Fluid Engineering
A Division of TM Industrial Supply, Inc.

1432 Walnut Street Erie, PA 16502-1746 USA
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180 "Y" STRAINER ❖ ANSI CLASS 125

CAST IRON ❖ FLANGED ENDS, FLAT FACE

NEWLY DESIGNED...
Gauge Taps
STANDARD ON ALL 180 YFT MODELS IN SIZES 2" ~ 20"

MODELS: 180 YFT CI

(CAST IRON)

FEATURES

SIZE RANGE : 2" ~ 24"

◇ **NEW DESIGN WITH GAUGE TAPS**
FE'S YFT HAS CONVENIENT GAUGE TAPS FURNISHED WITH A PLUG ON BOTH THE INLET AND OUTLET SIDES OF SIZES 2" THROUGH 20". THESE TAPS ALLOW FOR EASY INSTALLATION OF PRESSURE GAUGES TO MONITOR DIFFERENTIAL PRESSURE AND DETERMINE WHEN SCREEN CLEANING IS NECESSARY. ADDITIONALLY, SIZES 2" THROUGH 6" HAVE AN EXTRA BOSS FOR CUSTOM GAUGE TAPPING.

◇ **LARGE STRAINING CAPACITY**
WITH ITS LARGE BODY AND SIZABLE STRAINING ELEMENT, THE YFT PROVIDES EXCELLENT OPEN AREA RATIOS THAT ARE TYPICALLY TWO-AND-A-HALF TIMES LARGER THAN THE CORRESPONDING PIPELINE.

◇ **PRECISION MACHINED SEATS**
PRECISION MACHINED SCREEN SEATS IN BOTH THE BODY AND CAP HELP TO ENSURE ACCURATE POSITIONING OF THE SCREEN DURING REASSEMBLY AFTER CLEANING. ALSO, THE MACHINED BODY SEATS ENABLE FINER FILTRATION BY PREVENTING DEBRIS BYPASS.

◇ **SELF-CLEANING CAPABILITY**
WITH A TAPPED NPT BLOW-OFF CONNECTION, THIS UNIT CAN BE FITTED WITH A BLOW-DOWN VALVE WHICH FACILITATES CLEANING OF THE STRAINING ELEMENT. PLEASE CONTACT FACTORY FOR MORE INFORMATION.

◇ **EPOXY PAINTED**
ALL UNITS ARE EPOXY PAINTED TO HELP RESIST RUST AND CORROSION. FE ALSO OFFERS EPOXY COATING AS AN OPTION FOR THE YFT.

◇ **POTABLE WATER/FDA APPROVED COATINGS AVAILABLE**
IN ADDITION TO ITS LEAD FREE, CAST IRON BODY, FE CAN PROVIDE NSF/ANSI AND FDA APPROVED EPOXY COATINGS WHICH MAKE THIS PRODUCT SUITABLE FOR POTABLE WATER AND FOOD CONTACT APPLICATIONS. NUMEROUS OPTIONS ARE AVAILABLE. PLEASE CONTACT US FOR MORE DETAILS.

◇ **OPTIONAL COVER DESIGNS**
FE'S YFT IS AVAILABLE WITH DIFFERENT COVER OPTIONS INCLUDING SWING, CLAMP, AND HINGE TYPE COVERS. PLEASE CONSULT FACTORY FOR MORE INFORMATION ON THESE OPTIONS.

TECHNICAL

PRESSURE/ TEMPERATURE RATING CI- ASTM A126 GR. B - CLASS 125 **SIZES 2" ~ 12"**
WOG (Non-shock): 200 PSI @ 150 °F Saturated Steam: 125 PSI @ 353 °F Maximum Liquid: 125 PSI @ 450 °F
PRESSURE/ TEMPERATURE RATING CI- ASTM A126 GR. B - CLASS 125 **SIZES 14" ~ 24"**
WOG (Non-shock): 150 PSI @ 150 °F Saturated Steam: 100 PSI @ 353°F Maximum Liquid: 100 PSI @ 353 °F

- *The above listed temperatures are theoretical and may vary during actual operating conditions.*

APPLICATIONS

GENERAL APPLICATION: Y-STRAINERS ARE INSTALLED IN A PIPING SYSTEM TO REMOVE UNWANTED DEBRIS FROM THE PIPELINE, PROTECTING EXPENSIVE EQUIPMENT DOWNSTREAM SUCH AS PUMPS, METERS, SPRAY NOZZLES, COMPRESSORS, AND TURBINES. THEY CAN BE PLACED IN A HORIZONTAL OR VERTICAL PIPELINE AS LONG AS THE SCREEN IS IN A DOWNWARD POSITION. STRAINING IS ACCOMPLISHED VIA AN INTERNAL PERFORATED OR MESH LINED STRAINING ELEMENT, THE SIZE OF WHICH SHOULD BE DETERMINED BASED ON THE SIZE OF THE SMALLEST PARTICLE TO BE REMOVED.

SERVICING: THE STRAINING ELEMENT NEEDS REGULAR CLEANING TO PREVENT DEBRIS BUILD UP. IT IS NOT ADVISABLE TO ALLOW THE DIFFERENTIAL PRESSURE TO INCREASE BY 20 PSI. ALTHOUGH CLEANING NORMALLY REQUIRES THE REMOVAL OF THE STRAINING ELEMENT, INSTALLING AND USING A FE BLOW-OFF DRAIN VALVE CAN INCREASE THE TIME BETWEEN CLEANINGS.

The above data represents common market and service applications. No representation or guarantee, expressed or implied, is given due to the numerous variations of concentrations, temperatures and flow conditions that may occur during actual service.

Fluid Engineering

180 "Y" STRAINER

YFT - (Cast Iron)

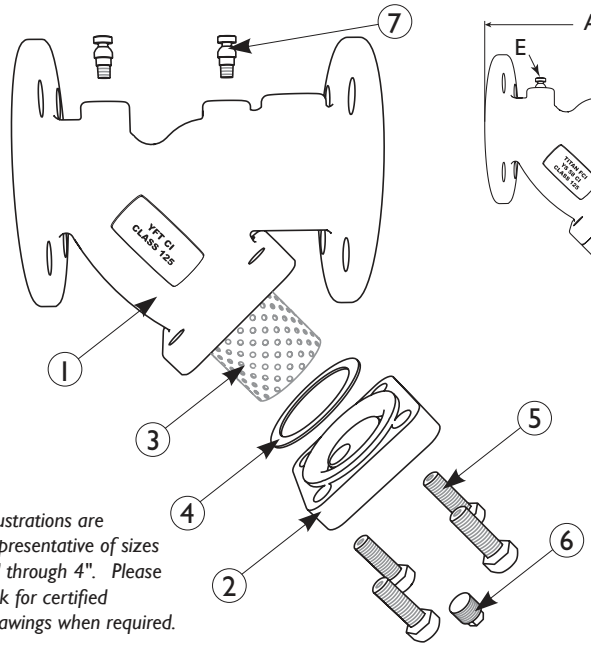
Flanged Ends • Flat Face • Cast Iron

ANSI Class 125

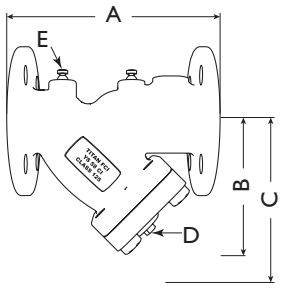
BILL OF MATERIALS (1)

No.	PART	180 YFT
1	Body	Cast Iron A126 Gr. B
2	Cover	Cast Iron A126 Gr. B
3	Straining Element (2)	Stainless Steel
4	Gasket (2)	Non-Asbestos Gasket, Garlock 3000 or Equal
5	Cap Screws	Steel
6	NPT Plug (Blow-off)	Carbon Steel
7	NPT Plugs (Gauge Taps) (3)	Carbon Steel

1. Bill of Materials represents standard materials. Equivalent or better materials may be substituted at the manufacturer's discretion.
2. Denotes recommended spare parts.
3. Gauge taps and NPT Plugs (Part #7) are standard only on sizes 2" through 20". See Dimensions and Performance Data for the standard NPT sizes.



Illustrations are representative of sizes 2" through 4". Please ask for certified drawings when required.



Additional Design and Technical Notes:

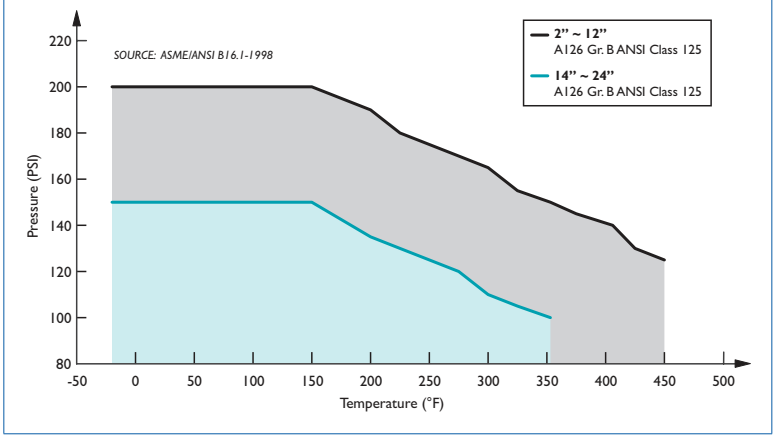
- On sizes 2" through 6", the bodies are cast with an additional boss that can be tapped for various sizes. Contact factory for more information on this option.
- If furnished with a bronze blow off valve, the YFT meets the military specification WW-S-2739 for Type 2 strainers, sizes 2" through 8". See factory.

DIMENSIONS AND PERFORMANCE DATA (1)

SIZE		2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24
	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600
A DIMENSION FACE TO FACE (FLAT FACE) (2)	in	7.875	10.0	10.125	12.12	15.62	18.5	21.625	25.75	29.87	33.25	38.75	43.125	49.5	58.375
	mm	200	254	256	308	397	470	550	655	759	845	984	1095	1257	1483
B DIMENSION CENTER LINE TO BOTTOM	in	5.25	6.50	7.0	8.25	11.25	13.5	15.5	18.5	21.75	25.0	26.5	31.0	39.0	45.0
	mm	133	166	178	210	286	343	394	470	553	625	673	787	991	1143
C DIMENSION SCREEN REMOVAL	in	7.0	9.75	10.0	12.0	20.0	20.0	22.75	28.0	30.0	36.5	42.0	45.5	56.0	68.0
	mm	178	248	254	305	508	508	578	712	762	927	1067	1156	1422	1727
D NPT Plug BLOW-OFF	in	1/2	1	1	1 1/2	2	2	2	2	2	2	2	2	2	2
	mm	15	25	25	40	50	50	50	50	50	50	50	50	50	50
E NPT Plug GAUGE TAPS	in	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	n/a
	mm	8	8	8	8	8	8	8	8	8	8	8	8	8	n/a
APPROXIMATE ASSEMBLED WEIGHT	lb	20.0	33.0	37.0	70.0	105.0	155.0	245.0	358.0	560.0	818.0	1145.0	1740.0	1888.0	3000.0
	kg	9.1	15.0	16.8	31.8	47.6	70.3	111.1	162.4	254.0	371.0	519.4	789.3	856.4	1360.8
Flow Coefficient	C_V	70	110	160	260	400	570	950	1600	2200	3300	4900	6100	8000	11000

1. Dimensions and weights are for reference only. When required, request certified drawings.
2. Face to face values have a tolerance of ±0.06 in (±2.0 mm) for sizes 10" and lower and a tolerance of ±0.12 in (±3.0 mm) for sizes 12" and larger.

PRESSURE - TEMPERATURE RATINGS (1)



1. This chart displays the pressure-temperature ratings for the valve's body per ASME B16.1-1998.

PRESSURE - TEMPERATURE RATING

A126 Gr. B	2" ~ 12"	14" ~ 24"
WOG (Non-shock):	200 PSI @ 150 °F	150 PSI @ 150 °F
Saturated Steam:	125 PSI @ 353°F	100 PSI @ 353°F
Max Liquid:	125 PSI @ 450 °F	100 PSI @ 353 °F

STANDARD SCREEN SELECTIONS

Size	Liquid	Open Area	Steam	Open Area
2" ~ 4"	1/16 (.0625)	41%	3/64 (.045)	36%
5" ~ 8"	1/8 (.125)	40%	3/64 (.045)	36%
10" ~ 16" (1)	1/8 (.125)	40%	30 Mesh Lined	44.8%

1. Please consult factory for screen selections on 18" and larger 180 YFT models.

REFERENCED STANDARDS & CODES

CODE	DESCRIPTION
ASME/ANSI B16.1	Cast Iron Pipe Flanges and Flanged Fittings

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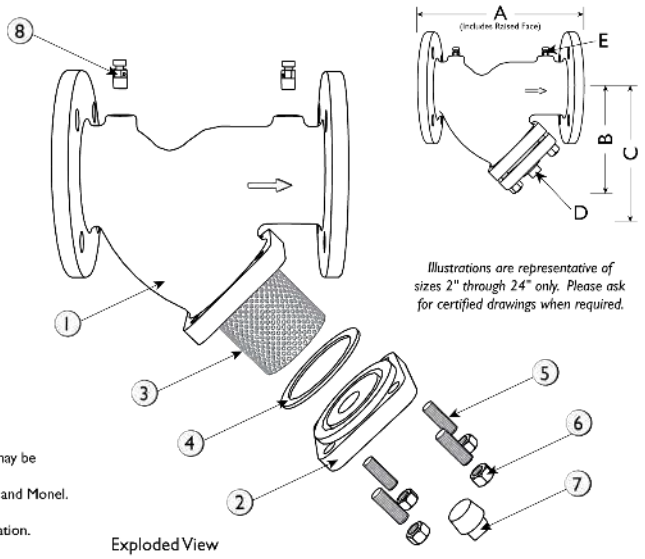
Series 180 "Y" Strainers

Raised Face Carbon Steel & Stainless Steel 150 lbs. ANSI Flange Rating

BILL OF MATERIALS [1]

No.	PART	180 YFT CS [6]	180 YFT SS
1	Body [2]	Carbon Steel A216 Gr. WCB	Stainless Steel A351 Gr. CF8M
2	Cover	Carbon Steel A216 Gr. WCB	Stainless Steel A351 Gr. CF8M
3	Straining Element [3]	Stainless Steel	Stainless Steel
4	Gasket [3] [4]	Stainless Steel Spiral Wound	Stainless Steel Spiral Wound
5	Studs	Alloy Steel	Stainless Steel
6	Nuts	Alloy Steel	Stainless Steel
7	NPT Plug Blow-off	Carbon Steel	Stainless Steel
8	NPT Plug Gauge Taps [5]	Carbon Steel	Stainless Steel

1. Bill of Materials represents standard materials. Equivalent or better materials may be substituted at the manufacturer's discretion.
2. Available in additional body materials, such as LCB, WC6, WC9, 316L, Alloy 20, and Monel.
3. Denotes recommended spare parts.
4. A wide range of gasket materials are available; contact factory for more information.
5. Part number 8 (NPT Plug - Gauge Taps) only applies to sizes 2" through 24".
6. Carbon Steel bodies are epoxy painted.



Exploded View

Illustrations are representative of sizes 2" through 24" only. Please ask for certified drawings when required.

