



TITAN FLOW CONTROL, INC.

## SIMPLEX BASKET STRAINER ♦ FLANGED ENDS - FLAT FACE

### ASME CLASS 125 ♦ CAST IRON ♦ CLAMPED & BOLTED COVER

**MODELS: BS 55-CI**  
(CLAMPED COVER)

**BS 65-CI**  
(BOLTED COVER)

SIZES: 2" ~ 20"

BS 55-CI is shown with clamp cover and removable leg brackets

Side drain is standard, an optional bottom drain is available



## FEATURES

### ◇ VERSATILE - HIGH QUALITY DESIGN

THIS BASKET STRAINER IS AVAILABLE WITH EITHER A FULL RATED BOLTED COVER (BS65) OR CLAMPED COVER (BS55). BOTH MODELS ARE EPOXY PAINTED AND COME STANDARD WITH A PLUGGED SIDE DRAIN CONNECTION. LARGER SIZES (8" ~ 20") ALSO FEATURE REMOVABLE/ADJUSTABLE LEG BRACKETS.

### ◇ MINIMAL PRESSURE LOSS

PRESSURE LOSS IS MINIMIZED BY PROVIDING A SLANTED STRAINING ELEMENT DESIGN, A STRAIGHT-THROUGH FLOW PATH, AND A LARGE OPEN AREA RATIO. INLET AND OUTLET BOSSES ARE PROVIDED TO FACILITATE THE MOUNTING OF PRESSURE GAUGES TO MONITOR PRESSURE LOSS.

### ◇ LARGE STRAINING CAPACITY

WITH ITS LARGE BODY AND SIZEABLE STRAINING ELEMENT, THIS BASKET STRAINER HAS THE ABILITY TO STORE LARGE QUANTITIES OF DEBRIS WITHOUT AFFECTING PRESSURE LOSS - THUS MAXIMIZING TIME BETWEEN SERVICING.

### ◇ NUMEROUS STRAINING ELEMENT OPTIONS

STRAINING ELEMENTS ARE AVAILABLE IN A VARIETY OF PERFORATIONS, MESHES, AND MATERIALS. SPECIAL DESIGNS ARE ALSO AVAILABLE INCLUDING MAGNETIC, WEDGE WIRE, DRILLED PERFORATIONS, AND PLEATED STRAINING ELEMENTS. THE STANDARD MATERIAL FOR STRAINING ELEMENTS IS TYPE 304 STAINLESS STEEL.

### ◇ SELF-CLEANING OPTION

UTILIZING A MODIFIED STRAINING ELEMENT, THE BOTTOM DRAIN CAN BE FITTED WITH A TITAN FCI BALL VALVE TO ALLOW FOR THE AUTOMATIC CLEANING OR FLUSHING OF THE STRAINING ELEMENT WHILE KEEPING THE PIPELINE IN SERVICE.

### ◇ POTABLE WATER/FDA APPROVED COATINGS AVAILABLE



ADDITION TO ITS LEAD FREE, CAST IRON BODY, TITAN CAN PROVIDE NSF/ASME AND FDA APPROVED EPOXY COATINGS WHICH MAKE THIS PRODUCT SUITABLE FOR POTABLE WATER AND FOOD CONTACT APPLICATIONS. NUMEROUS OPTIONS ARE AVAILABLE. PLEASE CONTACT US FOR MORE DETAILS.

## TECHNICAL

### PRESSURE/TEMPERATURE RATING CAST IRON ASTM A126 GR. B - CLASS 125

BS 55-CI (Clamped Cover) (2" ~ 12")  
WOG (Non-shock): 200 PSI @ 100 °F

BS 65-CI (Bolted Cover) (2" ~ 12")  
WOG (Non-shock): 200 PSI @ 150 °F

BS 55-CI (Clamped Cover) (14" ~ 20")  
WOG (Non-shock): 100 PSI @ 100 °F

BS 65-CI (Bolted Cover) (14" ~ 20")  
WOG (Non-shock): 150 PSI @ 150 °F

## APPLICATIONS

**MARKETS:** WATER & WASTEWATER, PULP & PAPER, CHEMICAL & PETROCHEMICAL, PETROLEUM, OIL & GAS, TRANSPORTATION, MARINE INDUSTRY, AND FOOD INDUSTRY

