



## Grinnell Mechanical Products Figure S853 “Y” Strainer

### General Description

The Figure S853 “Y” Strainer provides economical strainer protection for piping equipment such as pumps, meters, valves, compressors, traps and similar equipment. The inlet and outlet ends are suitable for installation with Figure 705, 707 and 772 couplings.

The Figure S853 “Y” Strainer has a standard screen, which is perforated 304 Stainless Steel with other alloys available.

All covers have an NPT blow-off outlet at location “C” (pipe plugs not included). A recessed seat in the cover ensures screen alignment.

Self cleaning is done by opening the valve (not supplied) connected to the blow-off outlet. Advise when ordering strainers that are to be mounted in vertical piping so that the cover will be rotated to position the blow-off at the lowest point.

#### NOTICE

*The Figure S853 “Y” Strainer described herein must be installed and maintained in compliance with this document, in addition to the standards of any other authorities having jurisdiction. Failure to do so may impair the performance of this device.*

*Never remove any piping component or correct or modify any piping deficiencies without first depressurizing and draining the system. Material and gasket selection should be verified to be compatible for the specific application.*

*It is the designer’s responsibility to select products suitable for the intended service and to ensure that pressure ratings and performance data are not exceeded. Always read and understand the installation instructions (IH-1000).*

*The owner is responsible for maintaining their system and devices in proper operating condition. Contact the installing contractor or product manufacturer with any questions.*

### Technical Data

#### Sizes

2 to 12 Inch (DN50 to DN300)

#### Maximum Working Pressure

640 psi (44,1 bar) at 100°F (38°C)

#### Body and Cover

Ductile iron conforming to ASTM A-536, Grade 65-45-12

#### Screen

Type 304 Stainless Steel ASTM A-240  
Standard perforations are listed below:

#### Perforations

2 to 4 Inch (DN50 to DN100)

1/16 Inch (1,6mm)

5 to 12 Inch (DN125 to DN300)

1/8 Inch (3,2mm)

#### Gasket

Non-Asbestos

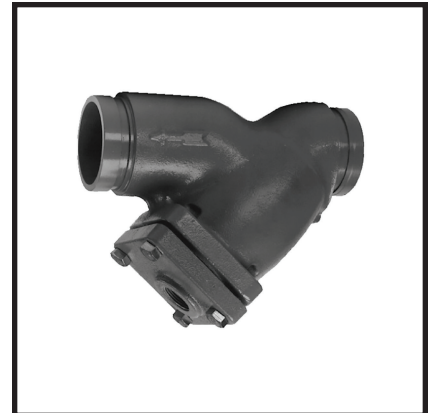
#### Protective Coating

Black fusion bonded epoxy

### Ordering Procedure

Grinnell Mechanical Products, are available through a network of distribution centers. For the nearest distributor, visit [www.grinnell.com](http://www.grinnell.com).

When placing an order, indicate the full product name. Please specify the quantity, figure number, screen material and size.

