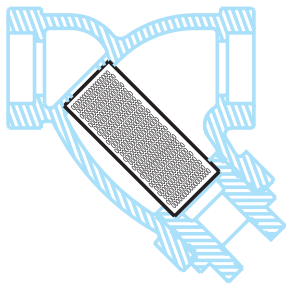
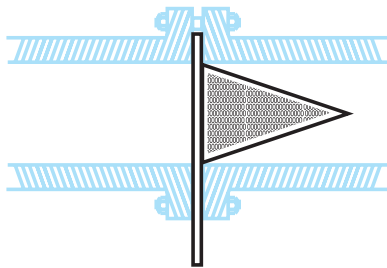


Partial cutaway of plug type duplex strainer showing basket in position



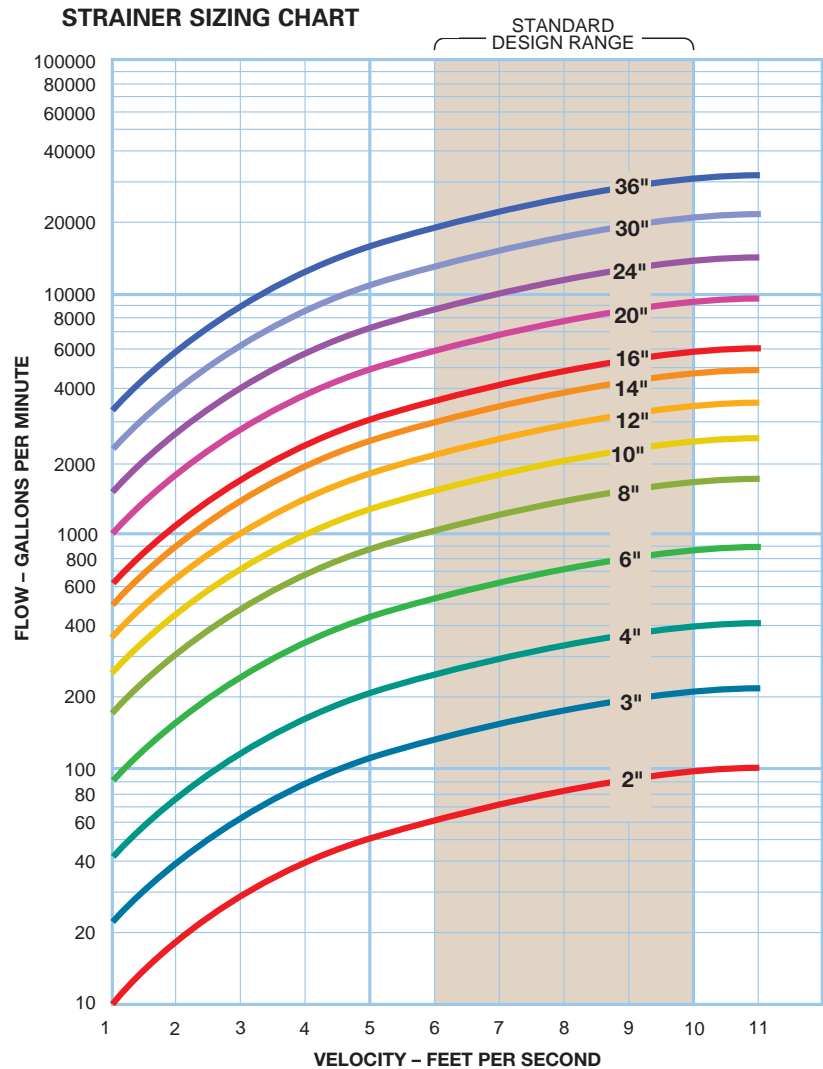
Cutaway of Y strainer shows strainer screen in position



Cone type temporary strainer is shown bolted between two pipe flanges

Basic Sizing Guidelines

1. Ensure that the pipeline flow velocity falls within the standard design range of the strainer.
2. Select the correct screen and opening size, do not make smaller than necessary.
3. The quantity, type, and nature of debris to be removed are considered.
4. The strainer meets the design pressure and temperature requirements of the pipeline.





Model 72



- Sizes $\frac{3}{8}$ " to 8"
- Iron, Bronze, Carbon Steel, or Stainless Steel
- Threaded or Flanged

FEATURES

- Quick open cover—no tools needed
- Heavy wall construction
- Large capacity baskets
- Machined basket seat
- Threaded drain
- Perforated or mesh 316 stainless basket
- Mounting feet for stable installation for flanged units 2" and larger

OPTIONS

- Basket perforations from $\frac{1}{32}$ " to $\frac{1}{2}$ "
- Basket mesh from 20 to 400
- Monel baskets
- Viton, PTFE-encapsulated, or EPDM seals
- Vent valves
- Gauge/vent taps - $\frac{1}{4}$ " NPT
- Magnetic basket inserts
- Pressure differential gauge and switch

The Eaton Model 72 has been the industry standard simplex basket strainer for more than 75 years. It is perfect for industrial and commercial applications in which the line can be temporarily shut down for strainer basket cleaning or changeout.

A reason for its popularity is the unusually large basket capacity. The free straining area with a perforated basket is a minimum of six times the cross sectional pipe area. No tools are needed to open the cover. The quick opening, swinging yoke can be disassembled and the basket removed in seconds. On sizes 4" and larger, a special cover clamp is provided to distribute

the seating pressure and to ensure positive seating of the cover.

Another feature is a threaded drain on every size strainer (fitted with a plug). Sizes 2" and larger are equipped with legs that bolt to the floor for rock solid installation.

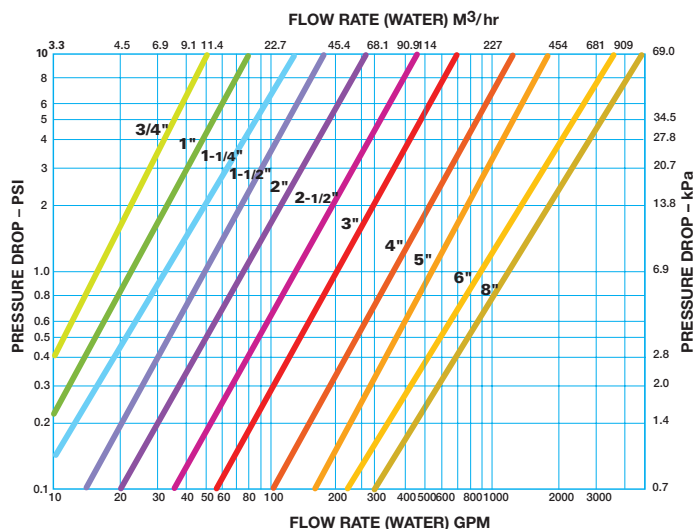
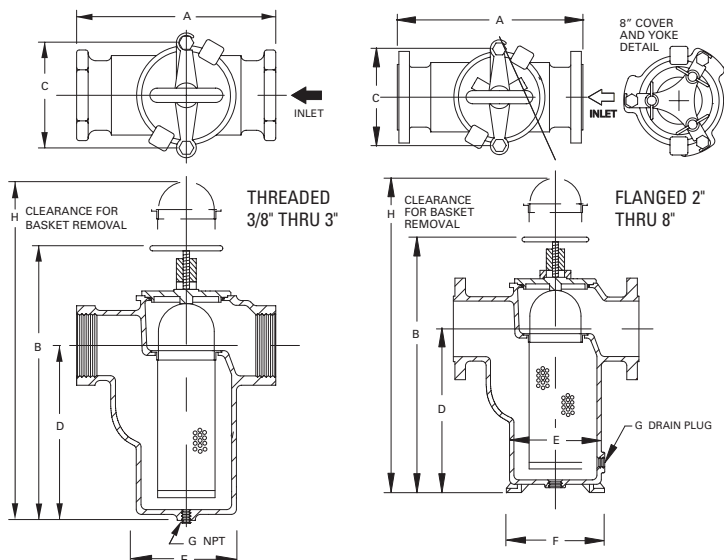
Wall thicknesses are exceptionally heavy. The basket seats are precision machined to give a tight seal and prevent any material from bypassing the basket. The Eaton Model 72 simplex basket strainer is a top quality, heavy-duty unit designed to stand up to the most demanding of applications.

