

# Style SD

Basket Strainer

Carbon Steel (ASTM A 216, Grade WCB)

300 lb. Threaded



# Style SDK

Basket Strainer

Carbon Steel (ASTM A 216, Grade WCB)

150 lb. Threaded



## Cast Carbon Steel Basket Strainer

### APPLICATIONS

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

### CONSTRUCTION

The Keckley Style SD and SDK strainers are constructed from rugged carbon steel castings that are machined to exacting specifications.

### FEATURES

The Keckley Style SD and SDK strainers feature a machined basket seat to minimize particle bypass. The Style SD has a spiral wound 304 stainless steel gasket and is compressed between the body and cover (for maximum strength and durability) and designed for high pressure and high temperature service. The Style SDK is furnished with a Buna-N o-ring and is limited to 150°F. Keckley threaded Style SD strainers have carbon steel hex head cap screws. All units are furnished standard with a tapped and plugged NPT drain connection.

### BASKETS

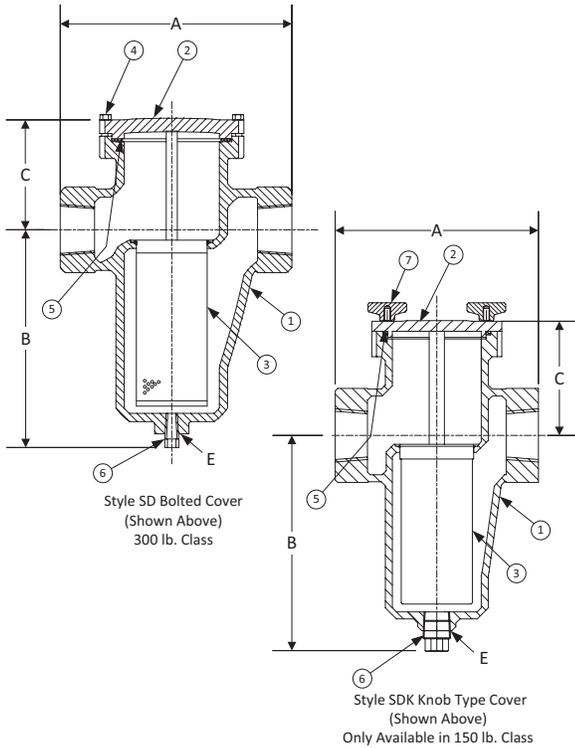
Standard baskets are 304 stainless steel and are spot welded for maximum strength. Different size perforations and meshes are available in stainless steel, monel, and brass to meet specific media requirements. If media is not indicated, screens for *water* will be supplied.

### CLEANING

Cleaning of the Style SD and SDK strainers are 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	3/8" to 3"	10 mm to 80 mm
300# (THREADED)	BOLTED COVER	STEAM	300 PSI @ 838°F	2069 KPa @ 448°C
		W.O.G.	740 PSI @ 100°F	5104 KPa @ 66°C
NOM. RATING		MEDIA	3/8" to 3"	10 mm to 80 mm
150# (THREADED)	KNOB TYPE COVER	W.O.G.	200 PSI @ 150°F	1379 KPa @ 66°C



# Style SD & SDK

## Basket Strainer, Threaded

### Carbon Steel (ASTM A 216, Grade WCB)

PARTS LIST		
ITEM	DESCRIPTION	MATERIAL
1†	Body	Carbon Steel (ASTM A 216, Grade WCB)
2	Cover	Carbon Steel (ASTM A 216, Grade WCB)
3	Basket	Stainless Steel (304)
4	Hex Head Cap Screw	Carbon Steel (ASTM A 193, Grade B7)
5	Gasket	Spiral Wound Stainless Steel (304)
6	Plug	Carbon Steel (ASTM A 105)
7*	Knob	Carbon Steel (ASTM A 216, Grade WCB)
8*	O-ring	Buna-N (Max Temperature 150°F)

†Denotes parts for the Style SDK 150 lb. class only.  
\*Optional Body Materials Available in LCB, WC6, and WC9.

SIZE		SCREEN PERFORATION					
		FOR LIQUID		OPEN AREA	FOR STEAM		OPEN AREA
in	mm	in	mm		in	mm	
3/8 to 2	10 to 50	1/16	1.6	30%	1/32	0.8	29%
2-1/2 & 3	65 & 80	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.

SIZE		DIMENSIONS								WEIGHTS	
		A		B		C		E		lbs	kgs
in	mm	in	mm	in	mm	in	mm	in	mm		
3/8	10	4-9/16	116	4	102	3-1/8	79	3/8	10	7	2.78
1/2	15	4-9/16	116	4	102	3-1/8	79	3/8	10	7	2.78
3/4	20	4-9/16	116	4	102	3-1/8	79	3/8	10	7	2.78
1	25	5-5/16	135	4-7/8	124	3	76	3/8	10	8	3.58
1-1/4	32	6-5/16	160	6-1/2	165	4-1/8	105	1/2	15	14	6.30
1-1/2	40	6-5/16	160	6-1/2	165	4-1/8	105	1/2	15	14	6.30
2	50	8-1/4	210	7-7/8	200	4-3/4	121	3/4	20	25	11.30
2-1/2	65	9-5/8	245	8-3/4	222	4	102	1	25	48	21.75
3	80	11-1/4	286	11-3/8	289	5-7/8	149	1	25	48	21.75

Certified dimensional drawings are available upon request.  
†This table reflects only the nearest metric equivalents.  
Face to face values tolerance in compliance with ASME B16.34.

### FLOW COEFFICIENTS

Size	C <sub>v</sub>	Size	C <sub>v</sub>	Size	C <sub>v</sub>
3/8"	19.9	1"	19.9	2"	55.7
1/2"	19.9	1-1/4"	35.4	2-1/2"	88.5
3/4"	19.9	1-1/2"	35.4	3"	123.3

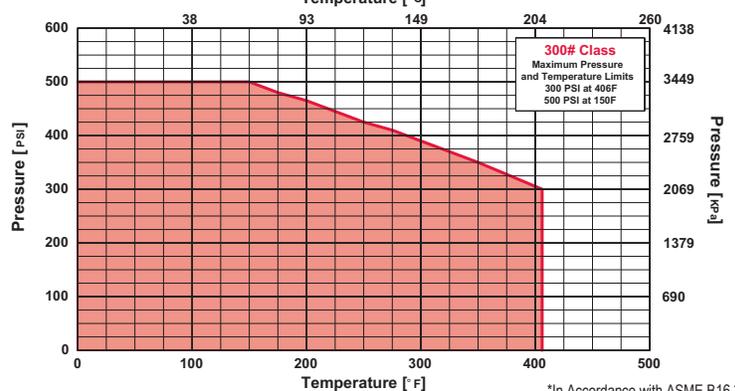
### TOTAL SCREEN AREA

Size	(in <sup>2</sup> )	Size	(in <sup>2</sup> )	Size	(in <sup>2</sup> )
3/8"	11.72	1"	19.17	2"	64.36
1/2"	11.72	1-1/4"	41.65	2-1/2"	67.60
3/4"	11.72	1-1/2"	41.65	3"	128.17

\*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

300# Threaded Carbon Steel (ASTM A 216, Grade WCB)  
For use with Bolted Cover Only



\*In Accordance with ASME B16.34

# 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

