

Driving
TECHNOLOGICAL
EXCELLENCE

Y-STRAINER

Strainers are used to separate solid contaminants from liquids or gases. They are compact for their size and pressure rating and require little maintenance. We offer strainers with high filtration efficiency, low pressure drops, and affordable prices, making them a great choice for our customers. The range of strainers we have, can be adapted to any application. For low pressure applications, we offer casted strainers, while for high pressure applications above 600#, we provide forged strainers.

All our strainers are designed as per ASME 16.34, with high corrosion allowance on wall thickness for longer life.

MESH SIZING

Petronash offers a wide variety of mesh sizes for various applications. Our Standard Mesh size ranges from 10 Mesh to 400 Mesh. Higher Mesh sizes for special applications are also available.

The mesh size of a filter element is defined as the number of openings per square inch. The mesh size and the pore size of the filter element are related as shown in the table below.



| MESH SIZE | MICRON (FILTER PORES) |
|-----------|-----------------------|
| 10 | 2000 |
| 20 | 841 |
| 40 | 400 |
| 50 | 297 |
| 100 | 149 |
| 140 | 105 |
| 200 | 74 |
| 270 | 53 |
| 400 | 37 |

A wide of Mesh sizes available, contact factory for more details.

To ensure effective filtration, it is advisable to keep the pore size smaller than the actual particle size during mesh selection. Furthermore, not all particles will be uniform in size, a slender hair like particle will fit through a certain hole in one direction but gets blocked in other direction. A particle that is soft and deformable can also squish through the holes with enough pressure.

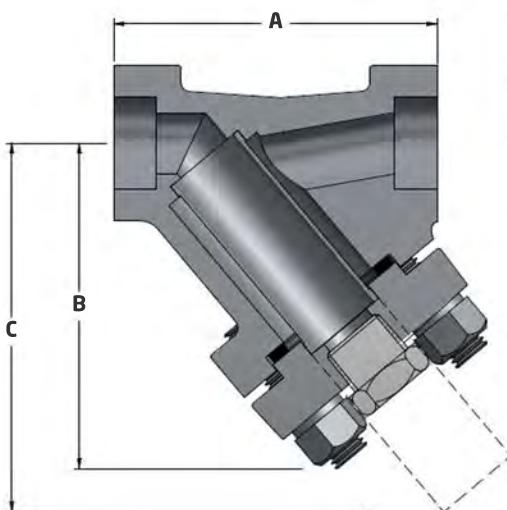
FORGED STRAINER

The strainers we manufacture are made from forgings of highest quality that are robust and compact. We offer a variety of process connections, materials, and filtration sizes.

- ▶ Socket welded (Sw) Connections as per ANSI B16.11
- ▶ Screwed (NPT) Connections as per ANSI B1.20.1
- ▶ Flanged Connections as per ASME B16.5 with RF
- ▶ EN10204 / NACE Certification
- ▶ Filter element available in all mesh sizes based on the requirement.
- ▶ The large filtration area ensures the superior filtration with least pressure drop.



DIMENSIONS AND WEIGHTS WITH STANDARD CONNECTION



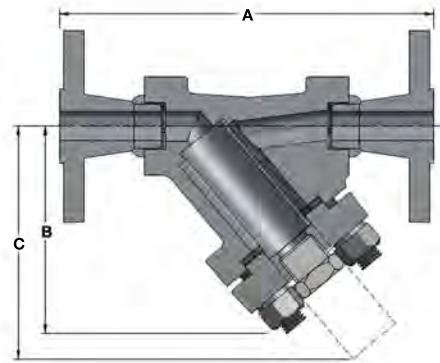
| SIZE | STANDARD END CONNECTIONS & DIMENSIONS | | | | | | |
|--------|---------------------------------------|----|-----|-----|-----|-----|--------|
| | INCHES | SW | NPT | A | B | C | Weight |
| 3/8" | ✓ | ✓ | | 96 | 97 | 110 | 2.2 |
| 1/2" | ✓ | ✓ | | 96 | 97 | 110 | 2.2 |
| 3/4" | ✓ | ✓ | | 96 | 97 | 96 | 2.2 |
| 1" | ✓ | ✓ | | 111 | 119 | 151 | 3.8 |
| 1-1/2" | ✓ | ✓ | | 140 | 145 | 183 | 6.5 |

All linear dimensions are in mm & weight specified in Kg.



