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.
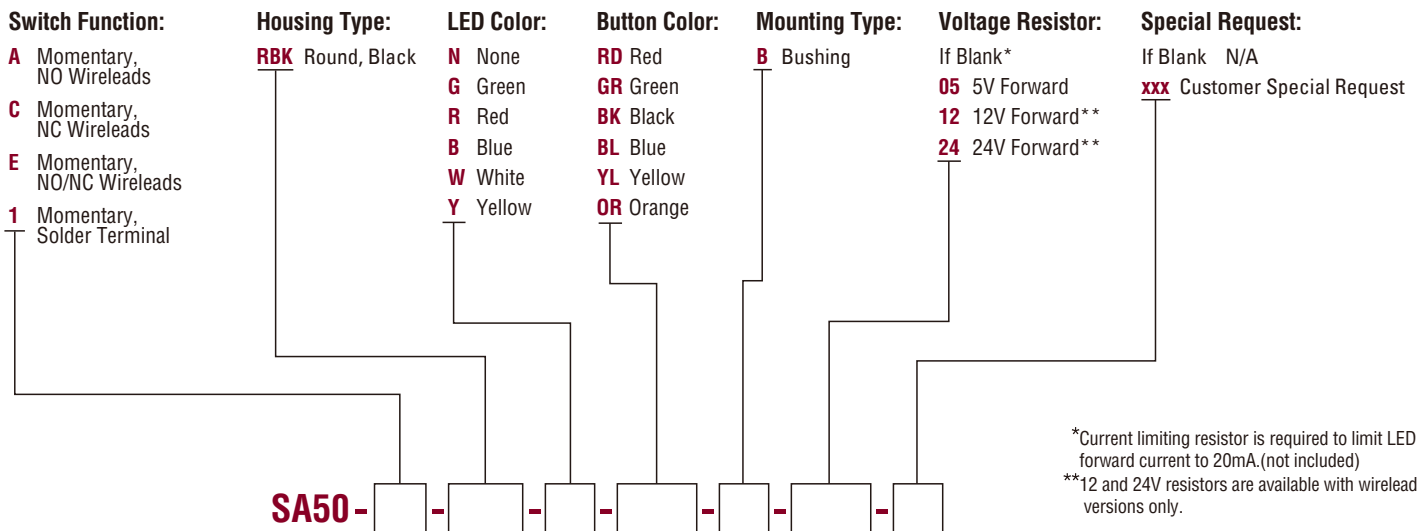
KEY FEATURES:

Size	16mm
Current Rating	5A @ 28VDC
Mechanical Life	25k Cycle Nominal
Operating Temperature	-40˚ to +185˚F [-40˚ to +85˚C]
Circuitry	1NO/1NC
Ingress Protection	IP67 (Front Panel)
Standards	UL 61058 / IEC 61058
Snap Action	Momentary
Illumination	Green/ Red/ Blue/ White/ Yellow