DIMENSIONS AND PERFORMANCE DATA [1]

SIZE		½	¾	1	1¼	1½	2	2½	3	4	5	6	8	10	12	14	16	18	20	24
	mm	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600
A DIMENSION FACE TO FACE [2]	in	6.50	7.37	7.37	7.00	7.12	7.87	9.75	10.06	12.12	15.62	18.50	21.37	26.00	29.87	36.00	41.75	46.00	49.50	58.37
	mm	166	188	188	178	181	200	248	256	308	397	470	543	661	759	914	1060	1168	1257	1483
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	11.25	13.50	15.50	18.50	22.25	25.00	26.50	31.00	39.00	45.00
	mm	89	96	96	121	121	134	166	178	210	286	343	394	470	566	625	673	787	991	1143
C DIMENSION SCREEN REMOVAL	in	5.00	5.00	5.00	7.00	7.00	7.00	9.75	10.00	12.00	20.00	20.00	22.75	28.00	30.00	36.50	42.00	45.50	56.00	68.00
	mm	127	127	127	178	178	178	248	254	305	508	508	578	712	762	927	1067	1156	1422	1727
D NPT Plug BLOW-OFF	in	3/8	1/2	1/2	1/2	1/2	1/2	1	1	1 1/2	2	2	2	2	2	2	2	2	2	2
	mm	10	15	15	15	15	15	25	25	40	50	50	50	50	50	50	50	50	50	50
E NPT Plug GAUGE TAPS	in	N/A	N/A	N/A	N/A	N/A	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
	mm	N/A	N/A	N/A	N/A	N/A	8	8	8	8	8	8	8	8	8	8	8	8	8	8
ASSEMBLED WEIGHT APPROXIMATE	lb	5.5	10.3	10.3	12.0	12.5	21.0	32.0	35.0	55.0	90.0	140.0	220.0	356.0	644.0	1000	1600	2400	2700	5000
	kg	2.5	4.6	4.6	5.4	5.7	9.5	14.5	15.9	24.9	40.8	63.5	99.7	161.5	292.1	453.6	725.7	1089	1225	2268
Flow Coefficient	C_v	C/F	C/F	C/F	C/F	42	70	110	160	260	400	570	950	1600	2200	3300	4900	6100	8000	11000

1. Dimensions and weights are for reference only. When required, request certified drawings.
2. Face to face dimension includes raised face. These values have a tolerance of ±0.06 in (±2.0 mm) for sizes 10" and lower and a tolerance of ±0.12 in (±3.0 mm) for sizes 12" and larger.

REFERENCED STANDARDS & CODES

CODE	DESCRIPTION
ASME/ANSI B16.5	Pipe Flanges and Flanged Fittings
ASME/ANSI B16.34	Flanged, Threaded, and Welding End

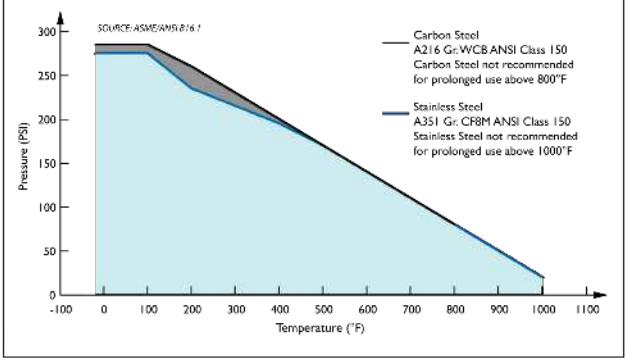
STANDARD SCREEN SELECTIONS

Size	Liquid	Open Area	Steam	Open Area
1/2" - 4"	1/16 (.0625)	41%	1/32 (.033)	28%
5" - 12"	1/8 (.125)	40%	3/64 (.045)	36%

PRESSURE - TEMPERATURE RATING

Body Material	A216 Gr. WCB	A351 Gr. CF8M
WOG (Non-shock):	285 PSI @ 100 °F	275 PSI @ 100 °F
Saturated Steam:	150 PSI @ 366°F	150 PSI @ 366°F
Max Liquid:	80 PSI @ 800 °F	20 PSI @ 1000 °F

PRESSURE - TEMPERATURE RATINGS



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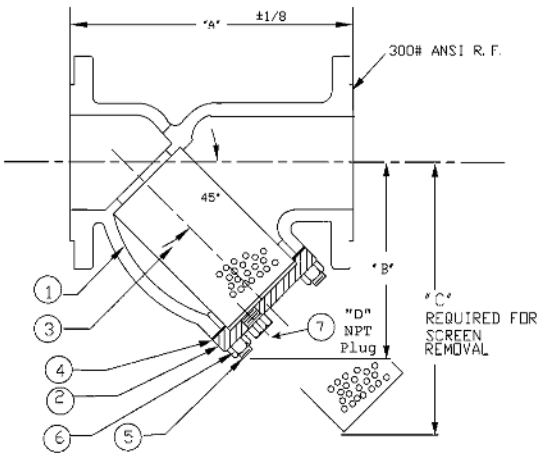
Series 180 "Y" Strainers

Raised Face Carbon Steel & Stainless Steel
300 lbs. ANSI Flange Rating



BILL OF MATERIALS

No.	PART	180 YFT CS	180 YFT SS
1	Body	ASTM A216 Gr. WCB	ASTM A351 Gr. CF8M
2	Cover	ASTM A216 Gr. WCB	ASTM A351 Gr. CF8M
3	Screen*	304 Stainless Steel	
4	Gasket*	304 Stainless Steel Spiral Wound Non-Asbestos	
5	Studs	ASTM A193-B7	ASTM A193 B8 T316SS
6	Nuts	ASTM A194-2H	ASTM A194 Gr. 8 T316SS
7	Plug	ASTM A105	ASTM A182 F316

**Recommended spare parts*

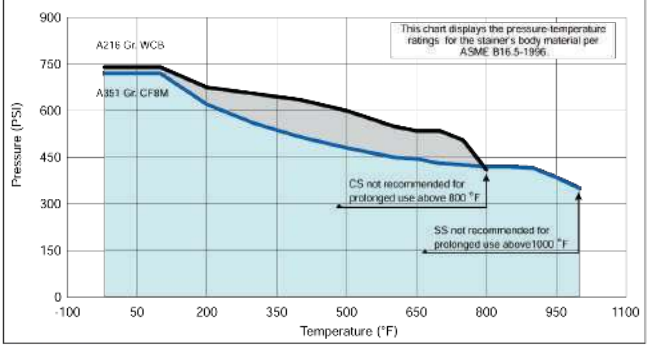
Notes:
- A wide range of optional gasket materials available - C/F.
- Optional body materials available:
  (LCB, WC6, WC9, 316L, Alloy 20, and Monel)
- Furnished with 1/16" raised face. Flange Finish: 125-250 AARH
- Gasket is encapsulated in machined recessed grove.

DIMENSIONS:

SIZE		1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10	12
	mm	15	20	25	32	40	50	65	80	100	125	150	200	250	300
A 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	19.31	23.37	27.37	32.00
	mm	169	212	212	258	261	245	270	305	369	491	491	594	696	813
B DIMENSION CTR. LINE - BOTTOM	in	3.50	3.75	3.75	5.50	5.50	5.25	6.50	7.00	8.25	11.25	13.50	15.50	18.50	21.75
	mm	89	96	96	140	140	134	166	178	210	286	343	394	470	553
C DIMENSION SCREEN REMOVAL	in	5.00	5.00	5.00	8.00	8.00	7.00	9.75	10.00	12.00	17.00	20.00	22.75	28.00	30.00
	mm	127	127	127	204	204	178	248	254	305	432	508	578	712	762
D DIMENSION NPT BLOW-OFF	in	3/8	1/2	1/2	1/2	1/2	1/2	1	1	1 1/2	2	2	2	2	2
	mm	10	15	15	15	15	15	25	25	40	50	50	50	50	50
ASSEMBLED WEIGHT	lb	7.0	10.0	13.5	26.0	26.0	26.0	40.0	52.5	94.0	161.5	185.5	260.0	408.0	632.0
	kg	3.2	4.5	6.1	11.8	11.8	11.8	18.1	23.8	42.6	73.2	84.1	117.9	185.1	286.7
Flow Coefficient	C_V	---	---	---	---	42	70	110	160	260	400	570	950	1600	2200

Dimensions, weights, and flow coefficients are for reference only. When required, always request certified drawing.

PRESSURE-TEMP: A216 Gr. WCB & A351 Gr. CF8M ANSI Class 300



TESTING: Strainers are individually, hydrostatically tested at 1.5 x the 100 °F rating, rounded off to the next higher 25 PSI measurement .

WORKING PRESSURES & TEMPERATURE - NON-SHOCK

ANSI Class 300	180 YFT CS	180 YFT SS
WOG (Water, Oil, Gas)	740 PSI @ 100 °F	720 PSI @ 100 °F
Saturated Steam	300 PSI @ 420 °F	300 PSI @ 420 °F
Max Liquid	400 PSI @ 800 °F	350 PSI @ 1000 °F

STANDARD SCREEN SELECTIONS

Sizes	Water Service	Open Area	Steam	Open Area
1/2" ~ 4"	1/16 (0.062)	41%	1/32 (0.033)	28%
5" ~ 12"	1/8 (0.125)	40%	3/64 (0.045)	36%

A wide range of optional wire mesh and perforated screens are available.

REFERENCED STANDARDS

Pipe Flanges and Flanged Fittings	ANSI B16.5

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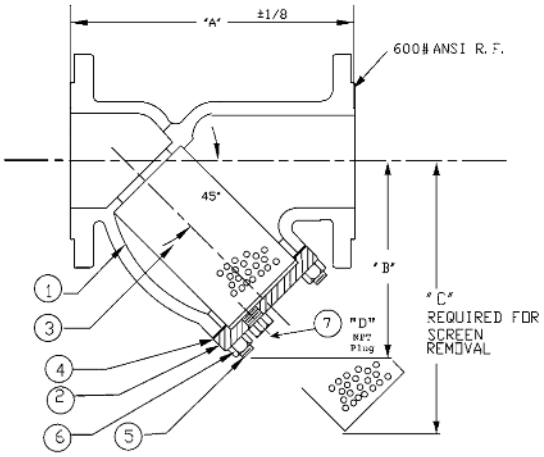
600 lbs. ANSI Flange Rating



BILL OF MATERIALS			
No.	**PART**	**180 YFT CS**	**180 YFT SS**
1	Body	ASTM A216 Gr. WCB	ASTM A351 Gr. CF8M
2	Cover	ASTM A216 Gr. WCB	ASTM A351 Gr. CF8M
3	Screen*	304 Stainless Steel	
4	Gasket*	304 Stainless Steel Spiral Wound Non-Asbestos	
5	Studs	ASTM A193-B7	ASTM A193 B8 T316SS
6	Nuts	ASTM A194-2H	ASTM A194 Gr. 8 T316SS
7	Plug	ASTM A105	ASTM A182 F316

**Recommended spare parts*

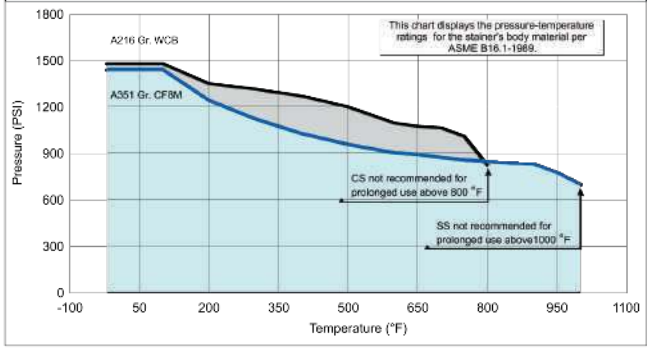
Notes:
- A wide range of optional gasket materials available - C/F.
- Optional body materials available:
  (LCB, WC6, WC9, 316L, Alloy 20, and Monel).
- Flange Finish: 125-250 AARH

DIMENSIONS:

SIZE		1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4	5	6	8	10	12
	mm	15	20	25	32	40	50	65	80	90	100	125	150	200	250	300
A DIMENSION FACE TO FACE	in	6.62	8.31	8.31	10.12	10.25	11.00	12.00	13.50	14.75	17.93	22.25	25.62	31.75	37.68	45.50
	mm	169	212	212	258	261	280	305	343	375	456	566	651	807	958	1156
B DIMENSION CTR. LINE - BOTTOM	in	3.50	3.75	3.75	5.50	5.50	7.00	8.25	9.25	10.37	12.50	15.00	20.00	24.00	28.50	34.50
	mm	89	96	96	140	140	178	210	235	264	318	381	508	610	724	877
C DIMENSION SCREEN REMOVAL	in	5.00	5.00	5.00	8.00	8.00	10.00	12.50	14.50	14.87	19.50	23.00	31.00	38.50	45.50	52.00
	mm	127	127	127	204	204	254	318	369	378	496	585	788	978	1156	1321
D DIMENSION NPT BLOW-OFF	in	3/8	1/2	1/2	1/2	1/2	1/2	1	1	1 1/4	1 1/2	2	2	2	2	2
	mm	10	15	15	15	15	15	25	25	32	40	50	50	50	50	50
ASSEMBLED WEIGHT	lb	7.5	10.0	13.5	19.0	25.0	32.0	50.0	65.0	125.0	125.0	254.0	304.0	526.0	1090.0	1558.0
	kg	3.4	4.5	6.1	8.6	11.3	14.5	22.7	29.5	56.7	56.7	115.1	137.9	238.6	493.8	705.9
Flow Coefficient	C_v	---	---	---	---	42	69	110	150	200	260	400	560	950	1600	2010

Dimensions and weights are for reference only. When required, request certified drawing.

PRESSURE-TEMP: A216 Gr. WCB & A351 Gr. CF8M Class 600 LB



TESTING: Strainers are individually, hydrostatically tested at 1.5 x the 100 °F rating, rounded off to the next higher 25 PSI measurement .

WORKING PRESSURES & TEMPERATURE - NON-SHOCK		
ANSI 600 lb Class	**180 YFT CS**	**180 YFT SS**
WOG (Water, Oil, Gas)	1480 PSI @ 100 °F	1440 PSI @ 100 °F
Saturated Steam	600 PSI @ 489 °F	600 PSI @ 489 °F
Max Liquid	825 PSI @ 800 °F	700 PSI @ 1000 °F

STANDARD SCREEN SELECTIONS				
Sizes	Water Service	Open Area	Steam	Open Area
1/2" ~ 4"	0.062 (1/16)	37%	0.033 (1/32)	28%
5' ~ 12"	0.125 (1/8)	40%	0.045 (3/64)	36%

A wide range of optional wire mesh and perforated screens are available.

APPLICABLE STANDARDS	
End Flanges	ANSI B16.5
Shell Wall Thickness	ANSI B16.34
Pressure vs. Temp. Rating	ANSI B16.34

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"Y" (180) STRAINER ❖ FLANGED ENDS, RAISED FACE

ANSI CLASS 1500 ❖ CARBON AND STAINLESS STEEL

MODELS: YFT 1500
(CARBON STEEL)

YFT 1500SS
(STAINLESS STEEL)

SIZES: 2" ~ 8"

"Ideal for High-Pressure Applications"

FEATURES

◇ **RUGGED - HIGH QUALITY DESIGN**
FE'S YFT IS IDEAL FOR PETROCHEMICAL AND OTHER DEMANDING INDUSTRIAL APPLICATIONS THAT HAVE HIGHER PRESSURE AND TEMPERATURE REQUIREMENTS. THIS UNIT EMPLOYS HEAVY GAUGE, REINFORCED SCREENS TO PREVENT DAMAGE TO THE STRAINING ELEMENT. BOLT HOLES ARE ALSO BACK OR SPOT FACED AND THE OUTSIDE DIAMETERS OF THE FLANGES ARE MACHINED FOR PRECISION.

