

RS Part no.

RS Pro MPN	Packs of 1	Packs of 20
MPB22-A0F100-JQ	1759760	1759334
MPB22-A0F100-JR	1759756	1759333
MPB22-A0F110-JQ	1759751	1759323
MPB22-A0F110-JR	1759776	1759335
MPB22-A0F210-JQ	1759711	1759245
MPB22-A0F210-JR	1759693	1759244
MPB22-A0F200-JQ	1759749	1759310
MPB22-A0F200-JR	1759770	1759271

Specifications:

1. Style :

This specification describes "Metal Pushbutton Switch", mainly used as signal or double switch of electric devices, with the general requirements of mechanical and electrical characteristic.

①Switch combination : 1NO1NC/2NO2NC.

②Enclosure material : Stainless steel / Nickel plated brass/ Aluminum alloy.

③Operating Type : Resettable or Self-locking.

④Operating Temperature Range : -20 °C~+55 °C.

Storage Temperature Range : -40°C~+85 °C.

⑤Degrees of protection provided by enclosures

IP code: IP67.

IK code: IK08 .(For case :Nickel plated brass / Aluminum alloy)

IK10 .(for case :stainless steel)

2. Electrical Rating : Ith :5A / Ui :250VAC.

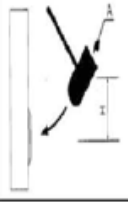
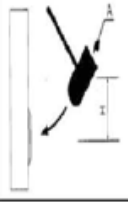
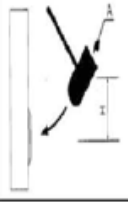
Ie: 3A / Ue :250VAC (resistive load).

Ie: 3A / Ue :28VDC (resistive load).

3. Type of Actuation : