



TITAN FLOW CONTROL, INC.

## "Y" (WYE) STRAINER ♦ ANSI CLASS 250

### CAST IRON ♦ FLANGED ENDS, RAISED FACE

MODELS: YS 59-CI  
(CAST IRON)

SIZE RANGE: 2" ~ 12"  
LARGER SIZES AVAILABLE



## FEATURES

- ♦ **LARGE STRAINING CAPACITY**  
WITH ITS LARGE BODY AND SIZABLE STRAINING ELEMENT, THE YS59 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. TITAN FCI ALSO OFFERS EPOXY COATING AS AN OPTION FOR THE YS59.
- ♦ **OPTIONAL COVER DESIGNS**  
TITAN'S YS59 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 250  
**SIZES 2" ~ 12"**

WOG (Non-shock): 500 PSI @ 150 °F  
Saturated Steam: 250 PSI @ 406 °F  
Maximum Liquid: 250 PSI @ 450 °F

**PRESSURE/TEMPERATURE RATING**  
CI- ASTM A126 GR. B - CLASS 250  
**SIZES 14" ~ 24"**

WOG (Non-shock): 300 PSI @ 150 °F  
Saturated Steam: 200 PSI @ 387 °F  
Maximum Liquid: 200 PSI @ 406 °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 TITAN 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.*

**TITAN FLOW CONTROL, INC.**  
YOUR PIPELINE TO THE FUTURE!

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**"Y" (WYE) STRAINER**  
**YS 59-CI - (Cast Iron)**  
Flanged Ends • Raised Face • Cast Iron

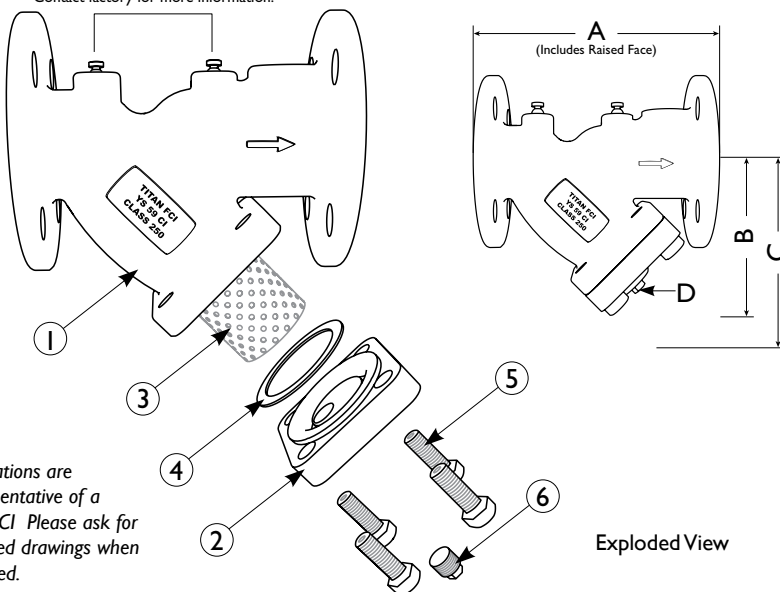
ANSI Class  
250

**BILL OF MATERIALS (1)**

No.	PART	YS 59-CI
1	Body (2)	Cast Iron A126 Gr. B
2	Cover	Cast Iron A126 Gr. B
3	Straining Element (3)	Stainless Steel
4	Gasket (3) (4)	Non-Asbestos Gasket, Garlock 3000 or Equal
5	Cap Screws	Steel
6	NPT Plug (Blow-off)	Carbon Steel

1. Bill of Materials represents standard materials. Equivalent or better materials may be substituted at the manufacturer's discretion.
2. Cast Iron bodies are epoxy painted.
3. Denotes recommended spare parts.
4. A wide range of gasket materials are available. Contact factory for more information.

Request gauge taps when required.  
Contact factory for more information.



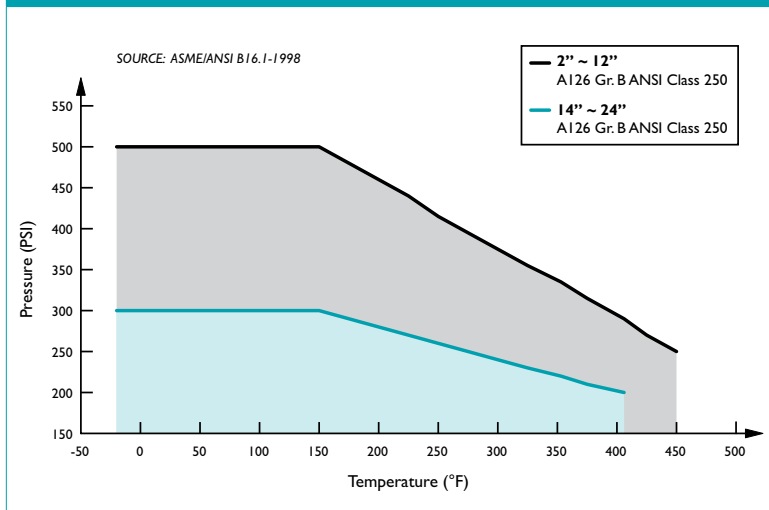
Illustrations are representative of a YS59-CI. Please ask for certified drawings when required.

**DIMENSIONS AND PERFORMANCE DATA (1)**

SIZE (2)	in	2	2 1/2	3	4	5	6	8	10	12
	mm	50	65	80	100	125	150	200	250	300
<b>A DIMENSION</b> FACE TO FACE (RAISED FACE) (3)	in	9.62	10.62	12.00	14.50	16.62	19.25	23.37	27.37	32.00
	mm	244	270	305	369	423	489	594	696	813
<b>B DIMENSION</b> CENTER LINE TO BOTTOM	in	5.5	6.5	7.5	8.75	11.5	14.0	16.75	19.00	22.00
	mm	140	165	191	222	292	356	425	483	559
<b>C DIMENSION</b> SCREEN REMOVAL	in	9.00	11.00	12.50	15.00	17.00	20.00	24.12	28.50	33.00
	mm	229	280	318	381	432	508	613	724	839
<b>D NPT Plug</b> BLOW-OFF	in	1/2	1	1	1 1/2	2	2	2	2	2
	mm	15	25	25	40	50	50	50	50	50
<b>APPROXIMATE ASSEMBLED WEIGHT</b>	lb	25.5	45.0	60.0	94.0	150.0	206.0	338.0	528.0	768.0
	kg	11.6	20.4	27.2	42.6	68.0	93.3	153.3	239.5	348.4
Flow Coefficient	C <sub>v</sub>	70	120	160	260	400	570	950	1600	2200

1. Dimensions and weights are for reference only. When required, request certified drawings.
2. Larger sizes are available. Please consult factory for these sizes and dimensions.
3. 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):	500 PSI @ 150 °F	300 PSI @ 150 °F
Saturated Steam:	250 PSI @ 406 °F	200 PSI @ 387 °F
Max Liquid:	250 PSI @ 450 °F	200 PSI @ 406 °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" ~ 14" (1)	1/8 (.125)	40%	30 Mesh Lined	44.8%

1. Please consult factory for screen selections on 16" and larger YS 59-CI models.

**REFERENCED STANDARDS & CODES**

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

Titan FCI makes every effort to ensure the information presented on our literature accurately reflects exact product specifications. However, as product changes occur, there may be short-term differences between actual product specifications and the information contained within our literature. Titan FCI reserves the right to make design and specification changes to improve our products without prior notification. When required, request certified drawings.