



Descriptive Report and Test Results

MASTER CONTRACT: 264566

REPORT: 70039143

PROJECT: 70039143

Edition 1: September 28, 2015; Project 70039143 – Shanghai
Issued by John Chen

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PRODUCTS

CLASS 6801 20 - PLUMBING SUPPLY FITTINGS - Specialty Supply Fittings

CLASS 6801 80 - PLUMBING SUPPLY FITTINGS - Specialty Supply Fittings - Certified to U.S. Standards

Emergency Eye/Face Wash: WG7020, WG7023, WG7023Y, WG7033F, WG7033FY

Emergency Shower: WG7043V, WG7043VY, WG7043H, WG7043HY, WG7043, WG7043Y

Emergency Eyewash and Shower Equipment: WG7050F, WG7050FY, WG7053F, WG7053FY

APPLICABLE REQUIREMENTS

ASME A112.1.18.1-2012/CSA B125.1-12 - Plumbing supply fittings

ANSI/ISEA Z358.1-2014 - Emergency Eyewash and Shower Equipment

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MARKINGS





The manufacturer is required to apply the following markings:

- Products shall be marked with the markings specified by the particular product standard.
- Products certified for Canada shall have all Caution and Warning markings in both English and French.

Additional bilingual markings not covered by the product standard(s) may be required by the Authorities Having Jurisdiction. It is the responsibility of the manufacturer to provide and apply these additional markings, where applicable, in accordance with the requirements of those authorities.

The products listed are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US (indicating that products have been manufactured to the requirements of both Canadian and U.S. Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only.

(1) Product Marking: The following information must appear in a permanent manner so that your product will be easily identified and recognized in the field as being CSA Certified.

- Submitter's identification: Submitter's identification and/or CSA Master Contract Number "264566"
- CSA Monogram with adjacent "C" and "US" for Canada and US  or with adjacent indicator "US" for US only  or without either indicator for Canada only .
- Optional Certification Marking: CSA Monogram with "US" Indicator  with "ANSI/ISEA Z358.1" below or adjacent the CSA mark.

Location: On a surface readily visible after installation.

The marking method consists of casting or stamping into the body of the fitting, electro etching on trim, or an equally permanent marking applied at the factory.

(2) Packaging Markings: The following markings must appear on the packaging in an acceptable manner.

- Submitter's identification and/or CSA Master Contract Number "264566".
- Model Number.

Nameplate adhesive label material approval information:

Not applicable.

ALTERATIONS

This report is issued on the condition that the alterations herein listed shall be made and that Certification of the subject products applies only to such products on which these alterations have been effected.

- a) Marking is in accordance with the above.

FACTORY TESTS

No Factory Tests Required.

SPECIAL INSTRUCTIONS FOR FIELD SERVICES

1. Component descriptions marked with either the "(INT)" or "(INT*)" identifiers may be substituted with other components providing the requirements specified under the notes in the "Description" are complied with.
2. No special instructions for field services.

COMPONENT SPECIAL PICKUP

1. Component descriptions marked with the identifier "(CT)" are subject to annual pickup and Conformity Testing.
2. No component special pickup.

DESCRIPTION

Notes:

1. Component Substitution
 - a) Critical components (those identified by mfr name, cat no), which are NOT identified with either "INT" or "INT*" are not eligible for substitution without evaluation and report updating
 - b) The term "INT" means a "Certified" and/or "Listed" (or a "Recognized" and/or "Accepted") component may be replaced by one "Certified" and/or "Listed" by another certification organization accredited by the appropriate accreditation body or scheme requirements to the correct standard, for the same application; providing the applicable country identifiers are included and requirements in item "d" below are complied with.
 - c) The Term "INT*" means a "Recognized" and/or "Accepted" component may be replaced by one "Recognized" and/or "Accepted" by another certification organization accredited by the appropriate accreditation body or scheme requirements to the correct standard, for the same application, providing the applicable country identifiers are included, the component is **also** CSA Certified, the requirements in item "d" below are complied with and any "conditions of suitability" for the component (as recorded in this descriptive report) are complied with.
 - d) Components which have been substituted, must be of an equivalent rating, configuration (size, orientation, mounting) and the applicable minimum creepage and clearance distances are to be maintained from live parts to bonded metal parts and secondary parts.
 - e) Substitution of a "Certified" and/or "Listed" component with a component that is "Recognized" or "Accepted" is not permitted without evaluation and report updating.

