

## SIMPLEX BASKET STRAINER \* RF FLANGED & THREADED

### ANSI CLASS 150/300 \* CARBON AND STAINLESS STEEL

TITAN FLOW CONTROL, INC.

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)

**FEATURES** 

BS 35F-SS

(STAINLESS STEEL - RF FLANGED - 150)

Quick-opening cover designs are available. Quick-opening knob cover is rated at 200 psi.

SIZE RANGE:

THREADED: 3/8" ~ 3" FLANGED: I" ~ 8"

#### 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.

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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 FLEMENT. 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.

#### O 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 FLEMENT WHILE KEEPING THE PIPELINE IN SERVICE.

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.

# **TECHNICAL**

#### PRESSURE/ TEMPERATURE RATING CS - ASTM A216 GR.WCB - CLASS 150

WOG (Non-shock): 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 (Non-shock): 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 (Non-shock): 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 (Non-shock): 720 PSI @ 100 °F Saturated Steam: 300 PSI @ 420 °F Maximum Liquid: 350 PSI @ 1000 °F



#### Ask Titan about making your BS 35 basket strainer a PUSH-CLEAN STRAINER!

TITAN FCI CAN FURNISH CAST BS35 MODELS WITH A SPECIAL COVER, HANDLE, SCRAPER, AND BASKET DESIGNED FOR EASY **CLEANING CAPABILITIES** WITHOUT BASKET REMOVAL.



# TITAN FLOW CONTROL, INC.

YOUR PIPFLINE TO THE FUTURE!

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**PUSH-CLEAN STRAINER** 

MINI

Patent-Pending Design



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#### SIMPLEX BASKET STRAINER

Threaded Ends (150/300 lb) Raised Face Flanged Ends (150 lb)

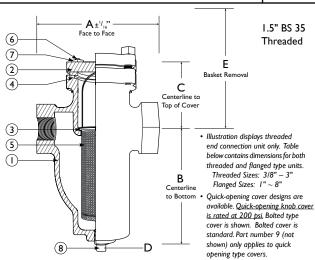
**BS 35-CS** (Carbon Steel) **BS 35F-CS** (Carbon Steel)

BS 35-SS (Stainless Steel) BS 35F-SS (Stainless Steel)

ANSI Class I 50/300 lb

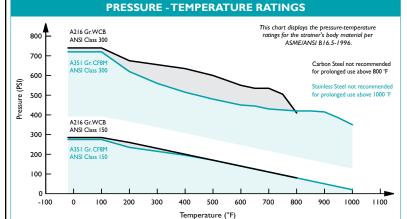
	BILL OF MATERIALS (1)							
No.	PART	BS 35-CS & BS 35F-CS (2)	BS 35-SS & BS 35F-SS					
I	Body	Carbon Steel A216 Gr. WCB	Stainless Steel A351 Gr. CF8M Type 316					
2	Cover	Carbon Steel A216 Gr. WCB	Stainless Steel A351 Gr. CF8M Type 316					
3	O-Ring (Basket) (3)	Buna-N	Viton					
4	Gasket (Cover) (3) (4)	Spiral Wound Stainless Steel Non-Asbestos						
5	Straining Element (3)	Type 304 Stainless Steel (Other materials are available)						
6	Studs	Alloy Steel A I 93-B7	Stainless Steel 18-8 Series 300					
7	Nuts	Carbon Steel A 194-2H	Stainless Steel 18-8 Series 300					
8	Bottom Drain Plug	Carbon Steel	Stainless Steel					
9	Cover Knobs (5)	Ductile Iron	Ductile Iron					

- 1. Equivalent or better materials may be substituted at the manufacturer's discretion.
- . Carbon Steel bodies are epoxy painted.
- 3. Denotes recommended spare parts.
- Gasket is for the bolted cover, which is standard. If quick open cover is specified, the O-ring material for the cover is Buna-N on BS35-CS & BS35F-CS or Viton on BS35-SS & BS35F-SS.
- 5. Bolted cover is standard. Part Number 9 (Cover Knobs) only applies to quick opening covers.



