



**APL 2**

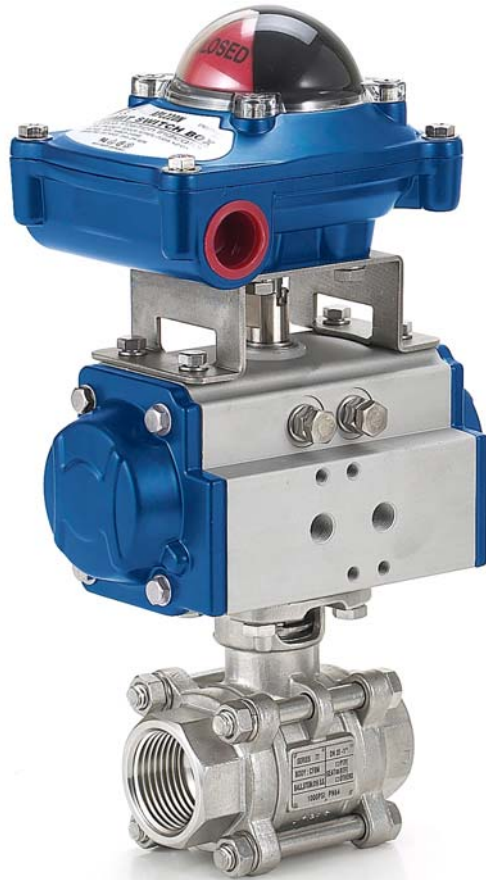


**APL 3**



**APL 4**





## Innovative Valve Indication

The APL series limit switch box from Lux offers uncompromising standards of safety, reliability, and value. The APL series is designed to operate on quarter turn pneumatic actuators, and is rugged enough for industrial applications.

Three innovative models make up the full line of valve monitoring systems, the APL 2, APL 3 and APL 4. Each model offers local visual display with remote mechanical switch signaling for continuous flow indication.

For over 25 years our engineers have strived to manufacture the most complete line of valve monitoring systems on the market today.

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# APL 2

# General Purpose



The Lux series APL 2 limit switch with position indicator provides open to close switch signaling and continuous visible rotational degree monitoring of quarter turn valves. The rugged and compact design is best suited for small ball valve assemblies, or any place where space is limited.

The solid aluminum die cast housing is polyester powder coated for superior corrosion protection. The limit switch is environmentally sealed with o-rings from the ingress of dirt and moisture. The o-rings also eliminates the potential for fogging in the position indicator. The APL 2 is rated NEMA 4 for general purpose areas.

The mechanical SPDT switches and terminal strip are CSA approved for your protection. The Lux limit switch provides approved and economical valve position monitoring for industrial process applications.

### Captive Bolts

Stainless bolts are specially designed to lock on the cover, to prevent losing the bolts when removing the housing for maintenance or installation.



### Quickset Cams

The self locking splined cams are fastened to a splined shaft. The cams are spring loaded for one hand calibration. There is no need to re-adjust after initial setting, the cams will never slip out of adjustment.



### Terminal Strip

Pre-wired terminal strip is numbered for clear and easy installation. Two 1/2" conduit entrances allow for a large working area when making terminations.



### Position Indication

Clear ABS polycarbonate indicator cover offers excellent chemical resistance and strength. Indicator displays exact valve position and displays "open" or "closed" positions at end of valve travel.



## Optional

### Proximity Sensor Switch

Intrinsically safe sensors are encapsulated and sealed.



### Mounting Bracket

Stainless steel bracket is NAMUR drilled for easy mounting of switch.



