



TITAN FLOW CONTROL, INC.

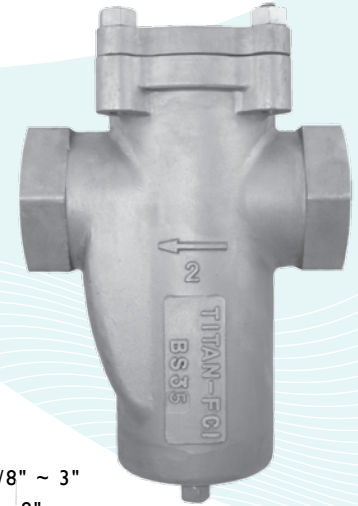
## SIMPLEX BASKET STRAINER ♦ RF FLANGED & THREADED ANSI CLASS 150/300 ♦ CARBON AND STAINLESS STEEL

**MODELS:** BS 35-CS  
(CARBON STEEL - THREADED - 150/300)

BS 35F-CS  
(CARBON STEEL - RF FLANGED - 150)

BS 35-SS  
(STAINLESS STEEL - THREADED - 150/300)

BS 35F-SS  
(STAINLESS STEEL - RF FLANGED - 150)



SIZE RANGE:  
THREADED: 3/8" ~ 3"  
FLANGED: 1" ~ 8"

## FEATURES

- ♦ **HIGH QUALITY CONSTRUCTION**  
THE SERIES BS35 BASKET STRAINER IS AVAILABLE IN CARBON OR STAINLESS STEEL WITH EITHER THREADED OR FLANGED (RF) END CONNECTIONS. IT FEATURES A MACHINED GROOVE THAT ENCAPSULATES THE COVER GASKET AND AIDS IN PREVENTING GASKET BLOW-OUTS.
- ♦ **MINIMAL PRESSURE LOSS**  
PRESSURE LOSS IS MINIMIZED BY PROVIDING AN OVER-THE-TOP FLOW PATH AND LARGE STRAINING AREA. THE STRAINING CAPACITY IS A MINIMUM OF SIX TIMES THAT OF THE CROSS SECTIONAL AREA OF THE CONNECTING PIPE.
- ♦ **LARGE STRAINING CAPACITY**  
WITH ITS LARGE BODY AND SIZEABLE STRAINING ELEMENT, THE SERIES BS35 BASKET STRAINER CAN STORE LARGE AMOUNTS OF DEBRIS - THUS MAXIMIZING TIME BETWEEN SERVICING. IT ALSO FEATURES A MACHINED SEAT WITH O-RING THAT ENABLES FINE FILTRATIONS - DOWN TO 40 MICRONS.
- ♦ **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: 285 PSI @ 100 °F  
Saturated Steam: 150 PSI @ 366 °F  
Maximum Liquid: 80 PSI @ 800 °F

PRESSURE/ TEMPERATURE RATING  
SS - ASTM A351 GR. CF8M - CLASS 150

WOG: 275 PSI @ 100 °F  
Saturated Steam: 150 PSI @ 366 °F  
Maximum Liquid: 20 PSI @ 1000 °F

PRESSURE/ TEMPERATURE RATING  
CS - ASTM A216 GR. WCB - CLASS 300

WOG: 740 PSI @ 100 °F  
Saturated Steam: 300 PSI @ 420 °F  
Maximum Liquid: 400 PSI @ 800 °F

PRESSURE/ TEMPERATURE RATING  
SS - ASTM A351 GR. CF8M - CLASS 300

WOG: 720 PSI @ 100 °F  
Saturated Steam: 300 PSI @ 420 °F  
Maximum Liquid: 350 PSI @ 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.*

