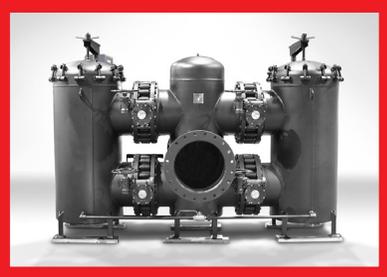




TITAN[®] FABRICATIONS

MADE IN THE USA | WORLD-CLASS | INNOVATIVE



PRODUCT CATALOG

BASKET STRAINERS | DUPLEX STRAINERS | TEE STRAINERS

UNLIMITED CUSTOMER SPECIFIC DESIGN OPTIONS | NUMEROUS MATERIAL OPTIONS

WWW.TITANFCI.COM

290 Corporate Drive | Lumberton, NC 28358 | 910.735.0000

CONTENTS

- 3. Brand New Facility
- 4. Options for Fabricated Products
- 5. Basket Strainers
ASME Class 150, 300: Sizes 2" - 10"
- 7. Basket Strainers
ASME Class 150, 300: Sizes 12" - 48"
- 9. Basket Strainers
ASME Class 600 Sizes: 2" - 12"
- 11. Duplex Strainer (Inline)
ASME Class 150, 300: Sizes 2" - 24"
- 15. Duplex Strainer (Offset)
ASME Class 150, 300: Sizes 2" - 24"
- 17. Tee Strainers
ASME Class 150 Sizes: 2" - 30"
- 19. Tee Strainers
ASME Class 300 Sizes: 2" - 30"
- 21. Tee Strainers
ASME Class 600 Sizes: 2" - 30"
- 23. Temporary Strainers
- 25. Spectacle Blinds, Closed Blinds,
Opens Blinds
- 27. Restriction Orifice Plates
- 29. Design Capabilities
- 30. Model Identification
Numbering System

Titan® Fabrications is an ASME Coded Facility.

TITAN FCI is a proud American Society of Mechanical Engineers (ASME) code certified shop.
We provide authorized repair and fabrication.

Designators: PP, S, U



*Fabrication And Assembly Of Pressure Piping At The Above Location
And Field Sites Controlled By The Above Location.*

S

*Fabrication And Assembly Of Power Boilers At The Aformentioned Location
And Field Sites Controlled By Them.*

U

*Fabrication Of Pressure Vessels At The Aforementioned Location
And Field Sites Controlled By Them.*



TITAN FLOW CONTROL, INC • 290 CORPORATE DRIVE • LUMBERTON, NC

TEL: 910.735.0000 FAX: 910.738.3848 • WWW.TITANFCI.COM • TITAN@TITANFCI.COM

BRAND NEW FACILITY

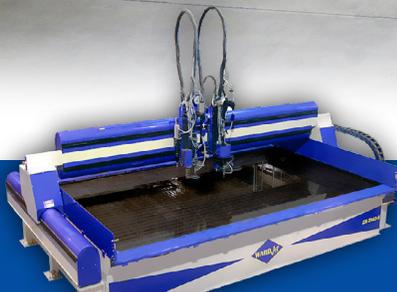
“Made in the USA” isn’t just a marketing slogan for us. We take tremendous pride in knowing that we are part of the industrial movement to bring manufacturing jobs and skills back to the USA. Our fabricated products are proudly made in our world-class facility located in the southeastern part of North Carolina.

STATE-OF-THE-ART FACILITY

Titan® Flow Control has invested millions of dollars into our world-class fabrication facility. Our brand new, 40,000 sq. ft. facility contains state-of-the-art fabrication equipment including: **Waterjet Technology, Robotic Pipe Cutters, CNC Machines, and one-of-a-kind machines designed explicitly by Titan’s engineers.**



Building The Future Of Fabrication



▶ Emerging Tech

Waterjet cutting is ideal when precise part cutting is required. Our water jet has a large cutting area of 96”x 156” and can cut materials up to 12” thick with tolerances up to .005” can be achieved. We can cut steels, laminates, composites, plastics, rubber, gaskets, fiberglass, and much more.



▶ Robotic Cutting

Titan’s robotic pipe cutter can automatically cut pipe with diameters ranging from 3” all the way up to 48”. This 5-Axis, Robotic Pipe Cutter is capable of making numerous types of intricate cuts including: saddles, multiple saddles, miter, double miter, gusset slots, offshore crowns, and much more.



▶ CNC Machining

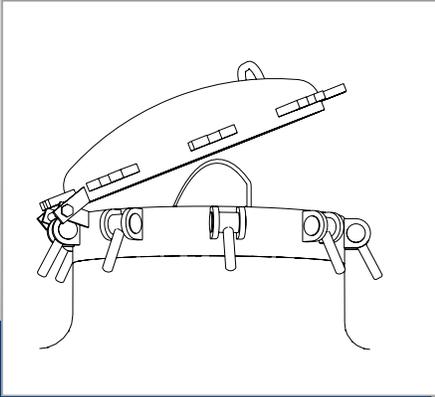
Titan has a variety of CNC vertical mills, horizontal mills and turning centers. These machines are capable of running 24 hours a day, 365 days a year. Speed, accuracy, economy, and repeatable are only a few advantages of our machines when comparable to traditional, manual machines.

We love to show off, so call us for a tour today! ▶ ▶ ▶  910.735.0000

OPTIONS FOR FABRICATED PRODUCTS

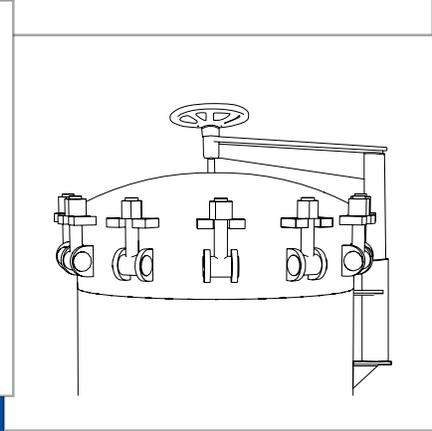
COVER OPTIONS - FABRICATED STRAINERS

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.



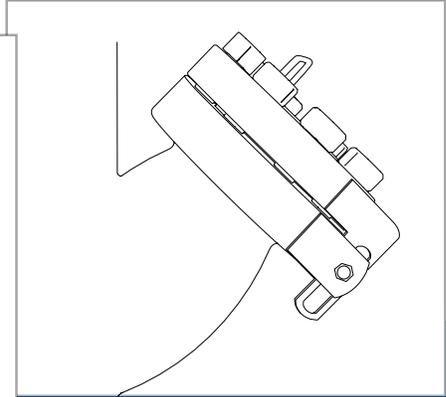
Hinged Cover (T-Bolt)

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.

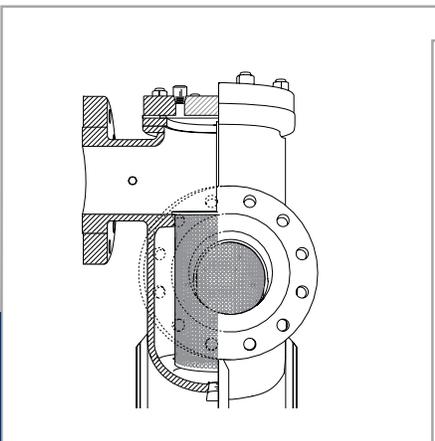


Bolted Slide Hinge Cover

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.

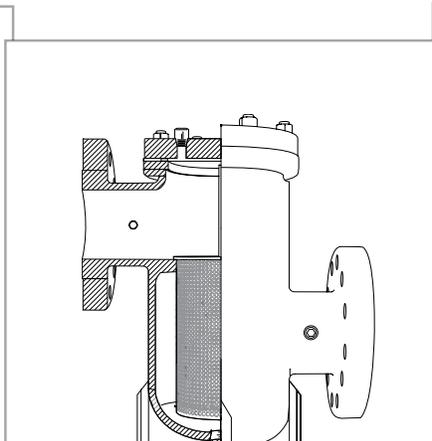
FLOW OPTIONS - FABRICATED STRAINERS

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.



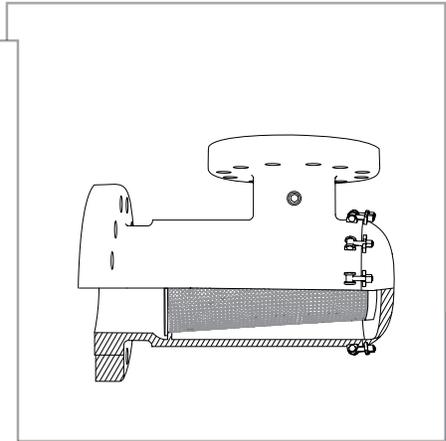
Right Angle Offset Flow

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



Inline Offset Flow

Inline 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.

▶ Contact Titan Flow Control, Inc. to learn about additional capabilities and information related to Titan's Fabricated Designs. This brochure is general in nature and is not a substitute for discussing your specific piping requirements with a Titan Sales Representative and obtaining certified engineering drawings.

FABRICATED BASKET STRAINERS

2" - 10" | ASME CLASS 150, 300

LARGER SIZES AVAILABLE

Fabricated Basket 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.



4" Fabricated Basket Strainer with Quick Open Cover shown

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

Sizes 2" - 48" Available

MODELS

- FB 20 Series - 150 Class**
- FB 30 Series - 300 Class**

MATERIALS:

- Carbon Steel • Stainless Steel
- Other Alloys

OPTIONS

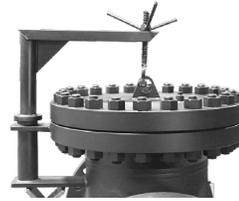


- Gauge Taps
- Vent/drains - (Standard)
- Back Flush Valves
- Semi-Automatic
- Pressure Gauges
- DP Gauge Switch
- Support Legs

CUSTOM COVER SOLUTIONS INCLUDING DAVITS & HINGED COVER



HINGED



DAVIT



BOLTED



ASME CLASSES

ASME Class 150 up to high pressure 900 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



PREFABRICATED PIPE & SPOOL OPTIONS

Created To Your Exact Specifications



TEMPERATURE CONTROL

Steam Jacket casing for set temperature control



UNIQUE PROJECTS

Rotated and Offset Nozzles to fit into your applications



TITAN FLOW CONTROL, INC

Tel: 910-735-0000 • Fax: 910-738-3848 • titan@titanfci.com
290 Corporate Drive • PO Box 7408 • Lumberton, NC 28358

www.titanfci.com



290 Corporate Dr
www.titanfci.com
Phone: 910.735.0000

Lumberton, NC 28358
titan@titanfci.com
Fax: 910.738.3848

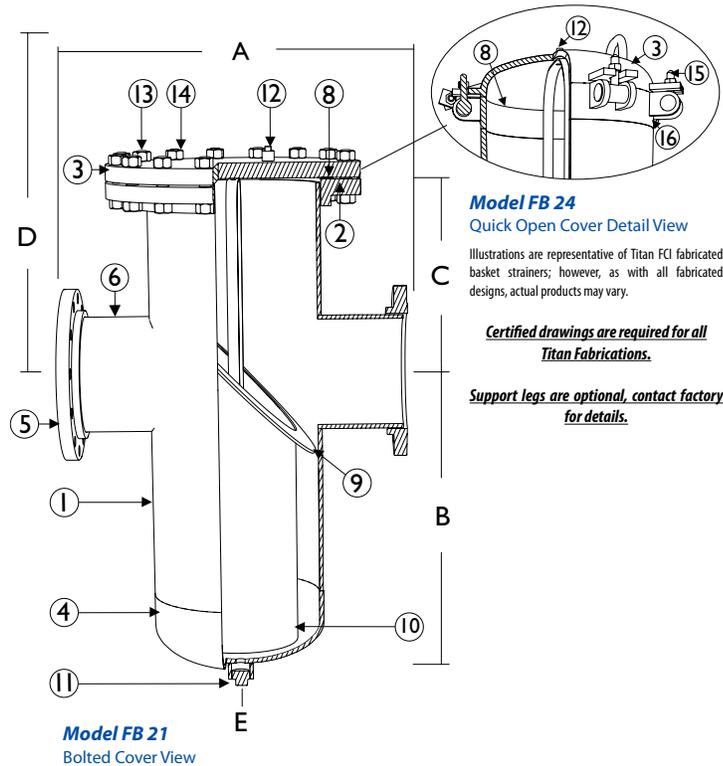
2" - 10"
FB 20 & FB 30 Series
Basket Strainer
(Single Basket)

ASME Class
150, 300

BILL OF MATERIALS ⁽¹⁾
FB 20 & FB 30 Series (Single Basket)

Part	FB 20 & FB 30 Carbon Steel	FB 20 & FB 30 Stainless Steel
1 Body	Carbon Steel A106 Gr.B	Stainless Steel SA312 Type 316
2 Body Flange	Carbon Steel A105	Stainless Steel SA182 Type 316
3 Cover	Bolted: Carbon Steel A105 Quick-Open: Carbon Steel A516 Gr. 70	Bolted: Stainless Steel SA182 Type 316 Quick-Open: Stainless Steel Type 316
4 Pipe Cap	Carbon Steel A234 Gr.WPB	Stainless Steel SA403 Type 316
5 Inlet/Outlet Flange	Carbon Steel A105	Stainless Steel SA182 Type 316
6 Nozzle Inlet/Outlet	Carbon Steel A106 Gr.B	Stainless Steel SA312 Type 316
7 Lifting Lug ⁽⁴⁾	Carbon Steel	Stainless Steel
8 Gasket/O-Ring ⁽²⁾	Bolted Cover: Spiral Wound Stainless Steel Quick-Open: Buna-N ⁽³⁾	
9 Basket Support	Carbon Steel A36 or A516-70	Stainless Steel A240 316
10 Straining Element ⁽²⁾	T304 SS	T304 SS
11 Drain	Carbon Steel A105	Stainless Steel SA182 Type 316
12 Vent with Plug ⁽⁵⁾	Carbon Steel A105	Stainless Steel SA182 Type 316
13 Studs	Carbon Steel A193 B7	Stainless Steel A193 B8 M
14 Nuts	Carbon Steel A194 2H	Stainless Steel A194 Gr.8
15 T-Bolt	Carbon Steel A325	Stainless Steel
16 T-Bolt Closure	Carbon Steel	Stainless Steel Type 316

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. Lifting lug not shown.
5. 1/2" NPT is standard.



