

Engineering Specifications

Bronze Ball Valves for Fuel Gas Installation

Model 0670

PART 1: GENERAL

1.1 SUMMARY

- A. ProPress G Bronze Ball Valves for Fuel Gas Piping Systems

1.2 DEFINITIONS

- A. The following are standard abbreviations for valves:
 - 1. HNBR: Hydrogenated Nitrile Butadiene Rubber
 - 2. PTFE: Polytetrafluoroethylene plastic

1.3 REFERENCES

- A. ASME B16.18 Cast Copper Alloy Solder Joint Pressure Fittings
- B. ASME B16.22 Wrought Copper and Copper Alloy Solder Joint Pressure Fittings
- C. ASME B31.9 Building Services Piping
- D. ASTM B75 Standard Specification for Seamless Copper Tube
- E. ASTM B88 Standard Specification for Seamless Copper Tube
- F. IAPMO Uniform Mechanical Code
- G. IAPMO Uniform Plumbing Code
- H. ICC International Plumbing Code
- I. ICC International Mechanical Code
- J. NFPA 54 National Fuel Gas Code
- K. NFPA 58 Liquefied Petroleum Gas Code
- L. IFGC International Fuel Gas Code
- M. NFPA 30 Flammable and Combustible Liquids Code
- N. NFPA 30A Code for Motor Fuel Dispensing Facilities and Repair Garages
- O. NFPA 31 Standard for the Installation of Oil-Burning Equipment (supply line only)
- P. ANSI/CSA LC4 Press-Connect Copper and Copper Alloy Fittings For Use In Fuel Gas Distribution Systems

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1.4 QUALITY ASSURANCE

- A. The installer shall be a qualified installer, licensed within the jurisdiction and familiar with the installation of copper fuel gas tubing
- B. The installation of ball valves for fuel gas distribution systems shall conform to the requirements of the ICC International Plumbing Code, IAPMO Uniform Plumbing Code, ICC International Mechanical Code, IAPMO Uniform Mechanical Code or the IFGC International Fuel Gas Code
- C. Press end ball valves shall have the Smart Connect feature (SC feature). In ProPress G ½" to 2" dimensions the Smart Connect feature assures leakage of gases from inside the system past the sealing element of an unpressed connection. The function of the feature is to provide the installer quick and easy identification of connections which have not been pressed prior to putting the system into operation

1.5 DELIVERY, STORAGE AND HANDLING

- A. Prepare valves for shipping as follows:
 - 1. Protect internal parts against rust and corrosion
 - 2. Protect press ends
 - 3. Set ball valves open to minimize exposure of functional surfaces
- B. Use the following precautions during storage:
 - 1. Maintain valve end protection
 - 2. Store valves indoors and maintain at higher than ambient dew-point temperature. If outdoor storage is necessary, store valves off the ground in watertight enclosures.

1.6 WARRANTY

- A. The manufacturer shall warrant the valve to be free from defects in material or workmanship. The manufacturer shall warrant the functionality of valve for approved applications, installed according to manufacturer's installation instructions.
- B. The manufacturer of the tubing and fittings shall not be responsible for the improper use, handling or installation of the product

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PART 2: PRODUCTS

2.1 MANUFACTURES

- A. Ball Valve: Viega, 301 N. Main, 9th Floor, Wichita, KS
Telephone: (316) 425-7400, Website: www.viega.com

2.2 MATERIAL

- A. Two piece body made of copper alloy that shall conform to material standards of ASME B16.18. The valve shall have a chrome plated brass ball, PTFE seats and brass stem. Valve shall have a galvanized steel handle with lock out feature. Sealing elements shall be of HNBR material and factory installed unless otherwise authorized by valve manufacturer. Pressure rating shall be 125 psi for general use and no less than 5 psi for natural gas applications. Press ends shall have the Smart Connect feature. The SC feature guarantees leakage of gases for an unpressed connection during a pressure test for easy detection.

PART 3: EXECUTION

3.1 INSTALLATION

- A. Press connections: Copper and copper alloy press fittings shall be made in accordance with the manufacturer's installation instructions. The tubing shall be fully inserted into the fitting and the tubing marked at the shoulder of the fitting. The fitting alignment shall be checked against the mark on the tubing to assure the tubing is fully engaged (inserted) in the fitting. The joint shall be pressed using the tool approved by the manufacturer. NOTE: We are not asking an engineer to eliminate the traditional methods of joining copper. We are asking the engineer to add copper press fittings as an alternative method.