25)	38 (17)
3 (80)	11 1/8 (295)	8 1/8 (214)	11 1/8 (286)	3 (76)	1 (25)	54 (24)
4 (100)	13 1/8 (353)	9 1/8 (245)	15 (381)	4 (102)	1 (25)	110 (50)
5 (125)	16 1/8 (416)	11 1/8 (295)	19 (483)	5 (127)	1 1/4 (32)	160 (73)
6 (150)	18 1/8 (470)	12 1/8 (321)	22 3/8 (578)	6 (152)	1 1/2 (40)	224 (102)
8 (200)	21 3/8 (543)	16 3/8 (416)	27 3/8 (692)	8 (203)	1 1/2 (40)	468 (212)
10 (250)	26 (660)	19 1/8 (486)	29 3/8 (756)	10 (254)	2 (50)	590 (268)
12 (300)	30 (762)	22 1/8 (560)	35 (889)	12 (305)	2 (50)	890 (404)

Dimensions shown are subject to change.
Contact factory for certified prints when required.

250Y SERIES
STRAINERS

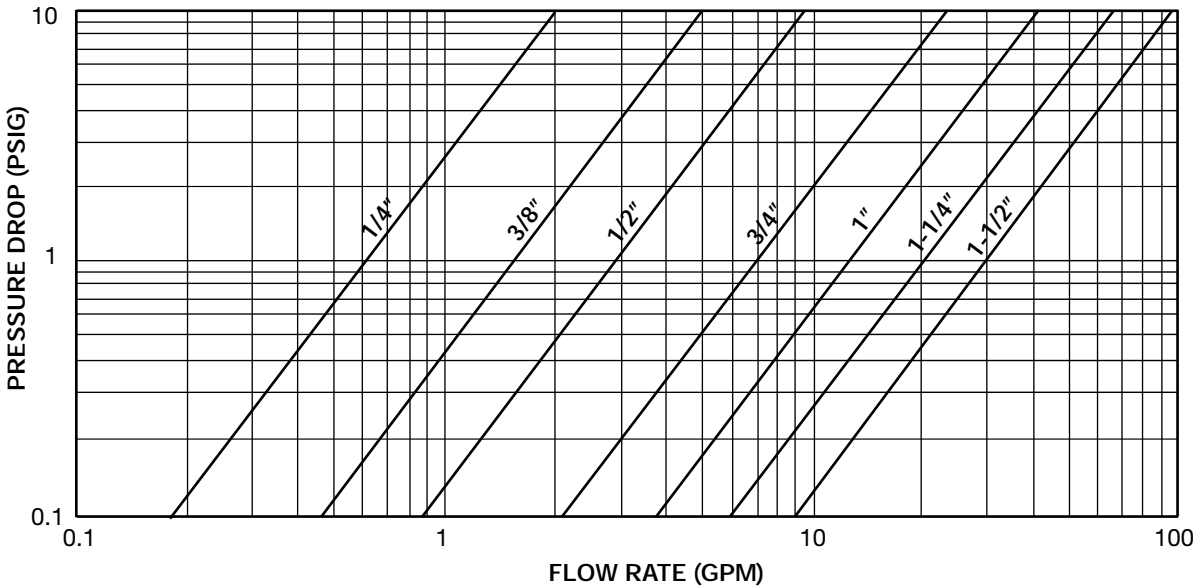
250Y SERIES

CAST IRON, BRONZE, DUCTILE IRON

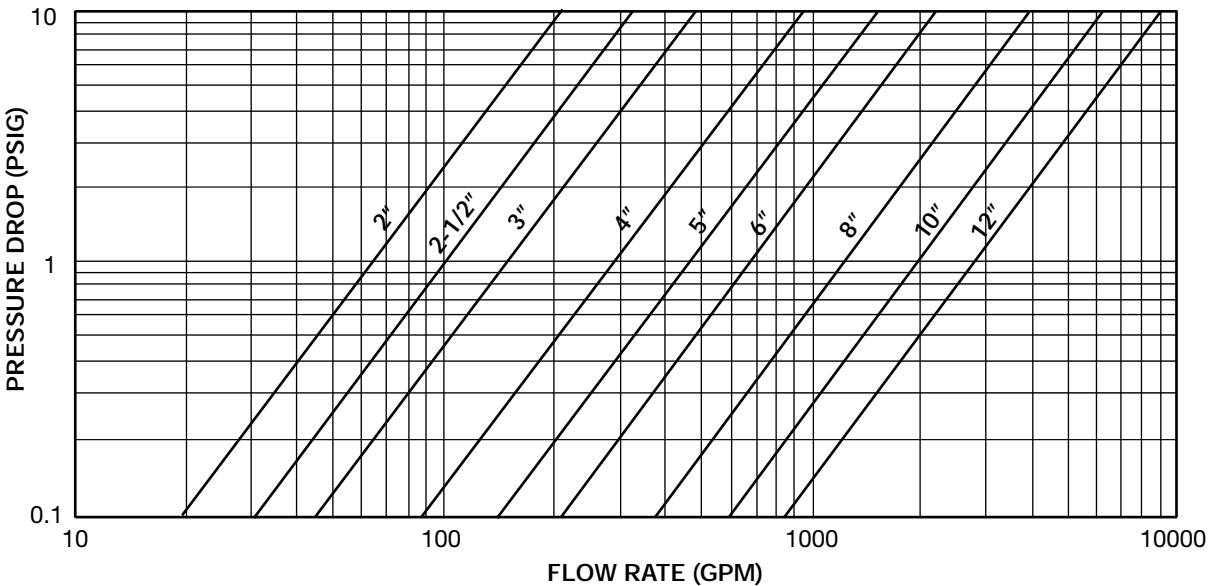
PRESSURE DROP VS FLOW RATE

Water Service, Clean Basket, 1/32" - 1/4" Perforated Screen*

(Sizes 1/4" - 1 1/2")



(Sizes 2" - 12")



* For Gas, Steam or Air service, consult factory.

250Y SERIES
STRAINERS

Steam Service Pressure Drop
Page 433

Correction Factors for Other Viscous
Liquids and/or Mesh Liners Page 432

Correction Factors for
Clogged Screens Page 432



250Y SERIES

CAST IRON, BRONZE, DUCTILE IRON

OPEN AREA RATIOS

with Standard Perforated Screen

BRONZE

Size	Mesh	Opening %	Std Pipe Inlet Area (in ²)	Gross Screen Area (in ²)	Free Screen Area (in ²)	Open Area Ratio (OAR)
