



TITAN FLOW CONTROL, INC.

DUPLEX STRAINER ♦ QUAD BALL TYPE ♦ THREE PIECE BODY

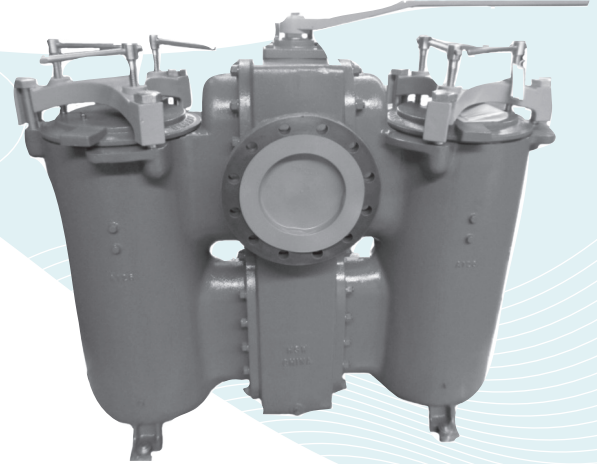
ASME CLASS 125 (CI) & 150 (CS & SS) ♦ FLANGED

MODELS: DS 695-CI
(Flanged - Cast Iron)

DS 696-CS
(Flanged - Carbon Steel)

DS 696-SS
(Flanged - Stainless Steel)

NEW
Quad-Ball
Design!



FEATURES

- ♦ **UNIQUE QUAD-BALL DIVERSION SYSTEM**
REVOLUTIONARY FOUR BALL DESIGN THAT EFFICIENTLY DIVERTS THE PIPELINE FLOW FROM ONE CHAMBER TO THE OTHER. TEFLON SEATS ENSURE A POSITIVE SEAL AND HELP TO PREVENT SEEPAGE INTO THE CHAMBER THAT IS BEING CLEANED.
- ♦ **LOW OPERATING TORQUE**
TITAN FCI'S DUPLEX STRAINER FEATURES A LOW TORQUE, EASY TO OPERATE HANDLE THAT DOES NOT REQUIRE ANY AUTOMATION. ADDITIONALLY, THE HANDLE'S POSITION CLEARLY INDICATES WHICH BASKET IS IN SERVICE AND WHICH BASKET CAN SAFELY BE REMOVED FOR CLEANING.
- ♦ **REDUCED MAINTENANCE**
THE QUAD BALL DESIGN ISOLATES EACH CHAMBER AND KEEPS THE SERVICING CHAMBER DRY DURING CLEANING. NO SPECIAL TOOLS ARE REQUIRED TO ACCESS AND REMOVE THE STRAINING ELEMENT FROM THE CHAMBER. COVER VENTS, DRAIN PLUGS, AND FOOT PADS ARE PROVIDED ON EACH CHAMBER.
- ♦ **NUMEROUS OTHER BENEFITS**
TITAN'S NEW DESIGN OFFERS COUNTLESS OTHER ADVANTAGES INCLUDING: NO INTERRUPTION IN SERVICE, COMPACT STRUCTURE, LONG SERVICE LIFE, AND LOW PRESSURE DROP.

SIZE RANGE: 6" ~ 8"

TECHNICAL

PRESSURE/TEMPERATURE RATING ⁽¹⁾
CAST IRON - A126 GR.B - CLASS 125

WOG (Non-shock): 200 PSI @ 150 °F

PRESSURE/TEMPERATURE RATING ⁽¹⁾
CARBON STEEL- A216 GR.WCB - CLASS 150

WOG (Non-shock): 285 PSI @ 100 °F

PRESSURE/TEMPERATURE RATING ⁽¹⁾
STAINLESS STEEL- A351 GR. CF8M - CLASS 150

WOG (Non-shock): 275 PSI @ 100 °F

1. The above listed temperatures are theoretical and may vary during actual operating conditions.
2. Longterm use at maximum temperature is not recommended for optimal performance. Longterm use at maximum temperature will result in performance degradation.