**TITAN FLOW CONTROL, INC.**  
YOUR PIPELINE TO THE FUTURE!

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**SIMPLEX BASKET STRAINER**

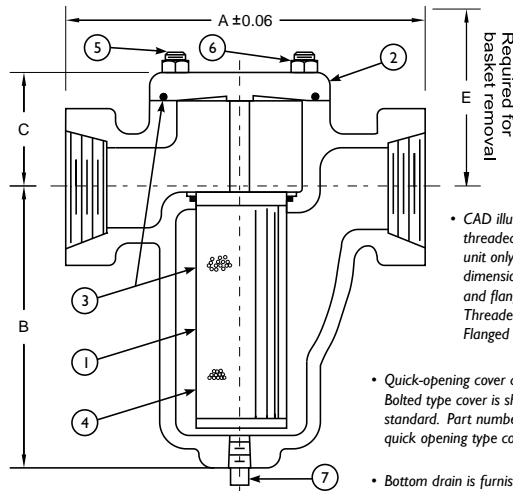
Threaded Ends (150/300 lb) Raised Face Flanged Ends (150 lb)  
**BS 35-CS** (Carbon Steel) **BS 35F-CS** (Carbon Steel)  
**BS 35-SS** (Stainless Steel) **BS 35F-SS** (Stainless Steel)

ANSI Class  
 150/300 lb

**BILL OF MATERIALS (1)**

No.	PART	BS 35-CS & BS 35F-CS (2)	BS 35-SS & BS 35F-SS
1	Body	Carbon Steel A216 Gr. WCB	Stainless Steel A351 Gr. CF8M
2	Cover	Carbon Steel A216 Gr. WCB	Stainless Steel A351 Gr. CF8M
3	O-Ring / Gasket (3) (4)	Buna-N / Spiral Wound Stainless Steel Non-Asbestos	
4	Straining Element (3)	Type 304 Stainless Steel (Other materials are available)	
5	Studs	Alloy Steel A193-B7	Stainless Steel 18-8 Series 300
6	Nuts	Carbon Steel A194-2H	Stainless Steel 18-8 Series 300
7	Cover Knobs (5)	Ductile Iron	Ductile Iron
8	Bottom Drain 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. Gasket is for bolted cover. For special cover designs, different gasket may be used.
5. Bolted cover is standard. Part Number 7 (Cover Knobs) only applies to quick opening covers.

