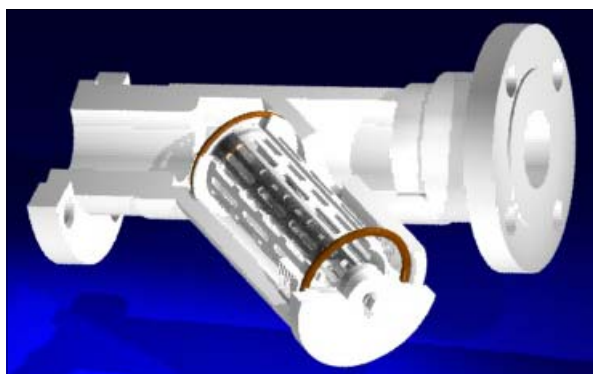


FLUOR-O-SHIELD™
PVDF & PTFE Y-Strainers
Removable PTFE Strainer Cartridge with Fluoropolymer Screen
Flanged • NPT • Tri-Clamp • Socket Weld



Micromold's Y-Strainers remove particles or debris from process lines handling extremely corrosive or high-purity fluids. To ensure maximum corrosion resistance and purity, all wetted materials are fluoroplastics.

Both PVDF and PTFE Y-Strainers are available in 1/8" through 4" pipe sizes.

Easily cleaned, removable PTFE cartridges securely support Tefzel® ETFE screens in standard 11, 17, 30 or 51 mesh sizes. Standard PEEK screens available in mesh sizes ranging from 400 to 65 (12 to 155 microns). Other mesh sizes and types available on special order.

Open area ratio of screen to pipe meets or exceeds 2:1 for all sizes when used with a mesh having a minimum 48% open area.

Standard end connections fit NPT threaded, Tri-Clamp, flanged, and socket- or butt-weld (PVDF only) piping systems. We can provide virtually any connection (True-Union, etc.) on special order.

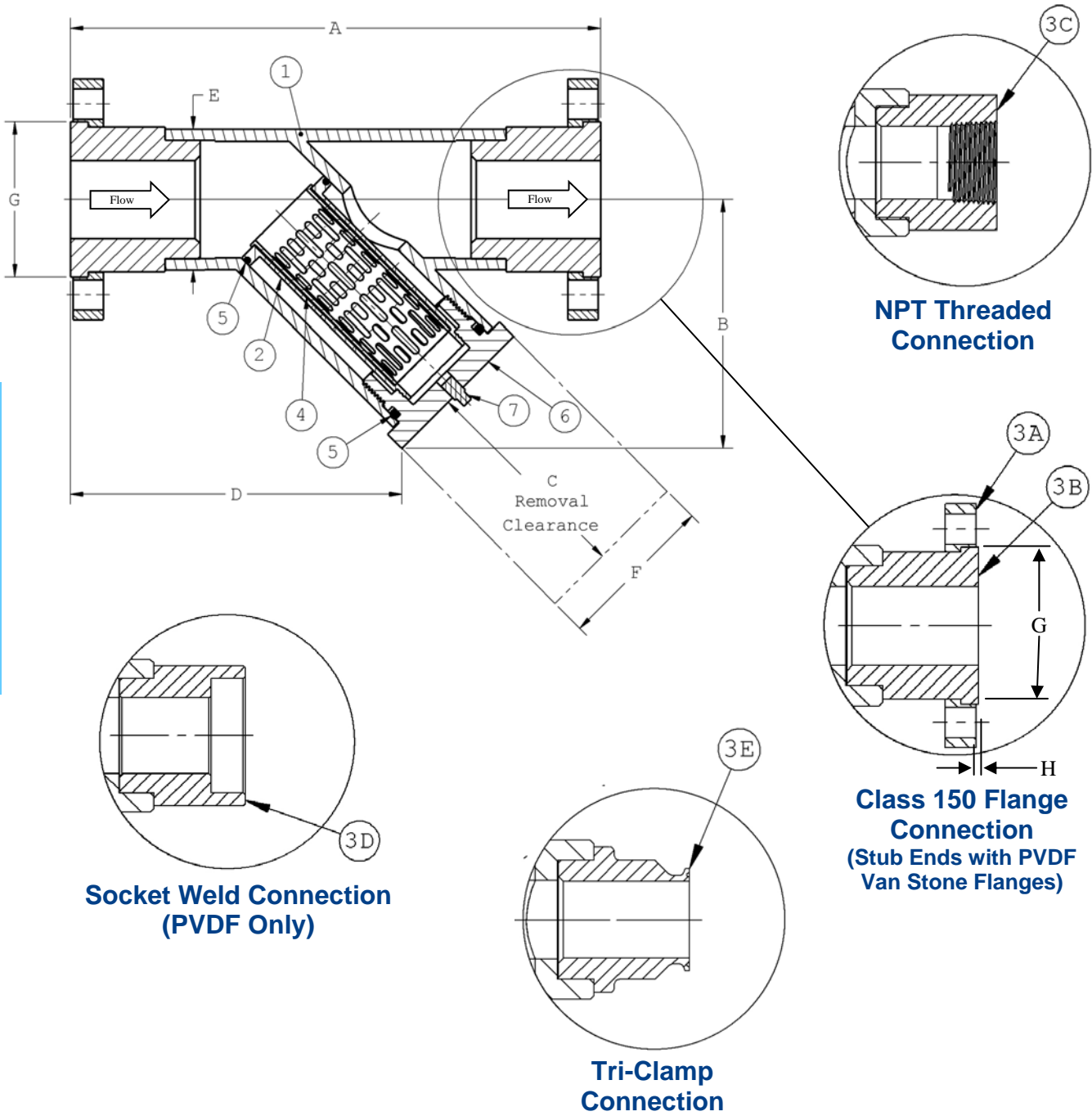
Units may be installed either horizontally or vertically.

