



THE FORD METER BOX COMPANY, INC.
CERTIFIED TO ISO 9001:2015
10002505

Section AA

Ford® Service Saddles and Tapping Sleeves



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Recommended Product Application

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S70, S71	17	YES	NO	NO	NO	NO	NO
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101B, 202B	21	NO	NO	YES	YES	YES	NO
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* All 101BS, 202BS, FC101, FC202, and FCD202 Saddles recommended for C900/909 PVC or steel size PVC require sizes specific to the pipe O.D.

101B, 202B, F101 and F202 Saddles are not for use on PVC pipe and do not comply with AWWA and Uni-Bell stipulations for use on PVC pipe. Pressure limitations may apply. Call for details.

** Specific products are available for use on HDPE, see catalog pages for details.

*** Size on size tapping sleeves not recommended for HDPE.

Ford offers many products that are Classified to ANSI/NSF Standard 61. To verify if a product is Classified to ANSI/NSF Standard 61, contact the Ford Meter Box Customer Service Department at 260-563-3171 or visit fordmeterbox.com. Ford Meter Box meets your need for ANSI/NSF Standard 61 Approved items with products that are proven and reliable.

Information

Ford Service Saddles are used to install corporation stops on water main pipe including iron, PVC, and asbestos-cement. Saddles constructed of ductile iron, brass, or stainless steel are available in all the popular sizes and for most metric-sized pipe. Saddles feature 3/4" through 2" tapped outlets manufactured to ANSI/AWWA C800. Fabricated steel saddles are also available in 3" and 4" iron pipe thread outlets

Ductile iron saddles are available with either single or double (electro-galvanized) steel straps or with optional stainless steel bands. Brass saddles are cast of 85-5-5-5 waterworks brass. The popular S70 and S90 series feature a hinged design and the 101B and 202B series incorporate silicon bronze straps or optional stainless steel bands.

Tapping sleeves of fabricated steel and stainless steel complete the Ford line of tapping devices. Tapping sleeves having a flange outlet conform to AWWA C207 Class D-ANSI 150 lb. drilling and the standard sizes have been optimized for U.S. Pipe Standards. Flanges conforming to alternate AWWA or international specifications are also available upon request. A mechanical joint adapter outlet option is available for all styles of Ford tapping sleeves, see page 5 for details.

Ford Brass Saddle and Iron Service Saddle Numbering System

SIZE OF O.D.
 High end of application
 O.D. range or actual
 pipe O.D.
 Please verify actual
 pipe O.D. is within listed
 catalog range.

TYPE OF TAP
 CC = AWWA tapered thread
 IP = Iron pipe thread

F C 2 0 2 - 6 9 0 - C C 3

TYPE OF SADDLE

101B = Brass saddle with a single silicon bronze strap
101BS = Brass saddle with a single stainless steel band
202B = Brass saddle with two silicon bronze straps
202BS = Brass saddle with a double wide stainless steel band
202BSD = Brass saddle with dual stainless steel band
***F101** = Iron saddle with a single strap & epoxy coated body
FC101 = Iron saddle with a single stainless steel band and epoxy coated body
***F202** = Iron saddle with two steel straps and epoxy coated body (*for 3" & 4" taps, saddle body is fabricated steel painted with black shop coat*)
FC202 = Iron saddle with a double wide stainless steel band & epoxy coated body
FRS202 = All stainless steel repair saddle with two stainless steel bands
FS300 = All stainless steel saddle
FCD202 = Iron saddle with a dual stainless steel bands and bolts, epoxy coated body

SIZE OUTLET THREAD

1 = 1/2"
 3 = 3/4"
 4 = 1"
 6 = 1-1/2"
 7 = 2"
 8 = 2-1/2"
 9 = 3"
 11 = 4"

* F101/F202 Saddles available with stainless steel bales, contact factory for availability.

Ford All Brass Saddle for PVC Pipe Numbering System

TYPE OF SADDLE
 S = Brass saddle

TYPE OUTLET THREAD
 0 = Tapped AWWA
 1 = Tapped iron pipe

S 7 0 - 2 0 3

TYPE OF MAIN TO BE TAPPED
 7 = PVC Main - steel O.D.
 9 = PVC Main - cast iron O.D.

SIZE PVC MAIN

20 = 2"
 25 = 2-1/2"
 30 = 3"
 40 = 4"
 50 = 5"
 60 = 6"
 80 = 8"
 100 = 10"
 120 = 12"

SIZE OUTLET THREAD

1 = 1/2"
 3 = 3/4"
 4 = 1"
 5 = 1-1/4"
 6 = 1-1/2"
 7 = 2"

Note: S902 and S912 styles are 4", 6" and 8" two-piece bolted saddles. These saddles follow the same numbering system except the "2" distinguishes these saddles from the hinged saddles of the same size.

Ford Tapping Sleeve Numbering System

TYPE OF TAPPING SLEEVE

- FAST** = All stainless steel tapping sleeve
- FTSS** = All stainless steel tapping sleeve with removable bolts
- FTSAS** = All stainless steel tapping sleeve with removable bolts designed for large taps with thicker outlet pipe, saddle and strap plates
- FTS** = Standard steel tapping sleeve
- FTSC** = Epoxy coated steel tapping sleeve with stainless steel bolts
- MJTS** = Mechanical Joint Tapping Sleeve
- FRCTS** = Tapping Sleeve for Reinforced Concrete Cylinder Pipe
- FRCTSC** = Epoxy Coated Tapping Sleeve for Reinforced Concrete Cylinder Pipe

OPTIONS

- A** = Optional carbon steel flange on FAST, FTSS and FTSAS

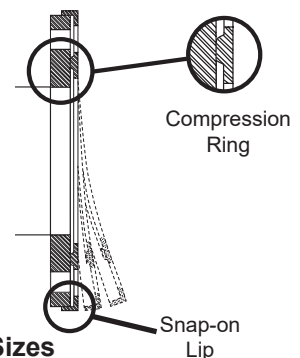
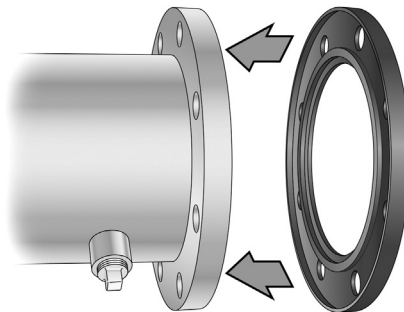
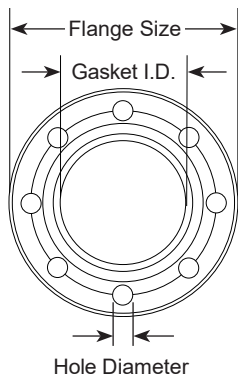
FAST - 970 - 4A - MJ

- | | | |
|--|---|---|
| <p>SIZE OF O.D.</p> <p>High end of application O.D. range.
Please verify actual pipe O.D. is within listed catalog range.</p> | <p>OUTLET SIZE CODE</p> <p>3 = 3"
4 = 4"
6 = 6"
8 = 8"
10 = 10"
12 = 12"
*14 = 14"
*16 = 16"
*18 = 18"
*20 = 20"
24 = 24"</p> <p><small> Not available on FAST</small></p> | <p>OPTIONS</p> <p>-MJ = Mechanical Joint Adapter Outlet (instead of C207 flange outlet)</p> <p>-AH = Optional high strength low alloy steel nuts and bolts on removable bolt tapping sleeves</p> <p>-EPDM = EPDM gasket</p> <p>-SH = Optional stainless steel nuts and bolts on FTS</p> <p>-FG = Optional Ultra-Seal Cap Style Flange Gasket (standard on all 10" & 12" size flanges for FAST and FTSS Tapping Sleeves)</p> |
|--|---|---|

Ford Ultra-Seal Cap Style Flange Gasket

4" Through 12" Nominal Ring Flange Sizes

The Ultra-Seal Cap Style Flange Gasket, **CSFG**, made from NBR (Buna-N) rubber is NSF-61 approved and has test pressures well beyond AWWA Class D flanges. A raised lip on the outside circumference of the gasket allows it to snap-on and stay on, eliminating the need to hold the gasket in place during installation. The compression ring near the ID of the gasket concentrates the clamping load in a small surface area, providing superior sealing capabilities.



Ford Ultra-Seal Gasket for 4" Through 12" Nominal Ring Flange Sizes

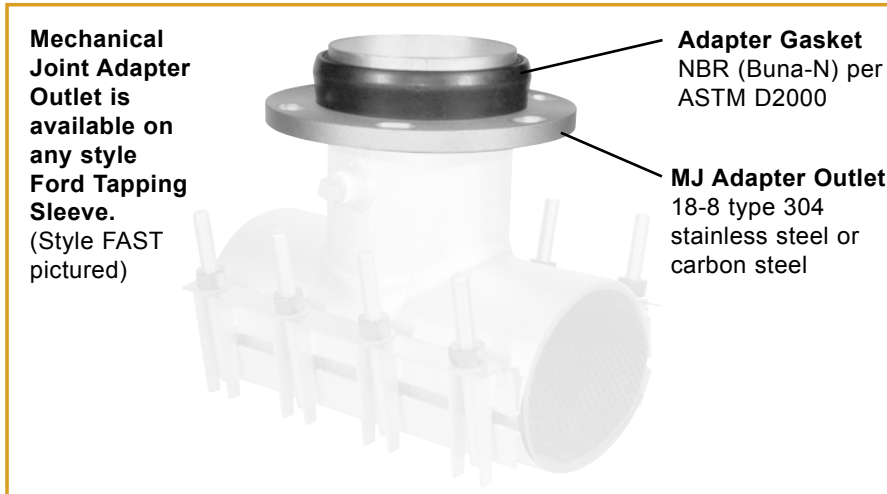
CATALOG NUMBER	DESCRIPTION	GASKET INSIDE DIAMETER	HOLE DIAMETER	WEIGHT LBS.
CSFG-4	4" Cap Style Flange Gasket	5-1/16"	0.81	0.4
CSFG-6	6" Cap Style Flange Gasket	7-1/16"	0.94	0.5
CSFG-8	8" Cap Style Flange Gasket	9-1/16"	0.94	0.7
CSFG-10	10" Cap Style Flange Gasket	11-1/16"	1.06	0.8
CSFG-12	12" Cap Style Flange Gasket	13-1/16"	1.06	1.2

Add "-FG" to end of tapping sleeve catalog number for Ultra-Seal Cap Style Gasket to be sent with tapping sleeve. Example: FAST-905-4-FG. Please note, this gasket comes standard on all 10" and 12" flanges for FAST and FTSS tapping sleeves.

Mechanical Joint Adapter Outlet Option

For Ford Tapping Sleeves

The mechanical joint adapter outlet ensures alignment between the valve and sleeve. Tightening the fasteners until the valve face makes complete contact with the tapping sleeve flange gives the installer a visual indicator of proper installation and alignment. The face-to-face flange contact prevents the joint from flexing and prevents the gasket from blowing out. The mechanical joint adapter outlet is available on Ford Tapping Sleeves with 3" - 24" outlets*. To order this option, add "-MJ" to the end of the part number.



Mechanical Joint Adapter Outlet is available on any style Ford Tapping Sleeve.
(Style FAST pictured)

Ordering Example: The catalog number for a 6" FAST tapping sleeve with a 6" carbon steel mechanical joint adapter outlet is FAST-700-6A-MJ or FAST-730-6A-MJ.

"-MJ" OUTLET SIZE
3"
4"
6"
8"
10"
12"
**14"
**16"
**18"
**20"
**24"

* Refer to the specific product pages in the catalog for outlet sizes available.

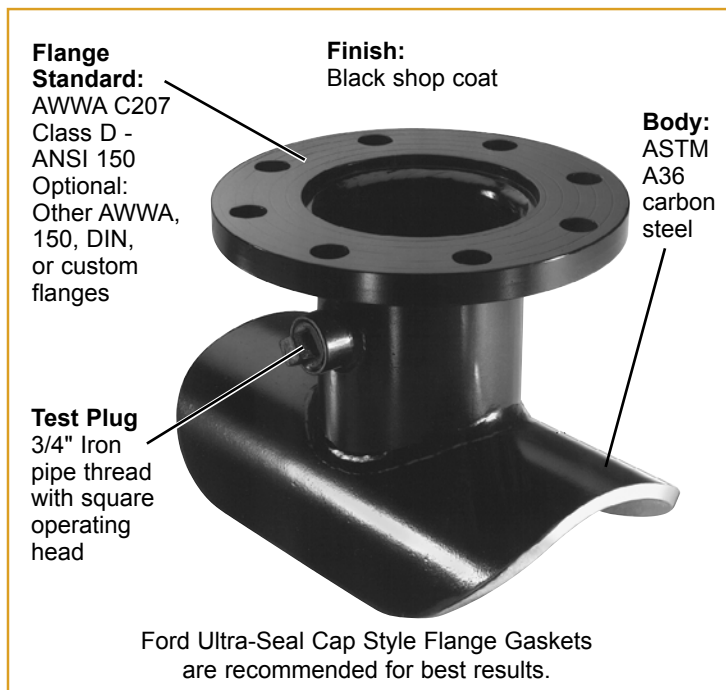
** Outlet sizes 14" through 24" are not available for FAST tapping sleeves.

Note: For styles FTS, FTSC, FTSS and FTSAS tapping sleeves, a 1" undersized cutter is required for flanges 14" and larger. Oversized outlets are available by special request.

Ford Steel Weld-On Tapping Sleeves

Style FWS

The Ford Weld-on Tapping Sleeve is designed for field welding to steel pipe. The saddle, sized to fit the pipe, has rounded corners to allow a continuous weld. The welding surface is not painted. The standard steel flange conforms to AWWA C207 Class D ANSI 150 drilling and all sleeves are furnished with a 3/4" test port. Please note that sleeves with outlet sizes through 12" require the use of a shell cutter 1/2" smaller than the nominal flange size. Larger sizes require a shell cutter 1" smaller than the flange size.



Style FWS Weld-On Tapping Sleeves

NOM PIPE SIZE	PIPE O.D.	FLANGE SIZE	CATALOG NUMBER	PRESSURE RATING		
3"	3.50	3"	FWS-350-3	175		
		3"	FWS-400-3	175		
4"	4.00	4"	FWS-400-4	175		
		3"	FWS-450-3	175		
		4"	FWS-450-4	175		
		4"	FWS-600-4	175		
6"	6.00	4"	FWS-600-4	175		
		6"	FWS-600-6	175		
		4"	FWS-663-4	175		
		6"	FWS-663-6	175		
8"	8.00	4"	FWS-800-4	175		
		6"	FWS-800-6	175		
		8"	FWS-800-8	175		
		4"	FWS-863-4	175		
		6"	FWS-863-6	175		
		8"	FWS-863-8	175		
10"	10.00	6"	FWS-1000-6	175		
		8"	FWS-1000-8	175		
		10"	FWS-1000-10	175		
		4"	FWS-1075-4	175		
		6"	FWS-1075-6	175		
		8"	FWS-1075-8	175		
12"	12.00	10"	FWS-1200-10	175		
		12"	FWS-1200-12	175		
		4"	FWS-1275-4	175		
		6"	FWS-1275-6	175		
		8"	FWS-1275-8	175		
		10"	FWS-1275-10	175		
		12.75	12.75	8"	FWS-1200-8	175
				10"	FWS-1200-10	175
12"	FWS-1275-12			175		
12"	FWS-1275-12			175		

Larger sizes available. Please contact factory for more information.

Ford Stainless Steel Tapping Sleeve

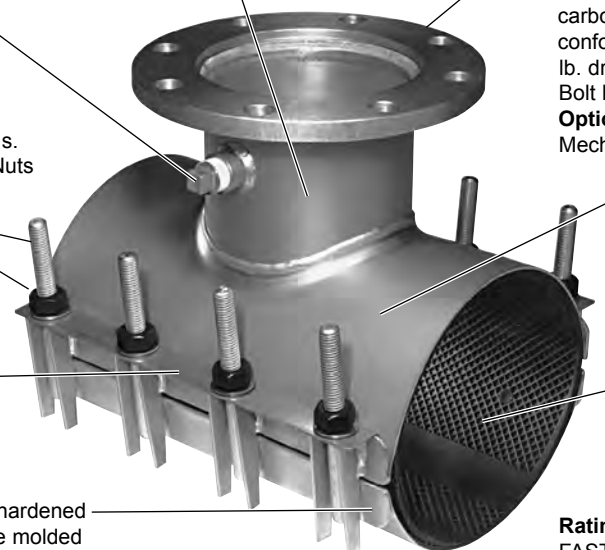
Style FAST Stainless Steel Tapping Sleeve with 360° Gasket

Ford FAST Tapping Sleeves take the guesswork out of large pipe taps. A gridded gasket surrounds the pipe and not only cushions the pipe during the tap, but also helps prevent pipe breaks. The flange outlet is welded inside and out. FAST Tapping Sleeves are chemically passivated to ensure maximum corrosion resistance.

The sleeve is constructed of 18-8 type 304 stainless steel to provide corrosion protection. Sleeves are available in pipe sizes 3" through 24", with outlets from 3" through 12". Detailed specifications and critical dimensions are outlined below.

The Ford Ultra-Seal Cap Style Flange Gasket, CSFG, is recommended for best results. See page 4.

Specifications



Test Plug
Waterworks no-lead brass 3/4" plug with standard square head. Proper use of this feature ensures positive seal before tapping.

Studs and Nuts
18-8 stainless steel UNC threads. Heavy hex nuts and washers. Nuts are coated to prevent galling.

Lifter Bar
18-8 type 304 stainless steel provides a heavy bearing surface for nuts.

Armors
Heavy gauge Type 18-8 hardened stainless steel armors are molded flush into the gasket to bridge the gap between lugs.

Outlet
18-8 type 304 stainless steel Schedule 10 for 3" and 4" outlets. Schedule 5 for all outlets larger than 4".

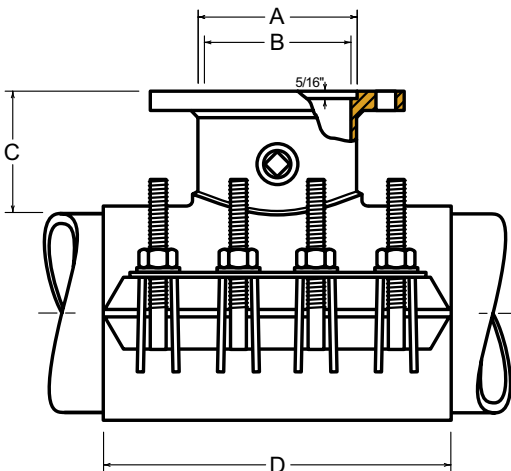
Flange
18-8 type 304 per AWWA C228 stainless steel flange with recess per MSS SP-60 to accept standard tapping valves. Optional ASTM A36 carbon steel flange may be ordered. Flange conforms to AWWA C207 Class D ANSI 150 lb. drilling. Class E or Class F flange available. Bolt holes straddle pipe center line.
Optional:
Mechanical Joint Adapter Outlet

Body
18-8 type 304 stainless steel for corrosion control. Fully chemically passivated to ensure corrosion resistance.

Gasket
Gridded virgin SBR or NBR (Buna-N) compounded for water service per ASTM D2000. Full gasket gives 360° pipe coverage. The outlet gasket is NBR (Buna-N). Optional EPDM

Rating:
FAST sleeve is rated for 250 psi working pressure on 3"-12" pipe size. Contact factory for psi rating on pipe sizes 14" and larger.

