

## North American Y-Type Strainers for Gas, Oil, Oxygen, Steam



### Threaded or Socket Welded With Cap Cover

**8555Y** Gas, Oil, Oxygen or Steam strainers are used in high pressure supply lines to prevent dirt and debris from damaging or jamming regulators, valves and other gas train accessories. In oil and steam lines, strainers help to screen out foreign particles that otherwise could reach the burner oil atomizer.

Strainer bodies are available in cast iron, carbon steel (epoxy painted to help resist rust and corrosion) and stainless steel. Bodies can be threaded or socket welded (limited sizes available) in smaller pipe sizes or flanged in larger pipe sizes.

Strainer screens are available in 304 (standard) or 316 (special order) or monel (oxygen service). Blow down cover is either threaded or bolted, depending on pipe size and strainer style.

Maximum working pressures vary depending on pipe size, materials of construction, operating temperature and fluid media being handled.

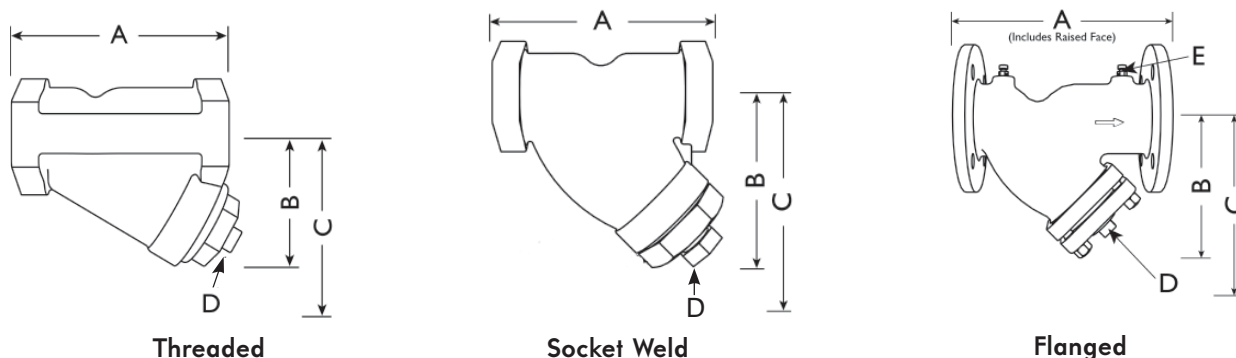
The new **8555Y** Strainer line provides many unique features:

- High pressure and temperature designs for rugged industrial applications
- Body and screen designs provides large open-area ratios for cleaning
- Precision machining of body and cover help to ensure accurate positioning of the screen during reassembly after cleaning, helping to prevent debris bypass.
- Flanged bodies are provided with gauge taps to measure differential pressures to determine if cleaning is required.
- Cover design provides blow down connection for cleaning.
- Y strainers can be mounted in vertical and horizontal pipe. Vertical pipe runs are for downward flow only.



### Flanged With Bolted Cover

DIMENSIONS (inches)



Threaded Dimensions ANSI Class 250

SIZE	in	¼	⅜	½	¾	1	1¼	1½	2	2½	3
	mm	8	10	15	20	25	32	40	50	65	80
<b>A</b> Dimension Face to Face <sup>(2)</sup>	in	3.188	3.188	3.188	3.75	4.0	5.0	5.75	7.0	9.25	10.0
	mm	81	81	81	95	102	127	146	178	235	254
<b>B</b> Dimension Center Line to Bottom	in	2.063	2.063	2.063	2.438	2.625	3.375	3.875	4.75	5.875	6.0
	mm	52	52	52	62	67	86	98	121	149	152
<b>C</b> Dimension Screen Removal	in	2.375	2.375	2.375	3.0	3.25	4.25	5.0	6.125	7.875	8.0
	mm	60	60	60	76	83	108	127	156	200	203
<b>D</b> NPT Plug Blow-off	in	¼	¼	¼	⅜	⅜	¾	¾	1	1½	1½
Approximate Assemble Wt.	lb	1.5	1.5	1.5	2.5	3.5	6.0	9.0	14.0	25.5	32.0
	kg	0.7	0.7	0.7	1.1	1.6	2.7	4.1	6.3	11.6	14.5
Flow Coefficient	C <sub>v</sub>	0.7	2	8	15	22	38	42	70	110	160

