

## C-Modules - Switching & Namur (Axiom)



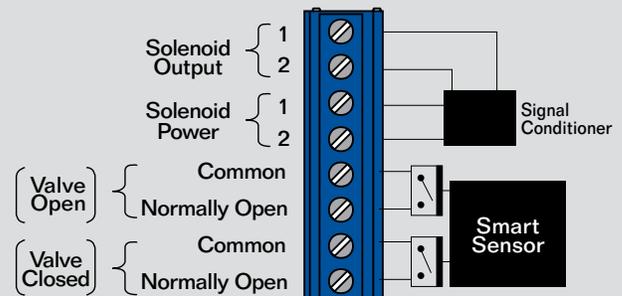
### C-Modules

Used in the Axiom platform, the C-Module (Continuous sensing) integrates a magnetic resistive sensor system to monitor exact valve position throughout the rotational range. Push button or remote Open and Closed position setting along with microprocessor based operation make this state of the art system convenient, reliable, and smart.

### Specifications and Ratings SST Switching Sensors (33)

Configuration	(2) Two wire solid state
Switching outputs	(1) or (2) Solenoid Power Input(s)
Output	Normally Open (SPST)
Maximum Current	
Inrush	2.0 Amps
Continuous	0.25 Amps
Min. On Current	2.0 mA
Max. Leakage Current	0.5 mA
Voltage Range	20 to 125VDC/125VAC
Max. Voltage Drop	7.0 Volts @ 100 mA
Short Circuit	Protected from Direct Application of up to 125 VDC/VAC

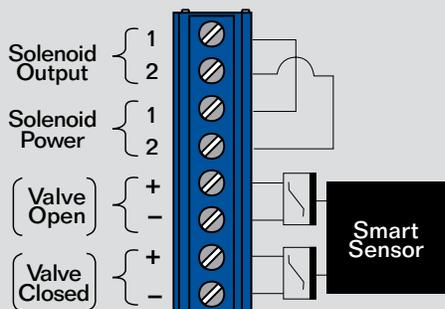
### SST Wiring Diagram (33) Single Solenoid



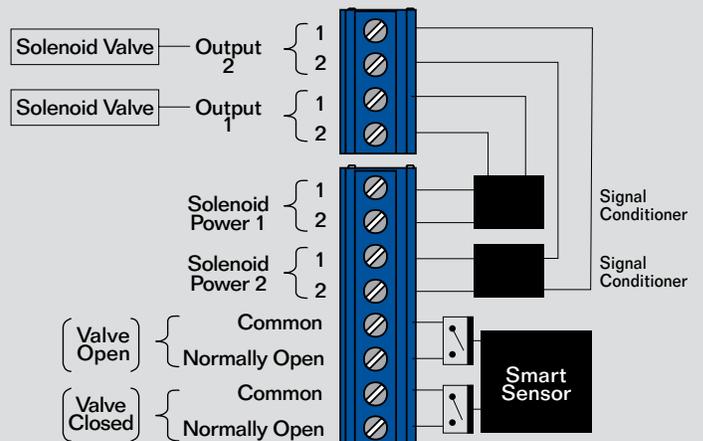
### Namur Sensors (44)

Configuration	(2) Namur Outputs
	(1) or (2) Solenoid Power Input(s)
Output	Conforms to DIN 19234
Current Ratings	Target On $I \leq 1.0$ mA
	Target Off $I \geq 2.1$ mA
Voltage Range	7 to 24 VDC

### Namur Wiring Diagram (44)



### SST Wiring Diagram (33) Dual Solenoid



## Dual Modules - Switching & Namur (Eclipse, Prism, & Quartz)



### SST & Namur Dual Modules

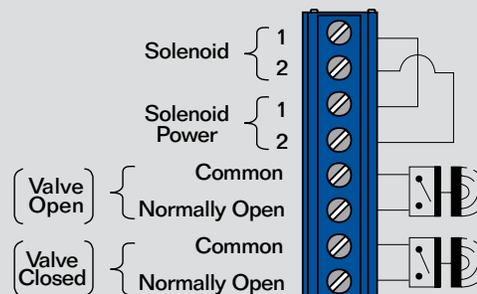
The Dual Module integrates two separate sensor circuits and solenoid wire terminations in a fully sealed module. Sensor circuits are available in either SST switching or Namur outputs. Each SST sensor circuit and each Namur sensor circuit are electrically isolated. Although they are packaged together they operate independently.

