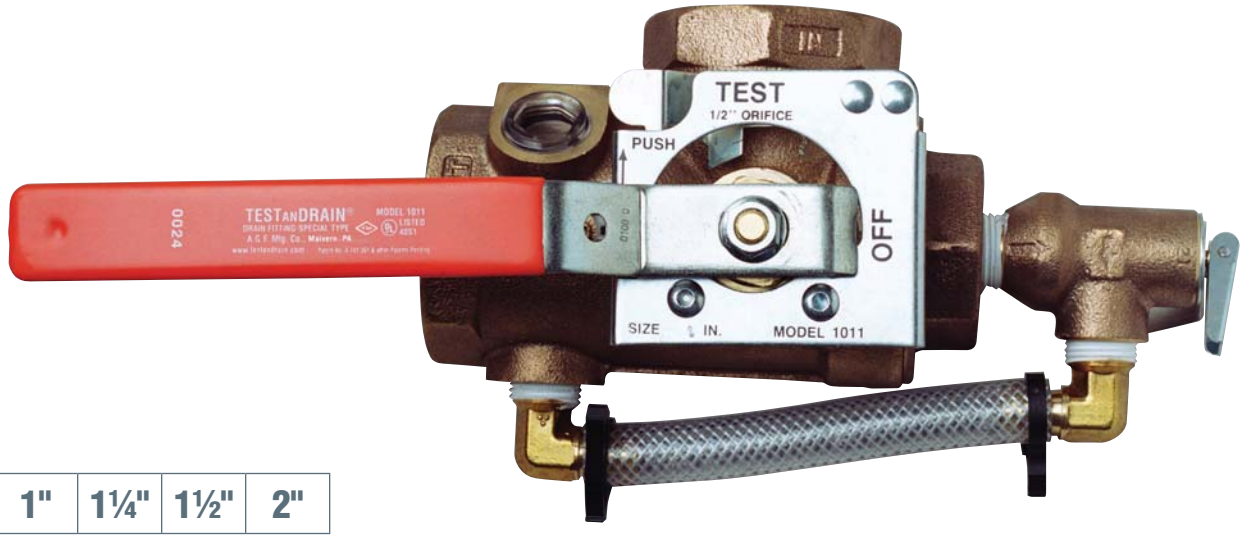
Model 1011A TESTANDRAIN®

Sectional Floor Control Test and Drain Valve for Systems Requiring Pressure Relief Valve



Sizes:

¾"	1"	1¼"	1½"	2"

The AGF **Model 1011A TESTANDRAIN®** provides the test and express drain functions for wet fire sprinkler systems on multi-story installations requiring pressure relief (NFPA 13 and NFPA 13R). The **Model 1011A** features a **Model 7000 Pressure Relief Valve** with drain pipe.

The **Model 1011A** is available in a full range of sizes (¾" to 2") with NPT connections (BSPT available). The **Model 7000 Pressure Relief Valve** (UL/FM) features a flushing handle and a 175 PSI factory rating (other pressure ratings available).

- Complies with NFPA 13 and NFPA 13R Requirements
- Compact, Single-Handle Ball Valve
- Tamper-Resistant Test Orifice and Sight Glasses
- 300 PSI rated.
- Specifiable orifice sizes: ⅜" (2.8K), 7⁄16" (4.2K), ½" (5.6K), 17⁄32" (8.0K), ⅝" (11.2K, ELO), ¾" (14.0K, ESFR), and K25
- Relieves Excess System Pressure caused by Surges or Temperature Changes
- Shipped with Relief Valve and Bypass Drain Ports Plugged to Expedite Pressure Testing
- Locking Kit Available

Repair kits are available for all **TESTANDRAIN®** valves. Kit includes: Adapter Gasket (1), Ball (1), Valve Seats (2), Stem Packing (1), and Stem Washer (1). ***Valve and orifice size must be specified when ordering.***

NOTE: It is important to note that the pressure rating of the relief valve indicates an operating range of pressure for both opening and closing of the valve. Standard relief valves are required to OPEN in a range of pressure between 90% and 105% of their rating. The valves are required to CLOSE at a pressure above 80% of that rating. The relief valve should be installed where it is easily accessible for maintenance. Care should be taken that the relief valve CANNOT be isolated from the system when the system is operational. A relief valve should NEVER have a shutoff valve or a plug downstream of its outlet.