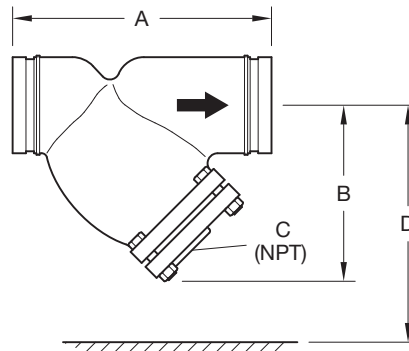


**10  
YEAR  
LIMITED  
WARRANTY**

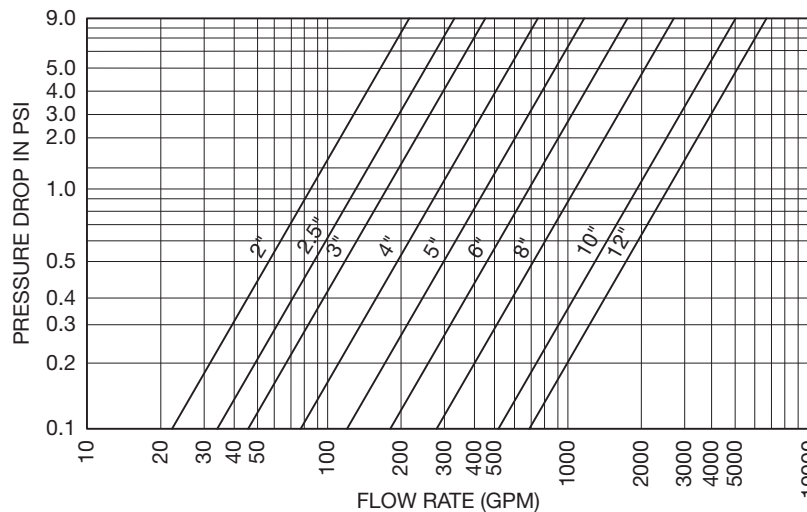
For warranty terms and conditions, visit [www.grinnell.com](http://www.grinnell.com)

| Nominal Pipe Size    |                      | Nominal Dimensions<br>Inches<br>mm |                |                |                        | Approx.<br>Weight<br>Lbs.<br>kg |
|----------------------|----------------------|------------------------------------|----------------|----------------|------------------------|---------------------------------|
| ANSI<br>Inches<br>DN | O.D.<br>Inches<br>mm | A                                  | B              | C <sup>a</sup> | D<br>Screen<br>Removal |                                 |
| 2<br>50              | 2.375<br>60,3        | 7.88<br>200,2                      | 5.25<br>133,4  | 0.50<br>12,7   | 7.00<br>177,8          | 12.0<br>5,4                     |
| 2-1/2<br>65          | 2.875<br>73,0        | 10.00<br>254,0                     | 6.50<br>165,1  | 1.00<br>25,4   | 9.75<br>247,7          | 18.0<br>8,2                     |
| 3<br>80              | 3.500<br>88,9        | 10.13<br>257,3                     | 7.00<br>177,8  | 1.00<br>25,4   | 10.00<br>254,0         | 23.0<br>10,4                    |
| 4<br>100             | 4.500<br>114,3       | 12.13<br>308,1                     | 8.25<br>209,6  | 1.50<br>38,1   | 12.00<br>304,8         | 42.0<br>19,1                    |
| 5<br>125             | 5.563<br>141,3       | 15.63<br>397,0                     | 11.25<br>285,8 | 2.00<br>50,8   | 17.00<br>431,8         | 80.0<br>36,3                    |
| 6<br>150             | 6.625<br>168,3       | 18.50<br>469,9                     | 13.50<br>342,9 | 2.00<br>50,8   | 20.00<br>508,0         | 112.0<br>50,8                   |
| 8<br>200             | 8.625<br>219,1       | 21.63<br>549,4                     | 15.50<br>393,7 | 2.00<br>50,8   | 22.75<br>577,9         | 205.0<br>93,0                   |
| 10<br>250            | 10.750<br>273,1      | 29.13<br>739,8                     | 21.00<br>533,4 | 2.00<br>50,8   | 30.50<br>774,7         | 277.0<br>125,6                  |
| 12<br>300            | 12.750<br>323,9      | 33.75<br>857,3                     | 25.00<br>635,0 | 2.00<br>50,8   | 35.50<br>901,7         | 470.0<br>213,2                  |

a. Blow-off outlet threads conforming to ISO 7-1 are available upon request. Contact TYCO Fire Protection Products.



**FIGURE 1**  
**FIGURE S853 "Y" STRAINER**  
**NOMINAL DIMENSIONS**



**Note:**  
It is good piping practice to apply a safety factor of 15% to 20% to the values in the above table for design purposes.

**GRAPH A**  
**FIGURE S853 "Y" STRAINER**  
**NOMINAL PRESSURE LOSS VS. FLOW**