

### **The Perfect Choice for Explosion-Proof**

The SENTINEL VPT has been designed to provide the most visible and reliable valve position indication in explosion-proof environments. With a wide variety of switches and sensors available to match your application, the Sentinel is the perfect choice.

#### *Features Include:*

- ▶ UL and CSA Certified for Explosion-proof.
- ▶ Moniteur's patented Engineered Loc-Ring Cam and Shaft Retention System provides unsurpassed sensing accuracy over the multi-million cycle life of the physical platform.
- ▶ Clear Ektar cover offers optimum chemical resistance and strength and is environmentally sealed to prevent fogging or entry of contaminants.
- ▶ Careful material selection provides Moniteur's patented indicator a rated life of minimum 1,000,000 cycles.
- ▶ Materials of construction selected to excel in high vibration, corrosive and dirty environments, either indoors or outdoors.
- ▶ Indicator is fully adjustable to any valve or actuator.
- ▶ Internal Switches and terminal block are labeled for easier installation.
- ▶ The industry's only "true" visual valve position indicator available for multi-port valves, adjustable to match the actual physical flow pattern of the valve.
- ▶ "Flat cover" version is available without an indicator for areas with tight space requirements.

### **Material Specifications**

- ▶ Enclosure - Aluminum with Optional Iridite for Corrosion Resistance, Optional Hard Anodizing for Severe Applications
- ▶ Shaft - 303 or Optional 316 Stainless Steel
- ▶ Shaft Locking Ring - Stainless Steel
- ▶ Indicator Cover - Ektar Copolyester
- ▶ Bearing - Bronze or Optional 303 Stainless Steel
- ▶ Fasteners - 316 & 18-8 Stainless Steel
- ▶ O-rings - BUNA-N or Optional Viton
- ▶ Cams and Splines - Acetal



### **Industry Approvals:**

#### **Mechanical Switches: UL / CSA**

Class I, Division 1, Groups C & D;  
Class II, Division 1, Groups E, F & G

#### **TTL Switches: UL / CSA**

Class I, Division 1, Groups C & D;  
Class I, Division 2, Groups A & B;  
Class II, Division 1, Groups E, F & G

### **Certified Configurations**

- ▶ 2 or 3 - 3/4" NPT Conduit Entries
- ▶ Certified Male 1/2" NPT Hub for Easy Direct-Mounting of Explosion-proof Solenoid Valves
- ▶ 1, 2, 3, 4 or 6 Mechanical SPDT Switches.
- ▶ 1, 2, 3, 4 or 6 Tungsten or Rhodium TTL Hermetically Sealed Proximity Switches
- ▶ 1, 2, 3 or 4 DPDT Mechanical Switches
- ▶ 1, 2, 3 or 4 Inductive Proximity or Intrinsically Safe Sensors
- ▶ Standard NAMUR, Low Profile NAMUR or Standard Shaft (1/4" flats)
- ▶ 4-20mA Transmitter or 0-1k or 10k ohm High Linearity Potentiometer for 0-100% Analog Output

### Popular Switch and Sensor Specifications

- Mechanical SPDT Switches



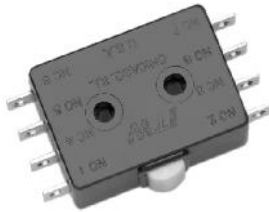
Electrical Ratings  
 15 A / 125-250 VAC  
 2.5 A / 24 VDC  
 0.5 A / 125 VDC  
 0.25 A / 250 VDC  
Operating Temperature  
 -40 to +175 °F

- TTL Hermetically Sealed Proximity Switches



Electrical Ratings  
 Rhodium (DC Signals):  
 1 A / 24VDC - 0.25 A / 120VAC  
 Tungsten (AC Signals):  
 3 A / 120 VAC - 2 A / 24VDC  
Operating Temperature  
 -40 to +175 °F

- Mechanical DPDT Switches



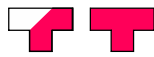
Electrical Ratings  
 10 A / 125-250 VAC  
 7 A / 24 VDC  
 0.25 A / 125 VDC  
Operating Temperature  
 -40 to +175 °F

- Pepperl & Fuchs NJ2-V3-N NAMUR Inductive Sensors (Intrinsically Safe)



Electrical Ratings  
 NAMUR 5-25 VDC  
 Target Present 3-15 mA  
 Target Absent <1mA  
Operating Temperature  
 -25 to +140 °C

### Open/Closed and 3-Way Path Indicators



### Intelligent Part Number System

**A** **M** **P** **B** - **E** **1** **2** **0** -420  
 Series Cover Indicator Bearing Shaft Switch Quantity Conduit

Description	Code	Description	Code	Description	Code
<b>Series: Sentinel</b>	<b>A</b>	Bearing	<b>B</b>	Conduit Connection	<b>0</b>
Moniteur	<b>M</b>	<b>Bronze</b>	<b>S</b>	<b>2 - 3/4" F NPT</b>	<b>0</b>
<b>With Indicator</b>	<b>M</b>	303 Stainless		3 - 3/4" F NPT	5
Flat Cover	<b>F</b>	<u>Shaft</u>		1 - 3/4" F NPT +	
<u>Indicator Type (open/closed)</u>		Standard 303 SS	1	1 - 1/2" M NPT	8
No Indicator (Flat Cover)	<b>N</b>	Standard 316 SS	3	<u>Options</u>	
Black / Yellow (Standard)	<b>Y</b>	Low Profile NAMUR 303 SS	5	<b>Transmitter 4 - 20mA</b>	<b>- 420</b>
Green / Red	<b>A</b>	Low Profile NAMUR 316 SS	7	Potentiometer 0 - 1k	- 1K
Red / Green	<b>C</b>	<b>NAMUR 303 SS</b>	<b>E</b>	All Viton Seals	-V
<b>0-100% Digital</b>	<b>P</b>	NAMUR 316 SS	<b>G</b>	Hard Anodized Enclosure X14206	
3-Way Path O (90 deg.)	<b>O</b>	<u>Switch/Sensor Type</u>		12 Terminal Points	-12T
3-Way Path T (90 deg.)	<b>T</b>	<b>Mechanical SPDT 15A-250VAC</b>	<b>1</b>	16 Terminal Points	-16T
3-Way Path F (90 deg.)	<b>F</b>	Mechanical SPDT 0.5A-125 VDC	<b>C</b>	High Temperature	-HT
4-Way Path S (90 deg.)	<b>S</b>	PRISM SPDT Gold Plated 1A-24VDC	3	Contact Moniteur for additional option codes and custom requirements	
180 degree T-port	1	ITW Mechanical DPDT 10A-250VAC	4		
180 degree L-Port - OcOc	5	Tungsten TTL Prox 3A-125 VAC	2		
180 degree L-Port - OOCC	6	Rhodium TTL Prox 1A-24VDC	<b>T</b>		
ANSI Green / White	<b>G</b>	P&F NJ2-V3-N, NAMUR	8		
ANSI Blue / White	<b>B</b>	<b>Sensor Quantity</b>	<b>1-6</b>		
ANSI Red / White	<b>R</b>				