



Section M

Ford[®] Cast Couplings and Adapters



Ford Couplings Contents

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For restrained couplings and flange adapters, see Catalog Section U.

The Ford Meter Box Company, Inc. manufacturing facilities are at the following locations:

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Ford Bolted Coupling Numbering System

OPTIONAL FEATURES

= Omit Suffix for Standard Center Sleeve

L12 = 12" Long Center Sleeve Length

(only available for 4" and 6" FC1's and

4"-12" FC2A's)

FOR FFCA COUPLING ADAPTERS

AS2 = Two Anchor Studs

AS4 = Four Anchor Studs

FRR = Cut-In Coupling

FEC = End Cap Coupling

TYPE OF COUPLING

FC2A = Ductile Iron Transition Coupling

and Cast Iron Pipe FFCA = Iron Flanged Coupling Adapter

FIB = Insulating Boot for Ductile Iron Pipe

FC1 = Ductile Iron Coupling

C1-690-720-L12-Y-

(small end) O.D. Size

(large end) O.D. Size

NOTE: For most coupling types each number indicates top end of range, only FC1 and FC2A

have an O.D. size for each coupling end.

NOTE: For blue Fluorocarbon coated nuts and bolts, contact factory.

COATING, HARDWARE AND GASKET OPTIONS

	COATING AND HARDWARE COMBINATIONS											
		Standard	Shop Coat			Epox\	Coated					
GASKET	Standard	304	316	Electro	Standard	304	316	Electro				
MATERIAL	Alloy	Stainless	Stainless	Galvanized	Alloy	Stainless	Stainless	Galvanized				
	Hdwr.	Steel Hdwr.	Steel Hdwr.	Hdwr.	Hdwr.	Steel Hdwr.	Steel Hdwr.	Hdwr.				
SBR Rubber	R	X	Q	G	E	Υ	Z	K				
NBR (Buna-N) Rubber	N	Н	J	F	С	Р	Т	0				
EPDM Rubber	S	M	V	W	Α	В	D	L				

Note: See item listings in catalog section to ensure that desired sizes and options are available.

TYPE OF COUPLING

FC2W = Ductile Iron Wide Range Coupling (epoxy coated, NBR (Buna-N) gasket)

F C 2 W-6 -L'

OPTIONAL FEATURES

End Cap with 2" FIP Threaded Boss (sizes 4"-12")

Omit Suffix for Standard Center Sleeve

L12-EC = 12" Long Center Sleeve (sizes 3"-12") with End Cap

L12 = 12" Long Center Sleeve (sizes 3"-12")

NOMINAL PIPE SIZE

3 = 3"

4" = 4

6"

8"

10"

= 12"

= 16"

NOTE: Forces created by internal water pressure and external conditions must be restrained.

EC =

NOTE: For blue Fluorocarbon coated nuts and bolts, contact factory.

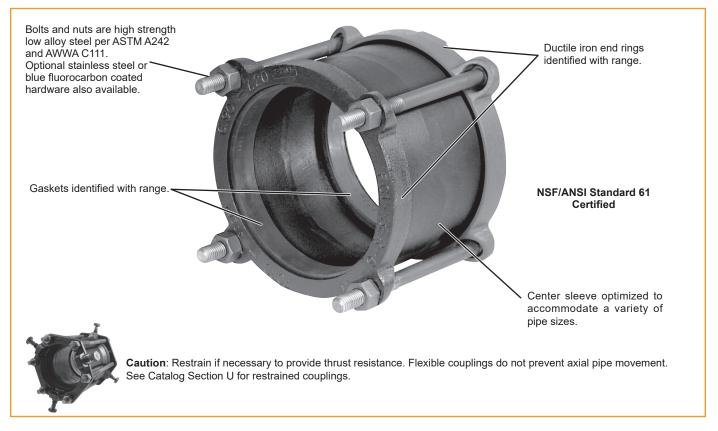
IMPORTANT: DOMESTIC PRODUCT COMPLIANCE NOTICE

The requirements for defining domestic product can vary among the many regulations, which have previously changed and can subsequently change. Please contact your Ford Customer Service Representative to clarify which Ford products currently meet a specific regulatory requirement (AIS, Buy America, Buy American, DOT).

Information

General Features of Ford Cast Couplings

Ford Cast Couplings offer an easy and economical way of joining pipe, whether the pipe is of the same nominal size and type or different at each coupling end. Ford FC1, FC2A and most cast couplings offer the following quality features:



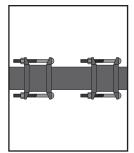
Specifications:

Ford Cast Couplings as listed in Catalog Section M are manufactured in accordance with the design, testing and performance standards of AWWA C219.

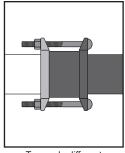
- 1. Center Sleeve Cast from ductile iron per ASTM A536 Grade 65-45-12 or carbon steel per ASTM A36.
- 2. End Rings Cast from ductile iron per ASTM A536 Grade 65-45-12. End rings are color coded for easy identification.
- 3. **Gaskets** SBR rubber per ASTM D2000. Gaskets have size and end ring color code embossed for easy identification.

 Optional armored gaskets are available on Style FC1 and Style FC2A in 4" thru 12" nominal pipe sizes. Optional NBR (Buna-N) or EPDM gaskets are available.
- 4. Bolts and Heavy
 - Hex Nuts High strength low alloy per ASTM A242 and AWWA C111. Optional blue fluorocarbon coating available. Optional stainless steel also available.
- 5. **Finish -** Shop coat. Optional fusion bonded epoxy coating is available.

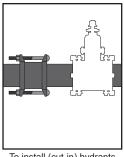
Typical Uses for Ford Cast Couplings



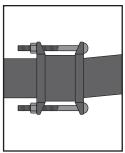
To repair split pipe



To couple different types of pipe



To install (cut-in) hydrants and valves



To connect misaligned pipe

Ford Couplings Style FC1



Rated Working Pressure: Up to 300 psi based on pipe type

Suggested uses for Ford FC1 Couplings include water main repair, joining of plain end pipe, valve and hydrant installation, and flexible joint installation at critical areas of water main stress.

The FC1 Couplings are constructed entirely of ductile iron components, permitting a strong, durable connection.

Only the FC1 offers one gasket and end ring that fits all PVC and ductile iron pipe in the most popular sizes: 4", 6", and 8". Gasket ranges are embossed on each gasket for easy identification.

Caution: Restrain if necessary to provide thrust resistance.

Flexible couplings do not prevent axial pipe movement.

See Catalog Section U for restrained couplings.

Nom.	CATALOG	GASKET	RANGE	END RING		GASKET	RANGE	END RING	CENTER	Number	APPROX.
PIPE	NUMBER		1st. Half	Color	By		2ND HALF	Color	SLEEVE	OF	WEIGHT
SIZE	PREFIX		CAT. No.	CODE			CAT. No.	CODE	LENGTH	Воцтя	LBS
2"	FC1-	2.34 —	2.63	Red	$\supset \subset$	2.34 —	2.63	Red	4"	2	6
2 1/2"	FC1-	See 2" FC2/	A on page M-	7							
		4.00 —	4.00	Red	$\setminus A$	4.00 —	4.00	Red			
4"	FC1-	4.50 —	4.80	Red	X	4.50 —	4.80	Red	5"	3	14
		4.80 —	5.10	Black	\angle	4.80 —	5.10	Black			
		6.00 —	6.00	Red	Λ	6.00 —	6.00	Red			
6"	FC1-	6.30 —	6.30	Red	$\mid \lor \mid$	6.30 —	6.30	Red	5"	4	20
O	FC1-	6.63 —	6.90	Red	$ \wedge $	6.63 —	6.90	Red	J	4	20
		6.90 —	7.20	Black	$V \setminus$	6.90 —	7.20	Black			
		8.00 —	8.00	Red	$\setminus A$	8.00 —	8.00	Red			
8"	FC1-	8.16 —	8.40	Red	$ \lor $	8.16 —	8.40	Red	5"	5	29
O	FC1-	8.63 —	9.05	Red	$ \wedge $	8.63 —	9.05	Red	J	3	29
		9.05 —	9.40	Black	$V \setminus$	9.05 —	9.40	Black			
		10.20 —	10.50	Red	$\setminus A$	10.20 —	10.50	Red			
10"	FC1-	10.75 —	10.75	Red	ΙXΙ	10.75 —	10.75	Red	6"	6	41.5
		11.10 —	11.46	Black	\vee \vee	11.10 —	11.46	Black			
		12.24 —	12.50	Red	$\setminus \mathcal{I}$	12.24 —	12.50	Red			
12"	FC1-	12.75 —	12.75	Red	X	12.75 —	12.75	Red	6"	7	54.5
		13.20 —	13.56	Black	\bigvee	13.20 —	13.56	Black			

To order: Locate the gasket range that accommodates your pipe O.D. for both pipe ends. Use the top range of each gasket size to determine the part number. For example, to connect pipe with an O.D. of 6.63 to a pipe with an O.D. of 7.10, the catalog number is FC1-690-720. For 100% domestic content, contact factory for pricing and availability.

