

## SWITCHES AND SENSORS

Westlock's control and monitoring equipment can be fitted with a variety of switches and sensors to provide the optimum combination and ideal solution for each application.

### Magnum XT-90 hermetically sealed proximity switch



Hermetically-sealed proximity switches with either pure tungsten or rhodium contacts for use with low power I/O's to provide longer contact life.

#### TECHNICAL DATA

Contact arrangement	SPDT, Form C
Contacts	Pure tungsten Rhodium
Operating time	3.0 ms
Initial contact resistance	0.50 ohms (max.) Tungsten 0.10 ohms (max.) Rhodium
Seal	Hermetic
Housing (flame retardant)	High impact PBT
Temperature range	-45°C to +105°C (Tungsten) -40°C to +105°C (Rhodium)
Operational life	600,000 cycles (full rated load)
Entity Parameters	Ui = 30 V, Ii = 100 mA, Pi = 1 W, Ci = 10 nF, Li = 10µ
<b>Electrical rating</b>	
Rhodium (low power, below 1 watt)	SPDT Form C 1 A/24 V DC
Tungsten (high power, above 1 watt)	SPDT Form C 3 A/120 V AC, 2 A/24 V DC

### MagPAC modular switches



Modular switches with bifurcated reed switches designed specifically for use in low power and high DI card capacitance discrete position feedback applications.

#### TECHNICAL DATA

Contact arrangement	Two SPST, Form A (normally open)
Contact material	Movable contact - Silver cadmium oxide Stationary contact - Molybdenum
Operating time	≤ 4 ms
Releasing time	≤ 2 ms
Initial contact resistance	≤ 250 milliohms
Seal	Hermetic
Operating temperature	-40°C to +85°C [-40°F to +185°F]
Operational life	100,000,000 operations (no load)
Repeatability	0.005 [0.125 mm]
Warranty	5 years
<b>Electrical rating</b>	
Rated voltage	12 - 120 V AC/V DC
Rated current	Min. 2 mA to light LED, Max. 750 mA
Allowable solenoid input voltage	25 - 120 V AC/V DC
<b>Entity parameters</b>	
Switch input	Vmax = 28 V DC; Imax = 174 mA; Pi = 1.6 W; Ci = 51.7 nF; Li = 0 mH

### P+F NJ2-V3-N inductive proximity sensor Intrinsically safe



A solid state inductive proximity sensor which is available in NAMUR output. It is ideal for use in devices within potentially explosive atmospheres.

#### TECHNICAL DATA

Sensing range	2 mm
Electrical version	DC voltage 2 wire in accordance with EN 60947-5-6 (NAMUR)
Hysteresis	3-15% [5% typical]
Switching frequency	1 kHz
Input voltage range	5- 25 V DC
Output/current consumption	Cam trigger present ≤ 1 mA Cam trigger absent > 3 mA (15 mA max)
Operating temperature	+14°F to +212°F [-10°C to +100°C]
<b>Entity parameters</b>	
Consult manufacturer's component certificate for entity parameters	

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## SPDT mechanical switch V3



A V3 SPDT (single pole double throw) mechanical switch (Form C) with gold plate contacts.

### TECHNICAL DATA

Operating force	3.5 - 5N
Release force	15 gram min.
Differential travel	≤ 0.4mm
Overtravel	0.059 inch [1.5 mm]
Operating temperature	-20°C to +85°C
Hysteresis	3°
Entity Parameters	Ui = 30 V, Ii = 100 mA, Pi = 1 W, Ci = 10 nF, Li = 10μ
<b>Electrical rating</b>	
Contact	SPDT, Form C (normally open)
Arrangement	16A/125/250V AC 15A/105/125V DC

## DPDT mechanical switch (Licon)



A Form CC DPDT (double pole double throw) mechanical switch with silver-plated contacts.

### TECHNICAL DATA

Contacts	Silver plated
Approvals	UL, CSA
Operating temperature	-55°C to +85°C
Hysteresis	20°
<b>Electrical rating</b>	
Contact	DPDT (Form CC)
Arrangement	10 A/125/250 V AC 10 A/24 V DC



### Translations

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### WESTLOCK CONTROLS

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