

Features

- IP67 rated.
- Available in 16mm, 19mm, 22mm, 25mm and high current.
- Stainless steel or black anodized finish
- Along with other industrial type applications that require vandal resistance in a public setting
- With a wide variety of options, including illuminated, sealed and long-life expectancy.

RS PRO Sub-Miniature Push Button Switches

RS Stock No.: see below table



The picture above is for reference only.

RS PRO is the own brand of RS. The RS PRO Seal of Approval is your assurance of professional quality, a guarantee that every part is rigorously tested, inspected, and audited against demanding standards. Making RS PRO the Smart Choice for our customers.

Product Description

- The distinctive of RS Pro metal switches are light weight, high strength, corrosion resistance, aesthetic, easy heat dissipation and more.
- Applications:
Industrial control instruments, medical equipment, security monitoring equipment, vehicle peripherals, audio-visual equipment, energy storage equipment.

Material Characteristics

Material Characteristics	
Case	Diallyl Phthalate (DAP)
Cap	Polyamide 6/6
Base	PBT (UL 94-V0)
Bushing	Stainless Steel / Aluminium Alloy (TWO OPTIONS)
Plunger	POM
Spring	Steel Wire
Contact	Copper alloy, Silver plated
Terminals	Brass, Silver plated
O-Ring	Silicone
Hardware	Nut (Brass, Nickel plated)

Electrical Specifications

Voltage Rating	Ith 5A/250 VAC resistive load 3A/250 VAC
Terminal Type	Solder Tags
Actuator Type	PC (UL94 V-2); Stainless Steel / Aluminium Alloy
Soldering	350°C max. for 5 seconds

Contact Specifications	
Contact Current Rating	Ith 5A/250VAC resistive load 3A/250VAC
Contact Resistance	50 mΩ max. @ 1A 12VDC (initial value)
Insulation Resistance	1,000 MΩ min. at 500VDC
Operation Temperature	-20°C to 55°C
Dielectric Strength	2,000V RMS @ sea level
Torque	5~14Nm
Panel Thickness	10mm (Ø25.20mm)
Total Travel	About 3.2mm
Electrical Life	50,000 operations min
Operation Pressure	1Pole 2.5±1N / 2Poles 3.5±1N
Ingress Protection	IP67, IK08(Stainless)

Mechanical Specifications

Panel Thickness	10.0mm
Panel Cut Out Diameter	25.2mm, 23mm
Mechanical Life	Momentary 1,000,000 cycles Self-lock 500,000 cycles
Torque	5~14Nm

Operation Environment Specifications

Storage Temperature	-40°C to 85°C
Maximum Operating Temperature	85°C
Minimum Operating Temperature	-40°C
Cold Test	Stored at temperature -20(+/-3) Celsius degree for 96 hours
Hot Test	Stored at temperature +55(+/-3) Celsius degree for 96 hours, shall result no changes to switch's electrical performance
Humidity Test	Stored at temperature 40(+/-2) Celsius degree with relative humidity 90%~95% for 96 hours, shall result no changes to switch's electrical performance

Protection Category

IP Rating	IP67, IK08 (Stainless)
Electric Shock Protection Class	N/A
Degree of Contamination	N/A

Products range

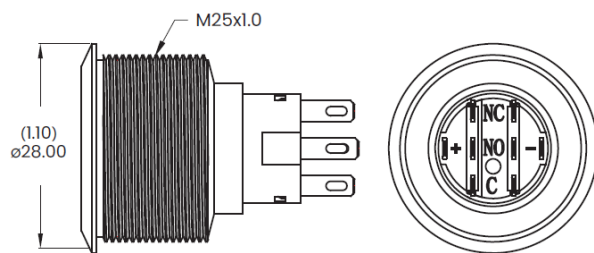
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175-9259	MPB25-A0F21E-124-JQ
175-9263, 175-9671	MPB25-A0F20E-124-JQ
175-9274	MPB25-A0F10E-324-JQ
175-9282	MPB25-A0F11E-324-JQ
175-9257	MPB25-A0F21E-324-JQ
175-9262	MPB25-A0F20E-324-JQ
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175-9256	MPB25-A0F21E-524-JQ