Model 72 Simplex

| Size | Material | End Connection | Seals | Pressure Rating |
|-----------------------|-----------------|----------------|--------|-----------------|
| $\frac{3}{8}$ " to 3" | Iron and Bronze | Threaded | Buna-N | 200 psi @ 100°F |
| 1" to 3" | Carbon Steel | Threaded | Buna-N | 200 psi @ 100°F |
| 1" to 3" | Stainless Steel | Threaded | Viton® | 200 psi @ 100°F |
| 1" to 8" | Iron | Flanged 125# | Buna-N | 200 psi @ 100°F |
| 1" to 8" | Bronze | Flanged 150# | Buna-N | 200 psi @ 100°F |
| 1" to 8" | Carbon Steel | Flanged 150# | Buna-N | 200 psi @ 100°F |
| 1" to 8" | Stainless Steel | Flanged 150# | Viton® | 200 psi @ 100°F |

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MODEL 72 Simplex Basket Strainer



Threaded Model 72 Dimensions (in/mm)

Dimensions and weights are for reference only. Contact Eaton for certified drawings.

| Size | A | B | C | D | E | F | G | H | Net Wt (lbs / kg) | | | |
|-------|-------------|-------------|------------|-------------|------------|---|-------|----------|-------------------|--------------|---------|-----------------|
| | | | | | | | | | Bronze | Carbon Steel | Iron | Stainless Steel |
| 3/8 | 4.00 / 102 | 6.63 / 168 | 2.88 / 73 | 4.00 / 102 | 2.38 / 60 | — | 3/8 | 11 / 279 | 4 / 1.8 | — | 4 / 1.8 | — |
| 1/2 | 4.00 / 102 | 6.63 / 168 | 2.88 / 73 | 4.00 / 102 | 2.38 / 60 | — | 3/8 | 11 / 279 | 4 / 1.8 | — | 4 / 1.8 | — |
| 3/4 | 5.38 / 137 | 8.38 / 213 | 4.00 / 102 | 5.00 / 127 | 3.06 / 78 | — | 1/2 | 13 / 330 | 8 / 3.6 | — | 7 / 3.2 | — |
| 1 | 5.38 / 137 | 8.38 / 213 | 4.00 / 102 | 5.00 / 127 | 3.06 / 78 | — | 1/2 | 13 / 330 | 8 / 3.6 | 7 / 3.2 | 7 / 3.2 | 7 / 3.2 |
| 1-1/4 | 6.75 / 172 | 9.88 / 251 | 4.88 / 124 | 5.88 / 149 | 3.88 / 99 | — | 1/2 | 14 / 356 | 13 / 6 | — | 12 / 6 | — |
| 1-1/2 | 7.25 / 184 | 11.00 / 279 | 4.88 / 124 | 7.00 / 178 | 4.00 / 102 | — | 3/4 | 16 / 406 | 16 / 7 | 15 / 7 | 15 / 7 | 16 / 7.3 |
| 2 | 8.75 / 222 | 13.38 / 340 | 6.75 / 172 | 7.63 / 194 | 5.13 / 130 | — | 1-1/4 | 21 / 533 | 32 / 15 | 36 / 16 | 28 / 13 | 31 / 14 |
| 2-1/2 | 10.38 / 264 | 14.88 / 378 | 8.00 / 203 | 8.63 / 219 | 6.38 / 162 | — | 1-1/2 | 26 / 660 | 49 / 22 | 52 / 24 | 42 / 19 | 51 / 23 |
| 3 | 11.50 / 292 | 17.75 / 468 | 8.00 / 203 | 11.38 / 298 | 6.63 / 168 | — | 1-1/2 | 28 / 711 | 60 / 27 | 60 / 27 | 52 / 23 | 60 / 27 |

Mod. 72C_v Factors*

| Size | Value | Size | Value |
|--------|-------|--------|-------|
| 3/8" | 15.0 | 2" | 73 |
| 1/2" | 15.0 | 2-1/2" | 125 |
| 3/4" | 15.0 | 3" | 180 |
| 1" | 22.5 | 4" | 350 |
| 1-1/4" | 31.5 | 6" | 900 |
| 1-1/2" | 46.0 | 8" | 1400 |

* For water with clean, perforated basket

Flanged Model 72 Dimensions (in/mm)

| Size | A | B | C | D | E | F | G | H | Net Wt (lbs / kg) | | | |
|-------|-------------|--------------|-------------|-------------|-------------|-------------|-----|--------------|-------------------|--------------|-----------|-----------------|
| | | | | | | | | | Bronze | Carbon Steel | Iron | Stainless Steel |
| 1 | 7.63 / 194 | 8.38 / 213 | 4.00 / 102 | 5.00 / 127 | — | — | 1/2 | 13.00 / 330 | 16 / 7 | 9 / 4 | 9 / 4 | 9 / 4 |
| 1-1/2 | 10.25 / 260 | 11.00 / 279 | 4.88 / 124 | 7.00 / 178 | — | — | 3/4 | 16.00 / 406 | 30 / 14 | 17 / 7.7 | 17 / 7.7 | 17 / 7.7 |
| 2 | 10.50 / 268 | 13.75 / 349 | 6.75 / 172 | 7.63 / 194 | 5.13 / 130 | 6.25 / 159 | 3/8 | 20.00 / 508 | 49 / 22.3 | 36 / 16 | 36.5 / 17 | 36 / 16 |
| 2-1/2 | 11.63 / 295 | 15.63 / 397 | 8.00 / 203 | 8.88 / 226 | 6.38 / 162 | 7.63 / 194 | 3/8 | 23.00 / 584 | 64 / 29.1 | 63 / 27 | 54 / 25 | 63 / 29 |
| 3 | 13.13 / 334 | 18.00 / 457 | 8.00 / 203 | 10.63 / 270 | 6.50 / 165 | 8.00 / 203 | 3/8 | 27.00 / 686 | 85 / 38.6 | — | 76 / 35 | — |
| 3 | 13.13 / 334 | 18.75 / 476 | 7.94 / 202 | 12.00 / 305 | 6.50 / 165 | 8.00 / 203 | 1/2 | 27.00 / 686 | — | 86 / 39 | — | 86 / 39 |
| 4 | 16.75 / 425 | 19.88 / 505 | 10.75 / 273 | 10.75 / 273 | 9.63 / 245 | 11.38 / 289 | 1/2 | 30.00 / 762 | 140 / 63.6 | — | 125 / 55 | — |
| 4 | 17.25 / 438 | 19.88 / 505 | 10.69 / 272 | 10.69 / 272 | 9.25 / 235 | 11.38 / 289 | 1/2 | 30.00 / 762 | — | 130 / 59 | — | 130 / 59 |
| 5 | 18.13 / 461 | 25.13 / 638 | 10.75 / 273 | 15.25 / 387 | 10.00 / 254 | 11.38 / 289 | 1/2 | 41.00 / 1041 | 182 / 82.7 | — | 170 / 775 | — |
| 6 | 19.63 / 499 | 28.50 / 724 | 10.69 / 272 | 18.38 / 467 | 10.00 / 254 | 11.38 / 289 | 1/2 | 46.00 / 1168 | 270 / 122.7 | 235 / 107 | 200 / 91 | 235 / 107 |
| 8 | 27.00 / 686 | 40.50 / 1029 | — | 27.00 / 686 | 13.75 / 349 | 17.50 / 445 | 1/2 | 60.00 / 1524 | 600 / 272.7 | 550 / 250 | 500 / 227 | 550 / 250 |

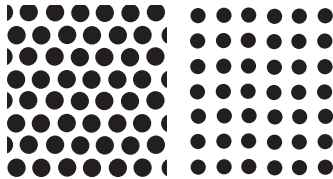
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TECHNICAL INFORMATION

Standard Cast Pipeline Strainers

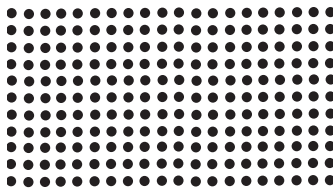
Basket and Screen Data

Pattern Examples

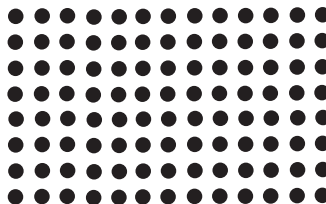


Staggered Holes

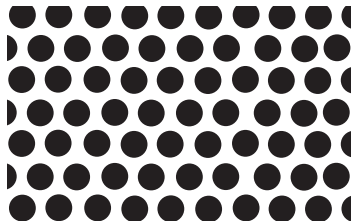
Straight Holes



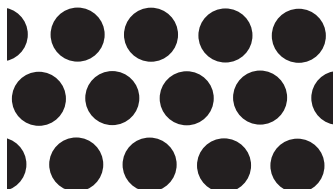
1/32" - Actual Size



1/16" - Actual Size



1/8" - Actual Size



1/4" - Actual Size

Basket and Screen Design

Designed to be both effective and durable, the basket or screen is the heart of an Eaton strainer. Eaton supplies baskets for simplex and duplex strainers, and screens for Y strainers, in standard and heavy-duty designs. Standard design baskets meet the needs of most applications. Eaton recommends the heavy-duty design in cases when straining an extremely high viscosity material or experiencing a high solids load.

