

Used in the heavy equipment, marine, process control and instrumentation markets, the R2 rotary switch is an excellent replacement for rocker switches, offering improved visual position indication, additional lighting options and different styling opportunities on front panels. The R2 is a sealed, lighted rotary switch which snaps into a 1.475" x 0.875" industry standard rocker switch panel opening. The rotary knob snaps onto a shaft and can be installed by the panel builder for those desiring that flexibility. The R2 rotary switch provides up to three positions in all combinations of momentary and maintained action. It is capable of handling loads from logic level up to 20 amps resistive. Sealing is to IP68S via a shaft O-ring seal in front and a potted base in the back. Termination options include 0.250" faston or a snap-on modular connector. The R2 offers unique lighting options including up to three independent LED light positions which illuminate a lens on the rotary knob. This design provides more lighting options than traditional rocker switches, handles the full range of electrical loads and is robust enough to survive in the most demanding applications.

## Features:

- **Sealed watertight per IP68S**
- **Snap-in panel mounting into industry standard 1.475" x 0.875" panel cutout**
- **Unique lighting options—up to 3 independent LED light positions**
- **Plastic or Soft Touch knob options available**
- **2 or 3 positions in all combinations of momentary & maintained action**
- **Termination can be used as 0.250" faston or with snap-on modular connector**
- **Reach compliant**



### Standard Characteristics/Ratings:

#### ELECTRICAL RATINGS:

Load	Sea Level @ 12/28VDC	Sea Level @ 115VAC
Resistive	20A	16A
Inductive	15A	15A
Lamp	4A	4A
Motor	N/A	0.5HP
DWV	1050Vrms through switch contacts	
Low Level	10mA @ 30mV	

**Electrical Life:** 25,000 cycles at full load

**Lighting:** LED 2V, 6V, 12V, 24V (VDC)

**Mechanical Life:** 100,000 cycles

**Seal:** IP68S

**Operating Temp Range:** -40°C to +85°C

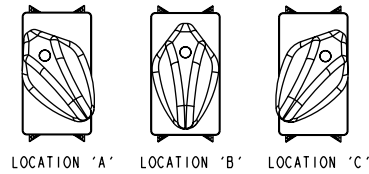
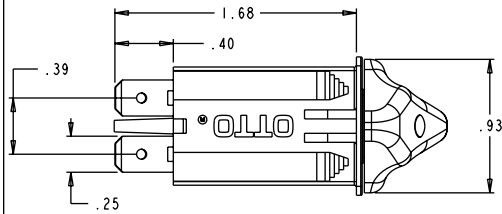
#### MATERIALS:

<b>Case:</b>	Thermoplastic
<b>Knob:</b>	Thermoplastic
<b>Lens:</b>	Thermoplastic, clear
<b>Terminals:</b>	Copper, silver plate, gold plate for low level
<b>Contacts:</b>	Silver alloy, gold plate for low level
<b>Terminal Hardware:</b>	R2 recommended Quick Connect terminals: AMP 60253-2 for 12-16 AWG AMP 42100-2 for 14-18 AWG
<b>Mounting Hardware:</b>	None provided

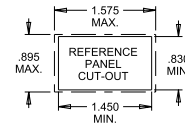
# ROTARY SWITCH

**R2**  
LIGHTED  
ROTARY

UP TO 3 POSITIONS WITH 3 OPTIONAL, INDEPENDENT LED LIGHT POSITIONS

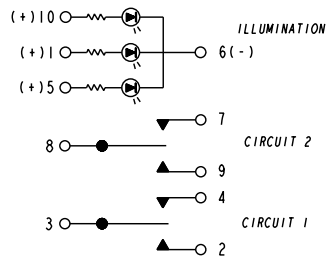


PANEL THICKNESS RANGE OF .025 - .105 A GASKET IS RECOMMENDED  
PANEL THICKNESS RANGE OF .105 - .187 W/O GASKET  
PANEL OPENING: MIN. TYP. MAX.  
WIDTH .830 .863 .895  
LENGTH 1.450 1.513 1.575

