

# Style FDI-20-30

## FABRICATED INLINE DUPLEX STRAINERS

2" - 24" | ANSI CLASS 150, 300

LARGER SIZES AVAILABLE

Fabricated Duplex strainers are required when an off-the-shelf solution will not meet your exact piping requirements. All of our Fabricated Strainers are made right here in the USA, at our state-of-the-art facility in the southeastern part of North Carolina.



20" Fabricated Duplex Strainer with Internal Epoxy Coating shown

All pictures shown are for illustrative purposes only. Actual product may vary due to product enhancement.

Sizes 2" - 24"  
Contact Factory for Larger Sizes

### CUSTOM COVER SOLUTIONS INCLUDING DAVITS & HINGED COVER



HINGED



DAVIT



BOLTED

### MODELS

FDI 20 Series - 150 Class  
FDI 30 Series - 300 Class

### MATERIALS:

- Carbon Steel • Stainless Steel
- Other Alloys

### OPTIONS



- Gauge Taps
- Vent/drains - (Standard)
- Back Flush Valves
- Semi-Automatic
- Pressure Gauges
- DP Gauge Switch
- Support Legs



### ANSI CLASSES

ANSI Class 150  
up to high pressure  
600 class



### STRAINING ELEMENTS

Customize to fit your requirements  
Heavy Duty Baskets,  
Wedge Wire, & Multi  
Basket Designs



### END CONNECTIONS

Flanged, Raised Face,  
RTJ, Butt Weld, Socket  
Weld, Threaded



### SANITARY

Sanitary Application  
Designs for  
food/pharmaceutical  
processing



### TEMPERATURE CONTROL

Steam Jacket  
casing for set  
temperature  
control



### UNIQUE PROJECTS

Rotated and Offset  
Nozzles to fit into  
your applications



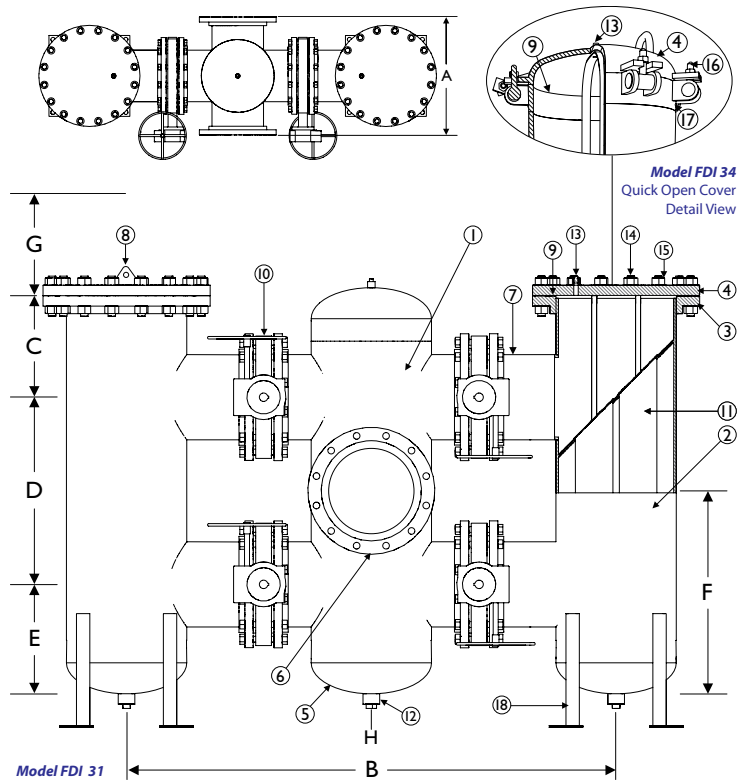
**2"- 24"** **FDI 20 & FDI 30 Series Duplex Strainer**