Eaton baskets and screens are available in two standard materials: 316 stainless steel or Monel. These materials cover nearly all corrosion resistance levels needed in strainer services. A wide range of perforations and mesh provides removal of solids from 1/2" down to as low as 40 microns. For special, unique applications, Eaton custom fabricates baskets from just about any material to exact specifications.

Basket Construction

Each style basket includes a perforated sheet induction welded to a rigid top ring and solid bottom cap. Special attention to the welds along the perforated sheet seam, prevent the possible bypass of solids and maintain the basket's strength. A handle, welded to the I.D. of the top ring, facilitates easy removal. Heavy-duty baskets have reinforcing strips induction welded along the perforation's

seam, and circumferentially on the outside of the mid-section of the basket. The perforated sheet is inside the top ring and bottom cap.

Screen Construction

Y strainer screens, rolled to form a perfect cylinder, are induction welded along the seam. A neat weld, applied along the perforated sheet seam, prevents the possible bypass of solids and provides a seam of acceptable strength. Eaton machines Y strainer screen seats to specific dimensions and, accordingly, both the O.D. and length of these screens are closely tolerated.

Perforated Sheet – Specification

Eaton baskets utilize perforated sheets because of their greater inherent strength and resistance to stress cracking. The percentage of open area of a screen generally dictates the internal pressure drop experienced across it. The objective is to select a perforation with the best balance of open area, hole arrangement, and sheet thickness.

Open Area

Perforated sheets can have an open area from 15% to 75%. In general, the larger the open area of perforated sheet, the thinner the sheet thickness must be. Holes punched closer together increase the perforated open area; the solid portion between holes distorts

and becomes weak. Another factor in controlling the sheet thickness is the hole diameter. The smaller the hole diameter, the thinner the sheet. The rule of thumb used by commercial perforated sheet manufacturers is that hole dimensions smaller than the plate thickness are impractical and costly to manufacture. Eaton baskets and screens have between 28% to 63% open area with gauge thickness from 18" (0.048") to 25" (0.021"), depending upon the size of the perforations and the size and model of the strainer.

Hole Arrangement

Holes can be punched either in a straight line or in a staggered pattern. Eaton baskets and screens have a staggered pattern that increases the open area, provides extra strength, and creates less pressure drop.

Perforations

Eaton baskets and screens are available in 1/32", 3/64", 1/16", 1/8", 5/32", 1/4", 3/8", and 1/2" perforations and in mesh sizes 20, 40, 60, 80, 100, 200, 325, and 400. However, for general service there is one perforation for each size and type of strainer. Unless specified, this standard perforation is the size furnished with the strainer.



Powering Business Worldwide

Basket and Screen Data

Wire Mesh Specifications

All Eaton strainers are available with woven wire mesh screens. Wire mesh provides smaller openings for very fine straining applications down to 40 microns. Eaton baskets and screens use monofilament mesh possessing equal wire size and wire count in both directions to produce square openings. Other types of mesh such as Dutch (or Hollander) are also available. Dutch weave has a greater quantity of wires in one direction and fewer wires of a larger diameter in the other direction. This creates a rectangular opening. As with perforated sheet, the best wire mesh selection is a balance of open area, wire diameter, and type of weave.

Openings

Standard wire mesh liners for Eaton baskets and screens are available from 20 to 400 mesh. For any size mesh, there are different open area selections based on the diameter of the wires used. Twenty mesh means 20 wires per inch in both a vertical and horizontal direction. Therefore, as the wire size increases, the hole size decreases. Eaton baskets offer wire mesh with openings from 0.034" to 0.0015" (20 mesh to 400 mesh).

Open Area

The open area of wire mesh is a function of both the weave and the wire diameter. Eaton uses a plain square weave in most cases because its straight-through flow path creates the least pressure drop. The mesh is

reinforced with a perforated metal backing possessing greater than a 60% open area. This combination affords the greatest degree of strength, yet offers a lower pressure drop than other types of wire mesh. In certain instances, such as Y strainer in steam applications, the increased pressure drop resulting from the use of a Dutch weave is not as critical as the retention of small particles. Therefore, in applications that involve steam, Eaton suggests the use of weave such as the 30 x 160 size that can withstand a much higher differential pressure without bursting. Eaton can supply baskets and screens with open areas from 14% to 46%.

Plain Square Weave

Woven in an over and under pattern of wire having the same diameter, this weave produces a square opening with excellent flow characteristics.

Plain Dutch Weave

Woven in an over and under pattern in one direction in which the horizontal wires are larger in diameter than the vertical wires, which are driven close and crimped at each pass. This weave produces greater strength, but lower flow rates, than a square weave. Most often used in steam applications.

Mesh Liners Available

The number of openings per linear inch determines the size of mesh liners. The standard sizes Eaton can furnish are 20, 40, 60, 80, 100, 200, 325, and 400.

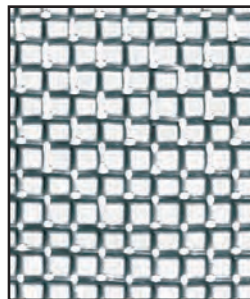
Perforated Basket Sheet Specifications

| Perforation Size Inches | Sheet Thickness USS Gauge # | Hole Pattern | % Open Area |
|-------------------------|-----------------------------|--------------|-------------|
| 0.020 | 26 | Straight | 16.0 |
| 1/32 | 26 | Straight | 28.0 |
| 3/64 | 26 | Straight | 30.2 |
| 0.045 | 26 | Staggered | 36.0 |
| 1/16 | 26 | Straight | 31.0 |
| 1/8 | 26 | Staggered | 47.9 |
| 5/32 | 26 | Staggered | 63.0 |
| 1/4 | 26 | Staggered | 42.0 |
| 3/8 | 26 | Staggered | 52.0 |
| 1/2 | 26 | Staggered | 47.9 |

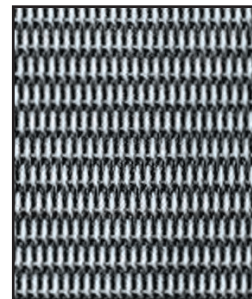
Mesh Basket Sheet Specifications

| Mesh Size | Wire Diameter Inches | Mesh Opening Inches | Mesh Opening Microns | % Open Area |
|-----------|----------------------|---------------------|----------------------|-------------|
| 20 | 0.016 | 0.0340 | 864 | 46.2 |
| 40 | 0.010 | 0.0150 | 381 | 36.0 |
| 60 | 0.0075 | 0.0092 | 234 | 30.5 |
| 80 | 0.0060 | 0.0065 | 165 | 27.0 |
| 100 | 0.0045 | 0.0055 | 140 | 30.3 |
| 200 | 0.0021 | 0.0029 | 74 | 33.6 |
| 325 | 0.0014 | 0.0017 | 43 | 30.0 |
| 400 | 0.0015 | 0.0381 | 38 | 36.0 |

