



1. Product Name

MG Couplings

2. Manufacturer

MG Piping Products Co.

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3. Product Description

BASIC USE

MG Couplings, manufactured by MG Piping Products Co., are ICC-ES evaluated, high strength, corrosion resistant, cast iron couplings used to join hubless cast iron soil pipes and fittings. When slipped over the plain ends of pipes and tightened to 175 inch pounds torque, MG Couplings provide a uniform and precise joint strength that matches or exceeds the corrosion resistance of the cast iron pipes.

MG Couplings are offered in varied configurations and sizes for above grade and below grade cast iron soil pipe applications. Uses include:

- Sanitary soil system
- Sanitary waste system
- Sanitary vent system
- Facility storm system
- Repair hub for service weight hub and spigot pipe

COMPOSITION & MATERIALS

MG Couplings are made of two cast iron clamps with a neoprene gasket and 18-8 stainless steel nuts and bolts.

SIZES

MG Couplings are offered in sizes from 1 1/2" to 10" (38.1 - 254 mm). See Table 1.

COLOR

Black

BENEFITS

- Resist corrosion and last longer than stainless steel couplings
- Provide uniform and precise joint strength to cast iron soil pipes
- Available for a wide range of above- and below-grade installations
- Resist abrasion from sand, gravel, garbage disposal residue, dishwasher discharge and debris carried in suspension
- Allow system to be supported in the same manner as lead and oakum hub and spigot pipe
- Use of neoprene gaskets and cast iron soil pipe reduce noise and minimize pipe vibration

ACCESSORIES

- MG Torque Wrench - A precalibrated, precision torque wrench for coupling installation

4. Technical Data

APPLICABLE STANDARDS

ASTM International

- ASTM A48/A48M Standard Specification for Gray Iron Castings
- ASTM A1056 Standard Specification for Cast Iron Couplings Used for Joining Hubless Cast Iron Soil Pipe and Fittings
- ASTM C564 Standard Specification for Rubber Gaskets for Cast Iron Soil Pipe and Fittings

American National Standards Institute (ANSI)

- ANSI B18.2.1 Square and Hex Bolts and Screws, Inch Series
- ANSI B18.2.2 Square and Hex Nuts

Cast Iron Soil Pipe Industry (CISPI)

- CISPI 310 Specification for Use in Connection with Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste and Vent Piping Applications

TECHNICAL PROPERTIES

- Couplings - Meet or exceed ASTM A1056 and ASTM C564
- Housing - Complies with ASTM A48/A48M
- Neoprene gasket - Complies with ASTM C564
- Stainless steel bolts - Comply with ANSI B18.2.1
- Stainless steel nuts - Comply with ANSI B18.2.2

APPROVALS

- International Association of Plumbing and Mechanical Officials (IAPMO) listed compliance with ASTM A1056 and applicable sections of UPC and IPC; File #0761
- IAPMO listed compliance with Cal Green 2010, LEED® 2009, National Green Plumbing Standard 2008; File #7721
- IAPMO listed compliance with CISPI 310-11; File #7722
- ICC-ES PMG (Plumbing, Mechanical and Fuel Gas) listed compliance with applicable International Plumbing Code (IPC); International Residential Code (IRC); ASTM A1056; ASTM C564
- Approved City of Los Angeles; Research Report: RR4759
- Approved City of Philadelphia

ENVIRONMENTAL CONSIDERATIONS

MG Couplings are manufactured of recycled material and in compliance with Cal Green, 2010; LEED® 2009 and National Green Plumbing Standard, 2008. The couplings can contribute points toward LEED project certification.

5. Installation

Install this product in strict accordance with the manufacturer's written instructions and procedures.

PREPARATORY WORK

Verify that site conditions are acceptable for installation. Do not proceed until unacceptable conditions are corrected.

METHOD

Place the neoprene gasket on the end of one pipe and the clamp assembly on the end of the other pipe.

Fit both pipe ends into the neoprene gasket, firmly butting them against the internal center rib or shoulder between them. Ensure that pipes or fittings to be joined are in proper alignment and that necessary support is available to maintain alignment during installation.

Pull the loose clamp assembly over the gasket so that the gasket is completely covered, keeping the bolting flanges evenly separated.

IMPORTANT: Tighten nuts alternately and gradually to 175 inch pounds torque. Use an accurate torque wrench.

When hubless pipe and fittings of CISPI-approved dimensions and tolerances are used, the clamp bolting flanges at both ends of the MG Coupling should be separated from each other by 1/16" - 3/16" (1.6 - 4.8 mm) after 175 inch pounds torque has been applied.

If the gasket leaks at the ears, it may be due to the outside diameter of the pipe or fittings exceeding the maximum dimension and tolerance allowed by CISPI specifications. A coating of gasket lubricant applied to the outside of the gasket and inside of the casting may help the gasket seat properly. If the leak continues, the outside diameter of the pipe or fittings should be measured to confirm that they meet CISPI standards.

When installing couplings in temperatures at or colder than 40 degrees F (4 degrees C), the gasket can be warmed to make it more flexible. A coating of gasket lubricant can be applied to the outside of the gasket and the inside of the cast iron housing to help the gasket seat properly.