**ANSI Class 150, 300**

**BILL OF MATERIALS <sup>(1)</sup>**  
**FDI 20 & FDI 30 Series**

Part	FDI 20 & FDI 30 Carbon Steel	FDI 20 & FDI 30 Stainless Steel
1 Column Body	Carbon Steel A106 Gr.B	Stainless Steel SA312 Type 316
2 Basket Housing Body	Carbon Steel A234	Stainless Steel SA312 Type 316
3 Body Flange	Carbon Steel A105	Stainless Steel SA182 Type 316
4 Cover	<b>Bolted:</b> Carbon Steel A105 <b>Quick-Open:</b> Carbon Steel A516 Gr.70	<b>Bolted:</b> Stainless Steel SA182 Type 316 <b>Quick-Open:</b> Stainless Steel Type 316
5 Pipe Cap	Carbon Steel A234	Stainless Steel SA 403 Type 316
6 Inlet/Outlet Flange	Carbon Steel A105	Stainless Steel SA182 Type 316
7 Nozzle Inlet/Outlet	Carbon Steel A106 Gr.B	Stainless Steel SA312 Type 316
8 Lifting Lug	Carbon Steel	Stainless Steel
9 Gasket/O-Ring <sup>(2)</sup>	<b>Bolted Cover:</b> Spiral Wound Stainless Steel <b>Quick-Open:</b> Buna-N <sup>(3)</sup>	<b>Quick-Open:</b> Buna-N <sup>(3)</sup>
10 Butterfly Valve	Butterfly Valve: BF 76 Ductile Iron Body, Ductile Iron Nickel Coated Disc <sup>(5)</sup> , Buna/EPDM Seat with Gear Operator	
11 Straining Element <sup>(2)</sup>	T304 SS	T304 SS
12 Drain	Carbon Steel A105	Stainless Steel SA182 Type 316
13 Vent with Plug <sup>(4)</sup>	Carbon Steel A105	Stainless Steel SA182 Type 316
14 Studs	Carbon Steel A193 B7	Stainless Steel A193 B8 M
15 Nuts	Carbon Steel A194 2H	Stainless Steel A194 Gr.8
16 T-Bolt	Carbon Steel S A325	Stainless Steel
17 T-Bolt Closure	Carbon Steel	Stainless Steel Type 316
18 Support Legs <sup>(6)</sup>	Carbon Steel	Stainless Steel

1. Bill of Materials represents standard materials. Equivalent or better materials may be substituted at the manufacturer's discretion.  
 2. Titan recommends keeping spare parts on hand.  
 3. Buna-N is standard for applications below 250°F. Viton is standard for applications above 250°F.  
 4. 1/2" NPT is standard  
 5. Stainless Steel discs are used for applications requiring all stainless parts.  
 6. Support legs are optional. Call factory.



Illustrations are representative of Titan FCI fabricated duplex strainers; however, as with all fabricated designs, actual products may vary. Illustration is representative of multi-basket style (sizes 12" and up). 2" - 10" are single basket style.

