

### Grooved-End "Wye" Strainer **Model 758G**



#### **Service Recommendations**

For use in water, oil and gas piping to provide economical protection for pumps, meters, valves, compressors, traps and similar equipment.

#### **Screens**

Standard screens for Y–Strainer are perforated 304 Stainless Steel with spot welded seam. Mesh lining is available in all alloys for extra fine st aining. Recommended standard perforations are listed below in the Material Specifications.

#### **Gruvlok Strainer Basket**

Furnished as standard in sizes 8" (43 mm) and larger. A one-quarter turn securely locks the screen in its seat and frees the serviceman for securing the cover flange to the body of the strainer.

Contact an ASC Engineered Solutions Representative for other applications.

#### Construction

All covers have an NPT blowoff outlet at location "C". A recessed seat in the cover ensures accurate screen alignment. Bosses at the inlet and outlet flanges are provided for gauge taps.

Self-cleaning is done by opening the valve or plug connected to the blowoff outlet. (When ordering, advise when strainers are to be mounted in vertical piping, the cover can be rotated to position the blowoff at the lowest point.)

#### **Blowoff Outlets**

Tapped NPT size specified in the dimension table. Blowoff outlets are not normally furnished with plugs.

Individually Hydrostatically Tested

**Working Pressures Non-Shock** 

640 PSI @ 150°F (45 Bar @ 65°C)

# GRUVLOK An ASC Engineered Solution

#### **Material Specifications**

#### **Body & Cover**

Ductile Iron ASTM A 395 Grade 60-40-18

#### Flat Gaskets

Non-asbestos

#### Screen

2" - 4" Type 304 Stainless Steel ½" (1.6mm) dia. holes (12 mesh) 5" - 12" Type 304 Stainless Steel ½" (3.2mm) dia. holes (6 mesh)

Special order screen option: 2" - 8" - 16 mesh / 10" - 12" - 12 mesh

#### Coupling

Ductile iron ASTM A 536 Grade 65-45-12





### Grooved-End "Wye" Strainer Model 758G

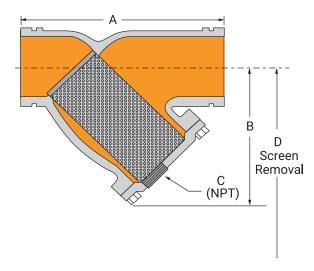


Fig. 758 G Grooved-End "Wye" Strainer

| Nominal         |                     |                                      |                                      |          |                                      |                    |  |
|-----------------|---------------------|--------------------------------------|--------------------------------------|----------|--------------------------------------|--------------------|--|
| Size            | 0.D.                | Α                                    | B C<br>Plug Size                     |          | D                                    | Approx.<br>Wt. Ea. |  |
| In./DN(mm)      | In./mm              | In./mm                               | In./mm                               | In./mm   | Lbs./Kg                              | Lbs./Kg            |  |
| <b>2</b><br>50  | 2.375<br>60.3       | 7 <sup>7</sup> / <sub>8</sub><br>200 | <b>5</b> ½<br>133                    | ½<br>25  | <b>7</b><br>178                      | 12.0<br>5.4        |  |
| 2½<br>65        | 2.875<br>73.0       | 10<br>254                            | 6½<br>165                            | 1<br>25  | 9 <sup>3</sup> / <sub>4</sub><br>248 | 18.0<br>8.2        |  |
| 3<br>80         | 3.500<br>88.9       | 101/8<br>257                         | <b>7</b> 178                         | 1<br>25  | 10<br>254                            | 23.0<br>10.4       |  |
| 4<br>100        | <b>4.500</b> 114.3  | 121/8<br>308                         | 8 <sup>1</sup> / <sub>4</sub><br>210 | 1½<br>38 | 12<br>305                            | <b>42.0</b> 19.1   |  |
| <b>5</b><br>125 | 5.563<br>141.3      | 15%<br>396                           | 11¼<br>286                           | 2<br>51  | 17<br>432                            | <b>80.0</b> 36.3   |  |
| <b>6</b><br>150 | 6.625<br>168.3      | 18½<br>470                           | 13½<br>343                           | 2<br>51  | <b>20</b> 508                        | 112.0<br>50.8      |  |
| 8<br>200        | 8.625<br>219.1      | <b>21</b> 5/8<br>549                 | 15½<br>394                           | 2<br>51  | 22³/ <sub>4</sub><br>577             | 205.0<br>93.0      |  |
| 10              | 10.750              | 253/4                                | 181/2                                | 2        | 28                                   | 277.0              |  |
| 250             | 273.1               | 654                                  | 470                                  | 51       | 711                                  | 125.6              |  |
| 12<br>300       | <b>12.750</b> 323.9 | <b>30</b> 762                        | 21³⁄₄<br>552                         | 2<br>51  | 30<br>762                            | <b>470.0</b> 213.2 |  |