DIMENSIONS AND WEIGHT WITH FLANGE END

| SIZE (Inches) | CLASS | A | B | C | Weight |
|------------------|----------|-----|-----|-----|--------|
| 1/2" | 150 | 225 | 96 | 113 | 3.5 |
| 1/2" | 300 | 265 | 96 | 113 | 4.0 |
| 1/2" | 600 | 275 | 96 | 110 | 4.25 |
| 1/2" | 900/1500 | 318 | 96 | 199 | 8.3 |
| 1/2" | 2500 | 344 | 117 | 120 | 11.2 |
| 3/4" | 150 | 259 | 96 | 113 | 3.8 |
| 3/4" | 300 | 269 | 96 | 113 | 5.2 |
| 3/4" | 600 | 280 | 97 | 110 | 5.6 |
| 3/4" | 900/1500 | 338 | 96 | 199 | 9.1 |
| 3/4" | 2500 | 356 | 117 | 120 | 12.2 |
| 1" | 150 | 271 | 120 | 151 | 6.4 |
| 1" | 300 | 289 | 120 | 151 | 7.8 |
| 1" | 600 | 303 | 120 | 151 | 8.2 |

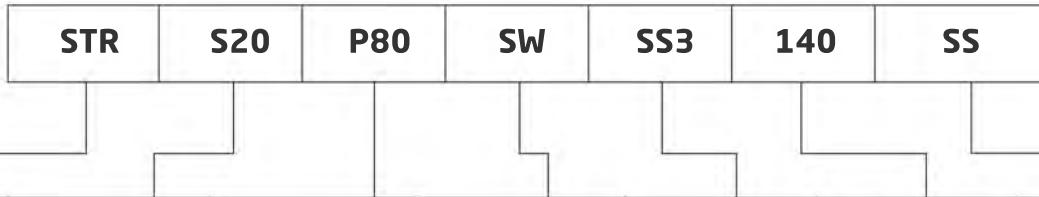


All linear dimensions are in mm & Weight specified in Kg.

STANDARD MATERIAL CONFIGURATION (other materials available on request)

| SL.NO | DESCRIPTION | STAINLESS STEEL | CARBON STEEL |
|-------|----------------|---------------------|-------------------|
| 1 | Body | ASTM A182 F316/316L | ASTM A105N |
| 2 | Retainer | SS 316 / 316L | ASTM A105N |
| 3 | Filter element | SS 316 / 316L | SS 316 / 316L |
| 4 | Gasket | Graphite + SS 316 | GRAPHITE + SS 316 |
| 5 | Stud | ASTM A193 B8M | ASTM A 193 B7 |
| 6 | Nut | ASTM A194 GR8M | ASTM A194 2H |
| 7 | Drain plug | SS 316 / 316L | ASTM A105 |
| 8 | Flanges | SS 316 / 316L | SS 316 / 316L |

ORDERING INFORMATION AND MODEL DECODIFICATION



| TYPE | SIZE | PRESSURE RATING | PROCESS CONNECTION | MATERIAL | MESH SIZE | MESH MOC |
|------------------|--------------|-----------------------|--------------------------|------------------------|-------------------------|---------------|
| STR - Y STRAINER | S10 - 3/8" | P15 - 150# | SW - SOCKET WELD | SS3 - ASTM A 182 F316L | 40 - 40 Mesh | SS-SS316 |
| | S15 - 1/2" | P30 - 300# | NPT - NPTF THREADED | SS4 - ASTM A 182 F316 | 40 - 40 Mesh | MN-MONEL |
| | S20 - 3/4" | P60 - 600# | RF - RAISED FACE FLANGED | CS2-ASTM A105N | 50 - 50 Mesh | Up on request |
| | S25 - 1" | P80 - 800# | | | 100 - 100 Mesh | |
| | S40 - 1-1/2" | P90/P150 - 900#/1500# | | | XXX - User defined Mesh | |
| | | P250 - 2500# | | | | |

CASTED STRAINER

These casted strainers are made from highest quality investment castings and we offer them in a variety of pressure ratings, Materials and filtration sizes.