Socket Weld Dimensions ANSI Class 600

SIZE	in	½	¾	1	1¼	1½	2 <sup>(3)</sup>
	mm	15	20	25	32	40	50
<b>A</b> Dimension Face to Face <sup>(2)</sup>	in	2.93	3.68	4.56	4.93	5.56	6.93
	mm	75	94	116	126	142	177
<b>B</b> Dimension Center Line to Bottom	in	2.37	2.81	3.68	4.12	4.75	6.00
	mm	61	72	94	105	121	153
<b>C</b> Dimension Screen Removal	in	2.62	3.37	4.75	5.25	6.00	7.25
	mm	67	86	121	134	153	184
<b>D</b> NPT Plug Blow-off	in	¼	⅜	⅜	¾	¾	1
Approximate Assemble Wt.	lb	1.5	2.5	5.0	5.5	9.0	13.0
	kg	0.7	1.1	2.3	2.5	4.1	5.9
Flow Coefficient	C <sub>v</sub>	8	15	22	38	42	70

DIMENSIONS SHOWN ARE SUBJECT TO CHANGE. PLEASE OBTAIN CERTIFIED PRINTS FROM FIVES NORTH AMERICAN COMBUSTION, INC. IF SPACE LIMITATIONS OR OTHER CONSIDERATIONS MAKE EXACT DIMENSION(S) CRITICAL.

**Cast Iron Flanged Flat Face Dimensions ANSI Class 125**

SIZE	in mm	2 50	2½ 65	3 80	4 100	6 150	8 200
<b>A</b> Dimension Face to Face (Flat Face)	in	7.875	10.0	10.125	12.12	18.5	21.625
	mm	200	254	256	308	470	550
<b>B</b> Dimension Center Line to Bottom	in	5.25	6.50	7.0	8.25	13.5	15.5
	mm	133	166	178	210	343	394
<b>C</b> Dimension Screen Removal	in	7.0	9.75	10.0	12.0	20.0	22.75
	mm	178	248	254	305	508	578
<b>D</b> NPT Plug Blow-off	in	½	1	1	1½	2	2
<b>E</b> NPT Plug Gauge Taps	in	¼	¼	¼	¼	¼	¼
Approximate Assemble Wt.	lb	20.0	33.0	37.0	70.0	155.0	245.0
	kg	9.1	15.0	16.8	31.8	70.3	111.1
Flow Coefficient	C <sub>v</sub>	70	110	160	260	570	950

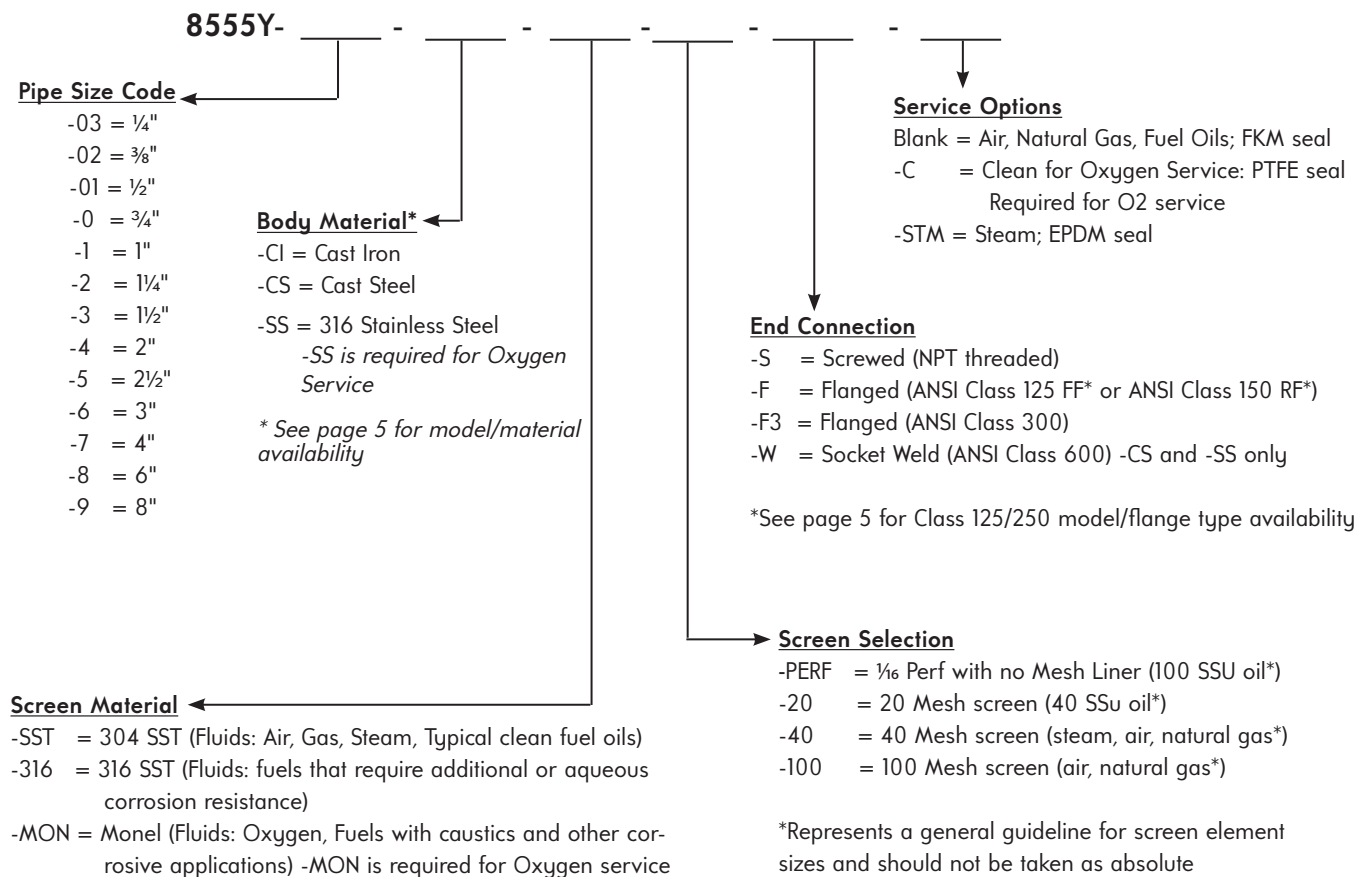
**SST and Cast Steel Flanged Raised Face Dimensions ANSI Class 150**

