

# Style D & DV

Basket Strainer

Cast Iron (ASTMA 126, Class B)

Class 125 FF Flanged

Class 250 RF Flanged



# Cast Iron Basket Strainer

## APPLICATIONS

Where protection from foreign matter in a pipeline is required.

## CONSTRUCTION

The Keckley Style D & DV 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 D & DV strainers feature a machined basket seat to minimize particle bypass. All sizes have a bolted top cover flange for ease in basket removal. The gasket is a synthetic fiber gasket is compressed between the body and cover for maximum strength and durability. All Keckley Style D & DV strainers are furnished standard with a tapped and plugged NPT drain connection.

## BASKETS

Standard baskets are 304 stainless steel and 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.

## CLEANING

Cleaning of the Style D strainer is accomplished by removing the cover and pulling out the basket. The Style DV basket has an open bottom and is cleaned by blowing trapped material out through the blow-off connection similar to a "Y" type strainer. **Warning:** See Maintenance Instructions on page S6 of the Strainer Information Section for additional precautions and detailed information on servicing the strainer.

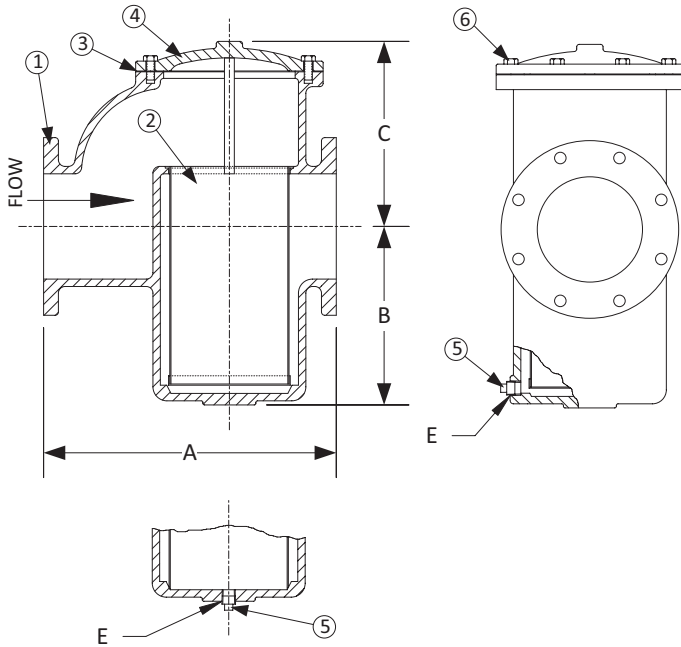
## WORKING PRESSURES - NON SHOCK

NOM. RATING	2" to 12"	50 mm to 300 mm
CLASS 125	200 PSI @ 150°F	1379 KPa @ 66°C
	125 PSI @ 450°F	862 KPa @ 232°C
NOM. RATING	2" to 12"	50 mm to 300 mm
CLASS 250	500 PSI @ 150°F	3449 KPa @ 66°C
	250 PSI @ 450°F	1724 KPa @ 232°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 D & DV cast iron flanged basket strainers meet or exceed government specification WW-S-2739 (Supersedes MIL-S-16293).



Style DV has a bottom blow off with an open bottom basket.

## Style D & DV

Basket Strainer, Class 125 FF Flanged & Class 250 RF Flanged  
Cast Iron (ASTM A 126, Class B)

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

STANDARD SCREENS SUPPLIED							
SIZE		SCREEN PERFORATION					
in	mm	FOR LIQUID		OPEN AREA	FOR STEAM		OPEN AREA
		in	mm		in	mm	
2 to 4	50 to 100	1/16	1.6	30%	3/64	1.2	33%
5 to 12	125 to 300	1/8	3.2	43%	1/16	1.6	30%

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

SIZE		DIMENSIONS										WEIGHTS			
		A		B		C		E		Class 125		Class 250			
		Class 125		Class 250		Class 125 & 250		Class 125 & 250		Class 125 & 250		lbs	kgs	lbs	kgs
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lbs	kgs	lbs	kgs
2	50	8	203	8-1/2	216	3-15/16	100	5-1/4	133	1/2	15	23	10	29	13
2-1/2	65	9	229	9-5/8	245	4	102	6	152	1/2	15	33	15	42	19
3	80	10	254	10-3/4	273	5	127	7	178	1/2	15	45	21	55	25
4	100	13-1/4	337	13-7/8	352	6-3/4	171	9-1/2	241	1/2	15	116	53	122	55
5	125	16-7/8	429	17-3/4	451	9-7/8	251	12	305	3/4	20	165	75	195	88
6	150	17	432	17-7/8	454	9-7/8	251	12	305	3/4	20	175	79	211	96
8	200	22-1/4	565	23-1/4	591	13-3/4	349	14	356	3/4	20	345	156	410	186
10	250	26	660	27-3/8	695	17	432	18	457	3/4	20	688	312	748	339
12	300	30-1/4	768	31-3/4	806	20-5/8	524	21	533	2	50	1135	515	1285	583

Certified dimensional drawings are available upon request.

†This table reflects only the nearest metric equivalents.

Face to face values tolerance in compliance with ASME B16.1.

### FLOW COEFFICIENTS

Size	C <sub>v</sub>	Size	C <sub>v</sub>	Size	C <sub>v</sub>
2"	55.7	4"	208.7	8"	784.3
2-1/2"	88.5	5"	354.2	10"	1208.0
3"	123.3	6"	430.1	12"	1868.9

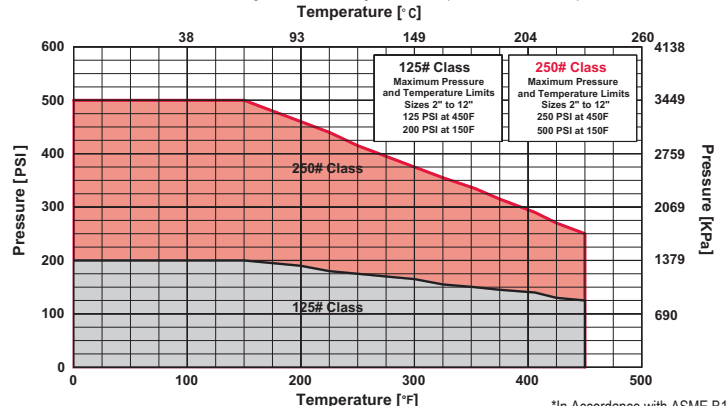
### TOTAL SCREEN AREA

Size	(in <sup>2</sup> )	Size	(in <sup>2</sup> )	Size	(in <sup>2</sup> )
2"	39.45	4"	152.58	8"	529.98
2-1/2"	51.66	5"	295.54	10"	808.58
3"	84.84	6"	295.54	12"	1252.0

\*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 & 250 RF Flanged Cast Iron (ASTM A 126, Class B)



# PRESSURE DROP CHART

## Basket Strainers (Styles D, DV, BD, BDV, SD, SDK, SSD, AND SSDK)

This pressure drop chart is based on the flow of clean water through the Keckley strainer styles 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 baskets 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