175-9261	MPB25-A0F20E-524-JQ
175-9272, 175-9679	MPB25-A0F10E-624-JQ
175-9266	MPB25-A0F11E-624-JQ
175-8336	MPB25-A0F20E-624-JQ
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175-8344	MPB25-A0F11E2-624-JQ
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175-8377	MPB25-D0F11E3-324-JQ
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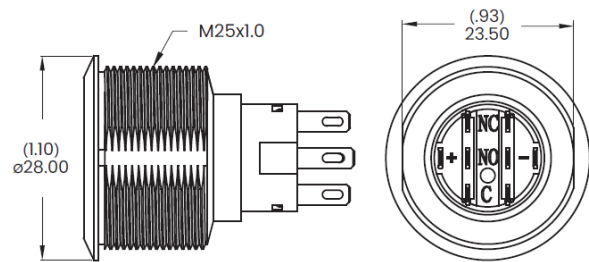
▼ BODY OPTIONS

A0 / C3 Round

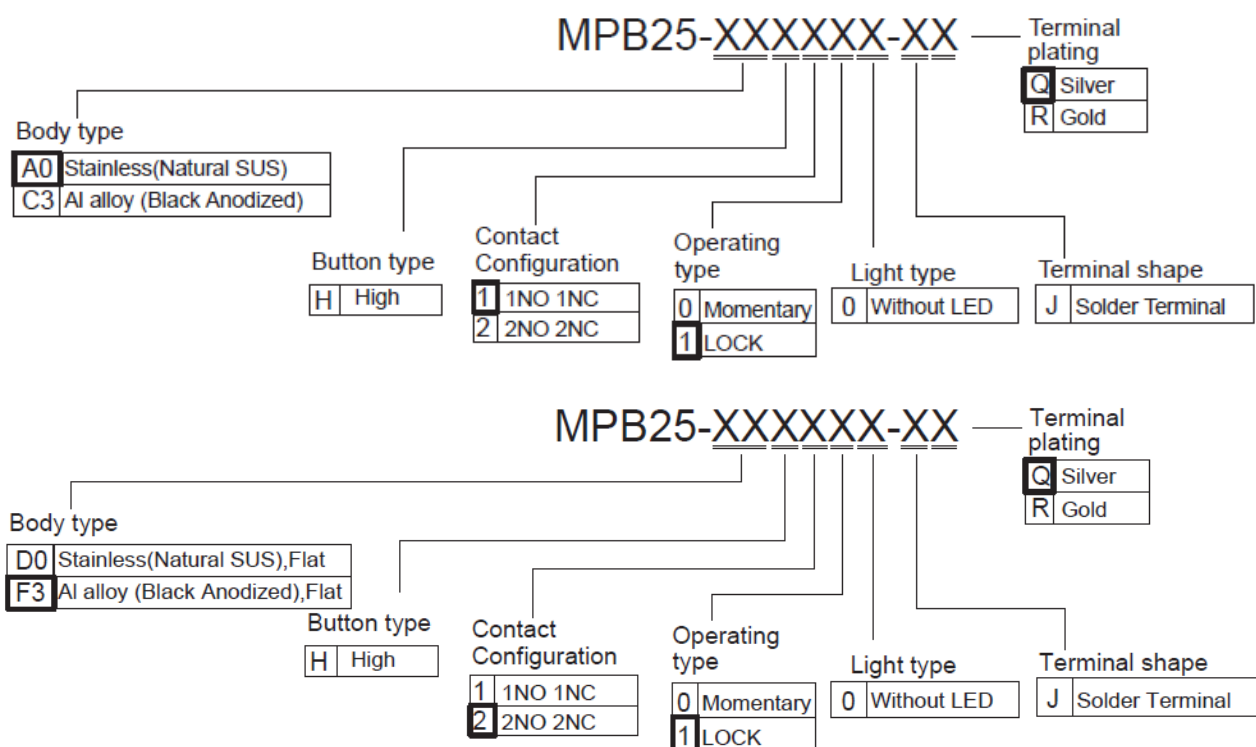


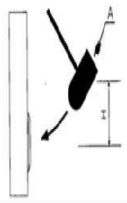
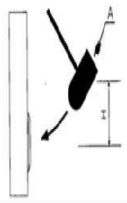
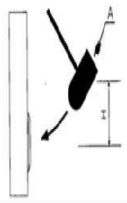
Note: Not available for light types E1 and E3.

D0 / F3 Double flat



Note: Available with light types E1 and E3 only.



MECHANICAL PERFORMANCE	ITEM	DESCRIPTION	TEST CONDITIONS					REQUIREMENTS													
	5	Operation pressure	MODEL-1305N MECHANICAL TEST 500gram 、1000gram 、 2000gram.					1Pole about 2.5 ± 1N. 2Pole about 3.5 ± 1N.													
	6	Operation Travel	Full Travel.					3.2 ±0.3mm.													
	7	Torque	Applied to nut.					About 5~14Nm.													
	8	Panel Thickness	Applied to nut.					About 1~10mm.													
	9	IK Code	<table><tr><th>IK Degree</th><th>Weight(A)</th><th>Original Height(H)</th><th>Impact Energy</th><th>Impact Diagram</th></tr><tr><td>08</td><td>1.25 kg</td><td>40cm</td><td>5J</td><td rowspan="2"></td></tr><tr><td>10</td><td>5.0kg</td><td>40cm</td><td>20J</td></tr></table>					IK Degree	Weight(A)	Original Height(H)	Impact Energy	Impact Diagram	08	1.25 kg	40cm	5J		10	5.0kg	40cm	20J
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08	1.25 kg	40cm	5J																		
10	5.0kg	40cm	20J																		
