

# Style B

Y-Strainer
Cast Iron (ASTM A 126, Class B)
Class 250 NPT



\*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.

# Cast Iron Y-Strainer (Lead Free\*)

#### **APPLICATIONS**

Where protection from foreign matter in a pipeline is required.

### CONSTRUCTION

The Keckley Style B strainers are constructed from rugged cast iron castings that are machined to exacting specifications.

#### **FEATURES**

The Keckley Style B features a tapered bushing in sizes ½" thru 2" and bolted cover with gasket for sizes 2-1/2", 3" and 4". All Keckley Style B strainers are furnished standard with a NPT blow-off connection and can be supplied with a cast iron blow-off plug upon request.

#### **SCREENS**

Standard screens are 20 mesh 304 stainless steel through size 2". Sizes 2-1/2", 3" and 4" are furnished with 1/16" perforated 304 stainless steel screens. All screens are spot welded 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 *water* 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	1/4" to 4"	8 mm to 100 mm		
CL ASS 350	400 PSI @ 150°F	2759 KPa @ 66°C		
CLASS 250	250 PSI @ 406°F	1724 KPa @ 208°C		

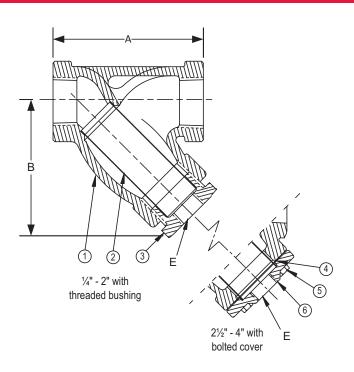
Values listed represent typical market and service applications. Due to numerous variables (concentrations, temperatures, and flow) present in any application, no representation or guarantee, expressed or implied, is given.

## **GOVERNMENT/MILITARY SPECIFICATIONS**

Style B cast iron threaded strainers meet or exceed government specification WW-S-2739 (Supersedes MIL-S-16293).



#### TECHNICAL DATA **DIMENSIONS AND WEIGHTS**



Style B Y-Strainer, Class 250 NPT Cast Iron (ASTM A 126, Class B) Lead Free\*

PARTS LIST					
ITEM	DESCRIPTION	MATERIAL			
1	Body	Cast Iron (ASTM A 126, Class B)			
2	Screen	Stainless Steel (304)			
3	Bushing	Malleable Iron			
4	Gasket*	Composition			
5	Cap Screw*	Steel			
6	Cover*	Cast Iron (ASTM A 126, Class B)			

Optional: Blow-off Plug, Malleable Iron

\*2 ½", 3" & 4" only.

#### STANDARD SCREENS SUPPLIED

er.	76	SCREEN PERFORATION					
31	SIZE FOR LIQUID (		OPEN	FOR STEAM		OPEN	
in	mm	in	mm	AREA	in	mm	AREA
1/4 to 2	8 to 50		20 MESH STAINLESS STEEL				
2-1/2 to 4	65 to 100	1/16	1.6	30%	3/64	1.2	33%

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

CI	ZE	DIMENSIONS						WEIGHTO	
31.	ZE	-	A	E	В Е		WEIGHTS		
in	mm	in	mm	in	mm	in	mm	lbs	kgs
1/4	8	3	76	2-5/8	67	3/8	10	2	0.9
3/8	10	3	76	2-5/8	67	3/8	10	2	0.9
1/2	15	3	76	2-5/8	67	3/8	10	2	0.9
3/4	20	4	102	3-5/8	92	1/2	15	3	1.4
1	25	4-7/8	124	4-1/2	114	3/4	20	4.5	2.0
1-1/4	32	5-1/8	130	4-3/4	121	3/4	20	6	2.7
1-1/2	40	5-3/4	146	4-7/8	124	1	25	8	3.6
2	50	7-1/4	184	5-3/4	146	1-1/4	32	15.5	7.0
2-1/2	65	8-7/8	225	7-1/2	191	1-1/4	32	25	11.3
3	80	10	254	8	203	1-1/2	40	36	16.3
4	100	15-1/4	387	12-1/2	318	2	50	95	43.1

<sup>&</sup>lt;sup>†</sup>This table reflects only the nearest metric equivalents.

Dimensions and weights are for reference only. When required, request certified drawings.

Face to face values have a tolerance in compliance with ASME B16.4.

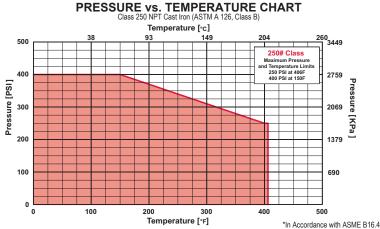
#### **FLOW COEFFICIENTS**

Size	C <sub>v</sub>	Size	C <sub>v</sub>	Size	C <sub>v</sub>
1/2"	9.5	1-1/4"	44.9	2-1/2"	129.7
3/4"	18.7	1-1/2"	61	3"	161.3
1"	30	2"	98	4"	256.2

#### **TOTAL SCREEN AREA**

Size	(in²)	Size	(in²)	Size	(in²)
1/2"	5.50	1-1/4"	18.69	2-1/2"	54.13
3/4"	8.59	1-1/2"	23.37	3"	73.51
1"	15 22	2"	36 23	4"	154 98

\*See DETERMINING RATIOS on page \$5 of the Strainer Information Section for calculating NET FREE AREA of the screen to inside pipe area.



<sup>\*</sup>The wetted surface of this product contacted by consumbale water contains less than 0.25% of lead by weight.



## PRESSURE DROP CHART

NPT "Y" Pattern Strainers (Styles B, BDI, E150, F150, F300, SB7, SB7BC, SBF, SSB7, SSB7BC and SSBF)

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

 150 mesh
 x 1.8

 200 mesh
 x 2.0

