SIMPLEX BASKET STRAINER ❖ FLANGED ENDS (RF)

ANSI CLASS 150 ❖ CARBON AND STAINLESS STEEL

Titan Series - 85

MODELS: BS 85-CS
(CARBON STEEL)

BS 85-SS
(STAINLESS STEEL)

SIZES: 2" ~ 12"

Quick-opening clamp cover option is also available.

Quick-opening clamp cover rated at 200 PSI.

FEATURES

◇ **HIGH QUALITY DESIGN**
THE BS85 BASKET STRAINER BOASTS MANY UNIQUE DESIGN FEATURES INCLUDING: INLET/OUTLET BOSSES WITH GAUGE TAPS (2" AND UP), SPOT-FACED FLANGE BOLT HOLES, PLUGGED BOTTOM DRAIN AND COVER VENT, CAST-IN SUPPORT LEGS (6" AND UP), EPOXY PAINTED CARBON BODIES, ENCAPSULATED COVER GASKET, AND AN OPTIONAL QUICK-OPENING COVER DESIGN.

◇ **MINIMAL PRESSURE LOSS**
PRESSURE LOSS IS MINIMIZED BY PROVIDING A SLANTED STRAINING ELEMENT DESIGN AND STRAIGHT FLOW PATH. PLUGGED, NPT TAPS ARE PROVIDED (NEAR THE INLET AND OUTLET ON BOTH SIDES) ALLOWING FOR THE QUICK MOUNTING OF PRESSURE GAUGES TO MONITOR PRESSURE LOSS.

◇ **LARGE STRAINING CAPACITY**
WITH ITS LARGE BODY AND SIZEABLE STRAINING ELEMENT, THE BS 85-CS/SS 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.

TECHNICAL

PRESSURE/ TEMPERATURE RATING CS - ASTM A216 GR.WCB - CLASS 150
WOG (Non-shock): 285 PSI @ 100 °F
PRESSURE/ TEMPERATURE RATING SS - ASTM A351 GR. CF8M - CLASS 150
WOG (Non-shock): 275 PSI @ 100 °F

- *Carbon Steel not recommended for prolonged use above 800 °F.*
- *Stainless Steel not recommended for prolonged use above 1000 °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.

CHASE FILTERS
AND COMPONENTS

Titan Series - 85

SIMPLEX BASKET STRAINER

BS 85-CS - (Carbon Steel)

BS 85-SS - (Stainless Steel)

Flanged Ends • Raised Face • Carbon & Stainless Steel

ANSI Class 150

BILL OF MATERIALS [1]