◇ **LARGE STRAINING CAPACITY**
WITH ITS LARGE BODY AND SIZABLE STRAINING ELEMENT, THE YFT PROVIDES EXCELLENT OPEN AREA RATIOS THAT ARE TYPICALLY TWO-AND-A-HALF TIMES LARGER THAN THE CORRESPONDING PIPELINE.

◇ **PRECISION MACHINED SEATS**
PRECISION MACHINED SCREEN SEATS IN BOTH THE BODY AND CAP HELP TO ENSURE ACCURATE POSITIONING OF THE SCREEN DURING REASSEMBLY AFTER CLEANING. ALSO, THE MACHINED BODY SEATS ENABLE FINER FILTRATION BY PREVENTING DEBRIS BYPASS.

◇ **ENCAPSULATED "CG" STYLE GASKET**
THE "CG" STYLE COVER GASKET PROVIDES ADDITIONAL RADIAL STRENGTH TO PREVENT GASKET BLOWOUT. IT ALSO ACTS AS A COMPRESSION STOP.

◇ **SELF-CLEANING CAPABILITY**
WITH THE OPTIONAL SOCKET WELD BLOW-OFF CONNECTION, THIS UNIT CAN BE FITTED WITH A BLOW-DOWN VALVE WHICH FACILITATES CLEANING OF THE STRAINING ELEMENT. PLEASE CONTACT FACTORY FOR MORE INFORMATION.

◇ **EPOXY PAINTED**
CARBON UNITS ARE EPOXY PAINTED TO HELP RESIST RUST AND CORROSION. FE ALSO OFFERS EPOXY COATING. PLEASE CONTACT FACTORY FOR MORE INFORMATION.

TECHNICAL

PRESSURE/ TEMPERATURE RATING CS - ASTM A216 GR. WCB - CLASS 1500
WOG (Non-shock): 3705 PSI @ 100 °F Saturated Steam: 1500 PSI @ 603 °F Maximum Liquid: 2060 PSI @ 800 °F
PRESSURE/ TEMPERATURE RATING SS - ASTM A351 GR. CF8M - CLASS 1500
WOG (Non-shock): 3600 PSI @ 100 °F Saturated Steam: 1500 PSI @ 603 °F Maximum Liquid: 1750 PSI @ 1000 °F

- *The above listed temperatures are theoretical and may vary during actual operating conditions.*
- *Carbon Steel not recommended for prolonged use above 800 °F.*
- *Stainless Steel not recommended for prolonged use above 1000 °F.*

APPLICATIONS

CARBON STEEL PROPERTIES: CARBON STEEL PERFORMS EXCEPTIONALLY WELL IN HIGH TEMPERATURES, UP TO 800°F IN CONTINUOUS SERVICE. IT PROVIDES HIGH RESISTANCE TO SHOCK, VIBRATION, PIPING STRAINS, AND FIRE AND FREEZING HAZARDS. CARBON STEEL STRAINERS ARE OFTEN USED IN THE OIL AND PETROCHEMICAL INDUSTRIES

STAINLESS STEEL PROPERTIES: STAINLESS STEEL IS COMMONLY SPECIFIED FOR HIGH TEMPERATURE SERVICE, UP TO 1000°F IN CONTINUOUS SERVICE. STAINLESS STEEL STRAINERS ARE COMMONLY FOUND IN THE CHEMICAL, FOOD, AND PHARMACEUTICAL INDUSTRIES.

The above data represents common market and service applications. No representation or guarantee, expressed or implied, is given due to the numerous variations of concentrations, temperatures and flow conditions that may occur during actual service.

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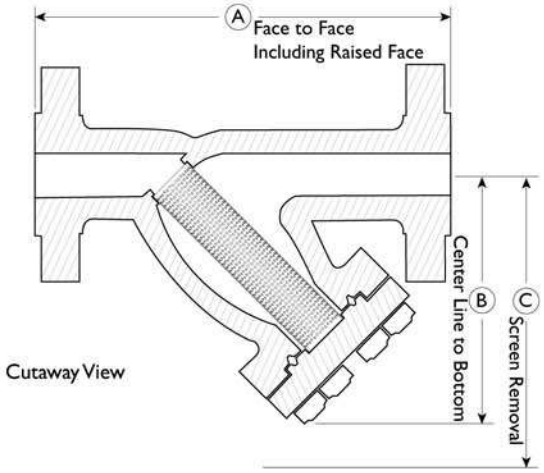
180 STRAINER
YFT 1500 - (Carbon Steel)
YFT 1500SS - (Stainless Steel)
Flanged Ends • Raised Face • Carbon & Stainless Steel

ANSI Class 1500

BILL OF MATERIALS [1]

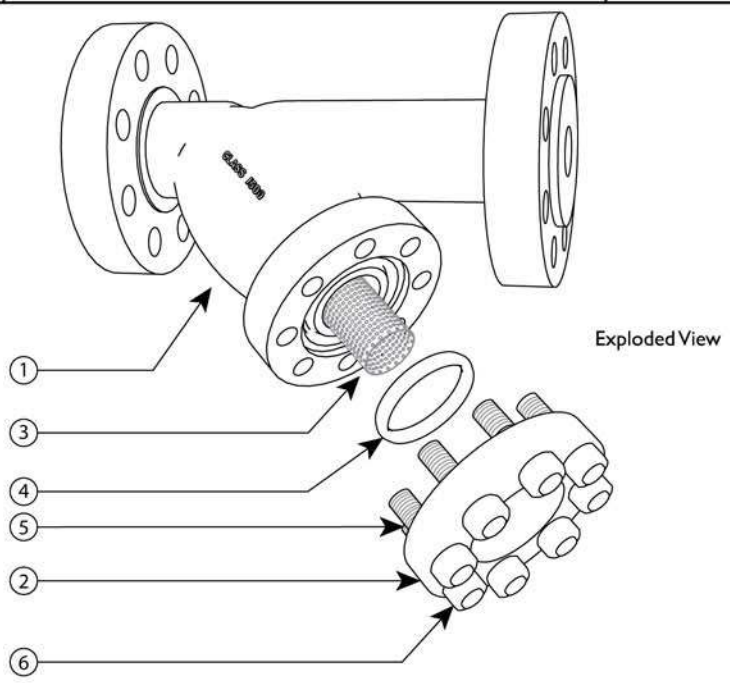
No.	PART	YFT [3]	YFT SS
1	Body	Carbon Steel A216 Gr. WCB	Stainless Steel A351 Gr. CF8M
2	Cover	Carbon Steel A216 Gr. WCB	Stainless Steel A351 Gr. CF8M
3	Straining Element [2]	Stainless Steel	Stainless Steel
4	Gasket [2]	Stainless Steel CG Style	Stainless Steel CG Style
5	Studs	Alloy Steel	Alloy Steel
6	Nuts	Alloy Steel	Alloy Steel

1. Bill of Materials represents standard materials. Equivalent or better materials may be substituted at the manufacturer's discretion.
2. Denotes recommended spare parts.
3. Carbon Steel bodies are epoxy painted.



Cutaway View

Illustrations are representative of sizes 2" through 8".
Please ask for certified drawings when required.



Exploded View

DIMENSIONS AND PERFORMANCE DATA [1]

SIZE		2	2 1/2	3	4	6	8
	mm	50	65	80	100	150	200
A DIMENSION FACE TO FACE [2]	in	16.5	C/F	18.0	22.5	32.5	36.0
	mm	419	C/F	457	572	826	914
B DIMENSION CENTER LINE TO BOTTOM	in	9.25	C/F	12.0	15.37	20.0	23.68
	mm	235	C/F	305	391	508	605
C DIMENSION SCREEN REMOVAL	in	11.0	C/F	16.5	21.0	27.0	32.0
	mm	279	C/F	419	533	686	813
APPROXIMATE ASSEMBLED WEIGHT	lb	91	C/F	175	316	766	1575
	kg	41	C/F	79	143	347	714
Flow Coefficient	C_V	60	C/F	140	180	450	650

1. Dimensions and weights are for reference only. When required, request certified drawings.
2. Face to face values have a tolerance of ±0.06 in (±2.0 mm) for sizes 10" and lower.
3. Contact factory before ordering a 2-1/2" YFT to get dimensions and performance data.

REFERENCED STANDARDS & CODES

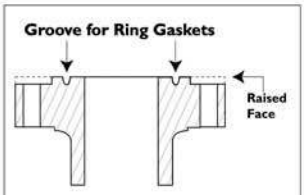
CODE	DESCRIPTION
ASME/ANSI B16.5	Pipe Flanges and Flanged Fittings
ASME/ANSI B16.34	Flanged, Threaded, and Welding End

STANDARD SCREEN SELECTIONS

Size	Liquid	Open Area	Steam	Open Area
2" ~ 4"	1/16 (.0625)	41%	1/32 (.033)	28%
5" ~ 8"	1/8 (.125)	40%	3/64 (.045)	36%

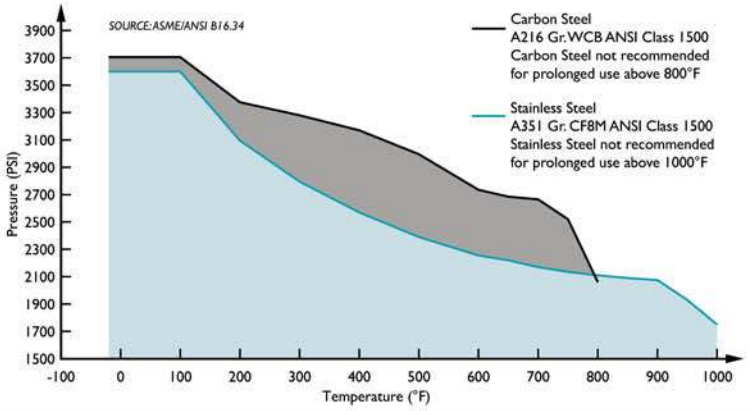
Additional Design & Technical Notes:

- Ring Type Joints (RTJ) are available. Please contact factory.
- An optional socket weld blow-off is available. Please contact factory.
- NPT blow-offs are not recommended for ANSI Class1500 strainers.
- Bodies are also available in high temperature steel A217 Gr. WC6 and WC9. Please contact factory.



Optional Ring Type Joints

PRESSURE - TEMPERATURE RATINGS



PRESSURE - TEMPERATURE RATING

Body Material	A216 Gr. WCB	A351 Gr. CF8M
WOG (Non-shock):	3705 PSI @ 100 °F	3600 PSI @ 100 °F
Saturated Steam:	1500 PSI @ 603 °F	1500 PSI @ 603 °F
Max Liquid:	2060 PSI @ 800 °F	1750 PSI @ 1000 °F

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"Y" (180) STRAINER ◆ FLANGED ENDS, RING TYPE JOINT

ANSI CLASS 2500 ◆ CARBON AND STAINLESS STEEL

MODELS: YFT 2500
(CARBON STEEL)

YFT 2500SS
(STAINLESS STEEL)

SIZES: 2" ~ 8"

"Ideal for High Pressure Applications"

FEATURES

◇ **RUGGED - HIGH QUALITY DESIGN**
FE's YFT IS IDEAL FOR POWER GENERATION AND OTHER DEMANDING INDUSTRIAL APPLICATIONS THAT HAVE HIGHER PRESSURE AND TEMPERATURE REQUIREMENTS. THIS UNIT EMPLOYS HEAVY GAUGE, REINFORCED SCREENS TO PREVENT DAMAGE TO THE STRAINING ELEMENT. BOLT HOLES ARE BACK OR SPOT FACED AND THE OUTSIDE DIAMETERS OF THE FLANGES ARE MACHINED FOR PRECISION.

◇ **LARGE STRAINING CAPACITY**
WITH ITS LARGE BODY AND SIZABLE STRAINING ELEMENT, **YFT** PROVIDES EXCELLENT OPEN AREA RATIOS THAT ARE TYPICALLY TWO-AND-A-HALF TIMES LARGER THAN THE CORRESPONDING PIPELINE.

◇ **PRECISION MACHINED SEATS**
PRECISION MACHINED SCREEN SEATS IN BOTH THE BODY AND CAP HELP TO ENSURE ACCURATE POSITIONING OF THE SCREEN DURING REASSEMBLY AFTER CLEANING. ALSO, THE MACHINED BODY SEATS ENABLE FINER FILTRATION BY PREVENTING DEBRIS BYPASS.

◇ **REUSABLE RTJ GASKET**
PRECISION MACHINED, RTJ GASKETS ARE PREFERRED FOR HIGH PRESSURE AND HIGH TEMPERATURE SERVICES BECAUSE THEY PROVIDE A TIGHT, EFFICIENT SEAL AND A LONG SERVICE LIFE.

◇ **SELF-CLEANING CAPABILITY**
WITH THE OPTIONAL SOCKET WELD BLOW-OFF CONNECTION, THIS UNIT CAN BE FITTED WITH A BLOW-DOWN VALVE WHICH FACILITATES CLEANING OF THE STRAINING ELEMENT. PLEASE CONTACT FACTORY FOR MORE INFORMATION.

◇ **EPOXY PAINTED**
CARBON UNITS ARE EPOXY PAINTED TO HELP RESIST RUST AND CORROSION. **FE** ALSO OFFERS EPOXY COATING. PLEASE CONTACT FACTORY FOR MORE INFORMATION.

TECHNICAL

PRESSURE/TEMPERATURE RATING CS - ASTM A216 GR.WCB - CLASS 2500	
WOG (Non-shock):	6170 PSI @ 100 °F
Saturated Steam:	2500 PSI @ 673°F
Maximum Liquid:	3430 PSI @ 800 °F

PRESSURE/TEMPERATURE RATING SS - ASTM A351 GR. CF8M - CLASS 2500	
WOG (Non-shock):	6000 PSI @ 100 °F
Saturated Steam:	2500 PSI @ 673 °F
Maximum Liquid:	2915 PSI @ 1000 °F

- *The above listed temperatures are theoretical and may vary during actual operating conditions.*
- *Carbon Steel not recommended for prolonged use above 800 °F.*
- *Stainless Steel not recommended for prolonged use above 1000 °F.*

APPLICATIONS

CARBON STEEL PROPERTIES: CARBON STEEL PERFORMS EXCEPTIONALLY WELL IN HIGH TEMPERATURES, UP TO 800°F IN CONTINUOUS SERVICE. IT PROVIDES HIGH RESISTANCE TO SHOCK, VIBRATION, PIPING STRAINS, AND FIRE AND FREEZING HAZARDS. CARBON STEEL STRAINERS ARE OFTEN USED IN THE OIL AND PETROCHEMICAL INDUSTRIES.

STAINLESS STEEL PROPERTIES: STAINLESS STEEL IS COMMONLY SPECIFIED FOR HIGH TEMPERATURE SERVICE, UP TO 1000°F IN CONTINUOUS SERVICE. STAINLESS STEEL STRAINERS ARE COMMONLY FOUND IN THE CHEMICAL, FOOD, AND PHARMACEUTICAL INDUSTRIES.