FB 20 & FB 30 Series Basket Strainer Dimensions: 2" - 10"⁽⁴⁾ | ASME CLASS 150, 300

DIMENSIONS AND WEIGHTS ⁽¹⁾

	in	2	2 1/2	3	4	5	6	8	10
	mm	50	65	80	100	125	150	200	250
A - Face to Face ⁽²⁾⁽⁶⁾ FB 21, FB 24, FB 31, FB 34	in	18.00	C/F	20.00	24.00	C/F	28.00	30.00	32.00
	mm	457	C/F	508	610	C/F	711	762	813
B - Center to Bottom ⁽⁵⁾	in	10.00	C/F	12.00	16.00	C/F	21.00	30.00	36.00
	mm	254	C/F	305	406	C/F	533	762	914
C - Center to Top ⁽³⁾	in	8.00	C/F	10.00	11.00	C/F	12.00	14.00	18.00
	mm	203	C/F	254	279	C/F	305	356	457
D - Screen Removal	in	24.00	C/F	30.00	35.00	C/F	41.00	53.00	66.00
	mm	610	C/F	762	889	C/F	1041	1346	1676
E - NPT	in	.75	C/F	.75	1.00	C/F	1.00	1.50	1.50
	mm	19	C/F	19	25	C/F	25	38	38
Approx. Weight: FB 21 Bolted (ASME 150)	lb	115.00	C/F	125.00	220.00	C/F	350.00	520.00	700.00
	kg	52	C/F	57	100	C/F	159	236	318
Approx. Weight: FB 24 Quick Open (ASME 150)	lb	100.00	C/F	110.00	190.00	C/F	300.00	450.00	580.00
	kg	45	C/F	50	86	C/F	136	204	263
Approx. Weight: FB 31 Bolted (ASME 300)	lb	200.00	C/F	210.00	325.00	C/F	550	830.00	1325.00
	kg	91	C/F	95	147	C/F	250	377	601
Approx. Weight: FB 34 Quick Open (ASME 300)	lb	158.00	C/F	178.00	255.00	C/F	425.00	655.00	1025.00
	kg	71	C/F	81	116	C/F	193	297	465

1. Dimensions and weights of the FB 21, FB 24, FB 31, FB 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 flange. Does not include cover. Quick open cover dimension is to the top of body housing.

4. Larger sizes are available. Please consult page 7 of catalog.
5. Centerline to bottom dimension is to bottom of body housing and does not include the NPT plug.
6. Face to face dimension listed are for flanged units only. Please call factory for more information.

†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.**

FABRICATED BASKET STRAINERS

12" - 48" | ASME CLASS 150, 300

SMALLER SIZES AVAILABLE

Fabricated Basket 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.



16" Fabricated Basket Strainer with Optional Davit Assembly shown

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

CUSTOM COVER SOLUTIONS INCLUDING DAVITS & HINGED COVER



HINGED



DAVIT



BOLTED

Sizes 2" - 48" Available

MODELS

- FB 20 Series - 150 Class**
- FB 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



ASME CLASSES

ASME Class 150
up to high pressure
900 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



PREFABRICATED PIPE & SPOOL OPTIONS

Created To Your Exact Specifications



TEMPERATURE CONTROL

Steam Jacket casing
for set temperature
control



UNIQUE PROJECTS

Rotated and Offset
Nozzles to fit into
your applications



TITAN FLOW CONTROL, INC

Tel: 910-735-0000 • Fax: 910-738-3848 • titan@titanfci.com
290 Corporate Drive • PO Box 7408 • Lumberton, NC 28358

www.titanfci.com



290 Corporate Dr
www.titanfci.com
Phone: 910.735.0000

Lumberton, NC 28358
titan@titanfci.com
Fax: 910.738.3848

12" - 48"

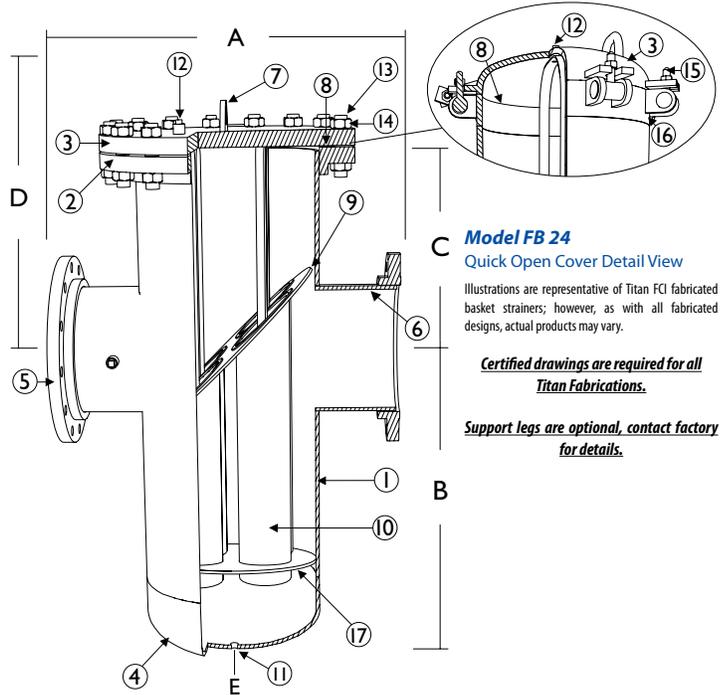
**FB 20 & 30 Series
Basket Strainer
(Multi Basket)**

ASME Class
150, 300

BILL OF MATERIALS ⁽¹⁾
FB 20 & FB 30 Series (Multi-Basket)

Part	FB 20 & FB 30 Carbon Steel	FB 20 & FB 30 Stainless Steel
1 Body	Carbon Steel A106 Gr.B	Stainless Steel SA312 Type 316
2 Body Flange	Carbon Steel A105	Stainless Steel SA182 Type 316
3 Cover	Bolted: Carbon Steel A105 Quick-Open: Carbon Steel A516 Gr. 70	Bolted: Stainless Steel SA182 Type 316 Quick-Open: Stainless Steel Type 316
4 Pipe Cap	Carbon Steel A234 Gr.WPB	Stainless Steel SA403 Type 316
5 Inlet/Outlet Flange	Carbon Steel A105	Stainless Steel SA182 Type 316
6 Nozzle Inlet/Outlet	Carbon Steel A106 Gr.B	Stainless Steel SA312 Type 316
7 Lifting Lug	Carbon Steel	Stainless Steel
8 Gasket/O-Ring ⁽²⁾	Bolted Cover: Spiral Wound Stainless Steel Quick-Open: Buna-N ⁽³⁾	Quick-Open: Buna-N ⁽³⁾
9 Basket Support	Carbon Steel A36 or A516-70	Stainless Steel A240 316
10 Straining Element ⁽²⁾	T304 SS	T304 SS
11 Drain	Carbon Steel A105	Stainless Steel SA182 Type 316
12 Vent with Plug ⁽⁴⁾	Carbon Steel A105	Stainless Steel SA182 Type 316
13 Studs	Carbon Steel A193 B7	Stainless Steel A193 B8 M
14 Nuts	Carbon Steel A194 2H	Stainless Steel A194 Gr.8
15 T-Bolt	Carbon Steel A325	Stainless Steel
16 T-Bolt Closure	Carbon Steel	Stainless Steel Type 316
17 Basket Support	Carbon Steel A36 or A516-70	Stainless Steel A240 316

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.



Model FB 21
Bolted Cover View

Model FB 24
Quick Open Cover Detail View

Illustrations are representative of Titan FCI fabricated basket strainers; however, as with all fabricated designs, actual products may vary.

Certified drawings are required for all Titan Fabrications.

Support legs are optional, contact factory for details.

FB 20 & FB 30 Series Basket Strainer Dimensions: 12" - 48" ⁽⁴⁾ | ASME CLASS 150, 300

DIMENSIONS AND WEIGHTS ⁽¹⁾

	in	12	14	16	18	20	24	30	36	48
	mm	300	355	405	460	508	610	762	914	1219
A - Face to Face ⁽²⁾⁽⁶⁾ FB 21, FB 24, FB 31, FB 34	in	34.00	40.00	44.00	44.00	50.00	66.00	66.00	84.00	96.00
	mm	864	1016	1118	1118	1270	1676	1676	2134	2438
B - Center to Bottom	in	31.00	34.00	44.00	44.00	44.00	51.00	62.00	77.00	122.00
	mm	787	864	1118	1118	1118	1295	1575	1956	3099
C - Center to Top ⁽³⁾	in	20.00	22.00	22.00	22.25	24.00	32.00	34.00	34.00	45.00
	mm	508	559	559	565	610	813	864	864	1143
D - Screen Removal	in	64.00	70.00	79.00	79.00	83.00	106.00	119.00	133.00	196.00
	mm	1626	1778	2006	2006	2108	2692	3023	3378	4978
E - NPT	in	1.50	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
	mm	38	50	50	50	50	50	50	50	50
Approx. Weight: FB 21 Bolted (ASME 150)	lb	1025.00	1125.00	1230.00	1600.00	2300.00	4480.00	6200.00	8400.00	14100.00
	kg	465	510	558	726	1043	2032	2812	3810	6396
Approx. Weight: FB 24 Quick Open (ASME 150)	lb	880.00	930.00	950.00	1300.00	1760.00	3460.00	C/F	C/F	C/F
	kg	399	422	431	590	798	1569	C/F	C/F	C/F
Approx. Weight: FB 31 Bolted (ASME 300)	lb	1780.00	1850.00	2100.00	2960.00	4625.00	7500.00	C/F	C/F	C/F
	kg	807	839	953	1343	2098	3402	C/F	C/F	C/F
Approx. Weight: FB 34 Quick Open (ASME 300)	lb	1425.00	1430.00	1450.00	2265.00	3220.00	5200.00	C/F	C/F	C/F
	kg	646	649	658	1028	1461	2359	C/F	C/F	C/F

1. Dimensions and weights of the FB 21, FB 24, FB 31, FB 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 flange. Does not include cover. Quick open cover dimension is to the top of body housing.

4. Smaller sizes are available. Please consult page 6 of catalog.
5. Centerline to bottom dimension is to bottom of body housing and does not include the NPT plug.
6. Face to face dimension listed are for flanged units only. Please call factory for more information.

†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.**

FABRICATED BASKET STRAINERS

2" - 12" | ASME CLASS 600, 900

Fabricated Basket 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.



