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Warranty

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Ford Bolted Coupling Numbering System

TYPE OF COUPLING

FC1 = Ductile Iron Coupling

FC2A = Ductile Iron Transition Coupling

FIB = Insulating Boot for Ductile Iron Pipe

and Cast Iron Pipe

FRC = Iron Reducing Coupling

FFCA = Iron Flanged Coupling Adapter

FRR = Cut-in Coupling

FEC = End Cap Coupling

FC2W-EC = Wide Range Coupling with End Cap

OPTIONAL FEATURES FOR FC1 & FC2A COUPLINGS

SH = Type 304 stainless steel nuts & bolts

ESH = Type 304 stainless steel nuts & bolts with epoxy coated coupling

N = NBR (Buna-N) gaskets, alloy bolts & nuts with shop coated coupling

BBN = Blue fluorocarbon coated nuts & bolts

FOR FFCA COUPLING ADAPTERS

AS2 = Two anchor studs

AS4 = Four anchor studs

(316 Stainless Steel Nuts and Bolts available - contact factory)

FC1-663-720-SH

one end

other end

OD SIZE

Use listed catalog sizes

NOTE: For most coupling types each number indicates top end of range, only FC1 and FC2A have an OD size for each coupling end.

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

TYPE OF COUPLING

FC2W = Ductile Iron Wide Range Coupling (Epoxy coated, NBR (Buna-N) gaskets)

FC2W-6-SH

NOMINAL PIPE SIZE -

4 = 4"

6 = 6"

8 = 8"

10 = 10"

12 = 12"

OPTIONAL FEATURES

SH = Type 304 stainless steel nuts and bolts

L12 = 12" long center sleeve

EPDM = EPDM gasket

EC = End Cap with 2" FIP threaded boss

(316 Stainless Steel Nuts and Bolts available - contact factory)

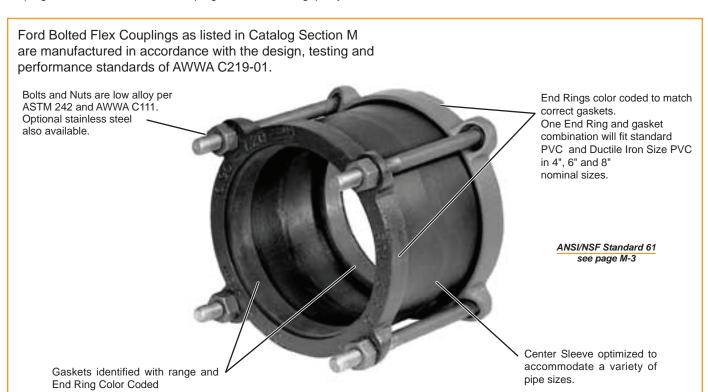
Ford offers more than 10,000 products that are Classified by Underwriters Laboratories Inc. to ANSI/NSF Standard 61. To verify if a product is classified to this Standard, contact the Ford Meter Box Customer Service Department at 260-563-3171 or go to http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm to view our compliant product listings. The UL marking will be on the box label to indicate that the product is classified to the ANSI/NSF Standard 61. Ford Meter Box meets your needs for products that are proven and reliable.



Information

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/or type or different at each coupling end. Ford FC1 and FC2A Couplings offer the following quality features:



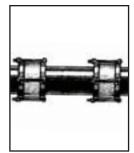
Caution: Restrain if necessary to provide thrust resistance. Flexible couplings do not prevent axial pipe movement.

Specifications:

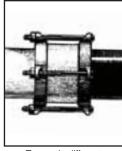
Ford Bolted Flex Couplings as listed in Catalog Section M are manufactured in accordance with the design, testing and performance standards of AWWA C219-01.

- 1. Center Sleeve Cast from Ductile Iron per ASTM A536 65-45-12.
- 2. End Rings Cast from Ductile Iron per ASTM A536 65-45-12. End rings are color coded for easy identification.
- 3. **Gaskets -**SBR rubber per ASTM D2000 90M 4AA 810. 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 epoxy coating is available.