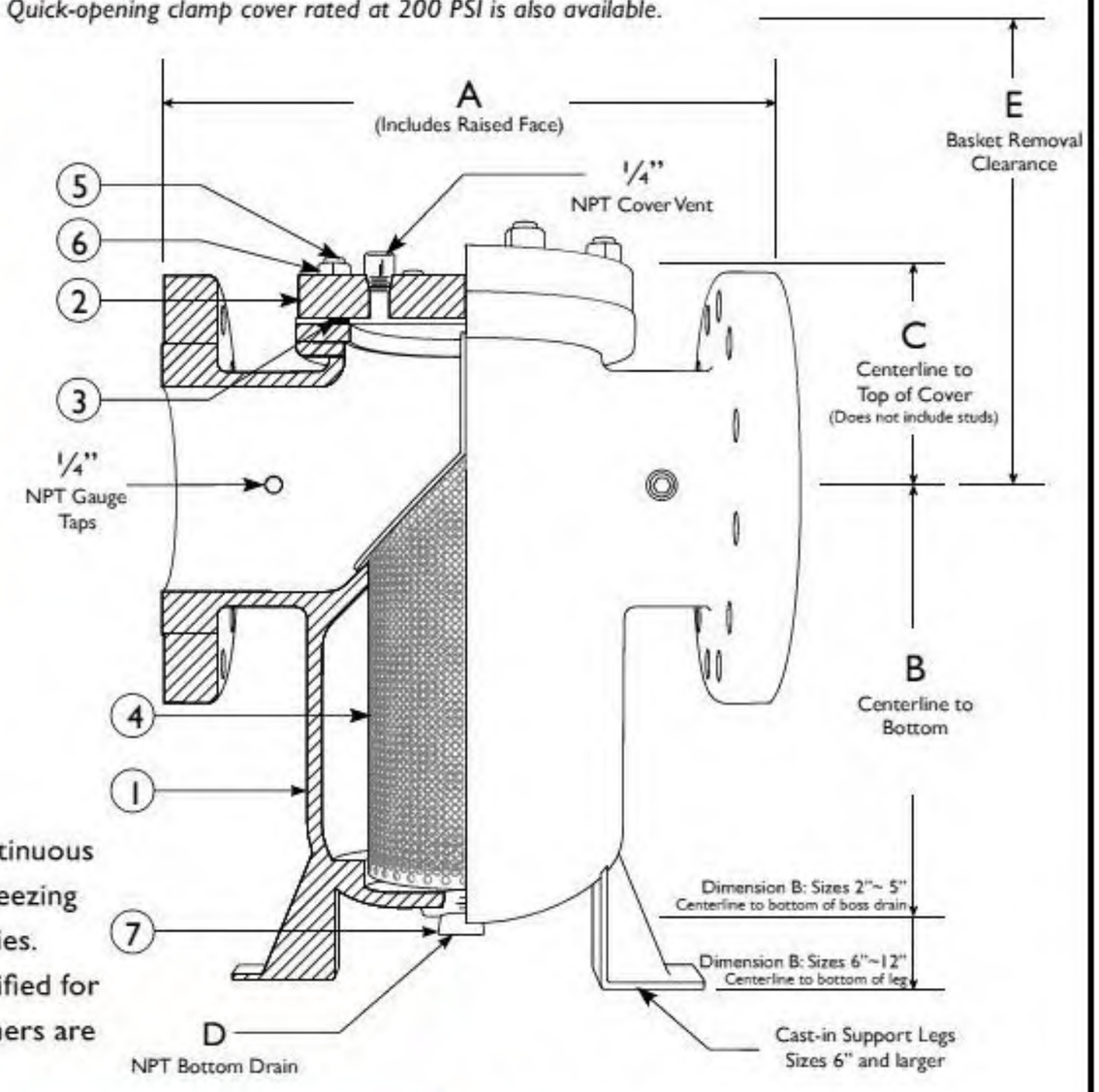
No.	PART	BS 85-CS [2]	BS 85-SS
1	Body	Carbon Steel A216 Gr.WCB	Stainless Steel A351 Gr. CF8M
2	Cover [4]	Carbon Steel A216 Gr.WCB	Stainless Steel A351 Gr. CF8M
3	Cover Gasket [3] [4]	Bolted Cover: Spiral Wound Stainless Steel Non-Asbestos Clamp Cover (Optional): Buna-N O-Ring	
4	Straining [3] [5] Element	Type 304 Stainless Steel (Other materials are available)	
5	Stud	Alloy Steel A193-B7	Stainless Steel 18-8 Series 300
6	Nut	Carbon Steel A194-2H	Stainless Steel 18-8 Series 300
7	Plug	Carbon Steel	Stainless Steel

1. Equivalent or better materials may be substituted at the manufacturer's discretion.
2. Carbon Steel bodies are epoxy painted.
3. Denotes recommended spare parts.
4. Bolted cover is shown. For information on clamp cover, please contact factory.
5. Straining element on 2" BS 85 is a straight screen. It is not diagonal as illustrated on right.

Body Material Application Notes:

- Carbon Steel performs exceptionally well in high temperatures, up to 800 °F in continuous service. It provides high resistance to shock, vibration, piping strains, and fire and freezing hazards. Carbon Steel strainers are often used in the oil and petrochemical industries.
- Stainless Steel is highly corrosion resistant, extremely strong, and is commonly specified for high temperature service, up to 1000 °F in continuous service. Stainless Steel strainers are commonly found in the chemical, food, and pharmaceutical industries.

Bolted cover is shown.
Quick-opening clamp cover rated at 200 PSI is also available.