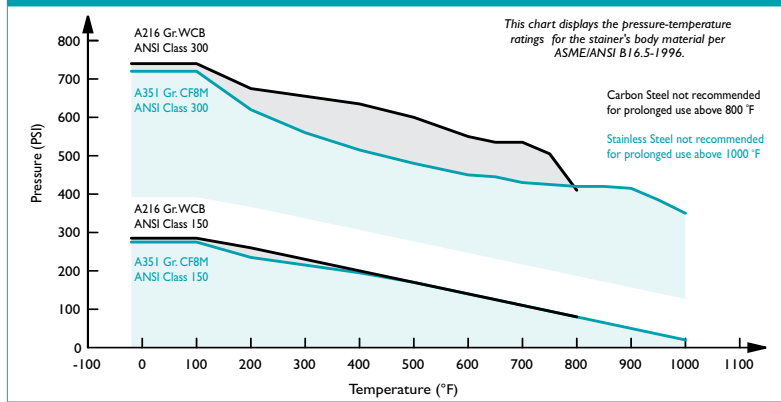


**DIMENSIONS AND PERFORMANCE DATA (1)**

Size	in	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	6	8
<b>A<sub>1</sub> DIMENSION</b> FACE TO FACE (THREADED)	in	4.562	4.562	4.562	5.312	6.312	6.312	8.25	9.625	11.25	n/a	n/a	n/a
	mm	116	116	116	135	161	161	210	245	286	n/a	n/a	n/a
<b>A<sub>2</sub> DIMENSION</b> FACE TO FACE (FLANGED)	in	n/a	n/a	n/a	5.687	n/a	7.00	9.00	10.375	11.75	15.00	20.25	27.375
	mm	n/a	n/a	n/a	145	n/a	178	229	264	299	381	515	696
<b>B<sub>1</sub> DIMENSION</b> CTR. LINE TO BOTTOM (THREADED)	in	4.00	4.00	4.00	4.687	6.50	6.50	7.875	8.75	11.375	n/a	n/a	n/a
	mm	102	102	102	120	166	166	201	223	289	n/a	n/a	n/a
<b>B<sub>2</sub> DIMENSION</b> CTR. LINE TO BOTTOM (FLANGED)	in	n/a	n/a	n/a	4.687	n/a	6.50	8.00	8.75	11.50	13.75	20.00	24.24
	mm	n/a	n/a	n/a	120	n/a	166	204	223	293	350	508	616
<b>C<sub>1</sub> DIMENSION</b> CTR. LINE TO TOP (THREADED)	in	2.50	2.50	2.50	2.75	3.00	3.00	3.625	4.00	4.50	n/a	n/a	n/a
	mm	64	64	64	70	77	77	93	102	115	n/a	n/a	n/a
<b>C<sub>2</sub> DIMENSION</b> CTR. LINE TO TOP (FLANGED)	in	n/a	n/a	n/a	3.00	n/a	3.00	3.75	4.00	4.75	6.18	7.88	10.55
	mm	n/a	n/a	n/a	77	n/a	77	96	102	121	157	201	268
<b>D DIMENSION</b> NPT BLOW-OFF (BOTH)	in	3/8	3/8	3/8	3/8	1/2	1/2	3/4	1	1	2	2	2
	mm	10	10	10	10	15	15	20	25	25	50	50	50
<b>E DIMENSION</b> SCREEN REMOVAL (BOTH)	in	4.812	4.812	4.812	5.875	8.125	8.125	10.125	11.875	14.812	19.875	29.125	37.125
	mm	123	123	123	150	207	207	258	302	377	505	740	943
<b>ASSEMBLED WEIGHT (THREADED)</b>	lb	4.8	4.8	5.0	6.5	11.5	11.5	22.8	33.8	51.0	n/a	n/a	n/a
	kg	2.2	2.2	2.3	2.9	5.2	5.2	10.3	15.3	23.1	n/a	n/a	n/a
<b>ASSEMBLED WEIGHT (FLANGED)</b>	lb	n/a	n/a	n/a	9.0	n/a	15.0	26	38.0	62.0	118.0	266.0	518.0
	kg	n/a	n/a	n/a	4.1	n/a	6.8	11.8	17.2	28.1	53.5	120.5	234.7
<b>Flow Coefficient</b>	C <sub>v</sub>	14	14	14	24	43	43	70	90	140	290	780	1600

1. Dimensions, weights, and flow coefficients are provided for reference only. When required, always request certified drawings. • Threaded Sizes: 3/8" ~ 3" • Flanged Sizes: 1" ~ 8"

**PRESSURE - TEMPERATURE RATINGS**



**PRESSURE - TEMPERATURE RATING (1)**

ANSI CLASS 150	A216 Gr. WCB (2)	A351 Gr. CF8M (2)
WOG (water, oil, gas)	285 PSI @ 100 °F	275 PSI @ 100 °F
Saturated Steam	150 PSI @ 366 °F	150 PSI @ 366 °F
Max Liquid	80 PSI @ 800 °F	20 PSI @ 1000 °F
ANSI CLASS 300	A216 Gr. WCB (2)	A351 Gr. CF8M (2)
WOG (water, oil, gas)	740 PSI @ 100 °F	720 PSI @ 100 °F
Saturated Steam	300 PSI @ 420 °F	300 PSI @ 420 °F
Max Liquid	400 PSI @ 800 °F	350 PSI @ 1000 °F

1. Threaded units are dual rated ANSI Class 150/300. Flanged units are rated at ANSI Class 150.
2. Pressure and Temperature ratings are considerably lower for units installed with the optional quick-opening covers. Please consult factory for further information.

**REFERENCED STANDARDS & CODES**

Code	Description	Code	Description
ASME/ANSI B16.5	Pipe Flanges and Flanged Fittings	ASME/ANSI B16.11	Forged Steel Fittings, Socket-Welding and Threaded

**STANDARD STRAINING ELEMENTS**

Size	Liquid	Open Area	Steam	Open Area
3/8" ~ 2"	1/16 (.0625)	41%	1/32 (.033)	28%
2 1/2" ~ 3"	1/16 (.0625)	41%	3/64 (.045)	36%

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.