Options: For available options, see chart on page M-3.

Component Parts for Style FC1 Couplings

	oomponent i a	its for Otyl	c i o i ooup	iiiiga
Nom. Pipe Size	Gasket Cat. No.	END RING Cat. No.	CENTER SLEEVE CAT. No.	BOLT AND NUT CAT. No.
2"	FC1G-234-263	FC1-RER-2	FC1-CS-2	FBN-58-65
	FC1G-400	FC1-RER-4		
4"	FC1G-450-480	FC1-RER-4	FC1-CS-4	FBN-58-8
	FC1G-480-510	FC1-BER-4		
	FC1G-600	FC1-RER-6		
6"	FC1G-630	FC1-RER-6	FC1-CS-6	FBN-58-8
O	FC1G-663-690	FC1-RER-6	FC1-C3-0	FBN-30-0
	FC1G-690-720	FC1-BER-6		
	FC1G-800	FC1-RER-8		
8"	FC1G-816-840	FC1-RER-8	FC1-CS-8	FBN-58-8
O	FC1G-863-905	FC1-RER-8	FC1-C3-0	FBN-30-0
	FC1G-905-940	FC1-BER-8		
	FC1G-1020-1050	FC1-RER-10		
10"	FC1G-1075	FC1-RER-10	FC1-CS-10	FBN-58-9
	FC1G-1110-1146	FC1-BER-10		
	FC1G-1224-1250	FC1-RER-12		
12"	FC1G-1275	FC1-RER-12	FC1-CS-12	FBN-58-9
	FC1G-1320-1356	FC1-BER-12		

Ford Extended Length Couplings

Style FC1-L12



Style FC1-L12 for Cast, Ductile Iron or PVC Pipe Rated Working Pressure: Up to 300 psi

Suggested uses for Ford FC1-L12 Couplings include water main repair, joining of plain end pipe, valve and hydrant installation, and flexible joint installation at critical areas of water main stress

The FC1 Couplings are constructed entirely of ductile iron components, permitting a strong, durable connection.

Only the FC1-L12 offers one gasket and end ring that fits all PVC and ductile iron pipe in the most popular sizes: 4" and 6", with 12" center sleeve length. Gasket ranges are embossed on each gasket for easy identification. End rings are color coded to match the color embossed on each gasket.

Caution: Restrain if necessary to provide thrust resistance.

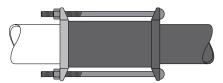
Flexible couplings do not prevent axial pipe movement.

See Catalog Section U for restrained couplings.

Nом.	CATALOG	GASKET	r Range	END RING		GASKET	RANGE	END RING	CATALOG	CENTER	Number	APPROX.
PIPE	NUMBER		1st. Half	Color	By		2ND HALF	Color	Number	SLEEVE	OF	WEIGHT
SIZE	PREFIX		CAT. No.	CODE			CAT. No.	CODE	SUFFIX	LENGTH	Bolts	LBS
		4.00 —	4.00	Red	\ /	4.00 —	4.00	Red				
4"	FC1-	4.50 —	4.80	Red	X	4.50 —	4.80	Red	-L12	12"	3	29
		4.80 —	5.10	Black	$/ \setminus$	4.80 —	5.10	Black				
		6.00 —	6.00	Red	/	6.00 —	6.00	Red				
6"	FC1-	6.30 —	6.30	Red		6.30 —	6.30	Red	-L12	12"	4	42
0	FC1-	6.63 —	6.90	Red	\wedge	6.63 —	6.90	Red	-L12	12	4	42
	1	6 90 —	7.20	Black	/ \	6 90 —	7.20	Black				

To order: Locate the gasket range that accommodates your pipe O.D. for both pipe ends. Use the top range of each gasket size to determine the part number. For example, to connect pipe with an O.D. of 6.63 to a pipe with an O.D. of 7.10, the catalog number is FC1-690-720-L12.

Options: For available options, see chart on page M-3.







A/C x C900 PVC



Steel Size PVC x Steel Size PVC

Component Parts for Style FC1-L12 Extended Length Couplings

Nom. PIPE SIZE	Gasket Cat. No.	END RING CAT. NO.	CENTER SLEEVE CAT. No.	BOLT AND NUT CAT. NO.
4"	FC1G-400 FC1G-450-480	FC1-RER-4 FC1-RER-4	FC1-CS-4-L12	FBN-58-155
4	FC1G-480-510	FC1-RER-4	FC1-C3-4-L12	FDIN-30-133
	FC1G-600	FC1-RER-6		
6"	FC1G-630	FC1-RER-6	FC1-CS-6-L12	FBN-58-155
O	FC1G-663-690	FC1-RER-6	FC1-C3-6-L12	FBN-30-133
	FC1G-690-720	FC1-BER-6		

Ford Transition Couplings

Style FC2A



Rated Working Pressure: 250 psi (sizes 2" - 12") 150 psi (sizes 14" - 24") Ford Iron Transition Couplings provide a convenient method of joining two pipes of the same nominal size but with different O.D.s. Gaskets are embossed and end rings are color coded for easy identification. The gaskets are identified with the exact O.D. range and the end ring color with which it is to be used. Generally, red signifies use on steel size PVC, black for iron pipe and Class 150 A/C, and white/gray for Class 200 A/C. See the table below for exact ranges. Larger, fabricated steel couplings are detailed in Catalog Section N.

Caution: Restrain if necessary to provide thrust resistance.

Flexible couplings do not prevent axial pipe movement.

See Catalog Section U for restrained couplings.

Nom.	CATALOG	GASKE	T RANGE	END RING		GASKET	RANGE	END RING	CENTER	Number	APPROX.
PIPE	Number		1st. Half	Color	By		2ND HALF	Color	SLEEVE	OF	WEIGHT
SIZE	PREFIX		CAT. No.	CODE			CAT. No.	CODE	LENGTH	Bolts	LBS
		2.30 —		Black	\setminus	2.30 —		Black			
2"	FC2A-	2.40 —		Black	lΧ	2.40 —		Black	4"	2	9
		2.65 —		Black	$\langle \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	2.65 —		Black			
		3.13 —		Red	N /	3.13 —		Red			
		3.45 —		Red	\ /	3.45 —		Red			
3"	FC2A-	3.70 —		Black	ΙX	3.70 —		Black	4"	3	14
		3.91 —		Black	/ \	3.91 —		Black			
		4.07 —		Black	$\langle \rangle$	4.07 —		Black			
		4.00 —		Red	N /	4.00 —		Red			
4"	FC2A-	4.50 —		Red	ΙX	4.50 —		Red	5"	3	16
•		4.80 —		Black	/	4.80 —		Black			
		<u>5.15</u> —		White/Gray	$\langle \rangle$	5.15 —		White/Gray			
		6.00 —		Red	\setminus	6.00 —		Red			
6"	FC2A-	6.63 —		Red	ΙX	6.63 —		Red	5"	4	24
		6.90 —		Black	$ / \setminus$	6.90 —		Black			
		7.21 —		White/Gray	$\langle - \rangle$	7.21 —		White/Gray			
		8.00 —		Red	$ \setminus / $	8.00 —		Red			
8"	FC2A-	8.63 —		Red	ΙX	8.63 —		Red Black	5"	5	34
		9.05 — 9.40 —		Black	$ / \setminus$	9.05 — 9.40 —		White/Gray			
		9.40 — 10.00 —		White/Gray Red	$\langle - \rangle$	10.00 —		Red			
		10.00 —		Red	\ /	10.00 —		Red			
10"	FC2A-	11.10 —		Black	$ \vee $	11.10 —		Black	6"	6	48
10	FCZA-	11.10 —		Black	$ \wedge $	11.42 —		Black	U	0	40
		11.77 —		White/Gray	/ \	11.77 —		White/Gray			
		12.00 —		Black	$\langle \cdot \rangle$	12.00 —		Black			
		12.75 —		Black	\	12.75 —		Black			
12"	FC2A-	13.20 —		Black	ΙV	13.20 —		Black	6"	7	62
		13.69 —		White/Gray		13.69 —		White/Gray			02
		14.03 —		White/Gray	/ \	14.03 —		White/Gray			
		15.30 —		Black		15.30 —		Black			
14"	FC2A-	16.00 —		Red	$\mid \times \mid$	16.00 —		Red	6"	9	83
		16.40 —		White/Gray	$/ \setminus$	16.40 —		White/Gray			
		17.40 —		Black		17.40 —		Black			
16"	FC2A-	18.45 —		White/Gray	X	18.45 —		White/Gray	7"	10	91
		18.90 —		White/Gray	$/ \setminus$	18.90 —		White/Gray			
18"	FC2A-	19.50 —		Black	\supset	19.50 —		Black	7"	11	111
20"	FC2A-	21.60 —	22.06	Black	\supset	21.60 —	22.06	Black	7"	12	125
24"	FC2A-	25.80 —		Black	\supset	25.80 —		Black	10"	14	183

To order: Locate the gasket range that accommodates your pipe O.D. for both ends of pipe. Use the top range of each gasket size to determine the part number. For example, to connect pipe with an O.D. of 6.90 to a pipe with an O.D. of 7.37, the catalog number is FC2A-720-756. For 100% domestic content, contact factory for pricing and availability.