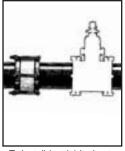
Typical Uses for Ford Cast Couplings



To repair split pipe



To couple different types of pipe



To install (cut-in) hydrants and valves



To connect misaligned pipe





Style FC1 for Cast, Ductile Iron or PVC Pipe

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

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. End rings are color coded to match the color embossed on

Nom.	GASKET	RANGE	END RING		GASKET	RANGE	END RING	CENTER	Number	APPROX.	
PIPE		1st. Half	Color	By		2ND HALF	Color	SLEEVE	OF	WEIGHT	
SIZE		CAT. No.	CODE			CAT. No.	CODE	LENGTH	Bolts	LBS	
2"	2.34 —		Red	>>	2.34 —	2.63	Red	4"	2	6	
2 1/2"	1/2" See 2" FC2A on next page										
	4.00 —	4.00	Red	\setminus \triangle	4.00 —	4.00	Red				
4"	4.50 —	4.80	Red	$\mid \times \mid$	4.50 —	4.80	Red	5"	3	14	
	4.80 —	5.10	Black		4.80 —	5.10	Black				
	6.00 —	6.00	Red	\setminus /	6.00 —	6.00	Red				
6"	6.30 —	6.30	Red	$\mid \bigvee \mid$	6.30 —	6.30	Red	5"	4	20	
O	6.63 —	6.90	Red	$ \wedge $	6.63 —	6.90	Red		4	20	
	6.90 —	7.20	Black	\vee	6.90 —	7.20	Black				
	8.00 —	8.00	Red		8.00 —	8.00	Red		_	20	
8"	8.16 —	8.40	Red	$ \setminus / $	8.16 —	8.40	Red	5"			
0	8.63 —	9.05	Red		8.63 —	9.05	Red	5	5	29	
	9.05 —	9.40	Black		9.05 —	9.40	Black				
	10.20 —	10.50	Red		10.20 —	10.50	Red				
10"	10.75 —	10.75	Red	$\mid \times \mid$	10.75 —	10.75	Red	6"	6	41.5	
	11.10 —	11.46	Black		11.10 —	11.46	Black				
	12.24 —	12.50	Red		12.24 —	12.50	Red				
12"	12.75 —	12.75	Red	$\mid \times \mid$	12.75 —	12.75	Red	6"	7	54.5	
	13.20 —	13.56	Black	$/\setminus$	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.

Options: SH Standard coated coupling with Type 304 stainless steel nuts and bolts: add "-SH" to the catalog number.

Epoxy coated coupling with Type 304 stainless steel nuts and bolts: add "-ESH" to the catalog number.

Blue fluorocarbon coating on HSLA nuts and bolts. Add "-BBN" to catalog number.

NBR (Buna-N) gasket, standard coated coupling and standard alloy bolts. Add "-N" to the catalog number.

Example: FC1-690-720-ESH is an FC1 coupling with epoxy coating and stainless steel nuts and bolts.

Component Parts for Style FC1 Couplings

	•		<u> </u>			
Nom. PIPE SIZE	GASKET CAT. No.	AT. No. 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				
6"	FC1G-600	FC1-RER-6		FBN-58-8		
	FC1G-630	FC1-RER-6	FC1-CS-6			
	FC1G-663-690	FC1-RER-6	FC1-C3-6			
	FC1G-690-720	FC1-BER-6				
	FC1G-800	FC1-RER-8				
8"	FC1G-816-840	FC1-RER-8	FC1-CS-8	FBN-58-8		
0	FC1G-863-905	FC1-RER-8	FC1-C5-6	FDIN-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				
T 0 1	0 1 1 1 1					

To Order: Order by catalog number from the table.

Restrain if necessary to provide thrust resistance.

Flexible couplings do not prevent axial pipe movement.

Ford Transition Couplings

Style FC2A



Rated: 250 psi working pressure (sizes 2" - 12") 150 psi working pressure (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. End Rings are color coded for various pipe sizes per the following chart. 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.