Also available:

FLUOR-O-SHIELD™ PVDF & PTFE Y-Strainers

- Sales Bulletin
- Installation and Maintenance Guide
- Strainer Screens Technical Bulletin

Product Specifications 4.1-2



Connection Availability and Size Ranges

| Strainer Material | NPT | Flanged | Socket Weld | Tri-Clamp |
|-------------------|-----------|-----------|-------------|-----------|
| PVDF | 1/8" – 4" | 1/2" – 4" | 3/8" – 4" | 1/2" – 4" |
| PTFE | 1/8" – 4" | 1/2" – 4" | N/A | 1/2" – 4" |

All flanges are Van Stone type with stub ends (rotatable)

Dimensions*

| Nominal Pipe Size | A | B | C | D | E (PVDF) | E (PTFE) | F | G | H | PLUG NPT |
|-------------------|------|------|------|------|----------|----------|------|------|-------|----------|
| 1/8 | 8.3 | 2.8 | 2.9 | 4.7 | 1.32 | 1.50 | 1.60 | NA | NA | 1/8 |
| 1/4 | 8.3 | 2.8 | 2.9 | 4.7 | 1.32 | 1.50 | 1.60 | NA | NA | 1/8 |
| 3/8 | 8.3 | 2.8 | 2.9 | 4.7 | 1.32 | 1.50 | 1.60 | NA | NA | 1/8 |
| 1/2 | 8.3 | 2.8 | 2.9 | 4.7 | 1.32 | 1.50 | 1.60 | 1.62 | 0.065 | 1/8 |
| | | | | | | | | | | |
| 3/4 | 9.9 | 3.5 | 3.7 | 5.5 | 1.90 | 2.00 | 2.20 | 1.99 | 0.065 | 1/8 |
| 1 | 9.9 | 3.5 | 3.7 | 5.5 | 1.90 | 2.00 | 2.20 | 2.37 | 0.065 | 1/8 |
| 1-1/4 | 11.1 | 5.5 | 5.8 | 7.4 | 2.88 | 2.88 | 3.00 | 2.74 | 0.065 | 1/8 |
| 1-1/2 | 11.1 | 5.5 | 5.8 | 7.4 | 2.88 | 2.88 | 3.00 | 3.12 | 0.065 | 1/8 |
| | | | | | | | | | | |
| 2 | 12.2 | 6.3 | 6.2 | 7.7 | 3.50 | 3.75 | 3.94 | 3.87 | 0.065 | 1/8 |
| 3 | 14.7 | 8.9 | 8.7 | 9.9 | 5.00 | 5.25 | 5.44 | 5.12 | 0.065 | 1/4 |
| 4 | 17.3 | 11.5 | 10.7 | 11.9 | 6.63 | 7.00 | 7.20 | 6.63 | 0.065 | 1/4 |

* All dimensions shown in inches

Construction

| Item No. | PVDF Y-Strainers | PTFE Y-Strainers |
|----------|---|---|
| 1 | PVDF Body | MICROFLON™ PTFE Body |
| 2 | PTFE Cartridge | PTFE Cartridge |
| 3A | PVDF Flange (Other materials available) | PVDF Flange (Other materials available) |
| 3B | PVDF Stub End | PTFE Stub End |
| 3C | PVDF NPT Connector | PTFE NPT Connector |
| 3D | PVDF Socket Weld Connector | Not Available |
| 3E | PVDF Tri-Clamp Connector | PTFE Tri-Clamp Connector |
| 4 | Fluoropolymer Screen | Fluoropolymer Screen |
| 5 | FEP Encapsulated Silicone Rubber O-Ring | FEP Encapsulated Silicone Rubber O-Ring |
| 6 | PVDF Knurled Cap | PTFE Knurled Cap |
| 7 | PTFE Drain Plug | PTFE Drain Plug |