Options: For available options, see chart on page M-3.

Note: For end cap options, see page M-15.

Ford Transition Coupling Parts Style FC2A



Component Parts for Style FC2A Couplings

	Component Parts for Style FC2A Couplings												
Nom. Pipe Size	Gasket Catalog No.	END RING CATALOG NO.	CENTER SLEEVE CATALOG NO.	BOLT AND NUT CATALOG NO.	BOLT AND NUT SIZE	NUMBER OF BOLTS REQUIRED							
2"	FC2AG-230-245 FC2AG-240-265 FC2AG-265-288	FC2A-BER-2 FC2A-BER-2 FC2A-BER-2	FC2A-CS-2	FBN-58-65	5/8" x 6-1/2"	2							
3"	FC2AG-313 FC2AG-345-360 FC2AG-370-388 FC2AG-391-406 FC2AG-407-420	FC2A-RER-3 FC2A-RER-3 FC2A-BER-3 FC2A-BER-3 FC2A-BER-3	FC2A-CS-3	FBN-58-65	5/8" x 6-1/2"	3							
4"	FC2AG-400 FC2AG-450 FC2AG-480-514 FC2AG-515-557	FC2A-RER-4 FC2A-RER-4 FC2A-BER-4 FC2A-WER-4	FC2A-CS-4	FBN-58-8	5/8" x 8"	3							
6"	FC2AG-600 FC2AG-663 FC2AG-690-720 FC2AG-721-756	FC2A-RER-6 FC2A-RER-6 FC2A-BER-6 FC2A-WER-6	FC2A-CS-6	FBN-58-8	5/8" x 8"	4							
8"	FC2AG-800 FC2AG-863 FC2AG-905-940 FC2AG-940-974	FC2A-RER-8 FC2A-RER-8 FC2A-BER-8 FC2A-WER-8	FC2A-CS-8	FBN-58-8	5/8" x 8"	5							
10"	FC2AG-1000 FC2AG-1075 FC2AG-1110-1140 FC2AG-1142-1177 FC2AG-1177-1212	FC2A-RER-10 FC2A-RER-10 FC2A-BER-10 FC2A-BER-10 FC2A-WER-10	FC2A-CS-10	FBN-58-9	5/8" x 9"	6							
12"	FC2AG-1200 FC2AG-1275 FC2AG-1320-1350 FC2AG-1369-1404 FC2AG-1403-1438	FC2A-BER-12 FC2A-BER-12 FC2A-BER-12 FC2A-WER-12 FC2A-WER-12	FC2A-CS-12	FBN-58-9	5/8" x 9"	7							
14"	FC2AG-1530-1570 FC2AG-1600-1635 FC2AG-1640-1688	FC2A-BER-14 FC2A-RER-14 FC2A-WER-14	FC2A-CS-14	FBN-58-105	5/8"x10-1/2"	9							
16"	FC2AG-1740-1780 FC2AG-1845-1897 FC2AG-1890-1920	FC2A-BER-16 FC2A-WER-16 FC2A-WER-16	FC2A-CS-16	FBN-58-105	5/8"x10-1/2"	10							
18"	FC2AG-1950-2000	FC2A-BER-18	FC2A-CS-18	FBN-58-105	5/8"x10-1/2"	11							
20"	FC2AG-2160-2206	FC2A-BER-20	FC2A-CS-20	FBN-58-105	5/8"x10-1/2"	12							
24"	FC2AG-2580-2632	FC2A-BER-24	FC2A-CS-24	FBN-58-135	5/8"x13-1/2"	14							

To order: Specify desired quantity and order using catalog number.

Ford Extended Length Transition Couplings

Style FC2A-L12

The extended length version of the Ford FC2A offers the same advantages as the standard FC2A (page M-7) with the added versatility of a 12-inch long center sleeve.

Caution: Restrain if necessary to provide thrust resistance.

Flexible couplings do not prevent axial pipe movement.

See Catalog Section U for restrained couplings.



Rated Working Pressure: 250 psi

Nom.	CATALOG	GASKET	RANGE	END RING		GASKET	RANGE	END RING	CATALOG	CENTER	Number	APPROX.
PIPE	NUMBER		1st. Half	Color	By		2ND HALF	Color	NUMBER	SLEEVE	OF	WEIGHT
SIZE	PREFIX		CAT. No.	CODE			CAT. No.	CODE	SUFFIX	LENGTH	Востѕ	LBS
		4.00 —	4.00	Red	\setminus	4.00 —	4.00	Red				
4"	FC2A-	4.50 —		Red		4.50 —	4.50	Red	-L12	12"	3	34
7	I OZA-	4.80 —		Black		4.80 —		Black		12		07
		5.15 —		White/Gray	$\langle \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	5.15 —		White/Gray				
		6.00 —		Red	\setminus	6.00 —		Red				
6"	FC2A-	6.63 —		Red		6.63 —		Red	-L12	12"	4	48
O	I OZA-	6.90 —		Black		6.90 —		Black		12	7	40
		7.21 —		White/Gray		7.21 —		White/Gray				
		8.00 —		Red	\ /	8.00 —		Red				
8"	FC2A-	8.63 —	8.63	Red		8.63 —	8.63	Red	-L12	12"	5	63
O	I OZA-	9.05 —	9.40	Black		9.05 —	9.40	Black		12		00
		9.40 —		White/Gray	/	9.40 —		White/Gray				
		10.00 —		Red	\setminus	10.00 —		Red				
		10.75 —		Red		10.75 —		Red				
10"	FC2A-	11.10 —		Black	X	11.10 —		Black	-L12	12"	6	83
		11.42 —		Black	/ \	11.42 —		Black				
		11.77 —		White/Gray		11.77 —		White/Gray				
		12.00 —		Black	\ /	12.00 —		Black				
		12.75 —		Black		12.75 —		Black				
12"	FC2A-	13.20 —	13.50	Black	X	13.20 —	13.50	Black	-L12	12"	7	106
		13.69 —		White/Gray	/ \	13.69 —		White/Gray				
		14.03 —	14.38	White/Gray	/ \	14.03 —	14.38	White/Gray				

To order: Locate the gasket range that accommodates your pipe O.D. for both ends of pipe. Use the top range of each gasket size to determine the part number. For example, to connect pipe with an O.D. of 6.90 to a pipe with an O.D. of 7.37, the catalog number is FC2A-720-756-L12.

Options: For available options, see chart on page M-3.

Note: For end cap options, see page M-15.

Ford Extended Length Transition Coupling Parts Style FC2A-L12



Component Parts for Style FC2A-L12 Extended Length Couplings

	iiponent i ai	to for oty	CI CZA-LIZ I	_Xteriaea	Length oc	
NOM. PIPE SIZE	Gasket Catalog No.	END RING CATALOG NO.	CENTER SLEEVE CATALOG NO.	BOLT AND NUT CATALOG NO.	BOLT AND NUT SIZE	NUMBER OF BOLTS REQUIRED
4"	FC2AG-400 FC2AG-450 FC2AG-480-514 FC2AG-515-557	FC2A-RER-4 FC2A-RER-4 FC2A-BER-4 FC2A-WER-4	FC2A-CS-4-L12	FBN-58-155	5/8" x 15-1/2"	3
6"	FC2AG-600 FC2AG-663 FC2AG-690-720 FC2AG-721-756	FC2A-RER-6 FC2A-RER-6 FC2A-BER-6 FC2A-WER-6	FC2A-CS-6-L12	FBN-58-155	5/8" x 15-1/2"	4
8"	FC2AG-800 FC2AG-863 FC2AG-905-940 FC2AG-940-974	FC2A-RER-8 FC2A-RER-8 FC2A-BER-8 FC2A-WER-8	FC2A-CS-8-L12	FBN-58-155	5/8" x 15-1/2"	5
10"	FC2AG-1000 FC2AG-1075 FC2AG-1110-1140 FC2AG-1142-1177 FC2AG-1177-1212	FC2A-RER-10 FC2A-RER-10 FC2A-BER-10 FC2A-BER-10 FC2A-WER-10	FC2A-CS-10-L12	FBN-58-155	5/8" x 15-1/2"	6
12"	FC2AG-1200 FC2AG-1275 FC2AG-1320-1350 FC2AG-1369-1404 FC2AG-1403-1438	FC2A-BER-12 FC2A-BER-12 FC2A-BER-12 FC2A-WER-12 FC2A-WER-12	FC2A-CS-12-L12	FBN-58-155	5/8" x 15-1/2"	7

To order: Specify desired quantity and order using catalog number.