APPLICATIONS

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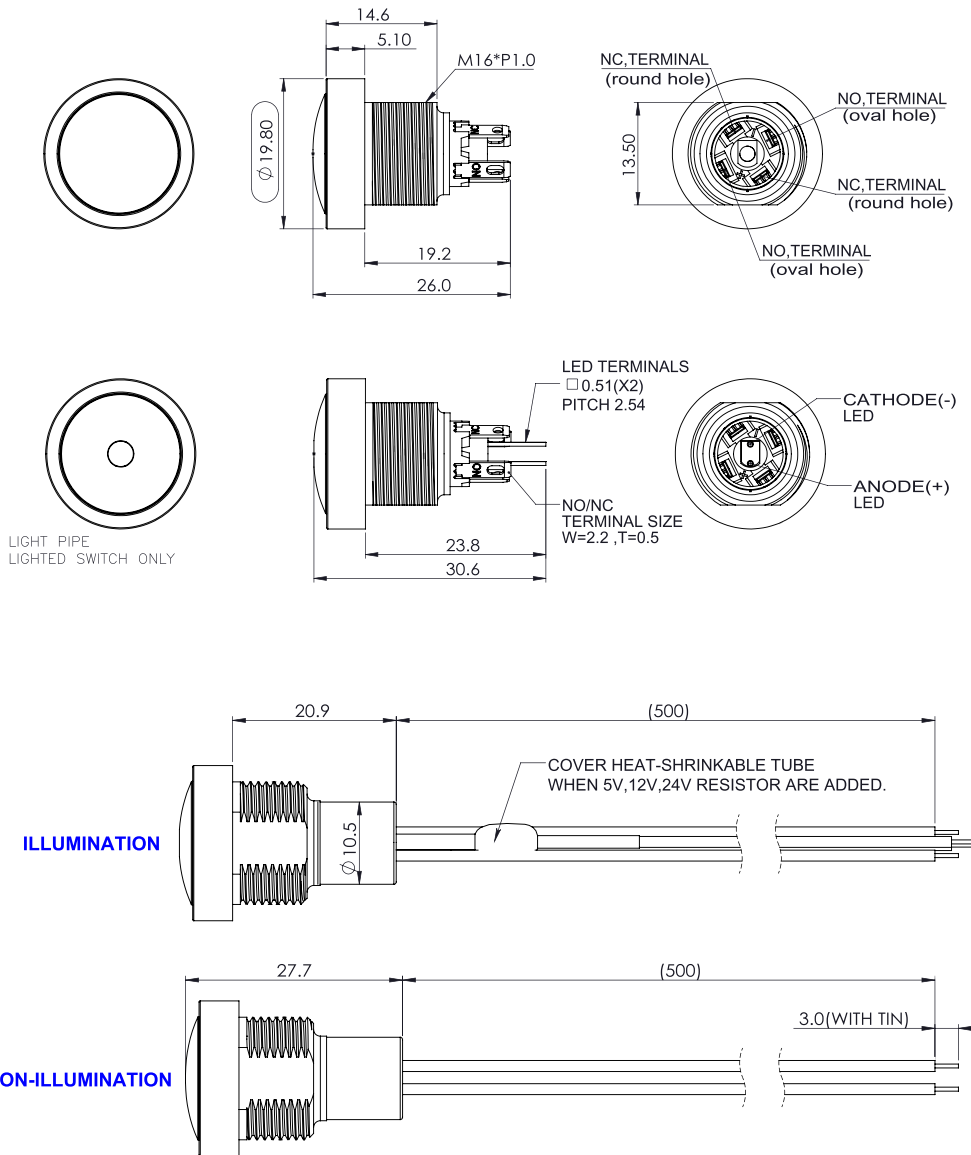- Outdoor Controls
- Joystick Control

ORDERING INFORMATION:

Switch Function:
- **A** Momentary, NO Wireleads
- **C** Momentary, NC Wireleads
- **E** Momentary, NO/NC Wireleads
- **1** Momentary, Solder Terminal

Housing Type:
- **RBK** Round, Black

LED Color:
- **N** None
- **G** Green
- **R** Red
- **B** Blue
- **W** White
- **Y** Yellow

Button Color:
- **RD** Red
- **GR** Green
- **BK** Black
- **BL** Blue
- **YL** Yellow
- **OR** Orange

Mounting Type:
- **B** Bushing

Voltage Resistor:
- If Blank*
- **05** 5V Forward
- **12** 12V Forward**
- **24** 24V Forward**

Special Request:
- If Blank   N/A
- **xxx** Customer Special Request

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

SA50 - ☐ **-** ☐ **-** ☐ **-** ☐ **-** ☐ **-** ☐ **-** ☐

SERIES SA50: PANEL SEALED 5 AMP PUSHBUTTON SWITCHES

PRODUCT DRAWINGS

14.6
5.10
M16*P1.0
⌀19.80
19.2
26.0

NC,TERMINAL (round hole)
NO,TERMINAL (oval hole)
NC,TERMINAL (round hole)
NO,TERMINAL (oval hole)
13.50

LIGHT PIPE
LIGHTED SWITCH ONLY

LED TERMINALS
□0.51(X2)
PITCH 2.54
NO/NC TERMINAL SIZE W=2.2 ,T=0.5
23.8
30.6

CATHODE(-) LED
ANODE(+) LED

ILLUMINATION
20.9
(500)
⌀10.5
COVER HEAT-SHRINKABLE TUBE WHEN 5V,12V,24V RESISTOR ARE ADDED.

NON-ILLUMINATION
27.7
(500)
3.0(WITH TIN)

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-MEHANICAL:

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	Vf(VDC)	If (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 NO	SW TERMINAL NC	LED COLOR +	LED COLOR –
ILLUMINATION	AWG24 / UL1007	BLUE	YELLOW	RED	BLACK
NON-ILLUMINATION		BLUE	YELLOW	–	–

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

ITW Switches
SENSORS, SWITCHES, ELECTRONIC CONTROLS