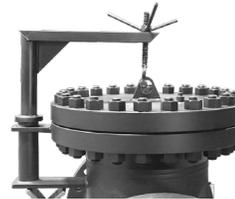
8" Fabricated Basket Strainer, ASME 600, with Optional Davit Assembly shown

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

CUSTOM COVER SOLUTIONS INCLUDING DAVITS & HINGED COVER



HINGED



DAVIT



BOLTED

MODELS

- FB 40 Series - 600 Class**
- FB 50 Series - 900 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

ASME CLASSES



ASME Class 150 up to high pressure 900 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

PREFABRICATED PIPE & SPOOL OPTIONS



Created To Your Exact Specifications

TEMPERATURE CONTROL



Steam Jacket casing for set temperature control

UNIQUE PROJECTS



Rotated and Offset Nozzles to fit into your applications



TITAN FLOW CONTROL, INC

Tel: 910-735-0000 • Fax: 910-738-3848 • titan@titanfci.com
290 Corporate Drive • PO Box 7408 • Lumberton, NC 28358

www.titanfci.com



290 Corporate Dr
www.titanfci.com
Phone: 910.735.0000

Lumberton, NC 28358
titan@titanfci.com
Fax: 910.738.3848

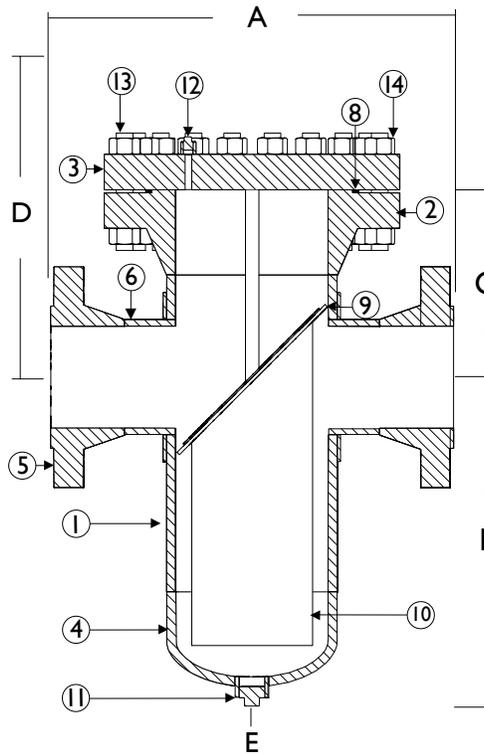
2" - 12"

FB 40 & FB 50 Series
Basket Strainer

ASME Class
600, 900

BILL OF MATERIALS⁽¹⁾
FB 40 & FB 50 Series

Part	FB 40 & FB 50 Carbon Steel	FB 40 & FB 50 Stainless Steel
1 Body	Carbon Steel A106 Gr.B	Stainless Steel SA312 Type 316
2 Body Flange	Carbon Steel A105	Stainless Steel SA182 Type 316
3 Cover	Bolted: Carbon Steel A105 Quick-Open: Carbon Steel A516 Gr. 70	Bolted: Stainless Steel SA182 Type 316 Quick-Open: Stainless Steel Type 316
4 Pipe Cap	Carbon Steel A234 Gr.WPB	Stainless Steel SA403 Type 316
5 Inlet/Outlet Flange	Carbon Steel A105	Stainless Steel SA182 Type 316
6 Nozzle Inlet/Outlet	Carbon Steel A106 Gr.B	Stainless Steel SA312 Type 316
7 Lifting Lug	Carbon Steel	Stainless Steel
8 Gasket/O-Ring ⁽²⁾	Bolted Cover: Spiral Wound Stainless Steel Quick-Open: Buna-N ⁽³⁾	
9 Basket Support	Carbon Steel A36 or A516-70	Stainless Steel A240 316
10 Straining Element ⁽⁴⁾	T304 SS	T304 SS
11 Drain	Carbon Steel A105	Stainless Steel SA182 Type 316
12 Vent with Plug ⁽⁴⁾	Carbon Steel A105	Stainless Steel SA182 Type 316
13 Studs	Carbon Steel A193 B7	Stainless Steel A193 B8 M
14 Nuts	Carbon Steel A194 2H	Stainless Steel A194 Gr.8
15 T-Bolt	Carbon Steel A325	Stainless Steel
16 T-Bolt Closure	Carbon Steel	Stainless Steel Type 316



Illustrations are representative of Titan FCI fabricated basket strainers; however, as with all fabricated designs, actual products may vary.

High pressure quick open threaded and yoke style covers available upon request.

Certified drawings are required for all Titan Fabrications.

Support legs are optional, contact factory for details.

Model FB 41
Bolted Cover View

- Bill of Materials represents standard materials. Equivalent or better materials may be substituted at the manufacturer's discretion.
- Titan recommends keeping spare parts on hand.
- Buna-N is standard for applications below 250° F. Viton is standard for applications above 250° F.
- 1/2" NPT is standard. NPT Blow-off not recommended for ASME Class 900 and above.

FB 40 & FB 50 Series Basket Strainer Dimensions: 2" - 12" | ASME CLASS 600, 900

DIMENSIONS AND WEIGHTS⁽¹⁾

	in	2	2 1/2	3	4	5	6	8	10	12 ⁽⁴⁾
	mm	50	65	80	100	125	150	200	250	300
A - Face to Face⁽²⁾⁽⁷⁾ FB 41, FB 44, FB 51, FB 54	in	22.00	C/F	22.00	26.00	C/F	30.00	34.00	42.00	44.00
	mm	559	C/F	559	660	C/F	762	864	1067	1118
B - Center to Bottom⁽⁵⁾	in	10.00	C/F	12.00	16.00	C/F	21.00	30.00	36.00	31.00
	mm	254	C/F	305	406	C/F	533	762	914	787
C - Center to Top⁽³⁾	in	8.00	C/F	10.00	11.00	C/F	12.00	14.00	18.00	20.00
	mm	203	C/F	254	279	C/F	305	356	457	508
D - Screen Removal	in	24.00	C/F	30.00	35.00	C/F	41.00	53.00	66.00	64.00
	mm	610	C/F	762	889	C/F	1041	1346	1676	1626
E- NPT⁽⁶⁾	in	.75	C/F	.75	1.00	C/F	1.00	1.50	1.50	1.50
	mm	19	C/F	19	25	C/F	25	38	38	38
Approx. Weight: FB 41 Bolted (ASME 600)	lb	290	C/F	400	550	C/F	850	1200	2150	2700
	kg	131.5	C/F	181.44	249.5	C/F	385.6	544.3	975.2	1224.7
Approx. Weight: FB 51 Bolted (ASME 900)	lb	375	C/F	450	700	C/F	1150	1750	3100	4100
	kg	170.1	C/F	204.1	317.5	C/F	521.6	793.8	1406.1	1859.8

- Dimensions and weights of the FB 41, FB 44, FB 51, FB 54 are provided for reference only. Certified drawings are required for all Titan Fabrications.
- 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.
- Centerline dimension is from the top of body flange. Does not include cover. Quick open cover dimension is to the top of body housing.
- 12" strainers are multi basket style.
- Centerline to bottom dimension is to bottom of body housing and does not include the NPT plug.
- NPT Blow-off not recommended for ASME Class 900 and above.
- Face to face dimension listed are for flanged units only. Please call factory for more information.

†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.**

FABRICATED INLINE DUPLEX STRAINERS

2" - 24" | ASME 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

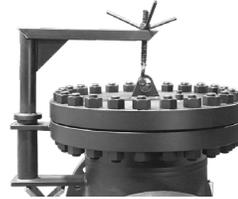
All pictures shown are for illustrative purposes only. Actual product may vary due to product enhancement.

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

ASME CLASSES

ASME Class 150 up to high pressure 900 class



END CONNECTIONS

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



TEMPERATURE CONTROL

Steam Jacket casing for set temperature control



STRAINING ELEMENTS

Customize to fit your requirements

Heavy Duty Baskets, Wedge Wire, & Multi Basket Designs



PREFABRICATED PIPE & SPOOL OPTIONS

Created To Your Exact Specifications



UNIQUE PROJECTS

Rotated and Offset Nozzles to fit into your applications



TITAN FLOW CONTROL, INC

Tel: 910-735-0000 • Fax: 910-738-3848 • titan@titanfci.com
290 Corporate Drive • PO Box 7408 • Lumberton, NC 28358

www.titanfci.com



290 Corporate Dr
www.titanfci.com
Phone: 910.735.0000

Lumberton, NC 28358
titan@titanfci.com
Fax: 910.738.3848

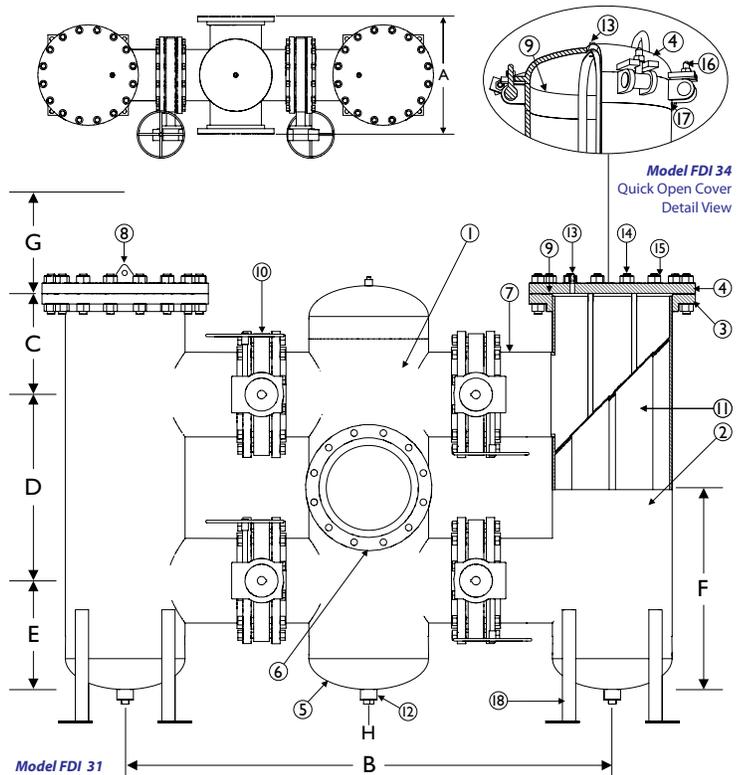
2" - 24" FDI 20 & FDI 30 Series Duplex Strainer

ASME Class 150, 300

BILL OF MATERIALS⁽¹⁾
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	Bolted: Carbon Steel A105 Quick-Open: Carbon Steel A516 Gr.70	Bolted: Stainless Steel SA182 Type 316 Quick-Open: 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 ⁽²⁾	Bolted Cover: Spiral Wound Stainless Steel Quick-Open: Buna-N ⁽³⁾	Quick-Open: Buna-N ⁽³⁾
10 Butterfly Valve	Butterfly Valve: BF 76 Ductile Iron Body, Ductile Iron Nickel Coated Disc ⁽⁵⁾ , Buna/EPDM Seat with Gear Operator	
11 Straining Element ⁽²⁾	T304 SS	T304 SS
12 Drain	Carbon Steel A105	Stainless Steel SA182 Type 316
13 Vent with Plug ⁽⁴⁾	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 ⁽⁶⁾	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" | ASME CLASS 150, 300

DIMENSIONS AND WEIGHTS⁽¹⁾

	in	2	3	4	6	8	10	12	14	16	18	20	24
A - Face to Face⁽²⁾ 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 - Center Column to Center Column	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
C - Center of Top Valve to Top⁽³⁾	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
D - Valve to Valve	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
E - Center of Bottom Valve to Bottom	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
F - Centerline to Bottom⁽⁴⁾	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
G - Screen Removal	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
H - NPT	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
Approximate Weight	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.**



**8" Fabricated Duplex Strainer
With Hinged Cover Solution**

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

MODELS

FDI 20 Series - 150 Class

FDI 30 Series - 300 Class

FDI 40 Series - 600 Class

DESIGN OPTIONS

INLINE MANIFOLD STYLE 1

INLINE MANIFOLD STYLE 2

INLINE MANIFOLD STYLE 3

FDI - INLINE MANIFOLD STYLE 3



FABRICATED INLINE DUPLEX DESIGNS

2" - 24" | ASME CLASS 150, 300, 600

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.

FDI - INLINE MANIFOLD STYLE 1



FDI - INLINE MANIFOLD STYLE 2



TITAN FLOW CONTROL, INC

Tel: 910-735-0000 • Fax: 910-738-3848 • titan@titanfci.com
290 Corporate Drive • PO Box 7408 • Lumberton, NC 28358

www.titanfci.com



**16" Fabricated Box
Duplex Strainer with hinged cover**

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

FABRICATED INLINE DUPLEX DESIGNS

12" - 24" | ASME CLASS 150

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.

Sizes 12" - 24"

Contact Factory for Larger Sizes

MODELS

FDI 20 Series - 150 Class

DESIGN OPTIONS

INLINE BOX STYLE 1

MATERIALS:

- Carbon Steel • Stainless Steel
- Other Alloys

CONFIGURATION

ENDS

FLANGED

BUTT WELD*

CONFIGURATION

COVER

QUICK-OPEN

BOLTED*

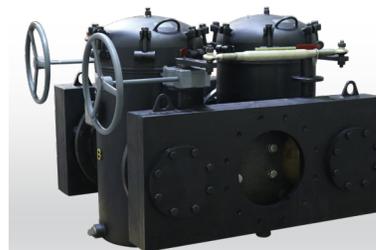
*Configurations vary by fabrication. Contact Titan FCI for more information.

FDI - INLINE BOX STYLE 1



REPLACE CAST DESIGNS NO LONGER AVAILABLE!