FAST Dimensions



NOM. PIPE SIZE	FLANGE SIZE CODE	NOMINAL DIMENSIONS - INCHES				STUD SIZE	NO. OF STUDS	DESIGN STYLE
		A	B	C	D			
3"	3	4-1/64	3-1/4	5-3/16	15	5/8	8	2 pc
	4	5-1/64	4-1/4	5-3/16	15	5/8	8	2 pc
4" - 12"	6	7-1/64	6-13/32	5-1/2	15	5/8	8	2 pc
	8	9-1/64	8-13/32	5-5/8	20	5/8	12	2 pc
	10	11-1/64	10-31/64	6-1/8	20	5/8	12	2 pc
	12	13-1/64	12-27/64	6-1/4	24	5/8	14	2 pc
	14"	3	4-1/64	3-1/4	5-3/16	16	5/8	10
14"	4	5-1/64	4-1/4	5-3/16	16	5/8	10	2 pc
	6	7-1/64	6-13/32	5-1/2	16	5/8	10	2 pc
	8	9-1/64	8-13/32	5-5/8	20	5/8	12	2 pc
	10	11-1/64	10-31/64	6-1/8	20	5/8	12	2 pc
	12	13-1/64	12-27/64	6-1/4	24	5/8	14	2 pc
16" - 18"	3	4-1/64	3-1/4	5-3/16	16	5/8	15	3 pc
	4	5-1/64	4-1/4	5-3/16	16	5/8	15	3 pc
	6	7-1/64	6-13/32	5-1/2	16	5/8	15	3 pc
	8	9-1/64	8-13/32	5-5/8	20	5/8	18	3 pc
	10	11-1/64	10-31/64	6-1/8	20	5/8	18	3 pc
20" - 24"	12	13-1/64	12-27/64	6-1/4	24	5/8	21	3 pc
	3	4-1/64	3-1/4	5-3/16	16	5/8	15	3 pc
	4	5-1/64	4-1/4	5-3/16	16	5/8	15	3 pc
	6	7-1/64	6-13/32	5-1/2	16	5/8	15	3 pc
	8	9-1/64	8-13/32	5-5/8	20	5/8	18	3 pc
20" - 24"	10	11-1/64	10-31/64	6-1/8	20	5/8	18	3 pc
	12	13-1/64	12-27/64	6-1/4	24	5/8	21	3 pc

Outlet Options: *Class E or Class F flange available, contact factory.

3" - 12" MJ adapter outlets available, contact factory for dimensions.

Ford Stainless Steel Tapping Sleeve

Style FAST Stainless Steel Tapping Sleeve with 360° Gasket

To Order: Select the catalog sleeve number for the desired range and complete the catalog number by adding the flange code.

Example: The complete catalog number for a 6" ductile iron pipe (6.90 O.D.) with a 4" stainless steel flange is FAST-730-4. The FAST-700-4 with a range of 6.60 to 7.00 could also be used on 6.90 O.D. pipe. Please contact factory for prices and delivery on pipe O.D. sizes not covered by our standard range.

NOM. PIPE SIZE	SLEEVE O.D. RANGE	SLEEVE NUMBER	BY	STAINLESS STEEL SIZE FLANGE CODE	OPTIONAL CARBON STEEL FLANGE CODE*	OPTIONAL MECHANICAL JOINT ADAPTER OUTLET	APPROX. WT. LBS.	
3"	3.50-3.96	FAST-396-	X	3	3A	-MJ	26	
	4.50-4.80	FAST-480-		3	3A	-MJ	28	
4"	4.80-5.10	FAST-510-	X	4	4A		-MJ	29
	5.05-5.30	FAST-530-		3	3A	-MJ		33
6"	6.60-7.00	FAST-700-	X	4	4A		-MJ	34
	6.90-7.30	FAST-730-		6	6A			38
	7.10-7.50	FAST-750-		3	3A	-MJ		38
8"	8.63-9.05	FAST-905-	X	4	4A		-MJ	39
	9.05-9.45	FAST-945-		6	6A			42
	9.30-9.70	FAST-970-		8	8A			58
	3	3A		-MJ	40			
10"	10.75-11.15	FAST-1115-	X		4	4A	-MJ	41
	11.05-11.45	FAST-1145-			6	6A		45
	11.75-12.15	FAST-1215-			8	8A		65
	10	10A			85			
	3	3A		-MJ	43			
12"	12.75-13.20	FAST-1320-	X		4	4A	-MJ	44
	13.10-13.50	FAST-1350-			6	6A		48
	14.00-14.40	FAST-1440-			8	8A		68
	10	10A			88			
	12	12A			116			
	3	3A		-MJ	65			
14"	15.10-15.50	FAST-1550-	X		4	4A	-MJ	66
	15.30-15.70	FAST-1570-			6	6A		71
	15.80-16.20	FAST-1620-			8	8A		88
	16.48-16.88	FAST-1688-			10	10A		96
	12	12A			125			
	3	3A		-MJ	74			
16"	17.30-17.70	FAST-1770-	X		4	4A	-MJ	75
	17.40-17.80	FAST-1780-			6	6A		78
	17.75-18.15	FAST-1815-			8	8A		100
	18.15-18.62	FAST-1862-			10	10A		114
	18.60-19.00	FAST-1900-			12	12A		146
	18.80-19.20	FAST-1920-		3	3A	-MJ		80
18"	19.30-19.70	FAST-1970-	X	4	4A		-MJ	81
	19.50-19.92	FAST-1992-		6	6A			86
	19.80-20.20	FAST-2020-		8	8A			106
	10	10A		119				
	12	12A		153				
	3	3A		-MJ	86			
20"	20.20-20.60	FAST-2060-	X		4	4A	-MJ	87
	20.90-21.30	FAST-2130-			6	6A		92
	21.40-21.80	FAST-2180-			8	8A		114
	21.86-22.26	FAST-2226-			10	10A		124
	22.30-22.70	FAST-2270-			12	12A		159
	23.40-23.80	FAST-2380-		3	3A	-MJ		98
24"	23.80-24.20	FAST-2420-	X	4	4A		-MJ	99
	25.60-26.00	FAST-2600-		6	6A			103
	8	8A		127				
	10	10A		135				
	12	12A		171				

For use on HDPE pipe, use prefix FASTP.

* Add "-E" for epoxy coated carbon steel flange.

Note: Highlighted ranges are recommended for ductile iron pipe and C900 pipe applications. (4" - 12" also fit IPS PVC pipe.)

Ford Stainless Steel Tapping Sleeve

Style FTSS Stainless Steel Tapping Sleeve with Removable Bolts and 360° Gasket

Ford FTSS Tapping Sleeves have a heavy gauge stainless steel body with removable bolts. A gridded gasket surrounds the pipe and not only cushions the pipe during the tap, but also helps prevent pipe breaks. The flange outlet is welded inside and out. FTSS Tapping Sleeves are chemically passivated to ensure maximum corrosion protection.

The Ford Ultra-Seal Cap Style Flange Gasket, CSFG, is recommended for best results. See page 4.

Specifications

Test Plug
Waterworks no-lead brass 3/4" plug with standard square head. Proper use of this feature ensures positive seal before tapping.

Bolts and Nuts
18-8 type 304 stainless steel UNC threads. Heavy hex nuts and washers. Nuts are coated to prevent galling.

Lugs
18-8 type 304 stainless steel cold formed for additional strength. MIG welded to body.

Armors
Heavy gauge Type 18-8 hardened stainless steel armors are molded flush into the gasket to bridge the gap between lugs.

Flange
18-8 type 304 stainless steel flange per AWWA C228 with recess per MSS SP-60 to accept standard tapping valves. Optional ASTM A36 carbon steel flange may be ordered. Flange conforms to AWWA C207 Class D ANSI 150 lb. drilling. Class E or Class F flange available. Bolt holes straddle pipe center line.

Optional:
Mechanical Joint Adapter Outlet

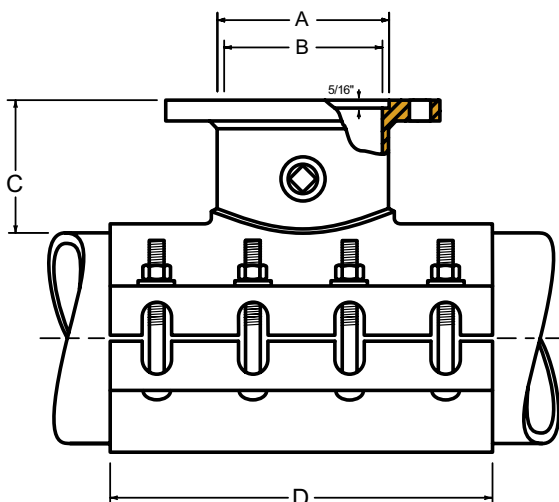
Outlet
18-8 type 304 stainless steel

Body
18-8 type 304 stainless steel for corrosion control. All welds are fully passivated to restore stainless characteristics.

Gasket
Gridded virgin SBR or NBR (Buna-N) compounded for water service per ASTM D2000. Full gasket gives 360° pipe coverage. The outlet gasket is NBR (Buna-N). Optional EPDM

Rating:
FTSS sleeve is rated for 250 psi working pressure on 4"-12" pipe size. Contact factory for psi rating on pipe sizes 14" and larger.

FTSS Dimensions



NOM. PIPE SIZE	FLANGE SIZE CODE	NOMINAL DIMENSIONS - INCHES				BOLT SIZE	No. OF BOLTS
		A	B	C	D		
4" - 12"	3	4-1/64	3-1/4	5-3/16	15	5/8	8
	4	5-1/64	4-1/4	5-3/16	15	5/8	8
	6	7-1/64	6-13/32	5-1/2	15	5/8	8
	8	9-1/64	8-13/32	5-5/8	20	5/8	12
	10	11-1/64	10-31/64	6-1/8	20	3/4	12
14" - 16"	12	13-1/64	12-27/64	6-1/4	24	3/4	14
	3	4-1/64	3-1/4	5-3/16	16	3/4	10
	4	5-1/64	4-1/4	5-3/16	16	3/4	10
	6	7-1/64	6-13/32	5-1/2	16	3/4	10
	8	9-1/64	8-13/32	5-5/8	20	3/4	12
18" - 24"	10	11-1/64	10-31/64	6-1/8	20	3/4	12
	12	13-1/64	12-27/64	6-1/4	24	3/4	14
	3	4-1/64	3-1/4	5-3/16	16	3/4	10
	4	5-1/64	4-1/4	5-3/16	16	3/4	10
	6	7-1/64	6-13/32	5-1/2	16	3/4	10
18" - 24"	8	9-1/64	8-13/32	5-5/8	20	3/4	12
	10	11-1/64	10-31/64	6-1/8	20	3/4	12
	12	13-1/64	12-27/64	6-1/4	24	3/4	14
	12	13-1/64	12-27/64	6-1/4	24	3/4	14

Outlet Options: *Class E or Class F flange available, contact factory.
3" - 24" MJ adapter outlets available, contact factory for dimensions.

Ford Stainless Steel Tapping Sleeve

Style FTSS Stainless Steel Tapping Sleeve with Removable Bolts and 360° Gasket

To Order: Select the catalog sleeve number for the desired pipe material and range; complete the catalog number by adding the flange code.

Examples: The complete FTSS catalog number for a 6" ductile iron pipe (6.90 O.D.) with a 4" stainless steel flange is FTSS-700-4. An FTSS for 6" ductile iron pipe (6.90 O.D.) with a 4" carbon steel mechanical joint outlet is FTSS-700-4A-MJ.

NOM. PIPE SIZE	SLEEVE O.D. RANGE	SLEEVE NUMBER	BY	STAINLESS STEEL SIZE FLANGE CODE	OPTIONAL CARBON STEEL FLANGE CODE	OPTIONAL MECHANICAL JOINT OUTLET	APPROX. WT. LBS.
4"	4.50-4.80	FTSS-480-	X	3	3A	-MJ	37
	4.80-5.00	FTSS-500-		4	4A		38
	5.10-5.30	FTSS-530-					
6"	5.20-5.40	FTSS-540-	X	3	3A	-MJ	41
	6.60-7.00	FTSS-700-		4	4A		42
	6.90-7.30	FTSS-730-		6	6A		47
8"	7.30-7.50	FTSS-750-	X	3	3A	-MJ	41
	8.63-9.05	FTSS-905-		4	4A		42
	8.97-9.45	FTSS-945-		6	6A		49
10"	9.30-9.60	FTSS-960-	X	8	8A	-MJ	75
	9.45-9.75	FTSS-975-		3	3A		46
	10.75-11.10	FTSS-1110-		4	4A		47
12"	11.06-11.45	FTSS-1145-	X	6	6A	-MJ	53
	11.40-11.70	FTSS-1170-		8	8A		79
	11.85-12.15	FTSS-1215-		10	10A		99
14"	12.75-13.20	FTSS-1320-	X	3	3A	-MJ	49
	13.12-13.52	FTSS-1352-		4	4A		50
	13.50-13.80	FTSS-1380-		6	6A		55
16"	14.10-14.40	FTSS-1440-	X	8	8A	-MJ	86
	15.22-15.70	FTSS-1570-		10	10A		104
	15.80-16.20	FTSS-1620-		12	12A		138
18"	16.48-16.88	FTSS-1688-	X	14	14A	-MJ	160
	17.32-17.80	FTSS-1780-		3	3A		74
	17.75-18.15	FTSS-1815-		4	4A		75
20"	18.15-18.62	FTSS-1862-	X	6	6A	-MJ	82
	18.60-19.00	FTSS-1900-		8	8A		102
	18.80-19.20	FTSS-1920-		10	10A		110
24"	19.42-19.92	FTSS-1992-	X	12	12A	-MJ	146
	19.80-20.20	FTSS-2020-		14	14A		160
	20.20-20.60	FTSS-2060-**		16	16A		200
30"	20.90-21.30	FTSS-2130-	X	18	18A	-MJ	210
	21.40-21.80	FTSS-2180-		3	3A		85
	21.86-22.26	FTSS-2226-		4	4A		86
42"	22.30-22.70	FTSS-2270-	X	6	6A	-MJ	92
	23.40-23.80	FTSS-2380-		8	8A		114
				10	10A		123
36"			X	12	12A	-MJ	162
				14	14A		195
				16	16A		205
48"			X	18	18A	-MJ	215
				20	20A		222
				3	3A		96
60"			X	4	4A	-MJ	97
				6	6A		103
				8	8A		127
72"			X	10	10A	-MJ	136
				12	12A		178
				14	14A		199
84"			X	16	16A	-MJ	210
				18	18A		224
				20	20A		230
96"			X	24	24A	-MJ	256

30" - 36"***
42" - 48"***

Contact factory for information, please indicate which tapping valve is being used.

Note: Use 1" undersize cutter for flanges 14" and larger. Oversized outlets are available by special request P.O.A.

** Size-on-size not available.

For use on HDPE pipe, use prefix FTSSP.

Note: Highlighted ranges are recommended for ductile iron pipe, pit cast and C900 pipe applications. (4" - 12" also fit IPS PVC pipe.)

Other sizes and ranges available. Contact your Ford Meter Box representative for details.

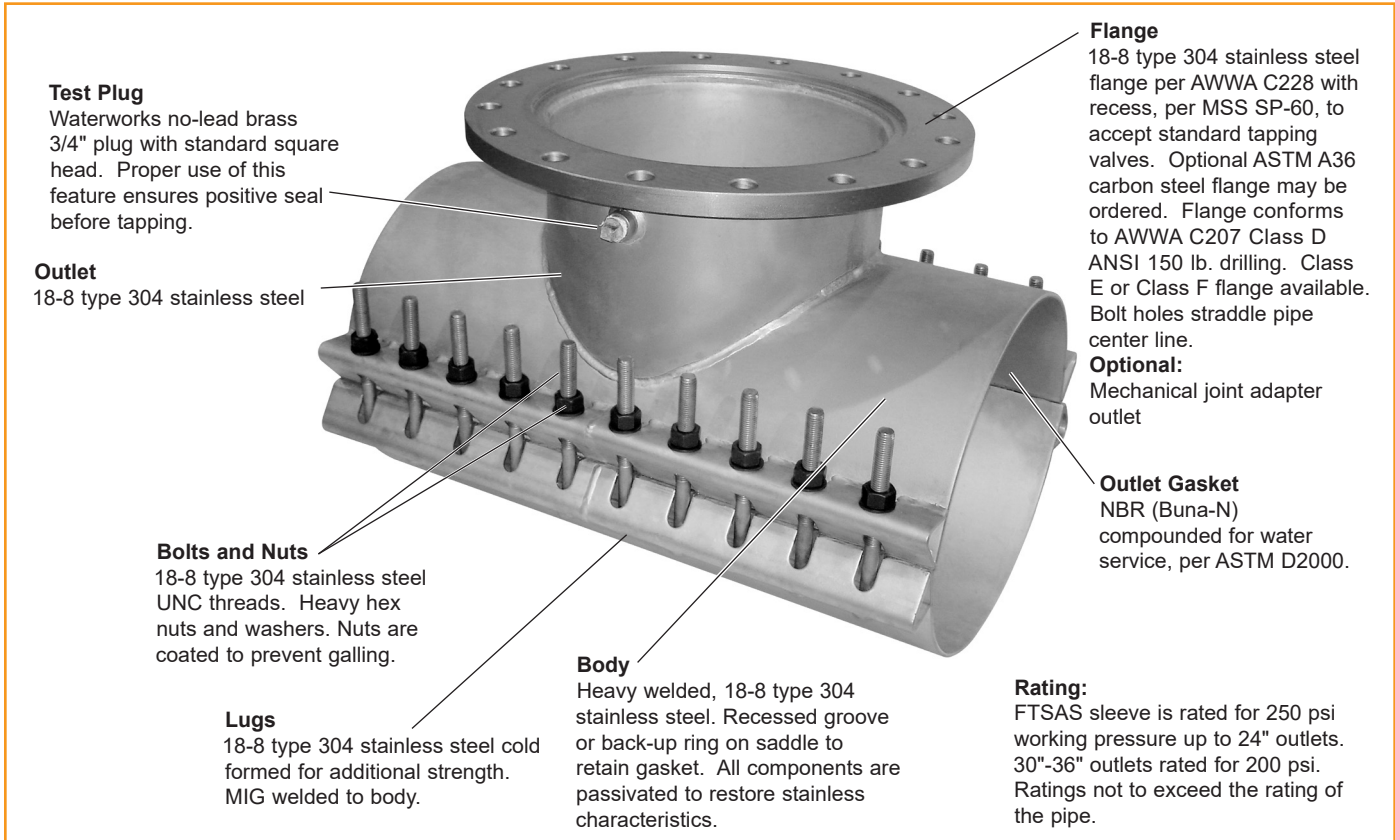
Ford Stainless Steel Tapping Sleeve

Style FTSAS Stainless Steel Tapping Sleeves with Removable Bolts and Outlet Seal Gasket

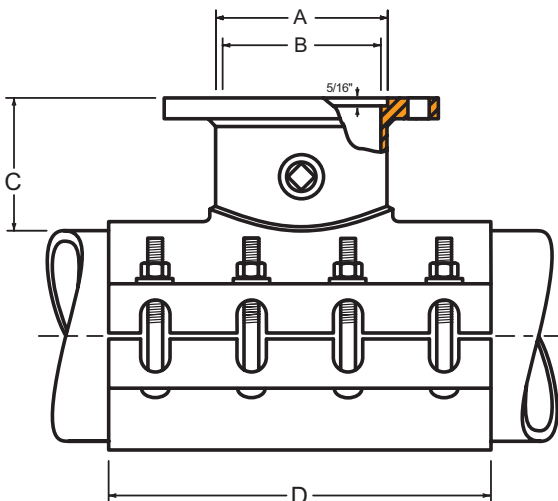
Ford FTSAS Tapping Sleeves have a heavy gauge stainless steel body with removable bolts. An outlet seal gasket compresses against the pipe, and provides a watertight seal. FTSAS Tapping Sleeves are chemically passivated to ensure maximum corrosion protection.

The Ford Ultra-Seal Cap Style Flange Gasket, CSFG, is recommended for best results. See page 4.

Specifications



FTSAS Dimensions



NOM PIPE SIZE	FLANGE SIZE CODE	NOMINAL DIMENSIONS - INCHES				BOLT SIZE	No. OF BOLTS
		A	B	C	D		
4" - 12"	3	4-1/64	3-1/4	5-3/16	15	5/8	8
	4	5-1/64	4-1/4	5-3/16	15	5/8	8
	6	7-1/64	6-13/32	5-1/2	15	5/8	8
	8	9-1/64	8-13/32	5-5/8	20	5/8	12
	10	11-1/64	10-31/64	6-1/8	20	3/4	12
14" - 16"	12	13-1/64	12-27/64	6-1/4	24	3/4	14
	3	4-1/64	3-1/4	5-3/16	16	3/4	10
	4	5-1/64	4-1/4	5-3/16	16	3/4	10
	6	7-1/64	6-13/32	5-1/2	16	3/4	10
	8	9-1/64	8-13/32	5-5/8	16	3/4	10
18" - 24"	10	11-1/64	10-31/64	6-1/8	20	3/4	12
	12	13-1/64	12-27/64	6-1/4	24	3/4	14
	3	4-1/64	3-1/4	5-3/16	16	3/4	10
	4	5-1/64	4-1/4	5-3/16	16	3/4	10
	6	7-1/64	6-13/32	5-1/2	16	3/4	10
18" - 24"	8	9-1/64	8-13/32	5-5/8	16	3/4	10
	10	11-1/64	10-31/64	6-1/8	20	3/4	12
	12	13-1/64	12-27/64	6-1/4	24	3/4	14

Outlet Options: *Class E or Class F flange available, contact factory.
3" - 24" MJ adapter outlets available, contact factory for dimensions.

