

# Style GFV

Basket Strainer

Cast Iron (ASTM A 126, Class B)

Class 125 FF Flanged

Class 250 RF Flanged



## Cast Iron Basket Strainer

### APPLICATIONS

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

### CONSTRUCTION

The Keckley Style GFV 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 GFV strainers feature a basket with an angular cutaway design to allow straight through flow and extremely low pressure loss. All sizes have a bolted top cover flange for ease in basket removal. The gasket is a synthetic fiber and is compressed between the body and cover for maximum strength and durability. Keckley Style GFV 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 GFV strainer is accomplished by removing the cover and pulling out the basket. **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 @ 450°F	862 KPa @ 232°C
	W.O.G.	200 PSI @ 150°F	1379 KPa @ 66°C
	<b>MEDIA</b>	<b>14" and UP</b>	<b>350 mm and UP</b>
	STEAM	100 PSI @ 353°F	690 KPa @ 178°C
CLASS 250	W.O.G.	150 PSI @ 150°F	1035 KPa @ 66°C
	<b>NOM. RATING</b>	<b>2" to 6"</b>	<b>50 mm to 150 mm</b>
	STEAM	250 PSI @ 450°F	1724 KPa @ 232°C
	W.O.G.	500 PSI @ 150°F	3449 KPa @ 66°C

### GOVERNMENT/MILITARY SPECIFICATIONS

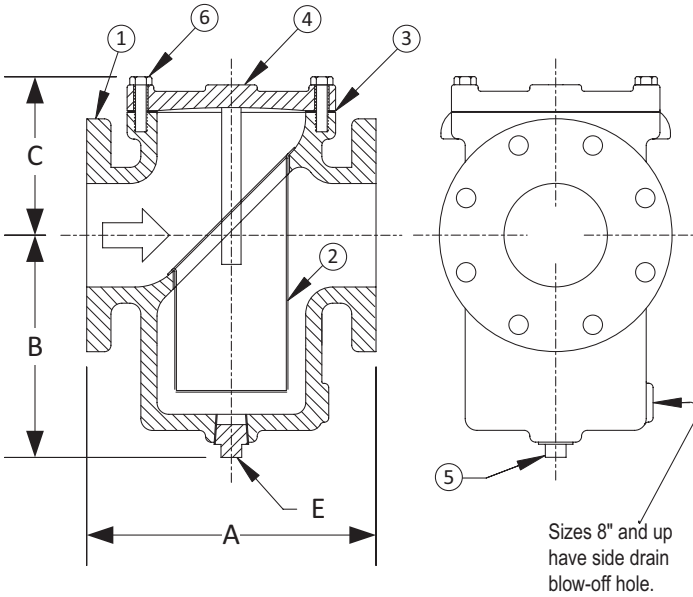
Style GFV cast iron flanged basket strainers meet or exceed government specification WW-S-2739 (Supersedes MIL-S-16293).

# Style GFV

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					
		FOR LIQUID		OPEN AREA	FOR STEAM		OPEN AREA
in	mm	in	mm		in	mm	
2 to 4	50 to 100	1/16	1.6	30%	3/64	1.2	33%
5 to 16	125 to 400	1/8	3.2	43%	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															
		A				B				C				E			
		Class 125		Class 250		Class 125		Class 250		Class 125		Class 250		Class 125		Class 250	
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
2	50	8	203	8-1/2	216	6	152	3-7/8	98	3-1/2	89	5-1/4	133	3/4	20	1/2	15
2-1/2	65	8-1/4	210	9-1/4	235	7	178	5-3/4	146	3-3/4	95	5-1/4	133	3/4	20	3/4	20
3	80	9-3/4	248	9-1/2	241	8-1/4	210	5-3/4	146	4-1/4	108	5-1/4	133	3/4	20	3/4	20
4	100	11-1/2	292	11-13/16	300	9	229	8-9/16	217	4-3/4	121	6	152	1	25	1	25
5	125	13-1/8	333	15-3/8	391	9-3/4	248	10-1/2	267	6	152	7-3/4	197	1	25	1	25
6	150	14-3/4	375	15-1/2	394	10-1/2	267	10-1/2	267	6-1/4	159	7-3/4	197	1	25	1	25
8	200	18-1/2	470	See Style D 250 lb.		12-3/4	324	See Style D 250 lb.		9	229	See Style D 250 lb.		1-1/2	40	See Style D 250 lb.	
10	250	20-1/8	511			14-3/4	375			10-3/4	273			1-1/2	40		
12	300	26-1/4	667			17-1/2	445			13-1/2	343			2	50		
14	350	30-1/4	768	Consult Factory		23-1/2	591	Consult Factory		14-1/4	362	Consult Factory		3	80	Consult Factory	
16	400	33-1/8	841			24-1/4	616			15	381			3	80		

Consult factory for sizes not shown.

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.

WEIGHTS												
Size	2"	2-1/2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	
125	lbs	23	33	44	67	88	120	220	353	523	814	1041
	kgs	10	15	20	30	40	54	100	160	237	369	472
250	lbs	29	53	65	107	187	224	See Style D 250 lb.				
	kgs	13	24	29	49	85	102					

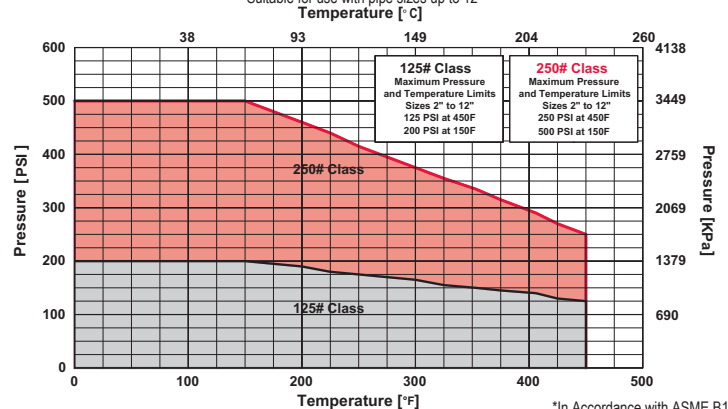
FLOW COEFFICIENTS					
Size	C <sub>v</sub>	Size	C <sub>v</sub>	Size	C <sub>v</sub>
2"	42.7	4"	276.7	8"	1486.3
2-1/2"	77.5	5"	442.7	10"	3051.6
3"	120.2	6"	743.1	12"	4980.6

TOTAL SCREEN AREA					
Size	(in <sup>2</sup> )	Size	(in <sup>2</sup> )	Size	(in <sup>2</sup> )
2"	29.27	4"	108.44	8"	310.03
2-1/2"	45.11	5"	142.29	10"	457.06
3"	78.20	6"	176.75	12"	691.07

\*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 & Class 250 RF Flanged Cast Iron (ASTM A 126, Class B)  
Suitable for use with pipe sizes up to 12"



\*In Accordance with ASME B16.1

# PRESSURE DROP CHART

## Basket Strainers (Styles GFV, GFVK, GFVK7, BGFV, SGFV, SGFVK, SSGFV, and SSGFVK)

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

