

300Y SERIES

CARBON STEEL, STAINLESS STEEL Y STRAINERS NPT, FLANGED, SOCKETWELD, BUTTWELD

PRESSURES TO 740 PSIG (51 BARG)
TEMPERATURES TO 800°F (427°C)

APPLICATIONS

- Steam, liquid, gas and oil service
- Power industry
- Pulp and paper
- Chemical industry
- Process Equipment
- 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 B16.5
- ANSI B16.25
- ANSI B16.34

Canadian Registration

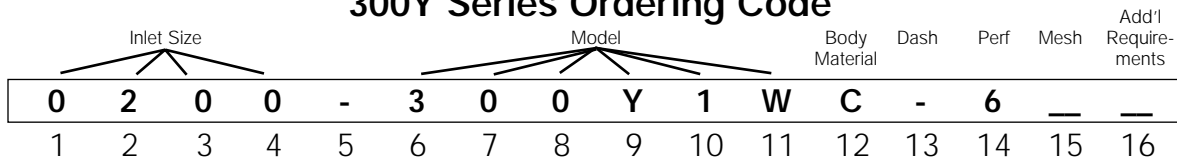
OEO447-902517 - 300YI Carbon Steel
OEO591.9C - 300YI Stainless Steel

- ANSI 300 PSIG rated strainers
- NPT, RF Flanges, Socketweld and Butt weld in accordance with ANSI 16.5, and 16.25
- All Flanged connections complete with Bolted Cover
- Cover flange (CS, SS) in accordance with ASME Section VIII, Div 1 Appendix II and/or ANSI 16.5.
- One piece cast body – Investment cast on NPT and socketweld versions.
- 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

MODELS

- 300Y1T – Carbon or Stainless Steel, NPT with Threaded Cover
- 300Y1W – Carbon or Stainless Steel, Socketweld with Threaded Cover
- 300Y2F – Carbon or Stainless Steel, Flanged with Bolted Cover
- 300Y2B – Carbon or Stainless Steel, Butt weld with Bolted Cover

300Y Series Ordering Code



<p>Inlet Size - Position 1 - 4</p> <p>0050 - ½" 0075 - ¾" 0100 - 1" 0125 - 1¼" 0150 - 1½" 0200 - 2" 0250 - 2½" 0300 - 3" 0400 - 4" 0600 - 6" 0800 - 8" 1000 - 10" 1200 - 12"</p>	<p>Dash - Position 5</p> <p>Model - Position 6 - 11</p> <p>300Y1T 300Y1W 300Y2F 300Y2B¹</p> <p>Body Material - Position 12</p> <p>C - Carbon Steel T - Stainless Steel</p> <p>Dash - Position 13</p> <p>1. For Butt weld connections please specify mating pipe schedule.</p>	<p>Perf² - Position 14</p> <p>304SS Material³</p> <p>A - No Perf 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>2. Standard Screens: Y1 < 2" — 1/32" perf, Y1 > 2" — 3/64" perf, Y2 < 1½" — 1/32" perf, Y2 2" - 3" — 3/64" perf, Y2 > 3" — 1/8" perf</p>	<p>Mesh³ - Position 15</p> <p>Leave Blank If not Required (std ALL)</p> <p>1 - 10 2 - 20 3 - 30 4 - 40 5 - 50 6 - 60 7 - 80 8 - 100 9 - 120</p> <p>3. For other screen material, contact factory.</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 N - Nace MR01-75 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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300Y1 SERIES CARBON STEEL, STAINLESS STEEL Y STRAINERS NPT, SOCKETWELD

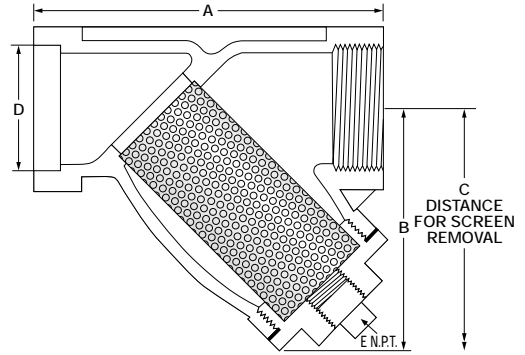
SPECIFICATION

Y Strainer shall be straight flow design with NPT or Socketweld inlet/outlet connections. The strainer shall be rated to ANSI 300 PSIG. The Strainer shall be Investment Cast Carbon Steel or Stainless Steel body 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 300Y1 Series.

