

TEE Type Filters

Accessories

DFILTER10123XEN2

Specifications

For other materials or modifications, please consult TESCOM.

OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

Maximum Operating Pressures

Up to 10,150 psig / 700 bar

Operating Temperature

-40°F to 392°F / -40°C to 200°C

Flow Capacity

See Flow Rates Table

MEDIA CONTACT MATERIALS

Housing

316L Stainless Steel or Brass

Filter Element

316L Stainless Steel

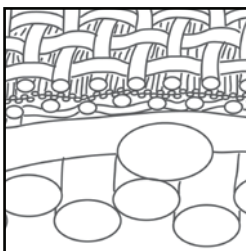
Gaskets

Viton®

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Stainless Steel Filter Elements

Stainless Steel filter elements are made up of several layers of 316 mesh that are sintered together to form an integrated porous element. The middle mesh is of very fine gauge and determines the filtration rates. This layer is then overlaid with inner and outer layers of coarser mesh to give support and protection.



These filter elements are a typical surface filter and the contaminants are retained on the surface of the filtration layer, which makes cleaning and back flushing very easy. These filter elements should be ultrasonically cleaned for best results.



TESCOM TEE Type Filters offer a high quality filter housing and internal elements that provide the effective and efficient removal of contaminants from both gas and liquid applications.

Application

- TEE Type Filters are particularly suitable for the performance of the following TESCOM pressure regulator series: 26-1700, 44-1100, 44-1300, 44-2200, 44-4600, and DH

Features and Benefits

- Protects pressure system components from contaminants
- Operating pressure ratings up to 10,150 psig / 700 bar
- Pleated, 20-40 micron, 316L Stainless Steel internal filter material for maximum contaminant control
- Cleanable element reduces operating cost
- Housing available in 316 Stainless Steel and Brass

TEE Type Filters Air Flow Rates – In Nm³/h at Stated Line Pressure and 0.1 bar Pressure Drop

Flow rates will depend on which filter element grade is installed in the filter housing. Use the chart below to read the flow rate at the desired pressure against the element grade.

| FILTER ELEMENT | FILTER RATE [µm] | AIR PRESSURE / bar | | | | | | | | | | | |
|----------------|------------------|--------------------|-----|----|-----|-----|-----|-----|-----|-----|------|------|------|
| | | 0.1 | 1 | 2 | 4 | 7 | 10 | 16 | 34 | 100 | 200 | 340 | 700 |
| 12.32 | 20 | 3.9 | 7.0 | 11 | 18 | 28 | 39 | 60 | - | 350 | 700 | 1200 | 2050 |
| 12.32 | 40 | 5.3 | 9.5 | 14 | 24 | 38 | 52 | 81 | - | 480 | 960 | 1620 | 2730 |
| 12.57 | 20 | 5.1 | 9.3 | 14 | 23 | 37 | 51 | 79 | - | 470 | 940 | 1590 | 2390 |
| 12.57 | 40 | 6.1 | 11 | 17 | 28 | 45 | 61 | 95 | - | 560 | 1120 | 1900 | 3250 |
| 25.64 | 20 | 8.5 | 16 | 23 | 39 | 62 | 85 | 130 | - | 780 | 1560 | 2320 | 4700 |
| 25.64 | 40 | 10 | 18 | 27 | 44 | 71 | 97 | 150 | - | 890 | 1780 | 2466 | 5350 |
| 38.152 | 20 | 27 | 50 | 75 | 122 | 197 | 275 | 425 | 850 | - | - | - | - |
| 38.152 | 40 | 30 | 52 | 80 | 132 | 210 | 287 | 450 | 900 | - | - | - | - |