Nom.	GASKET RANGE	END RING		GASKET	RANGE	END RING	CENTER	Number	Approx.
PIPE	1st. Half	Color	By		2ND HALF	Color	SLEEVE	OF	WEIGHT
SIZE	CAT. No.	CODE			CAT. No.	CODE	LENGTH	Востѕ	LBS
	2.30 — 2.45	Black		2.30 —	2.45	Black			
2"	2.40 — 2.65	Black	$\mid \times \mid$	2.40 —	2.65	Black	4"	2	9
	2.65 — 2.88	Black		2.65 —	2.88	Black			
	3.13 — 3.13	Red		3.13 —	3.13	Red			
	3.45 — 3.60	Red	$ \setminus / $	3.45 —	3.60	Red			
3"	3.70 — 3.88	Black	X	3.70 —	3.88	Black	4"	3	14
	3.91 — 4.06	Black		3.91 —	4.06	Black			
	4.07 — 4.20	Black		4.07 —	4.20	Black			
	4.00 — 4.00	Red		4.00 —	4.00	Red			
4"	4.50 — 4.50	Red		4.50 —	4.50	Red	5"	3	16
4	4.80 — 5.14	Black		4.80 —	5.14	Black	5	3	10
	5.15 — 5.57	White/Gray		5.15 —	5.57	White/Gray			
	6.00 — 6.00	Red		6.00 —	6.00	Red			
6"	6.63 — 6.63	Red		6.63 —	6.63	Red	5"	4	24
O	6.90 — 7.20	Black		6.90 —		Black	5	4	24
	7.21 — 7.56	White/Gray		7.21 —	7.56	White/Gray			
	8.00 — 8.00	Red		8.00 —	8.00	Red			
8"	8.63 — 8.63	Red		8.63 —	8.63	Red	5"	5	34
0	9.05 — 9.40	Black		9.05 —		Black	5	5	54
	9.40 — 9.74	White/Gray		9.40 —	9.74	White/Gray			
	10.00 — 10.00	Red		10.00 —	10.00	Red		6	48
	10.75 — 10.75	Red	$ \setminus / $	10.75 —	10.75	Red			
10"	11.10 — 11.40	Black	X	11.10 —		Black	6"		
	11.42 — 11.77	Black		11.42 —	11.77	Black			
	11.77 — 12.12	White/Gray		11.77 —	12.12	White/Gray			
	12.00 — 12.00	Black	\setminus	12.00 —		Black			
	12.75 — 12.75	Black	$ \setminus / $	12.75 —	12.75	Black			
12"	13.20 — 13.50	Black	X	13.20 —	13.50	Black	6"	7	62
	13.69 — 14.04	White/Gray		13.69 —	14.04	White/Gray			
	14.03 — 14.38	White/Gray		14.03 —	14.38	White/Gray			
	15.30 — 15.70	Black	\setminus \angle	15.30 —		Black			
14"	16.00 — 16.35	Red	$\mid \times \mid$	16.00 —		Red	6"	9	83
	16.40 — 16.88	White/Gray		16.40 —		White/Gray			
	17.40 — 17.80	Black	\setminus \angle	17.40 —		Black			
16"	18.45 — 18.97	White/Gray	$\mid \times \mid$	18.45 —	18.97	White/Gray	6"	10	103
	18.90 — 19.20	White/Gray		18.90 —	19.20	White/Gray			
18"	19.50 — 20.00	Black	$\geq \leq$	19.50 —	20.00	Black	7"	11	111
20"	21.60 — 22.06	Black	$\geq \leq$	21.60 —	22.06	Black	7"	12	125
24"	25.80 — 26.32	Black	$\geq <$	25.80 —	26.32	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.

Options: SH Standard coated coupling with Type 304 stainless steel nuts and bolts: add "-SH" to the catalog number.

ESH Epoxy coated coupling with Type 304 stainless steel nuts and bolts: add "-ESH" to the catalog number.

BBN Blue fluorocarbon coating on HSLA nuts and bolts. Add "-BBN" to catalog number.

NBR (Buna-N) gasket, standard coated coupling and standard alloy bolts. Add "-N" to the catalog number.

Example for above options: FC2A-690-720-ESH is an FC2A coupling with epoxy coating and stainless steel nuts and bolts. **Gasket for SDR 35 Sewer Pipe**: Gaskets are available in following sizes: 4.22", 6.23", 8.40", 10.50" and 12.50". Use these sizes as part of the catalog number.