MATERIALS OF CONSTRUCTION

Part	Carbon Steel	Stainless Steel
Body	A216-WCB	A351-CF8M
Cap	A216-WCB	A351-CF8M
Screen ¹	304 SS	304 SS
Plug	A105	A182-316
Gasket ¹	Teflon	Teflon

1. Recommended Spare Parts



Connections:
CS - 1/2" to 3" NPT or SW
SS - 1/2" to 3" NPT or S

SCREEN OPENINGS

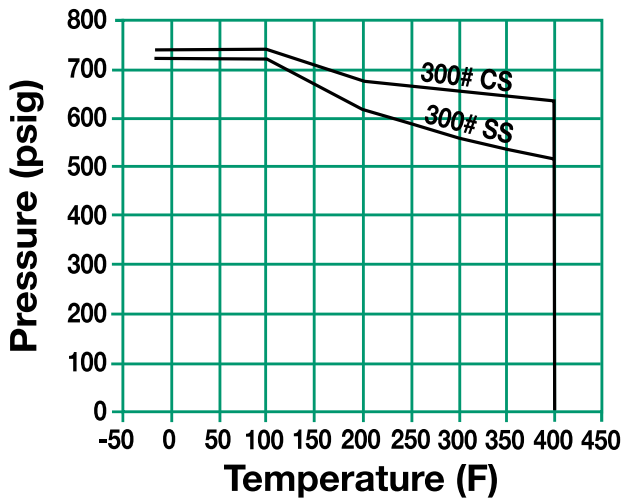
SIZE	STANDARD SCREEN	MATERIALS
1/2" - 2"	1/32" Perf	304 SS
2 1/2" - 3"	3/64" Perf	304 SS

DIMENSIONS inches (mm) AND WEIGHTS pounds (kg)

SIZE	A	B	C	D	E	WEIGHT
1/2 (15)	2 1/2 (59)	1 1/2 (41)	2 3/8 (60)	0.855 (21.72)	3/8 (10)	.50 (.22)
3/4 (20)	3 3/8 (80)	2 (51)	3 3/8 (81)	1.065 (27.05)	3/8 (10)	.82 (.37)
1 (25)	3 3/8 (84)	2 3/8 (60)	4 (102)	1.330 (33.78)	1/2 (15)	1.50 (.68)
1 1/4 (32)	4 1/2 (105)	2 3/8 (73)	4 1/2 (114)	1.675 (42.55)	1/2 (15)	2.0 (.90)
1 1/2 (40)	4 3/4 (119)	3 1/4 (83)	4 3/4 (121)	1.915 (48.64)	1/2 (15)	2.8 (1.27)
2 (50)	5 1/2 (1.38)	3 3/8 (97)	5 3/8 (146)	2.406 (61.11)	1/2 (15)	4.3 (1.95)
2 1/2 (65)	7 1/4 (183)	4 13/16 (124)	7 1/4 (184)	2.906 (73.81)	1/2 (15)	10 (4.54)
3 (80)	8 1/8 (205)	5 1/8 (138)	7 1/2 (191)	3.535 (89.79)	1/2 (15)	14 (6.35)

Dimensions shown are subject to change.
Consult factory for certified drawings when required.

