

# APPROVALS, ACCEPTANCES AND LISTINGS

JAMESBURY brand products have been accepted by a number of qualifying organizations and agencies world-wide. Many of the approvals are explained herein, with a list of the specific products that have been accepted. We welcome inquiries concerning approvals or listings of any products or organizations that are not covered in this bulletin.

While some acceptances cover entire product lines, others apply only to specific valve styles and/or materials of construction. Also, in some instances, acceptances are for maximum pressures or temperatures set by the organization for that particular service category, which may often be considerably below the full rating of the valve. Use of valves in such services should be followed accordingly.

*Most of the products listed in this bulletin are slight modifications of standard products, the difference being in special testing and tagging with the listing/ approval agency's pressure rating for the particular service. It is therefore important that when products are ordered for applications requiring a listing or approval, it should be clearly noted.*

## ISO9001



Metso Automation quality systems were developed to ensure that all of our products meet international standards of quality world-wide. All of our manufacturing facilities have instituted quality systems designed and approved to ISO-9001 standards.

## UNDERWRITER'S LABORATORIES



Users of valves, actuators, and accessories should refer to the applicable directory of listed equipment to determine the specific service category in which the product to be used will fall. Categories for which JAMESBURY products have been examined by UL and subsequently listed are shown below. Information about listings under other categories and listings on products other than those shown is available upon request.

### Gas and Oil Equipment List

Valves are listed by UL under several categories in the Gas and Oil Equipment List. These categories, their UL guide designations, and the identification number that appears on the valve tag denoting the service for which the valve was ordered are:

Category	UL Service Designation	UL Guide Designation	Jamesbury Identity Number
Manual valves	Shut-off valves for oil or gas burner equipment	MHKZ	08
Anhydrous ammonia shut-off valves	Liquid and gas line service valves	YQAR	11
Compressed gas shut-off valves	Gas line service valves	YQNZ	14
Flammable liquid shut-off valves	Manual valves for fuels and solvents	YRBX	06
Gas shut-off valves	Manual valves for natural and mfg. gases	YRPV	04
LP-gas shut-off valves	Liquid and gas line service valves	YSDT	05

Valves listed in these categories are shown on cards published by UL with the manufacturer's file MH6330. The valves listed are:

	inches	DN (mm)
Series 21 & 23 Clincher®*	1/4 – 2	8 – 50
Styles A-LP & AZ-LP*	1/4 – 2	8 – 50
Series 6F	1/2 – 3	15 – 80
Series 3000	1/2 – 1-1/2	15 – 40
Series 4000	1/2 – 2	15 – 50
Series 5000	1/2 – 8	15 – 200
Series 6150	2 – 6	50 – 150
Series 6300	2 – 4	50 – 100
Series 7000	3 – 8	80 – 200
Series 9000	2 – 8	50 – 200

All series 451T\* valves in sizes 1/4"-2" (DN 8-50) are listed by UL with the manufacturer's file MH15505 in the following categories: MHKZ, YQNZ, YRBX, YRPV and YSDT. The Jamesbury Identity Number need not be specified for this series

### Fire Protection Equipment List

The valves above, up through 2" (DN 50) only and not including 6F, are also UL listed as being suitable for use as indicating type valves for general use in air and water supply piping of fire protection equipment, dry pipe and alarm valve trim, and other applications where either gate or globe valves have been used in the past. Details are:

Category	UL Service Designation	UL Guide Designation	Jamesbury Identity Number
Valves, trim and drain	Shut-off valves for air and water	VQGU	07

**UNDERWRITERS LABORATORIES OF CANADA (ULC)**

Metso Automation has several valve styles listed with ULC for different gas services. These valves are identified by a ULC label (applied at the factory) and by a modifier code shown after the valve figure number, which should be specified when ordering.

