

Models: 781*, 781-WE*

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

Representative _____

LEAD FREE*

Cast Carbon & Alloy Steel Flanged & Butt Weld End Y Strainers

Models: 781*, 781-WE

Sizes: 1/2" – 24"

| PRESSURE/TEMPERATURE–NON-SHOCK | | |
|--------------------------------|--------------|------------------------|
| MODEL | MATERIAL | RATING |
| 781, 781-WE | Carbon Steel | 285 psi @ -20 to 100°F |
| | | 19.6 bar @ 38°C |
| | | 150psi @ 565°F |
| | | 10.2 bar @ 300°C |
| 781, 781-WE | Chrome Moly | 290psi @ -20 to 100°F |
| | | 19.8 bar @ 38°C |
| | | 150psi @ 565°F |
| | | 10.2 bar @ 300°C |

781 Class 150**781-WE Class 150**

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

- Designed for Class 150 specifications.
- Heavy gauge reinforced screens are used.

IMPORTANT NOTE: Model 781-WE ends are machined to match Schedule 40 pipe. Other connections are available, consult factory.

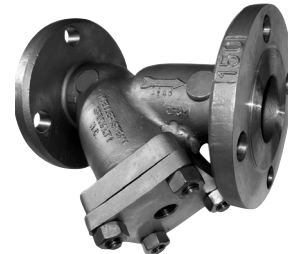
Self-Cleaning

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

Blowoff Outlets

- Blowoff outlets are NPT tapped at location C. See next page for NPT sizes.
- Blind covers are available, consult factory.

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.



Model 781



Model 781-WE

* 781/781-WE supersedes model 761/741-WE. 761/761-WE available upon request.

Capacity

- Generously proportioned bodies.
- Open Area Ratio much greater than pipe size, ensuring low pressure drop.

Screens

| MODEL | SIZES | STANDARD (WATER) | | STEAM RECOMENDATION | |
|-----------|-------|------------------|-----------|---------------------|-----------|
| | | MATERIAL | OPENING | MATERIAL | OPENING |
| 1/2" - 4" | All | 304SS | .062 perf | 304SS | .045 perf |
| 5" and Up | All | 304SS | .125 perf | 304SS | .062 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.

*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.

Mueller Steam Specialty™

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| BILL OF MATERIAL MODELS 781, 781-WE | | |
|-------------------------------------|-------------|----------------------------------|
| ITEM | DESCRIPTION | MATERIAL |
| 1 | BODY | Carbon Steel ASTM A216 Grade WCB |
| 2 | COVER ** | Carbon Steel ASTM A216 Grade WCB |
| 3 | SCREEN | 304 SS |
| 4 | GASKET | Compressed Non-Asbestos |
| 5 | STUDS | A193 B7 |
| 6 | NUTS | A194 2H |

** Cover may be manufactured from equivalent grade plate material

Materials

Also Available:

Body/Cap: Carbon-Moly ASTM A217 Gr. WC1
 Chrome-Moly ASTM A217 Gr. WC6
 Chrome-Moly ASTM A217 Gr. WC9

Pressure Drop

See Pressure Drop Charts in Technical Data section of the Mueller Steam Specialty Engineering binder. Cv values are noted in the Dimensions and Weights table below.

Dimensions and Weights

| SIZE | | DIMENSIONS | | | | | | WEIGHT | | | Cv | |
|-------|-----|------------|------|--------|------|---------|----|---------------------|------|-------|------|--------|
| | | A | | B | | C (NPT) | | D Screen Removal | | lbs. | kgs. | GPM |
| in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | | | |
| 1/2 | 15 | 5 1/4 | 149 | 3 1/2 | 89 | 3/8 | 10 | 5 | 130 | 5.5 | 2.5 | 8 |
| 3/4 | 20 | 7 1/4 | 187 | 3 3/4 | 95 | 1/2 | 15 | 5 | 130 | 10.25 | 4.6 | 15 |
| 1 | 25 | 7 3/4 | 187 | 3 3/4 | 95 | 1/2 | 15 | 5 | 130 | 10.25 | 4.6 | 22 |
| 1 1/4 | 32 | 7 | 178 | 4 3/4 | 121 | 1/2 | 15 | 7 | 178 | 9.75 | 4.4 | 38 |
| 1 1/2 | 40 | 7 1/4 | 181 | 4 3/4 | 121 | 1/2 | 15 | 7 | 178 | 12.5 | 5.6 | 42 |
| 2 | 50 | 7 3/4 | 200 | 5 1/4 | 133 | 1/2 | 15 | 7 | 178 | 18 | 8.1 | 70 |
| 2 1/2 | 65 | 9 3/4 | 248 | 6 1/2 | 165 | 1 | 25 | 9 3/4 | 248 | 28 | 12.7 | 110 |
| 3 | 80 | 10 1/8 | 256 | 7 | 178 | 1 | 25 | 10 | 254 | 34 | 15 | 140 |
| 4 | 100 | 12 1/8 | 308 | 8 1/4 | 210 | 1 1/2 | 40 | 12 | 305 | 55 | 25 | 245 |
| 5 | 125 | 15 3/8 | 397 | 11 1/4 | 286 | 2 | 50 | 20 | 508 | 90 | 40 | 400 |
| 6 | 150 | 18 1/2 | 470 | 13 1/2 | 343 | 2 | 50 | 20 | 508 | 153 | 69 | 600 |
| 8 | 200 | 21 3/8 | 543 | 15 1/2 | 394 | 2 | 50 | 22 3/4 | 578 | 220 | 100 | 1,000 |
| 10 | 250 | 26 | 660 | 18 1/2 | 470 | 2 | 50 | 28 | 711 | 320 | 145 | 1,580 |
| 12 | 300 | 29 3/8 | 759 | 22 1/4 | 565 | 2 | 50 | 30 | 762 | 550 | 250 | 2,200 |
| 14 | 350 | 36 | 914 | 25 | 635 | 2 | 50 | 36 1/2 | 927 | 975 | 442 | 3,200 |
| 16 | 400 | 41 1/8 | 1056 | 26 1/2 | 673 | 2 | 50 | 42 | 1067 | 1635 | 741 | 4,900 |
| 18 | 450 | 46 | 1168 | 34 3/8 | 886 | 2 | 50 | 50 3/8 | 1292 | 2376 | 1078 | 6,100 |
| 20 | 500 | 49 1/2 | 1257 | 39 | 991 | 2 | 50 | 55 3/8 | 1407 | 2675 | 1213 | 8,000 |
| 24 | 600 | 58 3/8 | 1483 | 44 1/2 | 1122 | 2 | 50 | 67 1/4 | 1708 | 4880 | 2213 | 11,000 |