Ford Transition Coupling Parts Style FC2A



Component Parts for Style FC2A Couplings

	component rates for otyle rozz 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					
	FC2AG-230-245	FC2A-BER-2									
2"	FC2AG-240-265	FC2A-BER-2	FC2A-CS-2	FBN-58-65	5/8" x 6-1/2"	2					
	FC2AG-265-288	FC2A-BER-2									
	FC2AG-313	FC2A-RER-3									
	FC2AG-345-360	FC2A-RER-3									
3"	FC2AG-370-388	FC2A-BER-3	FC2A-CS-3	FBN-58-65	5/8" x 6-1/2"	3					
	FC2AG-391-406	FC2A-BER-3									
	FC2AG-407-420	FC2A-BER-3									
	FC2AG-400	FC2A-RER-4									
411	FC2AG-450	FC2A-RER-4	F004 00 4	EDN 50.0	F/0" 0"	0					
4"	FC2AG-480-514	FC2A-BER-4	FC2A-CS-4	FBN-58-8	5/8" x 8"	3					
	FC2AG-515-557	FC2A-WER-4									
	FC2AG-600	FC2A-RER-6									
0"	FC2AG-663	FC2A-RER-6	F004 00 0	EDN 50.0	F/0" 0"	4					
6"	FC2AG-690-720	FC2A-BER-6	FC2A-CS-6	FBN-58-8	5/8" x 8"	4					
	FC2AG-721-756	FC2A-WER-6									
	FC2AG-800	FC2A-RER-8									
0.11	FC2AG-863	FC2A-RER-8	F004 00 0	EDN 50.0	5 (OII OII	_					
8"	FC2AG-905-940	FC2A-BER-8	FC2A-CS-8	FBN-58-8	5/8" x 8"	5					
	FC2AG-940-974	FC2A-WER-8									
	FC2AG-1000	FC2A-RER-10									
	FC2AG-1075	FC2A-RER-10		FBN-58-9	5/8" x 9"						
10"	FC2AG-1110-1140	FC2A-BER-10	FC2A-CS-10			6					
	FC2AG-1142-1177	FC2A-BER-10									
	FC2AG-1177-1212	FC2A-WER-10									
	FC2AG-1200	FC2A-BER-12									
	FC2AG-1275	FC2A-BER-12									
12"	FC2AG-1320-1350	FC2A-BER-12	FC2A-CS-12	FBN-58-9	5/8" x 9"	7					
	FC2AG-1369-1404	FC2A-WER-12									
	FC2AG-1403-1438	FC2A-WER-12									
	FC2AG-1530-1570	FC2A-BER-14									
14"	FC2AG-1600-1635	FC2A-RER-14	FC2A-CS-14	FBN-58-105	5/8"x10-1/2"	9					
	FC2AG-1640-1688	FC2A-WER-14									
	FC2AG-1740-1780	FC2A-BER-16									
16"	FC2AG-1845-1897	FC2A-WER-16	FC2A-CS-16	FBN-58-105	5/8"x10-1/2"	10					
	FC2AG-1890-1920	FC2A-WER-16	1								
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 Ultra-Flex Wide Range Couplings

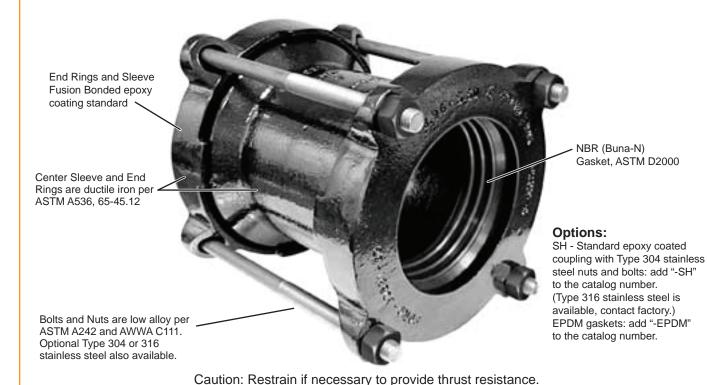
Style FC2W

Ford Ultra-Flex wide range couplings offer convenience, reliability, and inventory reduction. The Ultra-Flex can join virtually any two pipes within a nominal size and is rated for 250 psi working water pressure. 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 on site lubrication is required. The unique curved 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.

- Curved gasket allows for quicker installation.
- 250 psi rated working pressure.



Style FC2W Wide Range Couplings

Flexible couplings do not prevent axial pipe movement.

Nominal	PIPE OI	D RANGE*	CATALOG	Number	Вогт	SLEEVE	APPROX.
PIPE SIZE	INCHES	ММ	NUMBER	OF Bolts	DIAMETER	LENGTH	WEIGHT LBS.
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

^{*} 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: SH Type 304 stainless steel nuts and bolts: add "-SH" to the catalog number.

EPDM EPDM gaskets: add "-EPDM" to the catalog number.

BBN Blue fluorocarbon coating on HSLA nuts and bolts. Add "-BBN" to catalog number.

EC End Cap (see page M-13)

(Contact factory for Type 316 stainless steel nuts and bolts.)

Ford Ultra-Flex Wide Range Coupling Parts

Component Parts for FC2W Couplings

Nominal Pipe	GASKET CATALOG	END RING CATALOG	CENTER SLEEVE CATALOG	CATALOG	BOLT AND NUT	Number of Bolts
SIZE	Number	Number	Number	Number	0.22	REQUIRED
4"	FC2WG-4	FC2W-ER-4	FC2W-CS-4	FBN-58-1125	5/8"x11-1/4"	4
6"	FC2WG-6	FC2W-ER-6	FC2W-CS-6	FBN-58-1125	5/8"x11-1/4"	4
8"	FC2WG-8	FC2W-ER-8	FC2W-CS-8	FBN-58-1125	5/8"x11-1/4"	4
10"	FC2WG-10	FC2W-ER-10	FC2W-CS-10	FBN-58-135	5/8"x13-1/2"	6
12"	FC2WG-12	FC2W-ER-12	FC2W-CS-12	FBN-58-135	5/8"x13-1/2"	6

Ford Ultra-Flex Long Sleeve Wide Range Couplings
Style FC2W-12" Long



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

Style FC2W-12" Long Sleeve Wide Range Couplings

Nominal	MINAL PIPE OD RANGE		CATALOG	Number	Вогт	SLEEVE	APPROX.
PIPE	INCHES	мм	NUMBER	OF DIAMETER		LENGTH	WEIGHT
SIZE	INCILS	IVIIVI	TTOMBER	Bolts	DIAMETER	LLINOTTI	LBS.
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: SH Type 304 stainless steel nuts and bolts: add "-SH" to the catalog number.

