

Style F7

Y-Strainer

Cast Bronze (ASTM B 584, C87850)

Class 125 NPT



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

Style E7

Y-Strainer

Cast Bronze (ASTM B 584, C87850)

Class 125 Solder Joint



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

Bronze Y-Strainer (Lead Free*)

APPLICATIONS

Where protection from foreign matter in a pipeline is required.

CONSTRUCTION

The Keckley Style F7 & E7 strainers are constructed from the finest bronze castings and are machined to exacting specifications.

Solder Joint Ends are in compliance with ASME B16.18 unless otherwise specified.

FEATURES

The Keckley Style F7 & E7 strainers feature a machined seat in the body and cap for proper alignment and to ensure accurate reseating when servicing is required. These strainers have a straight threaded cap and are furnished standard with a NPT blow-off connection. The gasket is a flat PTFE gasket that is compressed between the body and cap for maximum strength and durability. Keckley Style F7 & E7 strainers are furnished with a bronze blow-off plug unless otherwise specified.

SCREENS

Standard screens are 20 mesh 304 stainless steel through size 2". Sizes 2-1/2" and 3" are furnished with 3/64" 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.

SELF CLEANING

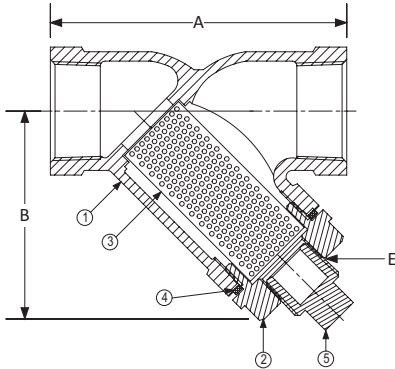
Self cleaning is accomplished by opening the valve or drain plug connected to the blow-off port. **Warning:** See Maintenance Instructions on page S6 of the Strainer Information Section for additional precautions and detailed information on servicing the strainer.

WORKING PRESSURES - NON SHOCK

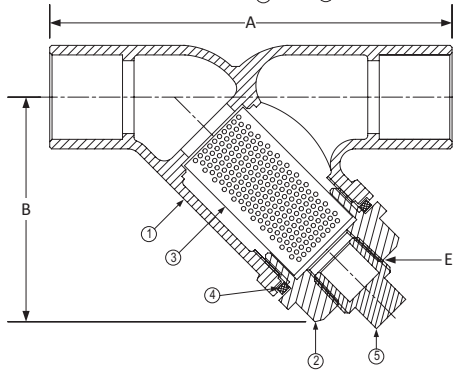
NOM. RATING	1/4" to 3"	8 mm to 80 mm
CLASS 125	200 PSI @ 150°F	1379 KPa @ 66°C
	125 PSI @ 400°F	862 KPa @ 204°C

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.

Style F7
(Threaded)



Style E7
(Solder Joint)



Style F7 & E7

Y-Strainer, Class 125 NPT & Solder Joint
Bronze (ASTM B 584, C87850) Lead Free*

PARTS LIST

ITEM	DESCRIPTION	MATERIAL
1	Body	Bronze (ASTM B 584, C87850)
2	Cap	Bronze (ASTM B 584, C87850)
3	Screen	Stainless Steel (304)
4	Gasket	PTFE
5	Plug	Bronze (ASTM B 584, C87850)

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

STANDARD SCREENS SUPPLIED

SIZE		SCREEN PERFORATION					
		FOR LIQUID		OPEN AREA	FOR STEAM		OPEN AREA
in	mm	in	mm		in	mm	
1/4 to 2	8 to 50	20 MESH STAINLESS STEEL					49%
2-1/2 to 3	65 to 80	3/64	1.2	33%	3/64	1.2	33%

Standard screens supplied are for **liquid service**, unless otherwise specified.

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

SIZE		DIMENSIONS												WEIGHTS			
		A				B				E							
		F7		E7		F7		E7		F7		E7					
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lbs	kgs	lbs	kgs
1/4	8	2-9/16	65	2-1/16	53	1-7/8	48	1-3/8	35	1/4	8	1/8	6	0.63	0.29	0.20	0.09
3/8	10	2-9/16	65	3-1/8	80	1-7/8	48	1-13/16	46	1/4	8	1/4	8	0.58	0.26	0.46	0.21
1/2	15	2-9/16	65	3-1/8	80	1-7/8	48	1-15/16	49	1/4	8	1/4	8	0.55	0.25	0.48	0.22
3/4	20	3	77	4-1/8	105	2-1/4	57	2-5/16	59	3/8	10	3/8	10	0.87	0.39	0.86	0.39
1	25	3-3/4	95	4-15/16	125	2-7/16	62	2-5/8	67	1/2	15	1/2	15	1.38	0.63	1.25	0.57
1-1/4	32	4-7/16	113	5-11/16	145	3-3/8	86	3-1/4	83	1/2	15	1/2	15	2.90	1.32	2.06	0.93
1-1/2	40	4-7/8	123	6-5/8	170	3-9/16	91	3-11/16	94	3/4	20	3/4	20	3.27	1.48	2.93	1.33
2	50	5-1/4	133	8-1/4	210	4-5/16	110	4-1/2	114	1	25	1	25	4.99	2.26	5.48	2.49
2-1/2	65	6-15/16	175	9-3/4	247.5	5	127	5-3/8	137	1-1/4	32	1-1/4	32	9.88	4.48	10.16	4.61
3	80	7-7/8	200	11-3/8	289	5-5/8	143	6-1/8	156	1-1/2	40	1-1/2	40	14.20	6.44	14.30	6.49

*This table reflects only the nearest metric equivalents.

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

Face to face values for threaded strainers have a tolerance in compliance with ASME B16.15

and solder joint strainers have a tolerance in compliance with ASME B16.18.

FLOW COEFFICIENTS

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		

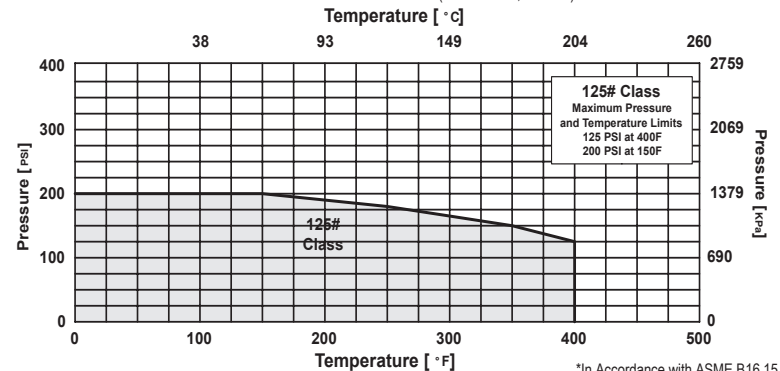
TOTAL SCREEN AREA

Size	(in ²)	Size	(in ²)	Size	(in ²)
1/4"	2.92	1"	6.70	2-1/2"	34.06
3/8"	2.92	1-1/4"	12.25	3"	47.01
1/2"	2.92	1-1/2"	14.58		
3/4"	4.34	2"	22.88		

*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

Class 125 NPT & Solder Joint Bronze (ASTM B 584, C87850)



PRESSURE DROP CHART

“Y” Pattern Strainers

(Styles B, BDI, E150, F150, E300, F300, E7, F7, 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

