



TITAN FLOW CONTROL, INC.

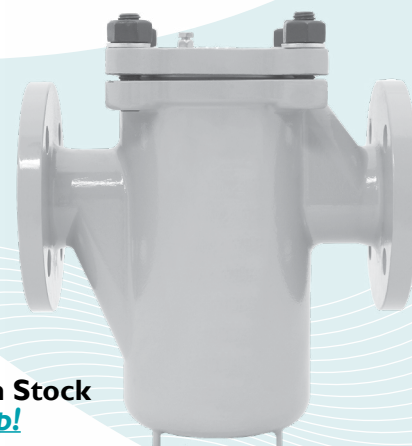
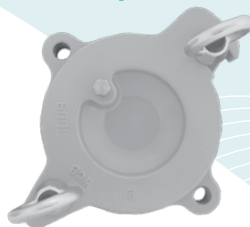
SIMPLEX BASKET STRAINER ♦ FLANGED ENDS (RF)

ASME CLASS 150 ♦ CARBON AND STAINLESS STEEL

MODELS: **BS 87F-CS**
(CARBON STEEL)

BS 87F-SS
(STAINLESS STEEL)

All Sizes Equipped:
Quick-Open Cover



Large Sizes in Stock
Ready to Ship!

FEATURES

SIZES: 1" ~ 16"

- ◇ **BETTER FLOW CHARACTERISTICS**
WITH ITS DUAL ANNULUS DESIGN, THE BS87 SERIES PROVIDES A STRAIGHTER FLOW PATH. DURING FLOW SIMULATION TESTING, THE BS87F ACHIEVED A 10 PERCENT REDUCTION IN PRESSURE LOSS WHEN COMPARED TO "OVER-THE-TOP" STYLE BASKET STRAINERS.
- ◇ **FINER FILTRATIONS**
THE BS87 SERIES IS DESIGNED WITH A MACHINED, FLAT SEAT FOR THE STRAINING ELEMENT. THIS ALLOWS AN O-RING TO BE INSTALLED UNDERNEATH THE LIP OF THE STRAINING ELEMENT, CREATING A TIGHT SEAL. THIS FEATURE PREVENTS DEBRIS FROM SLIPPING PAST THE STRAINING ELEMENT LIP- AS IS OFTEN THE CASE WITH 'SLANT-TYPE' BASKET STRAINERS THAT CANNOT UTILIZE AN O-RING.
- ◇ **LARGE STRAINING CAPACITY**
WITH ITS LARGE BODY AND SIZEABLE STRAINING ELEMENT, THE BS 87F 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, WEDGEWIRE, DRILLED PERFORATIONS, AND PLEATED STRAINING ELEMENTS.
- ◇ **HIGH QUALITY CONSTRUCTION**
THE BS87 SERIES IS AVAILABLE IN CARBON AND STAINLESS STEEL WITH EITHER THREADED OR FLANGED (RF) END CONNECTIONS. 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. STAINLESS STEEL IS HIGHLY CORROSION RESISTANT, EXTREMELY STRONG, AND IS COMMONLY SPECIFIED FOR HIGH TEMPERATURE SERVICE, UP TO 1000 °F IN CONTINUOUS 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.

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

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SIMPLEX BASKET STRAINER

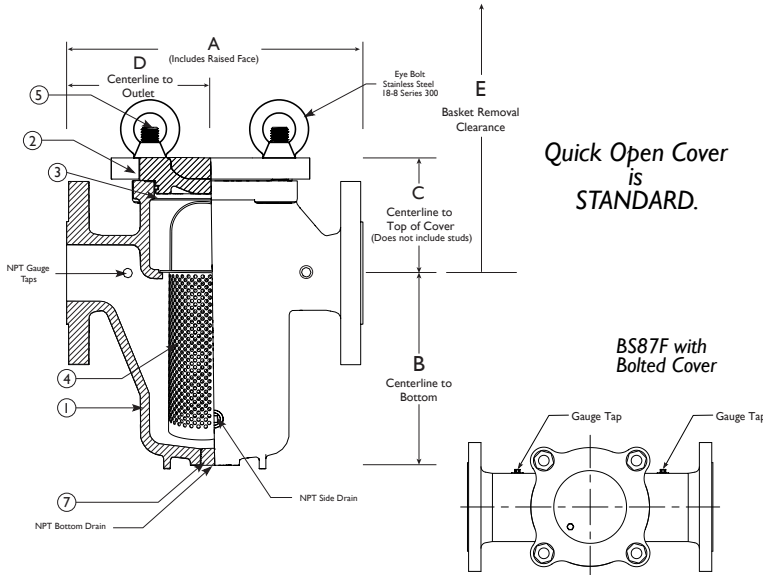
BS 87F-CS - (Carbon Steel)
BS 87F-SS - (Stainless Steel)