The above data represents common market and service applications. No representation or guarantee, expressed or implied, is given due to the numerous variations of concentrations, temperatures and flow conditions that may occur during actual service.

Fluid Engineering

180 STRAINER
YFT 2500
YFT 2500 SS

Flanged Ends • RTJ Raised Face • Carbon & Stainless Steel

ANSI Class 2500

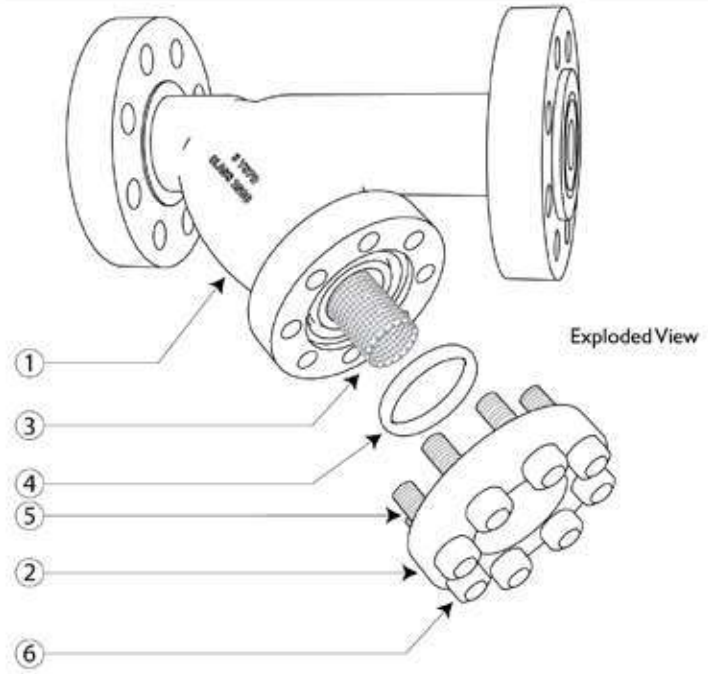
BILL OF MATERIALS [1]

No.	PART	YFT 2500[3]	YFT 2500 SS
1	Body	Carbon Steel A216 Gr.WCB	Stainless Steel A351 Gr. CF8M
2	Cover	Carbon Steel A216 Gr.WCB	Stainless Steel A351 Gr. CF8M
3	Straining Element [2]	Stainless Steel	Stainless Steel
4	Gasket [2]	RTJ Gasket	RTJ Gasket
5	Studs	Alloy Steel	Alloy Steel
6	Nuts	Alloy Steel	Alloy Steel

1. Bill of Materials represents standard materials. Equivalent or better materials may be substituted at the manufacturer's discretion.
2. Denotes recommended spare parts.
3. Carbon Steel bodies are epoxy painted.

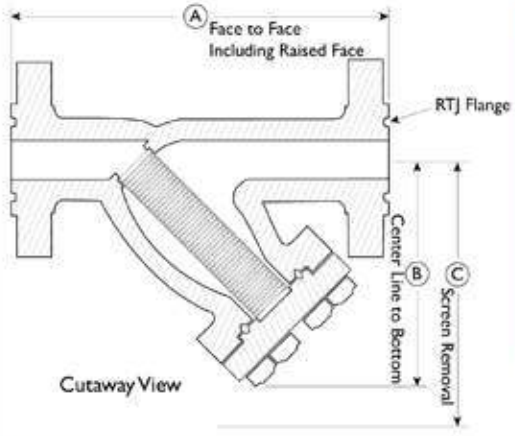
Additional Design & Technical Notes:

- Ring Type Joint, Raised Face Flanges are standard end connections for the **YFT** Contact factory for non-standard options.
- An optional socket weld blow-off is available. Please contact factory.
- NPT blow-offs are not recommended for ANSI Class 2500 strainers.
- Bodies are also available in high temperature steel A217 Gr. WC6 and WC9. Please contact factory for price and delivery.



Exploded View

Illustrations are representative of sizes 2" through 8".
Please ask for certified drawings when required.



Cutaway View

DIMENSIONS AND PERFORMANCE DATA [1]

SIZE		in	2	3	4	6	8
		mm	50	80	100	150	200
A DIMENSION FACE TO FACE [2]		in	17.5	22.0	29.12	36.75	45.0
		mm	445	559	740	933	1143
B DIMENSION CENTER LINE TO BOTTOM		in	10.5	13.0	17.0	21.73	29.0
		mm	267	330	432	552	737
C DIMENSION SCREEN REMOVAL		in	14.0	20.0	25.0	31.0	50.0
		mm	356	508	635	787	1270
APPROXIMATE ASSEMBLED WEIGHT [3]		lb	C/F	C/F	550	C/F	C/F
		kg	C/F	C/F	249	C/F	C/F
Flow Coefficient		C_v	42	100	160	375	600

1. Dimensions and weights are for reference only. When required, request certified drawings.
2. Face to face values have a tolerance of ±0.06 in (±2.0 mm) for sizes 10" and lower.
3. Contact factory for weight of the 2", 3", 6", and 8" YS 70 if required.

PRESSURE - TEMPERATURE RATING

Body Material	A216 Gr.WCB	A351 Gr. CF8M
WOG (Non-shock):	6170 PSI @ 100 °F	6000 PSI @ 100 °F
Saturated Steam:	2500 PSI @ 673°F	2500 PSI @ 673°F
Max Liquid:	3430 PSI @ 800 °F	2915 PSI @ 1000 °F

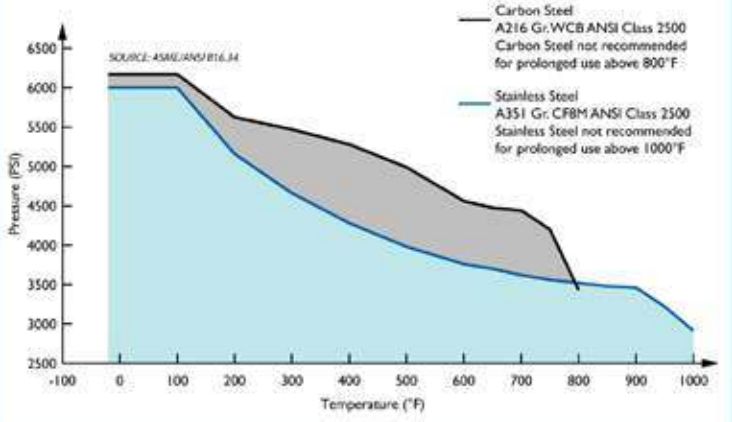
REFERENCED STANDARDS & CODES

CODE	DESCRIPTION
ASME/ANSI B16.5	Pipe Flanges and Flanged Fittings
ASME/ANSI B16.34	Flanged, Threaded, and Welding End

STANDARD SCREEN SELECTIONS

Size	Liquid	Open Area	Steam	Open Area
2" ~ 4"	1/16 (.0625)	41%	1/32 (.033)	28%
5" ~ 8"	1/8 (.125)	40%	3/64 (.045)	36 %

PRESSURE - TEMPERATURE RATINGS



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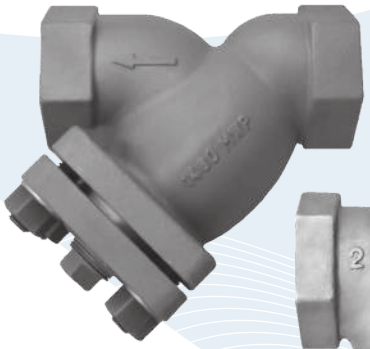
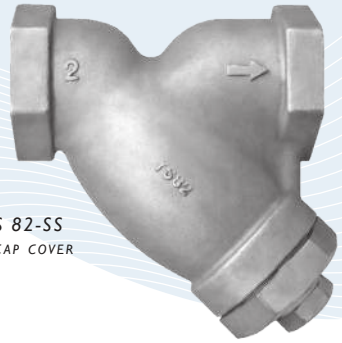
180 "Y" STRAINER ❖ THREADED AND SOCKET WELD

ANSI CLASS 600 ❖ CARBON AND STAINLESS STEEL



2" YSWT-BC-CS
WITH BOLTED COVER



2" YS 82-SS
WITH CAP COVER

MODELS:

YTT-CS
(CARBON STEEL - THREADED)

YSWT-CS
(CARBON STEEL - SOCKET WELD)

YTT-SS
(STAINLESS STEEL - THREADED)

YSWT-SS
(STAINLESS STEEL - SOCKET WELD)

YSWT-BC
(BOLTED COVER DESIGN)

SIZE RANGE
CAP COVER: ¼" ~ 2"
BOLTED COVER: 2" ~ 3"

FEATURES

◇ **BOLTED AND CAP COVER DESIGNS**
FE'S YTT AND YSWT SIZES 2½" AND 3" HAVE A BOLTED COVER AS STANDARD. AN OPTIONAL BOLTED COVER IS ALSO AVAILABLE ON SIZE 2". CAP COVERS ARE STANDARD ON YTT AND YSWT SIZES ¼" - 1½".

◇ **RUGGED - HIGH QUALITY DESIGN**
THE YTT AND YSWT ARE IDEAL FOR PETROCHEMICAL AND OTHER DEMANDING INDUSTRIAL APPLICATIONS THAT HAVE HIGHER PRESSURE AND TEMPERATURE REQUIREMENTS.

◇ **LARGE STRAINING CAPACITY**
WITH ITS LARGE BODY AND SIZABLE STRAINING ELEMENT, THE YTT AND YSWT PROVIDE EXCELLENT OPEN AREA RATIOS THAT ARE TYPICALLY TWO-AND-A-HALF TIMES LARGER THAN THE CORRESPONDING PIPELINE.

◇ **PRECISION MACHINED SEATS**
PRECISION MACHINED SCREEN SEATS IN BOTH THE BODY AND CAP HELP TO ENSURE ACCURATE POSITIONING OF THE SCREEN DURING REASSEMBLY AFTER CLEANING. ALSO, THE MACHINED BODY SEATS ENABLE FINER FILTRATION BY PREVENTING DEBRIS BYPASS.

◇ **SELF-CLEANING CAPABILITY**
WITH THE OPTIONAL SOCKET WELD BLOW-OFF CONNECTION, THIS UNIT CAN BE FITTED WITH A BLOW-DOWN VALVE WHICH FACILITATES CLEANING OF THE STRAINING ELEMENT. PLEASE CONTACT FACTORY FOR MORE INFORMATION.

◇ **EPOXY PAINTED**
CARBON UNITS ARE EPOXY PAINTED TO HELP RESIST RUST AND CORROSION. FE ALSO OFFERS EPOXY COATING. PLEASE CONTACT SALES FOR MORE INFORMATION.

TECHNICAL

PRESSURE/ TEMPERATURE RATING CS - ASTM A216 GR. WCB - CLASS 600
WOG (Non-shock): 1480 PSI @ 100 °F Saturated Steam: 600 PSI @ 489°F Maximum Liquid: 825 PSI @ 800 °F
PRESSURE/ TEMPERATURE RATING SS - ASTM A351 GR. CF8M - CLASS 600
WOG (Non-shock): 1440 PSI @ 100 °F Saturated Steam: 600 PSI @ 489 °F Maximum Liquid: 700 PSI @ 1000 °F

- *The above listed temperatures are theoretical and may vary during actual operating conditions.*
- *Carbon Steel not recommended for prolonged use above 800 °F.*
- *Stainless Steel not recommended for prolonged use above 1000 °F.*

APPLICATIONS

CARBON STEEL PROPERTIES: CARBON STEEL PERFORMS EXCEPTIONALLY WELL IN HIGH TEMPERATURES, UP TO 800°F IN CONTINUOUS SERVICE. IT PROVIDES HIGH RESISTANCE TO SHOCK, VIBRATION, PIPING STRAINS, AND FIRE AND FREEZING HAZARDS. CARBON STEEL STRAINERS ARE OFTEN USED IN THE OIL AND PETROCHEMICAL INDUSTRIES

STAINLESS STEEL PROPERTIES: STAINLESS STEEL IS COMMONLY SPECIFIED FOR HIGH TEMPERATURE SERVICE, UP TO 1000°F IN CONTINUOUS SERVICE. STAINLESS STEEL STRAINERS ARE COMMONLY FOUND IN THE CHEMICAL, FOOD, AND PHARMACEUTICAL INDUSTRIES.

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Fluid Engineering

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180 "Y" STRAINER

Threaded Ends	Socket Weld Ends
YTT-CS (Carbon Steel)	**YSWT-CS** (Carbon Steel)
YTT-CS (Stainless Steel)	**YSWT-SS** (Stainless Steel)

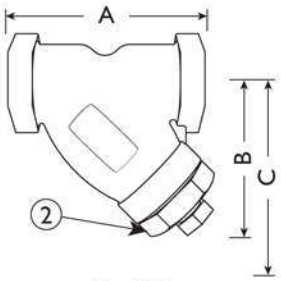
ANSI Class 600

BILL OF MATERIALS (1)

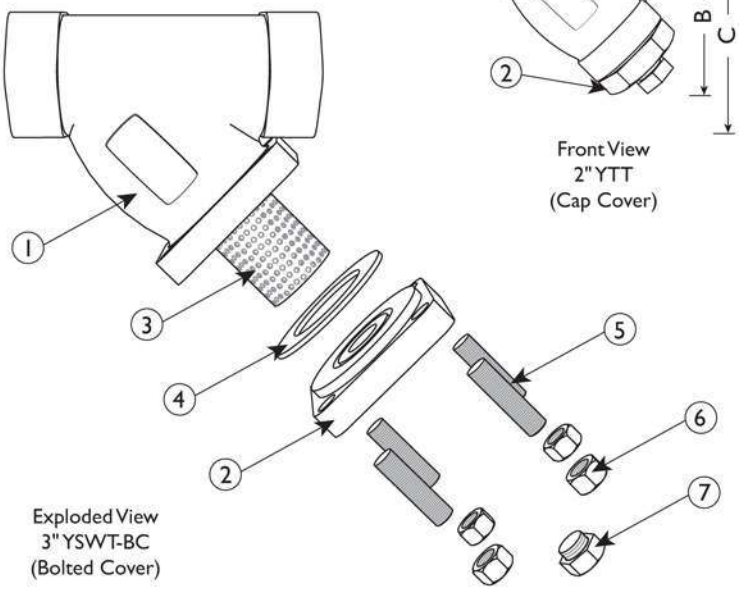
No.	PART	YTT/YSWT-CS(6)	YTT/YSWT-SS
1	Body (2)	Carbon Steel A216 Gr. WCB	Stainless Steel A351 Gr. CF8M
2	Cover/Cap (5)	Carbon Steel A216 Gr. WCB	Stainless Steel A351 Gr. CF8M
3	Straining Element (3)	Stainless Steel	Stainless Steel
4	Gasket (3)(4)	Stainless Steel Spiral Wound	Stainless Steel Spiral Wound
5	Studs (5) BC models only	Alloy Steel	Alloy Steel
6	Nuts (5) BC models only	Alloy Steel	Alloy Steel
7	Plug	Carbon Steel	Stainless Steel

1. Bill of Materials represents standard materials. Equivalent or better materials may be substituted at the manufacturer's discretion.
2. Available in additional body materials, such as LCB, WC6, WC9, 316L, Alloy 20, and Monel.
3. Denotes recommended spare parts.
4. The cover gasket is encapsulated in a machined recessed seat. A wide range of gasket materials are available; contact factory.
5. Only bolted cover designs (2½", 3", and optional 2") have Parts 5 and 6 (Studs and Nuts). Threaded cap covers are standard on Sizes ¼" through 1½". Size 2" is available with either a bolted or cap cover.
6. Carbon Steel bodies are epoxy painted.