Ford Ultra-Flex Wide Range Couplings

Ford Ultra-Flex Wide Range Couplings offer convenience, reliability, and inventory reduction. The Ultra-Flex can join virtually any pipes within a nominal size and is rated for 350 psi working pressure on 3"-12" and 250 psi working pressure on 16". The stab-in design allows quicker installation and the standard fusion bonded epoxy coating provides corrosion protection. The standard NBR (Buna-N) gaskets are lubricated at the factory. No field lubrication is required. The unique gaskets seal on the pipe with fewer turns of the wrench. This allows the installer to use a standard deep-well socket, even when installing on pipes at the low end of the listed range. See the table below for exact ranges.

Benefits:

- Stab-in installation. No disassembly required.
- · Long standard sleeve.

coating standard

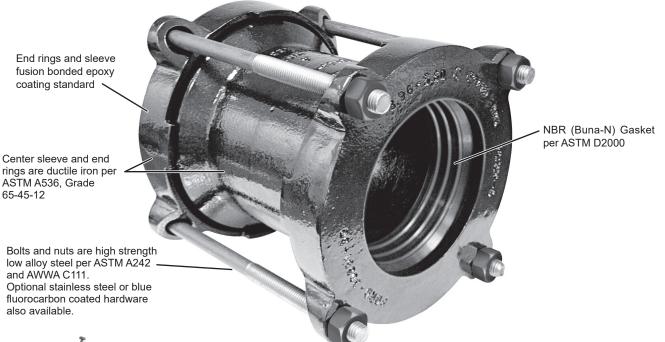
ASTM A536, Grade

and AWWA C111.

also available.

65-45-12

- Unique gasket allows for quicker installation.
- 350 psi rated working pressure, sizes 3" 12" 250 psi rated working pressure for 16"





Caution: Restrain if necessary to provide thrust resistance. Flexible couplings do not prevent axial pipe movement. See Catalog Section U for restrained couplings.

Style FC2W Wide Range Couplings

M	D 01	. D					A
Nominal	PIPE OL	D RANGE*	CATALOG	Number	Воцт	SLEEVE	APPROX.
PIPE	INCHES	MILLIMETERS	CATALOG OF I		DIAMETER	LENGTH	WEIGHT
SIZE	INCHES	WILLIMETERS	NUMBER	Востѕ	DIAMETER	LENGIH	LBS.
3"	2.50 - 4.29	63.5 - 109.0	FC2W-3	3	5/8"	7"	27
4"	3.96 - 5.60	100.5 - 142.2	FC2W-4	4	5/8"	7"	35
6"	6.23 - 7.60	158.2 - 193.0	FC2W-6	4	5/8"	7"	44
8"	8.40 - 9.75	213.3 - 247.6	FC2W-8	4	5/8"	7"	52
10"	10.75 - 12.12	273.0 - 307.8	FC2W-10	6	5/8"	9"	76
12"	12.75 - 14.38	323.8 - 365.25	FC2W-12	6	5/8"	9"	97
16"	16.00 - 17.80	406.4 - 452.1	FC2W-16	8	5/8"	10"	135

^{*} Pipes smaller than the published range may be joined using the FC2W coupling at a reduced pressure rating. Contact Ford Meter Box for details.

Options: For available options, see chart on page M-3.

Note: See page M-20 for installation instructions.

Ford Ultra-Flex Long Sleeve Wide Range Couplings

Style FC2W-L12

The long sleeve version of the Ford FC2W Ultra-Flex offers the same advantages as the standard FC2W (page M-11) with the added versatility of a 12-inch long center sleeve.

Caution: Restrain if necessary to provide thrust resistance.

Flexible couplings do not prevent axial pipe movement.

See Catalog Section U for restrained couplings.



Style FC2W-L12 Long Sleeve Wide Range Couplings

Nominal	PIPE OF	RANGE	CATALOG	Number	Вогт	SLEEVE	APPROX.
PIPE	INCHES	MILLIMETERS	NUMBER	OF	DIAMETER	LENGTH	WEIGHT
SIZE	INCHES	MILLIMETERS	NUMBER	Bolts	DIAMETER	LENGIH	LBS.
3"	2.50 - 4.29	63.5 - 109.0	FC2W-3-L12	3	5/8"	12"	40
4"	3.96 - 5.60	100.5 - 142.2	FC2W-4-L12	4	5/8"	12"	45
6"	6.23 - 7.60	158.2 - 193.0	FC2W-6-L12	4	5/8"	12"	56
8"	8.40 - 9.75	213.3 - 247.6	FC2W-8-L12	4	5/8"	12"	68
10"	10.75 - 12.12	273.0 - 307.8	FC2W-10-L12	6	5/8"	12"	90
12"	12.75 - 14.38	323.8 - 365.25	FC2W-12-L12	6	5/8"	12"	109

^{*} Pipes smaller than the published range may be joined using the FC2W coupling at a reduced pressure rating. Contact Ford Meter Box for details.

Options: For available options, see chart on page M-3.

Ford Insulating Boots

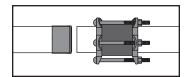
Style FIB

Ford Insulating Boots are used to provide a break in electrical conductivity between metallic pipes in order to control corrosion. The 7" long rubber boot slides over the end of the pipe and prevents contact with adjoining pipe. The FIB adds .25" to the outside diameter of the pipe which is important to consider when ordering couplings.

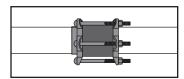
Material Specifications: SBR Rubber per ASTM D2000.



The Ford FIB



Place the FIB on one pipe end and the coupling on the adjoining pipe



Complete the installation according to the coupling instructions.

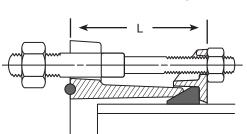
Nom. Pipe Size	PIPE O.D.	CATALOG NUMBER	Approx. Wt. Lbs.
4"	4.80	FIB-480	0.7
6"	6.90	FIB-690	1.0
8"	9.05	FIB-905	1.3
10"	11.10	FIB-1110	1.6
12"	13.20	FIB-1320	1.9

Note: Additional sizes built to the same specification are available upon request.

Ford Flanged Coupling Adapters

Style FFCA





Ford Flanged Coupling Adapters are used to join plain end pipe to flanged fittings. The FFCA is designed without pipe stops and can slide completely over the pipe to allow for clearance. The adapter is furnished with HSLA tee-head bolts and/or ductile iron cross bolts. The flange has a built-in O-ring gasket. Larger, fabricated steel flanged coupling adapters are detailed in Catalog Section N.

Material Specifications:

Body - Ductile iron per ASTM A536 Grade 65-45-12.
 End Rings - Ductile iron per ASTM A536 Grade 65-45-12.

3. Coupling Gasket - SBR per ASTM D2000.

4. Cross Bolts,

T-Bolts & Nuts - High strength low alloy steel per AWWA C111/ASTM A242.

Optional blue fluorocarbon coating.

5. Finish - Shop coat. Optional fusion bonded epoxy coating is

available upon request.

6. Flange - Drilling per ANSI/AWWA C110/A21.10, AWWA C207 Class D

and per ANSI B16.1 Class 125.

7. Flange O-Ring - NBR (Buna-N).

8. Anchor Studs - (optional) C1141 cold rolled steel.

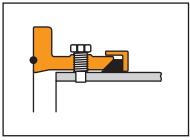
Caution: Restrain if necessary to provide thrust resistance. Flexible couplings do not prevent axial pipe movement. See anchor stud options below. See Catalog Section U for restrained couplings.

