16MM PANEL SEALED PUSHBUTTON SWITCHES

ITW Series 50, G50 is 16mm and water proof IP67 pushbutton switch in long life gold plating or silver plating contact (2A). The working temperature can low to -40 ˚C and up to 85 ˚C.
ITW Series 50 and, G50 are also with Illumination, wire harness option, momentary and maintain/lock type to meeting customer application.



KEY FEATURES:

Size	16mm
Circuitry	SPST-NO-DB
Current Rating	[50] 10mA @ 12VDC ; [G50] 2A@24VDC
Operating Temperature	-40˚ to +185˚F [-40˚ to +85˚C] (Momentary)
	-40˚ to +149˚F [-40˚ to +65˚C] (Maintained)
Ingress Protection	IP67 (Front Panel)
Snap Action	Momentary / Maintained
Button Color	Green/ Red/ Blue/ Black/ Yellow/ Orange
Illumination	Green/ Red/ Blue/ White/ Amber/ R+B/ R+G

APPLICATIONS

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

ORDERING INFORMATION:

Series:
- **BLANK** Gold Contact IP67
- **G** Silver Contact IP67/2A

Switch Function:
- **1** Mechanical, Momentary, Solder Terminal
- **2** Mechanical, Maintained, Solder Terminal
- **A** Mechanical, Momentary, Wireleads
- **B** Mechanical, Maintained, Wireleads

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**

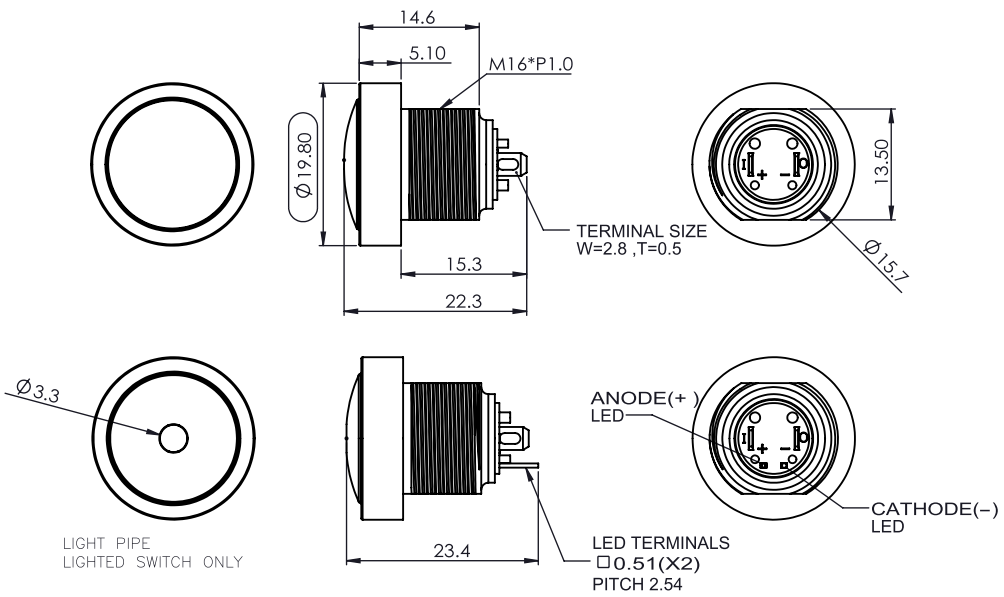
Special Request:
- If Blank N/A
- **xxx** Customer Special Request

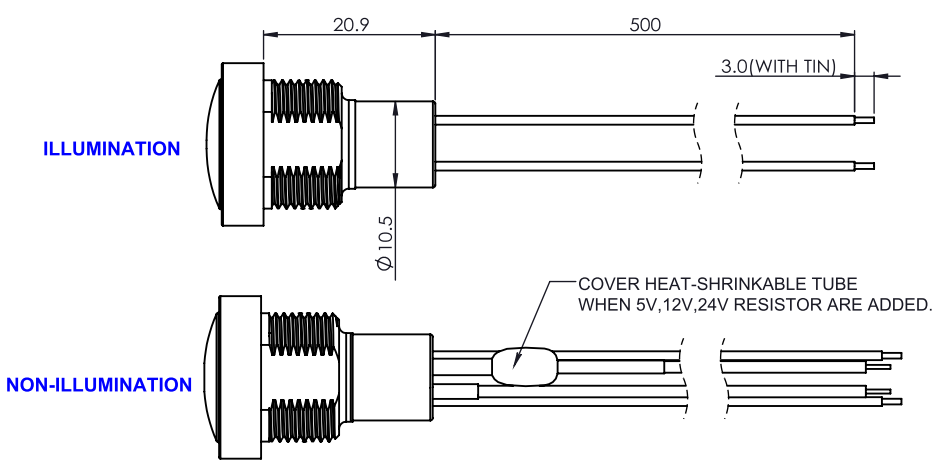
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*Current limiting resistor is required to limit LED forward current to 20mA.(not included)
**12 and 24V resistors are available with wirelead versions only.

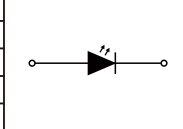
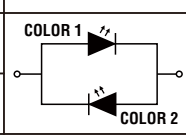
SERIES 50: 16MM PANEL SEALED PUSHBUTTON SWITCHES

PRODUCT DRAWINGS





LED SPECIFICATIONS

LED SPECIFICATION						
LED CODE	LED		CIRCUITRY	V_f(VDC)		I_f (mA)
	COLOR 1	COLOR 2		COLOR 1	COLOR 2	
A	AMBER	-		1.6~2.0	-	20
R	RED	-		1.6~2.0	-	20
B	BLUE	-		2.8~3.4	-	20
G	GREEN	-		2.8~3.4	-	20
W	WHITE	-		2.8~3.4	-	20
RB	RED	BLUE		1.6~2.0	2.8~3.4	20
RG	WHITE	GREEN		1.6~2.0	2.8~3.4	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		LED			
				COLOR 1		COLOR 2	
		I	O	+	–	+	–
ILLUMINATION	AWG26 / UL1007	BLUE	BLUE	RED	BLACK	BLACK	RED
NON-ILLUMINATION		BLUE	BLUE	–	–	–	–

MECHANICAL / ELECTRICAL CHARACTERISTICS:

Circuit:
SPST-NO-DB (Form X)

Button Travel (Nominal):
0.091inches [2.3mm]

Operating Force (Nominal):
3N [306g]

Contact Bounce (Nominal):
1ms

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

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

Contacts:
Series 50:
Gold Plated
Series G50:
Silver Plated

Actuator Ingress Protection:
IP67 (Front Panel)

Operating Temperature:
Momentary:
-40˚F to +185˚F [-40˚C to +85˚C]
Maintained:
-40˚F to +149˚F [-40˚C to +65˚C]

ELECTRO-MEHANICAL:

Current Ratings (Nominal):
Series 50:
10mA@ 12 VDC
Series G50:
2A@ 24 VDC

Life, Mechanical (Nominal):
50 (Momentary)
1000k Cycles
50 (Maintained)
50k Cycles

G50 (Momentary)
40k Cycles
G50 (Maintained)
20k Cycles

Dielectric Strength:
1,000 VAC

Insulation Resistance:
1GΩ

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