SIZE	in mm	½ 15	¾ 20	1 25	1¼ 32	1½ 40	2 50	2½ 65	3 80	4 100	6 150	8 200
<b>A</b> Dimension Face to Face	in	6.50	7.37	7.37	7.00	7.12	7.87	9.75	10.06	12.12	18.50	21.37
	mm	166	188	188	178	181	200	248	256	308	470	543
<b>B</b> Dimension Center Line to Bottom	in	3.50	3.75	3.75	4.75	4.75	5.25	6.50	7.00	8.25	13.50	15.50
	mm	89	96	96	121	121	134	166	178	210	343	394
<b>C</b> Dimension Screen Removal	in	5.00	5.00	5.00	7.00	7.00	7.00	9.75	10.00	12.00	20.00	22.75
	mm	127	127	127	178	178	178	248	254	305	508	578
<b>D</b> NPT Plug Blow-off	in	¾	½	½	½	½	½	1	1	1½	2	2
<b>E</b> NPT Plug Gauge Taps	in	N/A	N/A	N/A	N/A	N/A	¼	¼	¼	¼	¼	¼
Approximate Assemble Wt.	lb	5.5	10.3	10.3	12.0	12.5	21.0	32.0	35.0	55.0	140.0	220.0
	kg	2.5	4.6	4.6	5.4	5.7	9.5	14.5	15.9	24.9	63.5	99.7
Flow Coefficient	C <sub>v</sub>	8	15	22	38	42	70	110	160	260	570	950

**SST and Cast Steel Flanged Raised Face Dimensions ANSI Class 300**

SIZE	in mm	½ 15	¾ 20	1 25	1¼ 32	1½ 40	2 50	2½ 65	3 80	4 100	6 150	8 200
<b>A</b> Dimension Face to Face	in	6.62	8.31	8.31	10.12	10.25	9.62	10.62	12.00	14.50	19.31	23.37
	mm	169	212	212	258	261	245	270	3005	369	491	594
<b>B</b> Dimension Center Line to Bottom	in	3.50	3.75	3.75	5.50	5.50	5.25	6.50	7.00	8.25	13.50	15.50
	mm	89	96	96	140	140	134	166	178	210	343	394
<b>C</b> Dimension Screen Removal	in	5.00	5.00	5.00	8.00	8.00	7.00	9.75	10.00	12.00	20.00	22.75
	mm	127	127	127	204	204	178	248	254	305	508	578
<b>D</b> NPT Plug Blow-off	in	¾	½	½	½	½	½	1	1	1½	2	2
<b>E</b> NPT Plug Gauge Taps	in	N/A	N/A	N/A	N/A	N/A	¼	¼	¼	¼	¼	¼
Approximate Assemble Wt.	lb	7.0	10.0	13.5	26.0	26.0	26.0	40.0	52.5	94.0	185.5	260.0
	kg	3.2	4.5	6.1	11.8	11.8	11.8	18.1	22.8	42.6	84.1	117.9
Flow Coefficient	C <sub>v</sub>	8	15	22	38	42	70	110	160	260	570	950

