

## DUPLEX STRAINER ♦ QUAD BALL TYPE ♦ THREE PIECE BODY

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

#### MODELS: 560 CI

(Flanged - Cast Iron)

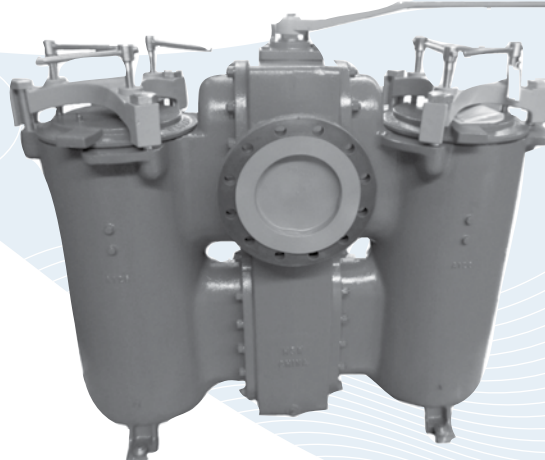
#### 560 CS

(Flanged - Carbon Steel)

#### 560 SS

(Flanged - Stainless Steel)

NEW  
Quad-Ball  
Design!



## FEATURES

SIZE RANGE: 6" ~ 8"

#### ◇ 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

FLUID ENGINEERING'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

FE'S NEW DESIGN OFFERS COUNTLESS OTHER ADVANTAGES INCLUDING: NO INTERRUPTION IN SERVICE, COMPACT STRUCTURE, LONG SERVICE LIFE, AND LOW PRESSURE DROP.

## TECHNICAL

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

WOG (Non-shock): 200 PSI @ 150 °F

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

WOG (Non-shock): 285 PSI @ 100 °F

PRESSURE/TEMPERATURE RATING <sup>(1)</sup>  
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.*

## APPLICATIONS

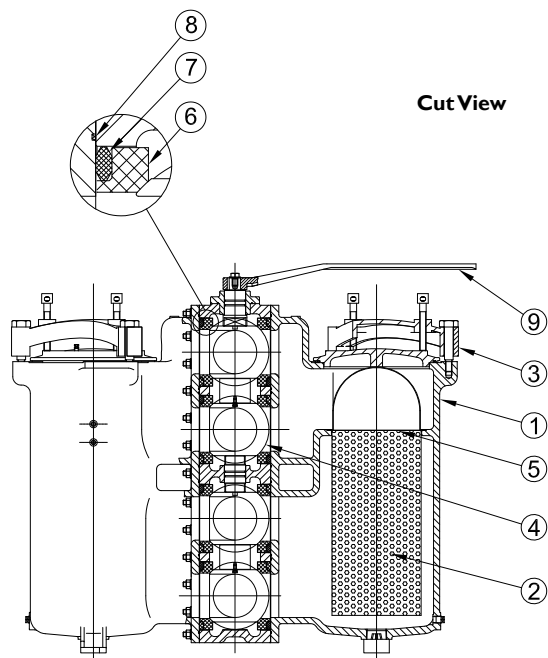
**GENERAL APPLICATION:** THE DUPLEX STRAINER IS A UNIQUE PRODUCT WITHIN THE PIPELINE INDUSTRY. LIKE OTHER BASKET STRAINERS, THE DUPLEX STRAINER PROTECTS EXPENSIVE DOWNSTREAM EQUIPMENT BY MECHANICALLY REMOVING SOLIDS FROM FLOWING FLUIDS VIA A PERFORATED, MESH, OR WEDGE WIRE STRAINING ELEMENT. HOWEVER, 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.

*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.*

**DUPLEX BASKET STRAINER****Flanged Ends****CS** (Carbon Steel) • **SS** (Stainless Steel)**CI** (Cast Iron)ASME Class  
125 CIASME Class  
150 CS & SS**BILL OF MATERIALS <sup>(1)</sup>**

No.	Part	560 CS	560 SS	560 CI
1	Body	Carbon Steel A216 Gr. WCB	Stainless Steel A351 Gr. CF8M	Cast Iron A126 Gr. B
2	Straining Element <sup>(3)</sup>	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.

**Cut View****DIMENSIONS AND PERFORMANCE DATA <sup>(1)</sup>**

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

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

**Please contact factory for more information.**

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

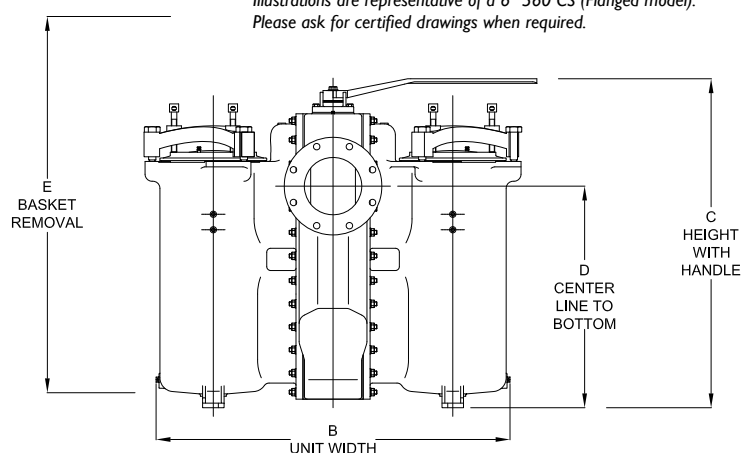
Quick-open covers are not recommended for steam or high temperature applications above 200°F.

**PRESSURE - TEMPERATURE RATING**

<b>ASME Class 125</b>	<b>560 CI</b>
WOG (Non-shock)	200 PSI @ 150 °F
<b>ASME Class 150</b>	<b>560 CS</b> <b>560 SS</b>
WOG (Non-shock)	285 PSI @ 100 °F      275 PSI @ 100 °F

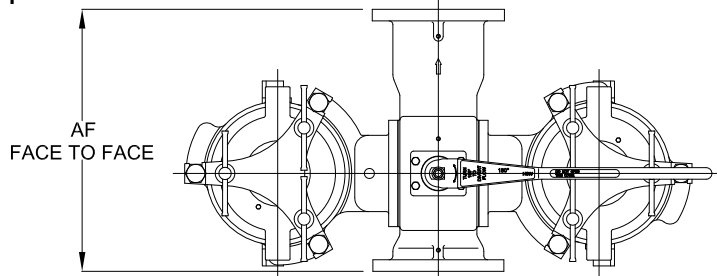
**MATERIAL TEMPERATURES**

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

**Front View**

Cut parts shown with hatch.

Illustrations are representative of a 6" 560 CS (Flanged model).  
 Please ask for certified drawings when required.

**Top View****STANDARD SCREEN SELECTIONS**

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

**REFERENCED STANDARDS & CODES**

<b>Code</b>	<b>Description</b>
ASME/ANSI B16.5	Pipe Flanges and Flanged Fittings
ASME/ANSI B16.11	Forged Steel Fittings, Socket-Welding, and Threaded
ASME B16.1	Gray Iron Pipe Flanges and Flanged Fittings

Fluid Engineering 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. FE reserves the right to make design and specification changes to improve our products without prior notification. When required, request certified drawings.