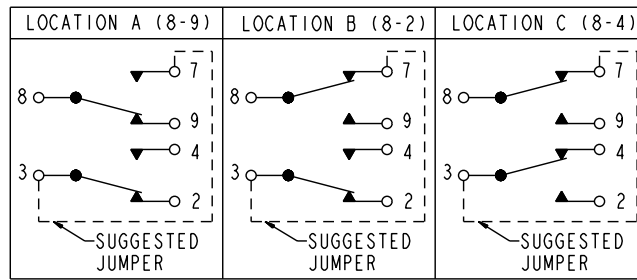


KNOB LOCATION DETAILS

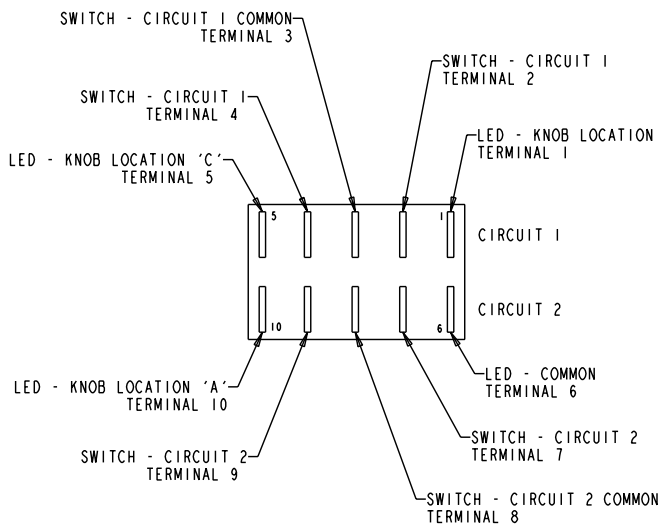
## ELECTRICAL SCHEMATICS



GENERIC SWITCH SCHEMATIC  
USE TERMINALS AS APPLICABLE  
TO PART NUMBER

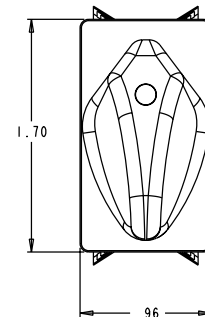
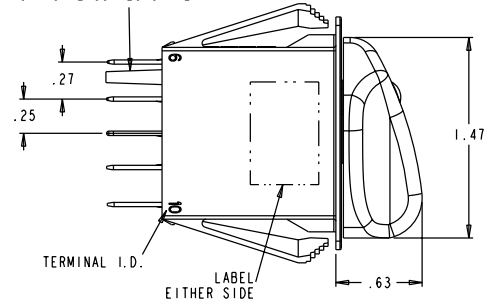


SPT SCHEMATIC  
USE R2XXXX7XXXX FOR (8-9), (8-2), (8-4)  
USE R2XXXX74XXXX FOR (OFF), (8-2), (8-4)  
USE R2XXXX67XXXX FOR (8-9), (8-2), (OFF)



TERMINAL LOCATION AS VIEWED  
FROM THE BOTTOM OF THE SWITCH

OPTIONAL CONNECTOR KEY

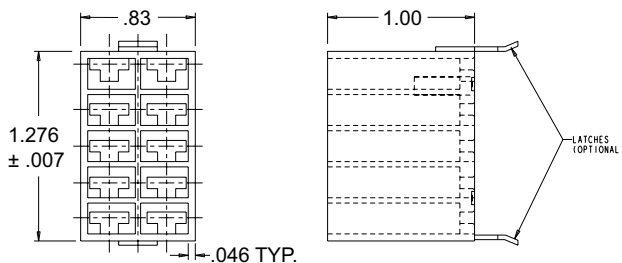


• R2 panel plugs available as shown on page 160.