In order to provide a sound joint with field cut lengths of pipe, the ends should be cut square.



| Nominal Size | | Couplings | | | Bolts | | Weight |
|--------------------------|---|-----------------------|---------------------|-------------------|-------|--------------------------------|---------------------|
| Coupling Size | Pipe Diameter | Height (X) | Width (Y) | Depth (Z) | No. | Size x Length | (each) |
| 1 1/2" (38 mm) | 1.9" ± 0.06" (48.26 - 152 mm) | 2 7/8" (73 mm) | 4 1/2" (114 mm) | 2 1/8" (54 mm) | 2 | 3/8" x 1 1/2" (9.5 x 38 mm) | 1.6 lb (0.7 kg) |
| 2" (51 mm) | 2.35" ± 0.09" (59.7 ± 2.29 mm) | 3 3/8" (85.7 mm) | 4 7/8" (124 mm) | 2 1/8" (54 mm) | 2 | 3/8" x 1 1/2" (9.5 x 38 mm) | 1.8 lb (0.8 kg) |
| 2" x 1 1/2" (51 x 38 mm) | 2.35" ± 0.09" (59.7 - 2.29 mm) | 3 3/8" (85.7 mm) | 4 7/8" (124 mm) | 2 1/8" (54 mm) | 2 | 3/8" x 1 1/2" (9.5 x 38 mm) | 1.8 lb (0.8 kg) |
| 3" (76 mm) | 3.35" ± 0.09" (85.09 ± 2.29 mm) | 4 1/4" (108 mm) | 6" (152 mm) | 2 1/8" (54 mm) | 2 | 3/8" x 1 1/2" (9.5 x 38 mm) | 2.3 lb (1.1 kg) |
| 4" (102 mm) | 4.38" ± 0.09"/-0.05" (111.25 + 2.29 - 1.27 mm) | 5 1/4" (133 mm) | 7" (178 mm) | 2 1/8" (54 mm) | 2 | 3/8" x 1 1/2" (9.5 x 38 mm) | 3.1 lb (1.4 kg) |
| 5" (127 mm) | 5.3" ± 0.09"/-0.05" (134.6 + 2.29 - 1.27 mm) | 6 1/4" (158.75 mm) | 8 5/8" (219 mm) | 3 1/8" (79 mm) | 4 | 3/8" x 1 1/2" (9.5 x 38 mm) | 5.7 lb (2.6 kg) |
| 6" (152 mm) | 6.3" ± 0.09"/-0.05" (160 + 2.29 - 1.27 mm) | 7 1/2" (190.5 mm) | 9 1/4" (235 mm) | 3 1/8" (79 mm) | 4 | 3/8" x 1 1/2" (9.5 x 38 mm) | 7.2 lb (3.3 kg) |
| 8" (203 mm) | 8.38" ± 0.09"/-0.09" (212.85 + 2.29 - 2.29 mm) | 9 1/2" (241 mm) | 11 3/4" (298 mm) | 4" (102 mm) | 4 | 3/8" x 2" (9.5 x 51 mm) | 14.1 lb (6.4 kg) |
| 10" (254 mm) | 10.56" ± 0.09" (268.22 ± 2.29 mm) | 11 13/16" (300 mm) | 14 1/3" (364 mm) | 4" (102 mm) | 4 | 3/8" x 2 1/4" (9.5 x 57 mm) | 18.3 lb (8.3 kg) |

To minimize friction during fastening and obtain maximum clamping force or holding power, pipe and surfaces that receive the gasket should be clean; clamp alignment maintained and fastener threads kept clean of dirt.

Hangers and Supports

Hanger and support requirements for hubless cast iron pipes joined by MG Couplings are the same as requirements for lead and oakum hub (bell) and spigot cast iron pipe installation.

For vertical piping: Where MG Coupling joints occur, cast iron soil pipe must be supported at not less than every story height and at its base.

For horizontal piping: Where MG Coupling joints occur, cast iron soil pipe must be supported at not more than 5' (1.5 m) intervals, except in instances where the pipe length exceeds 5' (1.5 m). Pipe exceeding 5' (1.5 m) in length must be supported at not more than 10' (3 m) intervals. Supports must be adequate to maintain alignment and prevent sagging and must be placed within 18" (457 mm) of the coupling joints. For multi-story testing, horizontal systems should be braced at all changes of direction, bends and ends of runs to prevent movement.

BUILDING CODES

Installation must comply with the requirements of all applicable local, state and federal code jurisdictions.

6. Availability & Cost

MG Couplings are distributed by regional representatives throughout the United States. Contact MG Piping Products Co. or visit the

www.mgcoupling.com website for availability and cost information.

7. Warranty

Manufacturer warrants all products to be free from defects in materials and workmanship under normal conditions of use and service. Manufacturer's obligation under this warranty is limited to replacing defective parts returned prepaid to the manufacturer's factory within one year after delivery to original purchaser, and shown by manufacturer's staff to have been defective, the cost of labor specifically excluded. Further, Manufacturer accepts no liability for costs of field labor or materials to adjust, change or correct any product, except with prior written authorization. This warranty is expressly made in lieu of all other warranties, express or implied.

8. Maintenance

Properly installed couplings require no special maintenance.

9. Technical Services

Detailed information, product literature, test results, project lists and assistance in preparing project specifications are available through MG Piping Products Co.

10. Filing Systems

- SmartBuilding Index
- MANU-SPEC®
- Additional product information is available from MG Piping Products Co.