Illustrations are representative of different YS81/82 models. Exploded view is shown with bolted cover; front view with cap. Contact factory for certified drawings of specific models when required.



Front View
2" YTT
(Cap Cover)



Exploded View
3" YSWT-BC
(Bolted Cover)

DIMENSIONS AND PERFORMANCE DATA (1)

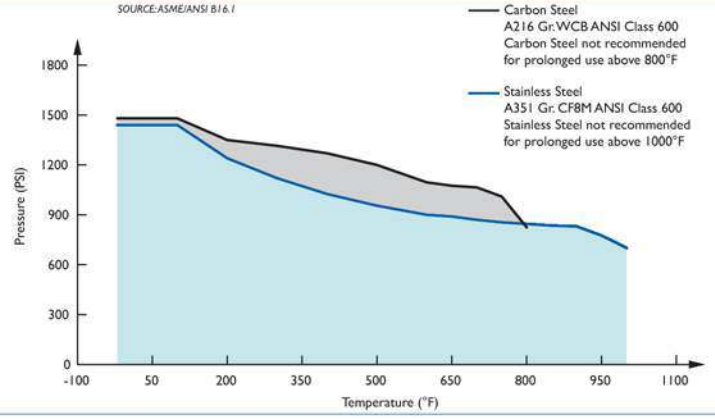
SIZE	in	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2 (3)	2 1/2 (4)	3 (4)
	mm			15	20	25	32	40	50	65	80
A DIMENSION FACE TO FACE (2)	in	2.93	2.93	2.93	3.68	4.56	4.93	5.56	6.93	12.00	12.00
	mm	75	75	75	94	116	126	142	177	305	305
B DIMENSION CENTER LINE TO BOTTOM	in	2.37	2.37	2.37	2.81	3.68	4.12	4.75	6.00	10.50	10.50
	mm	61	61	61	72	94	105	121	153	267	267
C DIMENSION SCREEN REMOVAL	in	2.62	2.62	2.62	3.37	4.75	5.25	6.00	7.25	16.00	16.00
	mm	67	67	67	86	121	134	153	184	407	407
D NPT Plug BLOW-OFF	in	1/4	1/4	1/4	3/8	3/8	3/4	3/4	1	1	1 1/4
	mm	8	8	8	10	10	20	20	25	25	32
APPROXIMATE ASSEMBLED WEIGHT	lb	1.5	1.5	1.5	2.5	5.0	5.5	9.0	13.0	96.0	92.0
	kg	0.7	0.7	0.7	1.1	2.3	2.5	4.1	5.9	43.5	41.7
Flow Coefficient	C_v	0.7	2	8	15	22	38	42	70	110	160

1. Dimensions and weights are for reference only. When required, request certified drawings.
2. Face to face values have a tolerance of ±0.06 in (±2.0 mm) for sizes 10" and lower.
3. Size 2" is available in either a cap or bolted cover; please specify when ordering. Weight given is for model with cap cover.
4. Sizes 2½" and 3" have bolted covers.

REFERENCED STANDARDS & CODES

CODE	DESCRIPTION
ANSI/ASME B1.20.1	National Pipe Thread Taper
ASME/ANSI B16.11	Forged Steel Fittings, Socket-Welding & Threaded
ASME/ANSI B16.34	Flanged, Threaded, and Welding End

PRESSURE - TEMPERATURE RATINGS



STANDARD SCREEN SELECTIONS

Size	Liquid	Open Area	Steam	Open Area
1/2" ~ 3"	1/16 (.0625)	41%	1/32 (.033)	28%

PRESSURE - TEMPERATURE RATING

Body Material	A216 Gr. WCB	A351 Gr. CF8M
WOG (Non-shock):	1480 PSI @ 100 °F	1440 PSI @ 100 °F
Saturated Steam:	600 PSI @ 489 °F	600 PSI @ 489 °F
Max Liquid:	825 PSI @ 800 °F	700 PSI @ 1000 °F

Fluid Engineering
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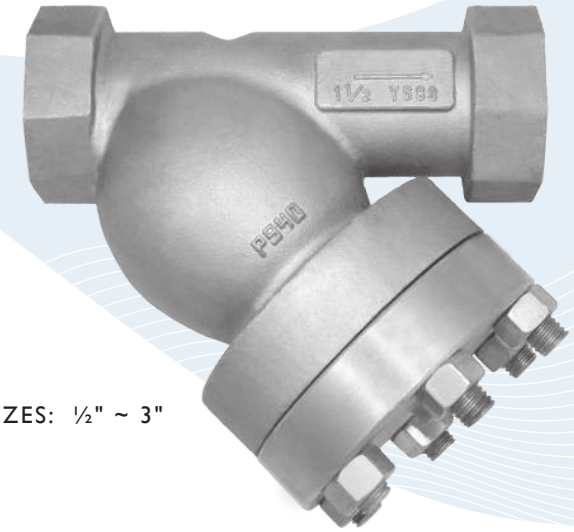
180 "Y" STRAINER ❖ THREADED AND SOCKET WELD

ANSI CLASS 1500 ❖ CARBON AND STAINLESS STEEL



MODELS:

YTT-CS
(CARBON STEEL - THREADED)

YSWT-CS
(CARBON STEEL - SOCKET WELD)

YTT-SS
(STAINLESS STEEL - THREADED)

YSWT-SS
(STAINLESS STEEL - SOCKET WELD)

SIZES: ½" ~ 3"

FEATURES

◇ **RUGGED - HIGH QUALITY DESIGN**
FE'S YTT AND YSWT ARE IDEAL FOR PETROCHEMICAL AND OTHER DEMANDING INDUSTRIAL APPLICATIONS THAT HAVE HIGHER PRESSURE AND TEMPERATURE REQUIREMENTS. THEY ARE DUAL RATED FOR ANSI CLASS 600 AND 1500.

◇ **LARGE STRAINING CAPACITY**
WITH ITS LARGE BODY AND SIZABLE STRAINING ELEMENT, THE YTT AND YSWT PROVIDE EXCELLENT OPEN AREA RATIOS THAT ARE TYPICALLY TWO-AND-A-HALF TIMES LARGER THAN THE CORRESPONDING PIPELINE.

◇ **PRECISION MACHINED SEATS**
PRECISION MACHINED SCREEN SEATS IN BOTH THE BODY AND CAP HELP TO ENSURE ACCURATE POSITIONING OF THE SCREEN DURING REASSEMBLY AFTER CLEANING. ALSO, THE MACHINED BODY SEATS ENABLE FINER FILTRATION BY PREVENTING DEBRIS BYPASS.

◇ **ENCAPSULATED "CG" STYLE GASKET**
THE "CG" STYLE COVER GASKET PROVIDES ADDITIONAL RADIAL STRENGTH TO PREVENT GASKET BLOWOUT. IT ALSO ACTS AS A COMPRESSION STOP.

◇ **SELF-CLEANING CAPABILITY**
WITH THE OPTIONAL SOCKET WELD BLOW-OFF CONNECTION, THIS UNIT CAN BE FITTED WITH A BLOW-DOWN VALVE WHICH FACILITATES CLEANING OF THE STRAINING ELEMENT. PLEASE CONTACT FACTORY FOR MORE INFORMATION.

◇ **EPOXY PAINTED**
CARBON UNITS ARE EPOXY PAINTED TO HELP RESIST RUST AND CORROSION. FE ALSO OFFERS EPOXY COATING. PLEASE CONTACT FACTORY FOR MORE INFORMATION.

TECHNICAL

PRESSURE/ TEMPERATURE RATING CS - ASTM A216 GR. WCB - CLASS 1500
WOG (Non-shock): 3705 PSI @ 100 °F Saturated Steam: 1500 PSI @ 603 °F Maximum Liquid: 2060 PSI @ 800 °F
PRESSURE/ TEMPERATURE RATING SS - ASTM A351 GR. CF8M - CLASS 1500
WOG (Non-shock): 3600 PSI @ 100 °F Saturated Steam: 1500 PSI @ 603 °F Maximum Liquid: 1750 PSI @ 1000 °F

- *The above listed temperatures are theoretical and may vary during actual operating conditions.*
- *Carbon Steel not recommended for prolonged use above 800 °F.*
- *Stainless Steel not recommended for prolonged use above 1000 °F.*

APPLICATIONS

CARBON STEEL PROPERTIES: CARBON STEEL PERFORMS EXCEPTIONALLY WELL IN HIGH TEMPERATURES, UP TO 800°F IN CONTINUOUS SERVICE. IT PROVIDES HIGH RESISTANCE TO SHOCK, VIBRATION, PIPING STRAINS, AND FIRE AND FREEZING HAZARDS. CARBON STEEL STRAINERS ARE OFTEN USED IN THE OIL AND PETROCHEMICAL INDUSTRIES

STAINLESS STEEL PROPERTIES: STAINLESS STEEL IS COMMONLY SPECIFIED FOR HIGH TEMPERATURE SERVICE, UP TO 1000°F IN CONTINUOUS SERVICE. STAINLESS STEEL STRAINERS ARE COMMONLY FOUND IN THE CHEMICAL, FOOD, AND PHARMACEUTICAL INDUSTRIES.

The above data represents common market and service applications. No representation or guarantee, expressed or implied, is given due to the numerous variations of concentrations, temperatures and flow conditions that may occur during actual service.

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180 STRAINER

Threaded Ends
YTT-CS (Carbon Steel)
YTT-SS (Stainless Steel)

Socket Weld Ends
YSWT-CS (Carbon Steel)
YSWT-SS (Stainless Steel)

ANSI Class 1500

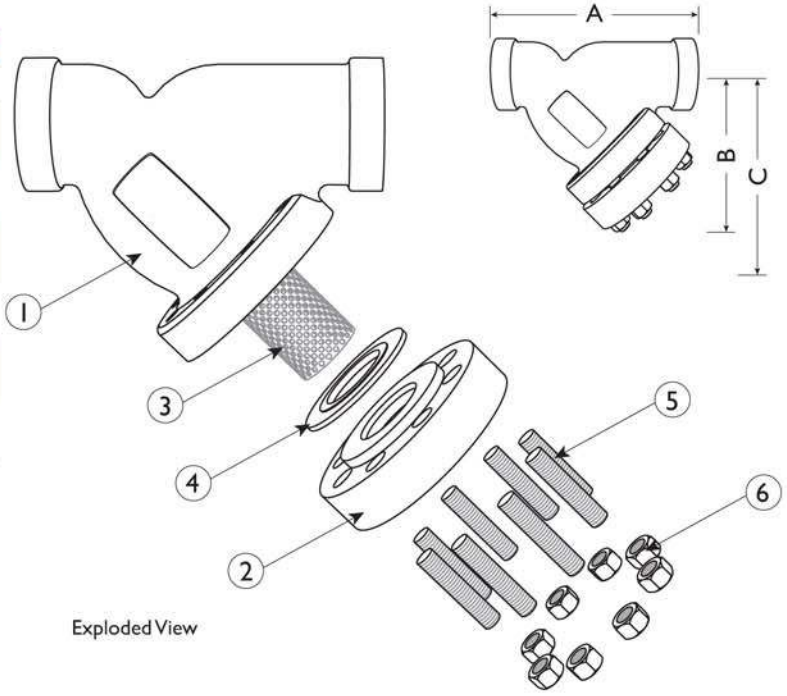
BILL OF MATERIALS (1)

No.	PART	YTT/YSWT-CS (3)	YTT/YSWT-SS
1	Body	Carbon Steel A216 Gr. WCB	Stainless Steel A351 Gr. CF8M
2	Cover	Carbon Steel A216 Gr. WCB	Stainless Steel A351 Gr. CF8M
3	Straining Element (2)	Stainless Steel	Stainless Steel
4	Gasket (2)	Stainless Steel CG Style	Stainless Steel CG Style
5	Studs	Alloy Steel	Alloy Steel
6	Nuts	Alloy Steel	Alloy Steel

1. Bill of Materials represents standard materials. Equivalent or better materials may be substituted at the manufacturer's discretion.
2. Denotes recommended spare parts.
3. Carbon Steel bodies are epoxy painted.

Additional Design & Technical Notes:

- The YTT and YSWT are dual rated for ANSI Class 600 and ANSI Class 1500
- NPT blow-offs are not recommended for ANSI Class 1500 strainers. An optional socket weld blow-off is available. Contact factory for details.
- A wide range of optional gasket materials are available.
- Bodies are also available in high temperature steel A217 Gr. WC6, WC9, and other materials. Please contact factory for price and delivery.



Exploded View

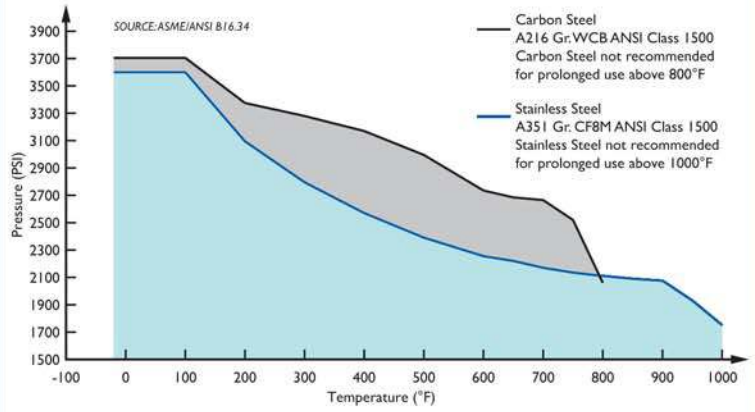
Illustrations are representative of sizes 1/2" through 3".
Please ask for certified drawings when required.

DIMENSIONS AND PERFORMANCE DATA (1)

SIZE		1/2	3/4	1	1 1/4	1 1/2	2	2 1/2 (3)	3 (3)
	mm	15	20	25	32	40	50	65	80
A DIMENSION FACE TO FACE (2)	in	3.94	4.25	6.00	8.37	8.37	9.31	C/F	C/F
	mm	101	108	153	213	213	237	C/F	C/F
B DIMENSION CENTER LINE TO BOTTOM	in	3.00	3.75	5.75	5.50	5.50	9.25	C/F	C/F
	mm	77	96	147	140	140	235	C/F	C/F
C DIMENSION SCREEN REMOVAL	in	4.25	5.25	7.00	8.00	8.00	11.00	C/F	C/F
	mm	108	134	178	204	204	280	C/F	C/F
APPROXIMATE ASSEMBLED WEIGHT	lb	4.5	7.0	12.0	27.0	26.5	44.5	C/F	C/F
	kg	2.0	3.2	5.4	12.2	12.0	20.2	C/F	C/F
Flow Coefficient	C_V	9	18	30	45	60	100	C/F	C/F

1. Dimensions and weights are for reference only. When required, request certified drawings.
2. Face to face values have a tolerance of ±0.06 in (±2.0 mm) for sizes 10" and lower.
3. Contact factory before ordering a 2-1/2" or 3" to get dimensions and performance data.

