

# Rigid Coupling

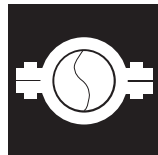
## Figure 772

### Patented

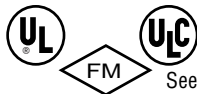


Grooved Piping Products

Tyco Fire Products --- www.tyco-grooved.com  
 451 North Cannon Avenue, Lansdale, Pennsylvania 19446 --- USA  
 Customer Service/Sales: Tel: (215) 362-0700 / Fax: (215) 362-5385  
 Technical Services: Tel: (800) 381-9312 / Fax: (800) 791-5500



## General Description



See Fire Protection Submittal Sheet for pressure rating and Listing and Approval information

The Figure 772 Rigid Coupling provides a rigid joint by firmly gripping along the circumference of the pipe grooves. Rigid Couplings are preferred for dry pipe and freezer applications. Figure 772 Rigid Couplings are a proven dependable method of joining pipe and are an economical alternative to welding, threading or using flanges, and can be used on a variety of pipe material and wall thicknesses.



## Technical Data

**Figure:** 772

**Sizes:** 1¼" - 12"

**Approvals:** UL, FM, and ULC;

See Fire Protection Submittal Sheet for exact Listing / Approval info.

**Manufacturing Source:** Domestic

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

**Protective Coatings:**

- Non-lead orange 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)

**Gasket:** (specify when ordering)

- Grade A EPDM violet color code ambient to +150°F (+66°C) for fire protection systems. Not recommended for hot water systems.
- Tri-seal (Grade E EPDM), green color code for use in dry pipe or freezer systems.
- Prelubricated (Grade A EPDM)

(See Gasket Grades and Recommendations Sheet for aid in selecting proper gasket)

**Note:** Rigid Couplings are recommended for dry pipe and freezer applications.



## Ordering Procedure

**Ordering Information:** When placing an order, indicate the full product name. Please specify the quantity, figure number, type of gasket, EPDM "A" or "E" Tri-Seal, and size.

**Availability and Service:** Grooved Piping Products, valves, accessories and other products are available throughout the U.S., Canada, and internationally, through a network distribution centers. You may write directly or call 215-362-0700 for the distributor nearest you.



## Care and Maintenance

The owner is responsible for the inspection, testing, and maintenance of their fire protection system and devices in accordance with the applicable standards of the National Fire Protection Association (e.g., NFPA 25), in addition to the standards of any authority having jurisdiction. The installing contractor or product manufacturer should be contacted relative to any questions. Any impairment must be immediately corrected.

It is recommended that automatic sprinkler systems be inspected, tested, and maintained by a qualified Inspection Service.



# Limited Warranty

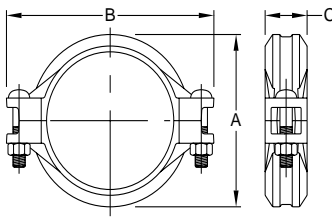
Products manufactured by Tyco Fire Products are warranted solely to the original Buyer for ten (10) years against defects in material and workmanship when paid for and properly installed and maintained under normal use and service. This warranty will expire ten (10) years from date of shipment by Tyco Fire Products. No warranty is given for products or components manufactured by companies not affiliated by ownership with Tyco Fire Products or for products and components which have been subject to misuse, improper installation, corrosion, or

which have not been installed, maintained, modified or repaired in accordance with applicable Standards of the National Fire Protection Association (NFPA), and/or the standards of any other Authorities Having Jurisdiction. Materials found by Tyco Fire Products to be defective shall be either repaired or replaced, at Tyco Fire Products' sole option. Tyco Fire Products neither assumes, nor authorizes any person to assume for it, any other obligation in connection with the sale of products or parts of products. Tyco Fire Products shall not be responsible for sprinkler system design errors or inaccurate or incomplete information supplied by Buyer or Buyer's representatives.