# Model APL 2

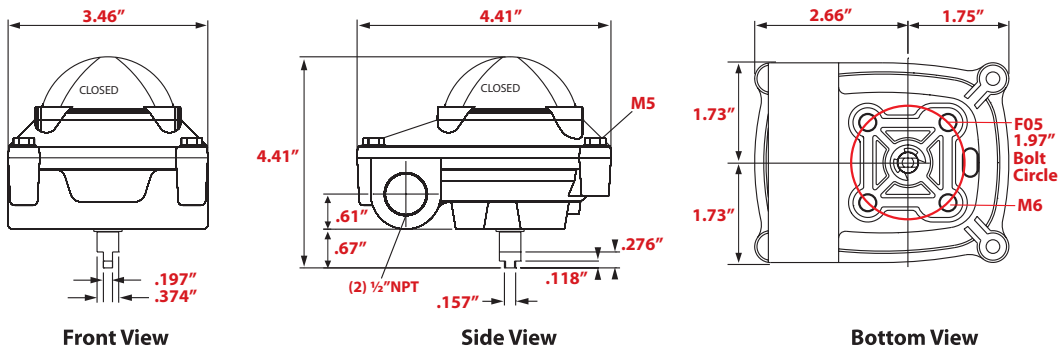
## SPECIFICATION

Enclosure	Weatherproof, IP 67 / NEMA 4 & 4X	OPTIONAL IP 68
Temperature rating	- 4° F to 185° F	
Conduit entrance	(2) ½" NPT threaded connections	
Terminal strips	8 -points	
Position indicator	0-90° rotation / open-yellow, closed-red	Open-green/closed-red
Switches	(2) SPDT mechanical switches form C	Proximity
External coating	Polyester powder coating	Nylon coated

## CONSTRUCTION

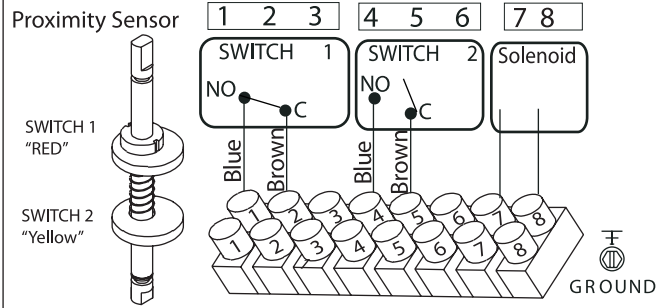
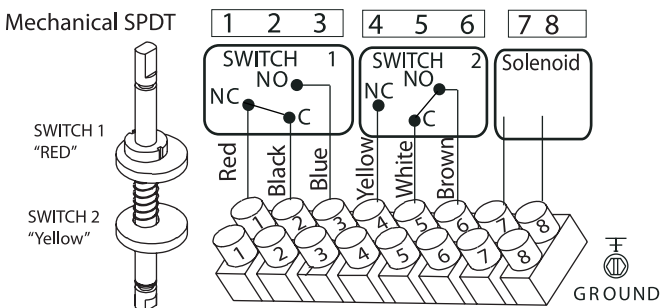
Housing cover	Aluminum die casting
Housing body	Aluminum die casting
Shaft	Stainless steel
Position indicator cover	Polycarbonate
Position indicator	ABS / polycarbonate
Terminal strip	Polycarbonate / tin plated brass / stainless steel
Cam	Polycarbonate
Spring	Stainless steel
Housing cover bolts	Stainless steel
Shaft o-ring	NBR Buna
Housing o-ring	NBR Buna
Position indicator o-ring	NBR Buna
Bushing	Bronze
Earth ground	Stainless steel
E-clip	Stainless steel

## OUTLINE DIMENSIONS



## ELECTRICAL

Switch Type	AC Rating	DC Rating	Form
Mechanical SPDT	16A - 250V	.25A - 250 VDC	C Type
Proximity Sensor	3A - 110V	2A - 24 VDC	C Type - Inductive



# APL 3

# General Purpose



The Lux series APL 3 limit switch with position indicator provides open to close switch signaling and continuous visible rotational degree monitoring of quarter turn valves. The larger footprint allows for a larger position indicator that can be seen from a distance. This switch is suited for ball, butterfly, or plug valve applications.

The solid aluminum die cast housing is polyester powder coated for superior corrosion protection. The limit switch is environmentally sealed with o-rings from the ingress of dirt and moisture. The o-rings also eliminates the potential for fogging in the position indicator. The APL 3 is rated NEMA 4 for general purpose areas.

The mechanical SPDT switches and terminal strip are CSA approved for your protection. The Lux limit switch provides approved and economical valve position monitoring for industrial process applications.

### Captive Bolts

Stainless bolts are specially designed to lock on the cover, to prevent losing the bolts when removing the housing for maintenance or installation.



### Quickset Cams

The self locking splined cams are fastened to a splined shaft. The cams are spring loaded for one hand calibration. There is no need to re-adjust after initial setting, the cams will never slip out of adjustment.



### Terminal Strip

Pre-wired terminal strip is numbered for clear and easy installation. Two 1/2" conduit entrances allow for a large working area when making terminations.