Flanged Ends • Raised Face • Carbon & Stainless Steel

**ASME
Class 150**

BILL OF MATERIALS (1)

| No. | PART | BS87F-CS ⁽²⁾ | BS87F-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 | Quick Open Bolted Cover ⁽⁴⁾⁽⁵⁾ | Buna O-Ring Garlock Blue Guard 3000 | Viton O-Ring |
| 4 | Straining ⁽³⁾ Element | Type 304 Stainless Steel (Other materials are available) | |
| 5 | Stud | Alloy Steel A193-B7 | Stainless Steel A320-B8 |
| 6 | Nut | Bolted: A194-2H Quick Open: CS A105 | Bolted: A194-8 Quick Open: CS A105 |
| 7 | Drain Plug | Carbon Steel | Stainless Steel |



Body Material Application Notes:

- Equivalent or better materials may be substituted at the manufacturer's discretion.
- Carbon Steel bodies are epoxy painted.
- Denotes recommended spare parts.
- Carbon Fiber Compressed gasket may be substituted at the manufacturer's discretion.
- Quick-Open Cover is standard. Bolted Cover is optional.

DIMENSIONS AND PERFORMANCE DATA (1)

| Size | in | 1 | 1 1/2 | 2 | 2 1/2 | 3 | 4 | 6 | 8 | 10 | 12 | 14 | 16 |
|---|----------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| | mm | 25 | 40 | 50 | 65 | 80 | 100 | 150 | 200 | 250 | 300 | 350 | 400 |
| A DIMENSION FACE TO FACE | in | 7.62 | 10.50 | 10.50 | 13.13 | 13.13 | 17.25 | 19.63 | 27.00 | 32.00 | 33.75 | 47 | 47 |
| | mm | 194 | 267 | 267 | 334 | 334 | 438 | 498 | 686 | 813 | 857 | 1194 | 1194 |
| B DIMENSION CTR. LINE TO BOTTOM | in | 4.88 | 6.93 | 6.93 | 9.81 | 9.81 | 11.25 | 15.38 | 22.91 | 26.38 | 33.50 | 28.37 | 28.37 |
| | mm | 124 | 176 | 176 | 249 | 249 | 285 | 390 | 582 | 670 | 850 | 720 | 720 |
| C DIMENSION CTR. LINE TO TOP | in | 3.94 | 5.00 | 5.00 | 6.50 | 6.50 | 6.93 | 7.68 | 10.25 | 13.91 | 14.75 | 14.84 | 14.84 |
| | mm | 100 | 128 | 128 | 164 | 164 | 176 | 195 | 260 | 353 | 374 | 377 | 377 |
| D DIMENSION CTR. LINE TO OUTLET | in | 3.81 | 5.25 | 5.25 | 6.56 | 6.56 | 8.62 | 9.81 | 13.50 | 16.00 | 16.87 | 23.5 | 23.5 |
| | mm | 97 | 133 | 133 | 166 | 166 | 219 | 249 | 343 | 406.5 | 428.5 | 597 | 597 |
| E DIMENSION SCREEN REMOVAL | in | 7.75 | 11.50 | 11.50 | 16.75 | 16.75 | 18.25 | 23.75 | 35.00 | 43.50 | 51.75 | 55.12 | 55.12 |
| | mm | 197 | 293 | 293 | 426 | 426 | 463 | 601 | 885 | 1103 | 1315 | 1400 | 1400 |
| F DIMENSION MOUNTING | in | n/a | n/a | n/a | n/a | n/a | n/a | 3.94 | 4.72 | 6.44 | 6.44 | 9.50 | 9.50 |
| | mm | n/a | n/a | n/a | n/a | n/a | n/a | 100 | 120 | 164 | 164 | 240 | 240 |
| G DIMENSION MOUNTING | in | n/a | n/a | n/a | n/a | n/a | n/a | 10.63 | 14.56 | 19.68 | 19.68 | 22.5 | 22.5 |
| | mm | n/a | n/a | n/a | n/a | n/a | n/a | 270 | 370 | 500 | 500 | 571 | 571 |
| H DIMENSION MOUNTING HOLES | in | n/a | n/a | n/a | n/a | n/a | n/a | 0.71 | 0.79 | 0.87 | 0.87 | 0.93 | 0.93 |
| | mm | n/a | n/a | n/a | n/a | n/a | n/a | 18 | 20 | 22 | 22 | 24 | 24 |
| ASSEMBLED WEIGHT APPROXIMATE | lb | 22.5 | 39.9 | 43 | 63.9 | 69.5 | 110.1 | 207 | 425.1 | 707 | 916.3 | 1763.7 | 1873.9 |
| | kg | 10.2 | 18.1 | 19.5 | 29 | 31.5 | 50 | 94 | 193 | 321 | 416 | 1150 | 1165 |
| Flow Coefficient | C _v | 24 | 50 | 78 | 140 | 210 | 360 | 780 | 1250 | 2400 | 3300 | 5100 | 6800 |