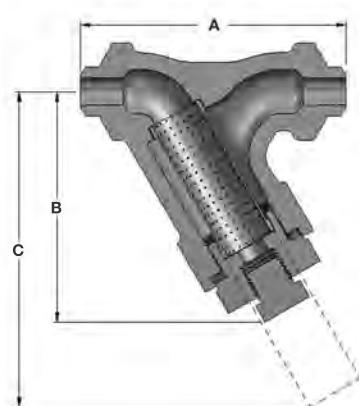
- ▶ Designed per ASME 16.34, with high corrosion allowance on wall thickness for longer life
- ▶ Socket welded (SW) Connections as per ANSI B16.11
- ▶ Butt welded (BW) connections as per ANSI B16.9
- ▶ Screwed (NPT) Connections as per ANSI B1.20.1
- ▶ Flanged Connections as per ASME B16.5 with RF & RTJ end
- ▶ EN 10204 / NACE Certification
- ▶ Body made by Investment casting process for superior quality
- ▶ Filter element available in different mesh sizes based on the requirement
- ▶ The large filtration area ensures the superior filtration with least pressure drop



DIMENSIONS AND WEIGHT WITH STANDARD CONNECTION

| SIZE INCHES | STANDARD END CONNECTIONS & DIMENSIONS | | | | | | |
|----------------|---------------------------------------|-----|----|----|----|-----|--------|
| | SW | NPT | BW | A | B | C | Weight |
| 1/2" | ✓ | ✓ | ✓ | 96 | 97 | 110 | 2.2 |
| 3/4" | ✓ | ✓ | ✓ | 96 | 97 | 110 | 2.2 |

linear dimensions are in mm & Weight specified in Kg



| SIZE INCHES | FLANGED END CONNECTIONS & DIMENSIONS | | | | |
|----------------|--------------------------------------|-----|----|-----|--------|
| | CLASS | A | B | C | Weight |
| 1/2" | 150 | 127 | 97 | 110 | 3.8 |
| 1/2" | 300 | 141 | 97 | 110 | 3.8 |
| 1/2" | 600 | 153 | 97 | 110 | 4.8 |
| 3/4" | 150 | 127 | 97 | 120 | 3.7 |
| 3/4" | 300 | 141 | 97 | 120 | 4.7 |
| 3/4" | 600 | 153 | 97 | 110 | 4.9 |

linear dimensions are in mm & Weight specified in Kg

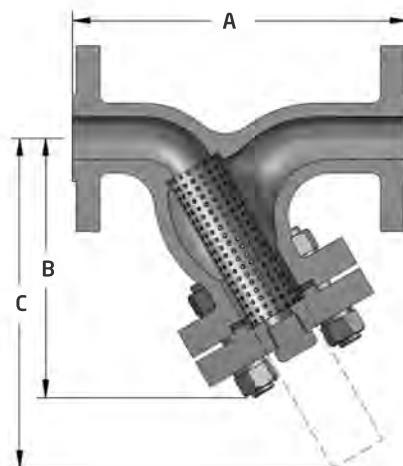
ORDERING INFORMATION AND MODEL DECODIFICATION



| TYPE | SIZE | PRESSURE RATING | PROCESS CONNECTION | MATERIAL | MESH SIZE | MESH MOC |
|---------------------|------------|-----------------|------------------------|-------------------------|----------------------------|---------------|
| STR - Y STRAINER | S15 - 1/2" | P80 - 800# | BW - BUTT WELD | SS1 - ASTM A351 CF3M | 40 - 40 Mesh | SS-SS316 |
| | S20 - 3/4" | P30 - 300# | NPT - NPTF THREADED | SS2 - ASTM A351 CF8M | 50 - 50 Mesh | MN-MONEL |
| | | P60 - 600# | SW - SOCKET WELD | CS1-ASTM A216 WCB | 100 - 100 Mesh | Up on request |
| | | | | | XXX - User defined Mesh | |