The following Fittings are hereby certified:

| Model No. | Product Name | Categories | Description | Drawing No. |
|-----------|------------------------------------|------------|------------------------------------|-------------|
| WG7020 | Wall Mounted Eye/Face Wash No Bowl | | Wall Mounted Eye/Face Wash No Bowl | 1-2 |

| | | | | |
|----------|--------------------------------|--|--|-------|
| WG7023 | Wall Mounted Eye/Face Wash | Emergency Eye/Face Wash | Wall Mounted Eye/Face Wash with 304 stainless steel water bowl | 3-4 |
| WG7023Y | Wall Mounted Eye/Face Wash | | Wall Mounted Eye/Face Wash with AES plastic water bowl | |
| WG7033F | Pedestal Mounted Eye/Face Wash | | Wall Mounted Eye/Face Wash with 304 stainless steel water bowl, foot pedal operation | 5-6 |
| WG7033FY | Pedestal Mounted Eye/Face Wash | | Wall Mounted Eye/Face Wash with AES plastic water bowl, foot pedal operation | |
| WG7043V | Vertical Safety Shower | Emergency Shower | Vertical Safety Shower with 304 stainless steel showerhead | 7-9 |
| WG7043VY | Vertical Safety Shower | | Vertical Safety Shower with | |
| WG7043H | Horizontal Safety Shower | | Horizontal Safety Shower with 304 stainless steel showerhead | |
| WG7043HY | Horizontal Safety Shower | | Horizontal Safety Shower | |
| WG7043 | Pedestal Mounted Shower | | Pedestal Mounted Shower with 304 stainless steel showerhead | 10-12 |
| WG7043Y | Pedestal Mounted Shower | | Pedestal Mounted Shower with AES plastic showerhead | |
| WG7050F | Combination Unit No Bowl | Emergency Eyewash and Shower Equipment | Combination Unit No Bowl with 304 stainless steel showerhead, foot pedal operation | 13-15 |
| WG7050FY | Combination Unit No Bowl | | Combination Unit No Bowl with AES plastic showerhead, foot pedal operation | |
| WG7053F | Combination Unit | | Combination Unit with 304 stainless steel bowl and showerhead, foot pedal operation | 16-19 |
| WG7053FY | Combination Unit | | Combination Unit with AES plastic bowl and showerhead, foot pedal operation | |