Wire Mesh Weaves



Plain Square Weave



Plain Dutch Weave

TECHNICAL INFORMATION

Standard Cast Pipeline Strainers

Basket Effective Area

| Strainer Model | Pipe Size | Perforation Size | Nominal Area of Pipe (sq in) | Gross Screen Area (sq in) | Free Area (sq in) | Ratio Free Area to Pipe Area |
|----------------|-----------|------------------|------------------------------|---------------------------|-------------------|------------------------------|
| 85 | 1/4 | .045 | .10 | 5.0 | 1.8 | 18.0 |
| 85 | 3/8 | .045 | .19 | 5.0 | 1.8 | 9.5 |
| 85 | 1/2 | .045 | .30 | 5.0 | 1.8 | 6.0 |
| 85 | 3/4 | .045 | .53 | 7.1 | 2.6 | 4.9 |
| 85 | 1 | .045 | .86 | 10.4 | 3.7 | 4.3 |
| 85 | 1-1/4 | .045 | 1.49 | 15.1 | 5.5 | 3.7 |
| 85 | 1-1/2 | .045 | 2.03 | 21.7 | 7.8 | 3.8 |
| 85 | 2 | .045 | 3.35 | 30.4 | 10.9 | 3.3 |
| 85 | 2-1/2 | .045 | 4.78 | 43.2 | 15.5 | 3.2 |
| 85 | 3 | .045 | 7.39 | 70.7 | 25.5 | 3.4 |
| 85 | 4 | .045 | 12.73 | 106.8 | 38.4 | 3.0 |
| 85 | 6 | .045 | 28.70 | 241.7 | 87.0 | 3.0 |
| 85 | 8 | .045 | 50.02 | 414.6 | 149.2 | 3.0 |
| 85 | 10 | .045 | 71.80 | 652.2 | 234.8 | 3.3 |
| 30R | 1-1/2 | 5/32 | 2.03 | 35.4 | 22.3 | 11.0 |
| 30R | 2 | 5/32 | 3.35 | 50.9 | 32.1 | 9.6 |
| 30R | 2-1/2 | 5/32 | 4.78 | 84.7 | 53.4 | 11.2 |
| 30R | 3 | 5/32 | 7.39 | 84.7 | 53.4 | 7.2 |
| 30R | 4 | 5/32 | 12.73 | 114.5 | 72.1 | 5.6 |
| 30R | 5 | 5/32 | 20.0 | 158.1 | 99.6 | 5.0 |
| 30R | 6 | 5/32 | 28.9 | 180.9 | 113.9 | 4.0 |
| 30R | 8 | 5/32 | 50.03 | 275.6 | 171.8 | 3.4 |
| 50 | 3/4 | 1/32 | 0.53 | 19.5 | 5.2 | 9.8 |
| 50 | 1 | 1/32 | 0.86 | 19.5 | 5.2 | 6.1 |
| 50 | 1-1/4 | 1/8 | 1.49 | 39.7 | 19.0 | 12.8 |
| 50 | 1-1/2 | 1/8 | 2.03 | 39.7 | 19.0 | 9.4 |
| 50 | 2 | 1/8 | 3.35 | 64.0 | 30.7 | 9.2 |
| 50 | 2-1/2 | 1/8 | 4.78 | 64.0 | 30.7 | 6.4 |
| 50 | 3 | 3/16 | 7.39 | 85.6 | 42.8 | 5.8 |
| 50 | 4 | 3/16 | 12.73 | 146.1 | 73.0 | 5.7 |
| 50 | 5 | 3/16 | 20.0 | 216.1 | 106.0 | 5.4 |
| 50 | 6 | 3/16 | 28.9 | 265.4 | 132.7 | 4.6 |
| 50 | 8 | 3/16 | 50.02 | 506.7 | 253.4 | 5.1 |
| 50 | 10 | 3/16 | 78.8 | 800 | 400 | 5.1 |
| 50 | 12 | 3/16 | 113.1 | 1200 | 600 | 5.3 |
| 50 | 14 | 3/16 | 137.9 | 2000 | 1000 | 7.3 |
| 50 | 16 | 3/16 | 182.6 | 2000 | 1000 | 5.5 |
| 50 | 18 | 3/16 | 182.6 | 2000 | 1000 | 5.5 |
| 53BTX | 3/4 | 1/32 | 0.53 | 19.8 | 5.5 | 10.4 |
| 53BTX | 1 | 1/32 | 0.86 | 19.8 | 5.5 | 6.4 |
| 53BTX | 1-1/4 | 1/8 | 1.49 | 45.0 | 22.0 | 14.4 |
| 53BTX | 1-1/2 | 1/8 | 2.03 | 45.0 | 22.0 | 10.6 |
| 53BTX | 2 | 1/8 | 3.35 | 65.0 | 31.0 | 9.3 |
| 53BTX | 2-1/2 | 1/8 | 4.78 | 65.0 | 31.0 | 6.5 |
| 53BTX | 3 | 3/16 | 7.39 | 110.3 | 55.1 | 7.4 |
| 53BTX | 4 | 3/16 | 12.73 | 152.0 | 76.0 | 5.9 |

| Strainer Model | Pipe Size | Perforation Size | Nominal Area of Pipe (sq in) | Gross Screen Area (sq in) | Free Area (sq in) | Ratio Free Area to Pipe Area |
|----------------|-----------|------------------|------------------------------|---------------------------|-------------------|------------------------------|
| 72 | 3/8 | 1/32 | 0.19 | 12.7 | 3.4 | 18.0 |
| 72 | 1/2 | 1/32 | 0.30 | 12.7 | 3.4 | 11.3 |
| 72 | 3/4 | 1/32 | 0.53 | 19.5 | 5.2 | 9.9 |
| 72 | 1 | 1/32 | 0.86 | 19.5 | 5.2 | 6.1 |
| 72 | 1-1/4 | 1/8 | 1.49 | 30.1 | 14.4 | 9.7 |
| 72 | 1-1/2 | 1/8 | 2.03 | 49.7 | 19.0 | 9.4 |
| 72 | 2 | 1/8 | 3.35 | 50.9 | 24.4 | 7.3 |
| 72 | 2-1/2 | 1/8 | 4.78 | 80.2 | 38.4 | 8.0 |
| 72 | 3 | 3/16 | 7.39 | 114.5 | 57.2 | 7.8 |
| 72 | 4 | 3/16 | 12.73 | 168.3 | 84.1 | 6.6 |
| 72 | 5 | 3/16 | 20.0 | 265.4 | 132.7 | 6.6 |
| 72 | 6 | 3/16 | 28.9 | 324.2 | 162.1 | 5.6 |
| 72 | 8 | 3/16 | 50.02 | 555.3 | 277.7 | 5.6 |
| 72 | 10 | 3/16 | 78.8 | 800 | 400 | 5.1 |
| 72 | 12 | 3/16 | 113.1 | 1200 | 600 | 5.3 |
| 72 | 14 | 3/16 | 137.9 | 2000 | 1000 | 7.3 |
| 72 | 16 | 3/16 | 182.6 | 2000 | 1000 | 5.5 |
| 72 | 18 | 3/16 | 182.6 | 2000 | 1000 | 5.5 |

Alloy Data

Metal Alloys used in Eaton Strainers

Carbon Steel – ASTM A-216 Grade WCB

Tensile Strength: 70,000 lb/sq in
Yield: 36,000 lb/sq in
Elongation: 22%

Chemical Composition:

C (Carbon) 0.30%
Si (Silicon) 0.60%
P (Phosphorus) 0.04%
S (Sulfur) 0.045%
Mn (Manganese) 1.00%
Residual Elements 1.00% max

Aluminum Bronze – ASTM B-148

Grade C95400

Tensile Strength: 75,000 lb/sq in
Yield: 30,000 lb/sq in
Elongation: 12%

Chemical Composition:

Cu (Copper) 85%
Fe (Iron) 4%
Al (Aluminum) 11%

Stainless Steel – ASTM A-351

Grade CF8M

Tensile Strength: 70,000 lb/sq in
Yield: 30,000 lb/sq in
Elongation: 30%

Chemical Composition:

C (Carbon) 0.08% max
Si (Silicon) 1.5%
P (Phosphorus) 0.040%
Cr (Chromium) 18.0 - 21.0%
Ni (Nickel) 9.0 - 12.0%
Mn (Manganese) 1.50%
S (Sulfur) 0.04%
Mo (Molybdenum) 2.0 - 3.0%

Cast Iron – ASTM A-126 Class B

Tensile Strength: 31,000 lb/sq in
Compressive Strength: 109,000 lbs/sq in
Tensile Modulus: 15 x 10⁶ lb/sq in

Chemical Composition:

C (Carbon) 3.20 - 3.40 %
Si (Silicon) 2.10 - 2.30%
P (Phosphorus) 0.15 - 0.30%
S (Sulfur) 0.08 - 0.12%
Mn (Manganese) 0.50 - 0.80%

Ductile Iron - ASTM A-395

Grade 60-40-18

Tensile Strength: 60,000 lb/sq in
Yield: 40,000 lb/sq in
Elongation: 18%

Chemical Composition:

C (Carbon) 3.20 - 4.0%
Si (Silicon) 1.80 - 2.80%
P (Phosphorus) 0.08% max.
S (Sulfur) 0.03% max.
Mn (Manganese) 0.03% max.



Powering Business Worldwide

TECHNICAL INFORMATION

Standard Cast Pipeline Strainers

Pressure Drop Calculations

Pressure drops for Eaton strainers are shown on each product page. The curves are based on the flow of water through clean, perforated baskets or screens. For mesh-lined baskets or screens and/or for fluids other than water, use the correction factors listed on this page. To accurately calculate the pressure loss for filters and strainers in a pipeline, proceed as follows:

1. First calculate pressure loss using C_v factor formula at right.
2. Take the pressure loss figure obtained in (1) and recalculate it using the appropriate correction factor from the following table.

Correction Factors for Mesh-Lined Baskets

First – Multiply the pressure drop for water shown in charts by the specific gravity of the liquid.