Ford Stainless Steel Tapping Sleeve

Style FTSAS Stainless Steel Tapping Sleeves with Removable Bolts and Outlet Seal Gasket

To order: Select the sleeve number for the desired pipe range and complete catalog number by adding flange code.

Example: The catalog number for use on a 16" ductile iron pipe (17.40 O.D.) with a 16" stainless steel flange is FTSAS-1787-16.

NOM. PIPE SIZE	SLEEVE O.D. RANGE	SLEEVE NUMBER	BY	STAINLESS STEEL SIZE FLANGE CODE	OPTIONAL CARBON STEEL FLANGE CODE	OPTIONAL MECHANICAL JOINT OUTLET	APPROX. WT. LBS.
4"	4.50-4.80	FTSAS-480-	X	3	3A	-MJ	40
				4	4A		40
6"	6.65-7.00 6.90-7.30	FTSAS-700- FTSAS-730-	X	3	3A	-MJ	66
				4	4A		67
				6	6A		74
8"	8.63-9.05 9.05-9.30	FTSAS-905- FTSAS-930-	X	3	3A	-MJ	84
				4	4A		85
				6	6A		89
				8	8A		94
10"	10.75-11.10 11.40-11.70	FTSAS-1110- FTSAS-1170-	X	3	3A	-MJ	89
				4	4A		90
				6	6A		93
				8	8A		99
12"	12.75-13.20 13.20-13.50	FTSAS-1320- FTSAS-1350-	X	10	10A	-MJ	111
				3	3A		97
				4	4A		98
				6	6A		102
				8	8A		108
14"	15.23-15.72 15.73-16.22 16.30-16.73 16.74-17.26	FTSAS-1572- FTSAS-1622- FTSAS-1673- FTSAS-1726-	X	10	10A	-MJ	188
				12	12A		207
				3	3A		236
				4	4A		237
				6	6A		240
				8	8A		245
16"	17.33-17.87 17.88-18.43 18.46-19.03 18.87-19.45	FTSAS-1787- FTSAS-1843- FTSAS-1903- FTSAS-1945-	X	10	10A	-MJ	263
				12	12A		288
				14	14A		300
				3	3A		135
				4	4A		136
				6	6A		139
				8	8A		144
18"	19.41-20.01 19.88-20.48 20.29-20.92 20.93-21.57	FTSAS-2001- FTSAS-2048- FTSAS-2092- FTSAS-2157-	X	10	10A	-MJ	246
				12	12A		273
				14	14A		285
				16	16A		342
				3	3A		230
				4	4A		231
				6	6A		234
				8	8A		239
20"	21.51-22.15 22.16-22.81 23.46-24.16 24.82-25.52	FTSAS-2215- FTSAS-2281- FTSAS-2416- FTSAS-2552-	X	10	10A	-MJ	260
				12	12A		290
				14	14A		302
				16	16A		358
				18	18A		450
				3	3A		248
				4	4A		249
				6	6A		252
				8	8A		257
24"	25.71-26.41 26.55-27.25 27.26-27.96 28.14-28.84	FTSAS-2641- FTSAS-2725- FTSAS-2796- FTSAS-2884-	X	10	10A	-MJ	279
				12	12A		310
				14	14A		321
				16	16A		377
				18	18A		502
				20	20A		532
				3	3A		267
				4	4A		268
				6	6A		271
				8	8A		276
30" - 36"	Contact factory for information, please indicate which tapping valve is being used.						304
	42" - 48"	Contact factory for information, please indicate which tapping valve is being used.					
							351
							414
							523
							586
							727

Note: Use 1" undersize cutter for flanges 14" and larger. Oversized outlets are available by special request. For use on HDPE pipe, use prefix FTSASP.

Ford Steel Tapping Sleeves

Styles FTS and FTSC (Epoxy Coated) Carbon Steel Tapping Sleeves with Removable Bolts and Outlet Seal Gasket

Ford Tapping Sleeves feature a simple design that can easily be installed without special tools, welding, or caulking. Most sleeves have a range that allows for installation on more than one pipe diameter. The large outlet gasket has a broad cross-section to resist rolling and to provide a dependable seal. Ford Tapping Sleeves are recommended for use on commonly used water mains such as asbestos-cement, cast or ductile iron, and/or PVC pipe.

The Ford Ultra-Seal Cap Style Flange Gasket, CSFG, is recommended for best results. See page 4.

Specifications

Test Plug - steel (FTS) or No-Lead brass (FTSC) 3/4" plug with square operating head. Proper use of this feature ensures positive seal before tapping.

Bolts and Nuts -

Style FTS - High strength low alloy per ASTM A242 and AWWA C111. Heavy hex nuts are coated to prevent galling.

Style FTSC - 18-8 type 304 stainless steel.

Optional: 316 stainless steel or coated high strength low alloy per ASTM A242 and AWWA C111.

Finish - Style FTS - Shop coat. Excellent base for coal tar enamel and similar field coatings.

Style FTSC - Fusion bonded epoxy coating.

Rating:

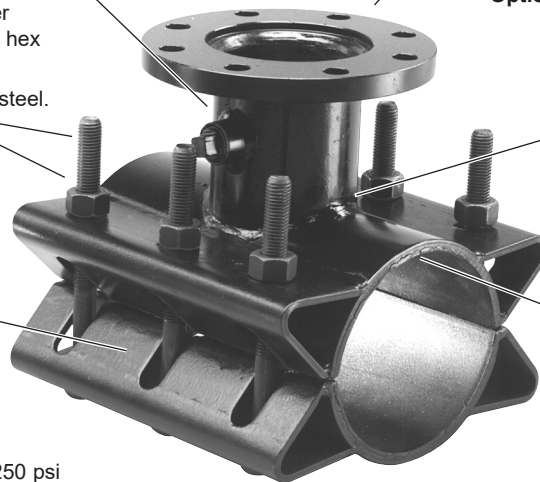
FTS and FTSC sleeve is rated for 250 psi working pressure up to 24" outlets. 30"-36" outlets rated for 200 psi. Ratings not to exceed the rating of the pipe.

Flange - ASTM A36 carbon steel, recessed per MSS SP-60 for standard tapping valve through 24" - AWWA C207 Class D ANSI 150 lb. drilling. Class E or Class F flange available. Bolt holes straddle pipe center line.

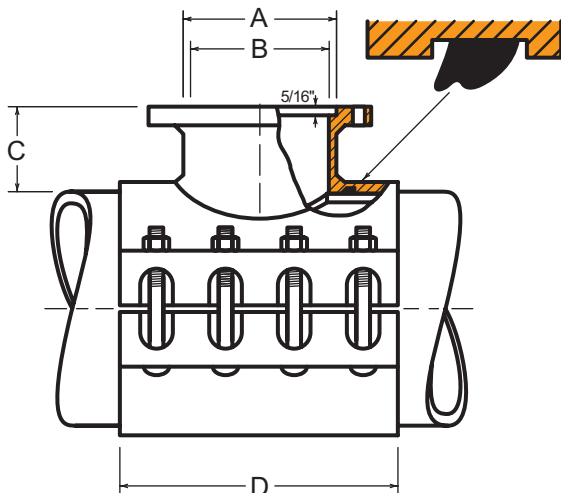
Optional: Mechanical Joint Adapter Outlet

Body - Heavy-welded steel with mechanically retained gasket. ASTM A36 36,000 psi minimum yield.

Outlet Gasket - NBR (Buna-N) compounded for water service, per ASTM D2000. Optional EPDM



FTS/FTSC Dimensions



NOM. PIPE SIZE	FLANGE SIZE CODE	NOMINAL DIMENSIONS - INCHES				BOLT SIZE	NO. OF BOLTS
		A	B	C	D		
4"	3	4-3/64	3-1/16	5-1/16	12	5/8	8
	4	5-3/64	4-1/8	5-1/16	12	5/8	8
6" - 12"	3	4-3/64	3-1/16	5-3/16	12	3/4	6
	4	5-3/64	4-1/8	5-3/16	12	3/4	6
	6	7-3/64	6-1/4	5-3/16	12	3/4	6
	8	9-3/64	8-1/4	5-3/16	16	3/4	8
14" - 16"	10	11-3/64	10-1/4	5-3/16	20	3/4	10
	12	13-3/64	12-1/4	5-3/16	24	3/4	12
	3	4-3/64	3-1/16	5-3/16	12	3/4	6
	4	5-3/64	4-1/8	5-3/16	12	3/4	6
	6	7-3/64	6-1/4	5-3/16	12	3/4	6
	8	9-3/64	8-1/4	5-3/16	16	3/4	8
18" - 24"	10	11-3/64	10-1/4	5-3/16	20	3/4	10
	12	13-3/64	12-1/4	5-3/16	24	3/4	12
	3	4-3/64	3-1/16	5-3/16	12	3/4	6
	4	5-3/64	4-1/8	5-3/16	12	3/4	6
	6	7-3/64	6-1/4	5-3/16	12	3/4	6
	8	9-3/64	8-1/4	5-3/16	16	3/4	8

Outlet Options: Class E or F flanges available, contact factory.
3" - 24" MJ adapter outlets available, see next page.

Note: Smaller size-on-size units may require 1/2" undersize cutter. See notes on next page. Use 1" undersized cutter for flanges 14" and larger. Over-sized outlets, B dimension, are available by special request.

Ford Steel Tapping Sleeves

Styles FTS and FTSC (Epoxy Coated) Carbon Steel Tapping Sleeves with Removable Bolts and Outlet Seal Gasket

The Ford FTS Style Tapping Sleeve has a shop coat suitable for most field applied coatings, and is furnished with high strength low alloy steel bolts. Ford Steel Tapping Sleeves are available with optional stainless steel bolts by adding "-SH" to the FTS catalog number. For maximum corrosion resistance, the FTSC style has fusion applied epoxy and stainless steel bolts.

NOM. PIPE SIZE	SLEEVE O.D. RANGE	SLEEVE NUMBER	EPOXY COATED SLEEVE	BY	FLANGE SIZE CODE	OPTIONAL MJ OUTLET	APPROX. WT. LBS.
4"	4.50 - 4.80	*FTS-480-	*FTSC-480-	X	3	-MJ	40
					4		41
6"	6.57 - 6.73 6.83 - 7.16 7.20 - 7.60 7.40 - 7.73	*FTS-673- FTS-716- FTS-760- FTS-773-	*FTSC-673- FTSC-716- FTSC-760- FTSC-773-	X	3	-MJ	64
					4		65
					6		72
					8		72
8"	7.95 - 8.05 8.36 - 8.75 8.73 - 9.12 8.89 - 9.37 9.27 - 9.69	**FTS-805- *FTS-875- FTS-912- FTS-937- FTS-969-	**FTSC-805- *FTSC-875- FTSC-912- FTSC-937- FTSC-969-	X	3	-MJ	73
					4		79
					6		106
					8		81
					10		82
10"	9.95 - 10.10 10.45 - 10.88 11.03 - 11.47 11.36 - 11.80	**FTS-1010- FTS-1088- FTS-1147- FTS-1180-	**FTSC-1010- FTSC-1088- FTSC-1147- FTSC-1180-	X	4	-MJ	87
					6		117
					8		153
					10		92
					12		93
12"	11.76 - 12.20 12.42 - 12.88 13.13 - 13.60 13.60 - 14.09 14.10 - 14.58	**FTS-1220- FTS-1288- FTS-1360- FTS-1409- FTS-1458-	**FTSC-1220- FTSC-1288- FTSC-1360- FTSC-1409- FTSC-1458-	X	4	-MJ	98
					6		98
					8		130
					10		169
					12		216
					14		98
14"-16"	14.59 - 15.08 15.23 - 15.72 15.73 - 16.22 16.30 - 16.73 16.74 - 17.26	FTS-1508- FTS-1572- FTS-1622- FTS-1673- FTS-1726-	FTSC-1508- FTSC-1572- FTSC-1622- FTSC-1673- FTSC-1726-	X	3	-MJ	99
					4		105
					6		139
					8		178
					10		230
					12		113
16"-18"	17.33 - 17.87 17.88 - 18.43 18.46 - 19.03 18.87 - 19.45 19.41 - 20.01	FTS-1787- FTS-1843- FTS-1903- FTS-1945- FTS-2001-	FTSC-1787- FTSC-1843- FTSC-1903- FTSC-1945- FTSC-2001-	X	4	-MJ	114
					6		120
					8		159
					10		203
					12		256
					16		413
					3		121
18"-20"	19.88 - 20.48 20.29 - 20.92 20.93 - 21.57 21.51 - 22.15 22.16 - 22.81	FTS-2048- FTS-2092- FTS-2157- FTS-2215- FTS-2281-	FTSC-2048- FTSC-2092- FTSC-2157- FTSC-2215- FTSC-2281-	X	4	-MJ	122
					6		128
					8		170
					10		216
					12		273
					16		412
					3		132
20"-24"	22.78 - 23.45 23.46 - 24.16 24.15 - 24.85 24.82 - 25.52	FTS-2345- FTS-2416- FTS-2485- FTS-2552-	FTSC-2345- FTSC-2416- FTSC-2485- FTSC-2552-	X	4	-MJ	133
					6		136
					8		180
					10		229
					12		299
					16		430
					3		148
24"	25.71 - 26.41 26.55 - 27.25 27.26 - 27.96 28.14 - 28.84	FTS-2641- FTS-2725- FTS-2796- FTS-2884-	FTSC-2641- FTSC-2725- FTSC-2796- FTSC-2884-	X	4	-MJ	149
					6		153
					8		212
					10		260
					12		323
					16		459
					3		161
30"	29.78 - 30.48 30.48 - 31.18 31.52 - 32.22	FTS-3048- FTS-3118- FTS-3222-	FTSC-3048- FTSC-3118- FTSC-3222-	X	4	-MJ	162
					6		168
					8		222
					10		283
					12		350
					16		550
36" - 60"	Contact factory for information, please indicate which tapping valve is being used.						

To Order: Add flange size to the appropriate sleeve number. For example: A 4" flange on 6" ductile iron pipe would be FTS-716-4.

Option: Standard FTS with **stainless steel nuts and bolts:** add "-SH" to the catalog number. Example: FTS-716-4-SH.

Standard FTSC with **alloy nuts and bolts:** add "-AH" to the catalog number. Example: FTSC-716-4-AH.

Note: Use 1" undersize cutter for flanges 14" and larger. Oversized outlets are available by special request.

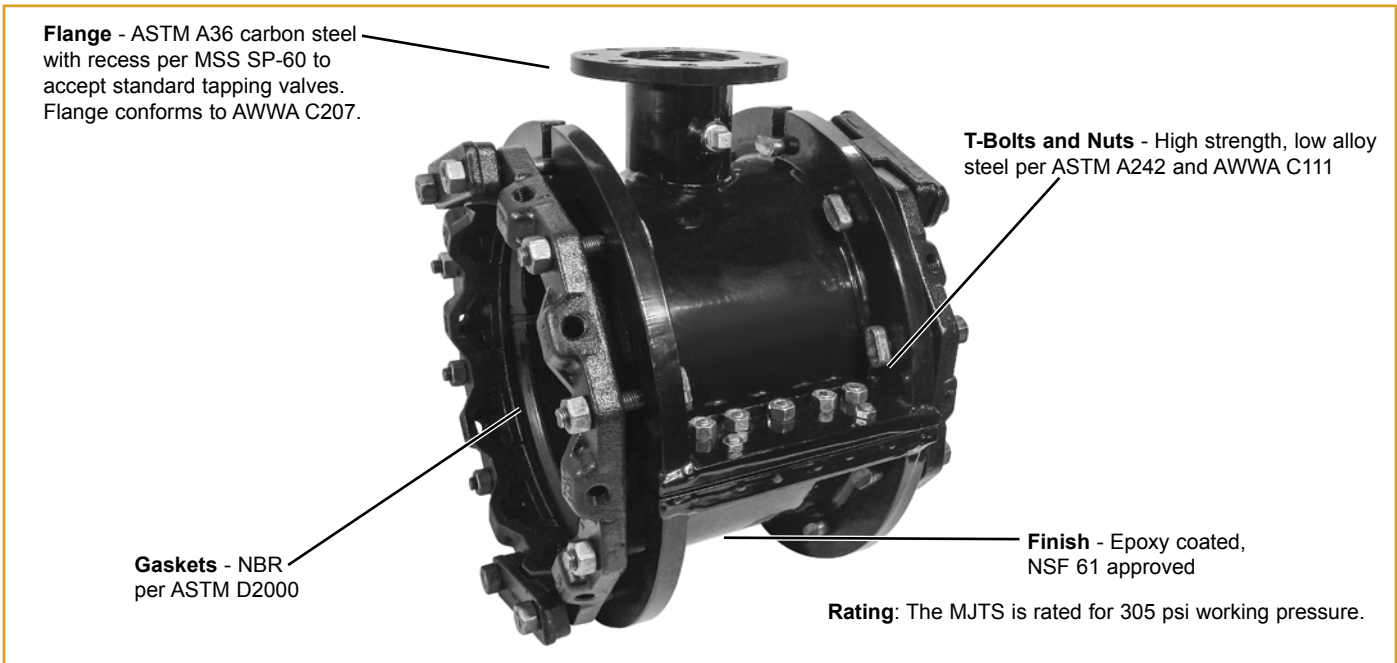
* These units for size-on-size taps may require a 1/2" undersized cutter.

** Size-on-size for this range is not available.

For use on HDPE pipe, use part prefix FTSP or FTSCP.

Ford Mechanical Joint Tapping Sleeve

With a heavy-duty fully encapsulating design, the Ford Mechanical Joint Tapping Sleeve (MJTS) is ideal for challenging situations where pipes may be out-of-round, susceptible to breakage, or where the pipe will not allow for an outlet neck seal. A unique leverage bar sealing system eliminates the need for removing or modifying the sideseal gasket during installation. Alignment pins and lugs on each half ensure easy installation.



NOMINAL PIPE SIZE	SLEEVE* O.D.	SLEEVE NUMBER**	BY	FLANGE SIZE CODE
4"	4.80	MJTS-480-x	X	4
6"	6.90	MJTS-690-x		4
8"	9.05	MJTS-905-x	X	6
				4
				8
10"	11.10	MJTS-1110-x	X	4
				6
				9
				10
12"	13.20	MJTS-1320-x	X	4
14"	15.30	MJTS-1530-x		6
16"	17.40	MJTS-1740-x		8
18"	19.50	MJTS-1950-x		10
20"	21.60	MJTS-2160-x		12
24"	25.80	MJTS-2580-x		
30"	32.00	MJTS-3200-x		

* Sleeve will accommodate AWWA pipe tolerances.

** To order: Add flange size to the sleeve number. Example: A 4" flange on 14" ductile iron pipe would be MJTS-1530-4. For MJ outlet, add "-MJ" to the catalog number. Example: MJTS-1530-4-MJ. Please contact factory for pipe O.D. sizes not covered by our standard ranges.