### Position Indication

Clear ABS polycarbonate indicator cover offers excellent chemical resistance and strength. Indicator displays exact valve position and displays "open" or "closed" positions at end of valve travel.



## Optional

### Proximity Sensor Switch

Intrinsically safe sensors are encapsulated and sealed.



### Mounting Bracket

Stainless steel bracket is NAMUR drilled for easy mounting of switch.



# Model APL 3

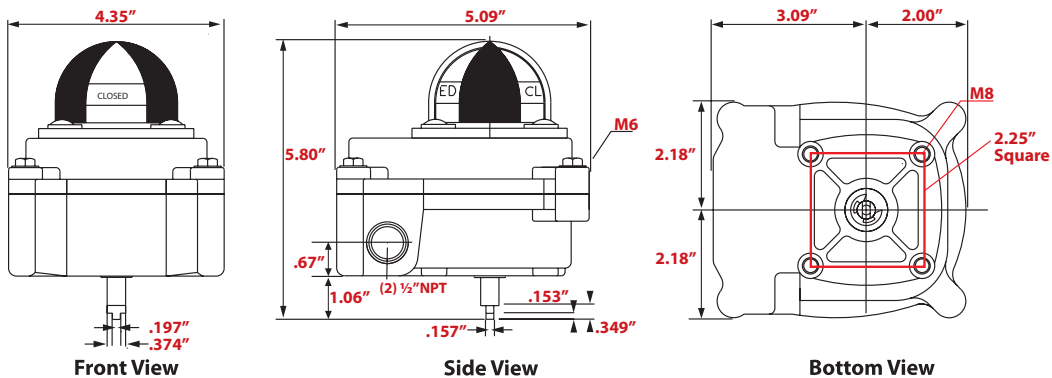
## SPECIFICATION

Enclosure	Weatherproof, IP 67 / NEMA 4 & 4X	OPTIONAL IP 68
Temperature rating	- 4° F to 185° F	
Conduit entrance	(2) ½" NPT threaded connections	
Terminal strips	8 -points	
Position indicator	0-90° rotation / open-yellow, closed-red	Open-green/closed-red
Switches	(2) SPDT mechanical switches form C	Proximity sensor, GO switches
External coating	Polyester powder coating	Nylon coated

## CONSTRUCTION

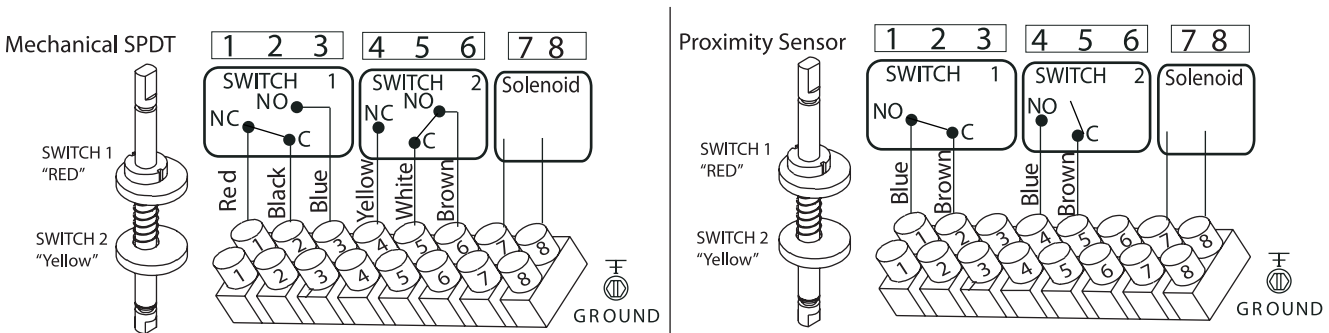
Housing cover	Aluminum die casting
Housing body	Aluminum die casting
Shaft	Stainless steel
Position indicator cover	Polycarbonate
Position indicator	ABS / polycarbonate
Terminal strip	Polycarbonate / tin plated brass / stainless steel
Cam	Polycarbonate
Spring	Stainless steel
Housing cover bolts	Stainless steel
Shaft o-ring	NBR Buna
Housing o-ring	NBR Buna
Position indicator o-ring	NBR Buna
Bushing	Bronze
Earth ground	Stainless steel
E-clip	Stainless steel