OPERATING LIFE	10	Operating Life	Measurements shall be made following the test forth below :					①Dielectric Strength : between terminals :1000VAC. between terminals of opposite polarity :2000VAC. ②Insulation Resistance : 1000MΩ (at 500VDC)min. ③Contact Resistance : 100mΩ Max.													
			①Ie:3A /Ue:250VAC .(resistive load) ②Rate of Operation: 6-8operation cycles per minute. ③Electronics Life Test : 50,000 cycles. (for 3A/250VAC) ④Electronics Life Test : 6,000 cycles. (for 3A/28VDC) ⑤Mechanical Life Test : Rate of Operation: 30 operation cycles/MIN Resettable : 1,000,000 cycles. Self-locking: 500,000 cycles.																		

Jul.27.2017

	ITEM	DESCRIPTION	TEST CONDITIONS	REQUIREMENTS
HUMIDITY RESISTANCE	14	Salt spray Testing	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before the measurements are made: ①Temperature: $35 \pm 2^{\circ}\text{C}$. ②The ratio of salt-water : 5%. ③The spray amount of salt- water : 1~2 ml/h. ④Time: 48 hours.	The testing standard based on bubble, crack, And magnifying glass with gauge.
	15	Test of IP 67	Protected against the effects of Temporary immersion in water. (1m below the surface of the water for a duration of 30 min).	IP67 According to EN 60529 : 1991+A1 : 2000 IEC 60529 : 2001
RoHS	16	HSF	Refer RoHS Standard : The electronic electrical machinery product limits with six big chemical materials.	Cd : 100ppm Pb : 1000ppm Hg : 1000ppm Cr6+ : 1000ppm PBB 、PBDE : 1000ppm
SOLDER HEAT RESISTANCE	17	Manual Soldering	■ hand Soldering : ①Soldering Temperature : 290°C. (Max) ②Duration of Solder Heated : 3 seconds (Max). ■ Precautions in Handling: ①Please make sure that there is no flux rose over the surface of the PCB.	①Shall be free from pronounced backlash and falling-off or breakage terminals. ②As shown in item 2~4.

