

## Engineering Specification

Job Name \_\_\_\_\_  
 Job Location \_\_\_\_\_  
 Engineer \_\_\_\_\_  
 Approval \_\_\_\_\_

Contractor \_\_\_\_\_  
 Approval \_\_\_\_\_  
 Contractor's P.O. No. \_\_\_\_\_  
 Representative \_\_\_\_\_

# Cast Carbon and Alloy Steel Screwed & Socket Weld End Y Strainers

**Models: 863M Screwed, Class 1500**  
**864M Socket, Class 1500**  
**865 Screwed, Class 2500**  
**866 Socket, Class 2500**

**Sizes: 1/2" – 2" (15 – 50mm)**

### Typical Service

- Used extensively to strain foreign matter from pipelines and provide economical protection for costly pumps, meters, valves, and other similar mechanical equipment.
- These are especially critical as weld debris is often present in the pipeline.
- Well suited for long service in high pressure and temperature applications.

### Features

- Machined seats in both body and cap align and lock the screen in place to stop sediment bypass.
- Machined seats facilitate alignment and accurate reseating after servicing.

### Construction

- Most are furnished with a removable bolted cap for easy maintenance.
  - NOTE: 1" and smaller 863M and 864M have screwed cap.
- Heavy duty, rugged bodies with extra heavy bore.

### Self-Cleaning

- Self-cleaning is accomplished by opening the plug or valve connected to the blowoff outlet.

### Blowoff Outlets

- Covers are furnished blind. Socket weld blowoff connection are available, consult factory.
- 1" and smaller 863M and 864M are furnished with NPT tapped blowoff.
- Sizes of tapping specified on next page.
- Not normally furnished with plug. Plug available, specify with order.



Models 863M, 864M



Models 865, 866

Pressure/Temperature - Non-Shock		
Model	Material	Rating
863M, 864M	Carbon Steel	3705psi @-20°F to 100°F 255.45 bar @ 37.78°C 1595psi @ 850°F 109.97 bar @ 454.44°C
863M, 864M	Chrome- Moly	3750psi @-20°F to 100°F 258.55 bar @ 37.78°C 1500psi @ 975°F 103.42 bar @ 523.89°C
865, 866	Carbon Steel	6170psi @-20°F to 100°F 425.41 bar @ 37.78°C 2655psi @ 850°F 183.06 bar @ 454.44°C
865, 866	Chrome- Moly	6250psi @-20°F to 100°F 430.92 bar @ 37.78°C 2500psi @ 975°F 172.37 bar @ 523.89°C

### Capacity

- Generously proportioned bodies.
- Open Area Ratio much greater than pipe size, ensuring low pressure drop.
- Minimum of 4 to 1 Open Area Ratio.

### Screens

		STANDARD (WATER)		STEAM RECOMMENDATION	
MODEL	SIZES	MATERIAL	OPENING	MATERIAL	OPENING
All	1/2" - 2"	304SS	.062 perf	304SS	.045 perf

### NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

Mueller Steam Specialty product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Mueller Steam Specialty Technical Service. Mueller Steam Specialty reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Mueller Steam Specialty products previously or subsequently sold.

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## Material

863M, 864M, 865, 866	
Body	Carbon Steel, ASTM A216 Grade WCB
Cap	Carbon Steel, ASTM A216 Grade WCB
Gasket	Spiral Wound SS, Graphite Filled

## ALSO AVAILABLE:

Body/Cap: Carbon-Moly ASTM A217 Gr. W1  
 Chrome-Moly ASTM A217 Gr. WC6  
 Chrome-Moly ASTM A217 Gr. WC9

## Pressure Drop

- See Pressure Drop Charts in Technical Data Section in the Mueller Steam Specialty Engineering binder.