APPLICATIONS

GENERAL APPLICATION: THE DUPLEX STRAINER IS A UNIQUE PRODUCT WITHIN THE PIPELINE INDUSTRY. LIKE OTHER BASKET STRAINERS, THE DUPLEX STRAINER PROTECTS EXPENSIVE DOWNSTREAM EQUIPMENT BY MECHANICALLY REMOVING SOLIDS FROM FLOWING FLUIDS VIA A PERFORATED, MESH, OR WEDGE WIRE STRAINING ELEMENT. HOWEVER, THE DUPLEX STRAINER IS DESIGNED WITH TWO BASKET CHAMBERS AND A FLOW DIVERTER SYSTEM THAT ALLOWS THE PIPELINE FLOW TO BE SWITCHED FROM ONE CHAMBER TO THE OTHER, COMPLETELY ISOLATING THE FLOW TO A SINGLE CHAMBER. THIS MAKES THE DUPLEX STRAINER IDEAL FOR NON-INTERRUPTIBLE APPLICATIONS THAT CANNOT BE SHUT DOWN DURING ROUTINE MAINTENANCE AND CLEANING OPERATIONS.

Ball-Type Duplex Strainers are not recommended for slurry and fibrous content applications.

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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DUPLEX BASKET STRAINER
Flanged Ends

DS 696-CS (Carbon Steel) • **DS 696-SS** (Stainless Steel)
DS 695-CI (Cast Iron)

ASME Class
125 CI

ASME Class
150 CS & SS

BILL OF MATERIALS (1)

| No. | Part | DS 696-CS | DS 696-SS | DS 695-CI |
|-----|-----------------------|-----------------------------|----------------------------------|-----------------------------|
| 1 | Body | Carbon Steel A216 Gr.WCB | Stainless Steel A351 Gr. CF8M | Cast Iron A126 Gr. B |
| 2 | Straining Element (3) | Stainless Steel | Stainless Steel | Stainless Steel |
| 3 | Cover | Carbon Steel A216 Gr.WCB | Stainless Steel A351 Gr. CF8M | Cast Iron A126 Gr. B |
| 4 | Ball | Stainless Steel Type 304 | Stainless Steel Type 304 | Stainless Steel Type 304 |
| 5 | O-Ring | Buna-N | Viton | Buna-N |
| 6 | Seat | Teflon (PTFE) | Teflon (PTFE) | Teflon (PTFE) |
| 7 | Seal | Buna-N | Viton | Buna-N |
| 8 | O-Ring Body | Buna-N | Viton | Buna-N |
| 9 | Handle | Carbon Steel Zinc Coated | Carbon Steel Zinc Coated | Carbon Steel Zinc Coated |

1. Bill of Materials represents standard materials. Equivalent or better materials may be substituted at the manufacturer's discretion.
2. Aluminum Bronze units are also available.
3. Denotes recommended spare parts.

DIMENSIONS AND PERFORMANCE DATA (1)

| SIZE (2) | in | 6" | 8" |
|---|----------------|-------|-------|
| | mm | 300 | 350 |
| AF DIMENSION FACE TO FACE | in | 22 | 26.75 |
| | mm | 559 | 680 |
| B DIMENSION UNIT WIDTH (INCLUDING PLUG) | in | 35.31 | 48.50 |
| | mm | 897 | 1368 |
| C DIMENSION HEIGHT WITH HANDLE | in | 35.63 | 45.12 |
| | mm | 905 | 1146 |
| D DIMENSION CENTER LINE TO BOTTOM | in | 24.45 | 30.39 |
| | mm | 621 | 772 |
| E DIMENSION BASKET REMOVAL | in | 48 | 62 |
| | mm | 1220 | 1575 |
| F DIMENSION HANDLE LENGTH | in | 21.65 | 29.13 |
| | mm | 550 | 740 |
| APPROXIMATE WEIGHT DS DS695/696, FLANGED | lb | 850 | 1600 |
| | kg | 386 | 726 |
| Flow Coefficient | C _v | 429 | 776 |

1. Dimensions, weights, and flow coefficients are provided for reference only. Always request certified drawings.

Larger, fabricated duplex strainers are available. Fabricated duplex strainers can be designed to meet any space or application requirements.

Quick-open covers are not recommended for steam or high temperature applications above 200°F.