Second – Multiply the corrected pressure drop figure by the following correction factors for more viscous liquids. (Water has a viscosity of 30 SSU.)

| Viscosity (SSU) | Unlined Perforated Basket | 40 Mesh Lined Basket | 60 Mesh Lined Basket | 80 Mesh Lined Basket | 100 Mesh Lined Basket | 200 Mesh Lined Basket | 325 Mesh Lined Basket |
|-----------------|---------------------------|----------------------|----------------------|----------------------|-----------------------|-----------------------|-----------------------|
| 30 (water) | 0 | 1.2 | 1.4 | 1.6 | 1.7 | 2.0 | 2.5 |
| 500 | 1.6 | 1.9 | 2.1 | 2.4 | 2.6 | 3.1 | 3.6 |
| 1000 | 1.7 | 2.2 | 2.4 | 2.6 | 2.8 | 3.3 | 3.8 |
| 2000 | 1.9 | 2.4 | 2.7 | 2.9 | 3.2 | 3.8 | 4.0 |
| 3000 | 2.0 | 2.6 | 2.9 | 3.2 | 3.5 | 4.1 | 4.3 |
| 5000 | 2.2 | 3.0 | 3.5 | 4.0 | 4.5 | 5.3 | 6.3 |
| 10000 | 2.5 | 3.5 | 4.2 | 5.0 | 6.0 | 7.1 | 8.5 |

Strainer Basket Opening Equivalents

| Mesh | Inches | Millimeters | Microns | Perf | Inches | Millimeters | Microns |
|------|--------|-------------|---------|------|--------|-------------|---------|
| 400 | 0.0015 | 0.0381 | 38 | 1/32 | 0.033 | 0.838 | 838 |
| 300 | 0.0018 | 0.0457 | 45 | 3/64 | 0.045 | 1.143 | 1143 |
| 250 | 0.0024 | 0.0609 | 60 | 1/16 | 0.070 | 1.778 | 1776 |
| 200 | 0.0027 | 0.0686 | 68 | 3/32 | 0.094 | 2.387 | 2387 |
| 150 | 0.0041 | 0.1041 | 104 | 1/8 | 0.125 | 3.175 | 3175 |
| 100 | 0.0065 | 0.1651 | 165 | 5/32 | 0.150 | 3.810 | 3810 |
| 80 | 0.007 | 0.1778 | 177 | 3/16 | 0.1875 | 4.762 | 4762 |
| 60 | 0.009 | 0.2286 | 228 | 1/4 | 0.250 | 6.350 | 6350 |
| 40 | 0.015 | 0.8636 | 380 | 3/8 | 0.375 | 9.525 | 9525 |
| 20 | 0.034 | 0.8636 | 862 | 1/2 | 0.500 | 12.700 | 12700 |

Pressure Loss Calculation Using C_v Factor

Metric Units

$$\Delta P = \left[\frac{Q}{C_v} \right]^2 (133.6)$$

ΔP = Pressure Drop in kPa
 Q = Flow in M³/hr
 C_v = Flow Coefficient

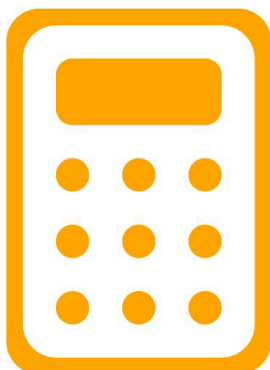
Standard Units

$$\Delta P = \left[\frac{Q}{C_v} \right]^2$$

ΔP = Pressure Drop in psi
 Q = Flow in gpm
 C_v = Flow Coefficient

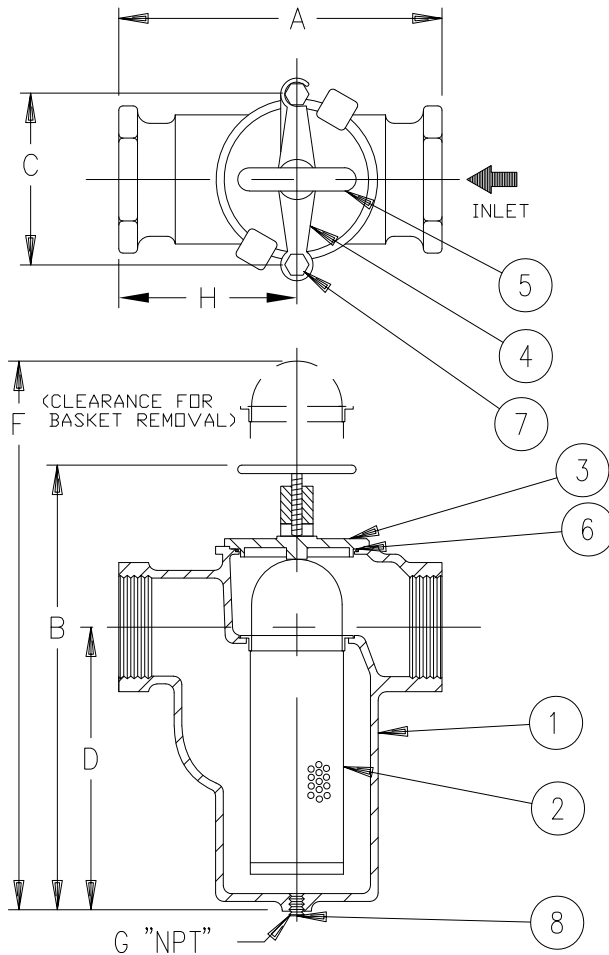
The pressure loss across a strainer can be calculated using the system's flow rate and the C_v factor for that strainer.

For example, a 1" Model 72 simplex strainer with a perforated basket has a C_v factor of 22.5. In water service with a 30 gpm flow rate, it will have a 1.7 psi pressure drop $(30 \div 22.5)^2 = 1.7$. For mesh-lined baskets and/or fluids with a viscosity greater than water, multiply the pressure drop by the correction factors in the chart "Correction Factors for mesh-lined baskets."



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PRESSURE DROP
CALCULATOR**

| REVISIONS | | | | |
|-----------|---------------------|-----------|---------|------------|
| REV | DESCRIPTION | BY | ECO | DATE |
| G | UPDATED TITLE BLOCK | R. DHONDE | 0106104 | 12/25/2014 |



| NO. | PART NAME | MATERIAL |
|-----|------------|-------------------------|
| 1 | BODY | SSTL. ASTM A351 GR CF8M |
| 2 | SCREEN | |
| | PERF. DIA. | |
| | MESH | |
| 3 | COVER | SSTL. ASTM A351 GR CF8M |
| 4 | YOKE | DUCTILE IRON |
| 5 | YOKE SCREW | STEEL |
| 6 | O-RING | VITON |
| 7 | STUD | STEEL |
| 8 | PIPE PLUG | STAINLESS STEEL |


NOTES:

1. INLET/OUTLET "NPT" THREADED CONNECTIONS PER ASME B1.20.1.
- 1-1/2" STRAINER WITH 1-1/4" REDUCER BUSHINGS.
1" STRAINER WITH 3/4" REDUCER BUSHINGS.
- MAX. WORKING PRESSURE: 200 PSI @ 100° F
(13.8 BAR @ 37.8° C)

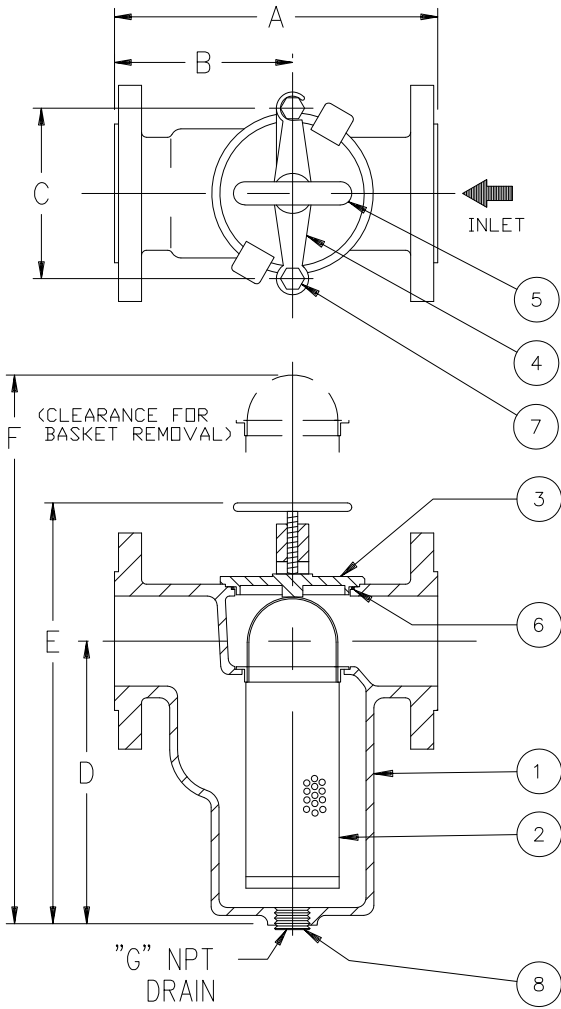
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| PIPE SIZE (NOMINAL) | DIMENSIONS | | | | | | | WEIGHT (DRY) LBS. KGS. | PART NO. |
|------------------------|--------------|--------------|--------------|--------------|--------------|---------------------|--------------|------------------------------|---------------|
| | A IN. MM. | B IN. MM. | C IN. MM. | D IN. MM. | F IN. MM. | G (NOM.) IN. MM. | H IN. MM. | | |
| *3/4" (20mm) | 6.13 / 156 | 8.38 / 213 | 4.00 / 102 | 5.00 / 127 | 13 / 330 | 1/2 (15) | 3.50 (89) | 7 / 3.2 | ST072007BT20A |
| 1" (25mm) | 5.38 / 137 | 8.38 / 213 | 4.00 / 102 | 5.00 / 127 | 13 / 330 | 1/2 (15) | 3.13 (80) | 7 / 3.2 | ST0720100T2C |
| *1-1/4" (32mm) | 8.25 / 210 | 11.00 / 279 | 4.88 / 124 | 7.00 / 178 | 16 / 406 | 3/4 (20) | 4.63 (118) | 17 / 7.7 | ST072012BT20A |
| 1-1/2" (40mm) | 7.38 / 188 | 11.00 / 279 | 4.88 / 124 | 7.00 / 178 | 16 / 406 | 3/4 (20) | 4.13 (105) | 16 / 7.3 | ST0720150T2C |
| 2" (50mm) | 8.75 / 222 | 13.38 / 340 | 6.75 / 172 | 7.63 / 194 | 21 / 533 | 1-1/4 (32) | 5.13 (130) | 36 / 16.4 | ST0720200T2C |
| 2-1/2" (65mm) | 12.00 / 305 | 14.88 / 378 | 8.00 / 203 | 8.00 / 203 | 26 / 660 | 1-1/2 (40) | 6.63 (168) | 52 / 23.6 | ST0720250T2C |
| 3" (80mm) | 12.50 / 318 | 17.75 / 451 | 8.00 / 203 | 11.38 / 289 | 28 / 711 | 1-1/2 (40) | 7.00 (178) | 60 / 27.3 | ST0720300T2C |