EPDM EPDM gaskets: add "-EPDM" to the catalog number.

BBN Blue fluorocarbon coating on HSLA nuts and bolts. Add "-BBN" to catalog number.

EC End Cap (see page M-13)

(Contact factory for Type 316 stainless steel nuts and bolts.)

Component Parts for FC2W-L12 Couplings

NOMINAL PIPE SIZE	GASKET CATALOG NUMBER	END RING CATALOG NUMBER	CENTER SLEEVE CATALOG NUMBER	BOLT AND NUT CATALOG NUMBER	BOLT AND NUT	NUMBER OF BOLTS REQUIRED
4"	FC2WG-4	FC2W-ER-4	FC2W-CS-4-L12	FBN-58-165	5/8"x16-1/2"	4
6"	FC2WG-6	FC2W-ER-6	FC2W-CS-6-L12	FBN-58-165	5/8"x16-1/2"	4
8"	FC2WG-8	FC2W-ER-8	FC2W-CS-8-L12	FBN-58-165	5/8"x16-1/2"	4
10"	FC2WG-10	FC2W-ER-10	FC2W-CS-10-L12	FBN-58-165	5/8"x16-1/2"	6
12"	FC2WG-12	FC2W-ER-12	FC2W-CS-12-L12	FBN-58-165	5/8"x16-1/2"	6

Ford Reducing Coupling

Style FRC



Ford Reducing Couplings are designed to connect different size water main pipes. Maximum pipe differential is one nominal pipe size. Material specifications for Style FRC Reducing Couplings are the same as those for Styles FC1 and FC2A Couplings. See page 4 for details.

Larger, Fabricated Steel Reducing Couplings are detailed in Catalog Section N.

Nom.	GASKET	RANGE	END RING		GASKET RANGE		END RING	Number	APPROX.
PIPE		1st. Half	Color	By		2ND HALF	Color	OF	WEIGHT
SIZE		CAT. No.	CODE			CAT. No.	CODE	Bolts	LBS
	3.95 —	4.05	Red	\setminus	3.45 —	3.60	Red		
	4.45 —	4.60	Red	$ \setminus / $	3.70 —	3.88	Black		
4"x3"	4.80 —	5.00	Black	l X	3.91 —	4.06	Black	4	23
	4.92 —	5.16	Black		4.07 —	4.20	White/Gray		
	5.17 —	5.32	White/Gray	$V \setminus$	_		- '		
	5.95 —	6.05	Red		3.95 —	4.05	Red		
	6.54 —	6.76	Red	$ \setminus / $	4.45 —	4.60	Red		
6"x4"	6.91 —	7.12	Black	ΙX	4.70 —	4.91	Black	5	37
	7.17 —	7.37	Black	/ \	4.92 —	5.16	Black		
	7.37 —	7.60	White/Gray	\bigvee	5.17 —	5.32	White/Gray		

To order: Locate the gasket range that accommodates your pipe O.D. for both types of pipe. Use the top

range of each gasket size to identify the part number. For example: to connect pipe with an O.D. of

6.63 to a pipe with an O.D. of 4.50, the catalog number is FRC-676-460.

Caution: Restrain if necessary to provide thrust resistance. Flexible couplings do not prevent axial

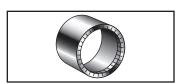
pipe movement.

Ford Insulating Boots

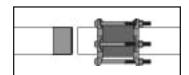
Style FIB

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 and this is important to consider when ordering accompanying fittings.

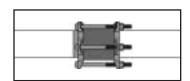
Material Specifications: NBR (Buna-N) Rubber per ASTM D2000.



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.

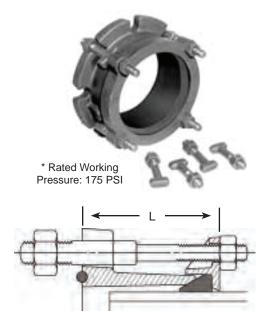
Nom. Pipe Size	PIPE O.D.	CATALOG NUMBER	APPROX. WT. LBS.
4"	4.80	FIB-480	.7
6"	6.90	FIB-690	1.0
8"	9.05	FIB-905	1.3
10"	11.10	FIB-1110	1.6
12"	13.20	FIB-1320	1.9

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

ANSI/NSF Standard 61 see page M-3

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:

- 1. **Body** Ductile Iron per ASTM A536 65-45-12.
- 2. End Rings Ductile Iron per ASTM A536 65-45-12.
- 3. Coupling Gasket SBR per ASTM D2000.
- 4. Cross Bolts,

T-Bolts & Nuts - High Strength Low Alloy Steel per AWWA C-111 or Ductile Iron per ASTM A536, 65-45-12. Optional blue fluorocarbon coating.

