## Style SSB-7

Y-Strainer
Stainless Steel (ASTM A 351, Grade Cf8M)
600 lb . Threaded
600 lb . Socket Weld


## Cast 316 Stainless Steel Y-Strainer

## APPLICATIONS

Steam, water, oil or gas where protection from foreign matter in a pipeline is required.

## CONSTRUCTION

The Keckley Style SSB-7 stainers are constructed from rugged 316 stainless steel castings that are machined to exacting specifications.

Socket Weld bore is in compliance with ASME B16.11 unless otherwise specified.

## FEATURES

The Keckley Style SSB-7 strainer features a machined groove in the body and cap for proper alignment and to ensure accurate reseating when servicing is required. This strainer has a straight threaded cap and is furnished standard with a NPT blow-off connection. The gasket is 304 stainless steel spiral wound and is compressed between the body and cap (for maximum strength and durability) and designed for both high pressure and high temperature service. Keckley Style SSB-7 strainers can be supplied with a stainless steel blow-off plug upon request.

## SCREENS

Standard perforated 304 stainless steel screens are spot welded along the seam for maximum strength. Different size perforations and meshes are available in stainless steel, monel, and brass to meet specific media requirements. If media is not indicated, screens for steam will be supplied.

## SELF CLEANING

Self cleaning is accomplished by opening the valve or drain plug connected to the blow-off port. Warning: See Maintenance Instructions on page S6 of the Strainer Information Section for additional precautions and detailed information on servicing the strainer.

WORKING PRESSURES - NON SHOCK

| NOM. RATING | MEDIA | $1 / 4^{\prime \prime}$ to $3^{\prime \prime}$ | 8 mm to 80 mm |
| :---: | :---: | :---: | :---: |
|  <br> SOCKET WELD) | STEAM | $600 \mathrm{PSI} @ 1125^{\circ} \mathrm{F}$ | $4138 \mathrm{KPa} @ 607^{\circ} \mathrm{C}$ |
|  | W.O.G. | $1440 \mathrm{PSI} @ 100^{\circ} \mathrm{F}$ | $9932 \mathrm{KPa} @ 38^{\circ} \mathrm{C}$ |

## Style SSB-7



Socket Weld
Y-Strainer, 600 lb . Threaded \& Socket Weld
Stainless Steel (ASTM A 351, Grade CF8M)

| PARTS LIST |  |  |
| :---: | :--- | :--- |
| ITEM | DESCRIPTION | MATERIAL |
| 1 | Body | Stainless Steel (ASTM A 351, Grade CF8M) |
| 2 | Screen | Stainless Steel (304) |
| 3 | Gasket | Spiral Wound Stainless Steel (304) |
| 4 | Cap | Stainless Steel (ASTM A 351, Grade CF8M) |

Optional: Blow-off Plug, Carbon Steel (ASTM A 105).
*Optional Body Materials Available in 304 and 400 Series SS, Alloy 20, Hastelloy, Inconel, Monel and Stellite..


Standard screens supplied are for steam service, unless otherwise specified. Options: Other perforations, meshes, and screen materials are available.

| SIZE |  | DIMENSIONS |  |  |  |  |  |  |  |  |  | WEIGHTS |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | A |  | B |  | C |  | D |  | E |  |  |  |
| in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | lbs | kgs |
| 1/4 | 8 | 2-15/16 | 75 | 2-7/16 | 62 | 0.555 | 14 | 3/8 | 10 | 1/4 | 8 | 3 | 1 |
| 3/8 | 10 | 2-15/16 | 75 | 2-7/16 | 62 | 0.690 | 18 | $3 / 8$ | 10 | $1 / 4$ | 8 | 3 | 1 |
| $1 / 2$ | 15 | 2-15/16 | 75 | 2-7/16 | 62 | 0.855 | 22 | 3/8 | 10 | 1/4 | 8 | 3 | 1 |
| $3 / 4$ | 20 | 3-11/16 | 94 | 3 | 76 | 1.065 | 27 | 1/2 | 13 | 3/8 | 10 | 5 | 2 |
| 1 | 22 | 4-9/16 | 116 | 4-5/16 | 110 | 1.330 | 34 | 1/2 | 13 | 3/8 | 10 | 6 | 3 |
| 1-1/4 | 32 | 4-15/16 | 125 | 4-3/16 | 106 | 1.675 | 43 | $1 / 2$ | 13 | 3/4 | 20 | 8 | 4 |
| 1-1/2 | 40 | 5-9/16 | 141 | 4-11/16 | 119 | 1.915 | 49 | 1/2 | 13 | 3/4 | 20 | 10 | 5 |
| 2 | 50 | 6-15/16 | 176 | 6-1/4 | 159 | 2.406 | 61 | $5 / 8$ | 16 | 1 | 25 | 16 | 7 |
| 2-1/2 | 65 | 12 | 305 | 9-3/8 | 238 | 2.906 | 74 | $5 / 8$ | 16 | 1-1/4 | 32 | 43 | 20 |
| 3 | 80 | 12 | 305 | 9-3/8 | 238 | 3.535 | 90 | 5/8 | 16 | 1-1/4 | 32 | 43 | 20 |