**ULC Guide No. 167 E49 (modifier code "GC")**

These valves have been examined and tested by ULC as meeting the Canadian Gas Association standard 3.16 (Lever Operated Non-lubricated Gas Shut-off Valves). They are intended for use as manual shutoff valves to be used with natural gas, manufactured gas, and liquefied petroleum gases (distributed as vapor with or without the admixture of air), or mixtures thereof, at pressures up to 125 psig (860 kPa).

The valves listed in these categories are:

	inches	DN (mm)
Style A/AZ	1/4 - 2	8 - 50
Series 21 <i>CLINCHER</i>	1/4 - 2	8 - 50
Series 451T*	1/4 - 2	8 - 50
Series 23 <i>CLINCHER</i>	1/4 - 2	8 - 50
Eliminator®	1/4 - 2	8 - 50
Series 451T*	1/4 - 2	8 - 50
Series 6F	1/2 - 3	15 - 80
Series 3000	1/4 - 2	8 - 50
Series 4000	1/2 - 2	15 - 50
Series 5000	1/2 - 2	15 - 50
Series 7000	3 - 8	80 - 200
Series 9150	2 - 8	50 - 200
Series 9300	2 - 6	50 - 150

\* Modifier code "GC" need not be specified.

**ULC Guide No. 440 A21.21 (modifier code "KL")**

These valves have been examined and listed by ULC as LP-Gas Shut-off valves, suitable for use in systems storing and handling LP-gas in either liquid or gaseous phase at pressures up to 400 psig (2760 kPa). They may be manually or pressure actuated. The ULC listing covers the valve only, not the combination of valve and actuator.

The valves listed are:

Valve Size and Style	Max. Pressure Rating	
	psig	kPa
1/4" - 2" (DN 8-50) Style A/AZ	250	1720
1/4" - 2" (DN 8-50) Series 451T*	600	4137
1/4" - 2" (DN 8-50) Series 21 <i>CLINCHER</i>	400	2760
1/4" - 2" (DN 8-50) Series 23 <i>CLINCHER</i>	400	2760
1/4" - 2" (DN 8-50) Series 3000	400	2760
1/2" - 2" (DN 15-50) Series 4000	400	2760
1/2" - 2" (DN 15-50) Series 5150	275	1900
1/2" - 2" (DN 15-50) Series 530S/5300	400	2760
1/4" - 2" (DN 8-50) <i>ELIMINATOR</i>	400	2760
1/4" - 2" (DN 8-50) Series 451T*	600	4137
1/2" - 3" (DN 15-80) Series 6F	400	2760
3" - 4" (DN 80-100) Series 7150	295	1900
6" - 8" (DN 150-200) Series 7150	275	1900
2" - 8" (DN 50-200) Series 9150	275	1900
2" - 6" (DN 50-150) Series 9300	400	2760
3" - 8" (DN 80-200) Series 730S / 7300	400	2760

\* Modifier code "KL" need not be specified.

**FACTORY MUTUAL**



Several JAMESBURY brand products for critical plant applications have been approved by the research laboratory of the Factory Mutual Insurance Companies and are listed in the Factory Mutual Approved Equipment Handbook. We will work in liaison with Factory Mutual upon request for approval on the use of products for service categories that are not listed, for products not included among those that are approved, or for assistance in acceptance of arrangements of equipment in which company products are involved.

**Hazardous Location Equipment**

Our StoneL brand limit switches are available in configurations that are approved, filling Nema 4, 4X, 6 and 7 Class I Groups C & D, and 9 Class II Groups E, F and G Div 1 specifications for combined watertight and hazardous location design.

**Firesafe Shutoff Valves**

Fire-Tite® Series 5150 ball valves in sizes 1/2"-2" (DN 15-50) and *FIRE-TITE* Series 4000 ball valves in sizes 1/2"-2" (DN 15-50) have been successfully subjected to Factory Mutual fire testing and are accordingly approved as Fire-safe Valves.