Wiring:

1. Solder the terminals using a 60W soldering iron at 290°C within 3 seconds. (Sn-Ag-Cu type solder is recommended.)
2. When soldering, be sure to keep the soldering iron as far away from the housing as possible.
3. Also ensure that no tensile force is applied to the terminal. Do not bend the terminal or apply excessive force to the terminal.

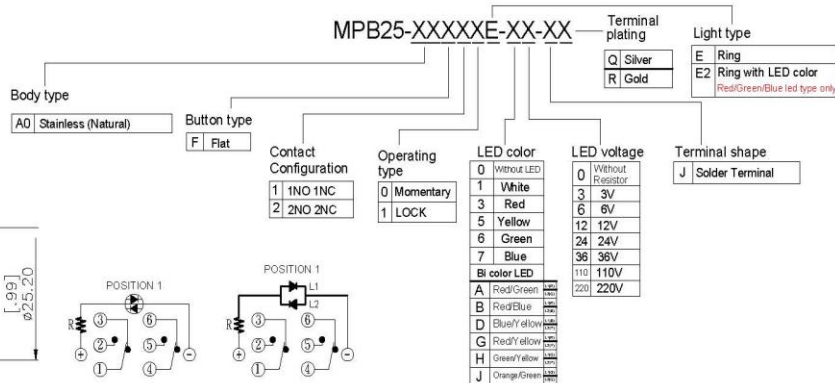
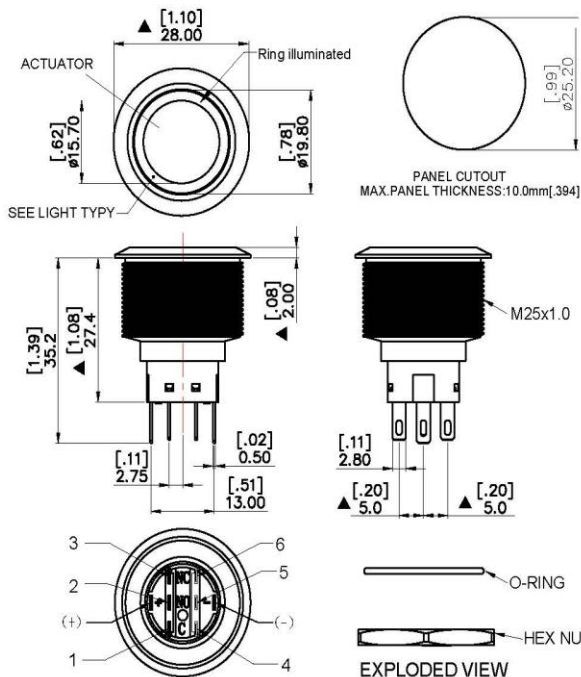
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5. LED Specifications : (LED Without resistor)

Color	VF(v) Min.	VF(v) TYP.	VF(v) MAX.	IF(MAX)
White	2.8	3.3	3.8	20mA
Red	1.8	2.1	2.5	20mA
yellow	1.8	2.1	2.5	20mA
Blue	2.8	3.2	3.8	20mA
Green	2.8	3.2	3.6	20mA

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MATERIAL:
 BUSHING: Stainless Steel.
 BASE: PBT(UL 94-V0); PC(UL 94-V2)
 ACTUATOR: PC; Stainless Steel.
 INNER ASSEMBLY: POM/PA66
 SPRING: spring steel.
 SEALING: Silicone.
 O-Ring: Silicone.
 TERMINAL: Brass, silver or gold plated.
 HEX NUT: Nickel plated brass.
 RoHS