PRESSURE/TEMPERATURE CHART
ANSI B16.34



300Y1 SERIES
STRAINERS

300Y2 SERIES CARBON STEEL, STAINLESS STEEL Y STRAINERS FLANGED, BUTTWELD

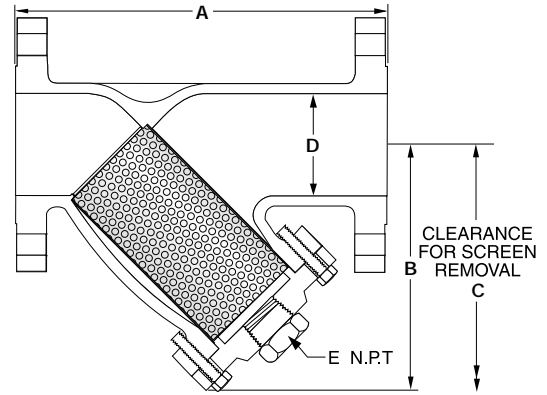
SPECIFICATION

Y Strainer shall be straight flow design with RF Flanged or Buttweld inlet/outlet connections. The strainer shall be rated to ANSI 300 PSIG rating in accordance with ANSI B16.5 or ANSI B16.25. The Strainer shall be Cast Carbon Steel or Stainless Steel body 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 300Y2 Series.

MATERIALS OF CONSTRUCTION*

Part	Carbon Steel	Stainless Steel
Body	A216-WCB	A351-CF8M
Cover	A216-WCB	A351-CF8M
Screen ¹	304 SS	304 SS
Plug ²	A105	A182-316
Gasket ¹	304 SS Spiral Wound	304 SS Spiral Wound
Stud	A193-B7	A193-B8-1
Nut ²	A194-2H	A194-8

1. Recommended Spare Parts
 2. Materials of equivalent strength may be substituted
- * Low Carbon Steel Available on request. Consult Factory



Connections:
CS - 1/2" to 12"
RF Flanged or Buttweld³
SS - 1/2" to 12"
RF Flanged or Buttweld³

3. For Buttweld connections please specify pipe schedule.

SCREEN OPENINGS

SIZE	STANDARD SCREEN	MATERIALS
1/2" - 1 1/2"	1/32" Perf	304 SS
2" - 3"	3/64" Perf	304 SS
4" - 12"	1/8" Perf	304 SS

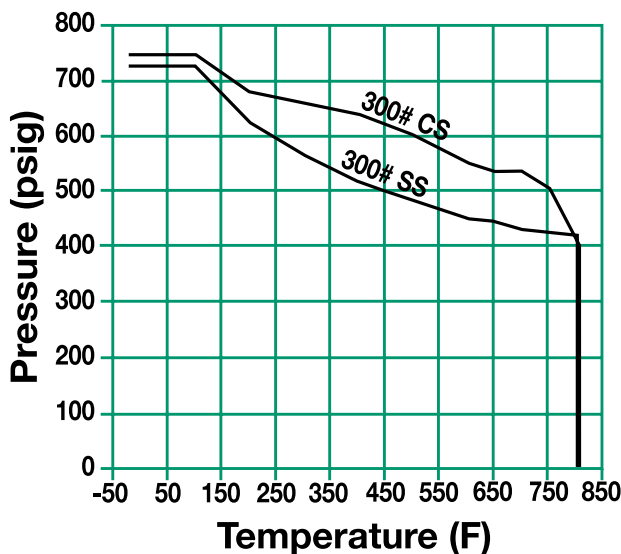
DIMENSIONS inches (mm) AND WEIGHTS pounds (kg)