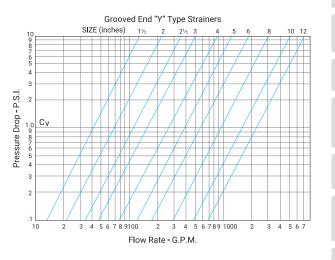
\*Maximum working pressure is based upon the performance capability of the Gruvlok Strainer. Maximum system working pressure is dependant upon the couplings used for installation and the pressure capacity of other system components.

Not for use with copper systems.

#### **Flow Data**

NOTE 1 Most U.S. piping engineers specify system startup instructions for new systems which include removing the pre-filter screen after system flushing of the main piping before the system is put into normal operation. Flow data values are based on flow of clean water at ambient temperatures. The pressure drop across the diffuser basket strainer, 50% clogged, is approximately twice as great as that of a clean strainer.

NOTE 2 Suction Diffuser baskets need a routine maintenance program to maintain system efficiency.





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### Grooved-end "Wye" Strainer Model 768G



Values for flow of water at +60°F (+16°C)

$$C_V = \frac{Q}{\sqrt{\Delta F}}$$

Q = Flow (GPM) C<sub>v</sub> = flow coefficient

 $\Delta P$  = Pressure drop (PSI)

Grooved-end Wye-Strainers are designed to strain debris and foreign

#### **Material Specifications**

Ductile iron ASTM A 536 Grade 65-45-12

#### **End Cap**

Ductile iron ASTM A 536 Grade 65-45-12

#### Screen

2" - 3" Type 304 Stainless Steel to ASTM A 240  $\frac{1}{16}$ " (1.6 mm) perforations (12 mesh)

Type 304 Stainless Steel to ASTM A 240  $\frac{1}{8}$ " (3.2 mm) perforations (6 mesh)

#### Coupling

Ductile iron ASTM A 536 Grade 65-45-12

EPDM Temperature range -40°F - +230°F (-40° to 110°C) - Standard

Nitrile Temperature range -20°F to 180°F (-29° to 82°C) - Special Request

#### **Blow Down Port**

2"-5": 1" tapped with plug,

6" - 12": 11/2" tapped with plug

Strainer baskets need a routine maintenance program to maintain efficiency and to prevent excess pressure drop caused by a clogged screen.

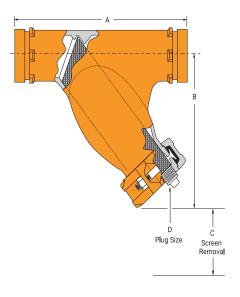
matter from piping systems and thus provide inexpensive protection for costly pumps, meters and other components. The Strainer can be installed quickly and easily with two mechanical couplings and the straight flow through design provides for lower pressure drop. This strainer features a stainless steel screen that is secured with an end cap and mechanical coupling. Cleaning and maintenance of the screen can be accomplished easily by removing the coupling. The Strainer is suitable for vertical and horizontal installations.



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## Grooved-end "Wye" Strainer **Model 768G**