Style FFCA Flanged Coupling Adapters

NOMINAL PIPE SIZE	PIPE O.D. RANGE	CATALOG Number	END RING COLOR CODE	APPROX. ASSEMBLED LENGTH (L)	APPROX. WEIGHT LBS.	OPTIONAL ANCHOR STUDS	Cross Bolts	No. AND SIZE OF T-BOLTS CATALOG NUMBER			
3"	3.45-3.60 3.70-3.88 3.91-4.06 4.07-4.20	FFCA-360 FFCA-388 FFCA-406 FFCA-420	Red Black Black White/Gray	3-7/8"	18 18 18 18	2	4 5/8" x 5/8" FCBN-58-58	N/A			
4"	4.45-4.60 4.70-4.91 4.92-5.16 5.17-5.32	FFCA-460 FFCA-491 FFCA-516 FFCA-532	Red Black Black White/Gray	3-1/2"	22 22 22 22	2	4 5/8" x 5/8" FCBN-58-58	4 5/8" FTBN-58-3			
6"	6.54-6.76 6.81-7.12 7.17-7.37 7.37-7.60	FFCA-676 FFCA-712 FFCA-737 FFCA-760	Red Black Black White/Gray	4-1/8"	34 34 34 34	2	4 3/4" x 5/8" FCBN-34-58	4 3/4" FTBN-34-35			
8"	8.50-8.75 8.76-9.17 9.22-9.50 9.49-9.79	FFCA-875 FFCA-917 FFCA-950 FFCA-979	Red Black Black White/Gray	4-3/16"	45 45 45 45	4	8 3/4" x 5/8" FCBN-34-58	N/A			
10"	10.69-10.85 11.04-11.40	FFCA-1085 FFCA-1140	Red Black	4-13/16"	55 55	4	12 7/8" x 5/8" FCBN-78-58	N/A			
12"		Use FCA located in catalog section N									

Note: End rings for FFCAs are not interchangeable with the balance of the Ford coupling system. For fabricated or larger flange coupling adapters, see Catalog Section N.

Optional Anchor Studs (C1141 cold rolled steel)



(Use of anchor studs requires field drilling of pipe.)

Optional anchor studs provide restraint against axial pipe movement. For use on ductile iron or steel pipe. See table above for optional stud quantities.

Optional anchor studs: For two studs add "-AS2" to the catalog number. For four studs add "-AS4" to the catalog number.

Example: FFCA-712-AS2

Ford Cut-In Couplings

Style FRR



Designed Specifically for Cut-In Applications

Ford FRR cut-in couplings are commonly used to replace leaking couplings that require removal or join pipe where the sections can't be moved or it is difficult or undesirable to replace a section of pipe.

The three-piece sleeve allows disassembly for installation through the space between two existing stationary pipe ends where a solid body coupling would not fit.

Material Specifications:

1. Center Sleeve - ASTM A36 steel.

2. Repair Ring - Ductile iron per ASTM A536 or carbon steel per ASTM A36.

3. End Rings - Ductile iron per ASTM A536 Grade 65-45-12.

4. Gaskets - NBR (Buna-N) per ASTM D2000.

5. Bolts - High strength low alloy steel per ASTM A242 and AWWA C111.
 6. Finish- Shop coat. Optional epoxy coating is available upon request.

Caution: Restrain if necessary to provide thrust resistance. Flexible couplings do not prevent axial pipe movement. See Catalog Section U for restrained couplings.

Style FRR Ford Cut-In Coupling

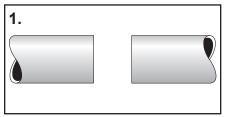
Marra Diana	D 0 D	0	A	David Alice	D N	N	M D	M	
Nom. PIPE	PIPE O.D.	CATALOG	APPROX.	BOLT AND NUT	BOLT AND NUT	NUMBER OF BOLTS	MINIMUM PIPE	MAXIMUM PIPE	
SIZE	RANGE	Number	Wt. Lbs.	CATALOG NUMBER	Size	REQUIRED	SEPARATION	SEPARATION*	
4"	4.80-5.14	FRR-514	38	FBN-58-155	5/8"x15-1/2"	3	5.25"	7-3/4"	
4	5.15-5.57	FRR-557	38	FDIN-30-133	3/6 X 13-1/2	3	5.25	7-3/4	
6"	6.90-7.20	FRR-720	61	FBN-58-155	5/8"x15-1/2"	4	5.25"	7-3/4"	
O	7.21-7.56	FRR-756	61	FDIN-30-133	5/6 X 13-1/2	4	5.25	1-3/4	
8"	9.05-9.40	FRR-940	82	EDN 50 455	5/8"x15-1/2"	_	E 05"	7-3/4"	
0	9.40-9.74	FRR-974	82	FBN-58-155	5/6 X 13-1/2	5	5.25"	7-3/4	
	11.10-11.40	FRR-1140	105						
10"	11.42-11.77	FRR-1177	105	FBN-58-175	5/8"x17-1/2"	6	6.25"	9-3/4"	
	11.77-12.12	FRR-1212	105						
	13.20-13.50	FRR-1350	135						
12"	13.69-14.04	FRR-1404	135	FBN-58-175	5/8"x17-1/2"	7	6.25"	9-3/4"	
	14.03-14.38	FRR-1438	135]					

^{*} Maximum pipe separation is dependent on the pipe material and the centering of the coupling.

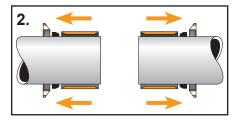
Note: A repair ring can be manufactured for any size 4" through 12". FC2A listed on page M-7.

Options: For available options, see chart on page M-3.

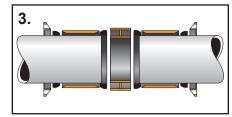
Installation Instructions



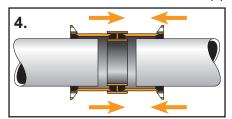
1. Clean each end of the pipe to ensure a watertight seal.



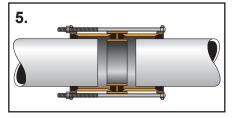
2. Slide the two end rings, end ring gaskets and sleeves over the exposed ends of the pipes as shown above.



3. Place the cut-in sleeve gaskets and cut-in sleeve into position.



4. Slide the end rings, end ring gaskets and sleeves toward the cut-in sleeve, making sure all components are properly positioned.



5. Insert the bolts and tighten nuts evenly to 60-70 ft-lb in an incremental and alternating sequence to ensure the end rings remain parallel.

Ford End Cap Couplings



The FEC Ford End Cap Coupling is provided with a 2" female iron pipe threaded boss (less the pipe plug). The boss is located in the center as standard; optional locations are available. Blind end caps may be furnished upon request.

Material Specifications:

Center Sleeve - Ductile iron per ASTM A536, Grade 65-45-12.
 End Rings - Ductile iron per ASTM A536, Grade 65-45-12.

Gaskets - NBR (Buna-N) per ASTM D2000.

4. End Cap - Carbon steel per ASTM A36 with 2" female iron pipe threaded boss.
 5. Bolts - High strength low alloy steel per ASTM A242 and AWWA C111.
 6. Finish - Shop coat. Optional epoxy coating is available upon request.

Caution: Restrain if necessary to provide thrust resistance. Flexible couplings do not prevent axial pipe movement. See Catalog Section U for restrained couplings.

Nom. PIPE	PIPE O.D.	CATALOG	APPROX.	END CAP ONLY (II	NCLUDES GASKET)	NUMBER OF BOLTS
SIZE	RANGE	Number	Wt. Lbs.	FC1 COUPLING	FC2A COUPLING	REQUIRED
4"	4.00 4.50 4.80-5.14 5.15-5.57	FEC-400 FEC-450 FEC-514 FEC-557	21	FEC1-4	FEC2-4	3
6"	6.00 6.63 6.90-7.20 7.21-7.56	FEC-600 FEC-663 FEC-720 FEC-756	31	FEC1-6	FEC2-6	4
8"	8.00 8.63 9.05-9.40 9.40-9.74	FEC-800 FEC-863 FEC-940 FEC-974	41	FEC1-8	FEC2-8	5
10"	11.10-11.40 11.77-12.12	FEC-1140 FEC-1212	55	FEC1-10	FEC2-10	6
12"	13.20-13.50	FEC-1350	66	FEC1-12	FEC2-12	7

Note: Larger fabricated end cap couplings are listed in Section "N".

Options: For available options, see chart on page M-3.

Ford End Cap for Ultra-Flex Wide Range Couplings





The FC2W-EC Ford End Cap Coupling is provided with a 2" female iron pipe threaded boss (less the pipe plug). The boss is located in the center as standard; optional locations are available on 10" and 12" end caps.