### Specifications and Ratings

#### SST Switching Sensors (33)

Configuration	(2) SST Solid State Sensors (2) Wire Terminations for One Solenoid
Operation	Cam Selectable NO or NC
Maximum Current	
Inrush	2.0 Amps @ 125 VAC/VDC
Continuous	0.3 Amps @ 125 VAC/VDC
Minimum On Current	2.0 mA
Max Leakage Current	0.5 mA
Voltage Range	18 to 125 VDC 24 to 125 VAC
Maximum Voltage Drop	6.5 Volts @ 10 mA 7.0 Volts @ 100 mA

#### SST Wiring Diagram (33)

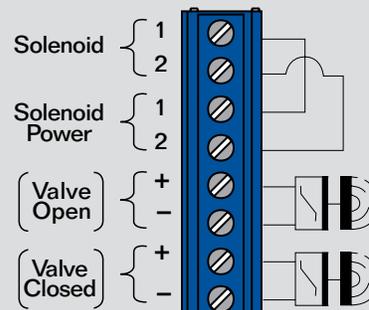


#### Namur Sensors (44)

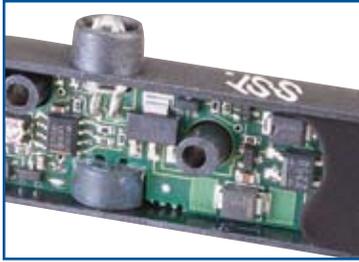
Configuration	(2) Namur Sensors (2) Wire Terminations for One Solenoid
Voltage Range	6 to 29 VDC
Current Ratings	Target On $I < 1$ mA Target Off $I > 3$ mA
Temperature Range	$-40^{\circ}$ to $82^{\circ}$ C ( $-40^{\circ}$ to $180^{\circ}$ F)
Warranty	Five Years
Operating Life	Unlimited

*(Use Namur sensor with intrinsic safety repeater barrier. Conforms to DIN 19234 standard.)*

#### Namur Wiring Diagram (44)



## Proximity Sensors (Quartz)



### SST Switching Sensor

Solid state SST proximity sensors are ideal for use in AC and DC computer input circuits. They are robust and well suited for general applications in control



### SST Switching Sensors ( \_X)

Operation	Cam Selectable NO or NC
Maximum Current	
Inrush	2.0 Amps @ 125 VAC/VDC
Continuous	0.3 Amps @ 125 VAC/VDC
Minimum On Current	2.0 mA
Leakage Current	Less than 0.50 mA
Voltage Range	8 to 125 VDC 24 to 125 VAC
Maximum Voltage Drop	6.5 Volts @ 10 mA 7.0 Volts @ 100 mA
Temperature Range	-40° to 82° C (-40° to 180° F)
Operating Life	Unlimited



### Maxx-Guard Proximity Switch

Maxx-Guard hermetically sealed reed switches are suitable for computer input circuits and general purpose applications. SPDT tungsten contacts are designed for 125VAC computer

inputs and 240VAC moderate power applications. SPDT rhodium contacts are suitable for both 24VDC and 120VAC computer inputs. SPST ruthenium contacts are ideal for either 24VDC or 125VAC low power computer inputs.

### Specifications and Ratings

#### Maxx-Guard Proximity Switch (G, H, M & S) Single-Pole Double-Throw (SPDT)

Temperature Range	-40° to 82° C (-40° to 180° F)
Seal	Hermetically Sealed
Operating Life	5 Million Cycles
Warranty	Two Years

#### G Switch

Configuration	SPDT
Electrical Ratings	0.30 Amp @ 24VDC 0.2 Amp @ 120VAC
Max. Voltage Drop	0.1 Volts @ 10mA 0.5 Volts @ 100mA
Contact Composition	Rhodium

#### H Switch

Configuration	SPDT
Electrical Ratings	240 VAC max; 3 Amp max 100 Watts max; 2.0 Watts min
Max. Voltage Drop	0.1 Volts @ 10mA 0.5 Volts @ 100mA
Contact Composition	Tungsten

#### M Switch

Configuration	SPDT; Passive (Intrinsically Safe)
Electrical Ratings	0.15 Amp @ 24VDC
Max. Voltage Drop	0.1 Volts @ 10mA 0.5 Volts @ 100mA
Contact Composition	Rhodium