PRESSURE - TEMPERATURE RATINGS



REFERENCED STANDARDS & CODES

CODE	DESCRIPTION
ASME/ANSI B16.11	Forged Steel Fittings, Socket-Welding & Threaded
ASME/ANSI B16.34	Flanged, Threaded, and Welding End

STANDARD SCREEN SELECTIONS

Size	Liquid	Open Area	Steam	Open Area
1/2" ~ 3"	1/16 (.0625)	41%	1/32 (.033)	28%

PRESSURE - TEMPERATURE RATING

Body Material	A216 Gr. WCB	A351 Gr. CF8M
WOG (Non-shock):	3705 PSI @ 100 °F	3600 PSI @ 100 °F
Saturated Steam:	1500 PSI @ 603 °F	1500 PSI @ 603 °F
Max Liquid:	2060 PSI @ 800 °F	1750 PSI @ 1000 °F

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"Y" (180) STRAINER ◆ SOCKET WELD ENDS

ANSI CLASS 2500 ◆ CARBON AND STAINLESS STEEL

MODELS: YSW 2500
(CARBON STEEL)

YSW 2500 SS
(STAINLESS STEEL)

Also available in WC6, WC9, 316L, and Alloy 20!

FEATURES

SIZES: 3/4" ~ 2"

◇ **RUGGED - HIGH QUALITY DESIGN**
FE's YSW IS IDEAL FOR POWER GENERATION AND OTHER DEMANDING INDUSTRIAL APPLICATIONS THAT HAVE HIGHER PRESSURE AND TEMPERATURE REQUIREMENTS. THIS UNIT EMPLOYES HEAVY GAUGE, REINFORCED SCREENS TO PREVENT DAMAGE TO THE STRAINING ELEMENT. BOLT HOLES ARE ALSO BACK OR SPOT FACED.

◇ **LARGE STRAINING CAPACITY**
WITH ITS LARGE BODY AND SIZABLE STRAINING ELEMENT, THE **YSW** PROVIDES EXCELLENT OPEN AREA RATIOS THAT ARE TYPICALLY TWO-AND-A-HALF TIMES LARGER THAN THE CORRESPONDING PIPELINE.

◇ **PRECISION MACHINED SEATS**
PRECISION MACHINED SCREEN SEATS IN BOTH THE BODY AND CAP HELP TO ENSURE ACCURATE POSITIONING OF THE SCREEN DURING REASSEMBLY AFTER CLEANING. ALSO, THE MACHINED BODY SEATS ENABLE FINER FILTRATION BY PREVENTING DEBRIS BYPASS.

◇ **ENCAPSULATED "CG" STYLE GASKET**
THE "CG" STYLE COVER GASKET PROVIDES ADDITIONAL RADIAL STRENGTH TO PREVENT GASKET BLOWOUT. IT ALSO ACTS AS A COMPRESSION STOP.

◇ **SELF-CLEANING CAPABILITY**
WITH THE OPTIONAL SOCKET WELD BLOW-OFF CONNECTION, THIS UNIT CAN BE FITTED WITH A BLOW-DOWN VALVE WHICH FACILITATES CLEANING OF THE STRAINING ELEMENT. PLEASE CONTACT FACTORY FOR MORE INFORMATION.

◇ **EPOXY PAINTED**
CARBON UNITS ARE EPOXY PAINTED TO HELP RESIST RUST AND CORROSION. **FE** ALSO OFFERS EPOXY COATING. PLEASE CONTACT FACTORY FOR MORE INFORMATION.

TECHNICAL

PRESSURE/ TEMPERATURE RATING CS - ASTM A216 GR. WCB - CLASS 2500
WOG (Non-shock): 6170 PSI @ 100 °F Saturated Steam: 2500 PSI @ 673 °F Maximum Liquid: 3430 PSI @ 800 °F
PRESSURE/ TEMPERATURE RATING SS - ASTM A351 GR. CF8M - CLASS 2500
WOG (Non-shock): 6000 PSI @ 100 °F Saturated Steam: 2500 PSI @ 673 °F Maximum Liquid: 2915 PSI @ 1000 °F

- *The above listed temperatures are theoretical and may vary during actual operating conditions.*
- *Carbon Steel not recommended for prolonged use above 800 °F.*
- *Stainless Steel not recommended for prolonged use above 1000 °F.*

APPLICATIONS

CARBON STEEL PROPERTIES: CARBON STEEL PERFORMS EXCEPTIONALLY WELL IN HIGH TEMPERATURES, UP TO 800°F IN CONTINUOUS SERVICE. IT PROVIDES HIGH RESISTANCE TO SHOCK, VIBRATION, PIPING STRAINS, AND FIRE AND FREEZING HAZARDS. CARBON STEEL STRAINERS ARE OFTEN USED IN THE OIL AND PETROCHEMICAL INDUSTRIES.

STAINLESS STEEL PROPERTIES: STAINLESS STEEL IS COMMONLY SPECIFIED FOR HIGH TEMPERATURE SERVICE, UP TO 1000°F IN CONTINUOUS SERVICE. STAINLESS STEEL STRAINERS ARE COMMONLY FOUND IN THE CHEMICAL, FOOD, AND PHARMACEUTICAL INDUSTRIES.

The above data represents common market and service applications. No representation or guarantee, expressed or implied, is given due to the numerous variations of concentrations, temperatures and flow conditions that may occur during actual service.

Fluid Engineering

180 STRAINER

YSW 2500 - (Carbon Steel)
YSW 2500 SS - (Stainless Steel)

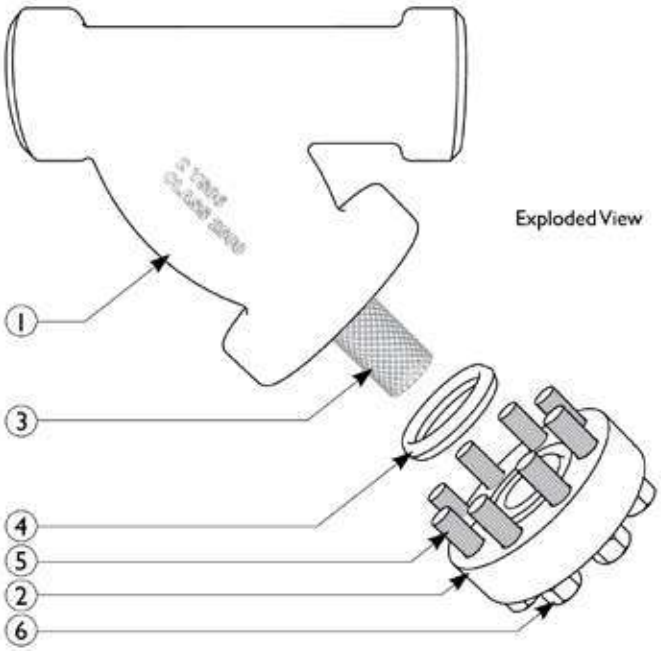
Socket Weld Ends • Carbon & Stainless Steel

ANSI Class 2500

BILL OF MATERIALS [1]

No.	PART	YSW 2500 [3]	YSW 2500 SS
1	Body	Carbon Steel A216 Gr.WCB	Stainless Steel A351 Gr.CF8M Type 316
2	Cover	Carbon Steel A216 Gr.WCB	Stainless Steel A351 Gr.CF8M Type 316
3	Straining Element [2]	Stainless Steel	Stainless Steel
4	Gasket [2]	RTJ Gasket Stainless Steel	RTJ Gasket Stainless Steel
5	Studs	Alloy Steel	Alloy Steel
6	Nuts	Alloy Steel	Alloy Steel

1. Bill of Materials represents standard materials. Equivalent or better materials may be substituted at the manufacturer's discretion.
2. Denotes recommended spare parts.
3. Carbon Steel bodies are epoxy painted.

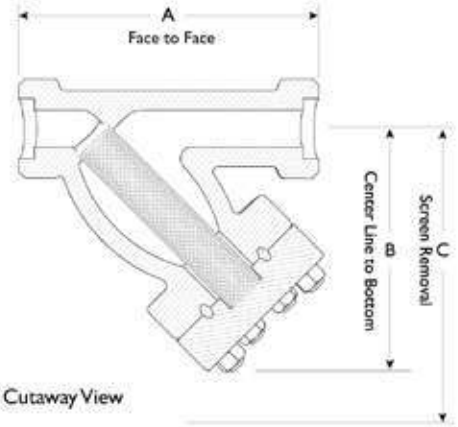


Exploded View

Illustrations are representative of a YSW.
Please ask for certified drawings when required.

Additional Design & Technical Notes:

- An optional socket weld blow-off is available. Please contact factory.
- NPT blow-offs are not recommended for ANSI Class 2500 strainers.
- Bodies are also available in WC6, WC9, 316L, and Alloy 20. Please contact factory for price and delivery.



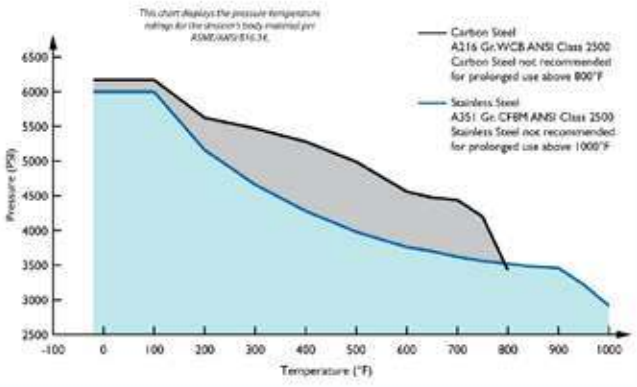
Cutaway View

DIMENSIONS AND PERFORMANCE DATA [1]

SIZE	in	3/4	1	1 1/2	2
	mm	20	25	40	50
A DIMENSION FACE TO FACE [2]	in	9.25	9.25	12.0	12.0
	mm	235	235	305	305
B DIMENSION CENTER LINE TO BOTTOM	in	8.55	8.55	9.0	9.0
	mm	217	217	229	229
C DIMENSION SCREEN REMOVAL	in	11.0	11.0	14.0	14.0
	mm	279	279	356	356
APPROXIMATE ASSEMBLED WEIGHT	lb	C/F	31.0	72.0	71.0
	kg	C/F	14.1	32.7	32.2
Flow Coefficient	C_v	9	9	30	42

1. Dimensions, weights, and flow coefficients are for reference only. When required, request certified drawings.
2. Face to face values have a tolerance of ±0.06 in (±2.0 mm).

PRESSURE - TEMPERATURE RATINGS



PRESSURE - TEMPERATURE RATING

Body Material	A216 Gr.WCB	A351 Gr. CF8M
WOG (Non-shock):	6170 PSI @ 100 °F	6000 PSI @ 100 °F
Saturated Steam:	2500 PSI @ 673°F	2500 PSI @ 673°F
Max Liquid:	3430 PSI @ 800 °F	2915 PSI @ 1000 °F

STANDARD SCREEN SELECTIONS

Size	Liquid	Open Area	Steam	Open Area
3/4" ~ 2"	1/16 (.0625)	41%	1/32 (.033)	28%

REFERENCED STANDARDS & CODES

CODE	DESCRIPTION
ASME/ANSI B16.11	Forged Steel Fittings, Socket-Welding and Threaded
ASME/ANSI B16.34	Flanged, Threaded, and Welding End

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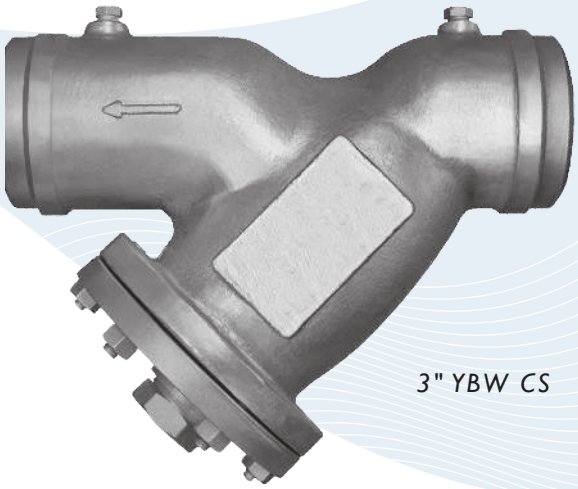
"Y" (YBW) STRAINER ❖ BUTT WELD ENDS

ANSI CLASS 300 ❖ CARBON AND STAINLESS STEEL

MODELS: **180 YBW CS**
(CARBON STEEL)

180 YBW SS
(STAINLESS STEEL)

SIZE RANGE: 1/2" ~ 12"



3" YBW CS

FEATURES

◇ **LARGE STRAINING CAPACITY**
WITH ITS LARGE BODY AND SIZABLE STRAINING ELEMENT, THE YBW PROVIDES EXCELLENT OPEN AREA RATIOS THAT ARE TYPICALLY TWO-AND-A-HALF TIMES LARGER THAN THE CORRESPONDING PIPELINE.

◇ **PRECISION MACHINED SEATS**
PRECISION MACHINED SCREEN SEATS IN BOTH THE BODY AND CAP HELP TO ENSURE ACCURATE POSITIONING OF THE SCREEN DURING REASSEMBLY AFTER CLEANING. ALSO, THE MACHINED BODY SEATS ENABLE FINER FILTRATION BY PREVENTING DEBRIS BYPASS.

◇ **SELF-CLEANING CAPABILITY**
WITH A TAPPED NPT BLOW-OFF CONNECTION, THIS UNIT CAN BE FITTED WITH A BLOW-DOWN VALVE WHICH FACILITATES CLEANING OF THE STRAINING ELEMENT. PLEASE CONTACT FACTORY FOR MORE INFORMATION.

◇ **EPOXY PAINTED**
CARBON STEEL UNITS ARE EPOXY PAINTED TO HELP RESIST RUST AND CORROSION. FLUID ENGINEERING ALSO OFFERS EPOXY COATING AS AN OPTION FOR THE YBW.

◇ **OPTIONAL COVER DESIGNS**
FE'S YBW IS AVAILABLE WITH DIFFERENT COVER OPTIONS INCLUDING SWING, CLAMP, AND HINGE TYPE COVERS. PLEASE CONSULT FACTORY FOR MORE INFORMATION ON THESE OPTIONS.

◇ **GAUGE TAPS AVAILABLE**
PLEASE REQUEST GAUGE TAPS (AS SHOWN IN PICTURE) WHEN REQUIRED. GAUGE TAPS MAY BE STANDARD ON SOME MODELS. FOR MORE INFORMATION, CONSULT FACTORY.

TECHNICAL

PRESSURE/ TEMPERATURE RATING CS - ASTM A216 GR.WCB - CLASS 300	
WOG (Non-shock):	740 PSI @ 100 °F
Saturated Steam:	300 PSI @ 420 °F
Maximum Liquid:	400 PSI @ 800 °F

PRESSURE/ TEMPERATURE RATING SS - ASTM A351 GR. CF8M - CLASS 300	
WOG (Non-shock):	720 PSI @ 100 °F
Saturated Steam:	300 PSI @ 420 °F
Maximum Liquid:	350 PSI @ 1000 °F

- *The above listed temperatures are theoretical and may vary during actual operating conditions.*
- *Carbon Steel not recommended for prolonged use above 800 °F.*
- *Stainless Steel not recommended for prolonged use above 1000 °F.*

APPLICATIONS

CARBON STEEL PROPERTIES: CARBON STEEL PERFORMS EXCEPTIONALLY WELL IN HIGH TEMPERATURES, UP TO 800°F IN CONTINUOUS SERVICE. IT PROVIDES HIGH RESISTANCE TO SHOCK, VIBRATION, PIPING STRAINS, AND FIRE AND FREEZING HAZARDS. CARBON STEEL STRAINERS ARE OFTEN USED IN THE OIL AND PETROCHEMICAL INDUSTRIES.