Material Specifications:

Center Sleeve - Ductile iron per ASTM A536, Grade 65-45-12.
 End Rings - Ductile iron per ASTM A536, Grade 65-45-12.

3. Gaskets - NBR (Buna-N) per ASTM D2000.

4. End Cap - Ductile iron per ASTM A536, Grade 65-45-12 or carbon steel per ASTM A36.

5. Bolts - High strength low alloy steel per ASTM A242 and AWWA C111.

6. Finish - Sleeve and end rings are epoxy coated. 4", 6" and 8" e-coat epoxy end caps

10" and 12" epoxy coated end caps

Nom. PIPE SIZE	PIPE O.	D. RANGE	CATALOG NUMBER	APPROX WT. LBS.	END CAP ONLY	END CAP WT. LBS.	
NOM. PIPE SIZE	INCHES	Millimeters	CAIALOG NUMBER	APPROX WI. LBS.	END CAP ONLY	END CAP WI. LBS.	
4"	3.96-5.60	100.5 - 142.2	FC2W-4-EC	44	FECW-4	9	
6"	6.23-7.60	158.2 - 193.0	FC2W-6-EC	57	FECW-6	13	
8"	8.40-9.75	213.3 - 247.6	FC2W-8-EC	75	FECW-8	23	
10"	10.77-12.12	273.0 - 307.8	FC2W-10-EC	138	FECW-10	62	
12"	12.75-14.38	323.8 - 365.25	FC2W-12-EC	178	FECW-12	80	

Ford Ultra-Flex Long Sleeve Wide Range Couplings

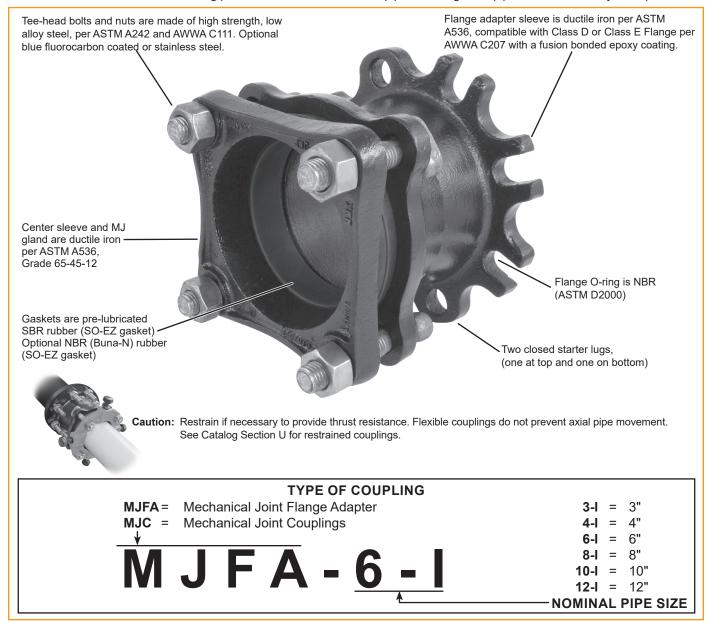
Style FC2W-EC (12" Long)

Non Dine Com	PIPE OD RANGE		Carra on Name	SLEEVE	A W - 1	F C O	END CAP WT. LBS.	
Nom. PIPE SIZE	INCHES	MILLIMETERS	CATALOG NUMBER	LENGTH	Approx. Wt. Lbs.	END CAP ONLY	END CAP WI. LBS.	
4"	3.96 - 5.60	100.5 - 142.2	FC2W-4-L12-EC	12"	54	FECW-4	9	
6"	6.23 - 7.60	158.2 - 193.0	FC2W-6-L12-EC	12"	69	FECW-6	13	
8"	8.40 - 9.75	213.3 - 247.6	FC2W-8-L12-EC	12"	91	FECW-8	23	
10"	10.75 - 12.12	273.0 - 307.8	FC2W-10-L12-EC	12"	152	FECW-10	62	
12"	12.75 - 14.38	323.8 - 365.25	FC2W-12-L12-EC	12"	189	FECW-12	80	

Ford Flange Adapter

Style MJFA

Ford offers a true stab fit for connecting plain end steel sized or ductile pipe to a flange end pipe with the MJFA style adapter.



- No dissassembly required
- Fits steel-to-ductile nominal pipe with no modification

Component Specifications:

Flange O-ring:

Flanged Adapter Sleeve: Ductile iron per ASTM A536, bolting up to Class D or Class E flange, per AWWA C207

with a fusion bonded epoxy coating. NBR (Buna-N per ASTM D2000).

Tee-head Bolts and Nuts: High strength low alloy steel, per ASTM A242 and AWWA C111

Optional: Blue fluorocarbon coated or stainless steel

MJ Gland: Black e-coat epoxy, ductile iron per ASTM A536
Gasket: Pre-lubricated SBR rubber (SO-EZ gasket)

Optional: NBR (Buna-N) rubber (SO-EZ gasket) required for sewer applications.

Pressure Rating for C900 PVC, IPS PVC, C909 PVC and SDR35 Sewer Pipe

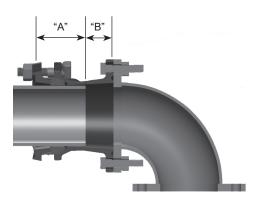
C900			ASTM	D2241	C909	SDR35
DR25 DR18 DR14		SDR26	SDR21	PC150		
165 PSI	235 PSI	305 PSI	160 PSI	200 PSI	150 PSI	PS> 46 PSI

Ford Mechanical Joint Flange Adapter

Style MJFA



The Ford Mechanical Joint Flange Adapter, style MJFA provides a stab fit for connecting plain end pipe to a flange end pipe. The MJFA adapter can be used on ductile iron pipe, steel, PVC, or SDR35 sewer pipe applications. There is a 2" or more pipe insertion adjustment, which allows for uneven size cuts and pipe deflection with a maximum pipe deflection of 5° for 4"- 8" and 3° for 10"- 12".



MJFA for Ductile Iron, C900, IPS PVC, Steel, C909 and **SDR35 Sewer Pipe

NOMINAL PIPE SIZE	PIPE O.D.	CATALOG NUMBER	DIMENSION "A" MINIMUM PIPE INSERTION	DIMENSION "B" PIPE ADJUSTABILITY	MAX. DEFLECTION ALLOWANCE	BOLT AND NUT CATALOG NUMBER	NUMBEROF BOLTS AND NUTS	Size of Bolts and Nuts	APPROX. WEIGHT LBS.
3"	3.50 - 3.96	MJFA-3-I	*3-7/8"	*1-7/8"	5°	TB-58-3	4	5/8" x 3"	15
4"	4.21 - 4.80	MJFA-4-I	*4-3/8"	*2"	5°	TB-34-4	4	3/4" x 4"	17
6"	6.27 - 6.90	MJFA-6-I	*4-5/8"	*2-7/8"	5°	TB-34-4	6	3/4" x 4"	34
8"	8.40 - 9.05	MJFA-8-I	*4-11/16"	*3"	5°	TB-34-412	6	3/4" x 4-1/2"	41
10"	10.50 - 11.10	MJFA-10-I	*4-11/16"	*3-3/8"	3°	TB-34-412	8	3/4" x 4-1/2"	56
12"	12.50 - 13.20	MJFA-12-I	*4-11/16"	*3-5/8"	3°	TB-34-412	8	3/4" x 4-1/2"	74

^{*} Not accounting for beveled, unsquare or deflected pipe ends.

Ford Series MJFA Flange Adapter with Flange Bolt

Nominal	PIPE O.D.	CATALOG	APPROX.	CATALOG NUMBER		Г-Востѕ	CATALOG NUMBER FLANGE	FL	FLANGE BOLTS	
PIPE SIZE		Number	WEIGHT LBS.	BOLTS AND NUTS	QTY.	Size	BOLTS AND NUTS	QTY.	Size	
3"	3.50 - 3.96	MJFA-3A-I	21	TB-58-3	4	5/8" x 3"	FBN-58-212	4	5/8" x 2-1/2"	
4"	4.21 - 4.80	MJFA-4A-I	25	TB-34-4	4	3/4" x 4"	FBN-58-212	8	5/8" x 2-1/2"	
6"	6.27 - 6.90	MJFA-6A-I	43	TB-34-4	6	3/4" x 4"	FBN-34-234	8	3/4" x 2-3/4"	
8"	8.40 - 9.05	MJFA-8A-I	50	TB-34-412	6	3/4" x 4-1/2"	FBN-34-234	8	3/4" x 2-3/4"	
10"	10.50 - 11.10	MJFA-10A-I	69	TB-34-412	8	3/4" x 4-1/2"	FBN-78-3	12	7/8" x 3"	
12"	12.50 - 13.20	MJFA-12A-I	76	TB-34-412	8	3/4" x 4-1/2"	FBN-78-312	12	7/8" x 3-1/2"	

Note: For available options, see table on page M-3.