- LIMITED SPACE DUPLEX STRAINER
- VALVE OPERATORS CUSTOMIZED FOR EASY ACCESS
- BOX HEADERS FOR REDUCED INLET/OUTLET DIMENSIONS



TITAN FLOW CONTROL, INC

Tel: 910-735-0000 • Fax: 910-738-3848 • titan@titanfci.com
290 Corporate Drive • PO Box 7408 • Lumberton, NC 28358

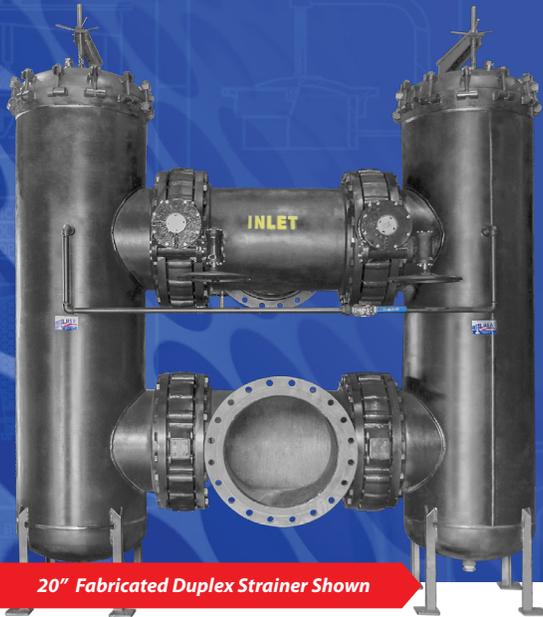
www.titanfci.com

FABRICATED OFFSET DUPLEX STRAINERS

2" - 24" | ASME 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 Shown

CUSTOM COVER SOLUTIONS INCLUDING DAVITS & HINGED COVER

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

Sizes 2" - 24"
Contact Factory for Larger Sizes

MODELS

FDO 20 Series - 150 Class
FDO 30 Series - 300 Class

MATERIALS:

- Carbon Steel • Stainless Steel
- Other Alloys

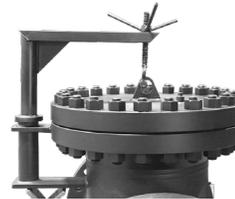
OPTIONS



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



HINGED



DAVIT



BOLTED



ASME CLASSES

ASME Class 150
up to high pressure
900 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



PREFABRICATED PIPE & SPOOL OPTIONS

Created To Your Exact Specifications



TEMPERATURE CONTROL

Steam Jacket casing
for set temperature
control



UNIQUE PROJECTS

Rotated and Offset
Nozzles to fit into
your applications



TITAN FLOW CONTROL, INC

Tel: 910-735-0000 • Fax: 910-738-3848 • titan@titanfci.com
290 Corporate Drive • PO Box 7408 • Lumberton, NC 28358

www.titanfci.com



290 Corporate Dr
www.titanfci.com
Phone: 910.735.0000

Lumberton, NC 28358
titan@titanfci.com
Fax: 910.738.3848

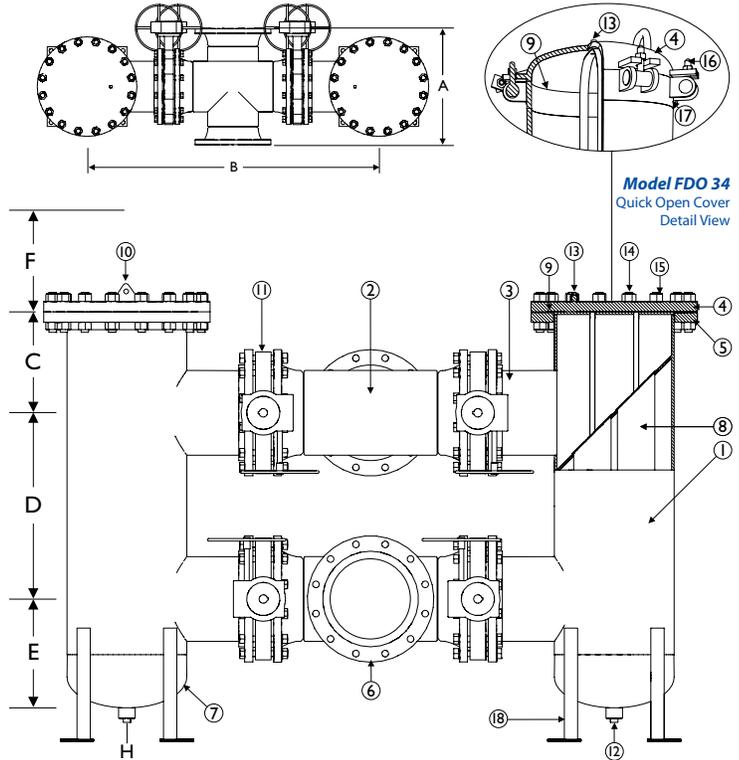
2" - 24" FDO 20 & FDO 30 Series Duplex Strainer

ASME Class
150, 300

BILL OF MATERIALS⁽¹⁾
FDO 20 & FDO 30 Series

Part	FDO 20 & FDO 30 Carbon Steel	FDO 20 & FDO 30 Stainless Steel
1 Body	Carbon Steel A106 Gr.B	Stainless Steel SA312 Type 316
2 Tee	Carbon Steel A234	Stainless Steel SA403 Type 316
3 Nozzle	Carbon Steel A106 Gr.B	Stainless Steel SA312 Type 316
4 Cover	Bolted: Carbon Steel A105 Quick-Open: Carbon Steel A516 Gr. 70	Bolted: Stainless Steel SA182 Type 316 Quick-Open: Stainless Steel Type 316
5 Body Flange	Carbon Steel A105	Stainless Steel SA182 Type 316
6 Inlet/Outlet Flange	Carbon Steel A105	Stainless Steel SA182 Type 316
7 Pipe Cap	Carbon Steel A234 Gr.WPB	Stainless Steel SA403 Type 316
8 Straining Element ⁽²⁾	T304 SS	T304 SS
9 Gasket/O-Ring ⁽²⁾	Bolted Cover: Spiral Wound Stainless Steel	Quick-Open: Buna-N ⁽³⁾
10 Lifting Lug	Carbon Steel	Stainless Steel
11 Butterfly Valve	Butterfly Valve: BF 76 Ductile Iron Body, Ductile Iron Nickel Coated Disc ⁽⁴⁾ , Buna/EPDM Seat with Gear Operator	
12 Drain	Carbon Steel A105	Stainless Steel SA182 Type 316
13 Vent with Plug ⁽⁴⁾	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 ⁽⁵⁾	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 250° F and above.
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.



Model FDO 31

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.

FDO 20 & FDO 30 Series Offset Duplex Strainer Dimensions: 2" - 24" | ASME CLASS 150, 300

DIMENSIONS AND WEIGHTS⁽¹⁾

	in	2	3	4	6	8	10	12	14	16	18	20	24
A - Face to Face⁽²⁾ FDO 21, FDO 24, FDO 31, FDO 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
	mm	260	318	368	470	565	641	743	819	870	972	1057	1175
B - Center Column to Center Column	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
	mm	817	880	1099	1261	1416	1586	1861	1988	2159	2299	2588	2899
C - Center of Top Valve to top⁽³⁾	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
	mm	168	184	222	254	286	337	386	400	462	462	588	687
D - Valve to Valve	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
	mm	330	330	432	432	533	635	711	762	864	914	1016	1219
E - Center of Bottom Valve to Bottom⁽⁴⁾	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
	mm	170	168	210	262	313	365	416	457	521	546	572	622
F - Screen Removal	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
	mm	610	635	813	864	1016	1194	1346	1422	1626	1702	1956	2311
H - NPT	in	.75	.75	1.00	1.00	1.50	1.50	1.50	2.00	2.00	2.00	2.00	2.00
	mm	19	19	25	25	38	38	38	51	51	51	51	51
Approximate Weight	lb	370.00	450.00	690.00	1100.00	1750.00	2550.00	4100.00	4300.00	6100.00	6500.00	9950.00	15250.00
	kg	168.00	204.00	313.00	499.00	794.00	1157.00	1860.00	1951.00	2767.00	2948.00	4513.00	6917.00

1. Dimensions and weights of FDO 21, FDO 24, FDO 31, & FDO 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. Center of Bottom Valve 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.**

FABRICATED TEE STRAINERS

2" - 30" | ASME CLASS 150



Fabricated Tee 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.

6" Fabricated Tee Strainer, ASME 150, with Quick Open Cover Shown

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

Sizes 2" - 30" Available

MODEL

FT 20 Series - 150 Class

MATERIALS:

- Carbon Steel • Stainless Steel
- Other Alloys

OPTIONS

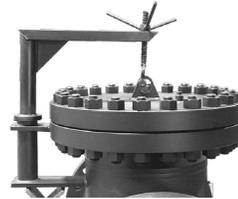


- Gauge Taps
- Vent - (Standard)
- Drains
- Back Flush Valves
- Semi-Automatic
- Pressure Gauges
- DP Gauge Switch

CUSTOM COVER SOLUTIONS INCLUDING DAVITS & HINGED COVER



HINGED



DAVIT



BOLTED



ASME CLASSES

ASME Class 150 up to high pressure 900 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



PREFABRICATED PIPE & SPOOL OPTIONS

Created To Your Exact Specifications



TEMPERATURE CONTROL

Steam Jacket casing for set temperature control



UNIQUE PROJECTS

Rotated and Offset Nozzles to fit into your applications



TITAN FLOW CONTROL, INC

Tel: 910-735-0000 • Fax: 910-738-3848 • titan@titanfci.com
290 Corporate Drive • PO Box 7408 • Lumberton, NC 28358

www.titanfci.com



290 Corporate Dr
www.titanfci.com
Phone: 910.735.0000

Lumberton, NC 28358
titan@titanfci.com
Fax: 910.738.3848

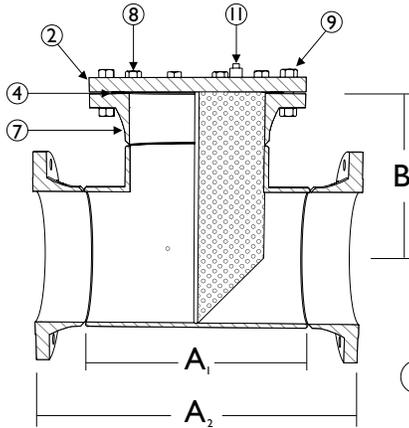
2"- 30" **FT 20 Series Tee Strainer**

ASME Class
150

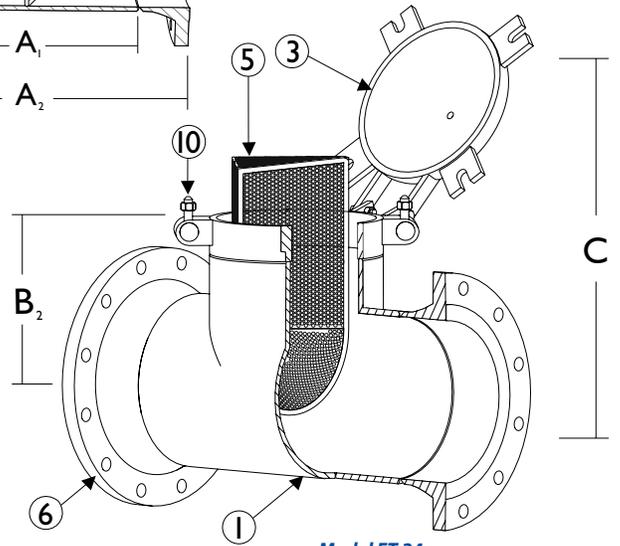
BILL OF MATERIALS⁽¹⁾
FT 20 Series

Part	FT 20 - 25 CS	FT 20 - 25 SS
1 Body	Carbon Steel A234 Gr.WPB	Stainless Steel SA403
2 Cover	Carbon Steel A105	Stainless Steel SA182 Type 316
3 Quick Open Cover Assembly	Carbon Steel A516 Gr.70	Stainless Steel Type 316
4 Cover Gasket/ O-Ring ⁽²⁾	Bolted: Spiral Wound Stainless Steel	Quick Open: Buna-N ⁽³⁾
5 Straining Element ⁽²⁾⁽⁴⁾⁽⁵⁾	T304 SS	T304 SS
6 Inlet/Outlet Flange	Carbon Steel A105	Stainless Steel SA182 Type 316
7 Weld Neck Flange	Carbon Steel A105	Stainless Steel SA182 Type 316
8 Bolts	Carbon Steel A193-B7	Stainless Steel A193 B8 M
9 Nuts	Carbon Steel A194 2H	Stainless Steel A194 Gr.8
10 T-Bolt	Carbon Steel A325	Stainless Steel
11 Vent with Plug ⁽⁶⁾	Carbon Steel A105	Stainless Steel SA182 Type 316

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. Max mesh size available is 60 mesh.
5. 1/8" perf is standard for all mesh lined straining elements.
6. 1/2" NPT is standard



Model FT 21



Model FT 24

Illustrations are representative of Titan FCI fabricated tee strainers; however, as with all fabricated designs, actual products may vary. **Certified drawings are required for all Titan fabrications.**

Tee Strainers are not recommended for suction applications.

Optional bottom drains (2" NPT Standard) are available at extra cost.

FT 20 Series: Tee Strainer Dimensions | 2"- 30" | ASME CLASS 150

DIMENSIONS AND WEIGHTS⁽¹⁾

	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	30
(A₁) Face to Face⁽²⁾ FT 20, FT 23 - Butt-Weld	in	5.00	6.00	6.75	8.25	9.75	11.25	14.00	17.00	20.00	22.00	24.00	27.00	30.00	34.00	44.00
	mm	127	152	172	210	248	286	356	432	508	559	610	686	762	864	1118
(A₂) Face to Face⁽²⁾ FT 21, FT 24 - Flanged	in	10.25	11.75	12.50	14.50	17.00	18.50	22.25	25.25	29.25	32.25	34.25	38.25	41.63	46.25	54.50
	mm	260	299	317	368.3	432	470	565	641	743	819	870	972	1057	1175	1384
(B₁) Ctr-Line to Top⁽³⁾ FT 20 - FT 22 - Bolted Cover	in	5.13	5.88	6.25	7.25	8.50	9.25	11.13	12.63	14.63	16.13	17.13	19.13	20.81	23.13	27.25
	mm	130	149	159	184	216	235	283	321	372	410	435	486	529	587	692
(B₂) Ctr-Line to Top⁽³⁾ FT 23 - FT 25 - Quick Open Cover	in	n/a	n/a	n/a	n/a	n/a	9.56	11.56	13.94	15.88	17.56	19.00	21.50	23.94	27.25	33.75
	mm	n/a	n/a	n/a	n/a	n/a	243	294	354	403	446	482	546	608	692	857
C Dimension Screen Removal	in	11.44	13.19	14.25	16.75	19.78	21.81	26.56	30.63	35.63	39.25	42.25	47.25	51.63	58.25	69.50
	mm	291	335	362	426	503	554	675	778	905	997	1073	1200	1311	1480	1765
Approx. Weight: FT 20	lb	18.13	C/F	34.38	56.88	C/F	108.75	178.75	246.25	413.75	523.75	643.75	666.25	1030.00	1532.50	C/F
	kg	8.22	C/F	15.60	25.80	C/F	49.33	81.08	111.70	187.70	237.60	292.00	302.21	467.00	695.13	C/F
Approx. Weight: FT 21	lb	33.13	C/F	63.13	98.13	C/F	173.75	283.75	381.25	633.75	808.75	993.75	1078.75	1522.50	2202.50	C/F
	kg	15.00	C/F	28.63	44.51	C/F	78.81	128.71	172.93	287.50	366.84	450.80	489.31	690.60	999.10	C/F

1. Dimensions and weights of the FT 20 series 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. Center line to top dimension is to the top of the body flange. Quick open cover dimension is to the top of body housing.