**Certified drawings are required for all Titan fabrications. Support legs are optional, contact factory for details.**

**FDI 20 & FDI 30 Series Inline Duplex Strainer Dimensions: 2" - 24" | ANSI CLASS 150, 300**

**DIMENSIONS AND WEIGHTS <sup>(1)</sup>**

	in	2	3	4	6	8	10	12	14	16	18	20	24
<b>A - Face to Face <sup>(2)</sup></b> FDI 21, FDI 24, FDI 31, FDI 34	mm	50	80	100	125	150	200	250	350	400	450	500	600
	in	10.25	12.50	14.50	18.50	22.25	25.25	29.25	32.25	34.25	38.25	41.63	46.25
<b>B - Center Column to Center Column</b>	mm	260	318	368	470	565	641	743	819	870	972	1057	1175
	in	32.18	34.63	43.25	49.63	55.75	62.44	73.25	78.25	85.00	90.50	101.88	114.13
<b>C - Center of Top Valve to Top <sup>(3)</sup></b>	mm	168	184	222	254	286	337	386	400	462	462	588	687
	in	6.63	7.25	8.75	10.00	11.25	13.25	15.19	15.75	18.19	18.19	23.13	27.06
<b>D - Valve to Valve</b>	mm	330	330	432	432	533	635	711	762	864	914	1016	1219
	in	13.00	13.00	17.00	17.00	21.00	25.00	28.00	30.00	34.00	36.00	40.00	48.00
<b>E - Center of Bottom Valve to Bottom</b>	mm	170	168	210	262	313	365	416	457	521	546	572	622
	in	6.69	6.63	8.25	10.31	12.31	14.38	16.38	18.00	20.50	21.50	22.50	24.50
<b>F - Centerline to Bottom <sup>(4)</sup></b>	mm	335	334	426	478	580	683	772	838	953	1003	1080	1232
	in	13.19	13.13	16.75	18.81	22.81	26.88	30.38	33.00	37.50	39.50	42.50	48.50
<b>G - Screen Removal</b>	mm	610	635	813	864	1016	1194	1346	1422	1626	1702	1956	2311
	in	24.00	25.00	32.00	34.00	40.00	47.00	53.00	56.00	64.00	67.00	77.00	91.00
<b>H - NPT</b>	mm	19	19	25	25	38	38	38	51	51	51	51	51
	in	.75	.75	1.00	1.00	1.50	1.50	1.50	2.00	2.00	2.00	2.00	2.00
<b>Approximate Weight</b>	lb	370.00	450.00	690.00	1100.00	1750.00	2550.00	4260.00	4325.00	6100.00	6500.00	10150.00	14750.00
	kg	168.00	204.00	313.00	499.00	794.00	1157.00	1932.00	1962.00	2767.00	2948.00	4604.00	6691.00

1. Dimensions and weights of FDI 21, FDI 24, FDI 31, and FDI 34 are provided for reference only. Certified drawings are required for all Titan fabrications.  
 2. 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.  
 3. Centerline dimension is from the top of body housing. Does not include cover. Quick open cover dimension is to the top of body housing.  
 4. Centerline to bottom dimension is to bottom of body housing and does not include the NPT plug.

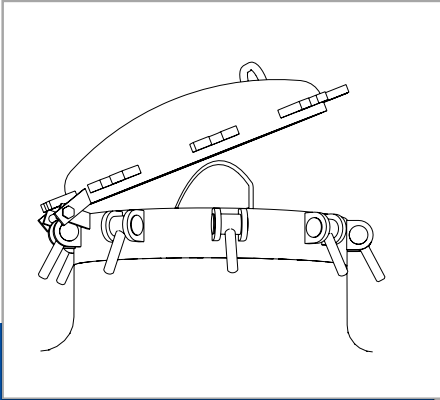
Titan FCI's fabricated products are made to each customer's unique specifications. Dimensions, materials, and all other product details referenced in this literature are general in nature. Some options may not be available in all sizes and/or models. Titan FCI reserves the right to make design and specification changes to improve the products without prior notification.

**For exact product specifications, please consult the Titan FCI factory and request certified engineering drawings.**

# OPTIONS FOR FABRICATED PRODUCTS

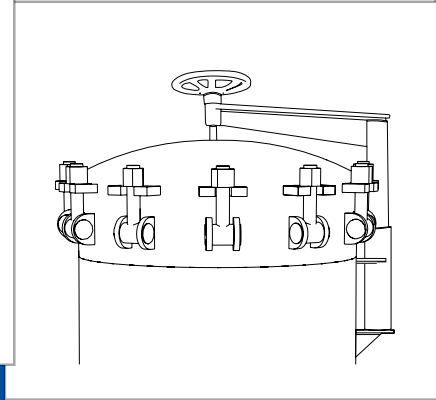
## COVER OPTIONS - FABRICATED STRAINERS

Titan Flow Control, Inc. cover options are designed for various strainers types and sizes so that the straining element is accessible for cleaning and maintenance, an important concern especially with large strainers. To make sure that you choose the best cover for your application, ask a Titan Sales Representative or Engineer.