Engineering Specifications

FLUOR-O-SHIELD™ Y-Strainers shall be (PVDF or virgin PTFE) construction with (socket weld, NPT threaded, Tri-Clamp, or flanged) end connections. The strainers shall have covers removable without the use of tools to facilitate cleaning, and have an FEP encapsulated silicone rubber o-ring seal. Strainer to have a (1/8" or 1/4") NPT removable drain plug. Strainers to have a minimum 2:1 ratio of open area to the size-corresponding cross-sectional pipe area when used with a mesh screen having a minimum open area of 48%. Strainers shall have a removable PTFE strainer cartridge with FEP encapsulated silicone rubber o-ring seal that is secured to and removable with the cover. Strainer cartridges shall have perforated PTFE inner and outer cartridge components to secure screen mesh. As manufactured by MICROMOLD PRODUCTS, INC.



PVDF Y-Strainer Part Numbers and Pressure Ratings*

| Nominal Size | | FNPT Thread- ed | IPS Socket Weld | Metric Socket Weld | ANSI Class 150 Flanged | Tri-Clamp | Pressure Ratings |
|--------------|------|--------------------|--------------------|-----------------------|---------------------------|-------------|------------------|
| (in.) | (mm) | | | | | | |
| 1/8" | NA | S-YK01FTNNN | S-YK01SINNN | N/A | N/A | N/A | 150 |
| 1/4" | NA | S-YK02FTNNN | S-YK02SINNN | N/A | N/A | N/A | 150 |
| 3/8" | 16 | S-YK03FTNNN | S-YK03SINNN | S-YK03SMNNN | N/A | N/A | 150 |
| 1/2" | 20 | S-YK04FTNNN | S-YK04SINNN | S-YK04SMNNN | S-YK04FLNNN | S-YK04TCNNN | 150 |
| | | | | | | | |
| 3/4" | 25 | S-YK06FTNNN | S-YK06SINNN | S-YK06SMNNN | S-YK06FLNNN | S-YK06TCNNN | 150 |
| 1" | 32 | S-YK08FTNNN | S-YK08SINNN | S-YK08SMNNN | S-YK08FLNNN | S-YK08TCNNN | 150 |
| 1-1/4" | 40 | S-YK10FTNNN | S-YK10SINNN | S-YK10SMNNN | S-YK10FLNNN | S-YK10TCNNN | 150 |
| 1-1/2" | 50 | S-YK12FTNNN | S-YK12SINNN | S-YK12SMNNN | S-YK12FLNNN | S-YK12TCNNN | 150 |
| | | | | | | | |
| 2" | 63 | S-YK16FTNNN | S-YK16SINNN | S-YK16SMNNN | S-YK16FLNNN | S-YK16TCNNN | 100 |
| 3" | 90 | S-YK24FTNNN | S-YK24SINNN | S-YK24SMNNN | S-YK24FLNNN | S-YK24TCNNN | 60 |
| 4" | 110 | S-YK32FTNNN | S-YK32SINNN | S-YK32SMNNN | S-YK32FLNNN | S-YK32TCNNN | 60 |

PTFE Y-Strainer Part Numbers and Pressure Ratings*

| Nominal Size | | FNPT Thread- ed | ANSI Class 150 Flanged | Tri-Clamp | Pressure Ratings |
|--------------|------|--------------------|---------------------------|-------------|------------------|
| (in.) | (mm) | | | | |
| 1/8" | NA | S-YT01FTNNN | N/A | N/A | 65 |
| 1/4" | NA | S-YT02FTNNN | N/A | N/A | 65 |
| 3/8" | 16 | S-YT03FTNNN | N/A | N/A | 65 |
| 1/2" | 20 | S-YT04FTNNN | S-YT04FLNNN | S-YT04TCNNN | 65 |
| | | | | | |
| 3/4" | 25 | S-YT06FTNNN | S-YT06FLNNN | S-YT06TCNNN | 50 |
| 1" | 32 | S-YT08FTNNN | S-YT08FLNNN | S-YT08TCNNN | 50 |
| 1-1/4" | 40 | S-YT10FTNNN | S-YT10FLNNN | S-YT10TCNNN | 35 |
| 1-1/2" | 50 | S-YT12FTNNN | S-YT12FLNNN | S-YT12TCNNN | 35 |
| | | | | | |
| 2" | 63 | S-YT16FTNNN | S-YT16FLNNN | S-YT16TCNNN | 30 |
| 3" | 90 | S-YT24FTNNN | S-YT24FLNNN | S-YT24TCNNN | 25 |
| 4" | 110 | S-YT32FTNNN | S-YT32FLNNN | S-YT32TCNNN | N/A |

Standard Mesh Specifications

Particle sizes strained: 1 to 25,400 microns (0.00003" to 1") using either membranes, mesh screens, or drilled holes. Please refer to our *Strainer Screens Technical Bulletin* for details.

*NNN refers to mesh size of screen. Pressure Ratings are maximum long-term operating pressures at room temperature.