| SIZE | | DIMENSIONS | | | | | | WEIGHT | | | Cv | |
|-------|-----|------------|------|--------|------|---------|----|---------------------|------|------|------|--------|
| | | A | | B | | C (NPT) | | D Screen Removal | | lbs. | kgs. | GPM |
| in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | | | |
| 1/2 | 15 | 6 3/8 | 168 | 3 1/2 | 89 | 3/8 | 10 | 5 | 130 | 3 | 1.3 | 8 |
| 3/4 | 20 | 8 1/8 | 211 | 3 3/4 | 95 | 1/2 | 15 | 5 | 130 | 9 | 4 | 15 |
| 1 | 25 | 8 3/8 | 257 | 3 3/4 | 95 | 1/2 | 15 | 5 | 130 | 9 | 4 | 22 |
| 1 1/4 | 32 | 10 1/8 | 260 | 5 1/4 | 133 | 1/2 | 15 | 7 | 178 | 12 | 5.4 | 38 |
| 1 1/2 | 40 | 10 3/4 | 279 | 5 1/4 | 133 | 1/2 | 15 | 7 | 178 | 13 | 5.9 | 42 |
| 2 | 50 | 10 3/4 | 219 | 5 1/4 | 133 | 1/2 | 15 | 7 | 178 | 10 | 4.5 | 70 |
| 2 1/2 | 65 | 10 3/8 | 269 | 6 1/2 | 165 | 1 | 25 | 9 3/4 | 248 | 14 | 6.3 | 110 |
| 3 | 80 | 12 | 305 | 7 | 178 | 1 | 25 | 10 | 254 | 20 | 9 | 140 |
| 4 | 100 | 14 1/2 | 368 | 8 1/4 | 210 | 1 1/2 | 40 | 12 | 305 | 40 | 18 | 245 |
| 5 | 125 | 19 3/8 | 491 | 13 1/2 | 343 | 2 | 50 | 20 | 508 | 90 | 40 | 400 |
| 6 | 150 | 19 3/8 | 491 | 13 1/2 | 343 | 2 | 50 | 20 | 508 | 90 | 40 | 600 |
| 8 | 200 | 23 3/8 | 594 | 15 3/4 | 400 | 2 | 50 | 22 3/4 | 578 | 168 | 76 | 1,000 |
| 10 | 250 | 27 3/8 | 695 | 19 | 483 | 2 | 50 | 28 | 711 | 250 | 113 | 1,580 |
| 12 | 300 | 32 | 813 | 22 1/2 | 565 | 2 | 50 | 30 | 762 | 440 | 200 | 2,200 |
| 14 | 350 | 36 | 914 | 25 | 635 | 2 | 50 | 36 1/2 | 927 | 815 | 370 | 3,200 |
| 16 | 400 | 41 1/8 | 1056 | 26 1/2 | 673 | 2 | 50 | 42 | 1067 | 1433 | 650 | 4,900 |
| 18 | 450 | 46 | 1168 | 34 3/8 | 886 | 2 | 50 | 50 3/8 | 1292 | 2152 | 976 | 6,100 |
| 20 | 500 | 49 1/2 | 1257 | 39 | 991 | 2 | 50 | 55 3/8 | 1407 | 2393 | 1085 | 8,000 |
| 24 | 600 | 58 3/8 | 1483 | 44 1/2 | 1122 | 2 | 50 | 67 1/4 | 1708 | 4486 | 2034 | 11,000 |

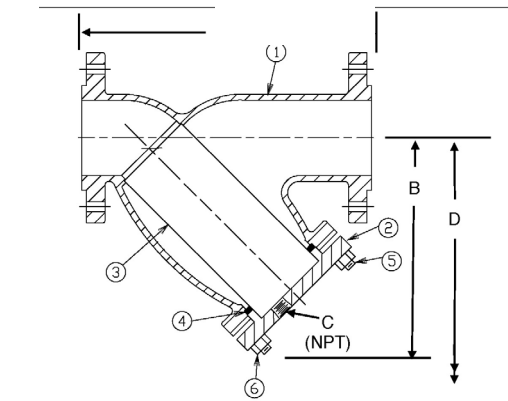
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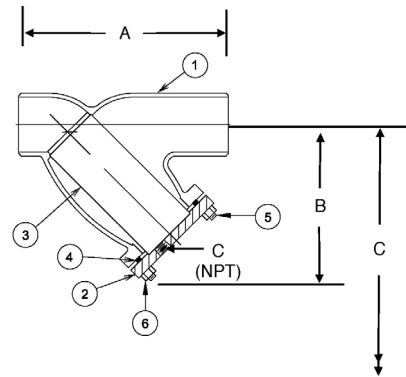
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