* - SEE NOTE 2.

| | | | | | | |
|---------------------------|-----------|--|--|--------------------------|--|----------|
| DRAWN BY VAA | |  HYDRAULICS GROUP FILTRATION DIVISION GALESBURG, MICHIGAN, USA • TINTON FALLS, NEW JERSEY, USA | | | | |
| | | | | | | |
| SCALE AS DRAWN | | TITLE MODEL 72 SIMPLEX STRAINER NPT THREADED CONNECTIONS SIZES 3/4" THRU 3" STAINLESS STEEL | | | | |
| RESTRICTION RESTRICTED | | | | | | |
| SHEET 1 OF 1 | | DATE 08/21/91 | | | | |
| PROJECTION THIRD ANGLE | | | | | | |
| CUSTOMER INFO | | SIZE A | | DWG FILENAME SD072012 | | REV G |
| NAME | | | | | | |
| P.O. NO. | | | | | | |
| TAG NO. | | | | | | |
| S.O. NO. | | | | | | |
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| REVISIONS | | | | |
|-----------|---------------------|-----------|---------|------------|
| REV | DESCRIPTION | BY | ECO | DATE |
| F | UPDATED TITLE BLOCK | R. DHONDE | 0106104 | 12/25/2014 |



| NO. | PART NAME | MATERIAL |
|-----|------------|------------------------|
| 1 | BODY | SSTL ASTM A351 GR.CF8M |
| 2 | SCREEN | |
| | PERF. DIA. | |
| | MESH | |
| 3 | COVER | SSTL ASTM A351 GR.CF8M |
| 4 | YOE | DUCTILE IRON |
| 5 | YOE SCREW | STEEL |
| 6 | O-RING | VITON |
| 7 | STUD | STEEL |
| 8 | PIPE PLUG | STAINLESS STEEL |

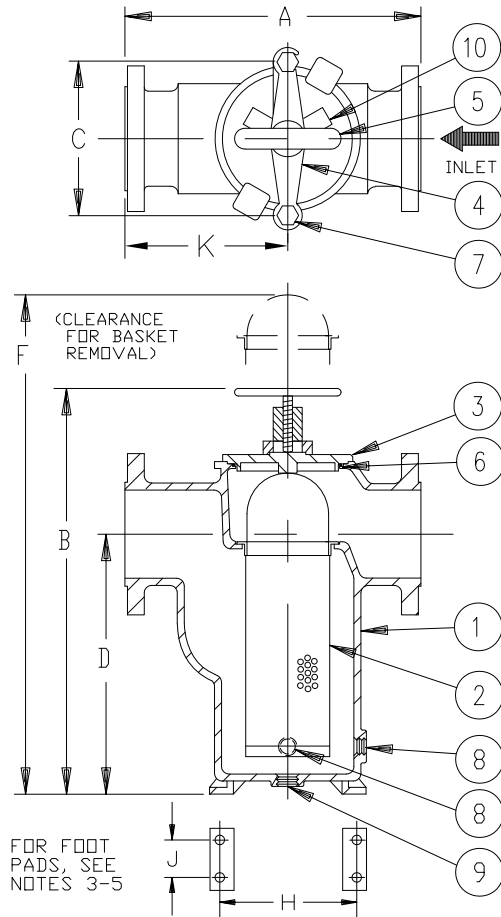
- NOTES:
1. INLET/OUTLET FLANGE CONNECTIONS PER ASME B16.5.
 2. MAX. WORKING PRESSURE: 200 PSI @ 100° F (13.8 BAR @ 37.8° C)

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| PIPE SIZE (NOMINAL) | DIMENSIONS | | | | | | | | WEIGHT (DRY) | | PART NO. |
|------------------------|-------------|------------|------------|------------|-------------|-------------|-----------------|----------|-----------------|-----------|---------------|
| | IN. A | MM. B | IN. C | MM. D | IN. E | MM. F | IN. G (NOM.) | MM. H | LBS. I | KGS. J | |
| 1" (25mm) | 7.63 / 194 | 4.31 / 110 | 4.00 / 102 | 5.00 / 127 | 8.38 / 213 | 12.00 / 305 | 1/2 (15) | | 9 / 4.1 | | ST072010BR20A |
| 1-1/2" (40mm) | 10.25 / 260 | 5.75 / 146 | 4.88 / 124 | 7.00 / 178 | 11.00 / 279 | 16.00 / 406 | 3/4 (20) | | 17 / 7.7 | | ST072015BR20A |

| | | | | | |
|---------------|-----------|--|---|-----------|--------------------------|
| CUSTOMER INFO | | DRAWN BY FM | <div> <div> HYDRAULICS GROUP FILTRATION DIVISION GALESBURG, MICHIGAN, USA • TINTON FALLS, NEW JERSEY, USA </div> </div> | | |
| | | SCALE AS DRAWN | | | |
| | | RESTRICTION RESTRICTED | <div> <div>MODEL 72 SIMPLEX STRAINER 150# RAISED FACE FLANGE, SIZES 1" & 1-1/2" STAINLESS STEEL</div> </div> | | |
| | | SHEET 1 OF 1 | | | |
| NAME | | PROJECTION THIRD ANGLE | DATE 12/02/93 | SIZE A | DWG FILENAME SD072023 |
| P.O. NO. | | | | | REV F |
| TAG NO. | | | | | |
| S.O. NO. | | | | | |
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| REVISIONS | | | | |
|-----------|---------------------|-----------|---------|------------|
| REV | DESCRIPTION | BY | ECO | DATE |
| F | UPDATED TITLE BLOCK | R. DHONDE | 0106104 | 12/25/2014 |



| NO. | PART NAME | MATERIAL |
|-----|-------------|------------------------------|
| 1 | BODY | STAINLESS STEEL A351 GR.CF8M |
| 2 | SCREEN | |
| | PERF. DIA. | |
| | MESH | |
| 3 | COVER | STAINLESS STEEL A351 GR.CF8M |
| 4 | YOKE | DUCTILE IRON |
| 5 | YOKE SCREW | STEEL |
| 6 | O-RING | VITON |
| 7 | STUD | STEEL |
| 8 | DRAIN PLUG | STAINLESS STEEL |
| 9 | BODY PLUG | STAINLESS STEEL |
| 10 | COVER CLAMP | DUCTILE IRON |

NOTES:


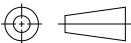
1. INLET/OUTLET 150 LB. RAISED FACED FLANGED CONNECTIONS PER ASME B16.5 .
2. COVER CLAMP (ITEM 10) FOR 4", 6" SIZES.
3. 7/16"Ø SLOTTED FOOT PADS FOR SIZE 2".
4. 1/2"Ø SLOTTED FOOT PADS FOR SIZE 3".
6. 9/16"Ø SLOTTED FOOT PADS FOR SIZE 4".
7. DIMENSION "G" (NPT) IS FOR DRAIN PLUG, ITEM 8.
8. ITEM 9, BODY PLUG IS NOT TO BE USED AS DRAIN.
9. MAX. WORKING PRESSURE: 200 PSI @ 100° F (13.8 BAR @ 37.8° C)

ALL SIZES EXCEPT 2"