STAINLESS STEEL PROPERTIES: STAINLESS STEEL IS COMMONLY SPECIFIED FOR HIGH TEMPERATURE SERVICE, UP TO 1000°F IN CONTINUOUS SERVICE. STAINLESS STEEL STRAINERS ARE COMMONLY FOUND IN THE CHEMICAL, FOOD, AND PHARMACEUTICAL INDUSTRIES.

The above data represents common market and service applications. No representation or guarantee, expressed or implied, is given due to the numerous variations of concentrations, temperatures and flow conditions that may occur during actual service.

Fluid Engineering

180 "Y" STRAINER

YBW CS - (Carbon Steel)

YBW SS - (Stainless Steel)

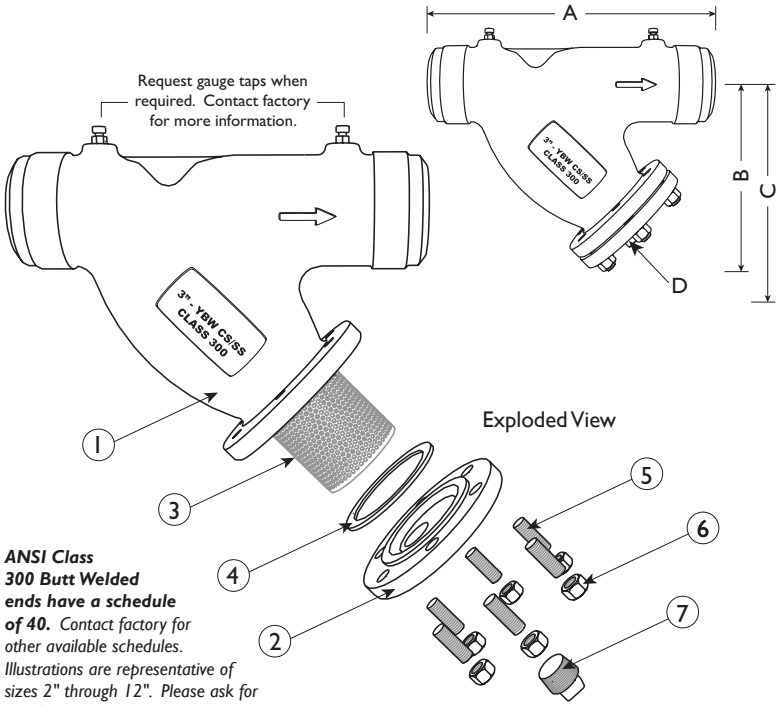
Butt Welded Ends • Carbon & Stainless Steel

ANSI Class 300

BILL OF MATERIALS (1)

No.	PART	YBW CS (5)	YBW SS
1	Body (2)	Carbon Steel A216 Gr. WCB	Stainless Steel A351 Gr. CF8M
2	Cover	Carbon Steel A216 Gr. WCB	Stainless Steel A351 Gr. CF8M
3	Straining Element (3)	Stainless Steel	Stainless Steel
4	Gasket (3) (4)	Stainless Steel Spiral Wound	Stainless Steel Spiral Wound
5	Studs	Alloy Steel	Stainless Steel
6	Nuts	Carbon Steel	Stainless Steel
7	NPT Plug Blow-off	Carbon Steel	Stainless Steel

1. Bill of Materials represents standard materials. Equivalent or better materials may be substituted at the manufacturer's discretion.
2. Available in additional body materials, such as LCB, WC6, WC9, 316L, Alloy 20, and Monel.
3. Denotes recommended spare parts.
4. The cover gasket is encapsulated in a machined recessed seat. A wide range of gasket materials are available; contact factory.
5. Carbon Steel bodies are epoxy painted.



ANSI Class 300 Butt Welded ends have a schedule of 40. *Contact factory for other available schedules. Illustrations are representative of sizes 2" through 12". Please ask for certified drawings when required.*

DIMENSIONS AND PERFORMANCE DATA (1)

SIZE		½	¾	1	1¼	1½	2	2½	3	4	5	6	8	10	12
	mm	15	20	25	32	40	50	65	80	100	125	150	200	250	300
A DIMENSION FACE TO FACE (2)	in	C/F	C/F	7.875	C/F	C/F	8.625	10.625	12.0	14.5	16.375	19.313	23.375	27.375	32.25
	mm	C/F	C/F	200	C/F	C/F	219	270	305	368	416	491	594	695	813
B DIMENSION CENTER LINE TO BOTTOM	in	C/F	C/F	5.5	C/F	C/F	5.25	6.5	7.0	8.25	11.25	13.5	15.75	19.0	22.25
	mm	C/F	C/F	140	C/F	C/F	133	165	178	210	286	343	400	483	565
C DIMENSION SCREEN REMOVAL	in	C/F	C/F	8.125	C/F	C/F	7.0	9.75	10.0	12.0	17.0	20.0	22.75	28.0	30.0
	mm	C/F	C/F	206	C/F	C/F	178	248	254	305	432	508	578	711	762
D NPT Plug BLOW-OFF	in	C/F	C/F	1/2	C/F	C/F	1/2	1	1	1 1/2	2	2	2	2	2
	mm	C/F	C/F	15	C/F	C/F	15	25	25	40	50	50	50	50	50
ASSEMBLED WEIGHT APPROXIMATE	lb	C/F	C/F	6.0	C/F	C/F	12.0	20.5	28.0	51.0	73.5	126.0	214.0	268.0	480.0
	kg	C/F	C/F	2.7	C/F	C/F	5.4	9.3	12.7	23.1	33.3	57.1	97.1	121.6	217.7
Flow Coefficient	C_V	C/F	C/F	C/F	C/F	42	70	110	160	260	400	570	950	1600	2200

1. Dimensions and weights are for reference only. When required, request certified drawings.
2. Face to face values have a tolerance of ±0.06 in (±2.0 mm) for sizes 10" and lower and a tolerance of ±0.12 in (±3.0 mm) for sizes 12" and larger.

REFERENCED STANDARDS & CODES

CODE	DESCRIPTION
ASME/ANSI B16.25	Buttwelding Ends
ASME/ANSI B16.34	Flanged, Threaded, and Welding End

STANDARD SCREEN SELECTIONS

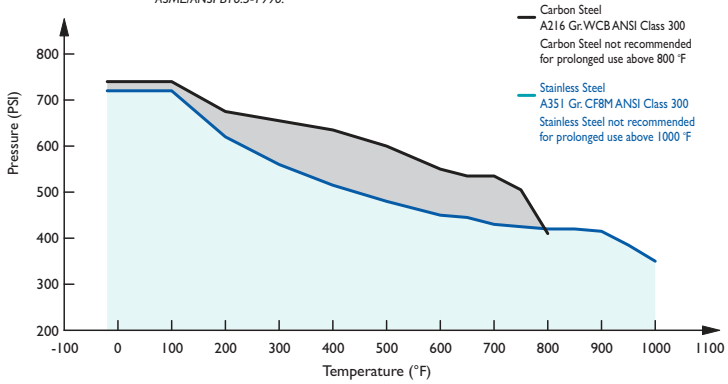
Size	Liquid	Open Area	Steam	Open Area
1/2" - 4"	1/16 (.0625)	41%	1/32 (.033)	28%
5" - 8"	1/8 (.125)	40%	3/64 (.045)	36%
10" - 12"	1/8 (.125)	40%	30 Mesh Lined	44.8%

PRESSURE - TEMPERATURE RATING

Body Material	A216 Gr. WCB	A351 Gr. CF8M
WOG (Non-shock):	740 PSI @ 100 °F	720 PSI @ 100 °F
Saturated Steam:	300 PSI @ 420°F	300 PSI @ 420°F
Max Liquid:	400 PSI @ 800 °F	350 PSI @ 1000 °F

PRESSURE - TEMPERATURE RATINGS

This chart displays the pressure-temperature ratings for the strainer's body material per ASME/ANSI B16.5-1996.



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180 "Y" STRAINER ❖ BUTT WELD ENDS

ANSI CLASS 2500 ❖ CARBON AND STAINLESS STEEL

MODELS: 180 YBWT CS
(CARBON STEEL)

180 YBWT SS
(STAINLESS STEEL)

"Ideal for High Pressure Applications"

FEATURES

SIZES: 1" ~ 10"

◇ **RUGGED - HIGH QUALITY DESIGN**
FLUID ENGINEERING'S YBWT IS IDEAL FOR POWER GENERATION AND OTHER DEMANDING INDUSTRIAL APPLICATIONS THAT HAVE HIGHER PRESSURE AND TEMPERATURE REQUIREMENTS. THIS UNIT EMPLOYES HEAVY GAUGE, REINFORCED SCREENS TO PREVENT DAMAGE TO THE STRAINING ELEMENT. BOLT HOLES ARE BACK OR SPOT FACED.

◇ **LARGE STRAINING CAPACITY**
WITH ITS LARGE BODY AND SIZABLE STRAINING ELEMENT, THE YBWT PROVIDES EXCELLENT OPEN AREA RATIOS THAT ARE TYPICALLY TWO-AND-A-HALF TIMES LARGER THAN THE CORRESPONDING PIPELINE.

◇ **PRECISION MACHINED SEATS**
PRECISION MACHINED SCREEN SEATS IN BOTH THE BODY AND CAP HELP TO ENSURE ACCURATE POSITIONING OF THE SCREEN DURING REASSEMBLY AFTER CLEANING. ALSO, THE MACHINED BODY SEATS ENABLE FINER FILTRATION BY PREVENTING DEBRIS BYPASS.

◇ **REUSABLE RTJ GASKET**
PRECISION MACHINED, RTJ GASKETS ARE PREFERRED FOR HIGH PRESSURE AND HIGH TEMPERATURE SERVICES BECAUSE THEY PROVIDE A TIGHT, EFFICIENT SEAL AND A LONG SERVICE LIFE.

◇ **SELF-CLEANING CAPABILITY**
WITH THE OPTIONAL SOCKET WELD BLOW-OFF CONNECTION, THIS UNIT CAN BE FITTED WITH A BLOW-DOWN VALVE WHICH FACILITATES CLEANING OF THE STRAINING ELEMENT. PLEASE CONTACT FACTORY FOR MORE INFORMATION.

◇ **EPOXY PAINTED**
CARBON UNITS ARE EPOXY PAINTED TO HELP RESIST RUST AND CORROSION. FE ALSO OFFERS EPOXY COATING. PLEASE CONTACT FACTORY FOR MORE INFORMATION.

TECHNICAL

PRESSURE/ TEMPERATURE RATING CS - ASTM A216 GR. WCB - CLASS 2500
WOG (Non-shock): 6170 PSI @ 100 °F Saturated Steam: 2500 PSI @ 673 °F Maximum Liquid: 3430 PSI @ 800 °F
PRESSURE/ TEMPERATURE RATING SS - ASTM A351 GR. CF8M - CLASS 2500
WOG (Non-shock): 6000 PSI @ 100 °F Saturated Steam: 2500 PSI @ 673 °F Maximum Liquid: 2915 PSI @ 1000 °F

- *The above listed temperatures are theoretical and may vary during actual operating conditions.*
- *Carbon Steel not recommended for prolonged use above 800 °F.*
- *Stainless Steel not recommended for prolonged use above 1000 °F.*

APPLICATIONS

CARBON STEEL PROPERTIES: CARBON STEEL PERFORMS EXCEPTIONALLY WELL IN HIGH TEMPERATURES, UP TO 800°F IN CONTINUOUS SERVICE. IT PROVIDES HIGH RESISTANCE TO SHOCK, VIBRATION, PIPING STRAINS, AND FIRE AND FREEZING HAZARDS. CARBON STEEL STRAINERS ARE OFTEN USED IN THE OIL AND PETROCHEMICAL INDUSTRIES.

STAINLESS STEEL PROPERTIES: STAINLESS STEEL IS COMMONLY SPECIFIED FOR HIGH TEMPERATURE SERVICE, UP TO 1000°F IN CONTINUOUS SERVICE. STAINLESS STEEL STRAINERS ARE COMMONLY FOUND IN THE CHEMICAL, FOOD, AND PHARMACEUTICAL INDUSTRIES.

The above data represents common market and service applications. No representation or guarantee, expressed or implied, is given due to the numerous variations of concentrations, temperatures and flow conditions that may occur during actual service.

Fluid Engineering

180 STRAINER

180 YBW CS - (Carbon Steel)

180 YBW SS - (Stainless Steel)

Butt Weld Ends • Carbon & Stainless Steel

ANSI Class 2500

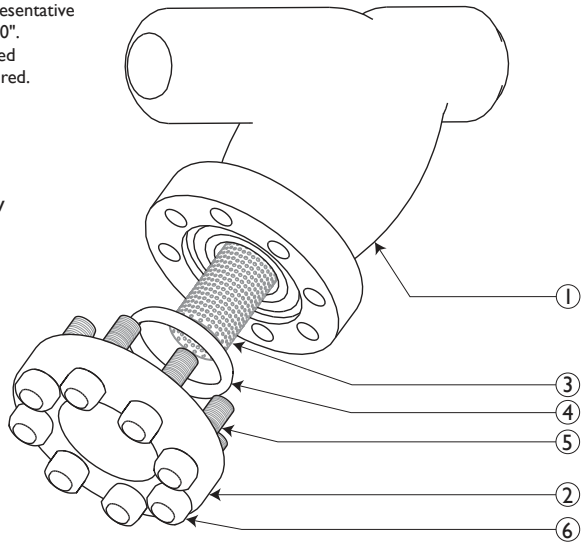
BILL OF MATERIALS (1)

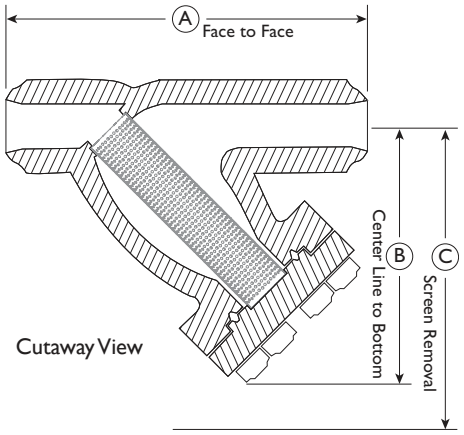
No.	PART	YBWT CS (3)	YBWT SS
1	Body	Carbon Steel A216 Gr.WCB	Stainless Steel A351 Gr.CF8M
2	Cover	Carbon Steel A216 Gr.WCB	Stainless Steel A351 Gr.CF8M
3	Straining Element (2)	Stainless Steel	Stainless Steel
4	Gasket (2)	RTJ Gasket	RTJ Gasket
5	Studs	Alloy Steel	Alloy Steel
6	Nuts	Alloy Steel	Alloy Steel

1. Bill of Materials represents standard materials. Equivalent or better materials may be substituted at the manufacturer's discretion.
2. Denotes recommended spare parts.
3. Carbon Steel bodies are epoxy painted.