Reliability, Versatility, Code Compatibility

TESTANDRAIN® is a registered trademark of AGF Manufacturing Inc.

Model 1011A TEST AN DRAIN®

Model 1011A 300 PSI Bronze Ball Valve, Model 7000 Pressure Relief Valve
Factory Rated at 175 PSI with other setting available

Dimensions

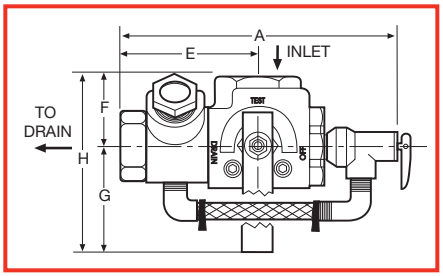
SIZE	A	B	C	D	E	F	G	H
¾"	7 9/16" (191 mm)	1 1/2" (37.5 mm)	2 3/16" (57 mm)	3 5/8" (93 mm)	3 3/8" (86 mm)	1 13/16" (46 mm)	4 9/16" (117 mm)	6 3/8" (162.5 mm)
1"	7 9/16" (191 mm)	1 1/2" (37.5 mm)	2 3/16" (57 mm)	3 5/8" (93 mm)	3 3/8" (86 mm)	1 13/16" (46 mm)	4 9/16" (117 mm)	6 3/8" (162.5 mm)
1¼"	7 15/16" (201 mm)	1 11/16" (43 mm)	2 9/16" (65 mm)	4 1/4" (108 mm)	3 5/8" (91 mm)	1 15/16" (51 mm)	5 9/16" (141 mm)	7 1/2" (192 mm)
1½"	8 15/16" (227 mm)	1 13/16" (45 mm)	3 1/4" (81.5 mm)	5 1/16" (127 mm)	3 7/8" (99 mm)	2 5/8" (67 mm)	8 1/4" (207 mm)	10 7/8" (274 mm)
2"	8 15/16" (227 mm)	1 13/16" (45 mm)	3 1/4" (81.5 mm)	5 1/16" (127 mm)	3 7/8" (99 mm)	2 5/8" (67 mm)	8 1/4" (207 mm)	10 7/8" (274 mm)

The Model 1011A provides the following…

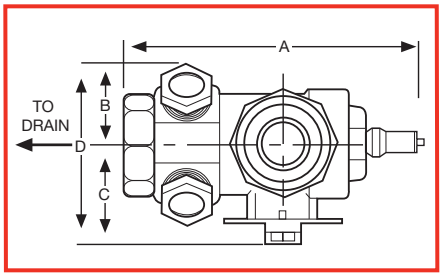
From the 2013 Edition of NFPA 13

Chapter 8.16.2.4.1*	Provisions shall be made to properly drain all parts of the system.
Chapter 8.16.2.4.2 & 8.16.2.4.3	Drain connections, interior sectional or floor control valve(s) – shall be provided with a drain connection having a minimum size as shown in Table 8.16.2.4.2.
Chapter 8.16.2.4.4	Drains shall discharge outside or to a drain capable of handling the flow of the drain.
Chapter A.8.17.4.2	(Wet Pipe System) test connection is permitted to terminate into a drain capable of accepting full flow… using an approved sight test connection containing a smooth bore corrosion-resistant orifice giving a flow equivalent to one sprinkler…
Chapter 8.17.4.2.2	The test connection valve shall be accessible.
Chapter 8.17.4.2.4	shall be permitted to be installed in any location… downstream of the waterflow alarm.
Chapter 8.17.4.3.1	(Dry Pipe System) a trip test connection not less than 1" in diameter, terminating in a smooth bore corrosion-resistant orifice, to provide a flow equivalent to one sprinkler…
Chapter 8.17.4.3.2	The trip test connection… with a shutoff valve and plug not less than 1", at least one of which shall be brass.
Chapter 7.1.2	- a wet pipe system shall be provided with a listed relief valve set to operate at 175 PSI or 10 PSI in excess of the maximum system pressure, whichever is greater.
Chapter 8.16.1.2.3*	A listed relief valve of not less than ½" in size shall be provided on the discharge side of the pressure-reducing valve set to operate at a pressure not exceeding rated pressure of the system.
Chapter A.8.16.1.2.3	- consideration should be given to piping the discharge from the (pressure relief) valve

