

## Series SA50

### PANEL SEALED 5 AMP PUSHBUTTON SWITCHES

The ITW SA50 series pushbutton offers the utmost in choices of button colours and lighting switching. These 5 AMP sealed switches have a positive snap action feel. They are ideal for rugged applications that good looks and long life.



### APPLICATIONS

- Office equipment
- Medical equipment
- Industrial machinery
- Mass transportation
- Food processing equipment
- Outdoor Controls
- Joystick Control

### KEY FEATURES:

- Diameter 16mm
- Panel sealed to IP67
- Up to 5Amp by UL61058 Certify
- Large choice of button colours
- Snap Action / Momentary Action
- Positive Tactic Feedback
- Choice of LED colours (or non-illuminated versions)

### ORDERING INFORMATION:

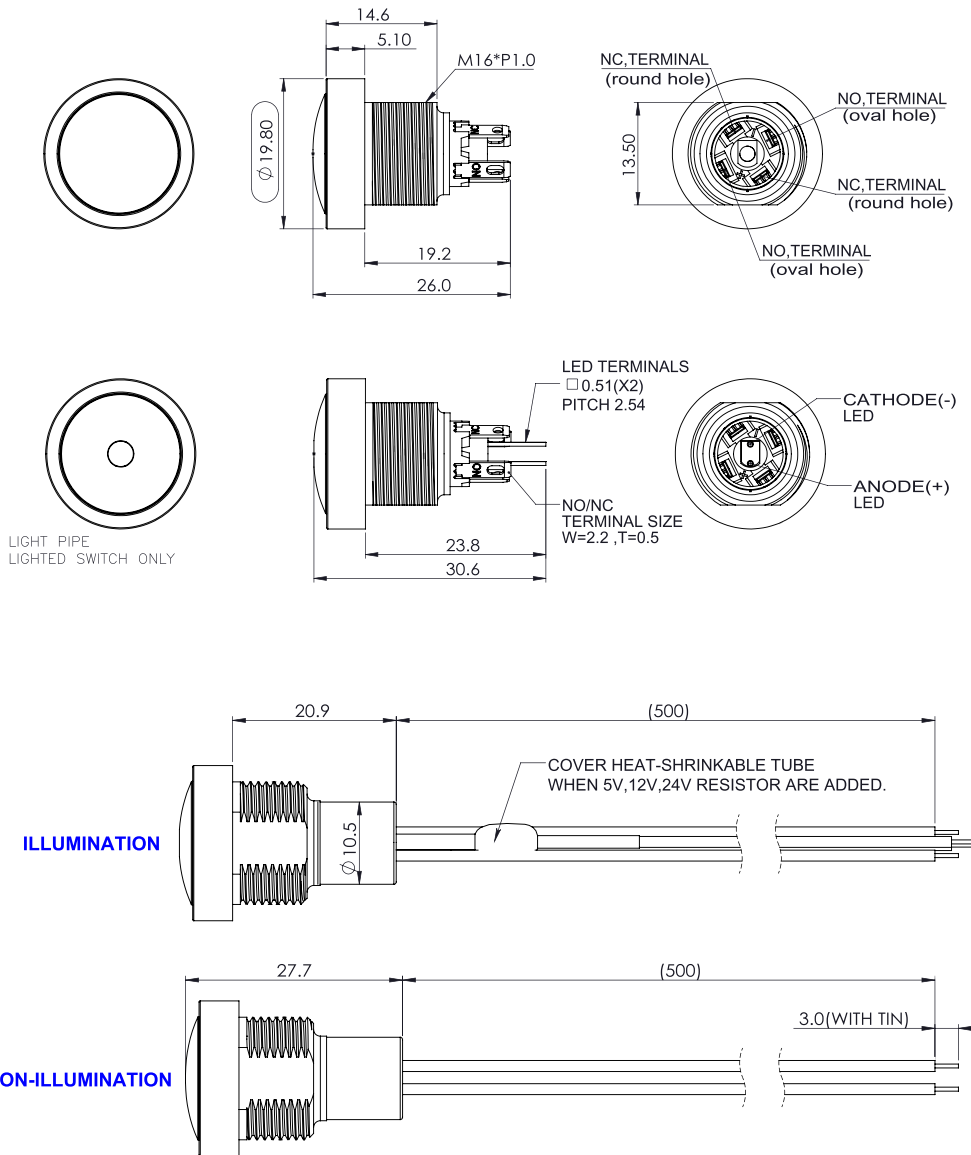
Switch Function:	Housing Type:	LED Color:	Button Color:	Mounting Type:	Voltage Resistor:	Special Request:
<b>A</b> Mechanical, Momentary, NO Wireleads	<b>RBK</b> Round, Black	<b>N</b> None	<b>RD</b> Red	<b>B</b> Bushing	If Blank*	If Blank N/A
<b>C</b> Mechanical, Momentary, NC Wireleads		<b>G</b> Green	<b>GR</b> Green		<b>05</b> 5V Forward	<b>xxx</b> Customer Special Request
<b>E</b> Mechanical, Momentary, NO/NC Wireleads		<b>R</b> Red	<b>BK</b> Black		<b>12</b> 12V Forward**	
<b>1</b> Mechanical, Momentary, Solder Terminal		<b>B</b> Blue	<b>BL</b> Blue		<b>24</b> 24V Forward**	
		<b>W</b> White	<b>YL</b> Yellow			
		<b>Y</b> Yellow	<b>OR</b> Orange			