Certified dimensional drawings are available upon request.
${ }^{\dagger}$ This table reflects only the nearest metric equivalents.

FLOW COEFFICIENTS

| Size | $\mathrm{C}_{\mathrm{V}}$ | Size | $\mathrm{C}_{\mathrm{V}}$ | Size | $\mathrm{C}_{\mathrm{V}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 4^{\prime \prime}$ | 9.5 | $1 "$ | 30 | $2-1 / 2^{\prime \prime}$ | 129.7 |
| $3 / 8^{\prime \prime}$ | 9.5 | $1-1 / 4^{\prime \prime}$ | 44.9 | $3^{\prime \prime}$ | 161.3 |
| $1 / 2^{\prime \prime}$ | 9.5 | $1-1 / 2^{\prime \prime}$ | 61 |  |  |
| $3 / 4^{\prime \prime}$ | 18.7 | $2^{\prime \prime}$ | 98 |  |  |

TOTAL SCREEN AREA

| Size | $\left(\right.$ in $\left.^{2}\right)$ | Size | $\left(\right.$ in $\left.^{2}\right)$ | Size | $\left(\right.$ in $\left.^{2}\right)$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 4^{\prime \prime}$ | 2.75 | $1{ }^{\prime \prime}$ | 10.08 | $2-1 / 2^{\prime \prime}$ | 78.14 |
| $3 / 8^{\prime \prime}$ | 2.75 | $1-1 / 4^{\prime \prime}$ | 12.79 | $3^{\prime \prime}$ | 78.14 |
| $1 / 2^{\prime \prime}$ | 2.75 | $1-1 / 2^{\prime \prime}$ | 16.33 |  |  |
| $3 / 4^{\prime \prime}$ | 4.71 | $2^{\prime \prime}$ | 27.04 |  |  |

*See DETERMINING RATIOS on page S5 of the
Strainer Information Section for calculating NET FREE
AREA of the screen to inside pipe area.

PRESSURE vs. TEMPERATURE CHART
600\# Threaded \& Socket Weld Stainless Steel (ASTM A 351, Grade CF8M)


## PRESSURE DROP CHART

## Threaded "Y" Pattern Strainers (sylves B, BDI, E-150, F-1 50, , F-300, SB, SB-7, SSB and SSB-7)

This pressure drop chart is based on the flow of clean water through the Keckley "Y" strainers listed above with screen perforations ranging from $3 / 64$ " through $1 / 8^{\prime \prime}$ and is additionally for use with those units equipped with a 20 mesh screen as standard.

## TO USE CHARTS:

Find your desired rate of flow (GPM) on the left hand side of the chart. Follow its corresponding horizontal line to the point where it intersects the diagonal line indicating the strainer pipe size. From this point of intersection, follow the vertical line down to the bottom of the chart to determine the approximate pressure drop.

## CORRECTION FACTORS:

For finer mesh screens that are backed with a perforated sheet, multiply the pressure drops shown at right by the following:

| 40 mesh | x 1.2 |
| :--- | :--- |
| 60 mesh | x 1.4 |
| 80 mesh | x 1.6 |
| 100 mesh | x 1.7 |