Model 1011A - Front View



Model 1011A - Plan View



Orifice Sizes

⅜", 7/16", ½", 17/32", ⅝" ELO*, ¾" ESFR*, and K25**

Materials

Handle ..... Steel
Stem ..... Rod Brass
Ball..... C.P. Brass
Body ..... Bronze
Valve Seat..... Impregnated Teflon®
Indicator Plate .... Steel
Relief Valve ..... Bronze
Bypass Fittings... Brass
Bypass Tubing.... Nylobraid

Approvals

UL and ULC Listed:
(EX4019 & EX4533)
FM Approved
NYC-BSA No. 720-87-SM

MADE IN U.S.A.

USA Patent # 4741361 and Other Patents Pending

AGF Manufacturing Inc.
100 Quaker Lane, Malvern, PA 19355
Phone: 610-240-4900
Fax: 610-240-4906
www.testandrain.com

Job Name:_____
Architect:_____
Engineer:_____
Contractor:_____

*Available on 1¼" to 2" size units only • **Available on 1½" and 2" size units only

WM TAO & ASSOCIATES
CONSULTING ENGINEERS

Shop Drawing Submittal Review

Transmitted To: Cannon Design

Date: December 15, 2016

Attention: **stl-cac@cannondesign.com**

Contact Person / WTA Field Inspector: Patrick Garner

Project Name: Webster University-**ISB**

Reviewed by: Mike Whitworth (WES)

Project No. WT 14127.01
WES 607

[ ] UPS [ ] Courier [X] **Email**

Copies	No.	Description
1 PDF	210523F01	(Submittal No.'s:)
		(Cannon #210523-002) - (Paric #15051-0353) – (WES #607)
		➢ **Valves for Fire Protection Piping Product Data**

*Remarks: See Submittal Review from Webb Enginnering.

c: **Kelvin Patel**
Kpatel@cannondesign.com

[X] ***Reviewed**

[X] ***No Exceptions Taken**

[ ]

[ ] *Make Corrections As Noted, No Resubmittal Required

Corrections or comments made on shop drawings during this review do not relieve contractor from compliance with requirements of drawings and specifications. This check is only for review of general conformance with the design concept of project and general compliance with information given in contract documents. Contractor is responsible for: confirming and correlating all quantities and dimensions; selecting fabrication processes and techniques of construction; coordinating his work with that of all other trades; and performing his work in a safe and satisfactory manner.

WEBB ENGINEERING SERVICES INC.

1400 S. 3rd Street, Suite 201
St. Louis, Missouri 63104
Phone: (314) 588-0600
Fax: (314) 588-0604

Letter of Transmittal

To: wtashop@wmtao.com

From: Mike Whitworth

Date: December 11, 2016

Re: Webster University ISB

WES No: 607

☐ For your Files ☐ For Review ☐ Please Comment ☐ Please Reply

Item No.	Description	No. of Copies	Date
1	Shop Drawing Review – (210523-002) 210523 General Duty Valves for Water-Based Fire-Suppression Piping	1	12/11/16