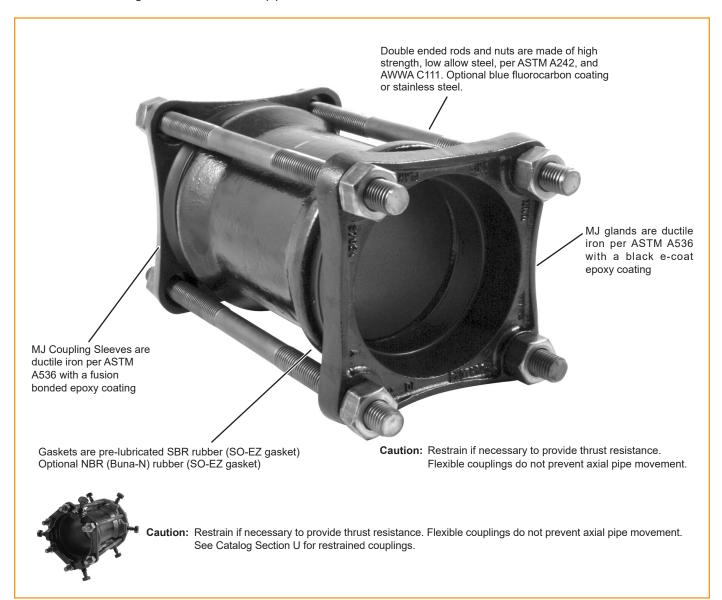
Caution: The MJFA is an unrestrained coupling and does not provide protection against possible pipe pullout. If restraint is required, the RFAD style coupling should be used on ductile iron applications. Restraint applications for C900, IPS PVC, steel, C909 or SDR35 pipe should use the RFAP style coupling (See Catalog Section U for restrained coupling options).

^{**} NBR (Buna-N) required for sewer applications. Add "-N" to the catalog number. Example: MJFA-6-N-I

Ford Mechanical Joint Coupling

Style MJC

Joining plain end pipe is so easy when using Ford's MJC coupling. The standard coupling includes the SO-EZ gasket that permits a stab fit for a wide range within a nominal size pipe.



Component Specifications:

MJ Coupling Sleeve: Ductile iron per ASTM A536 with fusion-bonded epoxy

Double-ended Rods and Nuts: High strength low alloy steel per ASTM A242 and AWWA C111

Optional: blue fluorocarbon coated or stainless steel

MJ Gland:

Black e-coated, ductile iron per ASTM A536

Gasket:

Pre-lubricated SBR rubber (SO-EZ gasket)

** Optional: NBR (Buna-N) rubber (SO-EZ gasket) required for sewer applications.

Pressure Rating for C900, IPS PVC, C909 and **SDR35 Sewer Pipe

C900			ASTM	D2241	C909	SDR35
DR25	DR18	DR14	SDR26	SDR21	PC150	
165 PSI	235 PSI	305 PSI	160 PSI	200 PSI	150 PSI	PS≥ 46 PSI

Ford Mechanical Joint Coupling



Joining plain end pipe is so easy when using Ford's MJC coupling. The standard coupling includes the SO-EZ gasket that permits a stab fit for a wide range within a nominal size pipe.

The MJC coupling has a 2:1 safety factor at the full rated pressure of the pipe on which it is installed.

Caution: Restrain if necessary to provide thrust resistance. Flexible couplings do not prevent axial pipe movement. See Catalog Section U for restrained couplings

Style MJC Coupling for Ductile Iron, C900, IPS, Steel, C909 and **SDR35 Sewer Pipe

Nominal		C1711.00	Managemen	MAXIMUM	Rods	AND NUTS	APPROX.
PIPE	PIPE O.D.*	NUMBER	NUMBER PIPE INSERTION DEFLECTION		QTY.	Size	WEIGHT
SIZE		NUMBER	PIPE INSERTION	ALLOWANCE	QII.	SIZE	LBS.
3"	3.50 - 3.96	MJC-3-U	*4"	5°	4	5/8" x 14"	21
4"	4.21 - 4.80	MJC-4-I	*4-5/8"	5°	4	3/4" x 14"	25
6"	6.27 - 6.90	MJC-6-I	*4-3/4"	5°	6	3/4" x 14"	43
8"	8.40 - 9.05	MJC-8-I	*4-13/16"	5°	6	3/4" x 14"	50
10"	10.50 - 11.10	MJC-10-I	*4-7/8"	5°	8	3/4" x 14"	69
12"	12.50 - 13.20	MJC-12-I	*4-7/8"	5°	8	3/4" x 14"	76

^{*} Not accounting for beveled, unsquare or deflected pipe ends.

Note: For available options, see table on page M-3.

I = Import Casting U = Domestic Casting

Component Parts for Style MJC Couplings

NOMINAL PIPE SIZE	***SLEEVEKITS	MJ COUPLING SLEEVE CATALOG NUMBER	Gasket Catalog Number	ROD CATALOG NUMBER	Rod Size	NUMBER OF RODS	Nuts	NUMBER OF NUTS
3"	RCAK-3	MJCS-3-U	SO-EZ-3	DER-58-14	5/8" x 14"	4	HHN-58	8
4"	RCAK-4	MJCS-4-I	SO-EZ-4	DER-34-14	3/4" x 14"	4	HHN-34	8
6"	RCAK-6	MJCS-6-I	SO-EZ-6	DER-34-14	3/4" x 14"	6	HHN-34	12
8"	RCAK-8	MJCS-8-I	SO-EZ-8	DER-34-14	3/4" x 14"	6	HHN-34	12
10"	RCAK-10	MJCS-10-I	SO-EZ-10	DER-34-14	3/4" x 14"	8	HHN-34	16
12"	RCAK-12	MJCS-12-I	SO-EZ-12	DER-34-14	3/4" x 14"	8	HHN-34	16

^{***} Includes center sleeve, rods, nuts and bolts.

^{**} NBR (Buna-N) gasket required for sewer applications.

Larger fabricated sizes are available, contact factory for more information.

Installation Instructions

Ford FC2W Ultra-Flex Coupling

FC2W Ultra-Flex Installation Instructions

CAUTION

- Ultra-Flex couplings do not restrain axial movement of pipe.
- Ultra-Flex couplings are designed to float on pipe ends and are not designed to support the pipe. Block and shim as necessary.

INSTALLATION INSTRUCTIONS

- 1. Measure the outside diameter of each pipe end to be joined to ensure they are within the coupling range.
- 2. Thoroughly clean each pipe end to a smooth, bare sealing surface.
- 3. Stab each pipe end into the Ultra-Flex coupling. For ease of installation, it may be necessary to loosen the nuts when assembling on larger O.D. pipes. Disassembly of the coupling is not required. NOTE: <u>Do not lubricate the pipe OD or the gasket</u>. If the coupling is disassembled, lubricate only the contoured lip on each end of the coupling sleeve prior to reassembly.
- 4. Center the coupling between the two pipe ends. The optimum pipe end gap for the Ultra-Flex coupling is less than 1".
- **5.** Evenly tighten bolts in an alternating sequence, being certain that end rings remain parallel to one another. Tighten bolts to the recommended torque shown in the table below. Use of a torque wrench is highly recommended and required to ensure proper torque.

Recommended Bolt Torque

Nominal Coupling Size Torque

3" - 10" 50 ft-lb

12" and 16" 75 ft-lb

6. Restrain if necessary. Test and recheck bolt torque before backfilling. If a leak develops during testing, recheck bolt torque. Be advised that extreme torque can overstress coupling components.

Installation Instructions

Ford Flexible Couplings

CAUTION

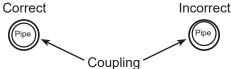
- Flexible couplings do not restrain axial movement of pipe.
- Flexible couplings are designed to float on pipe ends and are not designed to support the pipe.

INSTALLATION INSTRUCTIONS

- 1. Measure pipe O.D. to ensure it is within the coupling range.
- 2. Thoroughly clean each pipe end to a smooth, bare surface sufficiently longer than coupling length.
- 3. Slide the proper end ring onto each pipe end.
- 4. Lubricate the pipe ends and the gaskets before assembly to assist proper gasket seating. Use a non-petroleum based lubricant (suitable for potable water). In cold conditions, warm gasket to room temperature before installation to improve elasticity.
- 5. Place the proper gasket on each pipe end with the beveled edge facing the pipe end.
- 6. Slide center sleeve onto one pipe end, then center the sleeve over the pipe ends.

