

# **DUPLEX STRAINER \* DUAL BALL TYPE \* THREE PIECE BODY**

## ASME CLASS 125 \* CAST IRON \* FLANGED & THREADED ENDS

**NEW** Three-Piece Design!

**MODELS: DS 595-CI** 

(THREADED - CAST IRON)

DS 695-CI

(FLANGED - CAST IRON)



# **FEATURES**

#### ♦ DUAL-BALL DIVERTER DESIGN

THIS DUPLEX IS DESIGNED WITH TWO STAINLESS STEEL BALLS THAT EFFICIENTLY DIVERT THE PIPELINE FLOW FROM ONE BASKET CHAMBER TO THE OTHER. TEFLON SEATS ENSURE A POSITIVE SEAL AND HELP TO PREVENT SEEPAGE INTO THE CHAMBER THAT IS BEING SERVICED FOR CLEANING.

#### **♦ EASY TO OPERATE**

THE TITAN FCI DUPLEX STRAINER FEATURES A LOW TORQUE, EASY TO OPERATE HANDLE THAT DOES NOT REQUIRE A GEARBOX. ADDITIONALLY, THE HANDLE'S POSITION CLEARLY INDICATES WHICH BASKET IS IN SERVICE AND WHICH BASKET CAN SAFELY BE REMOVED FOR CLEANING.

### ♦ REDUCED "IN-LINE" MAINTENANCE

TITAN'S DUPLEX HAS NUMEROUS ATTRIBUTES THAT HELP REDUCE MAINTENANCE DURING CLEANING OPERATIONS. FIRST, THE DUAL BALL DESIGN ISOLATES EACH CHAMBER AND KEEPS THE SERVICING CHAMBER DRY DURING CLEANING. THERE ARE ALSO NO SPECIAL TOOLS REQUIRED TO ACCESS AND REMOVE THE STRAINING ELEMENT FROM THE CHAMBER. LASTLY, THE DUPLEX PROVIDES COVER VENTS, DRAIN PLUGS, AND FOOT PADS ON EACH CHAMBER.

## ♦ ENDLESS SCREEN OPTIONS

THIS STRAINER CAN BE FITTED WITH VIRTUALLY ANY CONFIGURATION OF PERFORATION OR MESH LINED STRAINING ELEMENTS. STRAINING ELEMENTS CAN ALSO BE CONSTRUCTED FROM SPECIAL MATERIALS SUCH AS ALLOY 20.

# **TECHNICAL**

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

DS 595-CI (Threaded) WOG (Non-shock): 200 PSI @ I50 °F

DS 695-CI (Flanged) WOG (Non-shock): 200 PSI @ 150 °F

- 1. The above listed temperatures are theoretical and may vary during actual operating conditions.
- 2. Max and min temperatures are for reference only. Prolonged use at these temperatures is not recommended for optimal service life.

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**

# **DS 595-CI (Threaded)** DS 695-CI (Flanged)

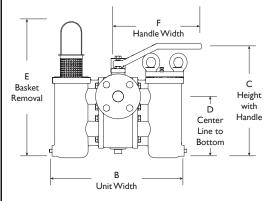
Dual Ball Type • 3-Piece Body • Cast Iron

**ASME** Class 125

BILL OF MATERIALS (1)					
No.	Part	DS 595/695-CI			
ı	Main Body / Basket Housing (2)	Cast Iron ASTM A I 26 Gr. B			
2	Straining Element (3)	Stainless Steel			
3	Cover	Cast Iron ASTM A I 26 Gr. B			
4	Ball	Stainless Steel			
5	O-Ring Straining Element	Buna-N			
6	Seat	Teflon (PTFE)			
7	Seal	Buna-N			
8	O-Ring Body	Buna-N			
9	Handle	Carbon Steel Zinc Coated			

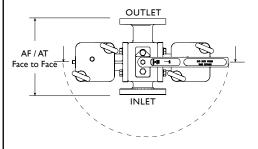
- $I. \ \ Bill of Materials \ represents \ standard \ materials. \ Equivalent \ or \ better \ materials$ may be substituted at the manufacturer's discretion.
- 2. Carbon Steel, Stainless Steel, and Aluminum Bronze units are also available.
- 3. Denotes recommended spare parts.