IN NO EVENT SHALL TYCO FIRE PRODUCTS BE LIABLE, IN CONTRACT, TORT, STRICT LIABILITY OR UNDER ANY OTHER LEGAL THEORY, FOR INCIDENTAL, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LABOR CHARGES, REGARDLESS OF WHETHER TYCO FIRE PRODUCTS WAS INFORMED ABOUT THE POSSIBILITY OF SUCH DAMAGES, AND IN NO EVENT SHALL TYCO FIRE PRODUCTS' LIABILITY EXCEED AN AMOUNT EQUAL TO THE SALES PRICE.

**THE FOREGOING WARRANTY IS MADE IN LIEU OF ANY AND ALL OTHER WARRANTIES EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**

**Figure 772  
Grooved  
Coupling**



Pipe Size	Pipe		Max. * ‡ End Gap Inches mm	Max. † Pressure psi kPa	Max. † End Load Lbs. N	Dimensions			Bolt Size** Dia. x Lg.	Net Wt. Lbs. Kg.
	O.D. Inches mm					A Inches mm	B Inches mm	C Inches mm		
1 1/4"	1.660 42.2		0.06 1.5	300 2,068	649 2,887	2.75 69.9	4.38 111.3	1.81 46.0	3/8" x 2 1/4"	1.0 0.5
1 1/2"	1.900 48.3		0.08 2.0	500 3,447	1,417 6,303	3.00 76.2	4.62 117.3	1.81 46.0	3/8" x 2 1/4"	1.0 0.5
2"	2.375 60.3		0.13 3.3	500 3,447	2,214 9,848	3.41 86.6	5.12 130.0	1.88 47.8	3/8" x 2 1/4"	1.5 0.7
2 1/2"	2.875 73.0		0.13 3.3	500 3,447	3,244 14,430	3.91 99.3	5.63 143.0	1.88 47.8	3/8" x 2 1/4"	2.5 1.1
76.1mm	3.000 76.1		0.13 3.3	300 2,068	2,120 9,430	4.19 106.4	5.72 145.3	2.00 50.8	M10 x 57	2.6 1.2
3"	3.500 88.9		0.13 3.3	500 3,447	4,808 21,387	4.63 117.6	6.25 158.8	1.88 47.8	3/8" x 2 1/4"	2.6 1.2
4"	4.500 114.3		0.19 4.8	500 3,447	7,948 35,353	7.50 147.6	1.97 190.5	1.97 50.0	3/8" x 2 1/4"	3.5 1.6
5"	5.563 141.3		0.19 4.8	300 2,068	7,288 32,417	7.09 180.1	9.72 246.9	2.06 52.3	5/8" x 3 1/4"	7.5 3.4
165.1mm	6.500 165.1		0.19 4.8	300 2,068	9,950 44,258	8.09 205.5	10.53 267.5	2.13 54.1	M16 x 83	7.6 3.4
6"	6.625 168.3		0.19 4.8	400 2,758	13,782 61,302	8.09 205.5	10.53 267.5	2.13 54.1	5/8" x 3 1/4"	7.6 3.4
8"	8.625 219.1		0.19 4.8	450 3,103	26,278 116,885	10.56 268.2	13.56 344.4	2.62 66.5	3/4" x 4 3/4"	18.0 8.2
10"	10.750 273.1		0.13 3.3	250 1,724	22,679 100,876	12.84 326.1	16.41 416.8	2.62 66.5	1" x 6 1/2"	24.6 11.2
12"	12.750 323.9		0.13 3.3	250 1,724	31,903 141,905	15.41 391.4	18.84 478.5	2.62 66.5	1" x 6 1/2"	42.0 19.1

\* Maximum available gap between pipe ends. Minimum gap = 0.

† 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 Products for details. See Fire Protection Equipment Submittal Sheet for Listing and Approval pressure ratings.

\*\* Metric bolt size used on 76.1mm and 165.1mm couplings.

‡ Max End Gap is for cut grooved standard weight pipe.

Values for roll grooved pipe will be 1/2 that of cut grooved.



Certified Company

General Notes: It is the Designer's responsibility to select products suitable for the intended service and to ensure that pressure ratings and performance data is not exceeded. Always read and understand the installation instructions (IH-1000). Never remove any piping component nor correct or modify any piping deficiencies without first depressurizing and draining the system. Material and gasket selection should be verified to be compatible for the specific application.