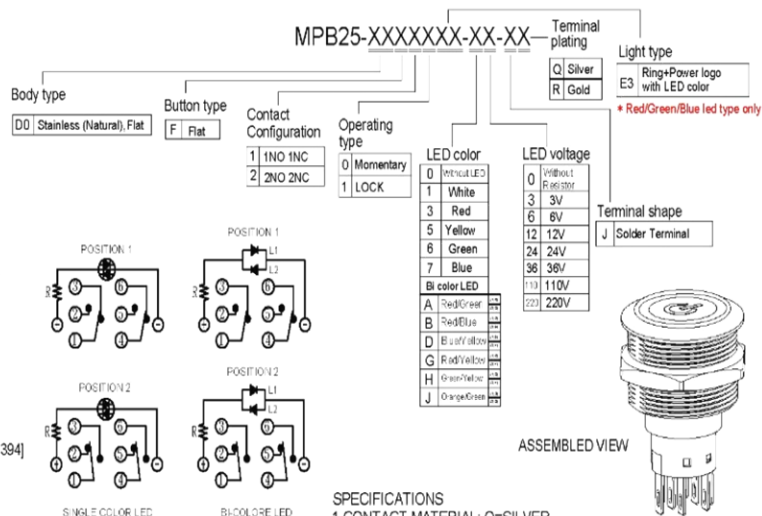
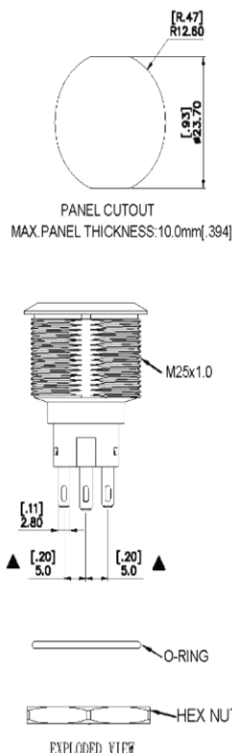
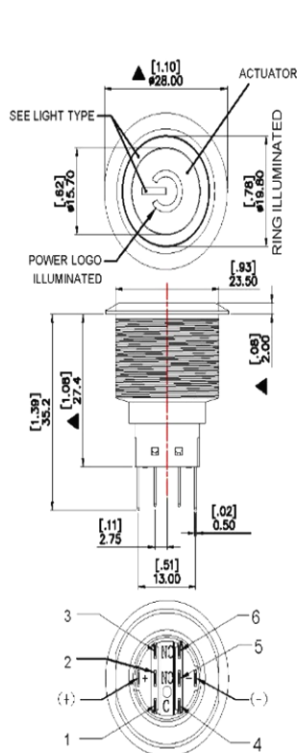


SPECIFICATIONS

- CONTACT MATERIAL: Q=SILVER.
 R=Brass, Coin silver, Gold plated.
- RATING: 1th 5A/250VAC, resistive load 3A/250VAC.
- ELECTRICAL LIFE: 50,000 MAKE-AND-BREAK CYCLES AT FULL LOAD.
- MECHANICAL LIFE: Momentary 1,000,000.
 SELF-LOCK 500,000.
- INSULATION RESISTANCE: 1,000MΩ MIN AT 500VDC.
- DIELECTRIC STRENGTH: 2,000V RMS@sea level.
- CONTACT RESISTANCE: 50mΩ MAX @1A 12VDC(initial value).
- OPERATING TEMPERATURE: -20 °C to 55 °C.
- TRAVEL: ABOUT 3.2mm.
- OPERATION PRESSURE: 1Pole 2.5±1N. / 2Pole 3.5±1N.
- INGRESS PROTECTION: IP67, IK10(Stainless).
- TORQUE: 5~14Nm.

TOLERANCE(公差):
 0.00 mm ± 0.25mm
 0.0 mm ± 0.40mm
 ANGULAR: ± 2°

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