SIZE	A	B	C	D	E	WEIGHT
1/2 (15)	6 1/2 (165)	4 1/4 (108)	5 3/4 (146)	1/2 (13)	3/4 (8)	8 (3.6)
3/4 (20)	7 3/4 (197)	5 (127)	6 3/4 (171)	3/4 (19)	5/8 (10)	14 (6.4)
1 (25)	7 7/8 (200)	5 1/2 (140)	8 3/8 (206)	1 (25)	1/2 (15)	15 (6.8)
1 1/2 (40)	10 1/2 (267)	7 (178)	10 1/4 (260)	1 1/2 (38)	1/2 (15)	32 (15)
2 (50)	9 (229)	5 1/16 (145)	8 (203)	2 (51)	1/2 (15)	25 (11.4)
2 1/2 (65)	10 3/8 (276)	7 3/16 (183)	10 1/4 (260)	2 1/2 (64)	1 (25)	38 (17.3)
3 (80)	12 3/8 (320)	8 1/2 (207)	11 1/2 (292)	3 (76)	1 (25)	56 (25.5)
4 (100)	14 3/8 (372)	9 3/8 (245)	13 3/8 (346)	4 (102)	1 1/2 (40)	90 (40.9)
5 (125)	18 3/8 (470)	15 3/8 (391)	21 1/2 (546)	5 (127)	2 (50)	180 (82)
6 (150)	19 3/4 (502)	15 (381)	21 1/2 (546)	6 (152)	2 (50)	203 (92.3)
8 (200)	25 (635)	16 1/2 (419)	22 (559)	8 (203)	2 (50)	323 (146.8)
10 (250)	27 3/8 (702)	21 3/8 (538)	30 (762)	10 (254)	2 (50)	571 (259.6)
12 (300)	32 3/8 (835)	24 3/8 (617)	34 3/8 (873)	12 (305)	2 (50)	893 (405.9)

