

IAPMO PS 104-~~1997~~2019

PUBLIC REVIEW DRAFT

Pressure Relief
Connection for
Dispensing Equipment



IAPMO Standard

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Pressure Relief Connection for Dispensing Equipment

1 **Purpose**Scope

1.1 General

1.1.1 ~~The purpose of~~This standard ~~is to establish an acceptable standard for~~covers a special connection means for a dispensing device. This dispensing device has a shut off valve and is intended for connection to faucets, janitor's hose bibs, or similar type connections. The connection means shall have a constant bleed so that any upstream backflow protection device, not rated for continuous supply pressure, will not be damaged. ~~Its intent is to serve as a guide for manufacturers, distributors, architects, engineers, contractors, installers, inspectors and users; to promote understanding regarding materials, manufacture and installation; and, to provide for identifying pressure relief connections for dispensing equipment. and specifies requirements for materials, physical characteristics, performance testing, and markings.~~

~~2.1.1.2~~ 1.1.2 This standard pertains only to the connection means and does not cover the dispensing device or its backflow protection. This standard covers general requirements, in addition to the description of the device and method of marking and identification.

1.2 Alternative Materials

The ~~provisions~~requirements of this standard are not intended to prevent the use of any ~~alternate~~alternative materials, or methods of construction, provided ~~that any~~ such ~~alternate alternatives~~ meets or exceeds the intent of this standard.

1.3 Terminology

In this Standard,

- (a) "shall" is used to express a requirement, i.e., a provision that the user is obliged to satisfy to comply with the Standard;
- (b) "should" is used to express a recommendation, but not a requirement;
- (c) "may" is used to express an option or something permissible within the scope of the Standard; and
- (d) "can" is used to express a possibility or a capability.

Notes accompanying sections of the Standard do not specify requirements or alternative requirements; their purpose is to separate explanatory or informative material from the text. Notes to tables and figures are considered part of the table or figure and can be written as requirements.

1.4 Units of Measurement

SI units are the primary units of record in global commerce. In this Standard, the inch/pound units are shown in parentheses. The values stated in each measurement system are equivalent in application, but each unit system is to be used independently. All references to gallons are to U.S. gallons.

1.5 Amendments

Proposals for amendments to this Standard will be processed in accordance with the standards-writing procedures of IAPMO.

~~2~~ **Scope**

~~2.1 This standard pertains only to the connection means and does not cover the dispensing device or its backflow protection. This standard covers general requirements, in addition to the description of the device and method of marking and identification.~~

2 Reference Publications

This section is reserved for later use.

3 Definitions and Abbreviations

This section is reserved for later use.

~~3.4~~ **General Requirements**

~~3.14.1~~ **Temperature Range**

Cold water devices shall withstand a temperature of 49°C (120°F). Hot water devices shall withstand a temperature of 82°C (180°F). They shall operate within the full temperature range as indicated by the manufacture.

~~3.24.2~~ **Pressure Range**

The device shall withstand, without damage or permanent distortion, 150% of the maximum supply pressure as indicated by the manufacturer for fifteen minutes at the maximum rated temperature.

45 Testing Requirements

4.15.1 Cycle Test Procedure

The cycle test shall be conducted as follows:

- (a) Install the device per the manufacturer's installation instructions~~;~~
- (b) A fast acting gate valve may be substituted for the dispensing equipment~~;~~
- (c) Turn on the water supply and open the gate valve simulating the dispenser~~;~~
- (d) Allow water flow until all air is purged~~;~~
- (e) Regulate the pressure to 138 kPa (20 psi) in the dynamic (flowing) condition~~;~~
- (f) Shut the gate valve simulating the dispenser~~;~~
- ~~(g)~~(g) Verify the free flow of the water through atmosphere to drain and record the rate of flow~~;~~
- (h) ~~4.2~~ With ~~the device installed as in 4.1, and~~ the gate valve simulating the dispenser closed, regulate the supply pressure to 863 kPa (125 psi) and open the gate valve to allow approximately 3.8 Lpm (1 gpm) flow~~;~~ and
- (i) Turn the water supply valve to the off position and record the time it takes to reach a pressure of 0 kPa (0 psi) at the point of connection to the supply.

4.35.3 Performance Requirements

Failure of the means of relief to discharge at a rate of at least 0.4 ~~L/minute~~Lpm (0.1 gpm) through atmosphere or to relieve the pressure at the point of connection within one minute is cause for rejection of the device.

56 ~~Identification and Markings~~ Markings and Accompanying Literature

5.16.1 Markings

Product shall be permanently marked with the following:

- (a) Manufacturer's name or trademark; and
- (b) Any other required markings.

5.26.2 Installation instructions

Pressure and temperature limits shall be enumerated in the installation information.