•Signature: Mike Whitworth

WEBB ENGINEERING SERVICES INC.
1400 S. 3rd Street, Suite 201 • St. Louis, Missouri 63104 • 314.588.0600 • *fax* 314.588.0604
www.webb-engineering.com

The review of this submittal is limited to the general conformance with the designated design concept and intent of this project and with the general compliance of the information provided in the contract documents. All comments, remarks and notations made on the submittal(s) as a result of this review do not relieve the contractor from full compliance with requirements of the contract documents. Approval for a specific item shall not include approval of an assembly of which the item is not a component. The contractor is solely responsible for rough-in and installation confirming and correlating all quantities and dimensions; selecting fabrication processes and techniques of construction; coordination of this work with that of other trades on this project; and in a safe and satisfactory manner. All work shall be installed in full compliance with the manufacturer's recommendation, Federal, State and Local rules and regulation and the Authority Having Jurisdiction (AHJ) and applicable adopted codes and standards.

PROJECT NAME:	Webster University ISB
LOCATION:	St. Louis Missouri
CLIENT PROJ. NO.:	N/A
WES PROJ. NO.:	607
SPECIFICATION SECTION:	210523 General Duty Valves for Water Based Fire-Suppression Piping
SUBMITTAL ITEM:	See Below -

CONTRACTOR:	J.F. Ahern Co.
CTR. SUBMITTAL #:	21 0523-002
SUBMITTAL DATE:	November 29, 2016
DATE RECEIVED:	December 07, 2016
RECEIVED VIA:	E-Mail
RECEIVED FROM:	WTA
DATE RETURNED:	DECEMBER 11, 2016
RETURNED VIA:	E-MAIL
RETRURNED TO:	WTASHOP@WMTAO.COM

STATUS KEY:

NO EXCEPTION TAKEN
MAKE CORRECTIONS NOTED, NO RESUBMITTAL:
AMEND AND RESUBMIT
REJECTED, SEE REMARKS:
REVIEWED ONLY

NEC	MCN	AAR	REJ	REV	ITEM	REMARKS
X					Iron Body Gate Valves NIBCO Model - F-607-RW	
X					Butterfly Valves Victaulic Model - Fire Lock Style 705	
X					Swing Check Valve Viking Model - D-1 & G-1	
X					Bronze Gate Valves NIBCO Model - T-104-0	
X					Bronze Angle Valves NIBCO Model - T-301-W	
X					Bronze Globe Valves NIBCO Model – KT-65-UL	
X					Bronze Globe Valves NIBCO Model – KT-211-W-UL	

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www.webb-engineering.com

X					Bronze Side Outlet Globe Valves NIBCO Model – KT-291-W3	
X					Bronze Check Valves NIBCO Model – KT-403-W	
X					Bronze Ball Valves NIBCO Model – KT-585-70-UL and KT-580-70-UL	
X					Fire Lock Ball Valve Victaulic Model - Fire Lock Series 728	
X					Butterball Butterfly Valves Milwaukee Valve Model - Various	
X					Calibrated Pressure Relief Valves Watts Model – Series 530C	
X					Test and Drain Valve AGF Manufacturing Model – 1011A	
X					Double Check Valve Assembly Zurn Model - 350A	
X					Forged Brass Ball Valve KITZ Model - 58	
X					Pressure Relief Valve / Pump Casing Relief Valve CLA-VAL Model – 55L-60	
X					Air Release Valve Val-Matic Valve and Manufacturing Corp. Model – 22.9	

REVIEWED BY: Michael R. Whitworth DATE: December 11, 2016

THESE COMMENTS ARE TO BE ATTACHED TO ALL COPIES OF THE SHOP DRAWING REFERENCED ABOVE.

CANNONDESIGN

SUBMITTAL IDENTIFICATION SHEET

To be completed by Contractor/CM

WEBSTER UNIVERSITY ISB
PROJECT NAME

8274 BIG BEND BLVD
ADDRESS

NUMBER

WEBSTER UNIVERSITY
OWNER

CANNON DESIGN
ARCHITECT / ENGINEER

Joe Voypick
SUBMITTED BY

210523-002
CONTRACTOR / CM SUBMITTAL NO.