2" SIZE ONLY

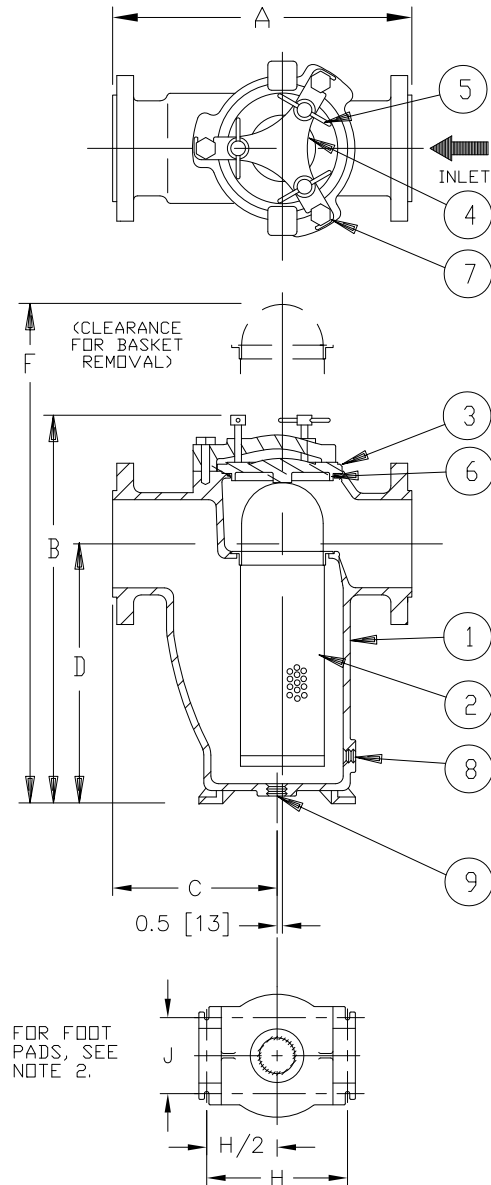
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| PIPE SIZE (NOMINAL) | DIMENSIONS | | | | | | | | | | WEIGHT (DRY) LBS. KGS. | PART NO. |
|----------------------------|--------------|--------------|--------------|--------------|--------------|---------------------|--------------|--------------|--------------|-----------|----------------------------------|----------|
| | A IN. MM. | B IN. MM. | C IN. MM. | D IN. MM. | F IN. MM. | G (NOM.) IN. MM. | H IN. MM. | J IN. MM. | K IN. MM. | | | |
| 2" (50mm) | 10.50/268 | 13.75/349 | 6.75/172 | 7.63 /194 | 20/508 | 1/2 (15) | 5.50/140 | 2.75/70 | 5.75/146 | 36 / 16 | ST0720200R2C | |
| 2-1/2"(65mm) | 11.63/295 | 15.63/397 | 8.00/203 | 8.88/226 | 23/584 | 1/2 (15) | 6.50/165 | 2.88/73 | 6.38/162 | 63 / 27 | ST0720250R2C | |
| 3" (80mm) | 13.13/334 | 18.75/476 | 7.94/202 | 12.00/305 | 27/686 | 1/2 (15) | 7.00/178 | 3.13/80 | 7.81/198 | 86 / 39 | ST0720300R2C | |
| 4" (100mm) | 17.25/438 | 19.88/505 | 10.69/272 | 10.69/272 | 29/737 | 1/2 (15) | 10.00/254 | 3.88/99 | 9.63/245 | 130 / 59 | ST0720400R2C | |
| 6" (150mm) | 19.63/499 | 28.50/724 | 10.69/272 | 18.31/465 | 46/1168 | 1/2 (15) | 10.00/254 | 5.00/127 | 10.81/275 | 235 / 107 | ST0720600R2C | |

| | | | | | | | | |
|---------------|-----------|--|--|--|--|-----------|--------------------------|----------|
| | | DRAWN BY FC | | <div>HYDRAULICS GROUP FILTRATION DIVISION GALESBURG, MICHIGAN, USA • TINTON FALLS, NEW JERSEY, USA</div> | | | | |
| | | SCALE AS DRAWN | | | | | | |
| CUSTOMER INFO | | RESTRICTION RESTRICTED | | TITLE MODEL 72 SIMPLEX STRAINER 150# RAISED FACE FLANGE, SIZES 2" THRU 6" STAINLESS STEEL | | | | |
| NAME | | SHEET 1 OF 1 | | | | | | |
| P.O. NO. | | PROJECTION THIRD ANGLE | | DATE 12/16/93 | | SIZE A | DWG FILENAME SD072025 | REV F |
| TAG NO. | |  | | | | | | |
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| REV | DESCRIPTION | BY | ECO | DATE |
| F | UPDATED TITLE BLOCK | R. DHONDE | 0106104 | 12/25/2014 |



| NO. | PART NAME | MATERIAL |
|-----|------------|-------------------------|
| 1 | BODY | SSTL ASTM A351 GR. CF8M |
| 2 | SCREEN | |
| | PERF. DIA. | |
| | MESH | |
| 3 | COVER | SSTL ASTM A351 GR. CF8M |
| 4 | YOKE | DUCTILE IRON |
| 5 | YOKE SCREW | STEEL |
| 6 | O-RING | VITON |
| 7 | STUD | STEEL |
| 8 | DRAIN PLUG | STAINLESS STEEL |
| 9 | BODY PLUG | STAINLESS STEEL |

NOTES:

1. INLET/OUTLET 150 LB. RAISED FACED FLANGED CONNECTIONS PER ASME B16.5.
2. 5/8" DIAMETER SLOTTED FOOT PADS FOR 8" SIZE.
3. DIMENSION "G" (NPT) IS FOR DRAIN PLUG, ITEM 8.
4. ITEM 9, BODY PLUG IS NOT TO BE USED AS DRAIN.
5. MAX. WORKING PRESSURE: 200 PSI @ 100° F
(13.8 BAR @ 37.8° C)

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| PIPE SIZE (NOMINAL) | DIMENSIONS | | | | | | | | | WEIGHT (DRY) LBS. KGS. | PART NO. |
|------------------------|--------------|--------------|--------------|--------------|--------------|---------------------|--------------|--------------|--|------------------------------|--------------|
| | A IN. MM. | B IN. MM. | C IN. MM. | D IN. MM. | F IN. MM. | G (NOM.) IN. MM. | H IN. MM. | J IN. MM. | | | |
| 8" (200mm) | 27.00 / 686 | 40.00 / 1016 | 15.5 / 394 | 27.00 / 686 | 60 / 1524 | 1/2 (15) | 15.75 / 400 | 8.50 / 216 | | 550 / 249 | ST0720800R2C |

| | | | | | | | | | | | | | | | | | |
|----------------|--|-------------------|--|---------------------------|--|-----------------|--|---------------------------|--|------------------|--|-----------|--|--------------------------|--|----------|--|
| DRAWN BY FM | | SCALE AS DRAWN | | RESTRICTION RESTRICTED | | SHEET 1 OF 1 | | PROJECTION THIRD ANGLE | | DATE 01/25/95 | | SIZE A | | DWG FILENAME SD072030 | | REV F | |
| | | | | | | | | | | | | | | | | | |
| CUSTOMER INFO | | NAME | | P.O. NO. | | TAG NO. | | S.O. NO. | | PART NO. | | SEE TABLE | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | |



HYDRAULICS GROUP
FILTRATION DIVISION
GALESBURG, MICHIGAN, USA • TINTON FALLS, NEW JERSEY, USA

MODEL 72 SIMPLEX STRAINER, 150# RAISED
FACE FLANGE, SIZE 8" STAINLESS STEEL

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Read all the following information and instructions prior to installing and operating the equipment.
Failure to comply with these instructions could result in bodily injury or property damage.



Flow Pattern

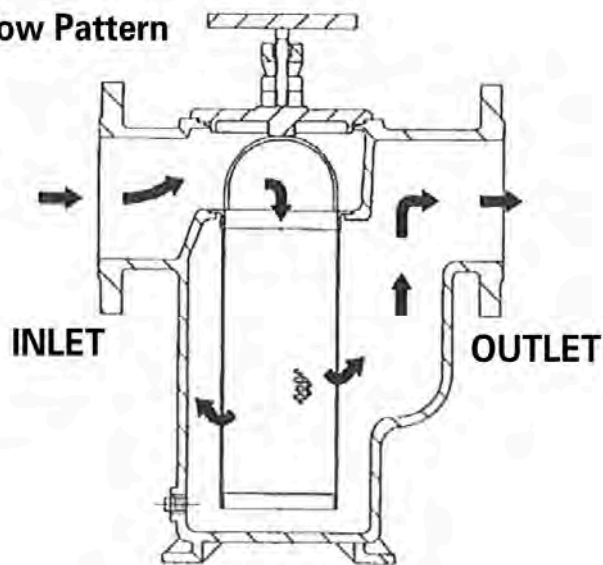


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INTRODUCTION

A simplex strainer is a device installed in a pipeline to remove dirt and other unwanted debris from fluids. Straining is accomplished by directing the fluid through sized openings in a basket. Simplex strainers are installed where fluid flow can be interrupted while the basket is removed for cleaning. Simplex strainers are designed to withstand the rated pressure of the piping system.