Sample Specifications for the MJTS Tapping Sleeve

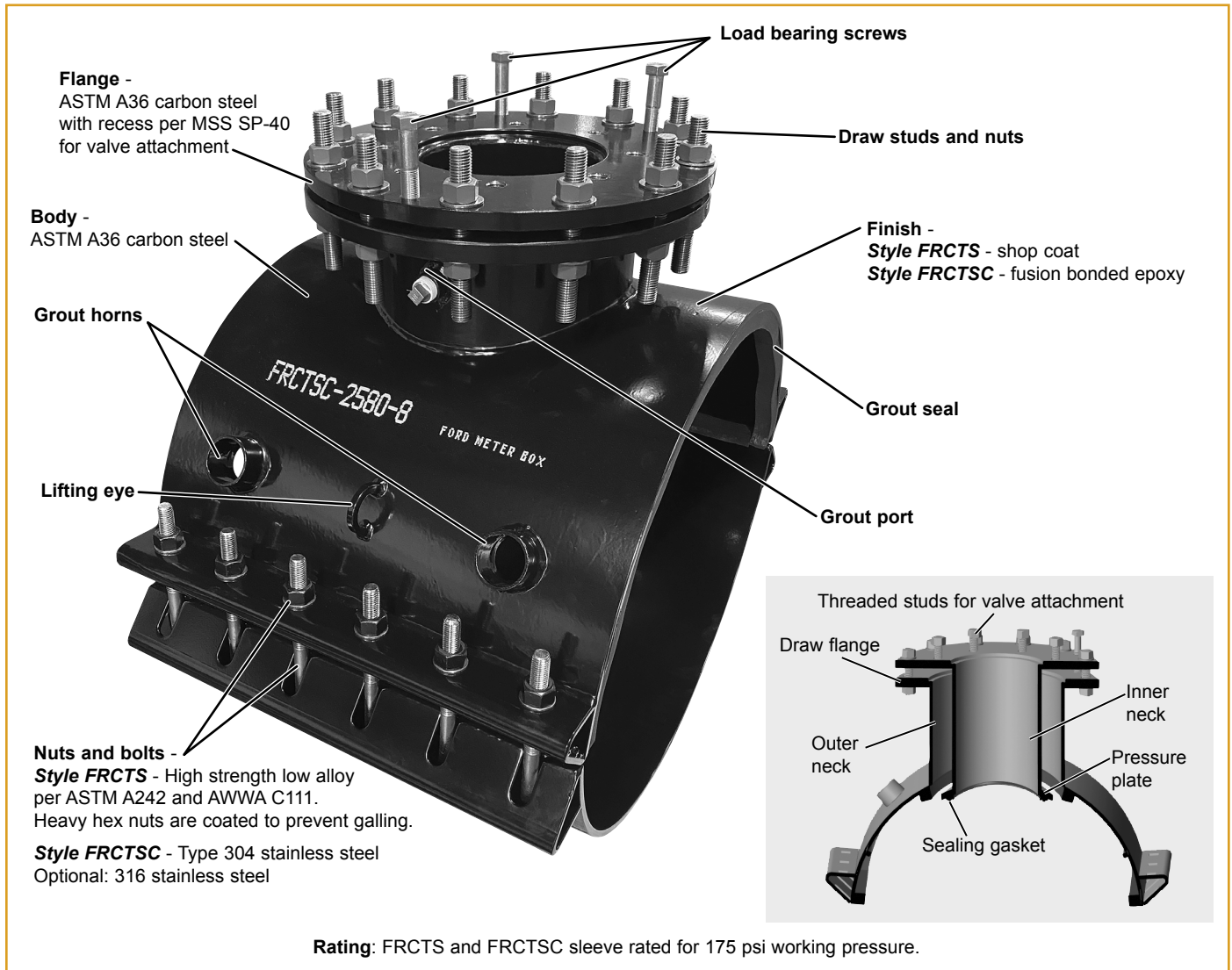
The Tapping Sleeve shall be of split mechanical joint design with independent end and side seal gaskets. All welded components except the flange shall be constructed with ASTM A36 carbon steel. Flange dimensions shall meet AWWA C207 with a valve recess per MSS SP-60. The flange shall be constructed of high strength, low alloy steel per ASTM A242 or ASTM A588 with a minimum of 50 ksi yield strength and superior corrosion resistance compared to carbon steel or ductile iron. The end seal and side seal gaskets shall be virgin NBR formulated for water service. The gaskets shall not require field trimming or cutting. The compression ring shall be manufactured with ductile iron per ASTM A536 Grade 65-45-12 or ASTM A36 carbon steel. The tapping sleeve shall meet AWWA C223 as applicable. The tapping sleeve shall be coated to an average of 12 mils thickness with a fusion-bonded epoxy that is NSF 61 listed.

Ford Reinforced Concrete Cylinder Pipe Tapping Sleeve

8" - 60" Pipe Sizes with 4" - 30" Outlets

The FRCTS(C) is ideal for tapping fragile, porous concrete cylinder pipe. An inner tapping outlet gland allows the sleeve to reinforce the pipe before the tap is made. Grout horns, a grout port, and grout retaining foam on the sleeve body allow for filling the cavity with cement for a perfect fit on out-of-round pipe. The FRCTS comes with a shop coat finish, while the FRCTSC features epoxy coating. For straps instead of a solid band, order an FRCTS2.

Specifications



Information Required Prior To Order

For pricing and engineering, please provide the following information:

- O.D. of concrete pipe and cylinder O.D.
- Type of pipe (manufacturer and class if know)
- Outlet size (on 14" and larger, provide valve manufacturer and cutter size)
- Pressure and line content
- Coating
- Solid band or straps
- If solid band, hardware requirements
- Installation orientation

Ford Brass Saddles Style S40 and S41

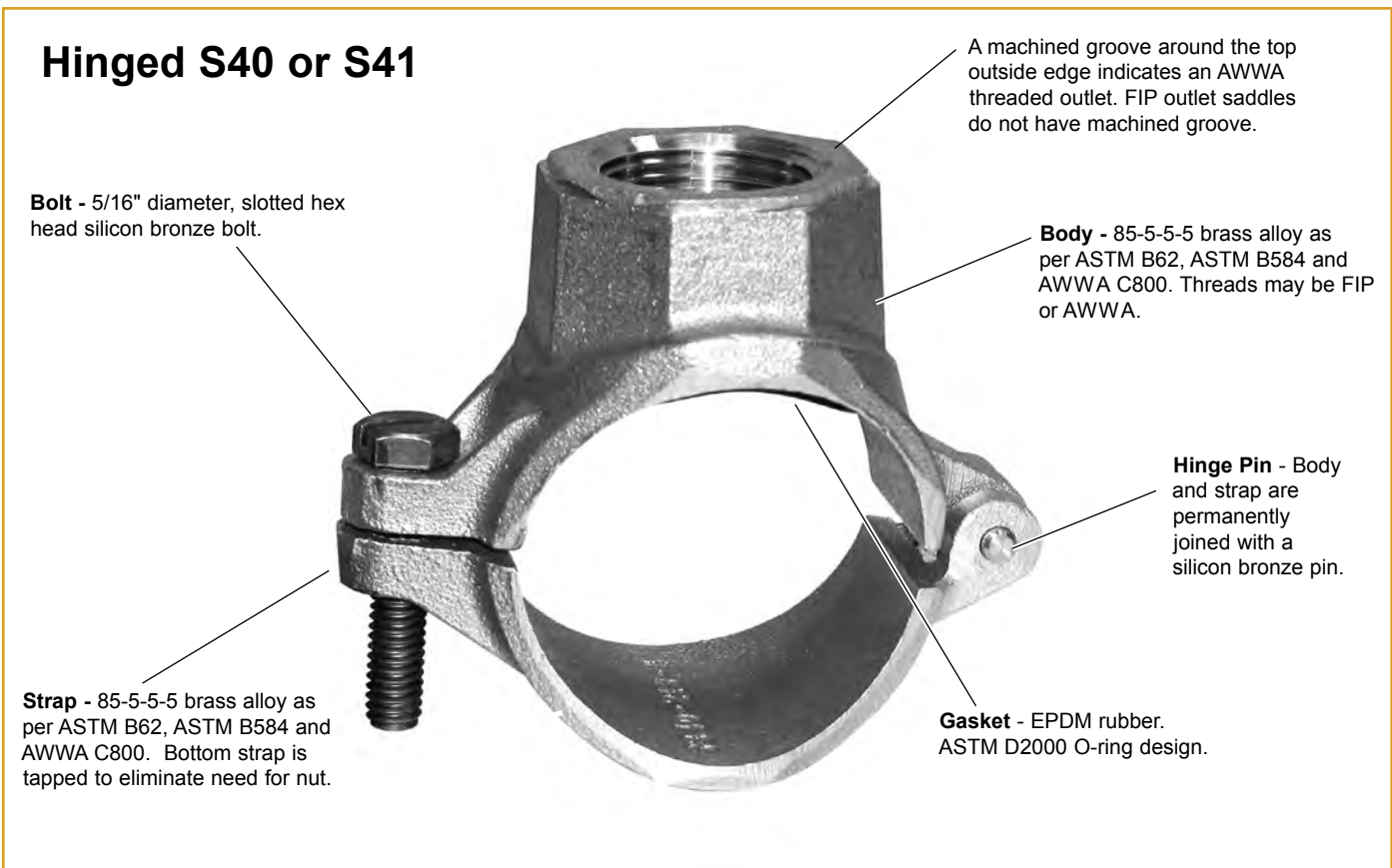
For Copper Tubing

Ford Saddles are cast from certified 85-5-5-5 waterworks brass and machined to rigid specifications. Their ample width and preformed radius provide greater distribution of clamping pressures to avoid crushing the pipe.

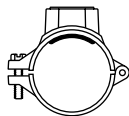
Design "A" (hinged) saddles install as a single unit with no loose parts to lose in the ditch. The upper and lower castings are permanently hinged together with a silicon bronze pin and the silicon bronze bolt has a retainer to prevent loss during shipment and installation. The retainer tag identifies the tap style and size. The lower casting is tapped to accept the bolt so nuts are not required.

Ford's convenient marking system quickly and easily identifies the type of thread in the boss. For AWWA tapered thread, the top edge of the boss has a machined groove around the top outside edge while the boss for iron pipe thread remains a cast surface. See photograph below.

Specifications



Style S40 and S41 Brass Saddles



COPPER TUBING SIZE	ACTUAL O.D.	AWWA TAP CATALOG NUMBER S40	IP TAP CATALOG NUMBER S41	TAP SIZE	APPROX. WT. LBS.
2"	2.13	S40-201	S41-201	1/2"	1.3
		S40-203	S41-203	3/4"	1.1
		S40-204	S41-204	1"	1.0

Saddle Style, Design and Bolt Chart

SADDLE STYLE	COPPER TUBING SIZE	TAP SIZE	DESIGN	NO. OF BOLTS	SADDLE SCREW AND BOLT SIZE	BOLT CAT. No.
S40 / S41	2"	1/2", 3/4" and 1"	Hinged	1 per saddle	5/16"x1-1/2"	SADDLE-SCREW800181

Ford Brass Saddles Style S70 and S71

For Standard PVC Pipe

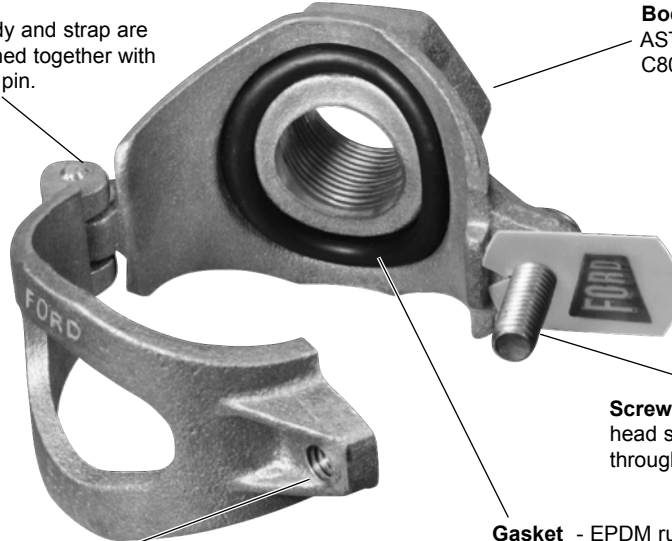
Specifications

Hinged S70

Design A

Hinge Pin - Body and strap are permanently joined together with a silicon bronze pin.

Body - 85-5-5-5 brass alloy as per ASTM B62, ASTM B584 and AWWA C800. Threads may be FIP or AWWA.



Screw - 5/16" diameter, slotted 1/2" hex head silicon bronze bolt used on 1-1/2" through 8" saddles, with 3/4" and 1" taps.

Gasket - EPDM rubber, ASTM D2000 O-ring design.

Strap - 85-5-5-5 brass alloy as per ASTM B62, ASTM B584 and AWWA C800. Bottom strap is tapped to eliminate need for nut.

S70 1-1/2" - 8" (Design may vary on certain sizes - see catalog listing).

Bolted S70

A machined groove around the top outside edge indicates an AWWA threaded outlet. FIP outlet saddles do not have machined groove.

Body - 85-5-5-5 brass alloy as per ASTM B62, ASTM B584 and AWWA C800. Threads may be FIP or AWWA.

Design B

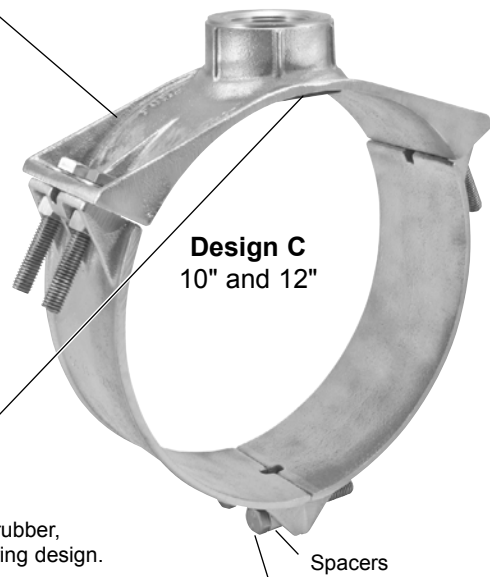
2" and 3"
1-1/4" - 2" Taps



Bolts - 5/16" (1/2" hex head) or 3/8" (9/16" hex head) silicon bronze bolts. Body casting tapped to eliminate need for nut.

Design C

10" and 12"



Gasket - EPDM rubber, ASTM D2000 O-ring design.

Bolts - 1/2" diameter (3/4" hex head) silicon bronze bolts, nuts and washers.

Ford Brass Saddles Style S70 and S71

For Standard Steel Size PVC Pipe

Ford Saddles are cast from certified 85-5-5 waterworks brass and machined to rigid specifications. Their ample width and preformed radius provide greater distribution of clamping pressures to avoid crushing the pipe.

Design "A" (hinged) saddles install as a single unit with no loose parts to lose in the ditch. (Designs may vary - see below.) The upper and lower castings are permanently hinged together with a silicon bronze pin and the silicon bronze bolt has a retainer on it to prevent loss during shipment and installation. The retainer tag identifies the tap style and size. The lower casting is tapped to accept the bolt so that nuts are not required. PVC pipe may expand under high pressure causing damage to over-tightened saddles.

Ford's convenient marking system quickly and easily identifies the type of thread in the boss. For AWWA tapered thread, the top of the boss has a machined groove around the top outside edge while the boss for iron pipe thread remains a cast surface.

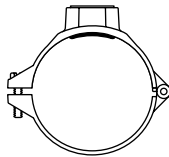
Style S70 and S71 Brass Saddles

PVC PIPE SIZE	ACTUAL PIPE O.D.	AWWA CAT. No. S70	IP TAP CAT. No. S71	TAP SIZE	DESIGN	APPROX. Wt. Lbs.
1-1/2"	1.90	S70-151	S71-151	1/2"	A	1.0
		S70-153	S71-153	3/4"	A	1.0
2"	2.38	S70-201	S71-201	1/2"	A	1.4
		S70-203	S71-203	3/4"	A	1.1
		S70-204	S71-204	1"	A	1.0
		S70-205	S71-205	1-1/4"	B	3.6
		S70-206	S71-206	1-1/2"	B	3.4
2-1/2"	2.88	S70-253	S71-253	3/4"	A	1.7
		S70-254	S71-254	1"	A	1.6
		S70-255	S71-255	1-1/4"	B	3.8
3"	3.50	S70-256	S71-256	1-1/2"	B	3.6
		S70-301	S71-301	1/2"	A	1.9
		S70-303	S71-303	3/4"	A	1.8
		S70-304	S71-304	1"	A	1.7
4"	4.50	-	S71-307	2"	B	3.5
		S70-401	S71-401	1/2"	A	2.2
		S70-403	S71-403	3/4"	A	2.1
		S70-404	S71-404	1"	A	2.0
		S70-406	S71-406	1-1/2"	A	4.1
5"	5.56	S70-407	S71-407	2"	A	4.8
		S70-503	S71-503	3/4"	A	2.6
6"	6.63	S70-504	S71-504	1"	A	2.5
		S70-601	S71-601	1/2"	A	2.9
		S70-603	S71-603	3/4"	A	2.8
		S70-604	S71-604	1"	A	2.8
8"	8.63	S70-606	S71-606	1-1/2"	A	5.9
		S70-607	S71-607	2"	A	5.1
		S70-801	S71-801	1/2"	A	3.7
		S70-803	S71-803	3/4"	A	3.6
		S70-804	S71-804	1"	A	3.6
10"	10.75	S70-806	S71-806	1-1/2"	A	5.8
		S70-807	S71-807	2"	A	5.6
		S70-1003	S71-1003	3/4"	C	7.0
		S70-1004	S71-1004	1"	C	7.0
12"	12.75	*S70-S90-1006	*S71-S91-1006	1-1/2"	C	10.4
		*S70-S90-1007	*S71-S91-1007	2"	C	10.7
		S70-1203	S71-1203	3/4"	C	8.1
12"	12.75-13.20	S70-1204	S71-1204	1"	C	7.8
		*S70-S90-1206	*S71-S91-1206	1-1/2"	C	11.3
		*S70-S90-1207	*S71-S91-1207	2"	C	10.9

* These saddles will cover Steel size PVC and C900 PVC O.D. range.

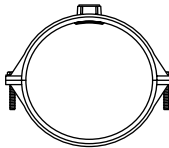
Design A

Hinged Design



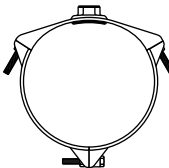
Design B

2-Piece Bolted Design



Design C

3-Piece Bolted Design



Saddle Style, Design and Bolt Chart

SADDLE STYLE	PVC PIPE SIZE	TAP SIZE	DESIGN	No. OF BOLTS	SADDLE SCREW AND BOLT SIZE	BOLT CAT. No.
S70 / S71	1-1/2" thru 8"	3/4" and 1"	Hinged	1 per saddle	5/16"x1-1/2"	SADDLE-SCREW800181
	2"	1-1/4" and 1-1/2"	2 Piece	4 per saddle	5/16"x1-1/2"	SADDLE-SCREW800181
	2-1/2"	1-1/4" and 1-1/2"	2 Piece	4 per saddle	3/8"x2"	SADDLE-SCREW800233
	3"	2"	2 Piece	4 per saddle	3/8"x1-1/2"	SADDLE-BOLT-800224
	4" thru 8"	1-1/2" and 2"	Hinged	2 per saddle	5/16"x1-1/2"	SADDLE-SCREW800181
	10" and 12"	3/4" and 1"	3 Piece	3 per saddle	1/2"x3"	**SADDLE-BOLT-800287
	10" and 12"	1-1/2" and 2"	3 Piece	6 per saddle	1/2"x3"	**SADDLE-BOLT-800287

** Requires nut. Catalog number: SADDLE-NUT-800490

Ford Brass Saddles Style S90 and S91

For C900 PVC Pipe

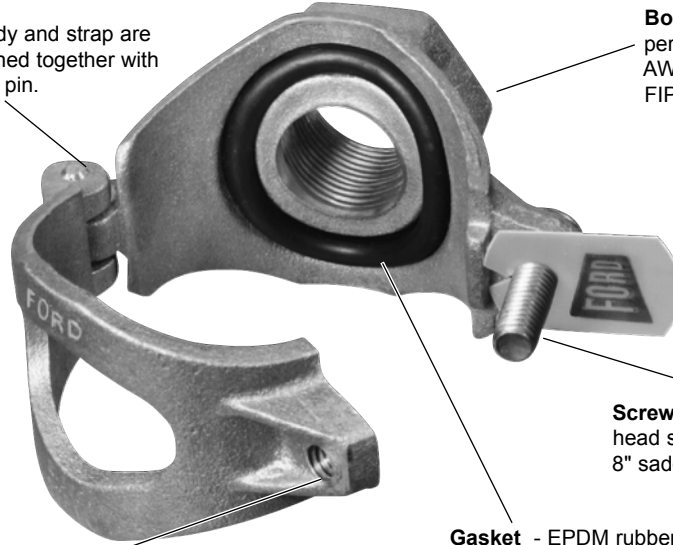
Specifications

Hinged S90

Design A

Hinge Pin - Body and strap are permanently joined together with a silicon bronze pin.

Body - 85-5-5-5 brass alloy as per ASTM B62, ASTM B584 and AWWA C800. Threads may be FIP or AWWA.



Screw - 5/16" diameter, slotted 1/2" hex head silicon bronze bolt used on 2" through 8" saddles.

Gasket - EPDM rubber, ASTM D2000 O-ring design.