## Dimensions and Weights

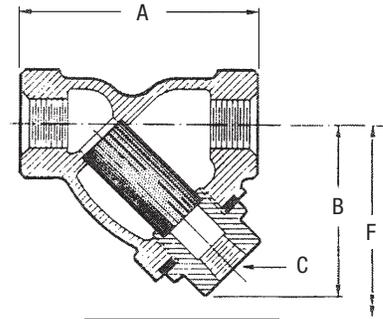
SIZE		DIMENSIONS							WEIGHT						
in.	mm	A	B	C (NPT)	D	E	F Screen Removal	lbs.	kgs.						
<b>863M</b>															
1/2	15	3 <sup>29</sup> / <sub>32</sub>	99.2	3	76	1/4	6	-	-	3 3/4	95	2.25	1.02		
3/4	20	4 1/4	108	3 5/8	92	3/8	10	-	-	4 5/8	111	3.75	1.7		
1	25	5	127	4 1/8	105	1/2	14	-	-	5 1/4	133	6.5	2.9		
1 1/4	32	8 3/8	213	7	178	-	-	-	-	7 3/4	197	22	10		
1 1/2	40	8 3/8	213	7	178	-	-	-	-	7 3/4	197	22	10		
2	50	9 5/16	237	7 3/8	187	-	-	-	-	9	229	30	13		
<b>864M</b>															
1/2	15	3 <sup>29</sup> / <sub>32</sub>	99.2	3	76	1/4	6	3/8	10	7/8	21.7	3 3/4	95	2.25	1.02
3/4	20	4 1/4	108	3 5/8	92	3/8	10	1/2	13	1 1/16	27	4 5/8	111	3.75	1.7
1	25	5	127	4 1/8	105	1/2	14	1/2	13	1 5/16	33.8	5 1/4	133	6.5	2.9
1 1/4	32	8 3/8	213	7	178	CF	CF	1/2	13	1 11/16	42.5	7 3/4	197	22	10
1 1/2	40	8 3/8	213	7	178	CF	CF	1/2	13	1 15/16	48.6	7 3/4	197	22	10
2	50	9 5/16	237	7 3/8	187	CF	CF	5/8	16	2 3/8	61.1	9	229	30	13
<b>865</b>															
1/2	15	12 5/8	321	7 11/16	195	-	-	-	-	-	-	10 1/2	267	9	4
3/4	20	12 5/8	321	7 11/16	195	-	-	-	-	-	-	10 1/2	267	12	5.4
1	25	12 5/8	321	7 11/16	195	-	-	-	-	-	-	10 1/2	267	40	18
1 1/4	32	16 7/8	429	10 1/2	267	-	-	-	-	-	-	14 1/2	368	75	34
1 1/2	40	16 7/8	429	10 1/2	267	-	-	-	-	-	-	14 1/2	368	75	34
2	50	17	432	12 1/2	318	-	-	-	-	-	-	16 3/4	425	200	90
<b>866</b>															
1/2	15	12 5/8	321	7 11/16	195	-	-	3/8	10	7/8	21.7	10 1/2	267	9	4
3/4	20	12 5/8	321	7 11/16	195	-	-	1/2	13	1 1/16	27	10 1/2	267	12	5.4
1	25	12 5/8	321	7 11/16	195	-	-	1/2	13	1 5/16	33.8	10 1/2	267	40	18
1 1/4	32	16 7/8	429	10 1/2	267	-	-	1/2	13	1 11/16	42.5	14 1/2	368	75	34
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2	50	17	432	12 1/2	318	-	-	5/8	16	2 3/8	61.1	16 3/4	425	200	90

Apply For Certified Drawings.

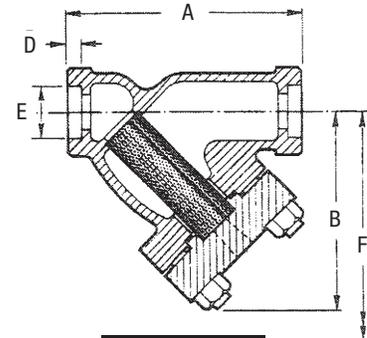
**ISO 9001-2008**  
**CERTIFIED**

**Limited Warranty:** Mueller Steam Specialty warrants each product to be free from defects in material and workmanship under normal usage for a period of one year from the date of original shipment. In the event of such defects within the warranty period, the Company will, at its option, replace or recondition the product without charge. This shall constitute the sole and exclusive remedy for breach of warranty, and the Company shall not be responsible for any incidental, special or consequential damages, including without limitation, lost profits or the cost of repairing or replacing other property which is damaged if this product does not work properly, other costs resulting from labor charges, delays, vandalism, negligence, fouling caused by foreign material, damage from adverse water conditions, chemical, or any other circumstances over which the Company has no control. This warranty shall be invalidated by any abuse, misuse, misapplication or improper installation of the product. **THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** Any implied warranties that are imposed by law are limited in duration to one year.

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**Model 863M, 864M**



**Model 865, 866**

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