PRESSURE - TEMPERATURE RATING

| ASME Class 125 | DS 695-CI | |
|-----------------|------------------|------------------|
| WOG (Non-shock) | 200 PSI @ 150 °F | |
| ASME Class 150 | DS 696-CS | DS 696-SS |
| WOG (Non-shock) | 285 PSI @ 100 °F | 275 PSI @ 100 °F |

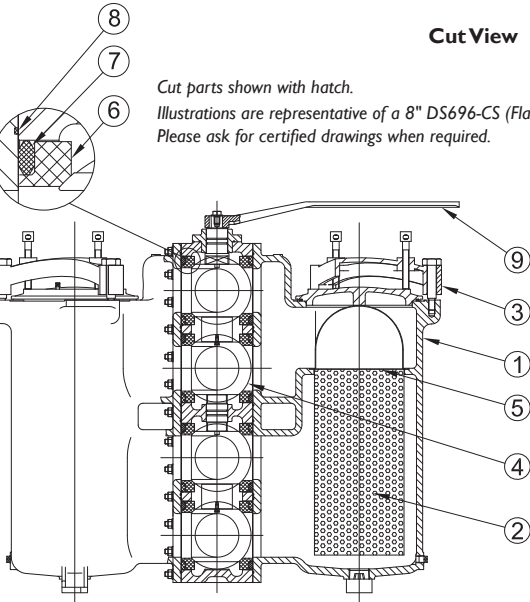
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MATERIAL TEMPERATURES

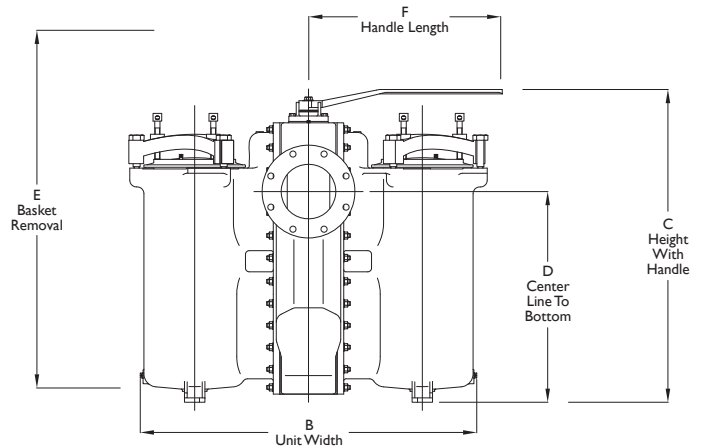
| Seat/Seal/Ball | Temp Range |
|----------------------|--------------|
| Buna-N (Seal) | -20 ~ 250 °F |
| Viton (Seal) | -40 ~ 400 °F |
| Stainless Steel Ball | Max 450 °F |

NPT FITTING SCHEDULE:

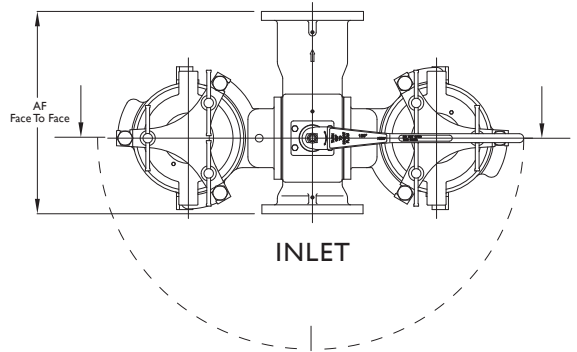
| Size | Gauge Taps | Bottom Drain | Side Drain | Cover Vent |
|------|------------|--------------|------------|------------|
| 6" | 1/8" | 1" | 1/2" | 1/8" |
| 8" | 1/8" | 2" | 1/2" | 1/8" |



Front View



Top View



STANDARD SCREEN SELECTIONS

| Size | Liquid | Open Area | Steam | Open Area |
|---------|--------------|-----------|-----------------|-----------|
| 6" ~ 8" | 1/8" (0.125) | 41% | Not Recommended | |

REFERENCED STANDARDS & CODES

| Code | Description |
|-------------|---|
| ASME B16.5 | Pipe Flanges and Flanged Fittings |
| ASME B16.11 | Forged Steel Fittings, Socket-Welding, and Threaded |
| ASME B16.1 | Gray Iron Pipe Flanges and Flanged Fittings |

Titan FCS/SS 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.