†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.**

FABRICATED TEE STRAINERS

2" - 30" | ASME CLASS 300



18" Fabricated Tee Strainer, ASME 300, with Optional Davit Assembly Shown

Fabricated Tee 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.

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

CUSTOM COVER SOLUTIONS INCLUDING DAVITS & HINGED COVER

Sizes 2" - 30"
Available

MODEL

FT 30 Series - 300 Class

MATERIALS:

- Carbon Steel • Stainless Steel
- Other Alloys

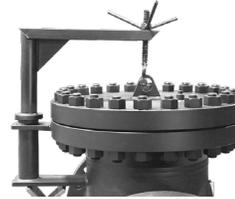
OPTIONS



- Gauge Taps
- Vent - (Standard)
- Drains
- Back Flush Valves
- Semi-Automatic
- Pressure Gauges
- DP Gauge Switch



HINGED



DAVIT



BOLTED



ASME CLASSES

ASME Class 150
up to high pressure
900 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



PREFABRICATED PIPE & SPOOL OPTIONS

Created To Your Exact
Specifications



TEMPERATURE CONTROL

Steam Jacket casing
for set temperature
control



UNIQUE PROJECTS

Rotated and Offset
Nozzles to fit into
your applications



TITAN FLOW CONTROL, INC

Tel: 910-735-0000 • Fax: 910-738-3848 • titan@titanfci.com
290 Corporate Drive • PO Box 7408 • Lumberton, NC 28358

www.titanfci.com



290 Corporate Dr
www.titanfci.com
Phone: 910.735.0000

Lumberton, NC 28358
titan@titanfci.com
Fax: 910.738.3848

2"- 30"

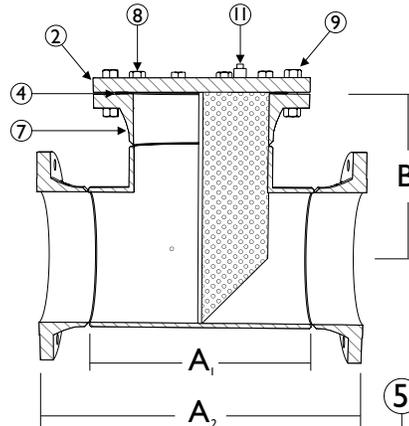
FT 30 Series
Tee Strainer

ASME Class
300

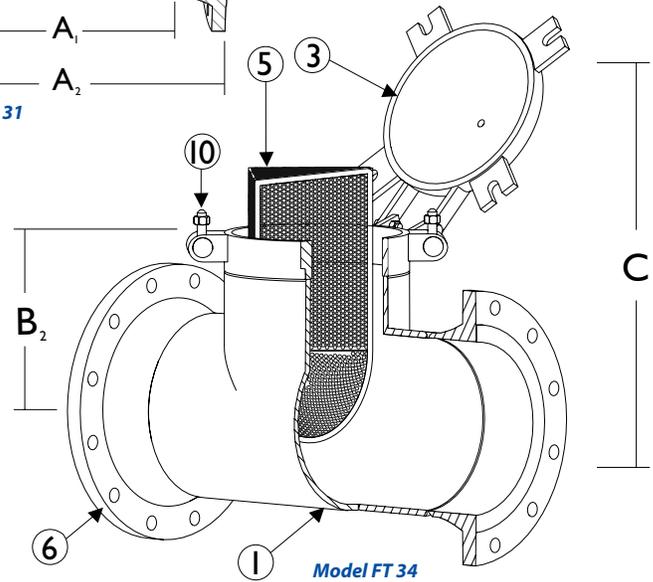
BILL OF MATERIALS⁽¹⁾
FT 30 Series

Part	FT 30-35 CS	FT 30-35 SS
1 Body	Carbon Steel A234 Gr.WPB	Stainless Steel SA 403
2 Cover	Carbon Steel A105	Stainless Steel SA182 Type 316
3 Quick Open Cover Assembly	Carbon Steel A516 Gr.70	Stainless Steel Type 316
4 Cover Gasket/ O-Ring ⁽²⁾	Bolted: Spiral Wound Stainless Steel	Quick Open: Buna-N ⁽³⁾
5 Straining Element ⁽²⁾⁽⁴⁾⁽⁵⁾	T304 SS	T304 SS
6 Inlet/Outlet Flange	Carbon Steel A105	Stainless Steel SA182 Type 316
7 Weld Neck Flange	Carbon Steel A105	Stainless Steel SA182 Type 316
8 Bolts	Carbon Steel A193-B7	Stainless Steel A193 B8 M
9 Nuts	Carbon Steel A194 2H	Stainless Steel A194 Gr.8
10 T-Bolt	Carbon Steel A325	Stainless Steel
11 Vent with Plug ⁽⁶⁾	Carbon Steel A105	Stainless Steel SA182 Type 316

- Bill of Materials represents standard materials. Equivalent or better materials may be substituted at the manufacturer's discretion.
- Titan recommends keeping spare parts on hand.
- Buna-N is standard for applications below 250° F. Viton is standard for applications above 250° F.
- Max mesh size available is 60 mesh.
- 1/8" perf is standard for all mesh lined straining elements.
- 1/2" NPT is standard



Model FT 31



Model FT 34

Illustrations are representative of Titan FCI fabricated tee strainers; however, as with all fabricated designs, actual products may vary. **Certified drawings are required for all Titan Fabrications.**

Tee Strainers are not recommended for suction applications.

Optional bottom drains (2" NPT Standard) are available at extra cost.

FT 30 Series: Tee Strainer Dimensions | 2" - 30" | ASME CLASS 300

DIMENSIONS AND WEIGHTS⁽¹⁾

	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	30
(A₁) Face to Face⁽²⁾ FT 30, FT 33 - Butt-Weld	in	5.00	6.00	6.75	8.25	9.75	11.25	14.00	17.00	20.00	22.00	24.00	27.00	30.00	34.00	C/F
	mm	127	152	172	210	248	286	356	432	508	559	610	686	762	864	C/F
(A₂) Face to Face⁽²⁾ FT 31, FT 34 - Flanged	in	10.75	12.25	13.25	15.25	17.75	19.25	23.00	26.50	30.50	33.50	35.75	39.75	43.00	47.50	C/F
	mm	273	311	337	387	451	489	584	673	775	851	908	1010	1092	1207	C/F
(B₁) Ctr-Line to Top⁽³⁾ FT 30-32 - Bolted Cover	in	5.38	6.13	6.63	7.63	8.88	9.63	11.50	13.25	15.25	16.75	17.88	19.88	21.5	23.75	C/F
	mm	137	157	168	194	225	245	292	337	387	426	454	505	546	603	C/F
(B₂) Ctr-Line to Top⁽³⁾ FT 33-35 - Quick Open Cover	in	n/a	n/a	n/a	n/a	n/a	9.94	11.56	13.94	15.90	17.60	19.00	21.50	23.94	27.25	C/F
	mm	n/a	n/a	n/a	n/a	n/a	252	294	354	403	446	483	546	608	692	C/F
C Dimension Screen Removal	in	11.94	13.69	15.00	17.50	20.53	22.56	27.31	31.90	36.88	40.50	43.75	48.75	53.00	59.50	C/F
	mm	303	348	381	446	522	573	694	810	937	1029	1111	1238	1346	1511	C/F
Approx. Weight: FT 30	lb	25.63	C/F	51.25	83.13	C/F	161.25	255.00	381.25	578.75	776.25	1056.25	1332.50	1743.75	3296.25	C/F
	kg	11.63	C/F	23.25	37.71	C/F	73.14	115.70	173.00	262.52	352.00	479.11	604.42	791.00	1495.20	C/F
Approx. Weight: FT 31	lb	48.13	C/F	96.25	149.38	C/F	273.75	427.50	631.25	933.75	1291.25	1681.25	2132.50	2743.75	4746.25	C/F
	kg	21.80	C/F	43.70	67.80	C/F	124.20	194.00	286.33	423.54	585.70	762.60	967.30	1244.54	2153.00	C/F

- Dimensions and weights of the FT 30 Series are provided for reference only. **Certified drawings are required for all Titan Fabrications.**
- 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.
- Center line to top dimension is to the top of the body flange. Quick open cover dimension is to the top of body housing.

†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.**

FABRICATED TEE STRAINERS

2" - 30" | ASME CLASS 600



Fabricated Tee 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.

6" Fabricated Tee Strainer, ASME 600, with Bolted Cover Assembly Shown

CUSTOM COVER SOLUTIONS INCLUDING DAVITS & HINGED COVER

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

MODEL

FT 40 Series - 600 Class

MATERIALS:

- Carbon Steel • Stainless Steel
- Other Alloys

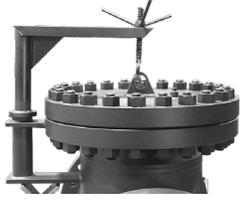
OPTIONS



- Gauge Taps
- Vent - (Standard)
- Drains
- Back Flush Valves
- Semi-Automatic
- Pressure Gauges
- DP Gauge Switch



HINGED



DAVIT



BOLTED



ASME CLASSES
ASME Class 150 up to high pressure 900 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



PREFABRICATED PIPE & SPOOL OPTIONS
Created To Your Exact Specifications



TEMPERATURE CONTROL
Steam Jacket casing for set temperature control



UNIQUE PROJECTS
Rotated and Offset Nozzles to fit into your applications



Tel: 910-735-0000 • Fax: 910-738-3848 • titan@titanfci.com
290 Corporate Drive • PO Box 7408 • Lumberton, NC 28358

www.titanfci.com



290 Corporate Dr
www.titanfci.com
Phone: 910.735.0000

Lumberton, NC 28358
titan@titanfci.com
Fax: 910.738.3848

2" - 30"

FT 40 Series
Tee Strainer

ASME Class
600

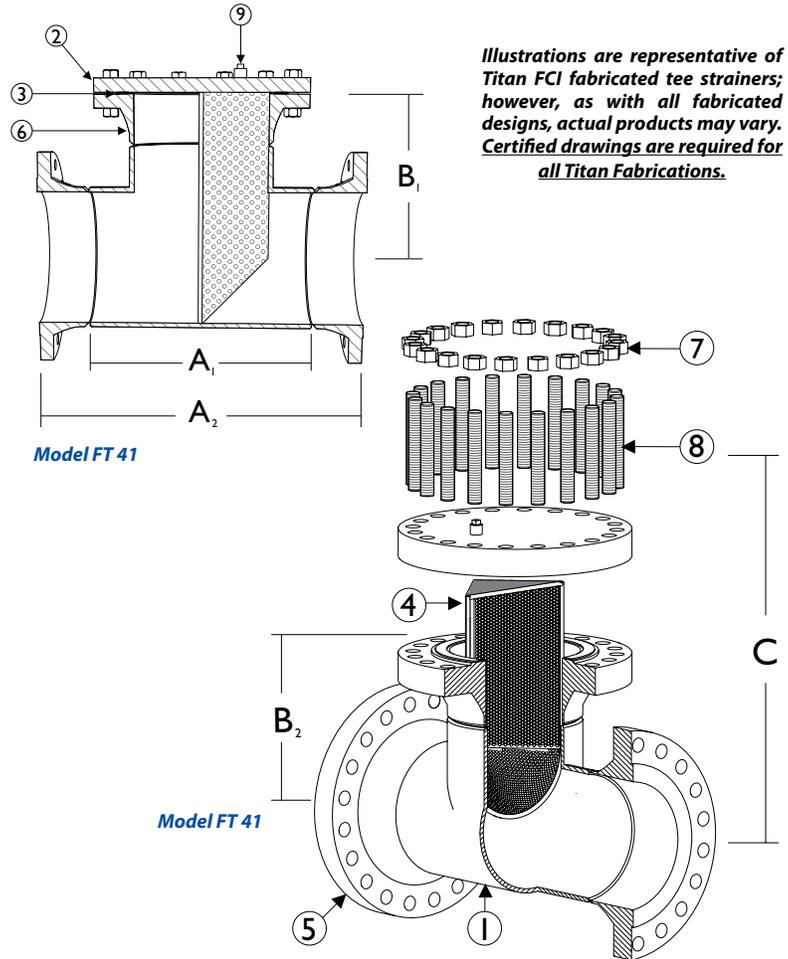
BILL OF MATERIALS⁽¹⁾
FT 40 Series

Part	FT 40-45 CS	FT 40-45 SS
1 Body	Carbon Steel A234 Gr.WPB	Stainless Steel SA403
2 Cover	Carbon Steel A105	Stainless Steel SA182 Type 316
3 Cover Gasket/ O-Ring ⁽²⁾	Bolted: Spiral Wound Stainless Steel	Quick Open: Buna-N ⁽³⁾
4 Straining Element ^{(2)(4) (5)}	T304 SS	T304 SS
5 Inlet/Outlet Flange	Carbon Steel A105	Stainless Steel SA182 Type 316
6 Weld Neck Flange	Carbon Steel A105	Stainless Steel SA182 Type 316
7 Bolts	Carbon Steel A193-B7	Stainless Steel A193 B8 M
8 Nuts	Carbon Steel A194 2H	Stainless Steel A194 Gr.8
9 Vent with Plug ⁽⁶⁾	Carbon Steel A105	Stainless Steel SA182 Type 316

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. Max mesh size available is 60 mesh.
5. 1/8" perf is standard for all mesh lined straining elements.
6. 1/2" NPT is standard

Tee Strainers are not recommended for suction applications.