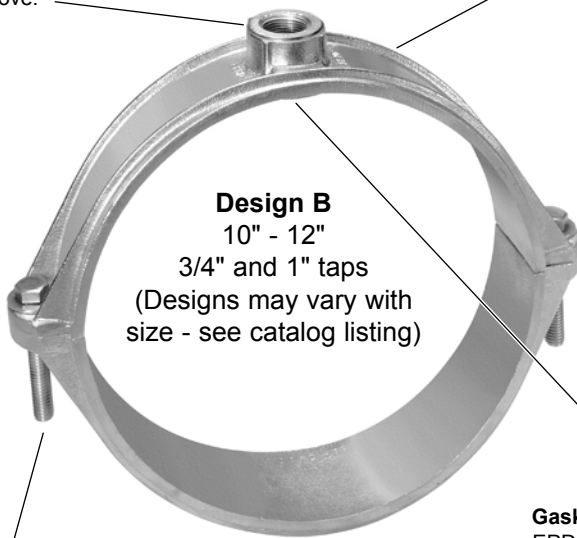
Strap - 85-5-5-5 brass alloy as per ASTM B62, ASTM B584 and AWWA C800. Bottom strap is tapped to eliminate need for nut.

S90 2" - 8" (Design may vary on certain sizes - see catalog listing).

Bolted S90

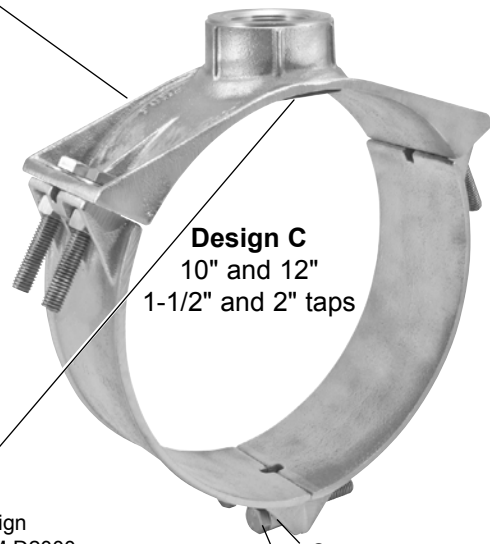
Body - 85-5-5-5 brass alloy as per ASTM B62, ASTM B584 and AWWA C800. Threads may be FIP or AWWA.

A machined groove around the top outside edge indicates an AWWA threaded outlet. FIP outlet saddles do not have machined groove.



Design B

10" - 12"
3/4" and 1" taps
(Designs may vary with size - see catalog listing)



Design C

10" and 12"
1-1/2" and 2" taps

Gasket - O-ring design EPDM rubber, ASTM D2000.

Spacers

Bolts - 1/2" (3/4" hex head) or 3/8" (9/16" hex head) silicon bronze bolts. Body casting tapped to eliminate need for nut.

Bolts - 1/2" diameter (3/4" hex head) silicon bronze bolts, nuts and washers.

Ford Brass Saddles Style S90 and S91

For C900 PVC Pipe

Ford Saddles are cast from certified 85-5-5 waterworks brass and machined to rigid specifications. Their ample width and preformed radius provide greater distribution of clamping pressures to avoid crushing the pipe.

Design "A" (hinged) saddles install as a single unit with no loose parts to lose in the ditch. (Designs may vary - see below.) The upper and lower castings are permanently hinged together with a silicon bronze pin and the silicon bronze bolt has a retainer on it to prevent loss during shipment and installation. The retainer tag identifies the tap style and size. The lower casting is tapped to accept the bolt so that nuts are not required. PVC pipe may expand under high pressure causing damage to over-tightened saddles.

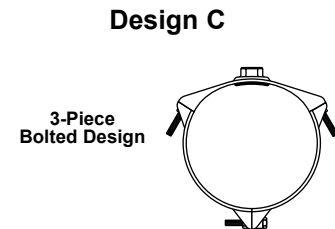
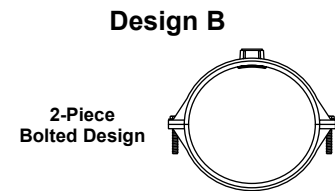
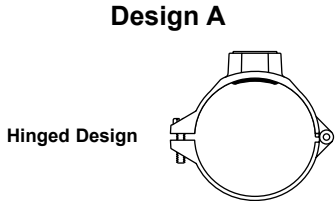
Ford's convenient marking system quickly and easily identifies the type of thread in the boss. For AWWA tapered thread, the top of the boss has a machined groove around the top outside edge while the boss for iron pipe thread is smooth.

Style S90 and S91 Saddles for C900 PVC Pipe

PVC PIPE SIZE	ACTUAL PIPE O.D.	AWWA CAT. No. S90	IP TAP CAT. No. S91	TAP SIZE	DESIGN	APPROX. WT. LBS.
2"	2.50	S90-201	S91-201	1/2"	A	0.9
		S90-203	S91-203	3/4"	A	1.1
4"	4.80	S90-401	S91-401	1/2"	A	2.1
		S90-403	S91-403	3/4"	A	1.8
		S90-404	S91-404	1"	A	2.0
		S90-406	S91-406	1-1/2"	A	6.5
		S90-407	S91-407	2"	A	6.4
6"	6.90	S90-601	-	1/2"	A	3.4
		S90-603	S91-603	3/4"	A	2.6
		S90-604	S91-604	1"	A	2.6
		S90-606	S91-606	1-1/2"	A	8.9
		S90-607	S91-607	2"	A	7.3
8"	9.05	S90-801	S91-801	1/2"	A	3.6
		S90-803	S91-803	3/4"	A	2.8
		S90-804	S91-804	1"	A	3.2
		S90-806	S91-806	1-1/2"	A	8.0
		S90-807	S91-807	2"	A	8.5
10"	11.10	S90-1003	S91-1003	3/4"	B	9.3
		S90-1004	S91-1004	1"	B	9.2
10"	10.75-11.10	*S70-S90-1006	*S71-S91-1006	1-1/2"	C	10.5
		*S70-S90-1007	*S71-S91-1007	2"	C	10.5
12"	13.20	S90-1203	S91-1203	3/4"	B	11.1
		S90-1204	S91-1204	1"	B	11.0
	12.75-13.20	*S70-S90-1206	*S71-S91-1206	1-1/2"	C	11.5
		*S70-S90-1207	*S71-S91-1207	2"	C	11.0

* These saddles will cover steel size PVC and C900 PVC O.D. range.

Note: 10" and 12" S90 and S91 saddles with 3/4" and 1" taps are also a two-piece bolted design. Larger saddles, style 202BS, designed for C900 PVC are listed on page 23.



Style S902 and S912 Two-Piece Bolted Saddles for C900 PVC Pipe

PVC PIPE SIZE	ACTUAL PIPE O.D.	AWWA CAT. No. S902	IP TAP CAT. No. S912	TAP SIZE	DESIGN	APPROX. WT. LBS.
4"	4.80	S902-403	S912-403	3/4"	B	3.2
		S902-404	S912-404	1"	B	2.9
		S902-406	S912-406	1-1/2"	B	6.5
		S902-407	S912-407	2"	B	6.5
6"	6.90	S902-603	S912-603	3/4"	B	4.6
		S902-604	S912-604	1"	B	4.5
		S902-606	S912-606	1-1/2"	B	8.5
		S902-607	S912-607	2"	B	8.5
8"	9.05	S902-803	S912-803	3/4"	B	5.5
		S902-804	S912-804	1"	B	5.4
		S902-806	S912-806	1-1/2"	B	12.5
		S902-807	S912-807	2"	B	12.5
10"	11.10	S902-1006	S912-1006	1-1/2"	B	12.8
		S902-1007	S912-1007	2"	B	12.2
12"	13.20	S902-1206	S912-1206	1-1/2"	B	14.3
		S902-1207	S912-1207	2"	B	14.3

Saddle Style, Design and Bolt Chart

SADDLE STYLE	PVC PIPE SIZE	TAP SIZE	DESIGN	NO. OF BOLTS	SADDLE SCREW AND BOLT SIZES	BOLT CAT. NO.
S90 / S91	2" thru 8"	3/4" and 1"	Hinged	1 per saddle	5/16"x1-1/2"	SADDLE-SCREW800181
	4" thru 8"	1-1/2" and 2"	Hinged	2 per saddle	5/16"x1-1/2"	SADDLE-SCREW800181
	10" and 12"	3/4" and 1"	2 Piece	2 per saddle	1/2"x3"	**SADDLE-BOLT-800287
	10" and 12"	1-1/2" and 2"	3 Piece	6 per saddle	1/2"x3"	**SADDLE-BOLT-800287
S902 / S912	4" thru 12"	3/4" and 1"	2 Piece	2 per saddle	3/8"x2"	SADDLE-SCREW800233
		1-1/2" and 2"	2 Piece	4 per saddle	1/2"x3"	**† SADDLE-BOLT-800287

** Requires nut. Catalog number: SADDLE-NUT-800490

† Requires washer. Catalog number: SADDLEWASHER800561

Ford Brass Saddles Style 101B and 202B

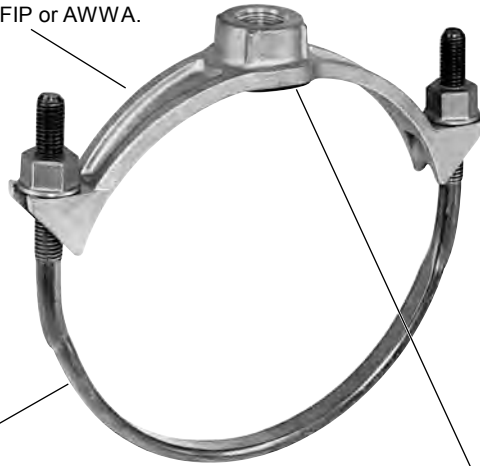
101B, 3/4" and 1" Taps
202B, 3/4" through 2" Taps

Specifications

101B

Body - 85-5-5-5 brass alloy as per ASTM B62, ASTM B584 and AWWA C800. Threads may be FIP or AWWA.

Nuts - 5/8" 85-5-5-5 brass alloy as per ASTM B62, ASTM B584 and AWWA C800 with integral washers.



One side of the saddle body has a closed bolt lug for easy installation.

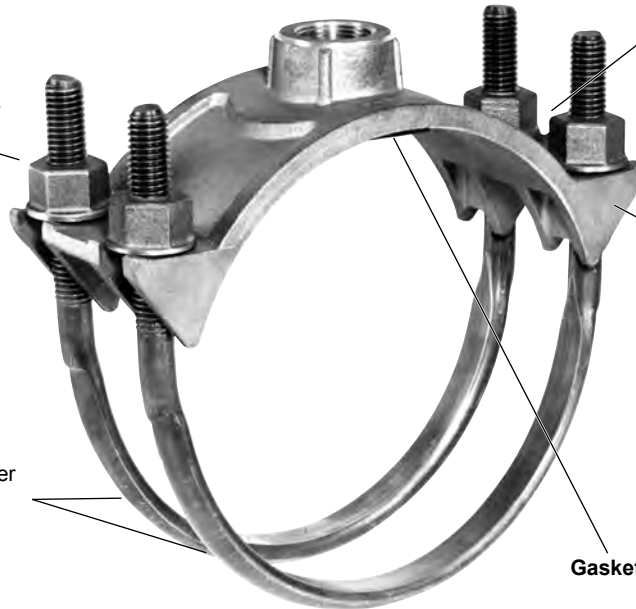
Strap - 5/8" high quality silicon bronze flattened to provide a wider bearing surface against pipe.

Gasket - EPDM rubber ASTM D2000

202B

Nuts - 5/8" 85-5-5-5 brass alloy as per ASTM B62, ASTM B584 and AWWA C800 with integral washers.

One side of saddle body has closed bolt lugs for easy installation.



Body - 85-5-5-5 brass alloy as per ASTM B62, ASTM B584 and AWWA C800. Threads may be FIP or AWWA.

Straps - 5/8" high quality silicon bronze flattened to provide a wider bearing surface against pipe.

Gasket - EPDM rubber ASTM D2000

OUTLET THREAD TAP CODE

CC (AWWA) THREAD		FIP THREAD	
THREAD	CODE	THREAD	CODE
3/4" CC	CC3	3/4" IP	IP3
1" CC	CC4	1" IP	IP4
1-1/4" CC	*CC5	1-1/4" IP	*IP5
1-1/2" CC	CC6	1-1/2" IP	IP6
2" CC	CC7	2" IP	IP7

*Contact factory for availability

Ford Brass Saddles Styles 101B and 202B

101B, 3/4" and 1" Taps

202B, 3/4" through 2" Taps

Ford's single strap 101B, and double strap 202B brass saddles are designed with built-in flexibility to cover asbestos-cement and/or cast iron size pipe. See 101BS & 202BS for use on PVC pipe. The body of the saddle is sized to fit class 200 asbestos-cement but will bend during installation to conform to the smaller size cast iron or ductile iron material. This eliminates double inventory and guesswork before heading to the job site.

The body and the nuts of Ford brass saddles are cast from certified 85-5-5 water works brass conforming to the AWWA C800 standard. The straps are high-quality silicon bronze flattened to provide a wide bearing surface against the pipe. The large EPDM rubber gasket is grooved to conform to the pipe surface and bonded in place for easy installation.

Ford's convenient marking system quickly and easily identifies the type of thread in the boss. For AWWA tapered thread, the boss has a machined groove around the top outside edge while the boss for iron pipe thread remains a cast surface.

These saddles are not for use on PVC and do not comply with AWWA and Uni-Bell stipulations for use on PVC pipe. See 101BS, 202BS and 202BSD saddles for use on PVC pipe.

Style 101B Single Strap Brass Saddles (For AC or Iron Pipe) For 3/4" and 1" Taps



NOM. PIPE SIZE	O.D. RANGE	CATALOG NUMBER	APPROX. WT. LBS.
4"	4.80-5.40	101B-540-Tap	3.0
6"	6.90-7.50	101B-750-Tap	3.8
8"	9.05-9.62	101B-962-Tap	4.4
10"	11.10-12.12	101B-1212-Tap	5.4
12"	13.20-14.38	101B-1438-Tap	5.9

To Order: Add tap code number from the table at the bottom of page 20 to the catalog number. For example, a saddle for 6" cast iron pipe with a 3/4" CC tap would be 101B-750-CC3. A saddle for 8" cast iron pipe with 1" iron pipe tap would be a 101B-962-IP4.

Style 202B Double Strap Brass Saddles (For AC or Iron Pipe) For 3/4" through 2" Taps



NOM. PIPE SIZE	O.D. RANGE	CATALOG NUMBER	APPROX. WT. LBS.	APPROX. WT. LBS.	APPROX. WT. LBS.
			3/4" & 1" TAPS	1-1/2" TAP	2" TAP
4"	4.80-5.40	202B-540-Tap	6.6	7.1	N/A
	4.80-5.10	*202B-510-Tap	-	-	7.3
	5.10-5.40	*202B-540-Tap	-	-	7.3
6"	6.90-7.50	202B-750-Tap	7.7	7.9	8.4
8"	9.05-9.62	202B-962-Tap	8.8	9.3	9.4
10"	11.10-12.12	202B-1212-Tap	10.7	11.3	11.3
12"	13.20-14.38	202B-1438-Tap	11.8	11.9	13.3
14"	15.30-16.25	202B-1625-Tap	18.0	17.5	17.5
	16.30-17.25	202B-1725-Tap	19.1	18.6	18.6
16"	17.40-18.40	202B-1840-Tap	23.0	22.5	22.5
	18.50-19.25	202B-1925-Tap	24.0	23.5	23.5
18"	19.50-20.50	202B-2050-Tap	25.0	24.5	24.5
20"	21.20-22.20	202B-2220-Tap	25.5	25.0	25.0
	22.50-23.50	202B-2350-Tap	25.7	25.2	25.2
24"	23.80-24.80	202B-2480-Tap	26.0	25.5	25.5
	25.60-26.50	202B-2650-Tap	26.5	26.0	26.0
30"	31.74-32.74	202B-3274-Tap	27.0	26.5	26.5

* These 4" saddles have a limited range and are for 2" taps only. All other tap sizes have a standard range of 4.80-5.40.

To Order: Add tap code from the table at the bottom of page 20 to the catalog number. For example, a saddle for 12" cast iron pipe with 1" CC tap would be 202B-1438-CC4.

Ford Brass Saddles Styles 101BS and 202BS

With Stainless Steel Band and Bolts for PVC Pipe for 3/4" through 2" Taps

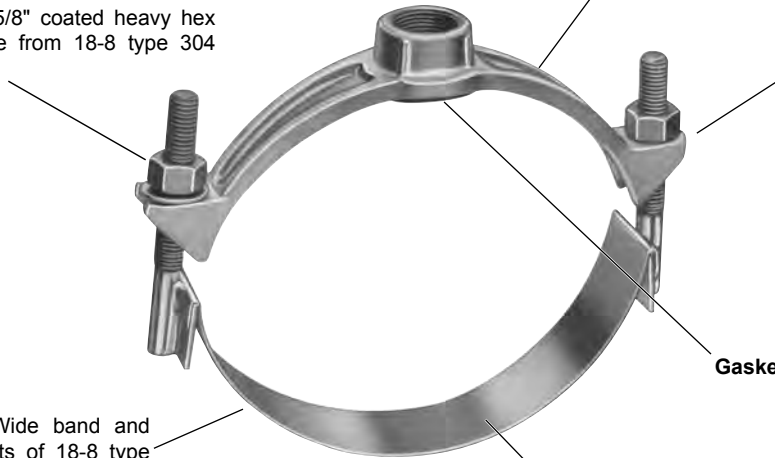
Specifications

101BS

Nuts and Washers - 5/8" coated heavy hex nuts and washers made from 18-8 type 304 stainless steel.

Body - 85-5-5-5 brass alloy as per ASTM B62, ASTM B584 and AWWA C800. Threads may be FIP or AWWA.

One side of the saddle body has a closed bolt lug for easy installation.



Gasket - EPDM rubber ASTM D2000.

Band and Bolts - Wide band and 5/8" UNC threaded bolts of 18-8 type 304 stainless steel. Welds are fully passivated for corrosion resistance.

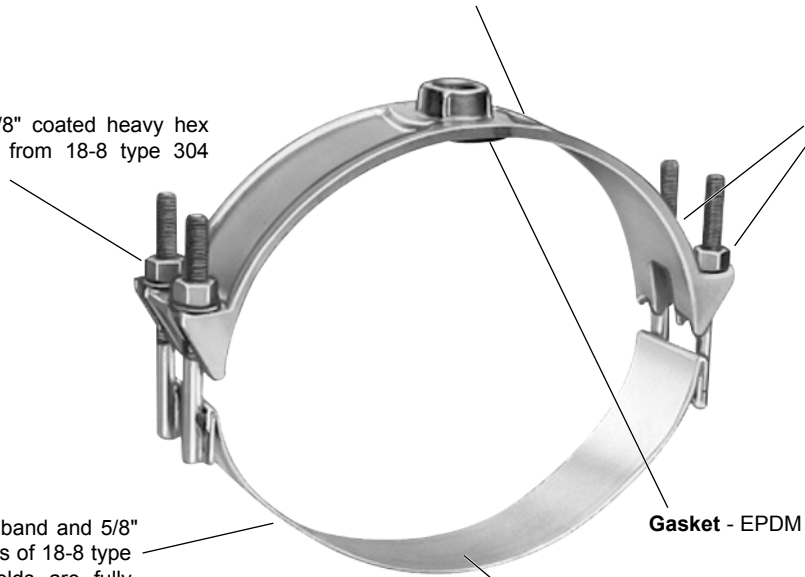
2" minimum width.

202BS

Body - 85-5-5-5 brass alloy as per ASTM B62, ASTM B584 and AWWA C800. Threads may be FIP or AWWA.

One side of the saddle body has closed bolt lugs for easy installation.

Nuts and Washers - 5/8" coated heavy hex nuts and washers made from 18-8 type 304 stainless steel.



Gasket - EPDM rubber ASTM D2000.

Band and Bolts - Wide band and 5/8" UNC threaded double bolts of 18-8 type 304 stainless steel. Welds are fully passivated for corrosion resistance.

3-1/4" minimum width.