For additional information regarding Simplex Basket Strainers visit our website at www.eaton.com/filtration

RECEIVING, HANDLING, AND INSPECTION

Inspect strainer after unpacking for damage incurred during transit. Report any damage to the carrier immediately. If the strainer is not to be installed immediately, store indoors in a clean, dry environment.

Remove preservative with a solvent dampened cloth. Exercise care when using solvent.

Model 72 Simplex

| Size | Material | End Connection | Seals | Pressure Rating |
|------------|-----------------|----------------|--------|-----------------|
| 3/8" to 3" | Iron and Bronze | Threaded | Buna-N | 200 psi @ 100°F |
| 1" to 3" | Carbon Steel | Threaded | Buna-N | 200 psi @ 100°F |
| 1" to 3" | Stainless Steel | Threaded | Viton® | 200 psi @ 100°F |
| 1" to 8" | Iron | Flanged 125# | Buna-N | 200 psi @ 100°F |
| 1" to 8" | Bronze | Flanged 150# | Buna-N | 200 psi @ 100°F |
| 1" to 8" | Carbon Steel | Flanged 150# | Buna-N | 200 psi @ 100°F |
| 1" to 8" | Stainless Steel | Flanged 150# | Viton® | 200 psi @ 100°F |

Check to be sure the rated pressure and temperature on the strainer nameplate is not less than the maximum pressure and temperature of the installation. The rated pressure shown on the nameplate is the maximum pressure, including shock, at which the strainer may be operated.

Remove cover by turning T-bolt counterclockwise to release yoke, swing yoke clear of cover and remove cover. Check for and remove any foreign or loose materials that could be carried downstream when fluid is introduced into the strainer.

Replace strainer cover and yoke and tighten T-bolt. The basket is held in place by pressure of the cover on the basket handle. If the basket is loose, spring the handle to a higher position to insure greater compression when the cover is seated.

INSTALLATION

Position the strainer in the line so that the fluid enters the connection marked "inlet."



CAUTION: Lift strainers with slings under the inlet and outlet connections. **DO NOT** lift the strainer by the yoke screw located on the strainer cover.

Be sure sufficient headroom is provided for easy removal of cover and basket.

Support the strainer in the line as follows:

4" size or under:

Use pipe supports under the process piping near inlet and outlet connections. Use care to prevent bending and expansion forces from acting on the nozzles.

5" size or larger:

Support on concrete or steel pads.

Connect the strainer to the line. Use same type flange faces. For example: **Do not** bolt raised face flanges to iron flat face flanges. Iron flanges must be flat face with full face gaskets.

Cast strainers are subject to face-to-face variations due to shrinkage and machining tolerances.

Prefabricated piping systems must allow adjustment at the strainer connection.

If strainer has threaded connections follow proper threaded specifications. If strainer has weld connection follow proper ANSI weld specifications.

Be sure flange gaskets are in place and fasteners are tight.

INSTALLATION (CONTINUED)

It is recommended that the bottom drain plug be removed and a drain valve be installed at the bottom of the basket chamber for strainers sized 1" and 1-1/2" flanged connections and for strainers sized 3/8" – 3" threaded connections. It is recommended that the side drain plug be removed and a drain valve be installed at the side of the basket chamber for strainers sized 2" – 8" flanged connections as shown in Fig. 1.



CAUTION: The bottom plug for flanged strainers, sized 2" through 8" is NOT to be removed and the opening NOT to be used for draining. Removal of this bottom plug voids the strainer warranty.



CAUTION: A vent is required when fluids other than water and with temperatures in excess of 120° F are to be handled by the strainer. The vent must be piped to a safe discharge point to protect the operator. (See Fig.2). Wear protective clothing, which includes gloves, vests, and goggles when handling dangerous fluids.

Pressure gauges near the strainer inlet and outlet are recommended. Cleaning frequency is determined by the pressure drop across the strainer.

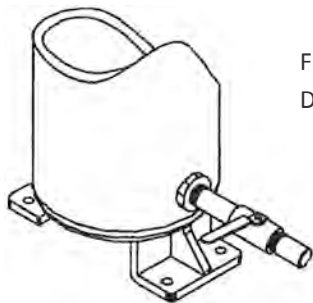


Figure 1
Drain Valve

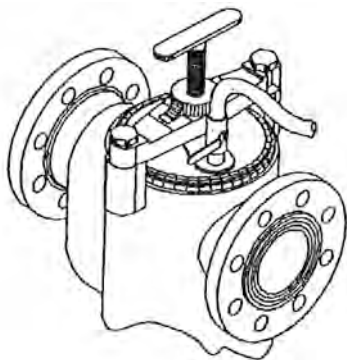


Figure 2
Vent Piping

OPERATION

Open vent, if strainer is so equipped (See Fig. 2), to expel air from the strainer.

Slowly introduce fluid to be strained by opening the outlet valve first, followed by opening the inlet valve.



CAUTION: Start system GRADUALLY. This eliminates sudden shock to the strainer and other equipment in the line.

Close the vent when air is expelled and fluid begins to flow.

SHUT-DOWN

Tightly close valves on the inlet and outlet connections or the strainer. Open vent (See Fig. 2) and/or drain valve (See Fig.1) to relieve liquid pressure in the strainer.



CAUTION: DO NOT loosen cover while there is liquid or air flow from the vent.

BASKET REMOVAL

Follow shut-down procedure.

When pressure is relieved, loosen T-bolt. Drain fluid through bottom drain to a level below the basket seat.

Swing yoke clear of cover and remove cover and dirty basket.

BASKET REPLACEMENT

Place new or clean basket squarely on the basket seat. Be sure basket handle is sufficiently high to be compressed by strainer cover.

Inspect O-ring and seal surface: Clean seat or replace cover O-ring as necessary. Always keep spare O-rings in stock.

Replace cover, swing the yoke over the cover and make full contact with the yoke stud. Tighten the center T-bolt. If strainer is on suction service, fill basket chamber from outside source before installing cover.

Follow start-up procedure.

BASKET CLEANING

When to Clean

Clean basket when there is a 5 psi increase in pressure loss across the strainer.



CAUTION: To prevent damage to basket, DO NOT permit strainer pressure differential between inlet and outlet connections to exceed 20 psi.

How to Clean

Invert basket and wash out debris by directing a stream of air or water against the basket exterior. Use solvent if strained fluid is fuel or a chemical. Follow manufacturer's instruction when using a solvent to clean the basket.



NOTE: Do not allow basket contents to dry as this will make cleaning most difficult.

Inspect basket at each cleaning for holes or tears and replace as required.

SHUT-DOWN PERIODS

During shut-down periods drain the fluid and clean the basket.

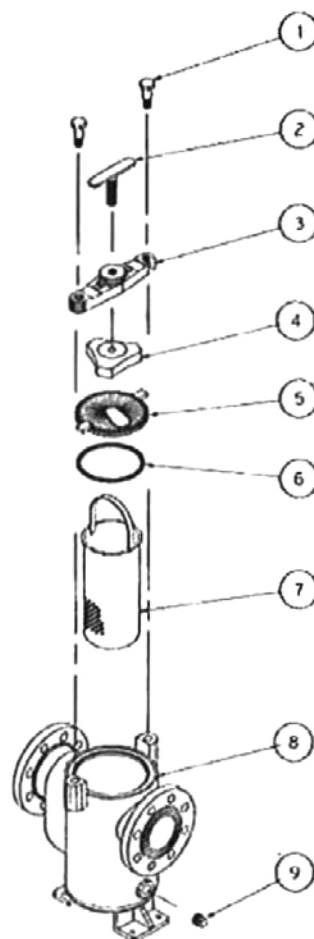
RECOMMENDED SPARE PARTS

- 1 Eaton Replacement Basket
- 1 Eaton Replacement O-Ring

When ordering spare parts, specify all nameplate data as well as the description and quantity of parts.

Always use genuine Eaton replacement parts for guaranteed fit and performance.

Visit our web site, www.filtration.eaton.com for information about the hundreds of different types of Eaton Simplex Basket Strainers.



| Item | Description |
|------|--------------------------------------|
| 1 | YOKE STUD |
| 2 | T-BOLT ASSEMBLY |
| 3 | YOKE |
| 4 | COVER CLAMP (sizes 4" to 6" only) |
| 5 | COVER |
| 6 | O-RING |
| 7 | BASKET |
| 8 | BODY |
| 9 | PIPE PLUG |

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