

Maxon Series 8000 Air Actuated Valves



- **Pneumatically actuated valves** with powerful closing spring for reliable operation
- **Compact design** with integral solenoid, quick exhaust, switches and cylinder that protects components, simplifies piping and minimizes space requirements
- **Factory Mutual (FM) and CSA (6.5 C/I & 3.9) approved** safety shut-off and vent valves
- **Hazardous Location approved:** Intrinsically Safe for Class I, Div. 1; Non-Incendive for Class I, Div. 2
- **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 available
- **Ambient temperature ranges** of -40°F (-40°C) to 140°F (60°C); **Gas temperature range** of -40°F (-40°C) to 212°F (100°C)
- **Application flexibility** provided with 3/4" through 4" line sizes (6" size pending) & line pressures up to 255 psig
- **Actuator assemblies are field-replaceable** and available in 120VAC 50/60 Hz, 240VAC 50/60 Hz, and 24VDC, 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) 70-2-1998 control valve standard for Class VI seat leakage**



Maxon Series 8000 Air Actuated Valves

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.



2" Series 8000 Valve

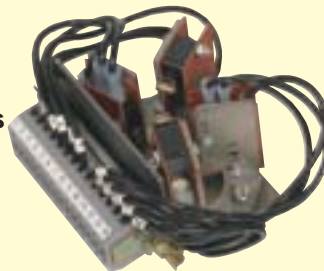
Maxon Series 8000 Air Actuated Valves

Switch Assemblies

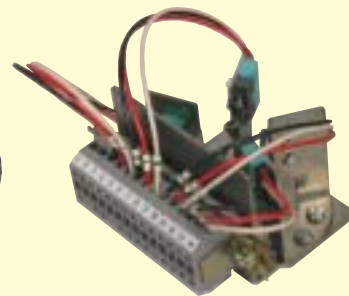
- Provides positive valve position - open or closed
- Complies with "proof of closure" requirements
- Easily integrates with an analog control system, DCS or PLC

VOS2/VCS2 Switch Assemblies (shown at right) 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



Standard Switch Assembly for General Purpose and Intrinsically Safe Class I Div.1 Areas



IP67 Switch Assembly for Non-Incendive Class I Div. 2 Areas

Body and Trim Selections

Cast iron, carbon steel and stainless steel body assemblies feature metal-to-metal seating that meets FCI 70-2-1998 control valve standard for Class VI seat leakage. Industrial-strength PEEK seats and followers are available for corrosive fluids that contain traces of H₂S and CO₂. Stainless steel body assemblies are constructed per NACE Standard MR0175. 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" through 4" line sizes (6" size under development) with line pressures up to 255 psig.



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



Maxon Series 8000 Air Actuated Valves

Safety shut-off and vent valve approved per FM Class 7400 and CSA 6.5 standards

• FM Approved for Hazardous Locations

Non-incendive Protection Method

(max ambient temp 140°F/60°C)

- Class I, Div. 2 Group A,B,C,D; Temp. Code T4
- Class I, Zone 2, Group IIC; Temp. Code T4
- Class II, Div. 2 Group F,G; Temp. Code T4
- Class III, Div. 2; Temp. Code T4

Intrinsically Safe Protection Method

(max ambient temp 122°F/50°C)

- Class I, Div. 1 Group A,B,C,D; Temp. Code T5
- Class II, Div. 1 Group E,F,G; Temp. Code T5
- Class III, Div. 1; Temp. Code T5

• CSA Approved for Hazardous Locations

Non-incendive Protection Method

(max ambient temp 140°F/60°C)

- Class I, Div. 2 Group A,B,C,D; Temp. Code T4
- Class II, Div. 2 Group F,G; Temp. Code T4
- Class III, Div. 2; Temp. Code T4

Intrinsically Safe Protection Method

(max ambient temp 122°F/50°C)

- Class I, Div. 1 Group A,B,C,D; Temp. Code T5
- Class II, Div. 1 Group E,F,G; Temp. Code T5
- Class III, Div. 1; Temp. Code T5

FM approved for fluid temperatures -40°F (-40°C) to 140°F (60°C)

CSA approved for fluid temperatures -40°F (-40°C) to 212°F (100°C)

Series Designations and Available Sizes

<i>Normally-Closed Shut-off Valves</i>		<i>Normally-Open Vent Valves</i>	
Series 8011 General Purpose	Series 8111 General Purpose	Series 8021 General Purpose	Series 8121 General Purpose
Series 8012 Class I, II, Div.2	Series 8112 Class I, II, Div.2	Series 8022 Class I, II, Div.2	Series 8122 Class I, II, Div.2
Series 8013 Class I, Div. 1 Standard MOPD ratings CP body only 2.5" through 4" sizes	Series 8113 Class I, Div. 1 High pressure MOPD ratings All bodies .75" through 4" sizes	Series 8023 Class I, Div. 1 Standard MOPD ratings CP body only 2.5" through 4"	Series 8123 Class I, Div. 1 High pressure MOPD ratings All bodies .75" through 4" sizes