|                 | Dimensions            |                    |                                       |   |   |                |           |                   |  |  |
|-----------------|-----------------------|--------------------|---------------------------------------|---|---|----------------|-----------|-------------------|--|--|
| Nominal Size    | O.D.                  | Working Pressure   | Α                                     | В                                       | С   | D<br>Plug Size | Cv Values | Approx<br>Wt. Ea. |  |  |
| In./DN(mm)      | In./mm                | PSI/bar            | ln./mm                                | ln./mm                                  | In./mm                                      | In./mm         |           | Lbs./Kg           |  |  |
| 2<br>50         | 2.375<br>60.3         | <b>300</b><br>20.7 | 9³⁄ <sub>4</sub><br>248               | 6³⁄₄<br>171                             | <b>4</b> <sup>7</sup> / <sub>8</sub><br>124 | 1<br>25        | 59        | 11<br>5.0         |  |  |
| 2½<br>65        | 2.875<br>73.0         | 300<br>20.7        | 10 <sup>3</sup> / <sub>4</sub><br>273 | <b>7</b> 3/8<br>187                     | <b>5½</b><br>133                            | 1<br>25        | 92        | 14<br>6.4         |  |  |
| 3<br>80         | 3. <b>500</b><br>88.9 | 300<br>20.7        | 11¾<br>298                            | 8 <sup>3</sup> / <sub>16</sub><br>208   | 57/8<br>149                                 | 1<br>25        | 162       | 20<br>9.1         |  |  |
| <b>4</b> 100    | <b>4.500</b> 114.3    | 300<br>20.7        | 1 <b>4</b> 1/ <sub>4</sub> 362        | 10<br>254                               | 7½<br>191                                   | 1<br>25        | 284       | 32<br>14.5        |  |  |
| <b>5</b><br>125 | 5.563<br>141.3        | <b>300</b><br>20.7 | 16½<br>419                            | 11¼<br>286                              | <b>81/4</b><br>210                          | 1<br>25        | 410       | <b>46</b> 20.9    |  |  |
| 6<br>150        | 6.625<br>168.3        | <b>300</b><br>20.7 | 18½<br>470                            | 133%<br>340                             | <b>9</b> %<br>251                           | 1½<br>38       | 770       | <b>70</b> 31.8    |  |  |
| <b>8</b><br>200 | 8.625<br>219.1        | <b>300</b><br>20.7 | <b>24</b><br>610                      | 1 <b>6³⁄₄</b><br>425                    | <b>12</b> 5/16<br>313                       | 1½<br>38       | 1010      | 155<br>70.3       |  |  |
| 10<br>250       | 10.750<br>273.1       | <b>300</b><br>20.7 | <b>27</b> 686                         | <b>19</b> 483                           | 13 <sup>11</sup> / <sub>16</sub><br>348     | 1½<br>38       | 1800      | 230<br>104.3      |  |  |
| 12<br>300       | 12.750<br>323.9       | 300<br>20.7        | 30<br>762                             | 22 <sup>15</sup> / <sub>16</sub><br>583 | 16 <sup>11</sup> / <sub>16</sub> 424        | 1½<br>38       | 2800      | 335<br>152.0      |  |  |

#### Not for use in copper systems.

- Pressure ratings listed are CWP (cold water pressure) or maximum working pressure within the service temperature range of the gasket used in the coupling. This rating may occasionally differ from maximum working pressures listed and/or approved by UL, ULC, and/or FM as testing conditions and test pipes differ.
- Maximum working pressure and end loads listed are total of internal and external pressures and loads based on Sch. 40 steel pipe with roll grooves to ANSI C606-97 specifications.
- $\bullet \ \text{For one time field test only the maximum joint working pressure may be increased 11/2 times the figu \ es shown.}$
- WARNING: Piping systems must always be depressurized and drained before attempting disassembly and or removal of any components.



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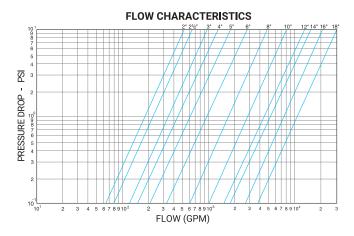


Tee Strainer **Fig. 7260** 



The Fig. 7260 Tee Strainer provides an economical, compact and hydraulically efficient m ans of protecting valuable piping system components. The in-line, twin-fold strainer basket provides more than 100% of the projected pipe area for open flow through the strainer screen, which results in excellent flow performance across the strainer.

Gruvlok Strainers are designed and tested to ensure long term, reliable service in working pressures up to 750 psi (51.7 bar), depending on size and the pressure rating of the connecting coupling.



**Note:** Most U.S. piping engineers specify system startup instructions for new systems which include removing and cleaning the strainer screen after system flushing of main piping before the system is put into normal operation. After flushing, replace the strainer screen. Flow data values are based on flow of clean water at ambient temperatures. The pressure drop across a strainer, 50% clogged, is approximately twice as great as that of a clean strainer. Strainer baskets need a routine maintenance program to maintain efficiency and to prevent excess pressure drop caused by a clogged screen.

#### **Material Specifications**

#### **Body**

2" - 12" Ductile iron conforming to ASTM A 536, Grade 65-45-12 14" - 18" Carbon steel pipe conforming to ASTM A 53

#### **Strainer Basket**

Stainless steel type 304 bar and woven wire screen. 12 mesh in sizes 2" – 3" and 6 mesh in sizes 4" – 18".

#### **Access Coupling & End Cap**

2" - 12" Ductile iron conforming to ASTM A 536, Grade 65-45-12

14" - 18" Low carbon steel conforming to ASTM A 53

#### **Bolts**

SAE J429, Grade 5, Zinc Electroplated

#### **Heavy Hex Nuts**

ASTM A563, Grade A, Zinc Electroplated

#### **Coupling Gaskets**

Elastomer properties as designated by ASTM D 2000

Grade "E" EPDM -40°F to +230°F (service temp. range)

Grade "EP" EPDM -40°F to +250°F (service temp. range)

Other options available upon request.