OUTLET THREAD TAP CODE

CC (AWWA) THREAD		FIP THREAD	
THREAD	CODE	THREAD	CODE
3/4" CC	CC3	3/4" IP	IP3
1" CC	CC4	1" IP	IP4
1-1/4" CC	**CC5	1-1/4" IP	**IP5
1-1/2" CC	CC6	1-1/2" IP	IP6
2" CC	CC7	2" IP	IP7

** Only the 6" (6.90-7.50 range) saddle and 14" and larger saddles are available with a 1-1/4" tap. Contact factory for availability

Ford Brass Saddles Styles 101BS and 202BS

With Stainless Steel Band and Bolts for PVC Pipe for 3/4" through 2" Taps

The 101BS and 202BS style service saddles incorporate stainless steel bands in place of the standard silicon bronze straps. This combination of brass and stainless provides the perfect answer for strength and flexibility. The stainless easily conforms to the surface of PVC pipe and the brass provides the required strength to support service lines. Specially sized 101BS and 202BS style saddles are ideally suited for tapping PVC pipe. **These saddles conform to the stipulations of Uni-Bell and AWWA for use on PVC pipe.**

Style 101BS Single Band Saddles for C900 PVC Pipe For 3/4" and 1" Taps



To Order: Add tap code from the table at the bottom of page 22 to catalog number.

Example: A saddle for 12" C900 PVC with 1" CC tap would be 101BS-1320-CC4.

NOM. PIPE SIZE	PIPE O.D.	CATALOG NUMBER	APPROX. WT. LBS.
4"	4.80	101BS-480-Tap	3.0
6"	6.90	101BS-690-Tap	3.8
8"	9.05	101BS-905-Tap	4.4
10"	11.10	101BS-1110-Tap	5.4
12"	13.20	101BS-1320-Tap	5.9

Note: For 100% domestic content, add "-U100" to the part number.

Style 202BS Double Band Saddles for C900 PVC For 3/4" through 2" Taps Steel Size PVC For 3/4" and 1" Taps



To Order: Add tap code from the table at the bottom of page 22 to catalog number.

Example: A saddle for 12" C900 PVC with 1" CC tap would be 202BS-1320-CC4.

NOM. PIPE SIZE	PIPE O.D.	CATALOG NUMBER	APPROX. WT. LBS.	APPROX. WT. LBS.
			3/4" & 1" TAPS	1-1/2" & 2" TAPS
4"	4.80	202BS-480-Tap	6.6	7.6
6"	6.63	202BS-663-Tap	7.7	-
	6.90	202BS-690-Tap	7.7	8.8
8"	8.63	202BS-863-Tap	8.8	-
	9.05	202BS-905-Tap	8.8	9.8
10"	10.75	202BS-1075-Tap	10.7	-
	11.10	202BS-1110-Tap	10.7	12.2
12"	12.75	202BS-1275-Tap	11.8	-
	13.20	202BS-1320-Tap	11.8	13.3
14"	15.30	202BS-1530-Tap	18.0	17.5
16"	17.40	202BS-1740-Tap	23.0	22.5
18"	19.50	202BS-1950-Tap	25.0	24.5
20"	21.60	202BS-2160-Tap	25.5	25.0
24"	25.80	202BS-2580-Tap	26.0	25.5
30"	32.00	202BS-3200-Tap	27.0	26.5

Note: For 100% domestic content, add "-U100" to the part number.

Style 202BS Double Band Brass Saddles for AC and Iron Pipe For 3/4" through 2" Taps



To Order: Add tap code from the table at the bottom of page 22 to the catalog number. For

example, a saddle for 20" iron pipe with 1" CC tap would be 202BS-2220-CC4.

NOM. PIPE SIZE	O.D.	CATALOG NUMBER	APPROX. WT. LBS.	APPROX. WT. LBS.
	RANGE	NUMBER	3/4" & 1" TAPS	1-1/2" & 2" TAPS
4"	4.80-5.40	202BS-540-Tap	6.1	-
	4.80-5.10	*202BS-510-Tap	-	7.2
	5.10-5.40	*202BS-540-Tap	-	7.2
6"	6.90-7.50	202BS-750-Tap	7.1	7.9
8"	9.05-9.62	202BS-962-Tap	7.1	8.7
10"	11.10-12.12	202BS-1212-Tap	9.1	10.1
12"	13.20-14.38	202BS-1438-Tap	10.4	12.2
	15.30-16.25	202BS-1625-Tap	18.0	17.5
14"	16.30-17.25	202BS-1725-Tap	19.1	18.6
	17.40-18.40	202BS-1840-Tap	23.0	22.5
16"	18.50-19.25	202BS-1925-Tap	24.0	23.5
	19.50-20.50	202BS-2050-Tap	25.0	24.5
20"	21.20-22.20	202BS-2220-Tap	25.5	25.0
	22.50-23.50	202BS-2350-Tap	25.7	25.2
24"	23.80-24.80	202BS-2480-Tap	26.0	25.5
	25.60-26.50	202BS-2650-Tap	26.5	26.0
30"	31.74-32.74	202BS-3274-Tap	27.0	26.5

* These 4" saddles have a limited range and are for 2" taps only. All other tap sizes have a standard range of 4.80-5.40.

Note: For 100% domestic content, add "-U100" to the part number.

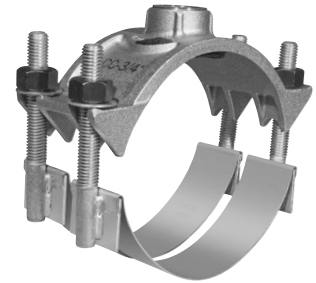
Ford Brass Saddles Styles 202BSD

With Stainless Steel Dual Band and Bolts
for 3/4" through 2" Taps

The 202BSD style service saddles incorporate dual stainless steel bands in place of the standard silicon bronze straps. This combination of brass and stainless provides the perfect answer for strength and flexibility. The stainless easily conforms to the surface of PVC pipe and the brass provides the required strength to support service lines. If specifically sized to the PVC pipe diameter, 202BSD style saddles are ideally suited for tapping PVC pipe and conform to the stipulations of Uni-Bell and AWWA for use on PVC pipe.

Style 202BSD Dual Band Saddles for C900 PVC Pipe

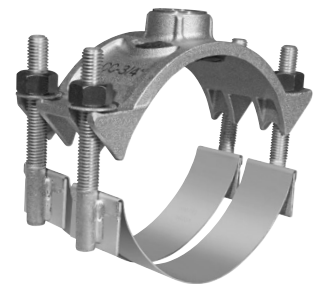
NOM. PIPE SIZE	PIPE O.D.	CATALOG NUMBER	APPROX. WT. LBS.	APPROX. WT. LBS.
			3/4" & 1" TAPS	1-1/2" & 2" TAPS
4"	4.80	202BSD-480-Tap	7.0	7.7
6"	6.90	202BSD-690-Tap	7.2	7.7
8"	9.05	202BSD-905-Tap	7.8	9.0
10"	11.10	202BSD-1110-Tap	9.0	10.0
12"	13.20	202BSD-1320-Tap	10.8	12.5
14"	15.30	202BSD-1530-Tap	17.0	16.5
16"	17.40	202BSD-1740-Tap	22.0	21.5
18"	19.50	202BSD-1950-Tap	24.0	23.5
20"	21.60	202BSD-2160-Tap	24.5	24.0
24"	25.80	202BSD-2580-Tap	25.0	24.5
30"	32.00	202BSD-3200-Tap	26.0	25.5



Note: For 100% domestic content, add "-U100" to the part number.

Style 202BSD Dual Band Saddles for Iron and AC Pipe

NOM. PIPE SIZE	PIPE O.D.	CATALOG NUMBER	APPROX. WT. LBS.	APPROX. WT. LBS.
			3/4" & 1" TAPS	1-1/2" & 2" TAPS
4"	4.80-5.40	202BSD-540-Tap	6.2	7.2
4"	4.80-5.10	*202BSD-510-Tap	-	7.2
4"	5.10-5.40	*202BSD-540-Tap	-	7.2
6"	6.63	●**202BSD-663-Tap	7.2	-
6"	6.90-7.50	202BSD-750-Tap	7.2	8.0
8"	8.63-9.05	**202BSD-905-Tap	7.8	9.0
8"	9.05-9.62	202BSD-962-Tap	7.8	9.0
10"	10.75	●**202BSD-1075-Tap	9.0	-
10"	11.10-12.12	202BSD-1212-Tap	9.1	10.0
12"	12.75	●**202BSD-1275-Tap	10.8	-
12"	13.20-14.38	202BSD-1438-Tap	11.0	11.0
14"	15.30-16.25	202BSD-1625-Tap	17.0	17.0
14"	16.30-17.25	202BSD-1725-Tap	22.0	22.0
16"	17.40-18.40	202BSD-1840-Tap	23.0	23.0
16"	18.50-19.25	202BSD-1925-Tap	23.0	23.0
18"	19.50-20.50	202BSD-2050-Tap	24.0	24.0
20"	21.20-22.20	202BSD-2220-Tap	24.0	24.0
20"	22.50-23.50	202BSD-2350-Tap	24.0	24.0
24"	25.80-24.80	202BSD-2480-Tap	25.0	25.0
24"	25.60-26.50	202BSD-2650-Tap	25.5	25.5
30"	31.74-32.74	202BSD-3274-Tap	26.0	26.0



Note: For 100% domestic content, add "-U100" to the part number.

* **Please Note:** These 4" saddles have limited range and are for 2" taps only. For all other tap sizes use the standard 4.80-5.40 range.

** 3/4" and 1" taps only

● These saddles are suitable for use on steel size PVC.

OUTLET THREAD TAP CODE

CC (AWWA) THREAD		IP THREAD	
THREAD	CODE	THREAD	CODE
3/4" CC	CC3	3/4" IP	IP3
1" CC	CC4	1" IP	IP4
1-1/2" CC	CC6	1-1/2" IP	IP6
2" CC	CC7	2" IP	IP7

To order: Select the catalog number for the desired pipe range and complete the catalog number by adding the outlet thread tap code.
Example: A double band saddle for 6.90 C900 PVC pipe with a 3/4" CC thread would be 202BS-690-CC3.

Ford Ductile Iron Service Saddles

Styles F101 and FC101

Styles F202 and FC202

Ford ductile iron service saddles have a wide range and are designed for use on asbestos-cement, cast or ductile iron, and can be specifically sized for PVC pipe. They offer a simple, yet satisfactory, means of tapping water main pipe. The FC style is recommended for use in corrosive areas and the stainless steel bands are especially recommended for use on PVC. Ford style FC saddles should be pre-sized when used on PVC pipe. Pre-sized saddles will conform to the PVC pipe O.D. without placing undue stress on the pipe. The Ford Meter Box Company endorses full compliance with the standard tapping practices and recommended material requirements for tapping PVC pipe outlined in the Uni-Bell Handbook of PVC Pipe and the AWWA Manual M23. **Improperly sized saddles and saddles with narrow straps are not for use on PVC pipe. If properly sized to the OD of PVC pipe, FC Saddles meet the stipulations of AWWA and Uni-Bell for use on PVC pipe.**

One side of the saddle has closed lugs to allow pre-assembly of the saddle straps to facilitate installation. The heavy-duty outlet gasket maintains a positive seal in excess of the pipe rating.

F202 and FC202 saddles are rated for the lesser of 350 psi or the pressure of the pipe on which it is installed on sizes 2" - 12". On sizes 14" - 30", these saddles are rated for the lesser of 250 psi or the pressure of the pipe on which it is installed.

Specifications

F101 and F202

Body - High strength ductile iron per ASTM A536.

Bolt Lugs - One side of the saddle body has closed bolt lugs for easy installation.

Straps - 5/8" AISI C1010 ASTM A510 steel, zinc plated with trivalent seal. Each strap has 5/8" flat bearing surface. 1/2" straps are furnished on saddles 3" and smaller.



Threads - CC or FIP per AWWA C800.

Heavy Hex Nuts and Washers - 1/2" or 5/8" AISI steel alloy, zinc plated, with dichromate seal.

Finish - Fusion bonded epoxy coating

Gasket - EPDM rubber per ASTM D2000.

FC101 and FC202

Finish - Fusion bonded epoxy coating.

Gaskets - EPDM rubber per ASTM D2000.

Band and Bolts - Wide band and 5/8" UNC threaded bolts of 18-8 type 304 stainless steel. 1/2" bolts are furnished on saddles 3" and smaller. Bands are fully passivated for corrosion resistance.



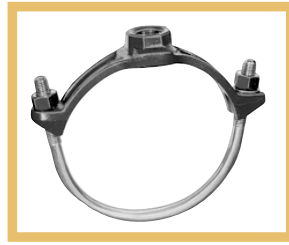
Nuts and Washers - 18-8 type 304 stainless steel. 1/2" or 5/8" heavy hex nuts are coated to prevent galling. (Washer is only on the open lug side.)

Nylon Washer - (Both sides) Protects epoxy coating

2" minimum width (FC101)

Ford Ductile Iron Service Saddles Styles F101 and FC101

Single Strap for 3/4" and 1" Taps



F101 (epoxy coated with standard strap)



FC101 (epoxy coated with stainless steel band and bolts)

Style F101 and FC101 Ductile Iron Service Saddles For AC and Iron Pipe

To Order: Select the catalog number for the desired pipe range and complete catalog number by adding the tap code from the table at the bottom of the page. Example: A standard single strap saddle for 6.90 ductile iron pipe with a 3/4" CC thread would be F101-760-CC3.

NOM. PIPE SIZE	PIPE O.D. RANGE	**CATALOG NUMBER STANDARD STRAP	CATALOG NUMBER STAINLESS BAND	APPROX. WT. LBS.
2"	2.35-2.50	F101-250-Tap	FC101-250-Tap	1.8
2-1/2"	2.75-2.90	F101-290-Tap	FC101-290-Tap	2.0
3"	3.46-3.80	F101-380-Tap	FC101-380-Tap	2.1
	3.80-4.25	F101-425-Tap	FC101-425-Tap	2.4
4"	4.26-4.80	F101-480-Tap	FC101-480-Tap	2.8
	4.74-5.26	F101-526-Tap	* FC101-526-Tap	3.0
	4.50-5.40	-	FC101-540-Tap	3.0
6"	5.94-6.69	F101-669-Tap	FC101-669-Tap	3.5
	6.63-6.90	F101-690-Tap	* FC101-690-Tap	-
	6.84-7.60	F101-760-Tap	FC101-760-Tap	3.6
	6.63-7.61	-	FC101-761-Tap	3.6
8"	7.93-8.71	F101-871-Tap	FC101-871-Tap	3.8
	8.63-9.05	F101-905-Tap	* FC101-905-Tap	-
	8.99-9.79	F101-979-Tap	* FC101-979-Tap	4.3
	8.63-9.80	-	* FC101-980-Tap	4.3
10"	10.00-10.75	F101-1075-Tap	FC101-1075-Tap	4.4
	11.10-12.12	F101-1212-Tap	FC101-1212-Tap	4.8
	10.64-12.13	-	FC101-1213-Tap	4.8
12"	12.00-12.75	F101-1275-Tap	FC101-1275-Tap	5.9
	13.20-14.38	F101-1438-Tap	FC101-1438-Tap	6.7
	12.62-14.39	-	FC101-1439-Tap	6.7

* These saddles are available with 1-1/4", 1-1/2", and 2" taps.

**Available with stainless steel bales, contact factory for availability.

FC101 Saddles Sized for C900 PVC

To Order: Select the catalog number for the desired pipe O.D. and complete the catalog number by adding the tap code.
Example: An FC101 style saddle for 12" C900 PVC with 3/4" CC thread tap would be FC101-1320-CC3

NOM. PIPE SIZE	PIPE O.D.	CATALOG NUMBER STAINLESS BAND	APPROX. WT. LBS.
4"	4.80	* FC101-480-Tap	3.0
6"	6.90	* FC101-690-Tap	3.6
8"	9.05	* FC101-905-Tap	4.3
10"	11.10	FC101-1110-Tap	4.8
12"	13.20	FC101-1320-Tap	6.7

* These saddles are available with 1-1/4", 1-1/2", and 2" taps.

OUTLET THREAD TAP CODE

CC (AWWA) THREAD		FIP THREAD	
THREAD	CODE	THREAD	CODE
1/2"	***CC1	1/2" IP	***IP1
3/4" CC	CC3	3/4" IP	IP3
1" CC	CC4	1" IP	IP4
1-1/4" CC	***CC5	1-1/4" IP	***IP5
1-1/2" CC	CC6	1-1/2" IP	IP6
2" CC	CC7	2" IP	IP7

***Contact factory for availability

Imported castings available in 2" – 12" with 1/2" through 1" taps. Add "-I" to the end of the catalog number. See price book for details.

Ford Ductile Iron Service Saddles Styles F202 and FC202 for AC and Iron Pipe

Double Strap Saddles for 3/4" through 2-1/2" Taps

Ford double strap or band saddles are recommended for larger taps and for use on larger O.D. pipe. Double strap saddles equalize the pressure on the pipe and can be used on asbestos-cement, cast or ductile iron pipe.

The FC style is recommended for use in corrosive areas and the stainless steel bands are especially recommended for use on PVC pipe. Ford FC Style saddles should be pre-sized when used on PVC pipe. Pre-sized saddles will conform to the PVC pipe O.D. without placing undue stress on the pipe. A separate listing of FC202 saddles sized for PVC is shown on the following page. The Ford Meter Box Company endorses full compliance with the standard tapping practices and recommended material requirements for tapping PVC pipe outlined in Uni-Bell Handbook of PVC Pipe and AWWA Manual M23. **Improperly sized saddles and saddles with narrow straps are not for use on PVC pipe. If properly sized to the PVC pipe O.D., FC saddles meet the stipulations of AWWA and Uni-Bell for use on PVC pipe. See following pages.**

The open and closed lug design allows pre-assembly of the straps, thus ensuring a safe yet simple installation. The heavy duty gasket ensures the saddle will maintain pressure in excess of the pipe rating.



Standard Straps
and Epoxy Coated



Stainless Band
and Epoxy Coated

Style F202 and FC202 Ductile Iron Saddles

To Order: Select the catalog number below for the desired pipe O.D. range and complete the catalog number by adding the outlet thread tap code from the bottom of page 26. Example: A standard double strap saddle for 6.90 ductile iron pipe with a 2" CC thread tap would be F202-760-CC7.

NOM. PIPE SIZE	PIPE O.D. RANGE	CATALOG NUMBER STANDARD STRAP	CATALOG NUMBER STAINLESS BAND	APPROX. WT. LBS.
2"	2.35-2.50	F202-250-Tap	FC202-250-Tap	2.8
2-1/2"	2.75-2.90	F202-290-Tap	FC202-290-Tap	2.8
3"	* 3.46-3.80	F202-380-Tap	FC202-380-Tap	4.8
	* 3.80-4.25	F202-425-Tap	FC202-425-Tap	5.5
4"	** 4.26-4.80	F202-480-Tap	FC202-480-Tap	5.4
	▲ 4.74-5.00	F202-500-Tap	FC202-500-Tap	5.4
	* 4.74-5.26	F202-526-Tap	FC202-526-Tap	5.4
	▲ 4.97-5.26	F202-526-Tap	FC202-526-Tap	5.4
6"	* 4.50-5.40	-	FC202-540-Tap	5.4
	5.94-6.69	F202-669-Tap	FC202-669-Tap	5.7
	6.63-6.90	F202-690-Tap	FC202-690-Tap	5.7
	6.84-7.60	F202-760-Tap	FC202-760-Tap	6.7
	6.63-7.61	-	FC202-761-Tap	6.7
8"	7.93-8.71	F202-871-Tap	FC202-871-Tap	6.8
	8.63-9.05	F202-905-Tap	FC202-905-Tap	8.2
	8.99-9.79	F202-979-Tap	FC202-979-Tap	8.4
	8.63-9.80	-	FC202-980-Tap	8.4
10"	10.00-10.75	F202-1075-Tap	FC202-1075-Tap	9.4
	10.75-11.10	F202-1110-Tap	FC202-1110-Tap	9.0
	11.10-12.12	F202-1212-Tap	FC202-1212-Tap	10.8
	10.64-12.13	-	FC202-1213-Tap	10.8
12"	12.00-12.75	F202-1275-Tap	FC202-1275-Tap	11.0
	12.75-13.20	F202-1320-Tap	FC202-1320-Tap	11.5
	13.20-14.38	F202-1438-Tap	FC202-1438-Tap	12.8
	12.62-14.39	-	FC202-1439-Tap	12.8
14"	15.30-16.25	F202-1625-Tap	FC202-1625-Tap	11.9
	16.30-17.25	F202-1725-Tap	FC202-1725-Tap	12.9
16"	17.40-18.40	F202-1840-Tap	FC202-1840-Tap	13.1
	18.50-19.25	F202-1925-Tap	FC202-1925-Tap	12.9
18"	19.50-20.50	F202-2050-Tap	FC202-2050-Tap	13.1
20"	21.20-22.20	F202-2220-Tap	FC202-2220-Tap	13.2
	22.50-23.50	F202-2350-Tap	FC202-2350-Tap	13.3
24"	23.80-24.80	F202-2480-Tap	FC202-2480-Tap	13.4
	25.60-26.50	F202-2650-Tap	FC202-2650-Tap	13.9
30"	31.74-32.74	F202-3274-Tap	FC202-3274-Tap	14.8

* Saddles for this pipe range are not available with 2" CC or 2-1/2" IP threads.