## ORDERING INFORMATION



**Example:**

**8555Y-4-CI-304-40-F; 2" Y strainer with Cast Iron Body, 304 SST Basket 40 Mesh Screen, ANSI Class 125 Flat Face Flanged, for Air, Natural Gas and Fuel Oil with FKM Seal.**

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PRESSURE TEMPERATURE RATINGS

8555Y Strainer Catalog Threaded Body Material Selection Guide

Material Selection Code	Material Options	Sizes Available With Cap Cover	Sizes Available With Bolted Cover	ANSI Class	Pressure/Temperature Ratings (PSIG/TEMP F)		
					Max. Oil, Gas, O2 Press. at Temperature	Steam	Max. Oil, Gas, O2 Press. at Temperature
CI	Cast Iron	¼" - 3"		250	400/150F	250/350F	300/350F
CS	Carbon Steel	¼" - 2"	2½" - 3"	600	1480/100F	600/350F	1300/350F
SS	Stainless Steel	¼" - 2"	2½" - 3"	600	1440/100F	600/350F	1050/350F

8555Y Strainer Catalog Flanged Body Material Selection Guide

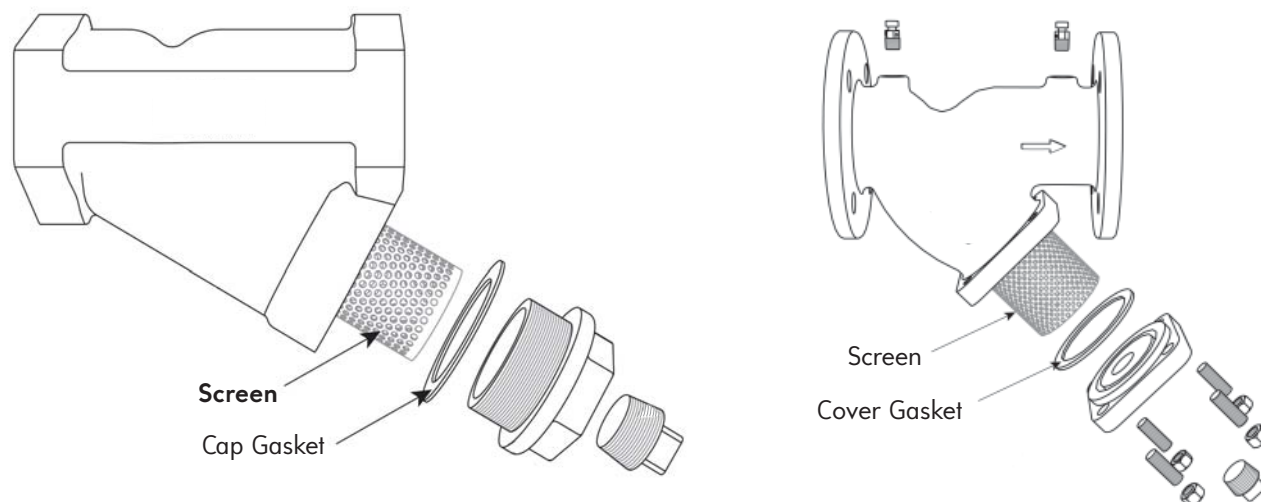
Material Selection Code	Material Options	Sizes Available (Bolted Cover Only)	ANSI Class	Pressure/Temperature Ratings (PSIG/TEMP F)		
				Max. Oil, Gas, O2 Press. at Temperature	Steam	Max. Oil, Gas, O2 Press. at Temperature
CI	Cast Iron	2" - 8" (FF)	125	200/150F	125/350F	150/350F
CS	Carbon Steel	½" - 8" (RF)	150	285/100F	150/350F	200/350F
SS	Stainless Steel	½" - 8" (RF)	150	275/100F	150/350F	210/350F
CS	Carbon Steel	½" - 8" (RF3)	300	740/100F	300/350F	650/350F
SS	Stainless Steel	½" - 8" (RF3)	300	720/100F	300/350	520/350F

8555Y Strainer Catalog Socket Weld Body Material Selection Guide

Material Selection Code	Material Options	Sizes Available With Cap Cover	Sizes Available With Bolted Cover	ANSI Class	Pressure/Temperature Ratings (PSIG/TEMP F)		
					Max. Oil, Gas, O2 Press. at Temperature	Steam	Max. Oil, Gas, O2 Press. at Temperature
CS	Carbon Steel	½" - 2"	2"	600	1480/100F	600/350F	1300/350F
SS	Stainless Steel	½" - 2"	2"	600	1440/100F	600/350F	1050/350F

**NOTE:** Although strainer body material selections are limited to cast iron, carbon steel and stainless steel, the above charted data is provided to assist in making the proper selection, taking into account sizes available for a given pressure/temperature requirement, flow media options, connection types and cover constructions.

