



Grinnell Mechanical Products Figure 770 Rigid Coupling

General Description

The Figure 770 Rigid Coupling provides a rigid joint by firmly gripping along the circumference of the pipe grooves. The Figure 770 Rigid Coupling is a proven dependable method of joining pipe and is an economical alternative to welding, threading or using flanges. It is capable of pressures up to 1000 psi (69,0 bar) depending on pipe size and wall thickness.

Note: Rigid Couplings are recommended for low temperature and vacuum applications.

NOTICE

The Figure 770 Rigid 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. The installing contractor or manufacturer should be contacted with any questions.

Technical Data

Sizes

2" to 12" (DN50 to DN300)

Approvals

Certified to all requirements of
NSF/ANSI 61
IAPMO UPC Certified

Maximum Pressure

See Figure 1

Housing

Ductile iron conforming to
ASTM A-536, Grade 65-45-12

Protective Coatings

- Non-lead orange paint
- RAL red (optional) non-lead paint
- Hot dipped galvanized conforming to ASTM A-153

Bolt/Nuts

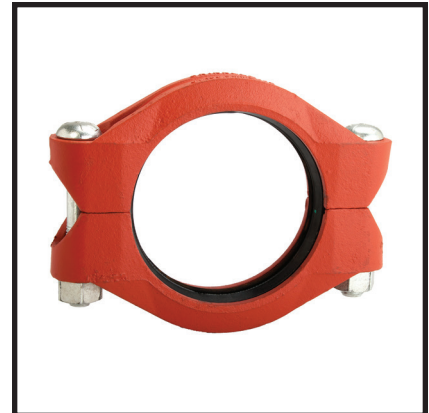
Track Head Bolts - conforming to ASTM A-183, Zinc Plated,
(Min. Tensile = 110,000 psi/758,422 kPa)
Metric - conforming to ASTM F568M

Gasket

(specify when ordering)

- Grade "E" EPDM, green color code -30°F (-34°C) to +230°F (+110°C)
- Tri-seal Grade "E" EPDM, green color code -30°F (-34°C) to +230°F (+110°C)
- Grade "T" Nitrile, orange color code -20°F (-29°C) to +180°F (+82°C)
- Grade "O" Fluoroelastomer, blue color code +20°F (-7°C) to +300°F (+149°C)
- Grade "L" Silicone, red gasket -30°F (-34°C) to +350°F (+177°C)

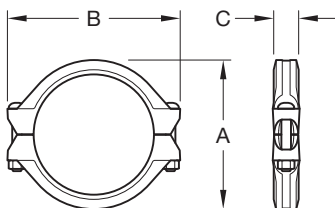
(See Data Sheet G610 for aid in selecting proper gasket.)



For certification information,
contact your Grinnell representative.



For warranty terms
and conditions, visit
www.grinnell.com



Nominal Pipe Size		Max. ^a Pressures psi bar	Max. ^a End Load Lbs. kN	Max. ^{b, c} End Gap Inches mm	Nominal Dimensions			Coupling Bolts		Approx. Weight Lbs. kg
ANSI Inches DN	O.D. Inches mm				A Inches mm	B Inches mm	C Inches mm	Qty.	Size ^d Inches mm	
2 50	2.375 60,3	1000 69,0	4,430.1 19,71	0.14 3,6	3.53 89,7	5.72 145,3	1.88 47,8	2	5/8 x 2-3/4 M16 x 70	4.3 2,0
2-1/2 65	2.875 73,0	1000 69,0	6,491.8 28,88	0.14 3,6	4.06 103,1	6.00 152,4	1.88 47,8	2	5/8 x 3-1/2 M16 x 89	5.0 2,3
3 80	3.500 88,9	1000 69,0	9,621.1 42,79	0.14 3,6	4.78 121,4	6.76 171,7	1.88 47,8	2	5/8 x 3-1/2 M16 x 89	5.3 2,4
4 100	4.500 114,3	1000 69,0	15,904.3 70,74	0.25 6,4	6.01 152,7	8.50 215,9	2.10 53,3	2	3/4 x 4-1/4 M20 x 108	7.7 3,5
6 150	6.625 168,3	1000 69,0	34,471.6 153,33	0.25 6,4	8.51 216,2	11.25 285,8	2.10 53,3	2	7/8 x 5-1/2 M22 x 140	16.2 7,3
8 200	8.625 219,1	800 55,2	46,741.0 207,90	0.25 6,4	10.93 277,6	13.75 349,3	2.60 66,0	2	1 x 5-1/2 M24 x 140	24.0 10,9
10 250	10.750 273,0	800 55,2	72,610.1 322,97	0.25 6,4	13.46 341,9	16.00 406,4	2.60 66,0	2	1 x 6-1/2 M24 x 165	32.0 14,5
12 300	12.750 323,9	800 55,2	102,141.0 454,32	0.25 6,4	15.52 394,2	18.00 457,2	2.60 66,0	2	1 x 6-1/2 M24 x 165	40.0 18,1

NOTES:

- a. Maximum pressure and end load are total from all loads based on standard weight steel pipe. Pressure ratings and end loads may differ for other pipe materials and/or wall thickness. Contact Tyco Fire & Building Products for details.
- b. Maximum available gap between pipe ends. Minimum gap = 0.
- c. Max End Gap and Deflection is for cut grooved standard weight pipe. Values for roll grooved pipe will be 1/2 that of cut grooved.
- d. Gold color coded metric bolt sizes for DN50 - DN300 couplings are available upon request

FIGURE 1
FIGURE 770 RIGID COUPLING
NOMINAL DIMENSIONS

Ordering Procedure

When placing an order, indicate the full product name. Please specify the quantity, size, (ANSI inch size or pipe O.D.), figure number, type of gasket:

- Grade “E” EPDM
- Grade “E” EPDM Tri-Seal
- Grade “T” Nitrile
- Grade “O” Fluoroelastomer
- Grade “L” Silicone

Grinnell Mechanical Products, valves, accessories and other products are available throughout the U.S., Canada, and internationally, through a network of distribution centers. You may write directly or call 800-558-5236 for the distributor nearest you.