**Emergency Switch Valves**

Integral assemblies consisting of either Series 2000 screwed-end or Series 5000 flanged valves and spring-return Torq-Handle® with a fusible link and optional limit switches, having the designation **Figure 1075**, are Factory-Mutual approved under the category Flammable Liquid Equipment.

These special units are approved as (a) Emergency Shut-off Valves that will close automatically in the event of excess environment temperature, and (b) Fire-safe Shut-off Valves, specifically designed for flammable liquid service which have been tested and qualified to resist exposure to a representative 15 minute uncontrolled fire and still provide effective shut-off. **Refer to Bulletin B132-1 for details.**

**Burner Management Valves**

Two Factory Mutual approved lines of products developed specifically for combustion control systems are available. These units are for controlling the flow of manufactured, natural, and LP-gases, unheated #4 and lighter and heated #5 and #6 fuel oils. Full information including designations, rating, and other specifications are contained in separate bulletins that describe each line.

**Figure 1051** Supervisory Cocks (Electric Interlocking Fuel Gas and Fuel Oil Cocks) consist of a conventional manually operated Double-Seal® ball valve (Style A and Series 2000 screwed end, Series 4000 screwed and weld end, Series 5150 flanged through 2" (DN 50) in size, and Series 7000 in 3" (DN 80) size), with an integrally mounted limit switch assembly arranged so that primary switch contacts close only when the cock is closed. These are available in both screwed end and flanged designs. **Refer to Bulletin B131-1 for details.**

**Figure 1052** Gas and Oil Safety Shutoff Valves (Automatic Opening, Electric and Pressure Opening, and Holding Valves) consist of a conventional Double-Seal Series 4000 ball valve in screwed end or weld design in 1/2"-2" (DN 15-50) sizes or ANSI Class 150 flanged design in 3" (DN 80) and 4" (DN 100) sizes with compact VPVL spring return rack & pinion ST-MS pneumatic spring-return piston or Quadra-Powr® spring-diaphragm actuator, integrally-mounted limit switch, assembly like that on the **Figure 1051** unit, and with appropriate solenoid pilot valve. Also approved are **Figure 1052** valves consisting of Type 6150 full-port flanged valves in 3/4"-1-1/2" (DN 20-40) sizes, Type 9150 full-port flanged valves in 2"-6" (DN 50-150) sizes, Type 5150 standard-bore flanged valves in 2" (DN 50) sizes, and Type 7150 valves in 3"-8" (DN 80-200) sizes. **Consult Bulletin B131-2 for further information.**

### CHLORINE INSTITUTE



Metso Automation offers a variety of ball and butterfly valves specially processed to meet the recommendations of the Chlorine Institute as listed in pamphlet #6 (Edition 13) that include design, application, testing, and marking of valves.

For complete information on chlorine service *DOUBLE-SEAL* ball valves and *WAFER-SPHERE* high-performance butterfly valves refer to **Bulletins B150-2 and W150-2, respectively.**

### AMERICAN PETROLEUM INSTITUTE



The JAMESBURY valves meet several applicable standards of the American Petroleum Institute, such as API 6D, qualifying them for a wide range of services throughout the petroleum industry.

For general applications, valves are available meeting specific standards for design and materials of construction. *FIRE-TITE* ball valves and high-performance butterfly valves are also available meeting API Standard 607 (4th Edition) for fire-tested valves.

The Bulletins detail standards that each valve type meets.

### AMERICAN GAS ASSOCIATION

The Series 1056 Automatic Safety Shut-off Gas Valves are approved under ANSI Z21.21-1995/CGA 6.5-M95.

The Series 451T in sizes 1/4"-2" (DN 8-50) are approved under ANSI Z21.15, AGA 3-88, ANSI/ASME B16.33 rated 125 psig. Classifications include:

- Manually Operated Gas Valves for Appliances
- Manually Operated Gas Valves House Piping
- Manually Operated Metallic Gas Valves for Use in Gas Piping Systems Up to 125 psig

### NATIONAL ASSOCIATION OF CORROSION ENGINEERS



Metso Automation offers a full range of ball valves and butterfly valves, conforming to NACE Standard MR-0175 (1999) for petroleum industry applications. These valves are of standard design but have materials of construction that are resistant to the corrosive effects of hydrogen sulfide characteristic of flow from deeper oil and gas wells. Consult the individual Bulletins for details on how to order.