** These saddles with 2" CC (CC7) or 2-1/2" IP (IP8) taps only fit 4.80" O.D. pipe. Example: F202-480-CC7 fits 4.80" pipe O.D. only.

• Available with stainless steel bales. Contact factory for availability.

▲ This saddle is only available with 2" CC (CC7) or 2-1/2" IP (IP8) taps.

Imported castings available in 2" - 12". Add "I" to the end of catalog number. See price book for details.

Ford Ductile Iron Service Saddles Style FC202 For C900 PVC or Steel Sized PVC

Stainless Steel Double Wide Band Saddles for 3/4" through 2-1/2" Taps



**Stainless Band
& Epoxy Coated**

FC202 Saddles Sized for C900 PVC

To Order: Select the catalog number for the desired pipe O.D. and complete the catalog number by adding the outlet thread tap code. Example: An FC202 style saddle for 12" C900 PVC with a 2" CC thread would be FC202-1320-CC7.

NOM. PIPE SIZE	PIPE O.D. RANGE	CATALOG NUMBER STAINLESS BAND	APPROX. Wt. LBS.
4"	4.80	FC202-480-Tap	6.0
6"	6.90	FC202-690-Tap	6.6
8"	9.05	FC202-905-Tap	7.3
10"	11.10	FC202-1110-Tap	11.5
12"	13.20	FC202-1320-Tap	13.4
14"	15.30	FC202-1530-Tap	15.1
16"	17.40	FC202-1740-Tap	15.6
18"	19.50	FC202-1950-Tap	16.8
20"	21.60	FC202-2160-Tap	17.4
24"	25.80	FC202-2580-Tap	18.1
30"	32.00	FC202-3200-Tap	19.4

FC202 Saddles Sized for Steel Sized PVC

To Order: Select the catalog number for the desired pipe O.D. and complete the catalog number by adding the outlet thread tap code. Example: An FC202 style saddle for 12" Steel sized PVC with a 2" CC thread would be FC202-1275-CC7.

NOM. PIPE SIZE	PIPE O.D.	CATALOG NUMBER STAINLESS BAND	APPROX. Wt. LBS.
3"	*3.50	FC202-350-Tap	5.6
4"	*4.50	FC202-450-Tap	6.0
6"	6.63	FC202-663-Tap	6.5
8"	8.63	FC202-863-Tap	6.9
10"	10.75	FC202-1075-Tap	11.3
12"	12.75	FC202-1275-Tap	12.2

* Saddles for this pipe range are not available with 2" CC or 2-1/2" IP threads.

OUTLET THREAD TAP CODE

CC (AWWA) THREAD		FIP THREAD	
THREAD	CODE	THREAD	CODE
3/4" CC	CC3	3/4" IP	IP3
1" CC	CC4	1" IP	IP4
1-1/4" CC	CC5	1-1/4" IP	IP5
1-1/2" CC	CC6	1-1/2" IP	IP6
2" CC	CC7	2" IP	IP7
-	-	2-1/2"	IP8

Imported castings available in 2" - 12". Add "-I" to the end of catalog number. See price book for details.

Ford Ductile Iron Service Saddles Style FCD202

Stainless Steel Dual Band Saddles for 3/4" through 2-1/2" Taps



Stainless Band
and Epoxy Coated

Saddles recommended for PVC pipe require sizes formed specifically to the pipe O.D.
If properly sized to the PVC pipe O.D., FCD saddles meet the stipulations of AWWA and Uni-Bell for use on PVC pipe.
FCD202 saddles are rated for the lesser of 350 psi or the pressure of the pipe on which it is installed on sizes 2" - 12".
On sizes 14" - 30", these saddles are rated for the lesser of 250 psi or the pressure of the pipe on which it is installed.

NOM. PIPE SIZE	PIPE O.D.	CATALOG NUMBER STAINLESS BAND	APPROX. WT. LBS.
2"	2.35-2.50	FCD202-250-Tap	2.8
2-1/2"	2.75-2.90	FCD202-290-Tap	2.8
3"	*3.46-3.80	FCD202-380-Tap	4.8
	*3.80-4.25	FCD202-425-Tap	5.5
4"	**4.26-4.80	FCD202-480-Tap	5.4
	▲4.74-5.00	FCD202-500-Tap	5.4
	*4.74-5.26	FCD202-526-Tap	5.4
	▲4.97-5.26	FCD202-526-Tap	5.4
6"	*4.50-5.40	FCD202-540-Tap	5.4
	5.94-6.69	FCD202-669-Tap	5.7
	6.63-6.90	FCD202-690-Tap	5.7
	6.84-7.60	FCD202-760-Tap	6.7
8"	6.63-7.61	FCD202-761-Tap	6.7
	7.93-8.71	FCD202-871-Tap	6.8
	8.63-9.05	FCD202-905-Tap	8.2
	8.99-9.79	FCD202-979-Tap	8.4
10"	8.63-9.80	FCD202-980-Tap	8.4
	10.00-10.75	FCD202-1075-Tap	9.4
	10.75-11.10	FCD202-1110-Tap	9.0
	11.10-12.12	FCD202-1212-Tap	10.8
12"	10.64-12.13	FCD202-1213-Tap	10.8
	12.00-12.75	FCD202-1275-Tap	11.0
	12.75-13.20	FCD202-1320-Tap	11.5
	13.20-14.38	FCD202-1438-Tap	12.8
14"	12.62-14.39	FCD202-1439-Tap	12.8
	***15.30	FCD202-1530-Tap	11.9
	15.30-16.25	FCD202-1625-Tap	11.9
16"	16.30-17.25	FCD202-1725-Tap	12.9
	***17.40	FCD202-1740-Tap	13.1
	17.40-18.40	FCD202-1840-Tap	13.1
18"	18.50-19.25	FCD202-1925-Tap	12.8
	***19.50	FCD202-1950-Tap	13.1
	19.50-20.50	FCD202-2050-Tap	13.1
20"	***21.60	FCD202-2160-Tap	13.2
	21.20-22.20	FCD202-2220-Tap	13.2
	22.50-23.50	FCD202-2350-Tap	13.3
24"	23.80-24.80	FCD202-2480-Tap	13.4
	***25.80	FCD202-2580-Tap	13.9
	25.60-26.50	FCD202-2650-Tap	13.9
30"	***32.00	FCD202-3200-Tap	14.8
	31.74-32.74	FCD202-3274-Tap	14.8

* Saddles for this pipe range are NOT available with 2" CC (CC7) or 2-1/2" IP (IP8) threads.

** These saddles with 1-1/4" through 2-1/2" taps fit the top of the listed range only.

Example: FCD202-480-CC7 fits 4.80" pipe O.D. only.

*** Sized for C900 PVC.

▲ This saddle is only available with 2" CC (CC7) or 2-1/2" IP (IP8) threads.

Imported castings available in 2" - 12". Add "-I" to the end of catalog number. See price book for details.

Fabricated Steel Saddles Styles FS202 and F202

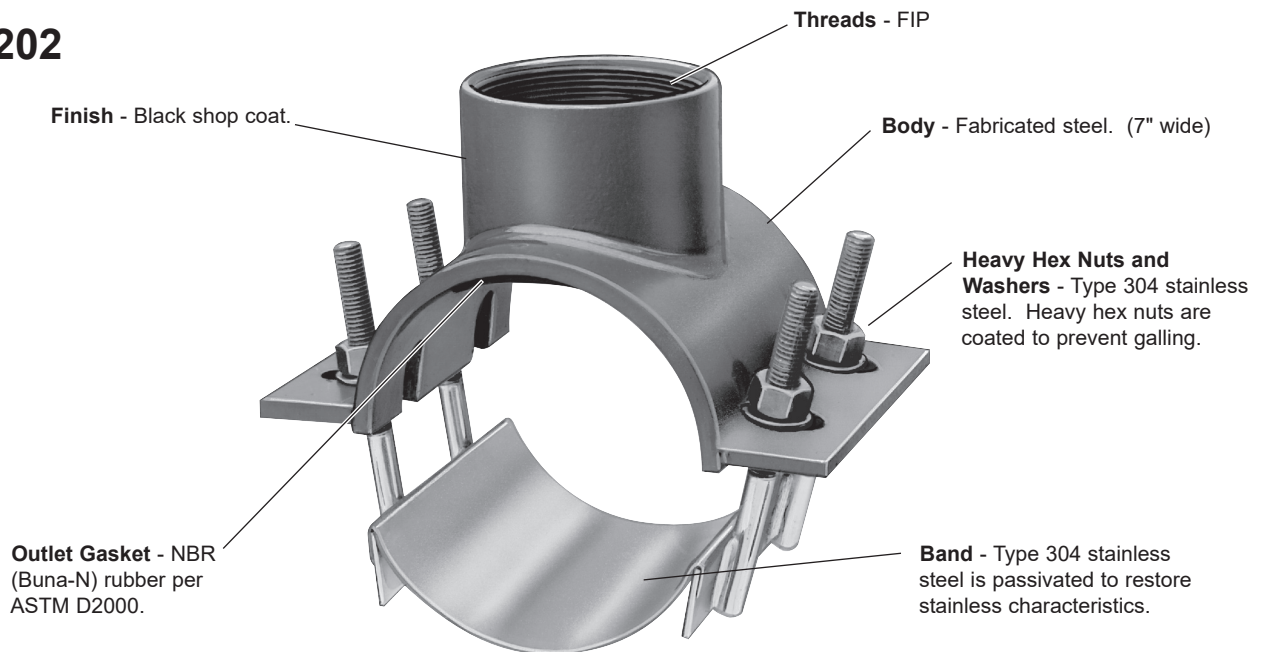
For 3" and 4" Taps

Ford fabricated steel saddles are specifically designed and manufactured for applications requiring a 3" and 4" iron pipe service tap. These products are available with a type 304 stainless steel band or with zinc plated C1010 steel straps. Ford fabricated steel saddles have a 150 psi working pressure rating, dependent upon the use of industry standard support and backfill practices.

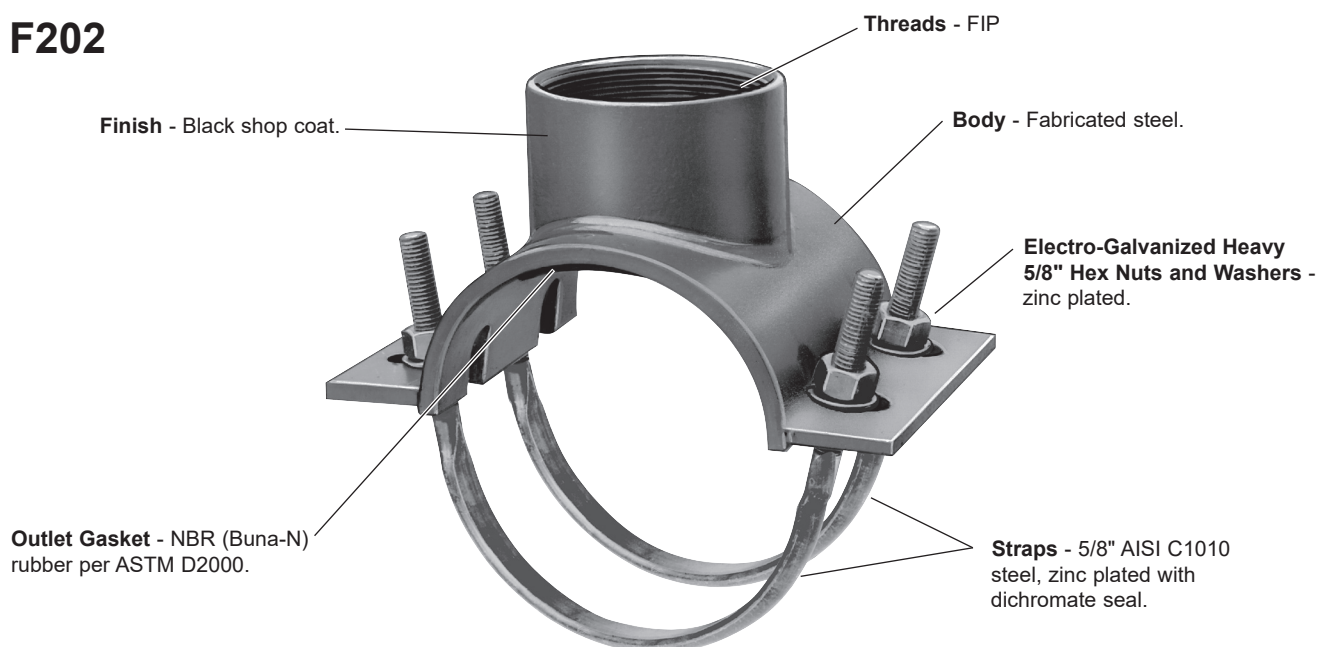
Ford recommends special fabricated FTS tapping sleeves for air release valve applications above 150 psi. Contact Ford Meter Box customer service for information regarding vacuum applications.

Specifications

FS202



F202



Fabricated Steel Saddles Styles FS202 and F202

For 3" and 4" Taps

Saddles recommended for PVC pipe require sizes formed specifically to the pipe O.D.

NOM. PIPE SIZE	ACTUAL PIPE O.D.	TAP SIZE	STEEL STRAPS CATALOG NUMBER	STAINLESS BAND CATALOG NUMBER	EPOXY COATED CATALOG NUMBER	APPROX. WT. LBS.
6"	6.00	3"	F202-600-IP9	FS202-600-IP9	FC202-600-IP9	15.7
	6.00	4"	F202-600-IP11	FS202-600-IP11	FC202-600-IP11	16.1
	6.63	3"	F202-663-IP9	FS202-663-IP9	FC202-663-IP9	16.0
	6.63	4"	F202-663-IP11	FS202-663-IP11	FC202-663-IP11	16.3
	6.90	3"	F202-690-IP9	FS202-690-IP9	FC202-690-IP9	16.4
8"	6.90	4"	F202-690-IP11	FS202-690-IP11	FC202-690-IP11	16.7
	8.00	3"	F202-800-IP9	FS202-800-IP9	FC202-800-IP9	16.6
	8.00	4"	F202-800-IP11	FS202-800-IP11	FC202-800-IP11	17.0
	8.63	3"	F202-863-IP9	FS202-863-IP9	FC202-863-IP9	16.9
	8.63	4"	F202-863-IP11	FS202-863-IP11	FC202-863-IP11	17.3
10"	9.05	3"	F202-905-IP9	FS202-905-IP9	FC202-905-IP9	17.2
	9.05	4"	F202-905-IP11	FS202-905-IP11	FC202-905-IP11	17.5
	10.00	3"	F202-1000-IP9	FS202-1000-IP9	FC202-1000-IP9	18.0
	10.00	4"	F202-1000-IP11	FS202-1000-IP11	FC202-1000-IP11	19.1
	10.75	3"	F202-1075-IP9	FS202-1075-IP9	FC202-1075-IP9	18.4
12"	10.75	4"	F202-1075-IP11	FS202-1075-IP11	FC202-1075-IP11	19.5
	11.10	3"	F202-1110-IP9	FS202-1110-IP9	FC202-1110-IP9	18.8
	11.10	4"	F202-1110-IP11	FS202-1110-IP11	FC202-1110-IP11	19.7
	12.00	3"	F202-1200-IP9	FS202-1200-IP9	FC202-1200-IP9	20.0
	12.00	4"	F202-1200-IP11	FS202-1200-IP11	FC202-1200-IP11	21.0
14"	12.75	3"	F202-1275-IP9	FS202-1275-IP9	FC202-1275-IP9	20.5
	12.75	4"	F202-1275-IP11	FS202-1275-IP11	FC202-1275-IP11	21.1
	13.20	3"	F202-1320-IP9	FS202-1320-IP9	FC202-1320-IP9	20.8
	13.20	4"	F202-1320-IP11	FS202-1320-IP11	FC202-1320-IP11	22.1
	14.00	3"	N/A	FS202-1400-IP9	FC202-1400-IP9	22.0
16"	14.00	4"	N/A	FS202-1400-IP11	FC202-1400-IP11	23.0
	15.30	3"	N/A	FS202-1530-IP9	FC202-1530-IP9	22.6
	15.30	4"	N/A	FS202-1530-IP11	FC202-1530-IP11	23.4
	16.00	3"	N/A	FS202-1600-IP9	FC202-1600-IP9	23.5
	16.00	4"	N/A	FS202-1600-IP11	FC202-1600-IP11	23.9
18"	17.40	3"	N/A	FS202-1740-IP9	FC202-1740-IP9	23.7
	17.40	4"	N/A	FS202-1740-IP11	FC202-1740-IP11	24.6
	17.80	3"	N/A	FS202-1780-IP9	FC202-1780-IP9	23.8
	17.80	4"	N/A	FS202-1780-IP11	FC202-1780-IP11	24.1
	18.00	3"	N/A	FS202-1800-IP9	FC202-1800-IP9	24.0
20"	18.00	4"	N/A	FS202-1800-IP11	FC202-1800-IP11	24.4
	19.50	3"	N/A	FS202-1950-IP9	FC202-1950-IP9	24.5
	19.50	4"	N/A	FS202-1950-IP11	FC202-1950-IP11	24.9
	20.00	3"	N/A	FS202-2000-IP9	FC202-2000-IP9	24.9
	20.00	4"	N/A	FS202-2000-IP11	FC202-2000-IP11	25.4
24"	21.60	3"	N/A	FS202-2160-IP9	FC202-2160-IP9	25.0
	21.60	4"	N/A	FS202-2160-IP11	FC202-2160-IP11	25.8
	24.00	3"	N/A	FS202-2400-IP9	FC202-2400-IP9	25.9
	24.00	4"	N/A	FS202-2400-IP11	FC202-2400-IP11	26.3
	25.80	3"	N/A	FS202-2580-IP9	FC202-2580-IP9	27.0
30"	25.80	4"	N/A	FS202-2580-IP11	FC202-2580-IP11	27.5
	30.00	3"	N/A	FS202-3000-IP9	FC202-3000-IP9	28.3
	30.00	4"	N/A	FS202-3000-IP11	FC202-3000-IP11	28.7
	32.00	3"	N/A	FS202-3200-IP9	FC202-3200-IP9	29.9
	32.00	4"	N/A	FS202-3200-IP11	FC202-3200-IP11	30.4

Ford Stainless Steel Saddles Style FS300

For 1/2" through 2" Taps

Ford Stainless Steel Saddles are designed for use where corrosive conditions exist. Designed for all pipe types, the stainless steel construction allows the saddle to conform, reducing stress on the pipe.

Specifications

Stainless Steel Bolts, Nuts and Washers- 18-8 type 304 stainless steel bolts. Heavy hex nuts are coated to prevent galling.

Stainless Taps - 18-8 type 304 stainless steel TIG welded to band. Available with AWWA and FIP threads in 1/2" through 2". Metric taps available.

Coined Body - Band is coined for gasket retention (some exceptions apply). Contact factory for further information.

Stainless Steel Lifter Bar- 18-8 type 304 stainless steel

Stainless Band - 18-8 type 304 stainless steel. Stainless steel saddles are fully passivated to ensure corrosion resistance.

Gasket - NBR (Buna-N) per ASTM D2000. EDPM available.

Working Pressure Rating - 2" - 12" rated for 250 psi (not to exceed the pressure rating of the pipe). 14" and larger rated for 150 psi.

NSF 61 Approved

Size 12" and under are approved for use on HDPE pipe. If Belleville washers are desired, use prefixes FSP313, FSP323, FSP333 and FSP343.