Optional bottom drains (2" NPT Standard) are available at extra cost.



Illustrations are representative of Titan FCI fabricated tee strainers; however, as with all fabricated designs, actual products may vary. Certified drawings are required for all Titan Fabrications.

FT 40 Series: Tee Strainer Dimensions | 2" - 30" | ASME CLASS 600

DIMENSIONS AND WEIGHTS⁽¹⁾

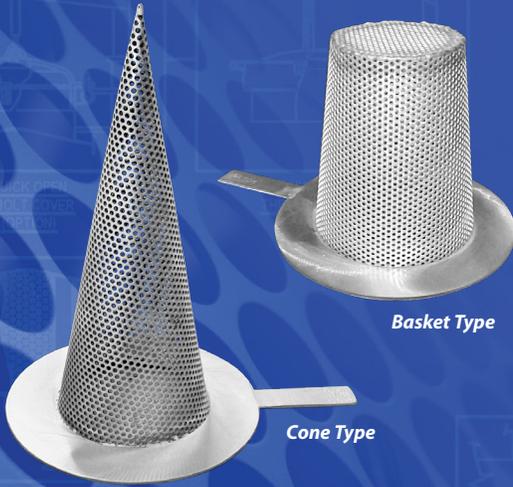
	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	30
(A₁) Face to Face⁽²⁾ FT 40, FT 43 - Butt-Weld	mm	50	65	80	100	125	150	200	250	300	355	405	460	508	610	762
	in	5.00	6.00	6.75	8.25	9.75	11.25	14.00	17.00	20.00	22.00	24.00	27.00	30.00	34.00	C/F
	mm	127	152	172	210	248	286	356	432	508	559	610	686	762	864	C/F
(A₂) Face to Face⁽²⁾ FT 41, FT 44 - Flanged	in	11.50	13.00	14.00	17.00	19.50	21.25	25.25	29.75	33.00	35.75	38.75	42.25	45.75	50.75	C/F
	mm	292	330	356	432	495	540	641	756	838	908	984	1073	1162	1289	C/F
(B) Ctr-Line to Top⁽³⁾ FT 40-42 - Bolted Cover	in	5.75	6.50	7.00	8.50	9.75	10.63	12.63	14.90	16.50	17.88	19.38	21.13	22.88	25.38	C/F
	mm	146	165	178	216	248	270	321	378	419	454	492	537	581	645	C/F
C Dimension Screen Removal	in	12.70	14.44	15.75	19.25	22.28	24.57	29.57	35.13	39.38	42.75	46.75	51.25	55.75	62.75	C/F
	mm	322	367	400	489	566	624	751	892	1000	1086	1188	1302	1416	1594	C/F
Approx. Weight: FT 40	lb	31.88	C/F	62.50	118.75	C/F	288.75	418.75	727.50	957.50	1367.50	1945.00	2412.50	3207.50	4875.00	C/F
	kg	14.50	C/F	28.35	53.86	C/F	131.00	190.00	330.00	434.32	620.30	882.24	1094.30	1454.90	2211.30	C/F
Approx. Weight: FT 41	lb	61.88	C/F	120.00	223.75	C/F	491.25	718.75	1202.50	1522.50	2235.00	3147.50	3800.00	4932.50	7317.50	C/F
	kg	28.10	C/F	54.43	101.50	C/F	222.82	326.02	545.50	690.60	1013.80	1427.70	1723.70	2237.34	3319.20	C/F

1. Dimensions and weights of the FT 40 Series 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. Center line to top dimension is to the top of the body flange. Quick open cover dimension is to the top of body housing.

†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.**

TEMPORARY STRAINERS

Temporary Strainers are fabricated in the Titan FCI factory so they can be made to meet your unique specifications! Listed are standard models and dimensions. Contact factory for more information



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

Cone Type

Model	Class
PS 15	150/300
PS 15	600
PS 15	900
PS 15	1500

Basket Type

Model	Class
PS 16	150/300
PS 16	600
PS 16	900
PS 16	1500

Uses

Temporary Cone and Basket Strainers are used for start up of new or revamped piping systems. They are designed to provide inexpensive protection for costly valves, pumps, meters, and other mechanical equipment.

Materials

Standard temporary strainer materials are stainless steel and carbon steel; however, other materials are also available. Contact factory. Diameter holes of 1/8" on 3/16" centers is the standard perforation, but most sizes/varieties are available. For mesh lined strainers, flow direction must be specified.

Open Area

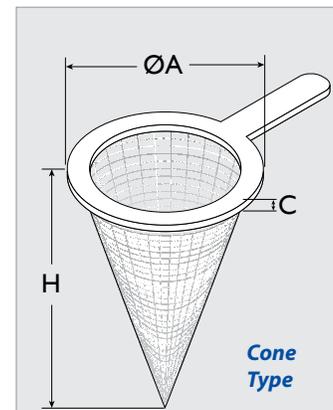
The available range in open area of strainer to cross section of pipe is 100% to 300%.

Flanges

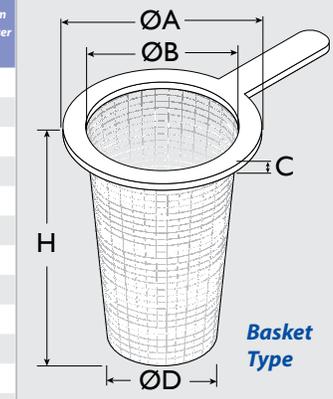
Titan can manufacture flanges to accommodate raised face or ring joint flanges.

Handles

Temporary Baskets and Cone Strainers have handles. Handles are generally 1" wide x 3" long.



Cone Type



Basket Type

Illustrations represent Titan FCI's Temporary Cone Strainer and Temporary Basket Strainer. Titan FCI's fabricated products are made to each customer's unique specifications. Dimensions, materials, illustrations, 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.**

DIMENSIONAL & TECHNICAL DATA

Nominal Pipe Size ⁽²⁾	ØA (OD)						C ⁽³⁾ Gauge Thickness	H (Cone Type, Height) ⁽⁴⁾ with 1/8" Perf. On 3/16" Centers				H (Basket Type, Height) ⁽⁴⁾ with 1/8" Perf on 3/16" Centers				Bottom Diameter
	ASME 150	ASME 300	ASME 600	ASME 900	ASME 1500	ØB (ID)		L=100%	L=150%	L=200%	L=300%	L=100%	L=150%	L=200%	L=300%	
3/4	2.13	C/F	2.5	2.63	2.63	0.63	11	C/F	C/F	C/F	C/F	C/F	C/F	C/F	C/F	0.38
1	2.5	C/F	2.75	3	3	0.75	11	C/F	C/F	C/F	C/F	C/F	C/F	C/F	C/F	0.5
1 1/2	3.25	3.63	3.63	3.75	3.75	1.25	11	3.5	4.5	6	9	2	2.5	3.5	5	0.75
2	4	4.25	4.25	5.5	5.5	1.75	11	4	6	8	11	2.5	3	4	6	1
2 1/2	4.75	5	5	6.38	6.38	2.25	11	4	6	8	11	2.5	3	4.5	6	1.25
3	5.25	5.75	5.75	6.5	6.75	2.75	11	5	7	9	13	3	4.5	6	8	1.5
4	6.75	7	7.5	8	8.13	3.75	11	8	10	12	18	4	5	7	11	2
5	7.63	8.38	9.38	9.63	9.88	4.63	11	8	11	14	22	4.5	7	9	14	2.5
6	8.63	9.75	10.38	11.25	11	5.38	11	9	13	18	25	5.5	8	11	17	3
8	10.88	12	12.5	14	13.75	7.38	11	12	17	23	33	7	11	14	21	4
10	13.25	14.13	15.63	17	17	9.38	11	14	21	28	41	8	13	17	26	5
12	16	16.5	17.88	19.5	20.38	11	11	16	25	34	49	10	15	20	31	6
14	17.38	19	19	20.38	22.63	12.25	11	18	27	36	53	10	16	22	33	7
16	20.13	21.13	21.88	22.5	C/F	14	11	21	31	40	61	12	19	24	37	8
18	21.25	23.38	23.75	25	C/F	15.75	11	24	35	46	68	14	21	27	41	9
20	23.5	25.63	26.63	C/F	C/F	17.5	11	26	38	51	76	16	24	31	48	10
24	27.88	30.38	30.88	C/F	C/F	21.25	11	31	45	61	90	18	28	37	57	12

1. Dimensions for Titan's PS 15 and PS 16 are provided for reference only. Certified drawings are required for all Titan Fabrications. All dimensions, except thickness are given in inches.
 2. Larger sizes are available; please contact factory.
 3. Gauge thickness is for flange thickness only. The standard gauge of strainer material ranges between 11 to 22, depending on hole size.
 4. Dimension H, height of strainer, is dependant upon the open area of the strainer as defined in the table by L L, or the percentage of open area in the strainer relative to the cross section of pipe, is available in a range of 100% to 300% (based on the perforated screens).



Tel: 910-735-0000 • Fax: 910-738-3848 • titan@titanfci.com
 290 Corporate Drive • PO Box 7408 • Lumberton, NC 28358

www.titanfci.com



Plate/Flat Type

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

TEMPORARY PLATE STRAINERS

Temporary Strainers are fabricated in the Titan FCI factory, so they can be made to meet your unique specifications! Listed are standard models and dimensions. Contact factory for more information.

Model	Material	Class	Model	Material	Class
PS 17	CS or SS	150/300	PS 17	CS or SS	900
PS 17	CS or SS	600	PS 17	CS or SS	1500

Specify When Ordering:

• Pipe Size • Perforation or Mesh Size • Pressure Rating • Material

Uses

Temporary Cone and Basket Strainers are used for start up of new or revamped piping systems. They are designed to provide inexpensive protection for costly valves, pumps, meters, and other mechanical equipment.

Materials

Standard temporary strainer materials are stainless steel and carbon steel; however, other materials are also available. Contact factory.

Perforation/Mesh

Diameter holes of 1/8" on 3/16" centers is the standard perforation, but most sizes/varieties are available. For mesh lined strainers, flow direction must be specified.

Flanges

Titan can manufacture flanges to accommodate raised face or ring joint flanges.

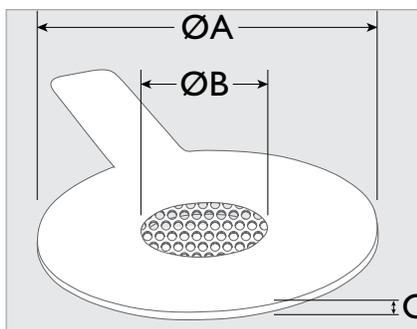


Plate Design (Flat Type)

Illustration represents Titan FCI's Temporary Plate Strainers. 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.**

DIMENSIONAL & TECHNICAL DATA

Nominal Pipe Size ⁽¹⁾	ØA (OD) (inches)					ØB (ID)	C ⁽³⁾ Gauge Thickness	Optional Thickness ⁽⁴⁾ (inches)
	ASME 150	ASME 300	ASME 600	ASME 900	ASME 1500			
3/4	2.13	C/F	2.5	2.63	2.63	0.63	11	No Change
1	2.5	C/F	2.75	3	3	0.75	11	No Change
1 1/2	3.25	3.63	3.63	3.75	3.75	1.25	11	No Change
2	4	4.25	4.25	5.5	5.5	1.75	11	No Change
2 1/2	4.75	5	5	6.38	6.38	2.25	11	No Change
3	5.25	5.75	5.75	6.5	6.75	2.75	11	No Change
4	6.75	7	7.5	8	8.13	3.75	11	No Change
5	7.63	8.38	9.38	9.63	9.88	4.63	11	No Change
6	8.63	9.75	10.38	11.25	11	5.38	11	0.1875
8	10.88	12	12.5	14	13.75	7.38	11	0.25
10	13.25	14.13	15.63	17	17	9.38	11	0.25
12	16	16.5	17.88	19.5	20.38	11	11	0.25
14	17.38	19	19	20.38	22.63	12.25	11	0.25
16	20.13	21.13	21.88	22.5	C/F	14	11	0.25"
18	21.25	23.38	23.75	25	C/F	15.75	11	0.375
20	23.5	25.63	26.63	C/F	C/F	17.5	11	0.375
24	27.88	30.38	30.88	C/F	C/F	21.25	11	0.375

1. Dimensions for Titan's PS 17 are provided for reference only. Certified drawings are required for all Titan Fabrications. OD and ID dimensions are in inches.

