

Grinnell®

GRINNELL Figure 716 Flexible Reducing Coupling

General Description

The GRINNELL Figure 716 Flexible Reducing Coupling allows a direct transition between two different pipe sizes, and replaces two couplings and a reducing fitting. It is capable of pressures up to 500 psi (34,5 bar) depending on pipe size and wall thickness.

Note: Reducing Couplings are not recommended for low temperature applications.

NOTICE

The Figure 716 Flexible Reducing Coupling described herein must be installed and maintained in compliance with this document, in addition to the standards of any other authorities having jurisdiction. Failure to do so may impair the performance of this device.

The owner is responsible for maintaining their system and devices in proper operating condition. Contact the installing contractor or product manufacturer with any questions.

Technical Data

Approvals

UL and ULC Listed
FM Approved
VdS Approved
LPCB Certified

Note: The listed approvals apply to all of the reducing couplings except the 5 in. x 4 in. (DN125 x DN100) size.

Sizes

2 in. x 1-1/2 in. (DN50 x DN40) through
8 in. x 6 in. (DN200 x DN150)

Maximum Pressure

Refer to Figure 1

Housing

Ductile Iron conforming to
ASTM A536, Grade 65-45-12

Protective Coatings

Orange Non-Lead Paint

RAL Red (optional) Non-Lead Paint

Hot-Dipped Galvanized conforming to
ASTM A153

Bolts/Nuts

Track Head Bolts:

Zinc Plated conforming to ASTM A183
Minimum Tensile = 110,000 psi (758,422
kPa) (Metric conforming to ASTM F568M)

Stainless Steel Bolts and Nuts are
available upon request.

Gasket

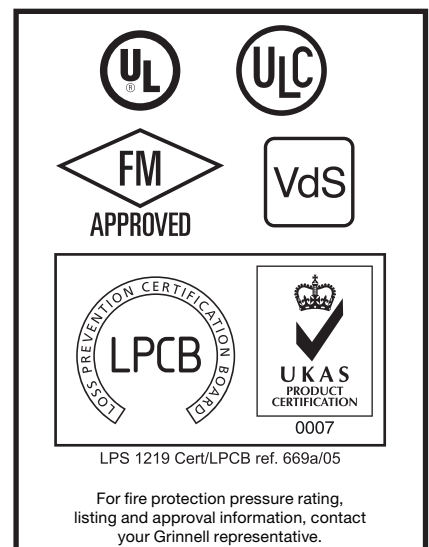
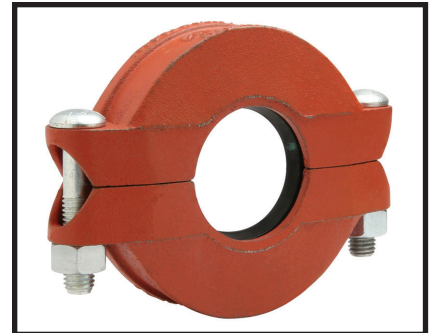
Grade "E" EPDM
Green Color Code
-30°F (-34°C) to +230°F (+110°C)

Grade "T" Nitrile
Orange Color Code
-20°F to 180°F (-29°C to 82°C)

(Refer to Technical Data Sheet G610 for
aid in selecting proper gasket.)

Ordering Procedure

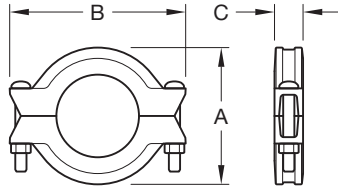
When placing an order, indicate the full product name. Specify the quantity and size (ANSI inches or pipe O.D.) Figure 716 Flexible Reducing Coupling with Grade "E" EPDM gasket.



10
YEAR
LIMITED
WARRANTY

IMPORTANT

Refer to Technical Data Sheet
G1100 for warnings pertaining to
regulatory and health information.