**GENERAL APPLICATION:** SIMPLEX BASKET STRAINERS ARE INSTALLED INTO A PIPELINE SYSTEM TO REMOVE UNWANTED DEBRIS FROM THE PIPELINE FLOW. BASKET STRAINERS ARE COMMONLY USED IN HORIZONTAL PIPELINES WHERE DEBRIS LOADING IS HIGH AND THE COLLECTION OF SOLIDS IS REQUIRED. STRAINING IS ACCOMPLISHED VIA A PERFORATED OR MESH LINED STRAINING ELEMENT, INTERNAL TO THE BASKET STRAINER. IN GENERAL, THE SIZE OF THE PERFORATION OR MESH SHOULD BE SLIGHTLY SMALLER THAN THE SMALLEST DEBRIS PARTICLE TO BE REMOVED. IT IS IMPORTANT TO NOTE THAT THE CORRECT SIZE OF A BASKET STRAINER IS DETERMINED BY ITS JOB FUNCTION, NOT BY THE SIZE OF THE PIPELINE.

*The above data represents common market and service applications. No representation or guarantee, expressed or implied, is given due to the numerous variations of concentrations, temperatures and flow conditions that may occur during actual service.*



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**SIMPLEX BASKET STRAINER**

**BS 55-CI - (Clamped Cover)**  
**BS 65-CI - (Bolted Cover)**

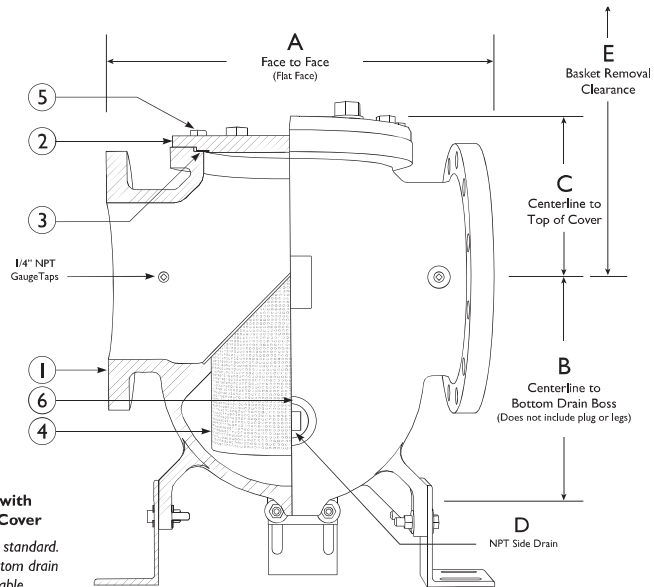
Flanged Ends • Flat Face • Cast Iron Body

ASME  
Class 125

**BILL OF MATERIALS (1)**

No.	PART	BS 65-CI	BS 55-CI
1	Body (2)	Cast Iron ASTM A126 Gr. B	
2	Cover	Cast Iron ASTM A126 Gr. B	
3	Cover Gasket (3)	Non-Asbestos - BS65(4)	Buna-N O-Ring - BS55
4	Straining Element (3)	Type 304 Stainless Steel	
5	Cap Screws	Zinc Plated Carbon Steel	
6	Plugs (Boss/Drain)	Cast Iron	
7	Clamp (5)	N/A	Cast Steel

- Equivalent or better materials may be substituted at the manufacturer's discretion.
- Cast Iron bodies are epoxy painted.
- Denotes recommended spare parts.
- Carbon Fiber Compressed gasket may be substituted at the manufacturer's discretion.
- Clamp cover for BS55 only.



**DIMENSIONS AND PERFORMANCE DATA (1)**

SIZE	in	2	2 1/2	3	4	5	6	8	10	12	14	16	20
	mm	50	65	80	100	125	150	200	250	300	350	400	500
<b>A DIMENSION (2)</b> FACE TO FACE	in	8.625	7.562	8.75	11.25	12.25	14.00	17.125	22.00	25.25	29.00	31.875	36.49
	mm	220	193	223	286	311	356	435	559	642	737	810	927
<b>B DIMENSION (3)</b> CTR. LINE TO BOTTOM	in	4.88	5.12	4.63	7.00	7.88	8.00	11.38	14.12	20.25	30.00	36.66	38.44
	mm	124	130	118	178	200	204	289	359	515	762	931	976
<b>C DIMENSION</b> CTR. LINE TO TOP	in	3.83	3.75	5.125	5.375	4.75	7.00	8.00	8.82	10.32	15.00	16.00	15.75
	mm	97	96	131	137	121	178	203	224	262	381	406	400
<b>D DIMENSION</b> NPT BLOW-OFF	in	1/2	3/4	3/4	1	1	1 1/4	1 1/2	1 1/2	2	2	2	2
	mm	15	20	20	25	25	32	40	40	50	50	50	50
<b>E DIMENSION</b> SCREEN REMOVAL	in	10.875	10.875	11.25	15.50	15.50	18.25	23.375	27.50	35.00	45.00	55.00	65.00
	mm	277	277	286	394	394	464	594	699	889	1143	1397	1651
ASSEMBLED WEIGHT (BS65)	lb	27.0	30.0	40.0	64.0	84.0	142.0	244.0	416.0	732.0	992	1735	C/F
	kg	12.2	13.6	18.1	29.0	38.1	64.4	110.6	188.5	332.0	450.0	787.0	C/F
ASSEMBLED WEIGHT (BS55)	lb	31.0	34.0	42.0	81.0	84.0	150.0	275.0	436.8	768.0	1246	C/F	C/F
	kg	14.0	15.4	19.0	36.7	38.1	68.0	124.7	197.8	348.4	565.2	C/F	C/F
Flow Coefficient	C <sub>v</sub>	45	90	140	290	500	800	1600	2800	3700	5100	6800	10900

