ITW SWITCH
LUMEX®

SERIES WSA58M
- PUSHBUTTON SWITCHES

Series WSA58M

KEY FEATURES

- Size: 22mm
- SPDT : 1NO / 1NC
- Electrical Life: 25k Cycle Nominal
- Snap Action: Momentary / Maintained
- Operation temperature: -40 ~ 85°C
- Stainless Steel / Aluminum Housing
- IP67 water proof
- 5A / 28VDC with UL 61058

APPLICATIONS

- Outdoor Controls
- Security Equipment
- Medical Equipment
- Food Processing Equipment
- Industrial Machinery
- Kiosks
- Transportation: Mass-Transit, Lift Trucks

ORDERING INFORMATION

WSA58M - ☐ - ☐ - ☐ - ☐ - ☐ - ☐

Switch Function / Termination:

1	Momentary, Solder
2	Maintained, Solder
A	Momentary, NO/NO Wireleads
B	Maintained, NO/NO Wireleads
C	Momentary, NC/NC Wireleads
D	Maintained, NC/NC Wireleads
E	Momentary, NC/NO Wireleads
F	Maintained / NC/NO Wireleads

Housing Material

1	Zinc Alloy, Chrome Plated
2	Aluminum, Inherent

Illumination/Button Color:

0	Non-illumination
2	Ring Illumination
3	Power / Standby Logo
R	Red Button***
G	Green Button***
Y	Yellow Button***
B	Blue Button***
D	Gold Button***

LED Color:

N	None
R	Red
G	Green
Y	Yellow
B	Blue
W	White

Voltage Resistor:

If Blank: Note*

05	5V Forward
12	12V Forward**
24	24V Forward**

Special Request:

If Blank: N/A

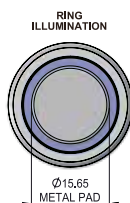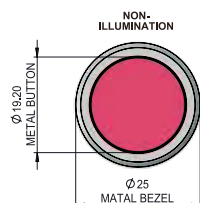|	
xxx	Customer Special Request

Note:
* Current limiting resistor is required to limit LED forward current to 20mA.(not included)
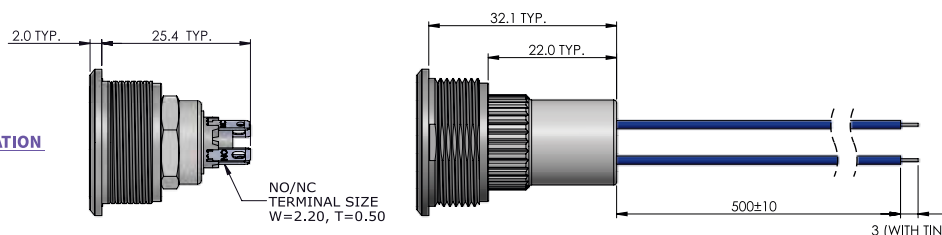** 12 and 24V resistors are available with wirelead versions only.
***Only for non-illumination, Aluminum Housing.
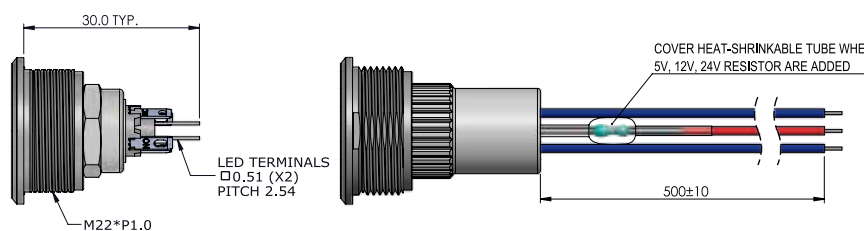
SERIES WSA58M-EM - PUSHBUTTON SWITCHES
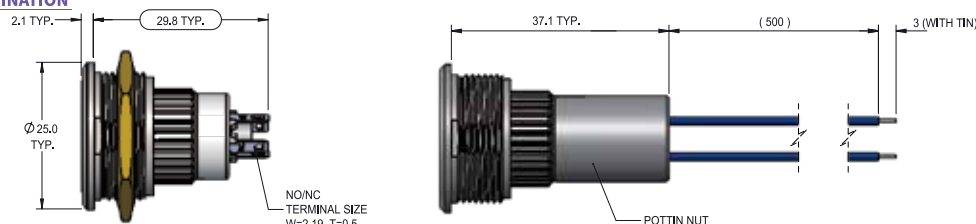
ITW SWITCH LUMEX®