- Finish Shop coat. Optional epoxy coating is available upon request.
- Flange Drilling per ANSI/AWWA C110/A21.10, AWWA C207 and per ANSI B16.1 Class 125.
- 7. Flange O-Ring NBR (Buna-N).
- 8. Optional Anchor

Studs - C1141 cold rolled steel or Type 416 stainless steel.

*Caution: Restrain if necessary to provide thrust resistance. Flexible couplings do not prevent axial pipe movement. See Anchor Stud options below.

Style FFCA Flanged Coupling Adapters

Nominal Pipe	PIPE O.D. RANGE	CATALOG Number	END RING COLOR	APPROX. ASSEMBLED	APPROX. WEIGHT	OPTIONAL ANCHOR	No. AND SIZE OF CROSS BOLTS	No. AND SIZE OF T-BOLTS			
SIZE	O.D. ITAROL	NOMBLK	CODE	LENGTH (L)	LBS.	STUDS	CATALOG NUMBER	CATALOG NUMBER			
	3.45-3.60	FFCA-360	Red		18		4				
3"	3.70-3.88	FFCA-388	Black	3-7/8"	18	2	4 5/8" x 5/8"	N/A			
3	3.91-4.06	FFCA-406	Black	3-1/6	18	2	FCBN-58-58	IN/A			
	4.07-4.20	FFCA-420	White/Gray		18						
	4.45-4.60	FFCA-460	Red		22		4	4			
4"	4.70-4.91 FFCA-4 9	FFCA-491	Black	3-1/2"	22	2	5/8" x 5/8" FCBN-58-58	5/8"			
4.92-5.	4.92-5.16	FFCA-516	Black	3-1/2	22						
	5.17-5.32	FFCA-532	White/Gray		22		FCDIN-30-30	FTBN-58-3			
	6.54-6.76	FFCA-676	Red		34		4	4			
6"	6.81-7.12	FFCA-712	Black	4-1/8"	34	2	3/4" x 5/8"	3/4"			
O	7.17-7.37	FFCA-737	Black	4-1/0	34		FCBN-34-58	FTBN-34-35			
	7.37-7.60	FFCA-760	White/Gray		34		FCDIN-34-36	F I DIN-34-33			
	8.50-8.75	FFCA-875	Red		45		8				
8"	8.76-9.17	FFCA-917	Black	4-3/16"	45	4	3/4" x 5/8"	N/A			
0	9.22-9.50	FFCA-950	Black	4-3/16	45	4	FCBN-34-58	IN/A			
	9.49-9.79	FFCA-979	White/Gray		45		FCDIN-34-36				
	10.69-10.85	FFCA-1085	Red		55		12				
10"	11.04-11.40	FFCA-1140	Black	4-13/16"	55	4	7/8" x 5/8"	N/A			
	11.0111.40	11.07.1140	Bidok				FCBN-78-58				
12"	12.72-12.84 FFCA-1284		Red		63		12				
	13.14-13.56	FFCA-1356	Black	4-3/4"	63	4	7/8" x 5/8"	N/A			
	13.14-13.30	13.14-13.50 FFCA-1356					FCBN-78-58				

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 or Type 416 stainless 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 Style FRR Cut-in Couplings allow the joining of pipe where the gap between the pipe ends is greater than normal. This fitting is commonly used to replace leaking couplings that require removal.

The three-piece steel sleeve allows disassembly for installation through the space between two existing stationary pipe ends.

Material Specifications:

- Sleeve Ductile Iron per ASTM A536, 65-45-12. Repair Ring Ductile Iron per ASTM A536 or steel per ASTM A36.
- End Rings Ductile Iron per ASTM A536, 65-45-12. 3.
- Gaskets NBR (Buna-N) per ASTM D2000.
- Bolts High strength low alloy per ASTM A242 and AWWA C111.
- Finish- Shop coat. Optional epoxy coating is available upon request.