Illustrations are representative of sizes 1" through 10". Please ask for certified drawings when required.

Exploded View





ANSI Class 2500 Butt Welded ends have a schedule of XXS.

DIMENSIONS AND PERFORMANCE DATA (1)

SIZE		in	1	1 1/2	2	3	4	6	8	10 (2)
		mm	25	40	50	80	100	150	200	250
A DIMENSION FACE TO FACE		in	9.26	12.0	12.0	18.0	24.0	27.0	33.0	40.0
		mm	235	305	305	457	610	686	838	1016
B DIMENSION CENTER LINE TO BOTTOM		in	8.55	11.0	11.0	15.0	17.0	21.73	29.0	31.86
		mm	218	279	279	381	432	552	737	809
C DIMENSION SCREEN REMOVAL		in	15.0	12.0	12.0	20.0	25.0	31.0	50.0	50.0
		mm	508	305	305	508	653	787	1270	1270
APPROXIMATE ASSEMBLED WEIGHT		lb	39	64	64	169	307	688	1465	C/F
		kg	17	29	29	77	139	312	665	C/F
Flow Coefficient		C_V	9	30	42	100	160	375	600	C/F

1. Dimensions, weights, and flow coefficients are for reference only. When required, request certified drawings.
2. Contact factory for weight of the 10" YSWT if required.

REFERENCED STANDARDS & CODES

CODE	DESCRIPTION
ASME/ANSI B16.25	Butt Welding Ends
ASME/ANSI B16.34	Flanged, Threaded, and Welding End

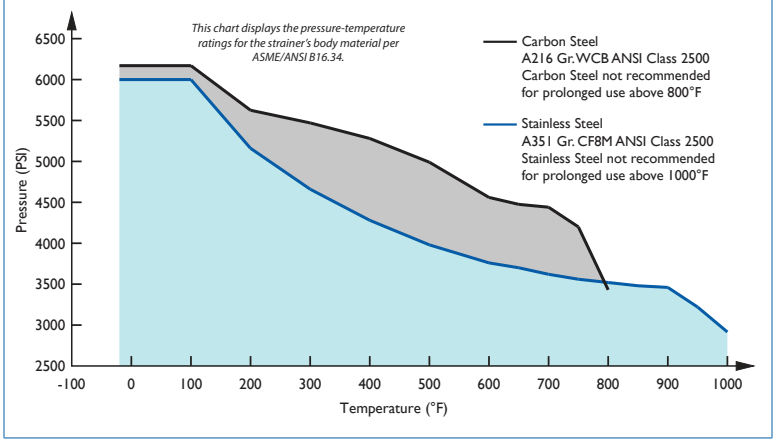
STANDARD SCREEN SELECTIONS

Size	Liquid	Open Area	Steam	Open Area
1" ~ 4"	1/16 (.0625)	41%	1/32 (.033)	28%
5" ~ 10"	1/8 (.125)	40%	3/64 (.045)	36%

Additional Design & Technical Notes:

- An optional socket weld blow-off is available. Please contact factory.
- NPT blow-offs are not recommended for ANSI Class 2500 strainers.
- Bodies are also available in high temperature steel A217 Gr. WC6 and WC9. Please contact factory for price and delivery.
- Socket Weld End Connections are available for sizes 2" and under; ask about FE's ANSI 2500 YSW y-strainers.

PRESSURE - TEMPERATURE RATINGS



PRESSURE - TEMPERATURE RATING

Body Material	A216 Gr. WCB	A351 Gr. CF8M
WOG (Non-shock):	6170 PSI @ 100 °F	6000 PSI @ 100 °F
Saturated Steam:	2500 PSI @ 673°F	2500 PSI @ 673°F
Max Liquid:	3430 PSI @ 800 °F	2915 PSI @ 1000 °F

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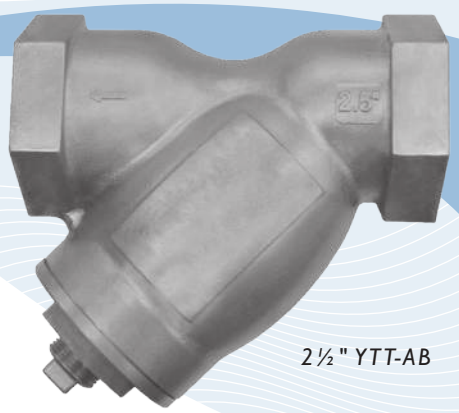
180 "Y" STRAINER ❖ THREADED ENDS

ALUMINUM BRONZE ❖ ANSI CLASS 250 ❖ LEAD FREE (1)

Meets LEAD-FREE(1) requirements!



2½" YTT-AB

MODELS: YTT-AB

(ALUMINUM BRONZE)

FEATURES

SIZE RANGE : 1/4" ~ 3"

◇ **ASTM B148 BODY MATERIAL**
ALUMINUM BRONZE IS STRONGER AND LESS LIKELY TO CORRODE THAN OTHER BRONZE ALLOYS, MAKING THEM A PREFERRED CHOICE FOR SEA WATER AND OTHER APPLICATIONS WHERE CORROSION IS A CONCERN. BECAUSE OF ITS COPPER CONTENT, MARINE ORGANISMS CANNOT COLONIZE ON THE MATERIAL. ADDITIONALLY, FE'S YTT-AB IS USED FOR POTABLE WATER APPLICATIONS AS IT MEETS LEAD FREE STATUTES REQUIRING THAT THE LEAD CONTENT IN THE WETTED SURFACES IS 0.25% OR LESS AS DETERMINED BY A WEIGHTED AVERAGE.

◇ **LARGE STRAINING CAPACITY**
WITH ITS LARGE BODY AND SIZABLE STRAINING ELEMENT, THE YTT PROVIDES EXCELLENT OPEN AREA RATIOS THAT ARE TYPICALLY TWO-AND-A-HALF TIMES LARGER THAN THE CORRESPONDING PIPELINE, MINIMIZING PRESSURE DROP ACROSS THE VALVE.

◇ **PRECISION MACHINED SEATS**
PRECISION MACHINED SCREEN SEATS IN BOTH THE BODY AND CAP HELP TO ENSURE ACCURATE POSITIONING OF THE SCREEN DURING REASSEMBLY AFTER CLEANING. ALSO, THE MACHINED BODY SEATS ENABLE FINER FILTRATION BY PREVENTING DEBRIS BYPASS.

◇ **SELF-CLEANING CAPABILITY**
WITH A TAPPED NPT BLOW-OFF CONNECTION, THIS UNIT CAN BE FITTED WITH A BLOW-DOWN VALVE WHICH FACILITATES CLEANING OF THE STRAINING ELEMENT. PLEASE CONTACT FACTORY FOR MORE INFORMATION.

TECHNICAL

PRESSURE/ TEMPERATURE RATING (2) AB - ASTM B148 GR. 9D - CLASS 250 **YTT-AB**
WOG (Non-shock): 400 PSI @ 150 °F
Saturated Steam: 250 PSI @ 406°F
Maximum Liquid: 250 PSI @ 400 °F

1. The YTT-AB meets requirements for lead free use in potable water systems. The lead content in the wetted surfaces is 0.25% or less as determined by a weighted average. For more information on lead free requirements, contact Fluid Engineering.
2. The above listed temperatures are theoretical and may vary during actual operating conditions.

APPLICATIONS

GENERAL APPLICATION: Y-STRAINERS ARE INSTALLED IN A PIPING SYSTEM TO REMOVE UNWANTED DEBRIS FROM THE PIPELINE, PROTECTING EXPENSIVE EQUIPMENT DOWNSTREAM SUCH AS PUMPS, METERS, SPRAY NOZZLES, COMPRESSORS, AND TURBINES. THEY CAN BE PLACED IN A HORIZONTAL OR VERTICAL PIPELINE AS LONG AS THE SCREEN IS IN A DOWNWARD POSITION. STRAINING IS ACCOMPLISHED VIA AN INTERNAL PERFORATED OR MESH LINED STRAINING ELEMENT, THE SIZE OF WHICH SHOULD BE DETERMINED BASED ON THE SIZE OF THE SMALLEST PARTICLE TO BE REMOVED.

SERVICING: THE STRAINING ELEMENT NEEDS REGULAR CLEANING TO PREVENT DEBRIS BUILD UP. IT IS NOT ADVISABLE TO ALLOW THE DIFFERENTIAL PRESSURE TO INCREASE BY 20 PSI. ALTHOUGH CLEANING NORMALLY REQUIRES THE REMOVAL OF THE STRAINING ELEMENT, INSTALLING AND USING A FE BLOW-OFF DRAIN VALVE CAN INCREASE THE TIME BETWEEN CLEANINGS.

The above data represents common market and service applications. No representation or guarantee, expressed or implied, is given due to the numerous variations of concentrations, temperatures and flow conditions that may occur during actual service.

Fluid Engineering

180 "Y" STRAINER

YTT-AB

Threaded Ends • ANSI Class 250 • Aluminum Bronze

ANSI Class 250

BILL OF MATERIALS (1)

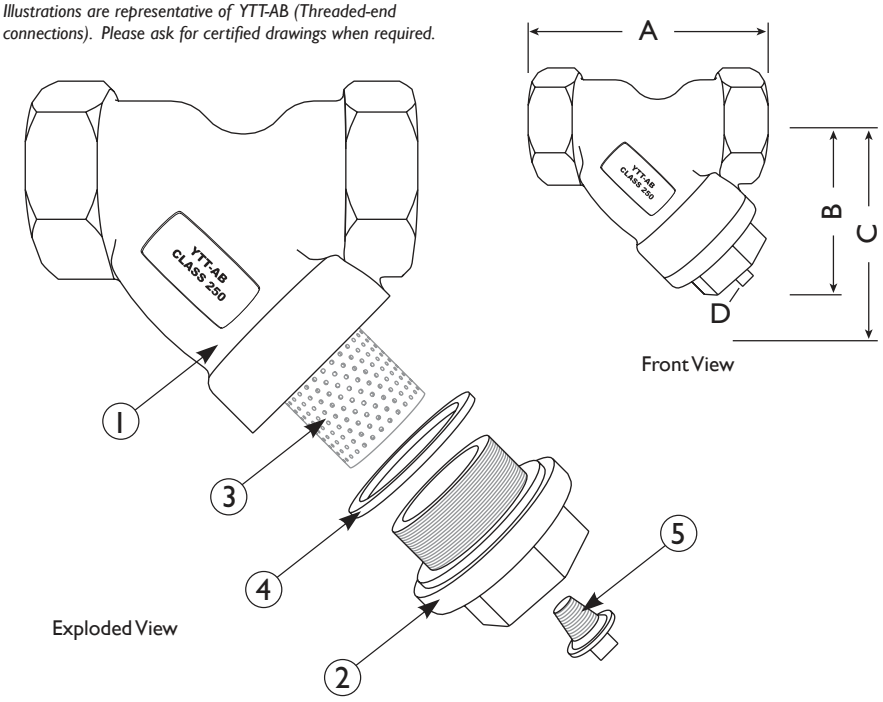
No.	PART	YTT - AB
1	Body	Aluminum Bronze ASTM B148 Gr. 9D
2	Cap	Aluminum Bronze ASTM B148 Gr. 9D
3	Straining Element (2)	Stainless Steel
4	Gasket (2)	Teflon
5	NPT Plug (Blow-off)	Aluminum Bronze ASTM B148 Gr. 9D

1. Bill of Materials represents standard materials. Equivalent or better materials may be substituted at the manufacturer's discretion.
2. Denotes recommended spare parts.

Body Material Application Notes:

- Aluminum Bronze (ASTM B148) is a preferred material for lead-free wye strainers, meeting requirements for potable water systems by containing 0.25% lead or less by average weight on all wetted parts.
- Aluminum Bronze is strong and corrosion resistant, meeting the needs of many various applications, such as seawater and marine.

Illustrations are representative of YTT-AB (Threaded-end connections). Please ask for certified drawings when required.

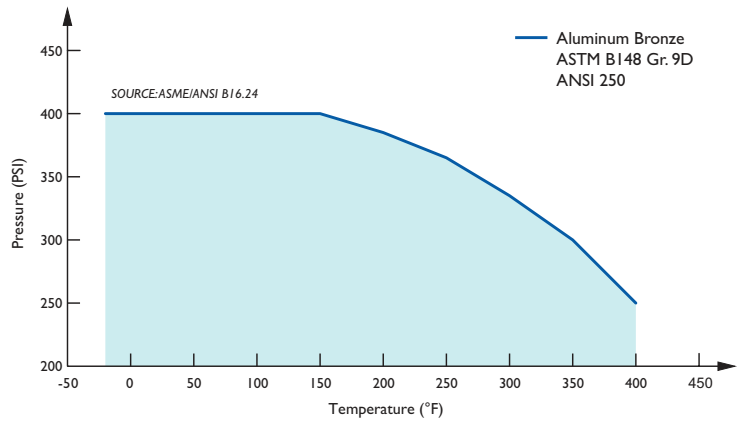


DIMENSIONS AND PERFORMANCE DATA (1)

SIZE		1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
	mm	8	10	15	20	25	32	40	50	65	80
A DIMENSION FACE TO FACE (2)	in	2.75	2.75	2.75	3.00	3.75	4.43	5.00	5.68	9.00	9.00
	mm	70	70	70	76	95	113	381	144	229	229
B DIMENSION CENTER LINE TO BOTTOM	in	2.18	2.18	2.18	2.34	2.91	3.5	3.78	4.39	6.44	6.44
	mm	55	55	55	59	74	89	96	112	164	164
C DIMENSION SCREEN REMOVAL	in	4.00	4.00	4.00	4.25	4.75	5.25	6.00	7.00	10.00	10.00
	mm	102	102	102	108	121	133	152	178	254	254
D NPT Plug BLOW-OFF	in	1/4	1/4	1/4	1/4	3/8	3/4	3/4	1	1 1/4	1 1/4
	mm	8	8	8	8	10	20	20	25	32	32
APPROXIMATE ASSEMBLED WEIGHT	lb	0.5	0.5	0.5	1.0	1.8	2.5	4.0	5.6	15.9	15.9
	kg	0.2	0.2	0.2	0.5	0.8	1.1	1.8	2.5	7.2	7.2
Flow Coefficient	C_V	0.7	2	8	15	22	38	42	70	110	160

1. Dimensions and weights are for reference only. When required, request certified drawings.
2. Face to face values have a tolerance of ±0.06 in (±2.0 mm).

PRESSURE - TEMPERATURE RATINGS



PRESSURE - TEMPERATURE RATING

ANSI Class 250	ASTM B148 Gr. 9D
WOG (Non-shock):	400 PSI @ 150 °F
Saturated Steam:	250 PSI @ 406 °F
Max Liquid:	250 PSI @ 400 °F

STANDARD SCREEN SELECTIONS

Size	Liquid	Open Area	Steam	Open Area
1/4" ~ 2"	20 mesh	51.8%	30 mesh	44.8%
2 1/2" ~ 3"	1/16 (.0625)	41%	3/64 (.045)	36%

REFERENCED STANDARDS & CODES

CODE	DESCRIPTION
ASME/ANSI B16.15	Cast Bronze Threaded Fittings
ASME/ANSI B16.24	Cast Copper Alloy Pipe Flanges and Flanged Fittings