| Clause | Description | Test | | | Results / Comments |
|--------|--|------|-----|---|--|
| | | A | N/A | W | |
| 1 | Scope | √ | | | |
| 2 | Purpose | √ | | | |
| 3 | Definitions | √ | | | |
| 4 | Emergency Showers | √ | | | |
| 4.1 | Performance of Emergency Showers | √ | | | |
| 4.1.1 | A control flow of flushing fluid is provided at a velocity low enough to be non-injurious to user | √ | | | |
| 4.1.2 | Flow pressure for plumbed Emergency Shower Flow rate throughout the 15 mins | √ | | | >20gpm |
| 4.1.3 | Height of flushing fluid column pattern from standing surface | √ | | | |
| 4.1.4 | Spray pattern at 60" above the standing surface | √ | | | >20" diameter, no obstruction 16" |
| 4.1.5 | Once activated, eyewash can be used without requiring the use of operator's hands | √ | | | |
| 4.1.6 | Emergency Shower is resistant to corrosion. Stored flushing fluid protected from airborne contaminants | √ | | | |
| 4.2 | Performance of Control Valve | √ | | | |
| 4.3 | Emergency Shower Enclosure | | √ | | No enclosure |
| 4.4 | Testing Procedures for Certification | √ | | | 4.4.1 Plumbed Emergency Showers |
| 4.5 | Installation | | √ | | |
| 4.6 | Maintenance and Training | | √ | | |
| 5 | Eyewash Equipment | √ | | | |
| 5.1 | Performance of Eyewashes | √ | | | 5.1.1-5.1.8 |
| 5.2 | Performance of Control Valve | √ | | | |
| 5.3 | Testing Procedures for Certification | √ | | | 5.3.1 Plumbed Eyewashes >0.4gpm |
| 5.4 | Installation | | √ | | |
| 5.5 | Maintenance and Training | | √ | | |
| 6 | Eye/Face Wash Equipment | √ | | | |
| 6.1 | Performance of Eye/Face Washes | √ | | | 6.1.1-6.1.8 |
| 6.2 | Performance of Control Valve | √ | | | |
| 6.3 | Testing Procedures for Certification | √ | | | 6.3.1 Plumbed Eye/Face Washes >3.0gpm |
| 6.4 | Installation | | √ | | |
| 6.5 | Maintenance and Training | | √ | | |

TEST HISTORY

Project 70039143

ANSI/ISEA Z358.1-2014 - American National Standard for Emergency Eyewash and Shower Equipment

| | | | | | |
|----------|---|---|---|--|--|
| 7 | Combination Units | √ | | | |
| 7.1 | Performance of Combination Units | √ | | | |
| 7.1.1 | Emergency Showers shall meet sec.4 | √ | | | |
| 7.1.2 | Eyewashes shall meet sec.5 | √ | | | |
| 7.1.3 | Eye/Face Washes shall meet sec.6 | √ | | | |
| 7.1.4 | Drench Hoses shall meet sec.8.2 at a flow and pressure stated by manufacturer | | √ | | |
| 7.2 | Performance of Control Valve | √ | | | |
| 7.3 | Testing Procedures for Certification | √ | | | |
| 7.4 | Installation | | √ | | |
| 7.5 | Maintenance and Training | | √ | | |
| 8 | Supplemental Equipment | | √ | | |
| 8.1 | Personal Wash Units | | √ | | |
| 8.2 | Drench Hoses | | √ | | |
| III.: 1 | Illustration Emergency Shower-Overhead Type | √ | | | |
| III.: 2 | Illustration Emergency Shower-Multi-Nozzle | | √ | | |
| III.: 3 | Illustration Emergency Shower-Multi-Nozzle with Overhead Fixture | | √ | | |
| III.: 4 | Illustration Plumbed Eyewash | √ | | | |
| III.: 5 | Illustration Nonpressurized self-Contained Eyewash | | √ | | |
| III.: 6 | Illustration Pressurized self-Contained Eyewash | | √ | | |
| III.: 7 | Illustration Typical Eyewash Gauge | √ | | | |
| III.: 8 | Illustration Eye/Face Wash | √ | | | |
| III.: 9 | Illustration Combination Unit | √ | | | |
| III.: 10 | Illustration Personal Wash | | √ | | |
| III.: 11 | Illustration Drench Hose | | √ | | |
| III.: 12 | Illustration Drench Hose with Eyewash Attachment | | √ | | |
| Append A | Appendix A safety considerations | | √ | | |
| A1 | Personal Wash Units | | √ | | |
| A2 | First Aid practices | | √ | | |
| A3 | Waste disposal | | √ | | |
| A4 | Personal Protective Equipment | | √ | | |
| Append B | Installation Considerations | | √ | | |
| B1 | Supply Lines | | √ | | |
| B2 | Water capacity | | √ | | |
| B3 | Valve Operation | | √ | | |
| B4 | Alarm Devices | | √ | | |
| B5 | Placement of Emergency Eyewash and Shower Equipment | | √ | | |
| B6 | Delivered Flushing Fluid Temperature | | √ | | |
| B7 | Weekly Activation for Plumbed Emergency Eyewash and Shower Equipment | | √ | | |
| Ref | Reference | | √ | | |