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

300Y2 SERIES
STRAINERS

PRESSURE/TEMPERATURE CHART
ANSI B16.34



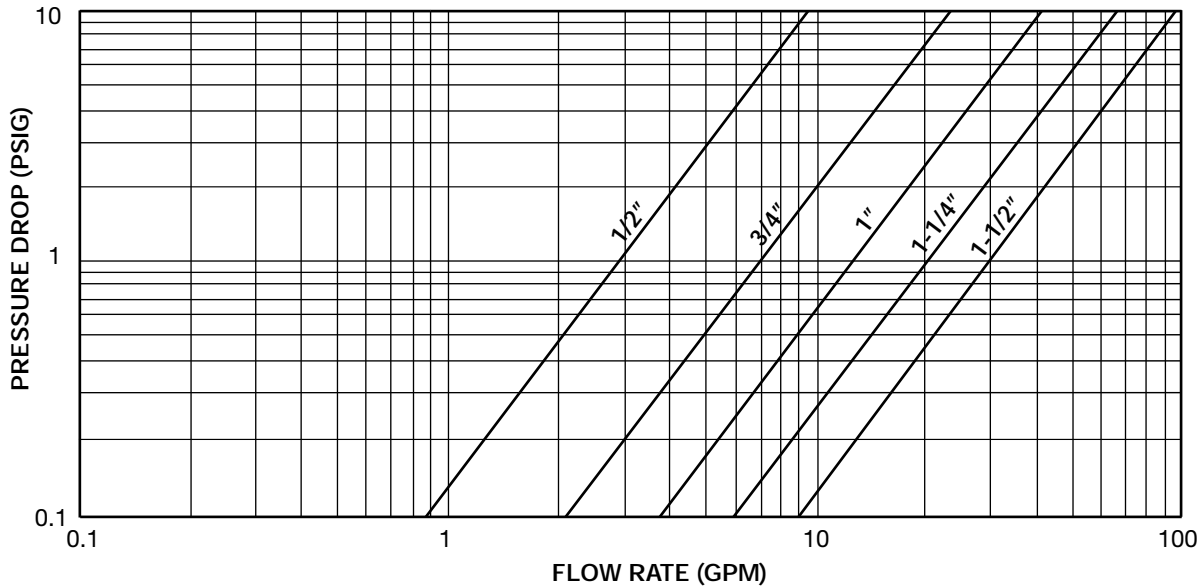
300Y SERIES

CARBON STEEL, STAINLESS STEEL

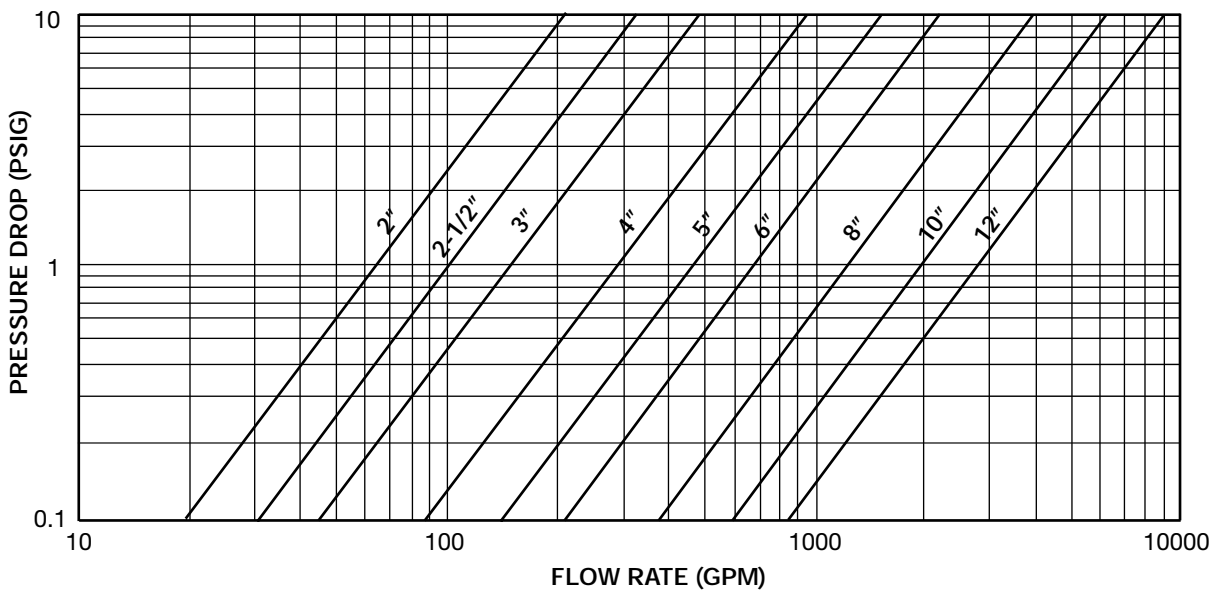
PRESSURE DROP VS FLOW RATE

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

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



(Sizes 2" - 12")



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

300Y 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

300Y SERIES

CARBON STEEL, STAINLESS STEEL

OPEN AREA RATIOS

with Standard Perforated Screen

300Y1 Carbon Steel, Stainless Steel

Size	Perf. Diameter (mm ²)	Opening %	Std Pipe Inlet Area (in ²)	Gross Screen Area (in ²)	Free Screen Area (in ²)	Open Area Ratio (OAR)
½	1/32	28	0.30	3.2	1.13	3.7
¾	1/32	28	0.53	5.1	1.80	3.4
1	1/32	28	0.86	8.1	2.82	3.3
1¼	1/32	28	1.50	10.2	3.56	2.4
1½	1/32	28	2.04	14.6	5.10	2.5
2	1/32	28	3.36	21.2	7.41	2.2
2½	3/64	36	4.79	37.0	12.94	2.7
3	3/64	36	7.39	47.6	16.66	2.3

300Y2 Carbon Steel, Stainless Steel

Size	Perf. Diameter (inches)	Opening %	Flange Inlet Area (in ²)	Gross Screen Area (in ²)	Free Screen Area (in ²)	Open Area Ratio (OAR)
½	1/32	28	0.20	6.8	1.91	9.7
¾	1/32	28	0.44	10.4	2.92	6.6
1	1/32	28	0.79	15.3	4.27	5.4
1½	1/32	28	1.77	32.5	9.11	5.2
2	3/64	36	3.14	28.7	10.35	3.3
2½	3/64	36	4.91	48.1	17.32	3.5
3	3/64	36	7.07	71.2	25.62	3.6
4	1/8	40	12.57	106.3	42.54	3.4
6	1/8	40	28.27	233.2	93.29	3.3
8	1/8	40	50.27	340.3	136.14	2.7
10	1/8	40	78.54	489.9	195.96	2.5
12	1/8	40	113.10	710.9	284.36	2.5

OAR = Free Screen Area / Inlet Area

Free Screen Area = Opening % x Gross Screen Area

Values shown are approximate. Consult factory for exact ratios.