### CANADIAN GAS ASSOCIATION

Metso Automation has various valve styles which comply with CGA standard 3.16 "Lever Operated Non-Lubricated Gas Shut-off Valves." They have been examined for compliance with this standard and listed by ULC. Refer to the Under-writer's Laboratories of Canada (ULC) section of this bulletin - Guide No. 167.E49.

The Series 1056 Automatic Safety Shut-off Gas Valves are approved under ANSI Z21.21-1995/CGA 3.9/6.5-M95.

The Series 451T in sizes 1/4"-2" (DN 8-50) comply with CGA 3.16 "Manually Operated Gas Valves" rated 125 psig. Classifications include:

- CGA 3.16
- Manually Operated Gas Valves for Appliances

### CANADIAN STANDARDS ASSOCIATION

EU, ER & ERV electric actuators have been tested and approved by this association for use in hazardous atmospheres. Our StoneL brand limit switches are available in configurations that are approved, filling Nema 4, 4X, 6 and 7 Class I Groups C & D, and 9 Class II Groups E, F and G Div 1 specifications for combined watertight and hazardous location design.

Please consult our factory or StoneL directly for details.

### PROVINCIAL REGISTRATION (CANADA)

In accordance with CSA standard B51 (Boiler, Pressure Vessel, and Pressure Piping Code), JAMESBURY brand product designs have been registered with the Departments of Labour of Canadian Provinces. Contact the factory for individual Canadian Registration Numbers (CRN).

### BRITISH STANDARDS INSTITUTE



The JAMESBURY valves are available meeting the following British Standards:

BS 5351-Steel Ball Valves for the Petroleum, Petrochemical and Allied Industries. Included are Series 4000, 5000, 6000, 7000, and 9000 *DOUBLE-SEAL* ball valves.

BS 5146-Inspection and Test of Steel Valves for the Petroleum, Petrochemical and Allied Industries.

This standard includes the fire-test procedure sometimes referred to as OCMA FSV-1. Ball valves in Series 4000, 5000, 6000, 7000, and 9000; and Series F815, F830, and F860 *WAFER-SPHERE* butterfly valves have been independently witness-tested by Lloyd's to this fire-test requirement.

BS 6755 Part 2 - Specification for fire-testing requirements. This is a test similar to API 607 (Third Edition). Series 3000, 4000, 5000, 6000, 7000, and 9000 *DOUBLE-SEAL* ball valves, C-Series, P-Series, and MBV metal-seated ball valves. Series F815 & F830 *WAFER-SPHERE* butterfly valves and *NELDISC* metal-seated butterfly valves have been independently witness-tested by Lloyd's to this requirement.

### IAPMO

Research and testing uniform plumbing code for valves (ball), ANSI/ASME B16.33. The Series 451T in sizes 1/4"-2" (DN 8-50) are rated 125 psig in this category.

### OTHER APPROVALS, ACCEPTANCES, AND LISTINGS

There are additional acceptances of JAMESBURY brand products by various organizations, details of which are available upon request. Some of these are:

Association of American Railroads

Department of Transportation-Marine Services  
(Canada)

Lloyd's Register of Shipping

Germanischer Lloyd

Oil Companies Material Association

Technical Research Centre of Finland

Yarsley Technical Centre, Ltd.

Province of Ontario (Canada), Ministry of the  
Environment

### Installation Instructions, Maintenance and Operation

IMO's (Installation, Maintenance, and Operating instructions) or AMI's (Assembly, Mounting, and Installation instructions) are shipped with the products. Additional copies of these instructions are available. Call your local Jamesbury Inc. Distributor, or visit our web site.

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