ASME A112.18.1-2012/CSA B125.1-12 - Plumbing Supply Fittings

| Clause | Description | Test | | | Results / Comments |
|--------|--|------|-----|---|---------------------|
| | | A | N/A | W | |
| 1 | Scope | √ | | | |
| 2 | Reference publications | √ | | | |
| 3 | Definitions and abbreviations | √ | | | |
| 4 | Design requirements | √ | | | |
| 4.1 | Supply Fittings | √ | | | |
| 4.2 | Servicing | | √ | | |
| 4.3 | Installation | √ | | | |
| 4.4 | Threaded connections | √ | | | |
| 4.5 | Connections other than threaded | | √ | | |
| 4.6 | Accessible design | | √ | | |
| 4.7 | Backflow prevention | | √ | | |
| 4.8 | Cover plates and escutcheons | | √ | | |
| 4.9 | Toxicity | | √ | | |
| 4.10 | Frost proof faucets and hydrants | | √ | | |
| 4.11 | Shower heads, body sprays, hand held showers | | √ | | |
| 4.12 | Cross-flow | | √ | | |
| 4.13 | Fittings incorporating electrical features | | √ | | |
| 4.14 | Materials | √ | | | Stainless Steel 304 |
| 4.15 | Automatic compensating valve temp control | | √ | | |
| 4.16 | Lawn and sediment faucets | | √ | | |
| 4.17 | Flexible water connectors | | √ | | |
| 5 | Performance requirements and test procedures | √ | | | |
| 5.1 | General | √ | | | |
| 5.1.1 | Preconditioning | √ | | | |
| 5.1.2 | Installation for testing | √ | | | |
| 5.1.3 | Test conditions | √ | | | |
| 5.1.4 | Order of tests | √ | | | |
| 5.2 | Coatings | | √ | | |
| 5.2.1 | General | | √ | | |
| 5.2.2 | Corrosion | | √ | | |
| 5.2.3 | Adhesion | | √ | | |
| 5.2.4 | Decorative organic coatings | | √ | | |
| 5.3 | Pressure and temperature : General | | √ | | |
| 5.3.1 | Static and dynamic seals | √ | | | |
| 5.3.2 | Burst test | √ | | | |
| 5.3.3 | Cross-flow check valves | | √ | | |
| 5.3.4 | Hose assemblies | | √ | | |
| 5.3.5 | Ball joints | | √ | | |
| 5.3.6 | Diverters | | √ | | |

| | | | | | |
|-------|--|---|---|--|--------------------------------|
| 5.3.7 | Aerators and other end point devices | | √ | | |
| 5.4 | Flow rate | √ | | | Refer to Z358.1 flow rate test |
| 5.5 | Operating requirements | √ | | | |
| 5.6 | Life cycle | √ | | | Ball valve 10000 cycle |
| 5.6.1 | Performance requirements | √ | | | |
| 5.6.2 | Test procedures | √ | | | |
| 5.6.3 | Fittings and other control devices | √ | | | |
| 5.7 | Resistance to installation loading | | √ | | |
| 5.8 | Resistance to use loading | | √ | | |
| 5.9 | Backflow prevention | | √ | | |
| 5.10 | Automatic Compensating valves | | √ | | |
| 5.11 | Lawn faucets | | √ | | |
| 5.12 | Alternate materials test | | √ | | |
| 5.13 | High-efficiency shower heads and hand-held showers | | √ | | |
| 6 | Markings | | √ | | |

Note: “√” in the appropriate box under A, N/A or W.

A - Applicable test or clause

N/A - Not Applicable test or clause (an explanation needs to be documented under ‘Comments’)

W - Test Waived (rationale needs to be explained under ‘Comments’ – a test that has been waived is one that was not done, but was applicable, due to engineering rational)

---End of Report---