NON-ILLUMINATION
Ø 19.20 METAL BUTTON
Ø 25 MATAL BEZEL

RING ILLUMINATION
Ø15.65 METAL PAD

POWER/STANDBY ILLUMINATION

MOMENTARY TYPE

NON-ILLUMINATION

2.0 TYP.   25.4 TYP.

NO/NC TERMINAL SIZE W=2.20, T=0.50

32.1 TYP.
22.0 TYP.
500±10
3 (WITH TIN)

ILLUMINATION

30.0 TYP.

LED TERMINALS ☐0.51 (X2) PITCH 2.54
M22*P1.0

COVER HEAT-SHRINKABLE TUBE WHEN 5V, 12V, 24V RESISTOR ARE ADDED
500±10

MAINTAINED TYPE

NON-ILLUMINATION

2.1 TYP.   29.8 TYP.
Ø 25.0 TYP.

NO/NC TERMINAL SIZE W=2.19, T=0.5

37.1 TYP.   (500)   3 (WITH TIN)

POTTIN NUT

ILLUMINATION

LED TERMINALS ☐0.5(x2) PITCH 2.5
M22 x P1.0

37.1 TYP.   (500)

COVER HEAT-SHRINKABLE TUBE WHEN 5V, 12V, 24V RESISTOR ARE ADDED

NC TERMINAL (ROUND HOLE)
CATHODE(-) LED
NO TERMINAL (OVAL HOLE)
NO TERMINAL (OVAL HOLE)
NC TERMINAL (ROUND HOLE)
ANODE(+) LED
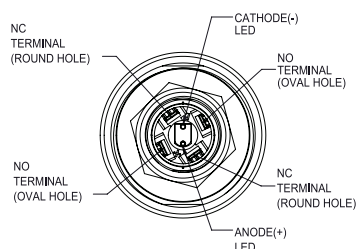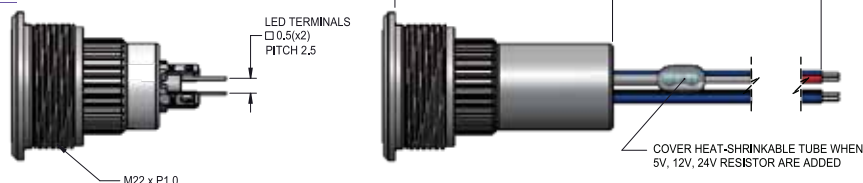
DETAIL FOR TERMINAL POSITION

RECOMMENDED PANEL CUT-OUT	Ø 22.15±0.10 / 21.05±0.10
PANEL THICKNESS	0.020~0.177" [0.5~4.5mm]
NUT TORQUE FORCE	Max. 10 lb-in [11.5 kgf-cm]

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. Hand Soldering Temperature (4mm above from body) : 320°C for 3 seconds

WIRELEADS TYPE	SW TERMINAL		LED	
	NO	NC	+	-
ILLUMINATION	BLUE AWG24 UL1007	YELLOW AWG24 UL1007	RED AWG26 UL1007	BLACK AWG26 UL1007
NON-ILLUMINATION	BLUE AWG24 UL1007	YELLOW AWG24 UL1007	-	-

MECHANICAL CHARACTERISTICS

- **Switch Circuitry:** SPDT-DB (Form X)
- **Pretravel (Nominal):** 0.050 inches [1.27mm]
- **Overtravel (Nominal):** 0.010 inches [0.25mm]
- **Total Travel (Nominal):** 0.060 inches [1.52mm]
- **Operating Force (Nominal):** 5.15N [525g]
- **Release Force (Nominal):** 3.45N [340g]
- **Contacts Material:** Silver
- **Panel Thickness:** 0.020" - 0.177" [0.5 - 4.5mm]
- **Nut Torque Force:** Max 10 lb-in [11.5 kgf-cm]
- **Current Ratings (Nominal):** 5A @ 28VDC, 25k Cycles

ENVIROMENTAL SPECIFICATIONS

- **Operating Temperature:** -40°F to +185°F (-40°C to +85°C)
- **Water Proof:** IP67 (Front Panel)

ELECTRICAL SPECIFICATIONS

- **Dielectric Strength:** 1,000VAC
- **Insulation Resistance:** 1G Ω
- **Contacts Resistance:** 50 mΩ max. (Non-Wirelead) 250 mΩ max. (Wirelead)