## Front View



## Top View

Seat/Seal/Ball



NPT FITTING SCHEDULE:								
Size $3/4" \sim 1"$ $1-1/4"$ $1-1/2"$ $2" \sim 4"$								
Cover Vent	1/8"	1/8"	1/8"	1/8"				
Drain	1/4"	1/4"	1/4"	1/2"				

NET FITTING SCHEDOLE.					
Size	3/4" ~I"	1-1/4"	1-1/2"	2" ~ 4"	
Cover Vent	1/8"	1/8"	1/8"	1/8"	
Drain	1/4"	1/4"	1/4"	1/2"	

**MATERIAL TEMPERATURES** 

Temp Range

I May and min tomboratures are	for reference only Drelenged use of
Stainless Steel Ball	Max 450 °F
Buna-N (Seal)	-20 ~ 250 °F

1. Max and min temperatures are for reference only. Prolon	nged use at				
these temperatures is not recommended for optimal service life.					

8	<b>C</b> ut <b>V</b> iew
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Cut parts shown with

Illustrations are representative of a 1" DS696-CS (Flanged model). Please ask for certified drawings when required.

DIMENSIONS AND PERFORMANCE DATA (1)									
CIZE (2)	in	3/4 <sup>(3)</sup>	I	I 1/4	l 1/2	2	2 1/2	3 <sup>(3)</sup>	4 <sup>(3)</sup>
SIZE (2)	mm	20	25	32	40	50	65	80	100
AF DIMENSION	in		7.0	9.37	9.37	10.6	13.5	13.5	16.0
FLANGED FACE TO FACE	mm		178	238	238	270	343	343	406
AT DIMENSION	in	5.59	5.59	7.5	7.5	10.0	11.5		
THREADED FACE TO FACE	mm	142	142	191	191	254	292		
B DIMENSION	in	12.95	12.95	15.12	15.12	18.43	22.05	22.0	26.85
UNIT WIDTH (INCLUDING PLUG)	mm	329	329	384	384	468	560	560	682
C DIMENSION	in	12.0	12.0	14.8	14.8	18.4	22.7	22.7	25.5
HEIGHT WITH HANDLE	mm	305	305	377	377	468	579	579	649
<b>D</b> DIMENSION	in	5.83	5.83	8.3	8.3	10.7	13.7	13.7	15.9
CENTER LINE TO BOTTOM	mm	148	148	211	211	271	347	347	403
E DIMENSION	in	15.4	15. <del>4</del>	21.3	21.3	26.4	35.0	35.0	41.0
BASKET REMOVAL	mm	390	390	541	541	670	885	885	1040
F DIMENSION	in	7.87	7.87	7.87	7.87	10.03	13.00	13.00	15.00
HANDLE LENGTH	mm	200	200	200	200	270	330	330	380
APPROXIMATE WEIGHT	lb		46.3	73.9	73.9	121.3	237.0	238.1	373.7
DS 695, FLANGED	kg		21	33.5	33.5	55	107.5	108	169.5
APPROXIMATE WEIGHT	lb	43.7	43.0	69.9	69.5	119.0	227.0		
DS 595,THREADED	kg	19.8	19.5	31.7	31.5	54	103		
Flow Coefficient	C <sub>v</sub>	13	14	19	24	42	68	105	180

- Dimensions, weights, and flow coefficients are provided for reference only. Always request certified drawings.
   Larger sizes (5" ~ 8") are available upon request. Please contact factory for pricing and delivery.
   Flanged units are not available in 3/4" size;Threaded units are not available in 3" or 4" sizes.

REFERENCED STANDARDS & CODES			
Code	Description		
ASME B16.1	Cast Iron Pipe Flanges and Flanged Fittings		
ASME B16.4	Cast Iron Pipe Threaded Fittings		

PRESSURE - TEM	PERATURE RATING	SCREEN	SCREEN SELECTION GUIDELINES		
ASME Class 125	DS 595/695-CI	Size Liquid Open Are			
WOG (Non-shock)	200 PSI @ 150 °F	3/4" ~ 4"	1/16 (.0625)	41%	

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.