KECKLEY

Style A7

Y-Strainer
Cast Iron (ASTM A 126, Class B)
Class 125 FF Flanged

Cast Iron Y-Strainer

APPLICATIONS

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

CONSTRUCTION

The Keckley Style A7 strainers are constructed from rugged cast iron castings that are machined to exacting specifications. These bodies have drilled flanges that are in accordance with ASME B16.1.

FEATURES

The Keckley Style A7 strainer features a machined groove in both the body and cover for proper screen alignment and to ensure accurate reseating when servicing is required. Style A7 strainers are furnished with a synthetic fiber that is compressed between the body and cover for maximum strength and durability. Keckley Style A7 strainers, sizes 2" - 12", are supplied with ¼" NPT DP taps.

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 the 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	MEDIA	2" to 12"	50 mm to 300 mm
CLASS 125	STEAM	125 PSI @ 450ºF	862 KPa @ 232ºC
	W.O.G.	200 PSI @ 150ºF	1379 KPa @ 66ºC
	MEDIA	**14" and UP**	**350 mm and UP**
	STEAM	100 PSI @ 353ºF	690 KPa @ 178ºC
	W.O.G.	150 PSI @ 150ºF	1035 KPa @ 66ºC

GOVERNMENT/MILITARY SPECIFICATIONS

Style A7 cast iron flanged strainers meet or exceed government specification WW-S-2739 (Supersedes MIL-S-16293).

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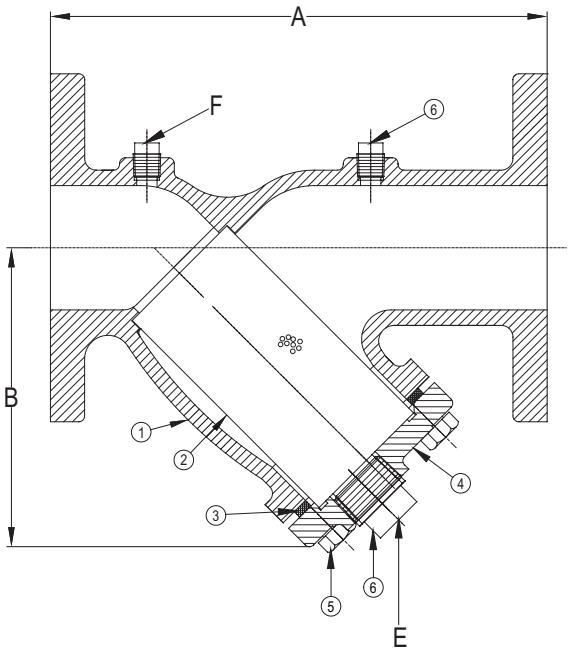
TECHNICAL DATA
DIMENSIONS AND WEIGHTS

Style A7

Y-Strainer, Class 125 FF Flanged
Cast Iron (ASTM A 126, Class B)



DP Taps are only on sizes 2" - 12".
"F" dimension is ¼" NPT for sizes 2" - 12".

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

STANDARD SCREENS SUPPLIED

SIZE		SCREEN PERFORATION					
		FOR LIQUID		OPEN	FOR STEAM		OPEN
in	mm	in	mm	AREA	in	mm	AREA
2 to 4	50 to 100	1/16	1.6	30%	3/64	1.2	33%
5 to 10	125 to 250	1/8	3.2	43%	3/64	1.2	33%
12	300	1/8	3.2	43%	1/16	1.6	30%
14 & up	350 & UP	1/8	3.2	43%	1/8	3.2	43%

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

SIZE		DIMENSIONS						WEIGHTS	
		A		B		E			
in	mm	in	mm	in	mm	in	mm	lbs	kgs
2	50	7-7/8	200	5-1/16	129	1/2	15	17	8
2-1/2	65	10	254	6-1/8	156	1	25	24	11
3	80	10-1/8	257	6-9/16	167	1	25	31	14
4	100	12-1/8	308	8-1/16	205	1-1/2	40	50	23
5	125	15-5/8	397	11	278	2	50	86	39
6	150	18-1/2	470	12-5/8	322	2	50	114	52
8	200	21-5/8	549	15-5/8	396	2	50	203	92
10	250	25-3/4	654	17-3/4	451	2	50	293	133
12	300	29-7/8	759	21-5/16	542	2	50	489	222
14	350	33-1/4	846	26-3/4	680	2	50	772	350
16	400	38-3/4	984	30-1/8	765	2	50	994	451
18	450	43-1/2	1105	33-1/4	845	2	50	1379	626
20	500	49/1/2	1257	39-1/4	997	2	50	1652	750
24	600	55-13/16	1418	41	1041	2	50	3400	1542

†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 B16.1.