#### Drain Plug

Carbon steel square head plug conforming to ASME B16.11

#### Tap Sizes

2"-4" - ½ NPT, 5"-8" - ¾ NPT, 10"-18" - 1 NPT

#### Coating

2" - 12" - Rust-inhibiting paint — color: orange (standard)

Hot Dip Galvanized conforming to ASTM A 153 (optional)

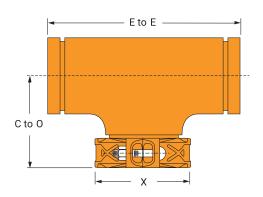
Other Colors Available (IE: RAL3000 and RAL9000)

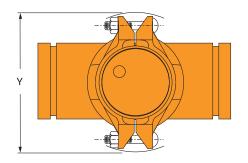
For other Coating requirements contact an ASC Engineered Solutions Representative.



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# Tee Strainer **Fig. 7260**





**Note**: The above illustration shows the required orientation of the Rigidlok access coupling for assembly with a grooved-end flange.

| Nominal Size | 0.D.   | Maximum*<br>Working Pressure | E to E | C to O | Χ      | Υ      | Basket<br>Removal | Approx<br>Wt. Ea |
|--------------|--------|------------------------------|--------|--------|--------|--------|-------------------|------------------|
| In./DN(mm)   | In./mm | PSI/bar                      | In./mm | In./mm | In./mm | In./mm | Clearance         | Lbs./Kg          |
| 2            | 2.375  | 750                          | 61/2   | 41/4   | 31/2   | 57/8   | 43/8              | 6.0              |
| 50           | 60.3   | 51.7                         | 165    | 108    | 89     | 149    | 111               | 2.7              |
| 21/2         | 2.875  | 750                          | 71/2   | 43/4   | 4      | 61/2   | 51/8              | 8.0              |
| 65           | 73.0   | 51.7                         | 191    | 121    | 102    | 165    | 130               | 3.6              |
| 3            | 3.500  | 750                          | 8 1/2  | 5 1/4  | 4 3/4  | 7      | 6                 | 13.0             |
| 80           | 88.9   | 51.7                         | 216    | 133    | 121    | 178    | 152               | 5.9              |
| 4            | 4.500  | 750                          | 10     | 61/8   | 57/8   | 83/8   | 71/4              | 19.0             |
| 100          | 114.3  | 51.7                         | 254    | 156    | 149    | 213    | 184               | 8.6              |
| 5            | 5.563  | 750                          | 11     | 65/8   | 7      | 101/8  | 81/4              | 30.0             |
| 125          | 141.3  | 51.7                         | 279    | 168    | 178    | 257    | 210               | 13.6             |
| 6            | 6.625  | 750                          | 13     | 75/8   | 81/8   | 111/8  | 93/4              | 45.0             |
| 150          | 168.3  | 51.7                         | 330    | 194    | 206    | 283    | 248               | 20.4             |
| 8            | 8.625  | 600                          | 151/2  | 91/8   | 101/2  | 141/8  | 12                | 79.0             |
| 200          | 219.1  | 41.4                         | 394    | 232    | 267    | 359    | 305               | 35.8             |
| 10           | 10.750 | 500                          | 18     | 103/8  | 127/8  | 171/8  | 141/4             | 133              |
| 250          | 273.1  | 34.5                         | 457    | 264    | 327    | 435    | 362               | 60.3             |
| 12           | 12.750 | 400                          | 20     | 113/8  | 15     | 191/8  | 161/4             | 187              |
| 300          | 323.9  | 27.6                         | 508    | 289    | 381    | 486    | 413               | 84.8             |
| 14           | 14.000 | 300                          | 22     | 123/4  | 161/8  | 201/2  | 171/4             | 272              |
| 350          | 355.6  | 20.7                         | 559    | 324    | 410    | 521    | 438               | 123.4            |
| 16           | 16.000 | 300                          | 24     | 12     | 181/8  | 221/4  | 20                | 350              |
| 400          | 406.4  | 20.7                         | 610    | 305    | 460    | 565    | 508               | 158.8            |
| 18           | 18.000 | 300                          | 31     | 15½    | 201/2  | 243/8  | 241/2             | 400              |
| 450          | 457.2  | 20.7                         | 787    | 394    | 521    | 619    | 622               | 181.4            |

<sup>\*</sup> Maximum working pressure is based upon the performance capability of the Gruvlok Strainer. Maximum system working pressure is dependent upon the couplings used for installation and the pressure capability of other system components.

Not for use with copper systems.



Outlets Couplings

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<sup>14&</sup>quot; - 18" Fabricated