## OUTLINE DIMENSIONS



## ELECTRICAL

Switch Type	AC Rating	DC Rating	Form
Mechanical SPDT	16A - 250V	.25A - 250 VDC	C Type
Proximity Sensor	3A - 110V	2A - 24 VDC	C Type - Inductive



# APL 4



# Hazardous Location

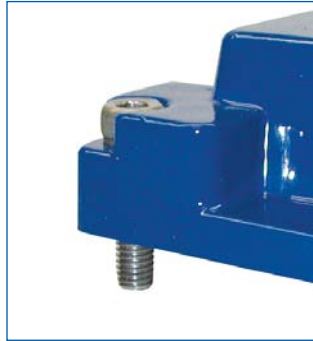
The Lux series APL 4 limit switch with position indicator provides open to close switch signaling and continuous visible rotational degree monitoring of quarter turn valves. The larger footprint allows for a larger position indicator that can be seen from a distance. This switch is suited for ball, butterfly, or plug valve applications.

The solid aluminum die cast housing is polyester powder coated for superior corrosion protection. The limit switch is environmentally sealed with o-rings from the ingress of dirt and moisture. The o-rings also eliminates the potential for fogging in the position indicator. The APL 4 is explosion proof rated NEMA 7 for hazardous location use.

The mechanical SPDT switches and terminal strip are CSA approved for your protection. The Lux limit switch provides approved and economical valve position monitoring for industrial process applications.

## Captive Bolts

Stainless bolts are specially designed to lock on the cover, to prevent losing the bolts when removing the housing for maintenance or installation.



## Quickset Cams

The self locking splined cams are fastened to a splined shaft. The cams are spring loaded for one hand calibration. There is no need to re-adjust after initial setting, the cams will never slip out of adjustment.



## Terminal Strip

Pre-wired terminal strip is numbered for clear and easy installation. Two 1/2" conduit entrances allow for a large working area when making terminations.



## Position Indication

Clear ABS polycarbonate indicator cover offers excellent chemical resistance and strength. Indicator displays exact valve position and displays "open" or "closed" positions at end of valve travel.



## Optional

### 1 Proximity Sensor Switch

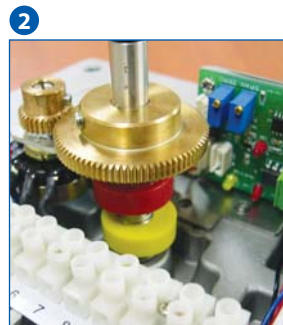
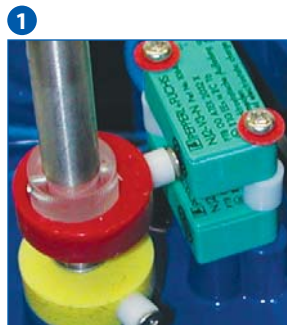
Intrinsically safe sensors are encapsulated and sealed.

### 2 4-20 Feedback

Allows for 4-20 MA signal feedback of the valves position.

### 3 Mounting Bracket

Stainless steel bracket is NAMUR drilled for easy mounting of switch.



# Model APL 4

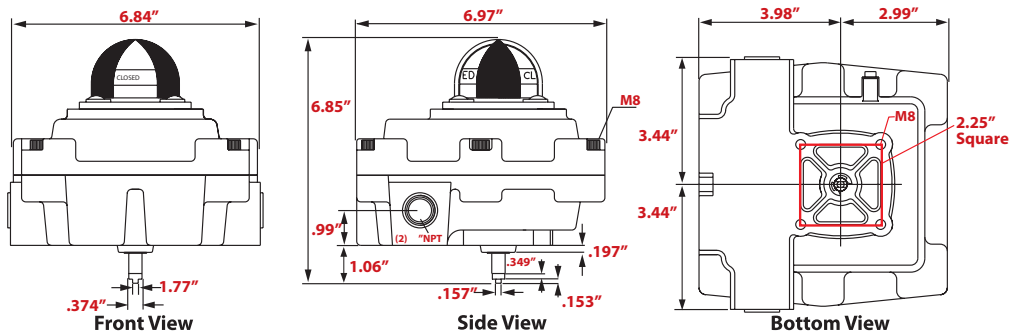
## SPECIFICATION

SPECIFICATION		OPTIONAL
Enclosure	Explosion proof, IP 67, Eexd IIB T6 to EN50014/50018	
Temperature rating	- 4° F to 185° F	
Conduit entrance	(2) 3/4" NPT threaded connections	3-4 entries
Terminal strips	8 -points	9-24 points
Position indicator	0-90° rotation / open-yellow, closed-red	Open-green/closed-red
Switches	(2) SPDT mechanical switches form C	Proximity sensor, GO switches
Potentiometer	1K Ohm feedback	0-5, 0-10 k Ohm
Feedback	4-20 MA current output	20-4 MA
Painting	Polyester powder coating	Nylon coated