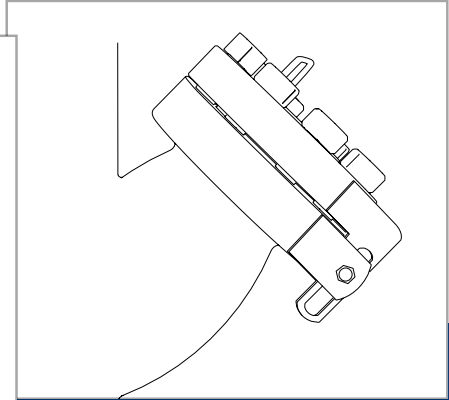
### Hinged Cover (T-Bolt)

A **Hinged Cover** is a quick opening cover that is secured with bolts around the outside of the cover. Rotating on its hinge, this cover is easiest to maneuver when it is on a small strainer, in a vertical position, or on the bottom of the strainer.



### Davit Cover Assembly

**Davit Cover Assemblies** mechanically aid in removing and replacing covers that would normally be too large for one operator to adjust unaccompanied. Lift davits also ensure that the cover is properly positioned and aligned with strainer.

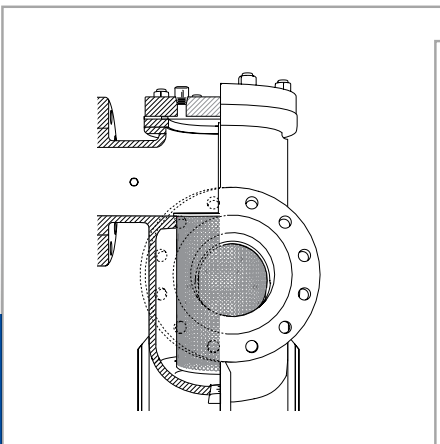


### Bolted Slide Hinge Cover

With a **Bolted Slide Hinge Cover**, the cover slides slightly away from the strainer so it has clearance to rotate. Although these covers in small sizes may be removed by a single operator, a lifting eye is available to aid in removal of larger covers.

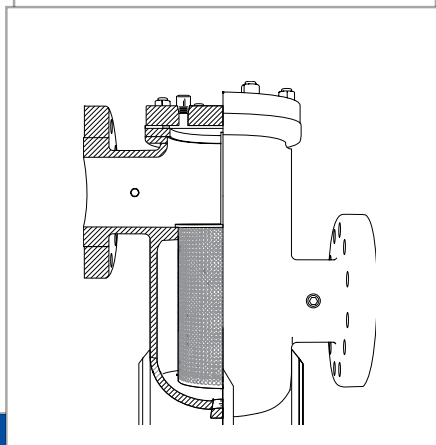
## FLOW OPTIONS - FABRICATED STRAINERS

Titan Flow Control, Inc. offers various options for the placement of inlet and outlet nozzles in order to accommodate each unique piping system. Please contact the factory with your needs, questions, and concerns.



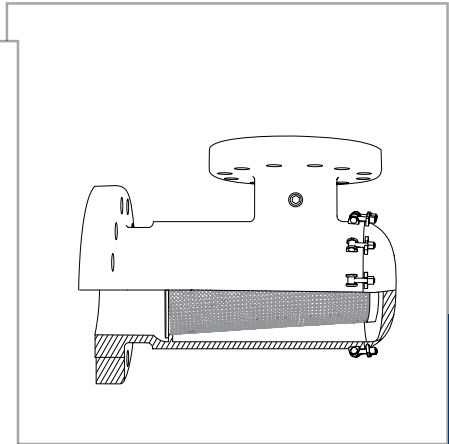
### Right Angle Flow

**Right Angle Flow** fabricated strainers can be placed in a pipeline where it has a 90 degree corner, eliminating the need for a pipeline elbow.



### Offset Flow

**Offset Flow** fabricated strainers can align with pipes at different levels.



### Horizontal-Vertical Flow

**Horizontal-Vertical Flow** fabricated strainers accommodate piping systems in which the flow changes from horizontal to vertical.