Style FFR Ford Cut-In Coupling

Nom. PIPE	PIPE O.D.	CATALOG	APPROX.	BOLT AND NUT	BOLT AND NUT	NUMBER OF BOLTS				
SIZE	RANGE	Number	Wt. Lbs.	CATALOG NUMBER	Size	REQUIRED				
4"	4.80-5.14	FRR-514	38	FBN-58-155	5/8"x15-1/2"	3				
	5.15-5.57	FRR-557	38	LDIA-20-122	3/6 X 13-1/2					
6"	6.90-7.20	FRR-720	61	FBN-58-155	5/8"x15-1/2"	4				
6"	7.21-7.56	FRR-756	61	LDIA-20-122	3/6 X 13-1/2					
8"	9.05-9.40	FRR-940	82	EDN 50 455	E/0"v4E 4/0"	F				
8	9.40-9.74	FRR-974	82	FBN-58-155	5/8"x15-1/2"	5				
	11.10-11.40	FRR-1140	105							
10"	11.42-11.77	FRR-1177	105	FBN-58-175	5/8"x17-1/2"	6				
	11.77-12.12	FRR-1212	105							
12"	13.20-13.50	FRR-1350	135							
	13.69-14.04	FRR-1404	135	FBN-58-175	5/8"x17-1/2"	7				
	14.03-14.38	FRR-1438	135							

Note: A repair ring can be manufactured for any size 4" through 12" FC2A listed on page 6.

Caution: Restrain if necessary to provide thrust resistance. Flexible couplings do not prevent axial pipe movement.

Options: SH Standard coated coupling with Type 304 stainless steel nuts and bolts: add "-SH" to the catalog number.

ESH Epoxy coated coupling with Type 304 stainless steel nuts and bolts: add "-ESH" to the catalog number.

BBN Blue fluorocarbon coating on HSLA nuts and bolts. Add "-BBN" to catalog number.

Example for above options: FRR-720-ESH is an FRR coupling with epoxy coating and stainless steel nuts and bolts.

Ford End Cap Couplings

Style FEC



The Ford End Cap Coupling, Style FEC, is provided with 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. For Blind End Cap add "-BEC" to the catalog number. Example: FEC-863-BEC.

Material Specifications:

- 1. Sleeve Ductile Iron per ASTM A536, 65-45-12.
- 2. End Rings Ductile Iron per ASTM A536, 65-45-12.
- 3. Gaskets NBR (Buna-N) per ASTM D2000.
- 4. End Cap Steel with 2" female iron pipe threaded boss.
- 5. Bolts High strength low alloy per ASTM A242 and AWWA C111.
- 6. Finish Shop coat. Optional epoxy coating is available upon request.

Nom. PIPE	PIPE O.D.	CATALOG	APPROX.	END CAP ONLY	Number of Bolts		
SIZE	RANGE	Number	WT. LBS.	FC1 Coupling	FC2A COUPLING	REQUIRED	
_	4.00	FEC-400					
4"	4.50	FEC-450	21	FEC1-4	FEC2-4	3	
4	4.80-5.14	FEC-514	21	FEC1-4		٥	
	5.15-5.57	FEC-557					
	6.00	FEC-600					
6"	6.63	FEC-663	31	FEC1-6	FEC2-6	4	
	6.90-7.20	FEC-720	31			4	
	7.21-7.56	FEC-756					
	8.00	FEC-800					
8"	8.63	FEC-863	41	FEC1-8	FEC2-8	5	
O	9.05-9.40	FEC-940	41	FECT-0	FL02-0]	
	9.40-9.74	FEC-974					
10"	11.10-11.40	FEC-1140	55	FEC1-10	FEC2-10	6	
	11.77-12.12	FEC-1212	55	FEC1-10	FL02-10	0	
12"	13.20-13.50	FEC-1350	66	FEC1-12	FEC2-12	7	

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

Caution: Restrain if necessary to provide thrust resistance. Flexible couplings do not prevent axial pipe movement.

Options: SH Standard coated coupling with Type 304 stainless steel nuts and bolts: add "-SH" to the catalog number.

ESH Epoxy coated coupling with Type 304 stainless steel nuts and bolts: add "-ESH" to the catalog number.

BBN Blue fluorocarbon coating on HSLA nuts and bolts. Add "-BBN" to catalog number.

BEC Blind End Cap, no female iron pipe threads. Add "-BEC" to the catalog number.

Example for above options: FEC-720-ESH is an FEC coupling with epoxy coating and stainless steel nuts and bolts.