FLOW COEFFICIENTS

Size	C_v	Size	C_v	Size	C_v	Size	C_v
2"	62	5"	364	12"	2261	20"	8064
2 ½"	98	6"	585	14"	3479		
3"	155	8"	942	16"	5060		
4"	269	10"	1572	18"	6008		

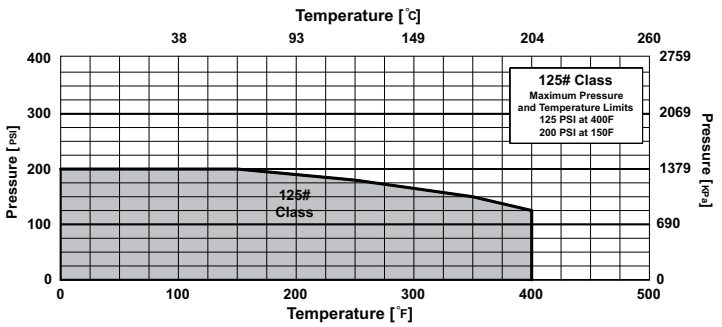
TOTAL SCREEN AREA

Size	(in²)	Size	(in²)	Size	(in²)	Size	(in²)
2"	28.84	5"	143.94	12"	596.07	20"	2947.1
2 ½"	45.47	6"	237.76	14"	1175.30		
3"	54.68	8"	345.30	16"	1471.34		
4"	91.12	10"	537.30	18"	2381.54		

*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 FF Flanged Cast Iron (ASTM A 126, Class B)
Suitable for use with pipe sizes up to 12"



*In Accordance with ASME B16.1

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PRESSURE DROP CHART

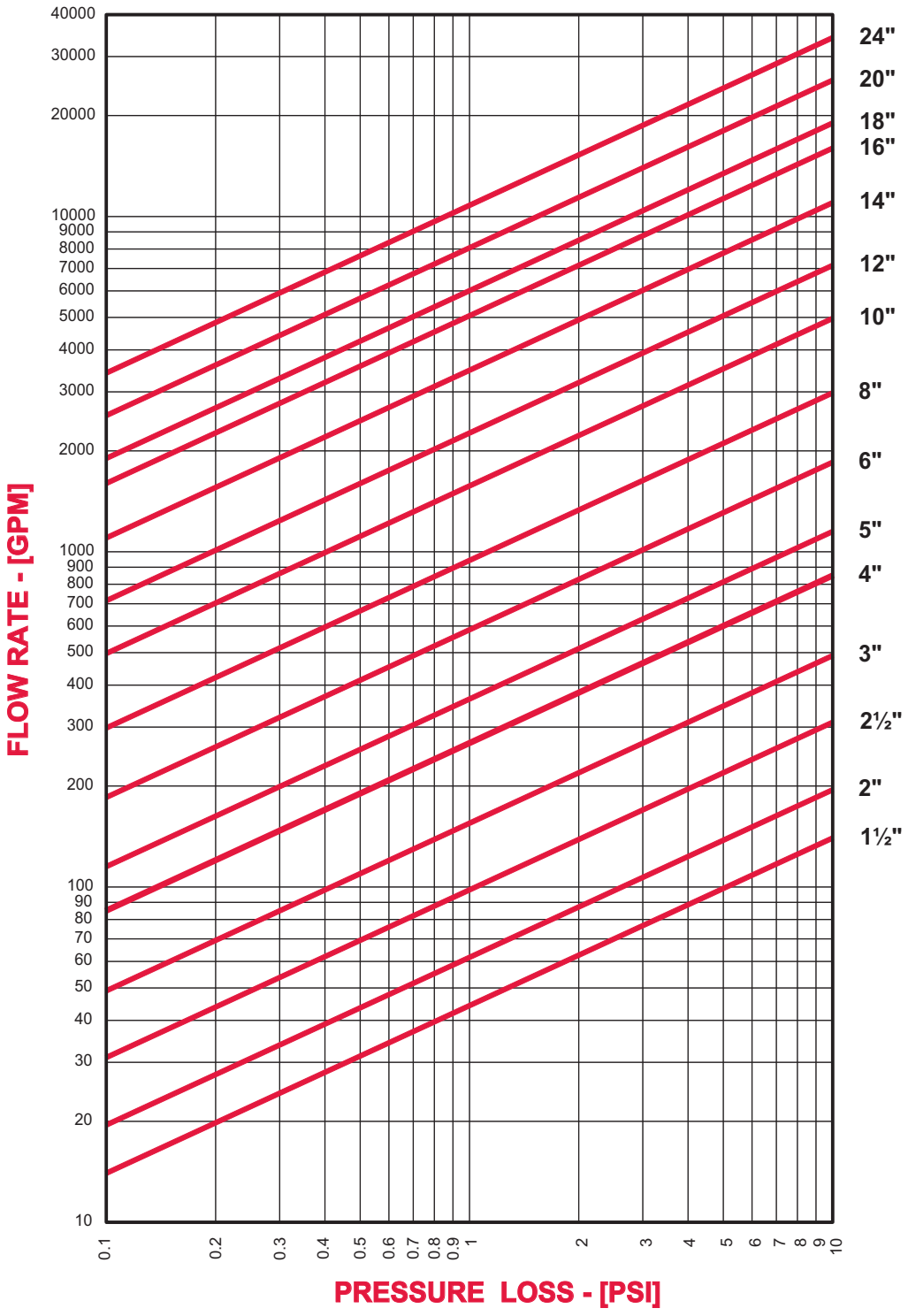
Flanged "Y" Pattern Strainers (Styles A, BA, BA7, SA, SA7, SSA and SSA7)

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".

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