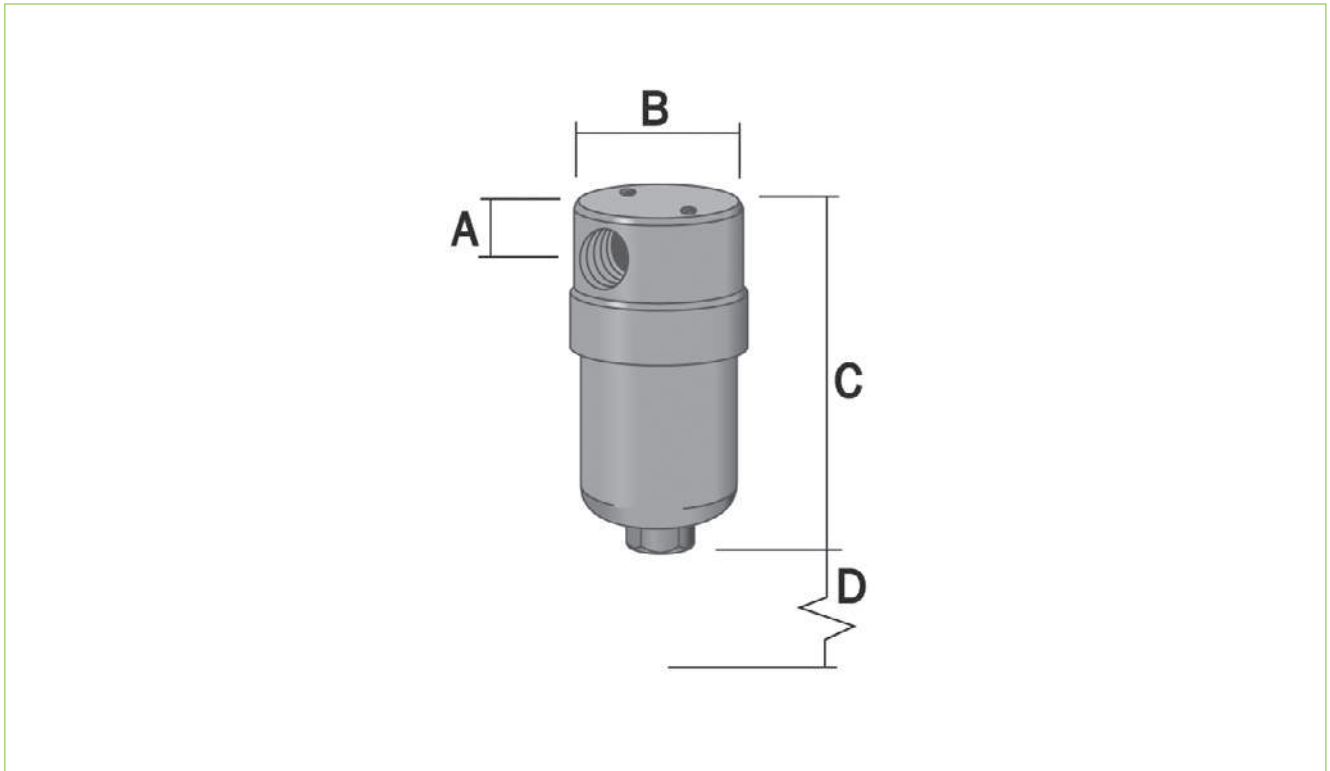
TEE Type Filters Part Number Selector

Repair Kits, Accessories & Modifications may be available for this product. Please contact TESCOM for more information.

Example for selecting a part number:

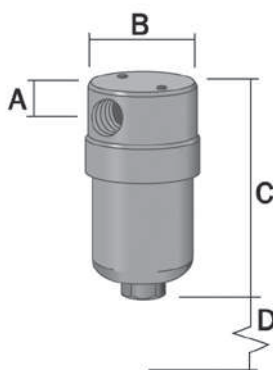
| D51170 | S | 2 | 700 | 6 | 20 |
|--------------|----------------------------------|---|--|--|--------------------------|
| BASIC SERIES | MATERIAL | FILTER ELEMENT | MAXIMUM PRESSURE | NPT CONNECTION SIZE | FILTER RATE |
| D51170 | S – Stainless Steel B – Brass | 1 – 12.32 2 – 12.57 3 – 25.64 4 – 38.152 | 700 – 10,150 psig 700 bar 340 – 4930 psig 340 bar 100 – 1450 psig 100 bar | 4 – 1/4" 6 – 3/8" 8 – 1/2" 12 – 3/4" 16 – 1" | 20 – 20 µm 40 – 40 µm |

TEE Type Filters Drawing



| TESCOM PART NUMBER | MATERIAL | A | B | C | D |
|--------------------|----------|-----------|------------|------------|------------|
| | | Inch / mm | | | |
| D51170-B2700420 | Brass | 0.39 / 10 | 2.56 / 65 | 5.32 / 135 | 1.58 / 40 |
| D51170-B2700440 | Brass | 0.39 / 10 | 2.56 / 65 | 5.32 / 135 | 1.58 / 40 |
| D51170-S2700420 | 316L | 0.39 / 10 | 2.56 / 65 | 5.32 / 135 | 1.58 / 40 |
| D51170-S2700440 | 316L | 0.39 / 10 | 2.56 / 65 | 5.32 / 135 | 1.58 / 40 |
| D51170-B1340420 | Brass | 0.47 / 12 | 1.58 / 40 | 3.15 / 80 | 1.77 / 45 |
| D51170-B1340440 | Brass | 0.47 / 12 | 1.58 / 40 | 3.15 / 80 | 1.77 / 45 |
| D51170-S1340420 | 316L | 0.39 / 10 | 1.42 / 36 | 2.91 / 74 | 1.58 / 40 |
| D51170-S1340440 | 316L | 0.39 / 10 | 1.42 / 36 | 2.91 / 74 | 1.58 / 40 |
| D51170-B3340820 | Brass | 0.79 / 20 | 3.54 / 90 | 7.87 / 200 | 3.94 / 100 |
| D51170-B3340840 | Brass | 0.79 / 20 | 3.54 / 90 | 7.87 / 200 | 3.94 / 100 |
| D51170-B33401220 | Brass | 0.98 / 25 | 3.94 / 100 | 8.27 / 210 | 3.94 / 100 |
| D51170-B33401240 | Brass | 0.98 / 25 | 3.94 / 100 | 8.27 / 210 | 3.94 / 100 |
| D51170-S3340820 | 316L | 0.79 / 20 | 3.54 / 90 | 7.87 / 200 | 3.94 / 100 |
| D51170-S3340840 | 316L | 0.79 / 20 | 3.54 / 90 | 7.87 / 200 | 3.94 / 100 |
| D51170-S33401220 | 316L | 0.98 / 25 | 3.94 / 100 | 8.27 / 210 | 3.94 / 100 |
| D51170-S33401240 | 316L | 0.98 / 25 | 3.94 / 100 | 8.27 / 210 | 3.94 / 100 |