Ford End Cap for Ultra-Flex Wide Range Couplings





The Ford End Cap Coupling, Style FC2W-EC, is provided with 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:

- 1. Sleeve Ductile Iron per ASTM A536, 65-45-12.
- 2. End Rings Ductile Iron per ASTM A536, 65-45-12.
- 3. Gaskets NBR (Buna-N) per ASTM D2000.
- 4. End Cap Ductile Iron per ASTM A536, 65-45-12 or Steel per ASTM A36.
- 5. Bolts High strength low alloy per ASTM A242 and AWWA C111.
- 6. Finish Sleeve and end rings are epoxy coated. 4", 6" and 8" E-Coat End Caps 10" and 12" epoxy coated End Caps

Now Dipe Size	PIPE O	.D. RANGE	CATALOG NUMBER	Approx Mr. Lpo	END CAD ONLY	END CAP WT. LBS.	
Nom. PIPE SIZE	INCHES MM		CATALOG NUMBER	Approx Wt. 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)

Nom. PIPE SIZE	PIPE OD RANGE		CATALOG NUMBER	SLEEVE	Approx. Wt. Lbs.	END CAP ONLY	END CAP WT. LBS.	
	INCHES	MM	CATALOG NUMBER	LENGTH	APPROX. WI. 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	

O.D. Chart

Nom.	PVC (Start Size)	PVC C900	CAST IRON ASBESTOS-CEMENT					STEEL		
Pipe	(Steel Size)	C900	Cla	isses			Machined	Rough Barrel		
Size	O.D.	O.D.	Pit	Spun	O.D.	Class	End O.D.	O.D. Min — Max	Туре	O.D.
1/2"	.84								STD.	.84
3/4"	1.05								STD.	1.05
1"	1.32								STD.	1.32
1-1/4"	1.66								STD.	1.66
1-1/2"	1.90								STD.	1.90
2"	2.38	2.50			2.50				STD.	2.38
2-1/2"	2.88								STD.	2.88
3"	3.50		A B, C, D	50 - 350	3.80 3.96	100 150	3.74 3.84	4.00 4.10	O.D. STD.	3.00 3.50
						200	3.84	4.29		
			Α	50 - 350	4.80	100	4.64	4.79 — 5.14	O.D.	4.00
4"	4.50	4.80	B, C, D		5.00	150 200	4.81 4.81	4.97 — 5.27 5.22 — 5.57	STD.	4.50
			Α	50 - 350	6.90	100	6.91	7.05 — 7.40	O.D.	6.00
6"	6.63	6.90	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		
			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
			E, F		9.42	200	9.11	9.39 - 9.74		
			A, B	50 - 200	11.10	100	11.24	11.42 — 11.77	O.D.	10.00
10"	10.75	11.10	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		
			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		13.76	200	13.92	14.03 - 14.38		
			A, B	50 - 100	15.30	100	15.07	15.40 — 15.80	O.D.	14.00
14"	14.00	15.30	C, D	150 - 300	15.65	150	16.22	16.38 - 16.73		
			E, F		15.98	200	16.22	16.48 - 16.88		
			A, B	50 -100	17.40	100	17.14	17.54 — 17.94	O.D.	16.00
16"	16.00	17.40	C, D	150 - 300	17.80	150	18.46	18.62 — 18.97		
			E, F		18.16	200	18.46	18.79 — 19.19		
40"	40.00	40.50	A, B	50 - 100	19.50	100	19.90	20.44	STD.	18.00
18"	18.00	19.50	C, D	150 - 250	19.92	150	20.94	21.20		
00"	00.00	04.00	A, B	50 -100	21.60	100	22.12	22.50	STD.	20.00
20"	20.00	21.60	C, D	150 - 250	22.06	150	23.28	23.54		
0.411	04.00	05.00	A, B	50 - 100	25.80	100	26.48	27.17	STD.	24.00
24"	24.00	25.80	C, D	150 - 250	26.32	150	27.96	28.22		
NOTE: D.	o to voriations in							vimata Farthia raa		

NOTE: Due to variations in outside diameters and specifications, dimensions listed are approximate. For this reason, determine the actual pipe O.D. before ordering Ford Pipe Coupling Products.

FC2W Ultra-Flex 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</u> <u>lubricate</u> the pipe OD or the gasket. If the coupling is disassembled, <u>lubricate</u> 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 50 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 over stress coupling components.

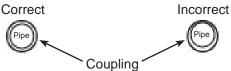
Installation Instructions

Ford Flexible Couplings (Except FC2W Ultra-Flex Coupling)

- 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 approximately 65 degrees 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"

7. 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.



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.
 1/2" Bolts = 40 - 50 ft. lbs.

5/8" Bolts = 60 - 70 ft. lbs.

 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 over stress coupling components.

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.

Section M

Ford Bolted Flex Couplings

Warranty

All merchandise is warranted to be free from defects in material and factory workmanship. 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 his 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.

Please Note:

Consult the Ford Meter Box Company, Inc. website (www.fordmeterbox.com) for the most recent catalog information. The Ford Meter Box Company considers the information in this catalog to be correct at the time of publication. Items and option availability, including specifications, are subject to change without notice. Please verify that your product information is current.