· Bottom drain is furnished with plug

				DIN	<b>1ENSIONS</b>	AND PERF	ORMANCI	E DATA (I)					
C:	in	3/8	1/2	3/4	ı	I 1/4	I 1/2	2	2 1/2	3	4	6	8
Size	mm	10	15	20	25	32	40	50	65	80	100	150	200
A, DIMENSION	in	4.562	4.562	4.562	5.312	6.312	6.312	8.25	11.25	11.25	n/a	n/a	n/a
FACE TO FACE (THREADED)	mm	116	116	116	135	161	161	210	286	286	n/a	n/a	n/a
A, DIMENSION	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
FACE TO FACE (FLANGED)	mm	n/a	n/a	n/a	145	n/a	178	229	264	299	381	515	696
<b>B</b> <sub>I</sub> DIMENSION 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, DIMENSION	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
CTR. LINE TO BOTTOM (FLANGED)	mm	n/a	n/a	n/a	120	n/a	166	204	223	293	350	508	616
C, DIMENSION	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
CTR. LINE TO TOP (THREADED)	mm	64	64	64	70	77	77	93	102	115	n/a	n/a	n/a
C, DIMENSION	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
CTR. LINE TO TOP (FLANGED)	mm	n/a	n/a	n/a	77	n/a	77	96	102	121	157	201	268
<b>D</b> DIMENSION	in	3/8	3/8	3/8	3/8	1/2	1/2	3/4	I	I	2	2	2
NPT BLOW-OFF (BOTH)	mm	10	10	10	10	15	15	20	25	25	50	50	50
E DIMENSION	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
SCREEN REMOVAL (BOTH)	mm	123	123	123	150	207	207	258	302	377	505	740	943
ASSEMBLED WEIGHT	lb	6.0	6.0	5.5	8.0	16.0	16.0	25.5	49.0	51.0	n/a	n/a	n/a
THREADED (APPROXIMATE)	kg	2.7	2.7	2.5	3.6	7.3	7.3	11.6	22.2	23.1	n/a	n/a	n/a
ASSEMBLED WEIGHT	lb	n/a	n/a	n/a	11.0	n/a	19.5	31.5	44.5	65.5	142.0	266.0	518.0
FLANGED (APPROXIMATE)	kg	n/a	n/a	n/a	5.0	n/a	8.8	14.3	20.2	29.7	64.4	120.5	234.7
Flow Coefficient	Cv	14	14	14	24	43	43	70	90	140	290	780	1600
. Dimensions, weights, ar	nd flow co	efficients are	provided for re	eference only.	When require	d, always requ	est certified d	rawings.	Threaded Sizes	s: 3/8" ~ 3"	Flanged Siz	res: I" ~ 8"	



REFERENCED STANDARDS & CODES							
Description	Code	Description					
Pipe Flanges and Flanged Fittings	ASME/ANSI B16.11	Forged Steel Fittings, Socket-Welding and Threaded					
	Description Pipe Flanges and	Description Code Pipe Flanges and ASME/ANISLB 14.11					

PRESSURE - TEMPERATURE RATING (1)							
ANSI CLASS 150	A216 Gr.WCB (2)	A351 Gr. CF8M (2)					
WOG (Non-shock)	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 (Non-shock)	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					

Threaded units are dual rated ANSI Class I 50/300. Flanged units are rated at ANSI Class I 50.
 Pressure and Temperature ratings are considerably lower for units installed with the optional quick-opening covers. Please consult factory for further information.

STANDARD STRAINING ELEMENTS								
Size	Liquid	Open Area	Steam	Open Area				
3/8" ~ 2"	1/16 (.0625)	41%	1/32 (.033)	28%				
2 1/2" ~ 4"	1/16 (.0625)	41%	3/64 (.045)	36%				
5" ~ 8"	1/8 (.125)	40%	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.