# Approvals

## Approval Listing Code and Information

UL, FM, CSA listings and compliance to applicable CE directives have been indicated for each Series in this catalog. Listing codes and other information follow in this section.

In addition to approvals with the standard features and for the standard voltages listed in each Series, many valves with optional features and other voltages have also been approved. *Consult your local ASCO sales office for details.*

### Agency Valve Classifications and Code Reference

**General Purpose Valve** – a Normally Open or Normally Closed valve intended to control the fluid flow, but not to be depended upon to act as a safety valve. This is a UL and CSA classification, and is not intended to indicate valve service or application.

**Safety Shutoff Valve** – a Normally Closed valve of the "on" and "off" type, intended to be actuated by a safety control or emergency device, to prevent unsafe fluid delivery. It may also be used as a General Purpose valve. A multiple port valve may be designated as a Safety Shutoff valve only with respect to its Normally Closed port. This is a UL, FM, and CSA valve classification. Safety shutoff valves are listed in UL index under Guide YIOZ or YIOZ2 for ordinary locations and YTSX or YTSX2 for hazardous locations.

**Process Control Valve** – an FM approved valve to control flammable gases, not to be relied upon as a Safety Shutoff valve. Refer to note under individual valve listing. Unless otherwise stated under the individual Series numbers, valves are listed as General Purpose valves.

### Underwriters Laboratories, Inc.

UL standards governing solenoid valves are:

UL429, "Electrically Operated Valves,"

UL1002, "Electrically Operated Valves for Use in Hazardous Locations."

UL1604, "Electrical Equipment for use in Class I and II, Division 2 and Class III Hazardous Classified Locations."

UL provides two "Listing" categories for solenoid valves:

**General Use**. Valves authorized for general use are complete in their requirements; therefore, they may be installed in the field. They are identified by the UL symbol, followed by the word "Listed" and the valve classification. UL Listings for ASCO "General Use" valves and solenoids can be found in the "UL Gas and Oil Equipment Directory" under Electrically Operated Valves, Guide No. YIOZ or YI0Z2 (File MP-618), and in the "UL Hazardous Location Equipment List" under Electric Valves, Guide No. YTSX or YTSX2 (File E25549) or under Solenoids, Guide No. VAPT (File E12264).

**Component**. Valves in this category are intended for use as factory-installed components of equipment where final acceptability must be determined by UL. They are not intended for installation in the field.

Component valves are termed "UL Recognized" and use UL's special Recognized Component mark. UL Listings of ASCO Component Valves can be found in the "UL Recognized Component Index" under Electrically Operated Valves, Guide No. YIOZ2 and YSY12 (File MP-618).

### Canadian Standards Association

Standard C22.2 No. 139, "Electrically Operated Valves," covers the standards governing solenoid valves.

Standard C22.2 No. 213, "Electrical equipment for use in Class I, Division 2 hazardous locations."

CSA certified valves and solenoids are listed in the "CSA Certified Electrical Equipment Book" under Valves, Guide No. 440-A-0 (File 10381) and Guide No. 440-A-0.8 (File 13976).

### Factory Mutual Research Corporation

FM "approves" and lists in the "Factory Mutual Approval Guide" fuel oil and fuel gas safety shutoff valves, process control valves, explosionproof/dust-ignitionproof, and intrinsically safe valves for hazardous locations. Valves designated for other fluids and operational characteristics, although not subject to FM approval, are usually "accepted" by FM on specific equipment installations.

## Industrial Risk Insurers (Formerly FIA)

Industrial Risk Insurers does not approve equipment. It established "recommended good practices" in such areas as combustion safeguards on single-burner boiler-furnaces, and safeguarding Class B and Class C furnaces and ovens. Conforming to these practices results in either insurability for fire protection or in more advantageous rates for their protection.

To meet the standards of good practice, safety controls must be either listed by Underwriters Laboratories, accepted by Industrial Risk Insurers or other nationally recognized testing laboratories (NRTL). The National Fire Protection Association (NFPA) maintains similar requirements and recommendations for safety shutoff and vent valves in oil and gas burner boiler systems.

## European Directives – CE

The Council of the European Communities, under the treaty establishing the European Community (EC), adopted into law a series of directives to harmonize technical standards.

Solenoid valves are controlled by:

EMC (Electomagnetic Capability) 2004/108/EC
Low Voltage 2006/95/EC

ASCO valves complying to these directives, through third-party or self-certification, display the CE mark on the nameplate or coil and on the Instruction and Maintenance sheet packaged with each valve. On request, ASCO will issue a Declaration of Incorporation and/or Declaration of Conformity for the valve supplied.

## Agency Approvals – Worldwide

ASCO's Quality Assurance Program meets all the requirements of ISO-9001:2008. We are also certified to IQ Net, providing customers with the products from 17 ISO-certified facilities around the world. The US, Canada, UK, France, the Netherlands, Germany, and Japan are included.