2. Larger sizes are available; please contact factory.

3. Gauge thickness is for flange thickness only. The standard gauge of strainer material ranges between 11 to 22, depending on hole size.

4. Denotes optional thicknesses. Recommended for 6" and larger sizes. There is no industry specification for plate strainers. When required by the application, the customer must specify the appropriate thickness.

Illustrations represent Titan FCI's fabricated PS 17. Titan's fabricated products are made to each customer's unique specifications. Dimensions, materials, illustrations, and all other product details referenced in this literature are general in nature. All pictures shown are for illustrative purposes only. Actual product may vary due to product enhancement. 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.**



TITAN FLOW CONTROL, INC

Tel: 910-735-0000 • Fax: 910-738-3848 • titan@titanfci.com
290 Corporate Drive • PO Box 7408 • Lumberton, NC 28358

www.titanfci.com

SPECTACLE BLINDS | CLOSED BLINDS OPEN BLINDS (RING SPACER) BLEED RINGS



Handle style may vary, consult factory for details.
All pictures shown are for illustrative purposes only.
Actual product may vary due to product enhancement.

Titan Blinds provide Complete, Positive Shutoff, Bleed Rings allow pipeline draining, taking samples and attaching instruments.

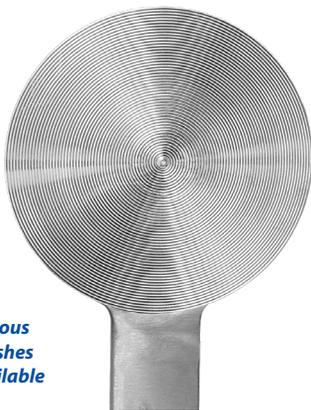
Venting, Purging and Blind Storage Racks are also available
Please contact us for more information.

Models

Name	Description
PB 18	Spectacle Blind
PB 19	Single Blind
PB 20	Ring Spacer
BR 15	Bleed Ring

Materials

Stainless Steel
Carbon Steel



Various
Finishes
Available

Titan Blind Benefits

- Provides Permanent - Positive Shutoff
- Promotes Safety during downstream Service Operations
- Spectacle Blinds provide Visible Shutoff
- Economical Solution when compared to Isolation Valves
- Quick - One Man Operation
- Can be used with liquids, solids, slurries and gases.

Body Materials

Standard materials are stainless steel and carbon steel. Contact factory for additional materials. Special Coatings are also available for highly corrosive applications.

End Connections

Available with raised or flat-faced blinds. Ring type joints are also available.

Finishes

Available with serrated (phonographic style) surface or ground finished. Surface dimension in Micro-inch ASA 500, 250, 125, 63, or 32 should be specified; standard is a smooth finish.

Referenced Standards - Blinds and Bleed Rings

- ASME B16.5 - Pipe Flanges and Flanged Fittings
- ASME B16.20 - Metallic Gaskets for Pipe Flanges
- ASME B16.47 - Large Diameter Steel Flanges
- ASME B16.48 - Line Blanks

Note: Pipeline Blinds are not the same as bolted on, Blind Flanges.

Titan Bleed Ring Benefits

- Can often be used in place of orifice flanges
- The ability to safely drain pipeline liquid
- Easy access for taking samples
- Convenient method of attaching equipment
- Can be used as pressure releasing rings
- Standard sizes stocked for quick delivery

Illustrations represent Titan FCI's fabricated PB 18, PB 19, PB 20 & BR 15. Titan's fabricated products are made to each customer's unique specifications. Dimensions, materials, illustrations, and all other product details referenced in this literature are general in nature. All pictures shown are for illustrative purposes only. Actual product may vary due to product enhancement. 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.**



TITAN FLOW CONTROL, INC

Tel: 910-735-0000 • Fax: 910-738-3848 • titan@titanfci.com
290 Corporate Drive • PO Box 7408 • Lumberton, NC 28358

www.titanfci.com



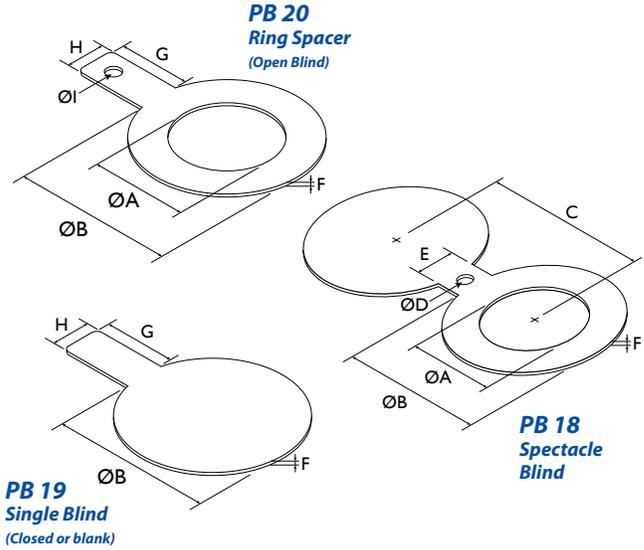
290 Corporate Dr
www.titanfci.com
Phone: 910.735.0000

Lumberton, NC 28358
titan@titanfci.com
Fax: 910.738.3848

Spectacle Blinds and Single Blinds

PB 18 | PB 19 | PB 20

ASME CLASS 150 BLINDS						
Nominal Pipe Size ⁽²⁾	ØA (ID)	ØB (OD)	C (Ctr. to Ctr.)	ØD (Pivot Hole)	E (Web Width)	F (Thickness)
1/2	0.62	1.75	2.38	0.62	1.5	0.12
3/4	0.82	2.12	2.75	0.62	1.5	0.12
1	1.05	2.5	3.12	0.62	1.5	0.12
1 1/4	1.66	2.88	3.5	0.62	1.5	0.25
1 1/2	1.9	3.25	3.88	0.62	1.5	0.25
2	2.38	4	4.75	0.75	2	0.25
2 1/2	2.88	4.75	5.5	0.75	2	0.25
3	3.5	5.25	6	0.75	2.5	0.25
3 1/2	4	6.25	7	0.75	2.5	0.38
4	4.5	6.75	7.5	0.75	2.5	0.38
5	5.56	7.62	8.5	0.88	3	0.38
6	6.62	8.62	9.5	0.88	3	0.5
8	8.62	10.88	11.75	0.88	3	0.5
10	10.75	13.25	14.25	1	4	0.62
12	12.75	16	17	1	4	0.75
14	14	17.62	18.75	1.12	4.25	0.75
16	16	20.12	21.25	1.12	4.25	0.88
18	18	21.5	22.75	1.25	4.5	1
20	20	23.75	25	1.25	4.75	1.12
24	24	28.12	29.5	1.38	5.5	1.25



Handle Dimensions (All Classes)			
Size Ranges	G (Length)	H (Width)	ØI (Hole)
½" - 3"	4	1	0.5
3½" - 10"	5	1	0.5
12"	5	1.5	0.75
14" - 24"	6	1.5	0.75

Illustrations represent Titan FCI's fabricated PB 18, PB 19, & PB 20. Titan's fabricated products are made to each customer's unique specifications. Dimensions, materials, illustrations, 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.**

ASME CLASS 300 BLINDS						
Nominal Pipe Size ⁽²⁾	ØA (ID)	ØB (OD)	C (Ctr. to Ctr.)	ØD (Pivot Hole)	E (Web Width)	F (Thickness)
1/2	0.62	2	2.62	0.62	1.5	0.25
3/4	0.82	2.5	3.25	0.75	1.5	0.25
1	1.05	2.75	3.5	0.75	1.5	0.25
1 1/4	1.66	3.12	3.88	0.75	1.5	0.25
1 1/2	1.9	3.62	4.5	0.88	1.5	0.25
2	2.38	4.25	5	0.75	2.0	0.38
2 1/2	2.88	5	5.88	0.88	2.0	0.38
3	3.5	5.75	6.62	0.88	2.5	0.38
3 1/2	4	6.38	7.25	0.88	2.5	0.5
4	4.5	7	7.88	0.88	2.5	0.5
5	5.56	8.38	9.25	0.88	3	0.62
6	6.62	9.75	10.62	0.88	3	0.62
8	8.62	12	13	1	3	0.88
10	10.75	14.12	15.25	1.12	4	1
12	12.75	16.5	17.75	1.25	4	1.12
14	14	19	20.25	1.25	4.25	1.25
16	16	21.12	22.5	1.38	4.25	1.5
18	18	23.38	24.75	1.38	4.5	1.62
20	20	25.62	27	1.38	4.75	1.75
24	24	30.38	32	1.62	5.5	2

ASME CLASS 600 BLINDS						
Nominal Pipe Size ⁽²⁾	ØA (ID)	ØB (OD)	C (Ctr. to Ctr.)	ØD (Pivot Hole)	E (Web Width)	F (Thickness)
1/2	0.62	2	2.62	0.62	1.5	0.25
3/4	0.82	2.5	3.25	0.75	1.50	0.25
1	1.05	2.75	3.5	0.75	2.25	0.25
1 1/4	1.44	3.12	3.88	0.75	2.25	0.38
1 1/2	1.68	3.62	4.5	0.88	2.62	0.38
2	2.16	4.25	5	0.75	2.25	0.38
2 1/2	2.64	5	5.88	0.88	2.62	0.5
3	3.26	5.75	6.62	0.88	2.62	0.5
3 1/2	3.76	6.25	7.25	1	3	0.62
4	4.26	7.5	8.5	1	3	0.62
5	5.3	9.38	10.5	1.12	3.38	0.75
6	6.36	10.38	11.5	1.12	3.38	0.88
8	8.33	12.5	13.75	1.25	3.75	1.12
10	10.42	15.62	17	1.37	4.12	1.38
12	12.39	17.88	19.25	1.37	4.12	1.62
14	13.62	19.25	20.75	1.5	4.5	1.75
16	15.62	22.12	23.75	1.62	4.88	2
18	17.62	24	25.75	1.75	5.25	2.12
20	19.56	26.75	28.5	1.75	5.25	2.5
24	23.5	31	33	2	6	2.88

†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.**

RESTRICTION ORIFICE PLATES

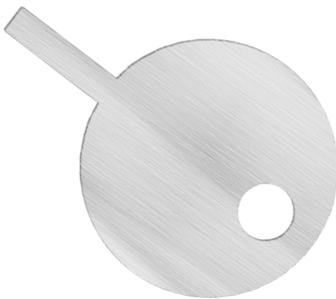
Standard Bore



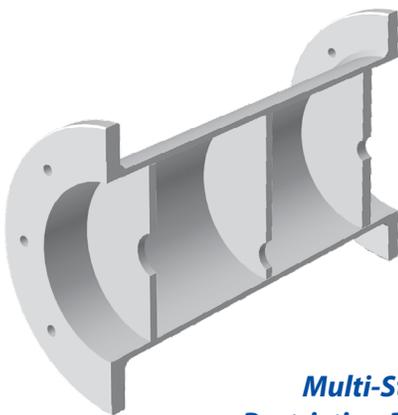
Multi-Hole Bore



Eccentric Bore



Multi-Stage Restriction Plate Assembly



A Restriction Orifice Plate is a device used to restrict flow. It reduces flow and pressure from the upstream side to the downstream side. This is beneficial in order to reduce noise and protect downstream equipment.

Model	Material
RP 21 CS	Carbon Steel
RP 21 SS	Stainless Steel

Materials

Standard materials for orifice plates are stainless steel and carbon steel. Contact factory for additional materials such as ceramic, fiberglass reinforced plastic, duplex stainless steel, etc.

Bore Diameter

Sizing of the restriction orifice is specified by the customer in order to meet specific application requirements. For reference, see below for common design options.

Codes & Standards

Currently, there are no corresponding codes or standards that address Restriction Orifice Plates.

Handles

Orifice plates can be ordered with or without a handle. Handles are generally 1" wide by 5" long.

Additional Design Options

Restriction Orifice plates can have a variety of specifications. Bores can be placed concentrically or eccentrically with the pipe and can have a full or segmented opening.

