Series WSA57M

KEY FEATURES

- Size: 16mm
- SPDT : 1NO / 1NC
- Mechanical Life: 25k Cycle Nominal
- Snap Action: Momentary / Maintained
- Operation temperature: -40 ~ 85°C
- Stainless Steel / Zinc Alloy Housing
- IP67 water proof
- 5A / 28VDC with UL 61058

APPLICATIONS

- Security Equipment
- Industrial Control
- Medical Equipment
- Marine
- Food Processing Equipment
- Office Equipment
- Transportation

ORDERING INFORMATION

WSA57M - ☐ - ☐ - ☐ - ☐ - ☐ - ☐

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
3	Zinc Alloy, Matt Black
4	Stainless Steel, Natural

Illumination:	
0	Non-illumination
1	Center Spot
2	Ring Illumination
3	Power / Standby Logo

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**

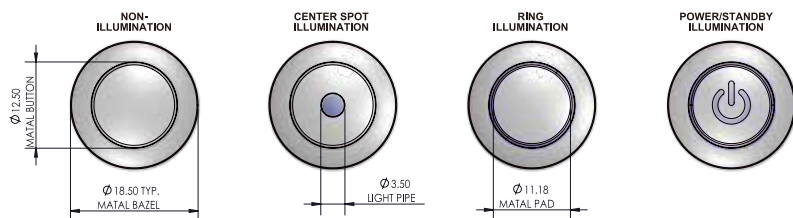| Special Request:	
If Blank: N/A	
xxx	Customer Special Request

Note:
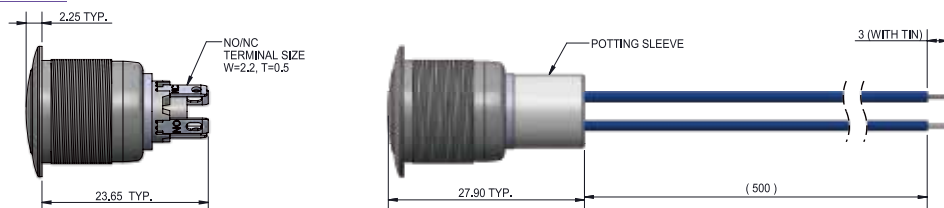* Current limiting resistor is required to limit LED forward current to 20mA.(not included)
** 12 and 24V resistors are available with wirelead versions only.
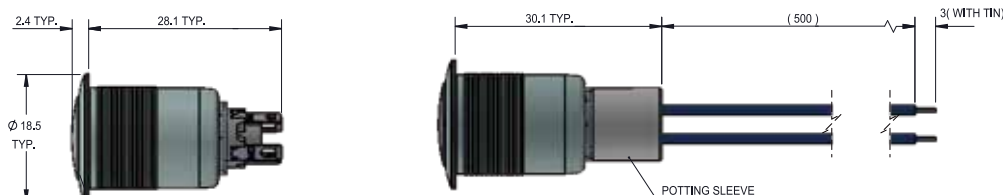
SERIES WSA57M-EM - PUSHBUTTON SWITCHES

ITW SWITCH LUMEX®

Ø 12.50 MATAL BUTTON
NON-ILLUMINATION
CENTER SPOT ILLUMINATION
RING ILLUMINATION
POWER/STANDBY ILLUMINATION

Ø 18.50 TYP. MATAL BAZEL
Ø 3.50 LIGHT PIPE
Ø 11.18 MATAL PAD

MOMENTARY TYPE

NON-ILLUMINATION

2.25 TYP.
NO/NC TERMINAL SIZE W=2.2, T=0.5
23.65 TYP.

POTTING SLEEVE
3 (WITH TIN)
27.90 TYP.
(500)

ILLUMINATION

M16 x P1.0
LED TERMINALS ☐ 0.51 (x2) PITCH 2.54
30 TYP.

COVER HEAT-SHRINKABLE TUBE WHEN 5V,12V,24V RESISTOR ARE ADDED
25.65 TYP.
(500)

MAINTAINED TYPE

NON-ILLUMINATION

2.4 TYP.   28.1 TYP.
Ø 18.5 TYP.

30.1 TYP.   (500)   3(WITH TIN)
POTTING SLEEVE

ILLUMINATION

M16 x P1.0
LED TERMINALS ☐ 0.5(x2) PITCH:2.5
NO/NC TERMINAL SIZE W:2.2 T:0.5

30.1 TYP.   (500)
COVER HEAT-SHRINKABLE TUBE WHEN 5V,12V,24V RESISTOR ARE ADDED
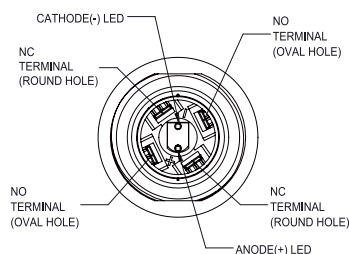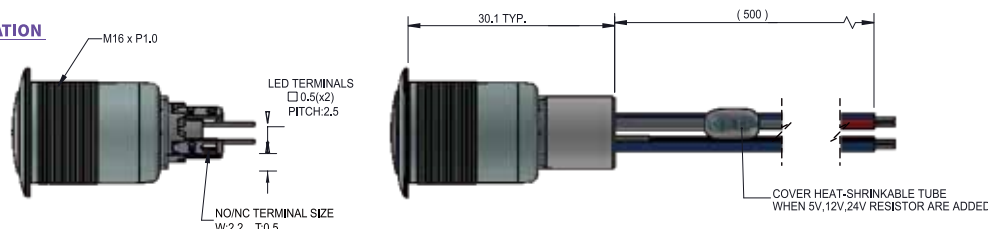
DETAIL FOR TERMINAL POSITION

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

RECOMMENDED PANEL CUT-OUT

FLAT SIDE (ONLY FOR POWER / STANDBY SYMBOL ALIGNMENT)
Ø16.15±0.1
14.80±0.1

PANEL THICKNESS	0.020~0.236" [0.5~6.0 mm]
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" - 0.236" [0.5 - 6.0mm]
- **Nut Torque Force:** Max 10 lb-in [11.5 kgf-cm]
- **Current Ratings (Nominal):** 5A @ 28VDC

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)