Nominal Pipe Size		Max. Press. ¹ psi bar	Max. End Load ¹ Lbs. kN	Max. End Gap ^{2,3} Inches mm	Deflection ²		Nominal Dimensions			Coupling Bolts		Approx. Weight Lbs. kg
ANSI Inches DN	O.D. Inches mm				Degrees per coupling	In./Ft. mm/m	A Inches mm	B Inches mm	C Inches mm	Qty.	Size ⁴ Inches mm	
2 x 1-1/2 50 x 40	2.375 x 1.900 60,3 x 48,3	500 34,5	1,417.6 6,31	0.13 3,3	1°53'	0.39 32,5	3.50 88,9	5.06 128,5	1.88 47,8	2	3/8 x 2-1/4 M10 x 57	2.0 0,9
2-1/2 x 2 65 x 50	2.875 x 2.375 73,0 x 60,3	500 34,5	2,215.1 9,85	0.13 3,3	1°33'	0.32 26,7	4.00 101,6	5.50 139,7	1.88 47,8	2	3/8 x 2-1/4 M120 x 57	2.5 1,1
76.1 x 2 65 x 50	3.000 x 2.375 76,1 x 60,3	500 34,5	2,215.1 9,85	0.13 3,3	1°34'	0.32 26,7	4.19 106,4	5.88 149,4	1.88 47,8	2	M12 x 76	3.1 1,4
3 x 2 80 x 50	3.500 x 2.375 88,9 x 60,3	500 34,5	2,215.1 9,85	0.13 3,3	1°17'	0.27 22,5	4.69 119,1	6.50 165,1	1.88 47,8	2	1/2 x 3 M12 x 76	4.1 1,9
3 x 2-1/2 80 x 65	3.500 x 2.875 88,9 x 73,0	500 34,5	3,245.9 14,44	0.13 3,3	1°17'	0.27 22,5	4.69 119,1	6.50 165,1	1.88 47,8	2	1/2 x 3 M12 x 76	4.3 2,0
3 x 76.1 80 x 65	3.500 x 3.000 88,9 x 76,1	500 34,5	3,534.3 15,72	0.13 3,3	1°17'	0.27 22,5	4.69 119,1	6.50 165,1	1.88 47,8	2	12 x 76	4.2 1,9
4 x 2 100 x 60	4.500 x 2.375 114,3 x 60,3	500 34,5	2,215.1 9,85	0.19 4,8	2°38'	0.55 45,8	6.00 152,4	8.13 206,5	2.00 50,8	2	5/8 x 3-1/4 M16 x 83	5.5 2,5
4 x 2-1/2 100 x 65	4.500 x 2.875 114,3 x 73,0	500 34,5	3,245.9 14,44	0.19 4,8	2°38'	0.55 45,8	6.00 152,4	8.13 206,5	2.00 50,8	2	5/8 x 3-1/4 M16 x 83	6.4 2,9
4 x 76.1 100 x 65	4.500 x 3.000 114,3 x 76,1	500 34,5	3,534.3 15,72	0.19 4,8	2°38'	0.55 45,8	6.00 152,4	8.13 206,5	2.00 50,8	2	M16 x 83	6.3 2,9
4 x 3 100 x 80	4.500 x 3.500 114,3 x 88,9	500 34,5	4,810.6 21,40	0.19 4,8	2°38'	0.55 45,8	6.00 152,4	8.13 206,5	2.00 50,8	2	5/8 x 3-1/4 M16 x 83	6.2 2,8
139.7 x 4 125 x 100	5.500 x 4.500 139,7 x 114,3	500 34,5	7,952.2 35,37	0.25 6,4	2°38'	0.55 45,8	7.06 179,3	9.50 241,3	2.06 52,3	2	M20 x 121	9.6 4,3
5 x 4 125 x 100	5.563 x 4.500 141,3 x 114,3	500 34,5	7,952.2 35,37	0.25 6,4	2°5'	0.44 36,7	7.13 181,1	9.56 242,8	2.06 52,3	2	3/4 x 4-3/4 M20 x 121	9.8 4,4
165.1 x 4 150 x 100	6.500 x 4.500 165,1 x 114,3	400 27,6	6,361.7 28,30	0.25 6,4	1°50'	0.38 31,7	8.18 207,8	10.81 274,6	2.06 52,3	2	M20 x 121	12.5 5,7
6 x 4 150 x 100	6.625 x 4.500 168,3 x 114,3	400 27,6	6,361.7 28,30	0.25 6,4	1°44'	0.36 30,0	8.38 212,9	10.88 276,4	2.06 52,3	2	3/4 x 4-3/4 M20 x 121	12.5 5,7
6 x 5 150 x 125	6.625 x 5.563 168,3 x 141,3	400 27,6	9,722.3 43,25	0.25 6,4	1°44'	0.36 30,0	8.38 212,9	10.88 276,4	2.06 52,3	2	3/4 x 4-3/4 M20 x 121	11.5 5,2
8 x 6 200 x 150	8.625 x 6.625 219,1 x 168,3	400 27,6	13,788.6 61,33	0.25 6,4	1°15'	0.26 21,7	10.69 271,5	13.75 349,3	2.25 57,2	2	7/8 x 6-1/2 M22 x 165	20.7 9,4

Notes:

1. Maximum pressure and end load are total from all loads based on standard weight steel pipe. Pressure ratings and end loads may differ on other pipe materials and/or wall thickness. Contact Tyco Fire Protection Products for details.
2. Maximum End Gap and Deflection is for cut grooved standard weight pipe. Values for roll grooved pipe will be 1/2 that of cut grooved.
3. Maximum available gap between pipe ends; minimum gap = 0
4. Gold color-coded metric bolt sizes are available upon request.

FIGURE 1
FIGURE 716 FLEXIBLE REDUCING COUPLING
NOMINAL DIMENSIONS