## RECOMMENDED SPARE PARTS



### Ordering Replacement Screens Only

**Example:**

**8555Y-4-CI-304-40-F- SCREEN; Screen only for 8555Y-4-CI-304-40-F**

### Ordering Replacement Gaskets Only

**Example:**

**8555Y-4-CI-304-40-F- GASKET; Gasket only for 8555Y-4-CI-304-40-F**

**WARNING:** Situations dangerous to personnel and property may exist with the operation and maintenance of any combustion equipment. The presence of fuels, oxidants, hot and cold combustion products, hot surfaces, electrical power in control and ignition circuits, etc., is inherent with any combustion application. Parts of this product may exceed 160F in operation and present a contact hazard. Fives North American Combustion, Inc. urges compliance with National Safety Standards and Insurance Underwriters' recommendations, and care in operation.

## STRAINER CAPACITY

**DETERMINE STRAINER CAPACITY IN GPM FOR .845 SPECIFIC GRAVITY #2 FUEL OIL AT 1 PSI DP, 60F**

Size (threaded or flanged bodies)	GPM with 1/16 PERF Strainer (Unlined)	GPM with 20 Mesh Lined Strainer	GPM with 40 Mesh Lined Strainer	GPM with 100 Mesh Lined Strainer	C <sub>v</sub> factor
1/4	0.73	0.71	0.64	0.57	0.7
3/8	2.07	2.03	1.84	1.62	2
1/2	8.3	8.12	7.36	6.49	8
3/4	15.56	15.22	13.79	12.16	15
1	22.82	22.32	20.23	17.84	22
1 1/4	39.41	38.55	34.94	30.81	38
1 1/2	43.56	42.61	38.62	34.06	42
2	72.61	71.01	64.36	56.76	70
2 1/2	114.1	111.59	101.13	89.19	110
3	165.96	162.31	147.11	129.73	160
4	269.68	263.75	239.05	210.82	260
6	591.22	578.23	524.06	462.18	570
8	985.37	963.71	873.44	770.30	950

STRAINER CAPACITY continued

**DETERMINE STRAINER CAPACITY IN GPM FOR .959 SPECIFIC GRAVITY #6 FUEL OIL AT 1 PSI DP, 60F**

Size (threaded or flanged bodies)	GPM with 1/16 PERF Strainer (Unlined)	GPM with 20 Mesh Lined Strainer	GPM with 40 Mesh Lined Strainer	GPM with 100 Mesh Lined Strainer	C <sub>v</sub> factor
1/4	0.65	0.64	0.58	0.49	0.7
3/8	1.86	1.83	1.67	1.41	2
1/2	7.46	7.31	6.67	5.64	8
3/4	13.98	13.7	12.51	10.57	15
1	20.51	20.09	18.35	15.5	22
1 1/4	35.42	34.71	31.68	26.78	38
1 1/2	39.15	38.36	35.02	29.6	42
2	65.25	63.93	58.36	49.33	70
2 1/2	102.54	100.47	91.71	77.51	110
3	149.15	146.14	133.4	112.75	160
4	242.37	237.47	216.78	183.21	260
6	531.34	520.61	475.25	569.3	570
8	885.57	867.68	792.08	669.43	950

**DETERMINE STRAINER CAPACITY FOR GASES**

Size (threaded or flanged bodies)	scfh (.6 SG) nat gas at 1" w.c. dp with 1 psi upstream, 60F, at sea level (1/16 PERF Screen)	scfh (.6 SG) nat gas at 1" w.c. dp with 1 psi upstream, 60F, at sea level (20 Mesh Lined)	scfh (.6 SG) nat gas at 1" w.c. dp with 1 psi upstream, 60F, at sea level (40 Mesh Lined)	scfh (.6 SG) nat gas at 1" w.c. dp with 1 psi upstream, 60F, at sea level (100 Mesh Lined)	C <sub>v</sub> factor
1/4	40.6	39.7	37	31	0.7
3/8	116	113	106	89	2
1/2	464	453	424	356	8
3/4	870	850	795	668	15
1	1276	1246	1166	980	22
1 1/4	2204	2153	2014	1682	38
1 1/2	2436	2379	2226	1870	42
2	4060	3966	3710	3117	70
2 1/2	6380	6232	5829	4898	110
3	9280	9064	8479	7124	160
4	15 080	14 730	13 778	11 576	260
6	33 060	32 292	30 206	25 378	570
8	55 100	53 819	50 343	42 297	950



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