When desired, ASCO solenoid valves can be supplied to meet the additional requirements of a variety of approval agencies around the world. The following can be requested. *Consult your local ASCO sales office for details.*

### United States of America

| | |
|---|---|
| AGA | American Gas Association |
| ANSI | American National Standards Institute, Inc. |
| CSA | Canadian Standards Association (Certified to US Standards) |
| EIA | Electronic Industries Association |
| ETL | Electronic Testing Laboratory |
| FM | Factory Mutual Research Corporation |
| IEEE | Institute of Electrical and Electronics Engineers, Inc. |
| IRI | Industrial Risk Insurers (formerly Factory Insurance Association) |
| JIC | Joint Industrial Council |
| MIL | Military Standards |
| MSHA | Mine Safety and Health Administration |
| NACE | National Association of Corrosion Engineers |
| NAVSEA | Naval Sea Systems Command |
| NEC | National Electric Code |
| NEMA | National Electrical Manufacturers Association |
| NFPA | National Fire Protection Association |
| NFPA | National Fluid Power Association, Inc. |
| NSF | National Sanitation Foundation |
| UL | Underwriters Laboratories, Inc. |
| USCG | United States Coast Guard |

**European Economic Community**
- CE European Directives
- CEE International Commission on Rules for the Approval of Electrical Equipment
- ATEX Directive 94/9/EC Apparatus for Potentially Explosive Atmospheres (ATmospheres EXplosibles)
- IEC International Electrotechnical Commission
- ISO International Organization for Standardization

**Austria**
- TÜV-A Technischer Überwachungs-Verein Österreich
- BVFA Bunderversuchs-und Forschungsanstalt Arsenal
- ETI Elektrotechnisches Institut

**Australia**
- AGA Australian Gas Association
- SAA Standards Association of Australia

**Belgium**
- CEB Comite Electrotechnique Belge
- IBN Institut Belge de Normalisation
- ISSEP Institut Scientifique de Service Public (anciennement INIEX)
- K.V.B.G. Koninklijke Vereniging der Belgische Gasvaklieden
- VERGAS Technische Vereniging van de Gasindustrie in Belgie V.Z.W.D.

**Brazil**
- INMETRO Instituto Nacional de Metrologia

**Canada**
- CGA Canadian Gas Association
- CSA Canadian Standards Association
- EEMAC Electrical and Electronic Manufacturers Association of Canada
- ULC Underwriters Laboratories of Canada

**China**
- NEPSI National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation
- CCC China Compulsory Certification

**Denmark**
- DEMKO Danmarks Elektriske Materielkontrol

**Finland**
- SL Sähkötarkastuslaitos Laboratoria
- VTT Technical Research Centre of Finland

**France**
- AFNOR Association Française de Normalisation
- INERIS Institut National de l'Environnement Industriel et des Risques (anciennement CERCHAR)
- Bureau Veritas
- LCIE Laboratoire Central des Industries Electriques
- MDIS Ministère du Développement Industrial et Scientifique

**Germany**
- BVS Bergbau-Versuchsstrecke
- DIN Deutsches Institut für Normung
- DVGW Deutscher Verein des Gas – Und Wasserfaches e.V.
- Germanischer Lloyd
- PTB Physikalisch – Technische Bundesanstalt
- VDE Verband Deutscher Electrotechniker

**Italy**
- CEI Comitato Elettrotecnico Italiano

**Japan**
- JEM Japan Electrical Manufacturers Association
- JIS Japanese Industrial Standards
- MIL Ministry of Labor
- NK Japan Maritime Association
- RIIS Research Institute of Industrial Safety, Department of Labor

**South Korea**
- KISCO Korea Industrial Safety Corp.
- KGSG Korea Gas Safety Corp.

**Luxembourg**
- Service de l'énergie de l'état

**Northern Ireland**
- Industrial Science Centre, Department of Economic Development

**Norway**
- Det Norske Veritas
- NEMKO Norges Elektriske Materiellkontroll

**Russia**
- USSR Register of Shipping

**South Africa**
- SABS South African Bureau of Standards

**Spain**
- CESI Centro Elettrotecnico Sperimentale Italiano
- LOM Laboratorio Oficial José Maria Madariaga

**Sweden**
- SEMKO Svenska Elektriska Material Kontrollanstalen
- SP Swedish National Testing and Research Institute

**Switzerland**
- ASE Association Suisse des Electriciens
- SEV Schweizerischer Electrotechnischer Verein

**The Netherlands**
- DGA Direktoraat – Generaal van de Arbeid
- KEMA Koningklijk Instituut voor het Testen van Elektrische Materialen N.V.
- NEC Nederlands Elektrotechnisch Comité
- NNI Nederlands Normalisatie – Instituut
- REGO Richtlijnen Voor de Samenstelling van Elektrisch Material In Verband Met Gasontploffinsgevaar
- VEG VEG-Gasistituut N.V.
- VGN Veriniging van Gasfabrikanten In Nederland

**United Kingdom**
- BASEEFA British Approvals Service for Electrical Equipment in Flammable Atmospheres
- BGC British Gas Corporation
- BSI British Standard Institution
- EECS Electrical Equipment Certification Service (BASEEFA)
- Lloyds Register of Shipping
- MRS Midlands Research Station
- NWC National Water Council
- SCS Sira Certification Service
- SFA Special Flammable Atmospheres
- WH Watson House