#### S Switch

Configuration	SPDT (LED)
Electrical Ratings	0.30 Amp @ 125VAC
Max. Voltage Drop	3.5 Volts @ 10 mA 6.5 Volts @ 100 mA
Contact Composition	Tungsten

### Specifications and Ratings

#### Maxx-Guard Proximity Switch (J, L & P) Single-Pole Single-Throw (SPST)

Temperature Range	-40° to 82° C (-40° to 180° F)
Seal	Hermetically Sealed
Operating Life	5 Million Cycles
Warranty	Two Years

#### J Switch

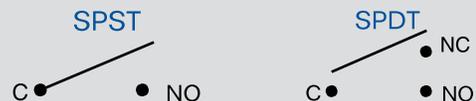
Configuration	SPST; Passive (Intrinsically Safe)
Electrical Ratings	0.15 Amp @ 30VDC
Max. Voltage Drop	0.1 Volts @ 10mA 0.5 Volts @ 100mA
Contact Composition	Ruthenium

#### L Switch

Configuration	SPST (LED)
Electrical Ratings	0.15 Amp @ 30 VDC/125VAC
Max. Voltage Drop	3.5 Volts @ 10 mA 6.5 Volts @ 100 mA
Contact Composition	Ruthenium

#### P Switch

Configuration	SPST
Electrical Ratings	0.15 Amp @ 30VDC/125VAC
Max. Voltage Drop	0.1 Volts @ 10mA 0.5 Volts @ 100mA
Contact Composition	Ruthenium



# Mechanical Switches and Transmitters (Quartz)



## Mechanical Switch (SPDT)

Low cost single-pole double-throw mechanical switches with silver contacts are recommended for high power 125 VAC applications. Gold contacts may be used in 30 VDC computer input applications.



## Specifications and Ratings

### Silver Contacts (V Function)

Electrical Ratings	10 Amp @ 125/250 VAC
	0.5 Amp @ 125 VDC
Temperature Range	-40° to 82° C (-40° to 180° F)
Operating Life	400,000 Cycles

*Not recommended for electrical circuits operating at less than 20 mA @ 24VDC.*

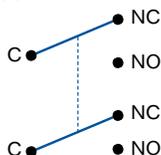
### Gold Contacts (W Function)

Electrical Ratings	1.0 Amp @ 125 VAC
	0.5 Amp @ 30 VDC
Temperature Range	-40° to 82° C (-40° to 180° F)
Operating Life	100,000 Cycles



## Mechanical Switch (DPDT)

Double-pole double-throw mechanical switches enable two electrical circuits to be activated simultaneously. Each switch circuit is electrically isolated from the other. As with standard silver contacts, DPDT switches are designed to operate in high power applications.



## 14 Function

Electrical Ratings	4.5 Amp @ 125/250 VAC
Temperature Range	-40° to 82° C (-40° to 180° F)
Operating Life	250,000 Cycles

*Not recommended for electrical circuits operating at less than 20 mA @ 24VDC.*



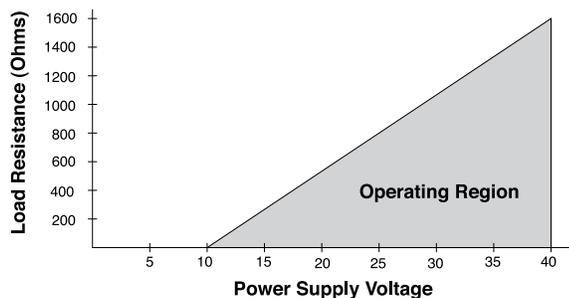
## 4 to 20 mA Position Transmitter

Position transmitters provide a precise 4 to 20 mA signal on a two wire DC loop. Control valves and dampers are accurately monitored through their range of travel offering you assurance of exact valve position at all times. Select a standard potentiometer or a vibration proof, high-performance potentiometer on your position transmitter.

Output	Two Wire 4 to 20 mA
Supply Source	10-40 VDC
Span Range*	35° to 270° (Adjustable)
Maximum Loading	700 Ohms @ 24 VDC
Linearity Error	
Standard (5)	+/-0.85° Maximum
High Perf. (7)	+/- 0.35°
Cycle Life	
Standard (5)	2 Million Rotations
High Perf. (7)	50 Million Rotations
Vibration Tolerance	
Standard (5)	Acceptable
High Per. (7)	Outstanding
Temperature Range	-40° to 82° C (-40° to 180° F)

\*Please consult factory for higher spans.

## Load Curve



## Electrical Schematic