Sleeve Length	5"	6"	7"	10"
Optimum Pipe End Gap	.50"	.50"	1.00"	1.00"

Extremely Important: Block and shim pipe ends and coupling as needed to ensure that the coupling remains at an equal distance from the pipe circumference.

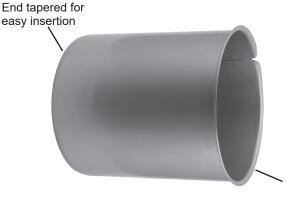


8. Push gaskets (by hand) into center sleeve evenly. Position end rings against the gaskets. Insert and tighten all bolts finger tight. Evenly tighten bolts in an alternating sequence, being certain that end rings remain parallel to one another. Use of a torque wrench is highly recommended and required to ensure proper torque.

9. Restrain if necessary. Test and recheck bolt torque before backfilling. If a leak develops during testing, tighten bolts to stop leak; however, extreme torque can overstress coupling components.

Stainless Steel Insert Stiffeners

For HDPE Pipe

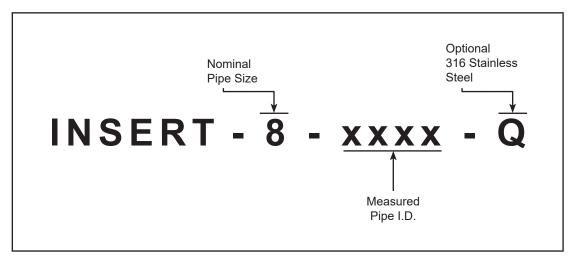


Ford stainless steel insert stiffeners prevent HDPE pipe from losing rigidity on the end while also keeping the gasket or restraint functioning properly on the pipe. With one end tapered and a lip on the other, the solid design is easy to install and can't be over-inserted.

Lip prevents over-insertion

Features:

- Solid design on 6" and larger sizes. 3" and 4" design may be solid or wedged.
- Type 304 stainless steel per ASTM A240 (with optional 316 stainless steel)
- Chemically passivated to restore natural corrosion-resistant state
- Durable, ergonomic design allows for a simple installation and long-lasting life



Nom. PIPE SIZE	*CATALOG NUMBER	LENGTH	GAUGE/THICKNESS	APPROX. WT. LBS.
3"	INSERT-3-xxx	6" - 8"	14	1.7
4"	INSERT-4-xxx	0 - 0	20	1.0
6"	INSERT-6-xxx		18	2.1
8"	INSERT-8-xxx		18	2.8
10"	INSERT-10-xxxx		18	3.5
12"	INSERT-12-xxxx		18	4.1
14"	INSERT-14-xxxx		16	5.7
16"	INSERT-16-xxxx	7-3/8"	16	6.5
18"	INSERT-18-xxxx		16	7.4
20"	INSERT-20-xxxx]	16	8.2
24"	INSERT-24-xxxx]	16	9.6
30"	INSERT-30-xxxx]	12	20.4
36"	INSERT-36-xxxx		12	25.0

^{*} When ordering, the pipe inside diameter is required. For example, when ordering for an 8" pipe with an I.D. of 7.305", the part number is INSERT-8-731.

Contact factory for sizes larger than 36" or high pressure applications.

O.D. Chart

<u>U.i</u>	J. GI										
PIPE	PVC/HDPE (Steel Size)	C900		ILE / CAST	IRON		ASBESTOS-CI Machined End	EMENT Rough Barrel O.D.	STI	EL	COPPER
SIZE	O.D.	O.D.	Pit	Spun	O.D.	Class	O.D.	Min - Max	Type	O.D.	O.D.
1/2"	.84	0.5.	- 11	Opun			G.B.	WIIII WILLX	STD.	.84	.625
3/4"	1.05								STD.	1.05	.875
1"	1.32								STD.	1.32	1.125
1-1/4" 1-1/2"	1.66 1.90								STD. STD.	1.66 1.90	1.375 1.625
2"	2.38				2.50				STD.	2.38	2.125
2-1/2"	2.88				2.00				STD.	2.88	2.625
			Α		3.80	100	3.74	4.00	O.D.	3.00	
3"	3.50		B, C, D	50 - 350	3.96	150	3.84	4.10	STD.	3.50	3.125
3-1/2"						200	3.84	4.29	STD.	4.00	3.625
3-1/2			Α	50 - 350	4.80	100	4.64	4.79 - 5.14		4.00	3.023
4"	4.50	4.80	B, C, D	00 000	5.00	150	4.81	4.97 - 5.27	O.D.		4.125
						200	4.81	5.22 - 5.57	STD.	4.50	
4-1/2"									STD.	5.00	- 10-
5"			Λ	50 - 350	6.00	100	6.91	7.05 7.40	STD.	5.56	5.125
6"	6.63	6.90	A B, C, D,	50 - 350	6.90 7.10	150	6.91	7.05 - 7.40 7.07 - 7.37	O.D.	6.00	6.125
	0.00	0.50	E, F		7.10	200	6.91	7.26 - 7.56	STD.	6.63	0.120
7"			, .				0.0.	7.20 7.00	STD.	7.63	
			A, B,	50 - 300	9.05	100	9.11	9.22 - 9.57	O.D.	8.00	
8"	8.63	9.05	C, D,	350	9.30	150	9.11	9.27 - 9.57	STD.	8.63	
9"			E, F		9.42	200	9.11	9.39 - 9.74	STD.	9.63	
9			A, B,	50 - 200	11.10	100	11.24	11.42 - 11.77			
10"	10.75	11.10	C, D,	250 - 350	11.40	150	11.66	11.82 - 12.12	O.D.	10.00	
			E, F		11.60	200	11.66	11.77 - 12.12	STD.	10.75	
			A, B,	50 - 200	13.20	100	13.44	13.69 - 14.04	O.D.	12.00	
12"	12.75	13.20	C, D,	250 - 350	13.50	150	13.92	14.08 - 14.38	STD.	12.75	
			E, F A, B,	50 - 100	13.76 15.30	200	13.92 15.07	14.03 - 14.38 15.40 - 15.80	010.	12.70	
14"	14.00	15.30	C, D,	150 - 300	15.65	150	16.22	16.38 - 16.73	STD.	14.00	
			E, F	100 000	15.98	200	16.22	16.48 - 16.88	0.2.		
			A, B,	50 - 100	17.40	100	17.14	17.54 - 17.94			
16"	16.00	17.40	C, D,	150 - 300	17.80	150	18.46	18.62 - 18.97	STD.	16.00	
			E, F	FO 400	18.16	200	18.46	18.79 - 19.19			
18"	18.00	19.50	A, B C, D	50 - 100 150 - 250	19.50 19.92	100 150	19.90 20.94	20.44 21.20	STD.	18.00	
10	10.00	19.50		130 - 230	19.92	200	22.18	21.20	510.	10.00	
			A, B,	50 - 100	21.60	100	22.12	22.50			
20"	20.00	21.60	C, D	150 - 250	22.06	150	23.28	23.54	STD.	20.00	
						200	24.66		OTD	00.00	
22"			A, B,	50 - 100	25.80	100	26.48	27.17	STD.	22.00	
24"	24.00	25.80	C, D	150 - 250	26.32	150	27.96	28.22	STD.	24.00	
2-7	24.00	20.00	0, 0	100 200	20.02	200	29.62	20.22	OID.	24.00	
			Α		31.74						
30"	30.00	32.00	В	50 - 350	32.00				STD.	30.00	
	00.00	02.00	С		32.40	-			0.2.	00.00	
			D A		32.74 37.96						
0.0"	20.00	20.22	В	50 - 350	38.30	1			CTD	20.00	
36"	36.00	38.30	С		38.70				STD.	36.00	
			D		39.16						
			<u>А</u> В	50 - 350	44.20 44.50	-					
42"		44.50	С	30 - 330	45.10	1			STD.	42.00	
			D		45.58	1					
			Α		50.50						
48"		50.80	В	50 - 350	50.80				STD.	48.00	
		00.00	С		51.40	-			J.D.	.5.55	
			D A		51.98 56.66					-	
			В		57.10						
54"		57.56		50 - 350	57.56				STD.	54.00	
			С		57.80						
			D	50 0	58.40						
			Λ.	50 - 350	61.61	-					
60"		61.61	A B		62.80 63.40	1			STD.	60.00	
		01.01	C		64.20				0.0.	00.00	
			D		64.82						
								ions listed above are			

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 M

Ford Cast Couplings and Adapters

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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