UP TO 3 POSITIONS WITH 3 OPTIONAL, INDEPENDENT LED LIGHT POSITIONS

## R2 SERIES PART NUMBER CODE

R2	X	X	XX	X	X	X	X	X	X					
Terminal Style/ Switch Rating	Knob Color & Texture	Switch Action			Switch Circuit 1 Terminals 2, 3, 4			Switch Circuit 2 Terminals 7, 8, 9			LED Light Source Voltage	Light Source Color		
		Knob Location "A"	Knob Location "B"	Knob Location "C"	Knob Location "A"	Knob Location "B"	Knob Location "C"	Knob Location "A"	Knob Location "B"	Knob Location "C"	N. NONE A. 2V B. 6V C. 12V D. 24V	Location "A"	Location "B"	Location "C"
A. Without Terminal Barriers, With Connector Keying Pin, Standard Rating	A. Black Plastic	2-Position Switch, Knob Locations A/B			2-Position Switch, Knob Locations A/B			N. NONE (Single Pole)				N. NONE	N. NONE	N. NONE
B. Without Terminal Barriers, Without Connector Keying Pin, Standard Rating	B. Black Soft Touch	11. Maintain	Maintain	N/A	1. 3-2	OFF	N/A	1. 8-9	OFF	N/A		1. Red	1. Red	1. Red
	C. White Plastic	12. Maintain	Momentary	N/A	2. OFF	3-4	N/A	2. OFF	8-7	N/A		2. Green	2. Green	2. Green
	D. White Soft Touch	13. Momentary	Maintain	N/A	3. 3-2	3-4	N/A	3. 8-9	8-7	N/A		3. Amber	3. Amber	3. Amber
C. Without Terminal Barriers, With Connector Keying Pin, Low Level Rating	E. Red Plastic	2-Position Switch, Knob Locations A/C			2-Position Switch, Knob Locations A/C			2-Position Switch, Knob Locations A/B						
	F. Red Soft Touch	21. Maintain	N/A	Maintain	1. 3-2	N/A	OFF	1. 8-9	N/A	OFF				
		22. Maintain	N/A	Momentary	2. OFF	N/A	3-4	2. OFF	N/A	8-7				
		23. Momentary	N/A	Maintain	3. 3-2	N/A	3-4	3. 8-9	N/A	8-7				
D. Without Terminal Barriers, Without Connector Keying Pin, Low Level Rating		2-Position Switch, Knob Locations B/C			2-Position Switch, Knob Locations B/C			2-Position Switch, Knob Locations A/C						
		31. N/A	Maintain	Maintain	1. N/A	3-2	OFF	1. N/A	8-9	OFF				
		32. N/A	Maintain	Momentary	2. N/A	OFF	3-4	2. N/A	OFF	8-7				
		33. N/A	Momentary	Maintain	3. N/A	3-2	3-4	3. N/A	8-9	8-7				
		3-Position Switch, Knob Locations A/B/C			3-Position Switch			2-Position Switch, Knob Locations B/C						
		44. Maintain	Maintain	Maintain	4. OFF	3-4	3-4	4. OFF	8-7	8-7				
		45. Momentary	Maintain	Momentary	5. 3-2	OFF	3-4	5. 8-9	OFF	8-7				
		46. Maintain	Maintain	Momentary	6. 3-2	3-2	OFF	6. 8-9	8-9	OFF				
		47. Momentary	Maintain	Maintain	7. 3-2	3-2	3-4	7. 8-9	8-7	8-7				
					8. 3-2	OFF	OFF	8. 8-9	OFF	OFF				
					9. OFF	OFF	3-4	9. OFF	OFF	8-7				



### R2 Connector

P/N 801775-2A Without Latches  
P/N 801775-2B With Latches

### Recommended Quick Connect Terminals

AMP 60253-2 for 12-16 AWG  
AMP 42100-2 for 14-18 AWG

### Panel Seal Gasket

P/N 807109