## CONSTRUCTION

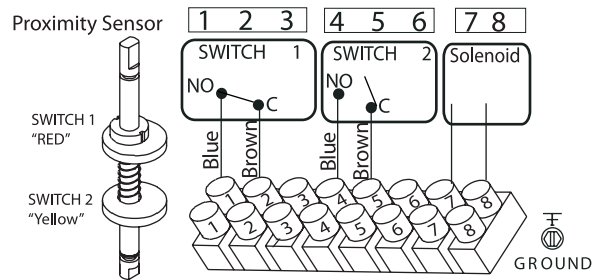
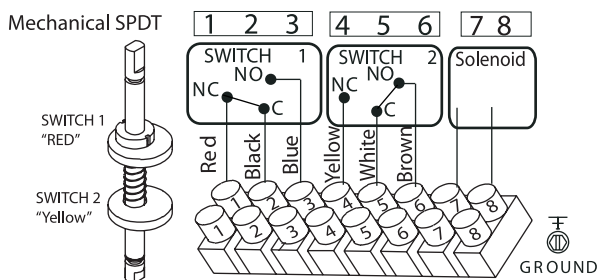
Housing cover	Aluminum die casting
Housing body	Aluminum die casting
Shaft	Stainless steel
Position indicator cover	Polycarbonate
Position indicator	ABS / polycarbonate
Terminal strip	Polycarbonate / tin plated brass / stainless steel
Cam	Polycarbonate
Spring	Stainless steel
Housing cover bolts	Stainless steel
Shaft o-ring	NBR Buna
Housing o-ring	NBR Buna
Position indicator o-ring	NBR Buna
Bushing	Bronze
Earth ground	Stainless steel
E-clip	Stainless steel

## OUTLINE DIMENSIONS

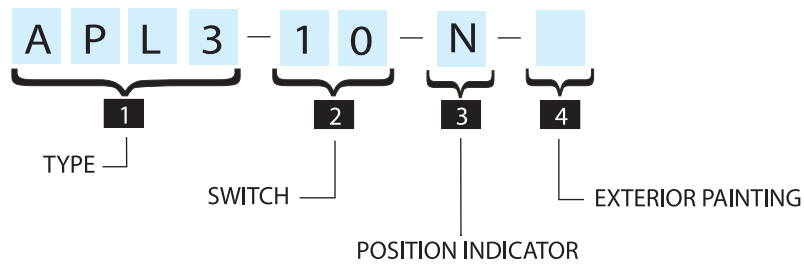


## ELECTRICAL

Switch Type	AC Rating	DC Rating	Form
Mechanical SPDT	16A - 250V	.25A - 250 VDC	C Type
Proximity Sensor	3A - 110V	2A - 24 VDC	C Type - Inductive



# Part Number



## 1 TYPE

APL2	Small NEMA 4
APL3	Medium NEMA 4
APL4	Large NEMA 7

## 2 SWITCH

Mechanical Switch		Proximity Sensor		Reed Type Proximity	
10	2-SPDT	20	2-SPDT	30	General Type
11	3-SPDT			31	High Temp
12	4-SPDT				
13	2-SPST				
14	2-DPDT				
15	2-SPDT + 1k Pot				
16	2-SPDT + 4-20 MA				

## 3 POSITION INDICATOR

N	Open Yellow / Closed Red
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## 4 EXTERIOR PAINTING

Blank	Standard Powder Coated
Y	Nylon

## Warranty

The seller warrants products to be free from defects in materials and workmanship under normal conditions of use and service. Our obligations under this warranty is limited to repairing or replacing at our option at our factory any product which shall within two (2) years after delivery to original buyer be returned with transportation charges prepaid, and which our examination shall show to our satisfaction to have been defective. For a copy of the full terms and conditions of the Lux limit switch please consult the factory.

**VALVE**

**VT**

**TECK**

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