TEE Type Filters Drawing



| TESCOM PART NUMBER | MATERIAL | A | B | C | D |
|--------------------|----------|-----------|------------|-------------|------------|
| | | Inch / mm | | | |
| D51170-B3340620 | Brass | 0.59 / 15 | 2.52 / 64 | 5.08 / 129 | 2.76 / 70 |
| D51170-B3340640 | Brass | 0.59 / 15 | 2.52 / 64 | 5.08 / 129 | 2.76 / 70 |
| D51170-B3340820 | Brass | 0.59 / 15 | 2.52 / 64 | 5.08 / 129 | 2.76 / 70 |
| D51170-B3340840 | Brass | 0.59 / 15 | 2.52 / 64 | 5.08 / 129 | 2.76 / 70 |
| D51170-B33401220 | Brass | 0.98 / 25 | 3.94 / 100 | 5.91 / 150 | 2.76 / 70 |
| D51170-B33401240 | Brass | 0.98 / 25 | 3.94 / 100 | 5.91 / 150 | 2.76 / 70 |
| D51170-B33401620 | Brass | 0.98 / 25 | 3.94 / 100 | 5.91 / 150 | 2.76 / 70 |
| D51170-B33401640 | Brass | 0.98 / 25 | 3.94 / 100 | 5.91 / 150 | 2.76 / 70 |
| D51170-S3340620 | 316L | 0.59 / 15 | 2.52 / 64 | 5.08 / 129 | 2.76 / 70 |
| D51170-S3340640 | 316L | 0.59 / 15 | 2.52 / 64 | 5.08 / 129 | 2.76 / 70 |
| D51170-S3340820 | 316L | 0.59 / 15 | 2.52 / 64 | 5.08 / 129 | 2.76 / 70 |
| D51170-S3340840 | 316L | 0.59 / 15 | 2.52 / 64 | 5.08 / 129 | 2.76 / 70 |
| D51170-S33401220 | 316L | 0.98 / 25 | 3.94 / 100 | 5.91 / 150 | 2.76 / 70 |
| D51170-S33401240 | 316L | 0.98 / 25 | 3.94 / 100 | 5.91 / 150 | 2.76 / 70 |
| D51170-S33401620 | 316L | 0.98 / 25 | 3.94 / 100 | 5.91 / 150 | 2.76 / 70 |
| D51170-S33401640 | 316L | 0.98 / 25 | 3.94 / 100 | 5.91 / 150 | 2.76 / 70 |
| D51170-S2340440 | 316L | 0.39 / 10 | 1.42 / 36 | 3.98 / 101 | 0.79 / 20 |
| D51170-B4100820 | Brass | 1.18 / 30 | 3.94 / 100 | 10.39 / 264 | 8.27 / 210 |
| D51170-B4100840 | Brass | 1.18 / 30 | 3.94 / 100 | 10.39 / 264 | 8.27 / 210 |
| D51170-B41001220 | Brass | 1.18 / 30 | 3.94 / 100 | 10.39 / 264 | 8.27 / 210 |
| D51170-B41001240 | Brass | 1.18 / 30 | 3.94 / 100 | 10.39 / 264 | 8.27 / 210 |
| D51170-B41001620 | Brass | 1.18 / 30 | 3.94 / 100 | 10.39 / 264 | 8.27 / 210 |
| D51170-B41001640 | Brass | 1.18 / 30 | 3.94 / 100 | 10.39 / 264 | 8.27 / 210 |
| D51170-S4100820 | 316L | 1.18 / 30 | 3.94 / 100 | 10.39 / 264 | 8.27 / 210 |
| D51170-S4100840 | 316L | 1.18 / 30 | 3.94 / 100 | 10.39 / 264 | 8.27 / 210 |
| D51170-S41001220 | 316L | 1.18 / 30 | 3.94 / 100 | 10.39 / 264 | 8.27 / 210 |
| D51170-S41001240 | 316L | 1.18 / 30 | 3.94 / 100 | 10.39 / 264 | 8.27 / 210 |
| D51170-S41001620 | 316L | 1.18 / 30 | 3.94 / 100 | 10.39 / 264 | 8.27 / 210 |
| D51170-S41001640 | 316L | 1.18 / 30 | 3.94 / 100 | 10.39 / 264 | 8.27 / 210 |
| D51170-S2700640 | 316L | 0.87 / 22 | 2.56 / 65 | 5.31 / 135 | 1.57 / 40 |