CANNON DESIGN SUBMITTAL NO.

DRAWING / DETAIL REFERENCE

210523
SPECIFICATION SECTION / PARAGRAPH

Ahern Fire Protection
MANUFACTURER / SUPPLIER

ITEM / PRODUCT ID

REQUIRED DATE

PRIORITY

◯ CRITICAL

ITEM BEING SUBMITTED (check only one)

- ◯ Shop Drawings
- ◯ Samples (_____ copies)
- ◯ LEED Submittal
- ◯ Certification / Qualifications
- ◉ Record Documents
- ◯ Product Data
- ◯ Coordination Drawing
- ◯ Calculations
- ◯ Schedules
- ◯ O&M Manuals
- ◯ Other _____

ITEM BEING SUBMITTED FOR (check only one)

◉ Action ◯ Information Only ◯ Record

REMARKS OR DEVIATIONS

CONTRACTOR / CM CERTIFICATION
(SUBMITTALS NOT CERTIFIED WILL BE RETURNED WITHOUT REVIEW)

PARIC

PARIC CORPORATION
SUBMITTAL STAMP

THIS SHOP DRAWING HAS BEEN REVIEWED BY PARIC CORPORATION

Subcontractor remains responsible for dimensions, quantities, coordination with other trades and compliance with contract documents.

By:
Devin D. Gates

Joe Voypick
REVIEWED BY

11/30/16
DATE

To be completed by Reviewer

21 0523-002
CANNON DESIGN SUBMITTAL NUMBER

11/30/16
RECEIVED DATE

- ◯ A. No Exceptions Taken
  No further review of submittal is required.
- ◯ B. Make Corrections Noted
  Incorporate corrections in work; resubmission is not required.
- ◯ C. Revise and Resubmit
  Revise as noted, and resubmit for review.
- ◯ D. Rejected
  Submittal is not in compliance with Contract Documents; provide new submittal.
- ◯ E. For Record / Information Only
  Submittal was reviewed for Record / Information purposes only.
- ◯ F. Not Required for Review
  Submittal is not required by Contract Documents and has not been reviewed.

Review is for conformance with the design concept of this project and for general compliance with contract documents. Contractor is responsible for quantities, dimensions and compliance with contract documents and for information that pertains to fabrication processes, construction techniques and coordination of this work with all trades which will be affected thereby. This review is null and void if submittal deviates from contract documents and does not indicate or note deviations.

A/E COMMENTS ◯ See attached sheet(s) for additional comments

REVIEWED BY

DATE

77 Westport Plaza
Suite 250
St. Louis, MO 63146

TRANSMITTAL

No. 15051-0353

Paric Corporation

PROJECT: 15051-Webster University Interdisciplinary Science Building

DATE: 11/29/2016

TO: Cannon Design
1100 Clark Ave
St Louis MO 63102

Fax;
314-241-2203

RE: Valves for Fire Protection Piping Product Data

ATTN: Kelvin Patel

JOB: 15051

WE ARE SENDING:	SUBMITTED FOR:	ACTION TAKEN:
☐ Shop Drawings	☑ Approval	☐ Approved as Submitted
☐ Letter	☐ Your Use	☐ Approved as Noted
☐ Prints	☐ As Requested	☐ Returned After Loan
☐ Change Order	☐ Review and Comment	☐ Resubmit
☐ Plans		☐ Submit
☐ Samples	**SENT VIA:**	☐ Returned
☐ Specifications	☐ Attached	☐ Returned for Corrections
☑ Other: Product Data	☐ Separate Cover Via:	☐ Due Date:

Item	*Package*	*Code*	*Rev.*	*Copies*	*Date*	*Description*	*Status*
Submittal		210523-002	1		11/29/2016	Valves for Fire Protection Piping Product Data	Submitted

NOTES:

CC:

Signed: _____

Devin Gates