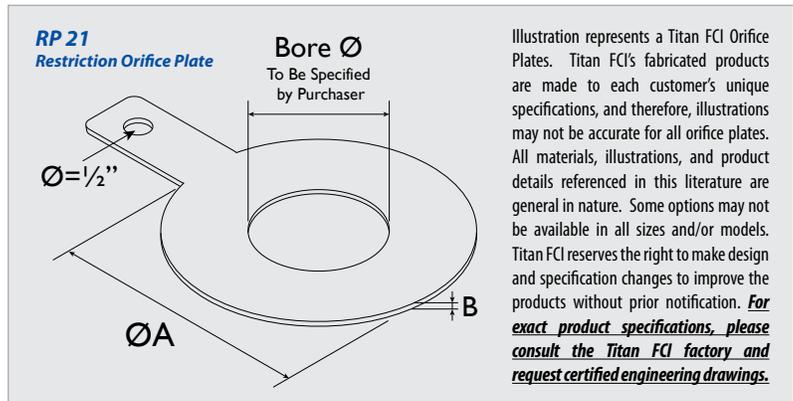


Illustration represents a Titan FCI Orifice Plates. Titan FCI's fabricated products are made to each customer's unique specifications, and therefore, illustrations may not be accurate for all orifice plates. All materials, illustrations, and product details referenced in this literature are general in 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.***

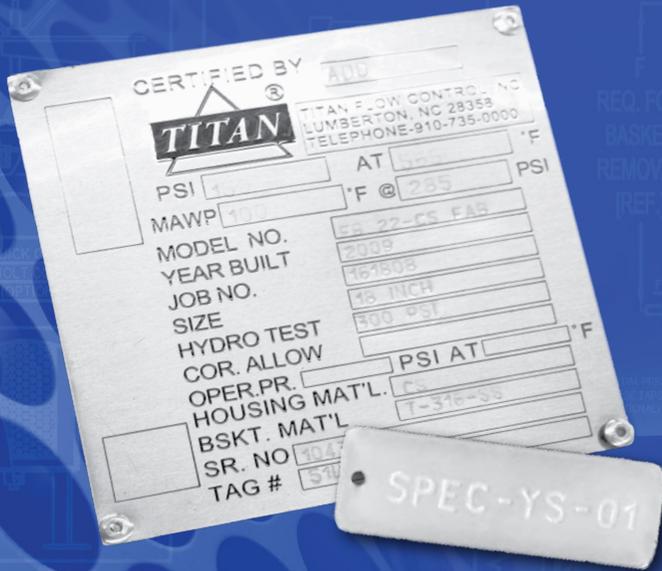
All pictures shown are for illustrative purposes only. Actual product may vary due to product enhancement.



Tel: 910-735-0000 • Fax: 910-738-3848 • titan@titanfci.com
290 Corporate Drive • PO Box 7408 • Lumberton, NC 28358

www.titanfci.com

IDENTIFICATION TAGS



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

Contact **Titan Flow Control, Inc.** for any of your identification needs. Two sizes of Standard Stainless Steel Tags (as illustrated below) are available for easy ordering, but Titan can make tags in a variety of sizes and specifications.

Titan Flow Control, Inc. has the capability to create identification tags for all your marking and labeling needs.

Make An Impression

High quality tags look professional. They are available in a wide variety of sizes, shapes, and materials. Titan FCI can even add your company's logo and information! (Graphic design charges may apply.)

Conveniently Identify Products

Tags can be marked with product numbers, dates, batch numbers, logos, etc and then attached to the product before its shipped to you for easy identification

Simplify and Organize

Titan can mark small parts, tools, keys, and more so you can stay organized.



**Great for Identifying
Check Valves and
other products**

**Organize and Track
Small Items or Parts**

**Leave a Lasting,
Professional
Impression**

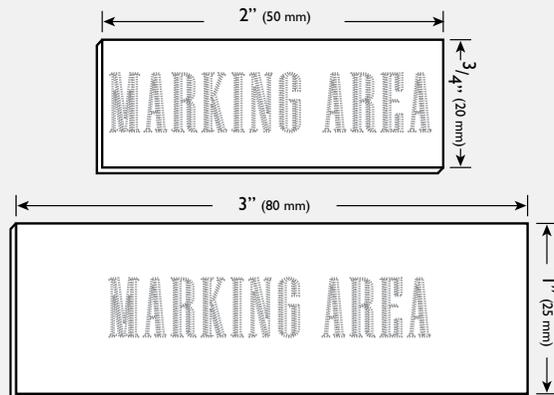
Standard Stainless Steel Tags

Two Standard Sizes Available:

2" x 3/4" (50 mm x 20 mm)

3" x 1" (80 mm x 25 mm)

Other sizes and shapes are available. Contact factory.



Specifications

Maximum marking area:
4" x 4" (100 x 100 mm)
Tag height/thickness range:
0.02" To 12" (0.5 To 300 mm)
Character range:
0.04" To 3.15"
(0.5 To 80 mm at intervals
of 0.1 mm)

Capabilities

Markings on various materials
(Treated and untreated metal, plastic, wood, and more)
Numerous shapes and sizes of tags
Logo design (Graphic design fees may apply)
Dates, times, and batch numbering capabilities
Linear, angular, and circular markings
Special markings such as reversed, mirrored, and reflected

Titan FCI 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. Some options may not be available on all types of identification tags.

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.**

TITAN

TITAN FLOW CONTROL, INC

Tel: 910-735-0000 • Fax: 910-738-3848 • titan@titanfci.com
290 Corporate Drive • PO Box 7408 • Lumberton, NC 28358

www.titanfci.com

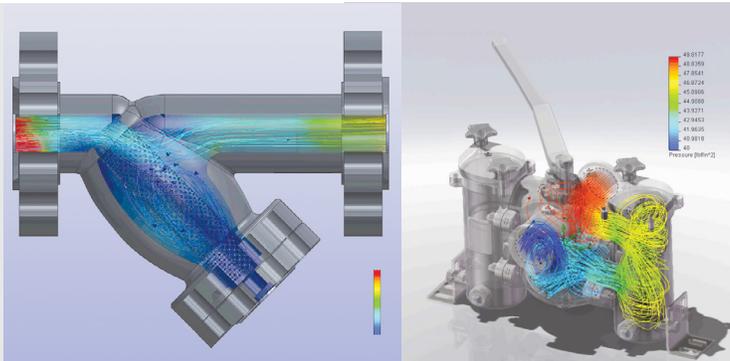
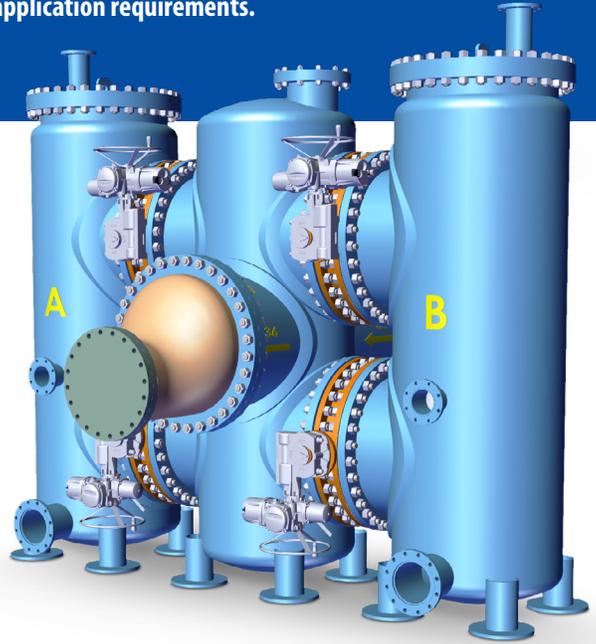
DESIGN CAPABILITIES

Piping Systems often have special requirements that can't be accomplished with off-the-shelf products. To address this problem, Titan can design and fabricate pressure vessels based upon your detailed application requirements. Our knowledgeable engineers are always available to discuss your special application requirements.

Experience Your Designs with Interactive 3D Models



Using powerful 3D Modeling Tools, Titan Flow Control can quickly transform your design requirements into great products. These rapid development tools allow Titan to provide you with an accurate 3D Model before fabrication starts. This allows the end user to virtually review the design within their system; ensuring proper fit and avoiding costly mistakes.



Flow Analysis

Pumping Systems demand that energy requirements be exact. Placing an unknown element into a system that results in excessive head loss can be disastrous. Titan uses advanced CFD (computational fluid dynamics) analysis, to make sure your design performs as expected. Our CFD tools can assist in aligning your design with flow conditions (such as pressure drop) to satisfy stated design goals.

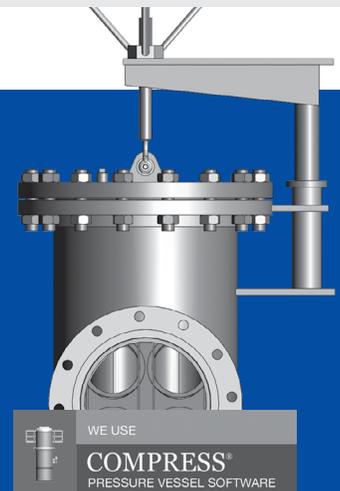
Titan Is Up To Code

Pressure Vessels must strictly adhere to ASME specifications. To ensure your design is precise, Titan utilizes a specialized modeling software to ensure nothing is left to chance. This productivity tool automatically calculates the appropriate sizes, thicknesses and ratings to meet Code Requirements. This eliminates the error-prone, time-consuming manual process commonly employed.

"If you don't have time to do it right, you must have time to do it over"

- John Wooden

Designing and fabricating pressure vessels is serious business. Titan's veteran engineers can help you get it right the first time.



We love to show off, so call us for a tour today! ▶ ▶ ▶  910.735.0000

MODEL IDENTIFICATION NUMBERING SYSTEM - BY ASME CLASS

ASME CLASS 150

Fabricated Basket Strainer	Fabricated Duplex Designs					Fabricated Duplex Strainer (Offset)	Fabricated TEE Strainer	Configuration		
	Series	Standard	Manifold 1	Manifold 2	Manifold 3			Box*	Series	Series
FB20	FDI20	FDIM120	FDIM220	FDIM320	FDIB120	FDO20	FT20	Butt-weld	150	Bolted
FB21	FDI21	FDIM121	FDIM221	FDIM321	FDIB121	FDO21	FT21	Flanged	150	Bolted
FB22	FDI22	FDIM122	FDIM222	FDIM322	FDIB122	FDO22	FT22	RTJ	150	Bolted
FB23	FDI23	FDIM123	FDIM223	FDIM323	FDIB123	FDO23	FT23	Butt-weld	150	Quick
FB24	FDI24	FDIM124	FDIM224	FDIM324	FDIB124	FDO24	FT24	Flanged	150	Quick
FB25	FDI25	FDIM125	FDIM225	FDIM325	FDIB125	FDO25	FT25	RTJ	150	Quick

*Configurations vary by fabrication. Contact Titan FCI for more information.

ASME CLASS 300

Fabricated Basket Strainer	Fabricated Duplex Designs					Fabricated Duplex Strainer (Offset)	Fabricated TEE Strainer	Configuration		
	Series	Standard	Manifold 1	Manifold 2	Manifold 3			Box	Series	Series
FB30	FDI30	FDIM130	FDIM230	FDIM330	C/F	FDO30	FT30	Butt-weld	300	Bolted
FB31	FDI31	FDIM131	FDIM231	FDIM331	C/F	FDO31	FT31	Flanged	300	Bolted
FB32	FDI32	FDIM132	FDIM232	FDIM332	C/F	FDO32	FT32	RTJ	300	Bolted
FB33	FDI33	FDIM133	FDIM233	FDIM333	C/F	FDO33	FT33	Butt-weld	300	Quick
FB34	FDI34	FDIM134	FDIM234	FDIM334	C/F	FDO34	FT34	Flanged	300	Quick
FB35	FDI35	FDIM135	FDIM235	FDIM335	C/F	FDO35	FT35	RTJ	300	Quick

ASME CLASS 600

Fabricated Basket Strainer	Fabricated Duplex Designs					Fabricated Duplex Strainer (Offset)	Fabricated TEE Strainer	Configuration		
	Series	Standard	Manifold 1	Manifold 2	Manifold 3			Box	Series	Series
FB40	FDI40	FDIM140	FDIM240	FDIM340	C/F	FDO40	FT40	Butt-weld	600	Bolted
FB41	FDI41	FDIM141	FDIM241	FDIM341	C/F	FDO41	FT41	Flanged	600	Bolted
FB42	FDI42	FDIM142	FDIM242	FDIM342	C/F	FDO42	FT42	RTJ	600	Bolted
FB43	FDI43	FDIM143	FDIM243	FDIM343	C/F	FDO43	FT43	Butt-weld	600	Quick
FB44	FDI44	FDIM144	FDIM244	FDIM344	C/F	FDO44	FT44	Flanged	600	Quick
FB45	FDI45	FDIM145	FDIM245	FDIM345	C/F	FDO45	FT45	RTJ	600	Quick

ASME CLASS 900

Fabricated Basket Strainer	Fabricated Duplex Designs					Fabricated Duplex Strainer (Offset)	Fabricated TEE Strainer	Configuration		
	Series	Standard	Manifold 1	Manifold 2	Manifold 3			Box	Series	Series
FB50	FDI50	FDIM150	FDIM250	FDIM350	C/F	FDO50	FT50	Butt-weld	900	Bolted
FB51	FDI51	FDIM151	FDIM251	FDIM351	C/F	FDO51	FT51	Flanged	900	Bolted
FB52	FDI52	FDIM152	FDIM252	FDIM352	C/F	FDO52	FT52	RTJ	900	Bolted
FB53	FDI53	FDIM153	FDIM253	FDIM353	C/F	FDO53	FT53	Butt-weld	900	Quick
FB54	FDI54	FDIM154	FDIM254	FDIM354	C/F	FDO54	FT54	Flanged	900	Quick
FB55	FDI55	FDIM155	FDIM255	FDIM355	C/F	FDO55	FT55	RTJ	900	Quick



290 Corporate Drive • Lumberton, NC 28358
Tel: 910.735.0000 • Fax: 910.738.3848 • titan@titanfci.com

www.titanfci.com