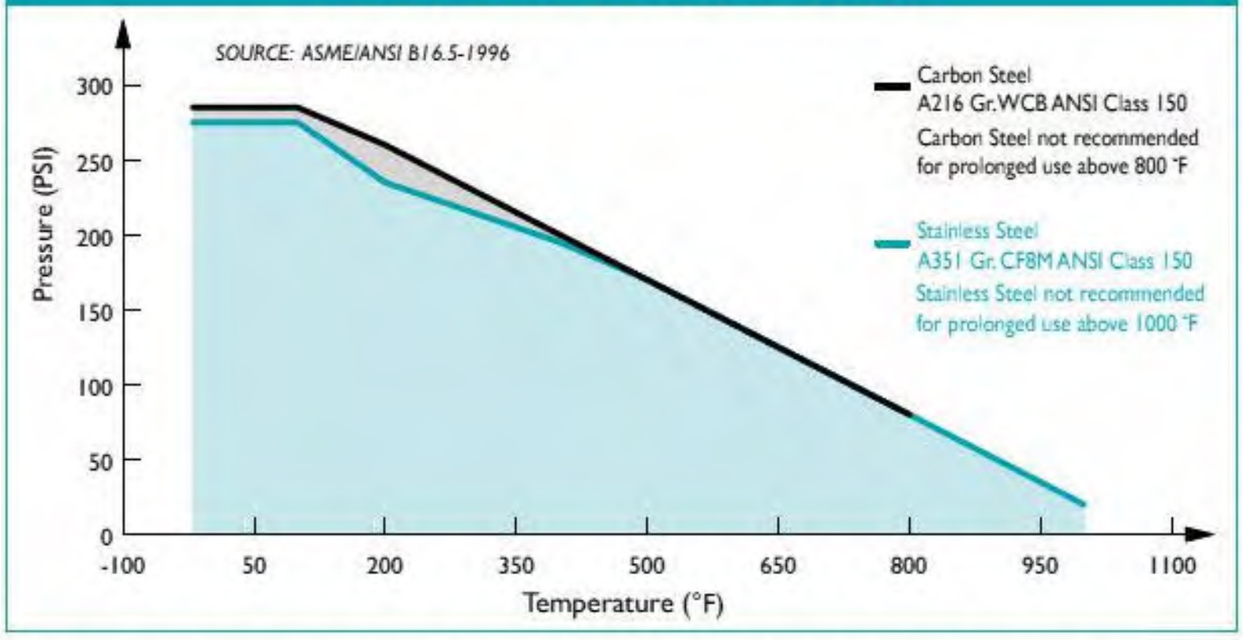


DIMENSIONS AND PERFORMANCE DATA [1]

SIZE		in	2	2 1/2	3	4	5	6	8	10	12
		mm	50	65	80	100	125	150	200	250	300
A DIMENSION FACE TO FACE		in	8.50	8.00	8.75	11.187	C/F	13.875	17.375	22.00	26.25
		mm	216	204	223	285	C/F	353	442	559	667
B DIMENSION CTR. LINE TO BOTTOM		in	5.875	5.437	5.25	7.875	C/F	13.125	16.375	18.25	18.75
		mm	150	139	134	201	C/F	334	416	464	476
C DIMENSION CTR. LINE TO TOP		in	5.00	4.75	5.50	6.125	C/F	6.75	8.875	10.75	13.75
		mm	127	121	140	156	C/F	172	226	274	350
D DIMENSION NPT BLOW-OFF		in	.50	.75	.75	1.00	C/F	1.25	1.50	1.50	2.00
		mm	15	20	20	25	C/F	32	40	40	50
E DIMENSION SCREEN REMOVAL		in	10.875	10.187	10.75	14.0	C/F	19.875	25.25	30.125	37.5
		mm	276	259	273	356	C/F	505	641	765	953
ASSEMBLED WEIGHT APPROXIMATE		lb	27.0	33.0	38.0	64.0	89.0	128.0	227.0	362.0	487.0
		kg	12.2	15.0	17.2	29.0	40.4	58.0	102.9	164.0	220.7
Flow Coefficient		C_v	43	86	135	290	C/F	780	1600	3250	5200

1. Dimensions, weights, and flow coefficients are provided for reference only. When required, always request certified drawings.
2. 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.

PRESSURE - TEMPERATURE RATING



Additional Design & Technical Notes:

- Cover vent is provided on all sizes. Cover vent is 1/4" NPT on all sizes and is furnished with plug.
- Bottom drain is furnished with plug. See table to the left for sizes.
- Plugged 1/4" NPT gauge taps (inlet and outlet) are provided on sizes 2" and larger.
- Cast-in support legs are provided on sizes 6" and larger.
- Optional cover designs are available - C/F.
- Steam jacketed designs are available - C/F.
- Epoxy coating is available - C/F.
- Designed for horizontal pipelines only.
- Standard material for straining elements is Type 304 Stainless Steel. Other materials are available upon request.

REFERENCED STANDARDS & CODES

CODE	DESCRIPTION
ASME/ANSI B16.5	Pipe Flanges and Flanged Fittings

PRESSURE - TEMPERATURE RATING

ANSI CLASS 150	A216 Gr.WCB	A351 Gr. CF8M
WOG (Non-shock)	285 PSI @ 100 °F	275 PSI @ 100 °F

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%	30 Mesh Ln. [1]	44.8 %

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