SIZE AND PRESSURE RATING

| SIZE (Inches) | PRESSURE RATING & END CONNECTION | | | | | | |
|------------------|----------------------------------|-------|-------|------------------------|--------|----|----|
| | 150 # | 300 # | 600 # | 900 #/1500 # | 2500 # | | |
| | RF | RF | RF | RF | RF | RF | RF |
| 1" | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 1-1/2" | ✓ | ✓ | ✓ | Other sizes on Request | | | |
| 2" | ✓ | ✓ | ✓ | | | | |



DIMENSION AND WEIGHT

| SIZE (Inches) | 900 # / 1500 # | | | | 2500 # | | | |
|------------------|----------------|-----|-----|-----|--------|-----|-----|------|
| | A | B | C | WT. | A | B | C | WT. |
| 1" | 254 | 193 | 232 | 18 | 308 | 215 | 259 | 25.5 |

| SIZE (Inches) | 150 # | | | | 300 # | | | | 600 # | | | |
|------------------|-------|-----|-----|------|-------|-----|-----|------|-------|-----|-----|------|
| | A | B | C | WT. | A | B | C | WT. | A | B | C | WT. |
| 1" | 197 | 153 | 193 | 6.5 | 203 | 153 | 193 | 7.5 | 221 | 155 | 193 | 7.8 |
| 1-1/2" | 219 | 177 | 214 | 10.5 | 229 | 177 | 227 | 13 | 241 | 177 | 214 | 14.5 |
| 2" | 203 | 207 | 281 | 13.6 | 267 | 214 | 290 | 16.7 | 292 | 218 | 290 | 19.3 |

All linear dimensions are in mm & Weight specified in Kg

STANDARD MATERIAL CONFIGURATION: (other materials available on request)

| SL.NO | DESCRIPTION | STAINLESS STEEL | CARBON STEEL |
|-------|----------------|-----------------------|-------------------|
| 1 | BODY | ASTM A351 CF8M / CF3M | ASTM A216 WCB |
| 2 | RETAINER | SS 316 / 316L | ASTM A105 |
| 3 | FILTER ELEMENT | SS 316 / 316L | SS 316 / 316L |
| 4 | GASKET | GRAPHITE + SS 316 | GRAPHITE + SS 316 |
| 5 | STUD | ASTM A193 B8M | ASTM A 193 B7 |
| 6 | NUT | ASTM A194 GR8M | ASTM A194 2H |
| 7 | DRAIN PLUG | SS 316 / 316L | ASTM A105 |

ORDERING INFORMATION AND MODEL DECODIFICATION

| STR | S20 | P80 | SW | SS2 | 140 | SS |
|------------------|--------------|-----------------|---------------------------|------------------|-------------------------|---------------|
| TYPE | SIZE | PRESSURE RATING | PROCESS CONNECTION | MATERIAL | MESH SIZE | MESH MOC |
| STR - Y STRAINER | S25 - 1" | P15 - 150# | SS1 - ASTM A 351 Gr. CF3M | RF - RAISED FACE | 40 - 40 Mesh | SS-SS316 |
| | S40 - 1 1/2" | P30 - 300# | SS2 - ASTM A 351 Gr. CF8M | RTJ - RING JOINT | 50 - 50 Mesh | MN-MONEL |
| | S50 - 2" | P60 - 600# | C1 - ASTM A 216 Gr. WCB | | 100 - 100 Mesh | Up on request |
| | | P150 - 1500# | | | XXX - User defined Mesh | |
| | | P250 - 2500# | | | | |

SPARES

GASKETS

We provide various gasket options to cater different industrial applications. Gaskets are available in PTFE, Spiral wound, Copper and various Rubber materials.



FILTER ELEMENT

We provide various sized filter elements with various material options. We can supply filter elements in material grades such as SS304, SS316 and Monel 400. Our filter elements are designed and tested to ensure lower pressure drop, reduced maintenance with high filtration efficiency.



Note: Customised models and materials are available based on requirements.

Above data are only for reference purpose and subject to change without any prior notice due to constant efforts on product improvement.



CONTACT US:

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