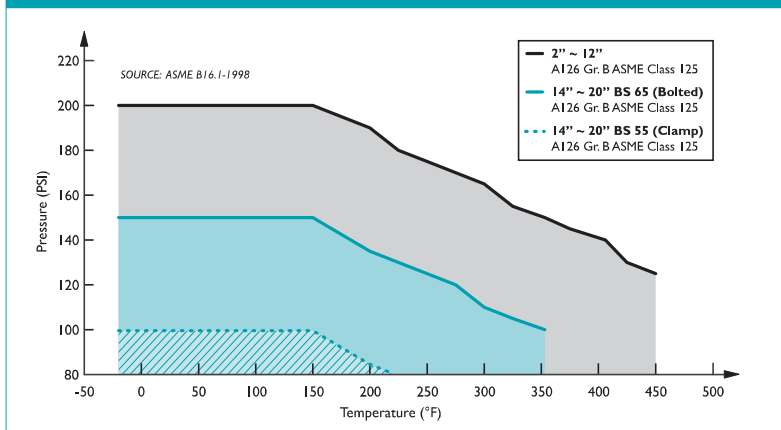
- Dimensions, weights, and flow coefficients are provided for reference only. When required request certified drawings.
- Face to face values have a tolerance of ±0.06 in (±2.0 mm) for sizes 10" and lower and a tolerance of ±0.12 in (±3.0 mm) for sizes 12" and larger.
- Removable/adjustable leg brackets are standard on sizes 8" through 20". Centerline to bottom dimension does not include removable legs, which can extend approximately three to five inches beyond the bottom boss drain.

**Additional Design & Technical Notes:**

- Inlet and outlet bosses are standard on sizes 8" through 14".
- Inlet and outlet 1/4" NPT gauge taps with plugs are standard on sizes 2" through 20".
- 1/4" cover vent taps with plugs are standard on all sizes.
- Straining element features a bow shaped handle that presses against the cover to help ensure the straining element remains securely seated during operation.
- Clamped cover design:  
 Sizes 2" ~ 4" are designed with (1) Tee Bolt  
 Size 6" is designed with (2) Tee Bolts  
 Sizes 8" ~ 16" are designed with (4) Tee Bolts  
 Size 20" is designed with (6) Tee Bolts



**PRESSURE - TEMPERATURE RATINGS**



**PRESSURE - TEMPERATURE RATING**

ASME CLASS 125	BS 65-CI (2 ~ 12")	BS 55-CI (2 ~ 12")
WOG (Non-shock)	200 PSI @ 150 °F	200 PSI @ 100 °F
ASME CLASS 125	BS 65-CI (14 ~ 20")	BS 55-CI (14 ~ 20")
WOG (Non-shock)	150 PSI @ 150 °F	100 PSI @ 100 °F

**REFERENCED STANDARDS & CODES**

CODE	DESCRIPTION
ASME B16.1	Cast Iron Pipe Flanges and Flanged Fittings

**STANDARD SCREEN SELECTIONS**

Size	Liquid	Open Area	Steam	Open Area
2" ~ 4"	1/16 (.0625)	41%	3/64 (.045)	36%
5" ~ 12"	1/8 (.125)	40%	3/64 (.045) (1)	36%

1. For 10" and above, consult factory on screen selections for steam.

Titan FCI makes every effort to ensure the information presented on our literature accurately reflects exact product specifications. However, as product changes occur, there may be short-term differences between actual product specifications and the information contained within our literature. Titan FCI reserves the right to make design and specification changes to improve our products without prior notification. When required, request certified drawings.