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Series 8000 Air Actuated Valves



- Pneumatically actuated valves with powerful closing spring for reliable operation
- **Compact design** with integral solenoid, quick exhaust and position switches that protects components, simplifies piping and minimizes space requirements
- Factory Mutual, CSA and CE approved safety shut-off and vent valves
- Hazardous Location approved: Intrinsically Safe and Non-Incendive constructions available
- Full assessment to IEC 61508 as SIL 3 capable
- Top mounted 360-degree open-shut visual position indication
- **Cast iron, carbon steel, low temperature carbon steel and stainless steel body assemblies** with internal trim options to handle general purpose or corrosive gases; oxygen compatibility and NACE compliant trims available
- Ambient temperature ranges of -40°F to 140°F ; Gas temperature range of -40°F to 212°F
- Application flexibility provided with 3/4" (DN20) through 6" (DN150) line sizes & line pressures up to 255 psig
- Actuator assemblies are field-replaceable and available in 120VAC 50/60 Hz, 240VAC 50/60 Hz, and 24VDC (with low power option), rated for NEMA 4, NEMA 4X and IP65
- Unique bonnet design eliminates packing adjustments, reducing maintenance and minimizing drag on closing
- Series 8000 Valves meet Fluid Control Institute (FCI) 70-2 control valve standard for Class VI seat leakage

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Features & Benefits

MAXON Series 8000 Air Actuated Valves combine a unique space-saving design with a maintenance-free bonnet seal and a replaceable actuator for easy installation and smooth, trouble-free operation.

The valve's quick exhaust and powerful closing spring provide valve closure in less than one second and reliable, long-life operation.

Series 8000 Valve's compact design simplifies piping design and minimizes space requirements.

The field-replaceable actuator provides easier maintenance and reduced downtime. The actuator can also be rotated around the valve body in 90° increments to fit your specific application requirements.

A unique bonnet design eliminates packing adjustments for reduced maintenance and minimized drag on closing.

The top-mounted open-shut indicator is visible from all angles for easy proof of valve position. SIL3 capable design provides easy design for safety instrumented systems in the IEC 61508 and 61511 process. FM, CSA and CE approvals for use as a fuel safety shut off valve making easy integration with worldwide certifications.







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Switch Assemblies

Provides positive valve position - open or closed
Complies with "proof of closure" requirements
Easily integrates with an analog control system, DCS or PLC

VOS2/VCS2 Switch Assemblies with Terminal Blocks and Leads Mounted •Factory-mounted to terminal strip to shorten installation time •Easy replacement (2 screws)

•Locating pins guarantee accurate mounting position

•No adjustment required





V7 Assembly for General Purpose and Intrinisically Safe valves

IP67 Switch Assembly for Non-Incendive and optional Intrinsically Safe valves

Body and Trim Selections

Cast iron, carbon steel and stainless steel body assemblies feature metal-to-metal seating that meets FCI 70-2 control valve standard for Class VI seat leakage. An industrial-strength trim with a stainless steel seat and disc and PEEK followers is available for corrosive fluids that contain traces of H₂S and CO₂, which meet NACE MR0175 requirements. Contact MAXON with your specific application details. **Valve bodies** are available in your choice of threaded, flanged and socket-welded connections. Bodies are currently available in 3/4" (DN20) through 6" (DN150).

Normally-closed shut-off valves use instrument air to open quickly. Removal of electrical signal allows release of control air through solenoid and quick exhaust valve allowing the powerful closing spring in the Series 8000 Valve to close the valve in less than one second. Optional speed control set kit available for slower opening adjustment. Series 8011, 8012 & 8013 require 40-100 psig instrument air

Series 8111, 8112 & 8113 require 65-100 psig instrument air

Normally-open vent valves use instrument air to close quickly. Removal of electrical signal allows release of control air through solenoid and quick exhaust valve allowing the Series 8000 Valve to open in less than one second. Optional speed control set kit available for slower closing adjustment.

Series 8021, 8022 & 8023 require 45-100 psig instrument air Series 8121, 8122 & 8123 require 70-100 psig instrument air



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Series 8000 Air Actuated Valves

Agency Approvals and Certifications						
	General Purpose Valves 8111, 8121, 8011, 8021 Series		Non-Incendive/Non-Sparking Valves 8112, 8122, 8012, 8022 Series		Intrinsically Safe Valves 8113, 8123, 8013, 8023 Series	
	Standards	Markings	Standards	Markings	Standards	Markings
FM Approvals	FM 7400	FM	FM 7400 FM 3611 FM 3600 FM 3810	Class I, Div. 2, Groups ABCD, T4 Class II, Div. 2, Groups FG, T4 Class III, Div. 2, T4	FM 7400 FM 3610 FM 3600 FM 3810	Class I, Div. 1, Groups ABCD, T5 Class II, Div. 1, Groups EFG, T5 Class III, Div. 1, T5
CSA International	CSA 6.5	€ C/I	CSA 6.5 CSA 22.2 No. 213 CSA 22.2 1010.1 CSA E60079-0 CSA E60079-15	Class I, Div. 2, Groups ABCD, T4 Class II, Div. 2, Groups FG, T4 Class III, Div. 2, T4 Ex nA IIC T4 Ta = 60C (with standard solenoid) (Zone 2 approval) Ex nA IIC T5 Ta = 50C (with IS solenoid) (Zone 2 approval) (Zone 2 approval) C/I 03.1433937	CSA 6.5 CSA 22.2 No. 157 CSA 22.2 1010.1 CSA E60079-0 CSA E60079-11	Class I, Div. 1, Groups ABCD, T5 Class II, Div. 1, Groups EFG, T5 Class III, Div. 1, T5 Ex ia IIC T5 Ta = 50C (with IS solenoid) (Zone 0 approval) Ex ia IIC T5 Ta = 60C (with ATEX IS solenoid) (Zone 0 approval) C/I 03.1433937X
European Approvals [1]	EN 161 EN 13774	CL/KL:A GR 2 EC PIN: C87BQ83	EN 161 EN 13774	CL/KL:A GR 2 EC PIN: C87BQ83	EN 161 EN 13774	CL/KL:A GR 2 EC PIN: C87BQ83
European Approvals [2] (Hazardous Locations)	Not Applicable		Not Applicable		EN 60079-0: 2006 EN 60079-11: 2007 EN 61214-0: 2007 EN 61241-11: 2007	II 2 G c Ex ia IIC T5 Ta= -20C to +50C IP65 II 2 D c Ex iaD 21 IP65 T100°C Ta= -20C to +50C FM07ATEX0036 (Approval valid with use of ATEX IS solenoid only)
IEC Approvals	IEC 61010-1 IEC 61508		IEC 61010-1 IEC 61508		IEC 61010-1 IEC 61508	

[1] Product certified to meet the following: Gas Appliance Directive (90/396/EEC); Low Voltage Directive (73/23/EEC); EMC Directive (89/336/ EEC)

[2] Product certified to meet the following: ATEX Directive (94/9/EC)



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