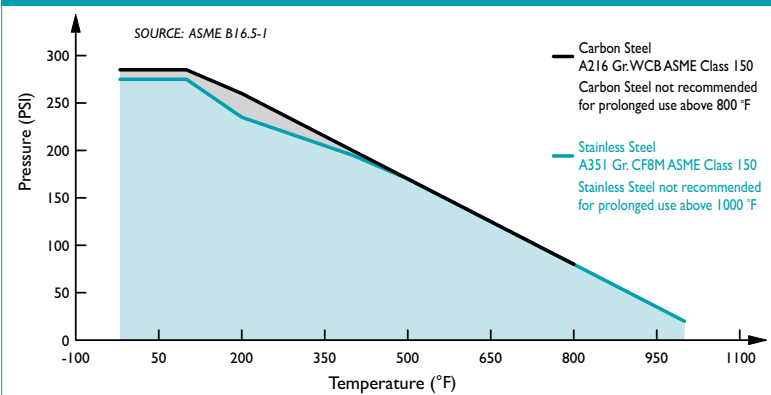
NPT FITTING SCHEDULE:

| SIZE | Gauge Taps | Bottom Drain | Side Drain | Cover Vent |
|-------------|------------|--------------|-------------------|------------|
| 1" | 1/8" | 1/2" | NA | 1/8" |
| 1 1/2" ~ 2" | 1/8" | 3/4" | NA | 1/8" |
| 2 1/2" ~ 3" | 1/8" | 3/4" | 1/2" | 1/8" |
| 4" | 1/8" | 1" | 1/2" | 1/8" |
| 6" | 1/4" | 1" | 1/2" | 1/8" |
| 8" | 1/4" | 1" | 1/2" | 1/8" |
| 10" | 1/4" | 2" | 1" ⁽¹⁾ | 1/8" |
| 12" | 1/4" | 2" | 1" ⁽¹⁾ | 1/8" |
| 14" | 1/4" | 2" | 1" ⁽¹⁾ | 1/8" |
| 16" | 1/4" | 2" | 1" ⁽¹⁾ | 1/8" |

1. 10" and larger models have two side drains.

- Dimensions, weights, and flow coefficients are provided for reference only. When required, always 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.
- Standard Vent and Gauge Plugs shall be Brass for Carbon Steel Units and Stainless Steel for Stainless Steel Units.

PRESSURE - TEMPERATURE RATING



REFERENCED STANDARDS & CODES

| CODE | DESCRIPTION |
|-------------|--|
| ASME B16.5 | Pipe Flanges and Flanged Fittings |
| ASME B16.34 | Valves - Flanged, Threaded, and Welding End. |
| MSS SP-55 | Quality Standard - Visual Inspection |

PRESSURE - TEMPERATURE RATING

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

SCREEN SELECTION GUIDELINES

| 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.

As Titan 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. TITAN is a registered trademark of Titan Flow Control Incorporated.