OUTLET THREAD TAP CODE

CC (AWWA) Thread		FIP Thread	
Thread	Code	Thread	Code
-	-	1/2" IP	IP1
3/4" CC	CC3	3/4" IP	IP3
1" CC	CC4	1" IP	IP4
1-1/4" CC	CC5	1-1/4" IP	IP5
1-1/2" CC	CC6	1-1/2" IP	IP6
2" CC	CC7	2" IP	IP7

Ford Stainless Steel Saddles Style FS300

For 1/2" through 2" Taps

NOM. PIPE SIZE	O.D. RANGE	CATALOG NUMBER	BOLT SIZE	BOLT QUANTITY	BAND WIDTH		NO. OF SECTIONS	APPROX. WEIGHTS	
					1/2" - 1"	1-1/4" - 2"		1/2"- 1" TAPS	1-1/4" - 2" TAPS
FS313 SINGLE BAND									
2"	2.13	FS313-213-Tap	1/2"	2	6"	-	1	1.9	-
	2.38	FS313-238-Tap	1/2"	2	6"	-			
	2.48	FS313-248-Tap	1/2"	2	6"	-			
	2.50 - 2.70	FS313-270-Tap	1/2"	2	6"	-			
2-1/2"	2.88	FS313-288-Tap	1/2"	2	6"	-	1	1.9	-
3"	3.00 - 3.13	FS313-313-Tap	1/2"	2	6"	-	1	2.2	3.8
	3.15 - 3.25	FS313-325-Tap	1/2"	2	6"	-			
	3.46 - 3.70	FS313-370-Tap*	1/2"	2	6"	7-1/2"			
	3.50	FS313-350-Tap**	1/2"	2	6"	7-1/2"			
	3.80	FS313-380-Tap*	1/2"	2	6"	7-1/2"			
	3.90 - 4.10	FS313-410-Tap*	1/2"	2	6"	7-1/2"			
4"	4.50 - 4.80	FS313-480-Tap	1/2"	2	6"	7-1/2"	1	3.3	3.9
	4.80 - 5.20	FS313-520-Tap							
5"	5.56	FS313-556-Tap	5/8"	2	6"	7-1/2"	1	4.4	4.8
6"	6.00 - 6.40	FS313-640-Tap	5/8"	2	6"	7-1/2"	1	4.7	5.1
	6.40 - 6.80	FS313-680-Tap							
	6.63 - 6.90	FS313-690-Tap							
	6.80 - 7.20	FS313-720-Tap							
8"	8.00 - 8.40	FS313-840-Tap	5/8"	2	6"	7-1/2"	1	5.2	5.8
	8.40 - 8.80	FS313-880-Tap							
	8.63 - 9.05	FS313-905-Tap							
	9.00 - 9.40	FS313-940-Tap							
10"	10.00 - 10.40	FS313-1040-Tap	5/8"	2	6"	7-1/2"	1	5.8	8.7
	10.75 - 11.10	FS313-1110-Tap							
	11.10 - 11.50	FS313-1150-Tap							
12"	12.00 - 12.40	FS313-1240-Tap	5/8"	2	6"	7-1/2"	1	6.4	9.3
	12.75 - 13.20	FS313-1320-Tap							
	13.10 - 13.50	FS313-1350-Tap							
FS323 DOUBLE BAND									
4"	4.74 - 5.54	FS323-554-Tap	5/8"	4	6"	7-1/2"	2	5.2	5.7
6"	6.40 - 7.20	FS323-720-Tap	5/8"	4	6"	7-1/2"	2	5.1	5.8
8"	8.40 - 9.20	FS323-920-Tap	5/8"	4	6"	7-1/2"	2	6.3	7.8
10"	10.70 - 11.50	FS323-1150-Tap	5/8"	4	6"	7-1/2"	2	7.0	9.0
12"	12.70 - 13.50	FS323-1350-Tap	5/8"	4	6"	7-1/2"	2	9.0	11.0
14"	14.00 - 14.80	FS323-1480-Tap	5/8"	4	6"	7-1/2"	2	10.0	12.0
	14.95 - 15.75	FS323-1575-Tap							
	15.60 - 16.40	FS323-1640-Tap							
16"	15.75 - 16.55	FS323-1655-Tap	5/8"	4	6"	7-1/2"	2	10.5	12.5
	16.40 - 17.20	FS323-1720-Tap							
	17.20 - 18.00	FS323-1800-Tap							
18"	17.60 - 18.40	FS323-1840-Tap	5/8"	4	6"	7-1/2"	2	10.5	12.5
	18.00 - 18.80	FS323-1880-Tap							
	18.40 - 19.20	FS323-1920-Tap							
	18.80 - 19.60	FS323-1960-Tap							
19.20 - 20.00	FS323-2000-Tap								
FS333 TRIPLE BAND									
20"	21.40-22.60	FS333-2260-Tap	5/8"	6	6"	7-1/2"	3	14.5	17.0
	22.80-24.00	FS333-2400-Tap							
	23.45-24.65	FS333-2465-Tap							
24"	24.45-25.65	FS333-2565-Tap	5/8"	6	6"	7-1/2"	3	15.5	17.5
	25.50-26.70	FS333-2670-Tap							
	28.25-29.45	FS333-2945-Tap							
30"	29.40-30.60	FS333-3060-Tap	5/8"	6	6"	7-1/2"	3	17.0	19.5
	29.85-31.05	FS333-3105-Tap							
	30.85-32.05	FS333-3205-Tap							
FS343 QUAD BAND									
36"	35.80-37.00	FS343-3700-Tap	5/8"	8	6"	7-1/2"	4	21.0	24.0
	37.50-38.70	FS343-3870-Tap							

2" – 12" approved for use on HDPE pipe. If Belleville washers are desired, use prefixes FSP313, FSP323, FSP333 and FSP343.

Note: Coined outlet not available on 2" and 3" saddles.

* CC7 not available for this size

** CC6, CC7 and IP7 not available for this size

Ford Repair Saddles

Style FRS202 Double Band

Specifications

Body - 7-1/2" wide, 18-8 type 304 stainless steel for corrosion control. All welds are fully passivated to restore stainless steel characteristics.

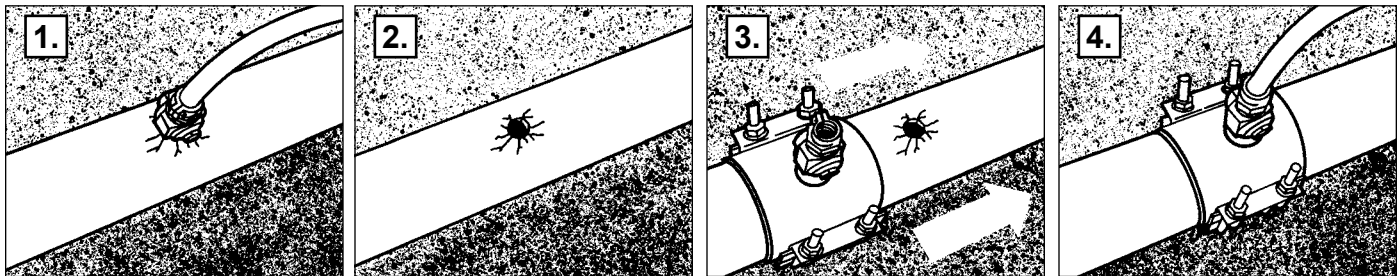
Outlet - 18-8 type 304 stainless steel available in 3/4" through 2" FIP or AWWA.

Bolts and Nuts - 18-8 type 304 stainless steel 5/8" UNC threads. Heavy hex nuts are coated to prevent galling.

Lifter Bar - 18-8 type 304 stainless steel provides a heavy bearing surface for nuts.

Gasket - Tapered NBR (Buna-N) with circular grid as per ASTM D2000.

Pressure Rating - The Ford FRS stainless steel repair saddle is rated for 150 psi working water pressure.



1. Confirm the leak location by cleaning and examining pipe.

2. Shut off the water supply and remove the corporation stop from the pipe.

3. Install the corporation stop into the saddle and position loosely on the pipe next to the hole.

4. Center the saddle over the damaged pipe hole and tighten the saddle onto the pipe.

Style FRS202 Double Band Repair Saddles

To Order: Add tap code number to catalog number. For example: A repair saddle for use on 9.05 iron pipe with a 2" CC tap would be FRS202-979-CC7.

NOM. PIPE SIZE	O.D. RANGE	CATALOG NUMBER	APPROX. WT. LBS.	BAND	
				QUANTITY	WIDTH
4"	4.75-5.35	FRS202-535-Tap	7.5	2	2"
6"	6.85-7.60	FRS202-760-Tap	8.0	2	2"
8"	9.00-9.79	FRS202-979-Tap	8.8	2	2"
10"	11.00-11.80	FRS202-1180-Tap	11.0	2	2"
	11.50-12.25	FRS202-1225-Tap	12.3	2	2"
12"	13.10-13.90	FRS202-1390-Tap	13.9	2	2"
	13.60-14.40	FRS202-1440-Tap	14.5	2	2"
14"	15.20-16.00	FRS202-1600-Tap	-	2	2"
16"	17.20-18.00	FRS202-1800-Tap	-	2	2"
18"	19.20-20.00	FRS202-2000-Tap	-	1	7"
20"	21.40-22.20	FRS202-2220-Tap	-	1	7"
24"	23.20-24.00	FRS202-2400-Tap	-	1	7"
	25.60-26.40	FRS202-2640-Tap	-	1	7"

OUTLET THREAD TAP CODE

CC (AWWA) THREAD		FIP THREAD	
THREAD	CODE	THREAD	CODE
3/4" CC	CC3	3/4" IP	IP3
1" CC	CC4	1" IP	IP4
1-1/4" CC	*CC5	1-1/4" IP	*IP5
1-1/2" CC	CC6	1-1/2" IP	IP6
2" CC	CC7	2" IP	IP7

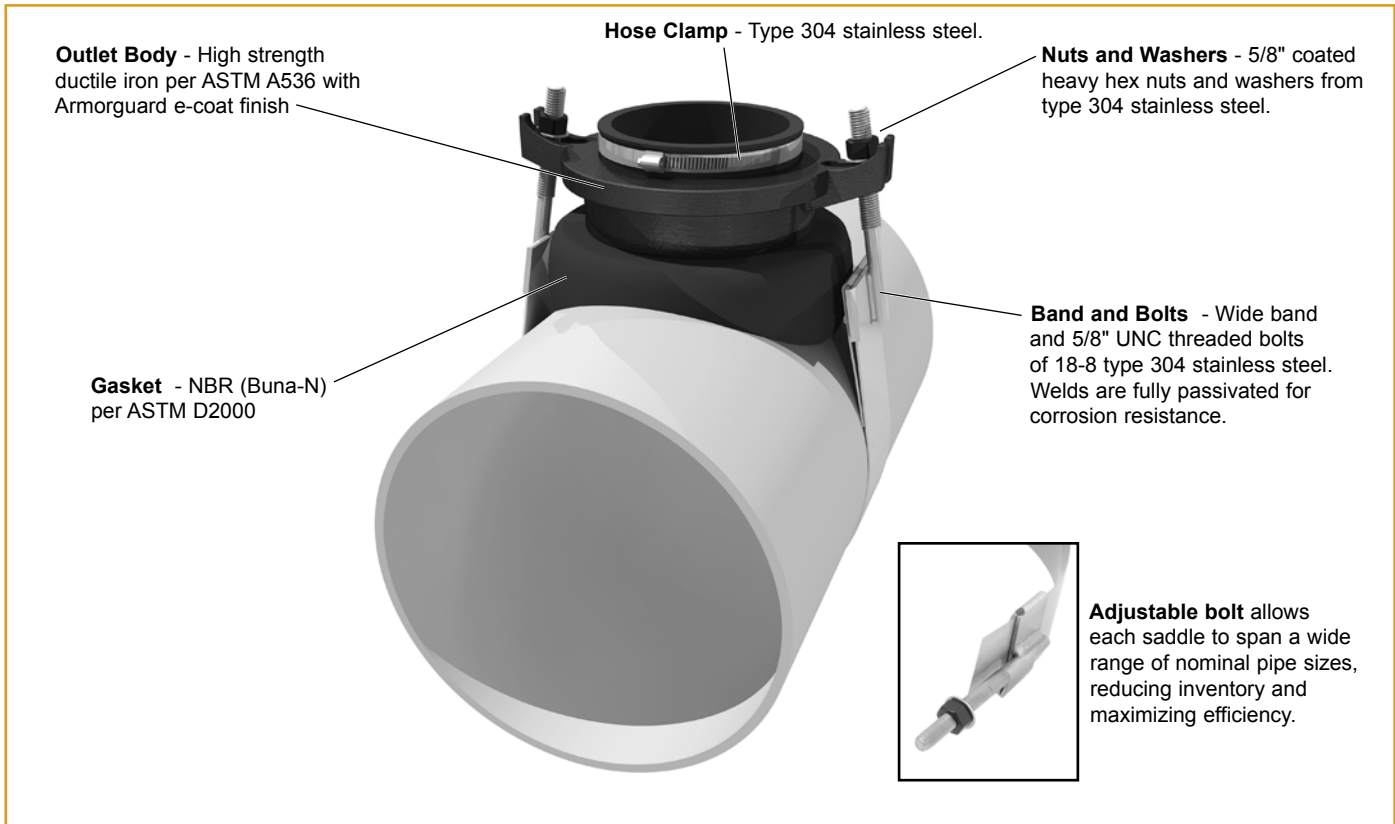
*Contact factory for availability

Ford Sewer Saddle

Style FSS Sewer Saddle

The Ford Sewer Saddle provides a secure and reliable method to connect to a sewer main. A fully passivated stainless steel strap paired with an e-coated ductile iron outlet body allows the sewer saddle to perform under some of the harshest conditions.

Specifications



CATALOG NUMBER	RANGE	NOMINAL BRANCH SIZE	BRANCH PIPE RANGE	APPROX. Wt. LBS.
FSS-1440-4	6.27" - 14.40"	4"	4.20" - 4.80"	10.3
FSS-2580-4	14.40" - 25.80"			11.5
FSS-5080-4	25.80" - 50.80"			13.1
FSS-1440-6	8.00" - 14.40"	6"	6.27" - 6.66"	12.1
FSS-2580-6	14.40" - 25.80"			13.2
FSS-5080-6	25.80" - 50.80"			15.3

FSS Sewer Saddle Components

NOMINAL BRANCH SIZE	SADDLE OPTIONS		GASKET OPTIONS	
	CATALOG NUMBER	CATALOG NUMBER	RANGE	
4"	FSS-SADDLE-4	FSS-GASKET-4-S	6.27" - 14.40"	
		FSS-GASKET-4-M	14.40" - 25.80"	
		FSS-GASKET-4-L	25.80" - 50.80"	
6"	FSS-SADDLE-6	FSS-GASKET-6-S	8.00" - 14.40"	
		FSS-GASKET-6-L	14.40" - 50.80"	

NOMINAL BRANCH SIZE	STAINLESS STEEL BAND OPTIONS		ADJUSTABLE SLIDE
	CATALOG NUMBER	RANGE	CATALOG NUMBER
4" or 6"	FSS-BAND-1440	6.27" - 14.40"	FSS-SLIDE
	FSS-BAND-2580	14.40" - 25.80"	
	FSS-BAND-5080	25.80" - 50.80"	

O.D. Chart

PIPE SIZE	PVC/HDPE (STEEL SIZE) O.D.	PVC/HDPE C900 O.D.	DUCTILE / CAST IRON			ASBESTOS-CEMENT			STEEL		COPPER
			CLASSES		O.D.	CLASS	MACHINED END O.D.	ROUGH BARREL O.D. MIN - MAX	TYPE	O.D.	O.D.
			PIT	SPUN							
1/2"	.84								STD.	.84	.625
3/4"	1.05								STD.	1.05	.875
1"	1.32								STD.	1.32	1.125
1-1/4"	1.66								STD.	1.66	1.375
1-1/2"	1.90								STD.	1.90	1.625
2"	2.38				2.50				STD.	2.38	2.125
2-1/2"	2.88								STD.	2.88	2.625
3"	3.50		A		3.80	100	3.74	4.00	O.D.	3.00	3.125
			B, C, D	50 - 350	3.96	150	3.84	4.10	STD.	3.50	
						200	3.84	4.29			
3-1/2"								STD.	4.00	3.625	
4"	4.50	4.80	A	50 - 350	4.80	100	4.64	4.79 - 5.14	O.D.	4.00	4.125
			B, C, D		5.00	150	4.81	4.97 - 5.27	STD.	4.50	
						200	4.81	5.22 - 5.57			
4-1/2"								STD.	5.00		
5"								STD.	5.56	5.125	
6"	6.63	6.90	A	50 - 350	6.90	100	6.91	7.05 - 7.40	O.D.	6.00	6.125
			B, C, D,		7.10	150	6.91	7.07 - 7.37	STD.	6.63	
			E, F		7.22	200	6.91	7.26 - 7.56			
7"								STD.	7.63		
8"	8.63	9.05	A, B,	50 - 300	9.05	100	9.11	9.22 - 9.57	O.D.	8.00	
			C, D,	350	9.30	150	9.11	9.27 - 9.57	STD.	8.63	
			E, F		9.42	200	9.11	9.39 - 9.74			
9"								STD.	9.63		
10"	10.75	11.10	A, B,	50 - 200	11.10	100	11.24	11.42 - 11.77	O.D.	10.00	
			C, D,	250 - 350	11.40	150	11.66	11.82 - 12.12	STD.	10.75	
			E, F		11.60	200	11.66	11.77 - 12.12			
12"	12.75	13.20	A, B,	50 - 200	13.20	100	13.44	13.69 - 14.04	O.D.	12.00	
			C, D,	250 - 350	13.50	150	13.92	14.08 - 14.38	STD.	12.75	
			E, F		13.76	200	13.92	14.03 - 14.38			
14"	14.00	15.30	A, B,	50 - 100	15.30	100	15.07	15.40 - 15.80	STD.	14.00	
			C, D,	150 - 300	15.65	150	16.22	16.38 - 16.73			
			E, F		15.98	200	16.22	16.48 - 16.88			
16"	16.00	17.40	A, B,	50 - 100	17.40	100	17.14	17.54 - 17.94	STD.	16.00	
			C, D,	150 - 300	17.80	150	18.46	18.62 - 18.97			
			E, F		18.16	200	18.46	18.79 - 19.19			
18"	18.00	19.50	A, B	50 - 100	19.50	100	19.90	20.44	STD.	18.00	
			C, D	150 - 250	19.92	150	20.94	21.20			
						200	22.18				
20"	20.00	21.60	A, B,	50 - 100	21.60	100	22.12	22.50	STD.	20.00	
			C, D	150 - 250	22.06	150	23.28	23.54			
						200	24.66				
22"								STD.	22.00		
24"	24.00	25.80	A, B,	50 - 100	25.80	100	26.48	27.17	STD.	24.00	
			C, D	150 - 250	26.32	150	27.96	28.22			
						200	29.62				
30"	30.00	32.00	A		31.74				STD.	30.00	
			B	50 - 350	32.00						
			C		32.40						
			D		32.74						
36"	36.00	38.30	A		37.96				STD.	36.00	
			B	50 - 350	38.30						
			C		38.70						
			D		39.16						
42"		44.50	A		44.20				STD.	42.00	
			B	50 - 350	44.50						
			C		45.10						
			D		45.58						
48"		50.80	A		50.50				STD.	48.00	
			B	50 - 350	50.80						
			C		51.40						
			D		51.98						
54"			A		56.66				STD.	54.00	
			B		57.10						
				50 - 350	57.56						
			C		57.80						
60"			D		58.40				STD.	60.00	
				50 - 350	61.61						
			A		62.80						
			B		63.40						
			C		64.20						
			D		64.82						

Note: Due to variations in outside diameters and specifications, dimensions listed above are approximate. For this reason, determine the pipe O.D. before ordering.

Section AA

Ford[®] Service Saddles and Tapping Sleeves

Warranty

All merchandise is warranted to be free from defects in material and factory workmanship for one year from date of shipment from our factory. We will provide, free of charge, new products in equal quantities for any that prove defective within one year from date of shipment from our factory. Manufacturer shall not be liable for any loss, damage, or injury, direct or consequential, arising out of the use of or the inability to use the product. Before using, user shall determine the suitability of the product for user's intended use and user assumes all risk and liability whatever in connection therewith. No claims for labor or consequential damage will be allowed. The foregoing may not be changed except by agreement signed by an officer of the manufacturer.

No other warranties are applicable or may be implied, including the implied warranty of merchantability and the implied warranty of fitness for particular purpose and any warranty relating to infringement or the like, all of which are disclaimed.

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