

Style SB7

Y-Strainer

Carbon Steel (ASTM A 216, Grade WCB)

Class 600 NPT

Class 600 Socket Weld



Cast Carbon Steel Y-Strainer

APPLICATIONS

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

CONSTRUCTION

The Keckley Style SB7 strainers are constructed from rugged carbon 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 SB7 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 SB7 strainers can be supplied with a carbon 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 *liquid* will be supplied.

SELF CLEANING

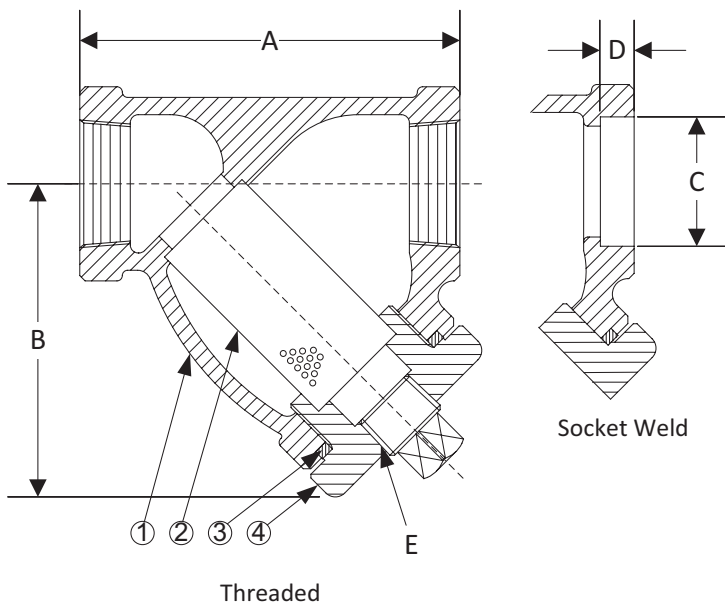
Self cleaning is accomplished by opening the valve or drain plug connected to the blow-off port. **Warning:** See Maintenance Instructions on page S6 of the Strainer Information Section for additional precautions and detailed information on servicing the strainer.

WORKING PRESSURES - NON SHOCK

NOM. RATING	MEDIA	1/4" to 3"	8 mm to 80 mm
CLASS 600	STEAM	600 PSI @ 838°F	4138 KPa @ 448°C
	W.O.G.	1480 PSI @ 100°F	10208 KPa @ 38°C

Style SB7

Y-Strainer, Class 600 NPT & Socket Weld Carbon Steel (ASTM A 216, Grade WCB)



ITEM	DESCRIPTION	MATERIAL
1	Body	Carbon Steel (ASTM A 216, Grade WCB)
2	Screen	Stainless Steel (304)
3	Gasket	Spiral Wound Stainless Steel (304)
4	Cap	Carbon Steel (ASTM A 216, Grade WCB)

*Optional Body Materials Available in LCB, WC6, and WC9.

STANDARD SCREENS SUPPLIED

SIZE		SCREEN PERFORATION					
		FOR LIQUID		OPEN AREA	FOR STEAM		OPEN AREA
in	mm	in	mm		in	mm	
1/4 to 3	8 to 80	1/16"	1.6	30%	3/64	1.2	33%

Options: Other perforations, meshes, and screen materials are available.

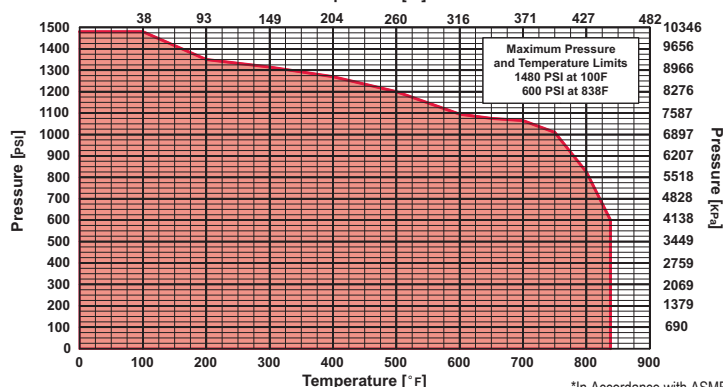
SIZE		DIMENSIONS										WEIGHTS	
		A		B		C		D		E			
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lbs	kgs
1/4	8	2-15/16	75	2-7/16	62	0.555	14	3/8	10	1/4	8	2	0.76
3/8	10	2-15/16	75	2-7/16	62	0.690	18	3/8	10	1/4	8	2	0.76
1/2	15	2-15/16	75	2-7/16	62	0.855	22	3/8	10	1/4	8	2	0.76
3/4	20	3-11/16	94	3	76	1.065	27	1/2	13	3/8	10	3	1.21
1	22	4-9/16	116	4-5/16	110	1.330	34	1/2	13	3/8	10	6	2.33
1-1/4	32	4-15/16	125	4-3/16	106	1.675	43	1/2	13	3/4	20	7	3.02
1-1/2	40	5-9/16	141	4-11/16	119	1.915	49	1/2	13	3/4	20	9	3.98
2	50	6-15/16	176	6-1/4	159	2.406	61	5/8	16	1	25	15	6.80
2-1/2	65	12	305	9-3/8	238	2.906	74	5/8	16	1-1/4	32	34	15.03
3	80	12	305	9-3/8	238	3.535	90	5/8	16	1-1/4	32	36	15.97

and socket weld strainers have a tolerance in compliance with ASME B16.11.

Size	C _V	Size	C _V	Size	C _V
1/4"	9.5	1"	30	2-1/2"	129.7
3/8"	9.5	1-1/4"	44.9	3"	161.3
1/2"	9.5	1-1/2"	61		
3/4"	18.7	2"	98		

Size	(in ²)	Size	(in ²)	Size	(in ²)
1/4"	2.75	1"	10.08	2-1/2"	78.14
3/8"	2.75	1-1/4"	12.79	3"	78.14
1/2"	2.75	1-1/2"	16.33		
3/4"	4.71	2"	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.

Temperature [$^{\circ}\text{C}$]

*In Accordance with ASME B16.34

PRESSURE DROP CHART

NPT “Y” Pattern Strainers (Styles B, BDI, E150, F150, F300, SB, SB7, SSB and SSB7)

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” 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