**SA50** - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ]

\*Current limiting resistor is required to limit LED forward current to 20mA, (not included)  
 \*\*12 and 24V resistors are available with wirelead versions only.

## SERIES SA50: PANEL SEALED 5 AMP PUSHBUTTON SWITCHES

### PRODUCT DRAWINGS



### MECHANICAL / ELECTRICAL CHARACTERISTICS:

#### Circuit:

SPDT-DB ( Form X )

**Pretravel (Nominal):**  
0.050inches [1.27mm]

**Overtravel (Nominal):**  
0.010inches [0.25mm]

**Total Travel (Nominal):**  
0.060inches [1.52mm]

**Operating Force (Nominal):**  
5.15N [525g]

**Release Force (Nominal):**  
3.45N [340g]

**Panel Thickness:**  
Bushing Mount:  
0.020" - 0.118" [0.5 - 3.0mm]

**Contacts:**  
Silver Plated

**Nut Torque Force:**  
Max 5.2 lb-in [6 kgf-cm]

**Actuator Ingress Protection:**  
IP67 (Front Panel)

**Operating Temperature:**  
-40°F to +185°F [-40°C to +85°C]

**Life, Mechanical (Nominal):**  
1,000,000 Cycles

**Current Ratings (Nominal):**  
5A@ 28 VDC

### ELECTRO-MECHANICAL:

**Dielectric Strength:**  
1,000 VAC

**Insulation Resistance:**  
1GΩ

**Contact Resistance:**  
Max 50mΩ (Non-Wirelead)  
Max 250mΩ (Wirelead)

### LED SPECIFICATIONS

LED SPECIFICATION				
LED CODE	LED COLOR	CIRCUITRY	V <sub>i</sub> (VDC)	I <sub>f</sub> (mA)
R	RED		1.8-2.5	20
B	BLUE		2.8-3.5	20
G	GREEN		2.8-3.5	20
Y	YELLOW		1.8-2.5	20
W	WHITE		2.8-3.5	20

Notes:  
1. Lead Soldering Temperature (4mm above from body): 280°C for 5 seconds  
2. Head Soldering Temperature (4mm above from body): 320°C for 3 seconds

WIRELEADS TYPE	WIRELEADS SPECIFICATION	SW TERMINAL	SW TERMINAL	LED COLOR	
		NO	NC	+	-
ILLUMINATION	AWG24 / UL1007	BLUE	YELLOW	RED	BLACK
NON-ILLUMINATION		BLUE	YELLOW	-	-

**TW Switches**  
SENSORS, SWITCHES, ELECTRONIC CONTROLS

Designs and specifications are subject to change without notice due to product improvement.

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