½	30	45	0.30	2.9	1.28	4.2
¾	30	45	0.53	5.6	2.52	4.7
1	30	45	0.86	9.0	4.03	4.7
1¼	20	49	1.50	15.1	7.38	4.9
1½	20	49	2.04	21.7	10.64	5.2
2	20	49	3.36	29.2	14.31	4.3
2½	20	49	4.79	35.9	17.61	3.7
3	20	49	7.39	49.9	24.45	3.3

CAST IRON

Size	Perf/Mesh Diameter	Opening %	Std Pipe Inlet Area (in ²)	Gross Screen Area (in ²)	Free Screen Area (in ²)	Open Area Ratio (OAR)
¼	20	49	0.30	3.7	1.80	5.9
½	20	49	0.30	3.7	1.80	5.9
¾	20	49	0.30	3.6	1.74	5.7
1	20	49	0.53	6.3	3.11	5.8
1¼	20	49	0.86	7.9	3.85	4.5
1½	20	49	1.50	13.0	6.35	4.2
2	20	49	2.04	16.6	8.13	4.0
2½	20	49	3.36	28.3	13.85	4.1
3	3/64	36	4.79	44.7	16.08	3.4
3	3/64	36	7.39	43.2	15.55	2.1

DUCTILE IRON

Size	Perf. Diameter (inches)	Opening %	Flange Inlet Area (in ²)	Gross Screen Area (in ²)	Free Screen Area (in ²)	Open Area Ratio (OAR)
2	3/64	36	3.14	29.4	10.58	3.4
2½	3/64	36	4.91	46.0	16.56	3.4
3	3/64	36	7.07	57.0	20.51	2.9
4	1/8	40	12.57	99.0	39.59	3.2
5	1/8	40	19.63	146.5	58.58	3.0
6	1/8	40	28.27	174.0	69.60	2.5
8	1/8	40	50.27	327.3	130.91	2.6
10	1/8	40	78.54	495.2	198.08	2.5
12	1/8	40	113.10	645.0	257.99	2.3

OAR = Free Screen Area / Nominal Inlet Area
 Free Screen Area = Opening % x Gross Screen Area
 Values shown are approximate. Consult factory for exact ratios.

250Y SERIES STRAINERS

Other Screen Openings Page 430	Basket Burst Pressure Page 435
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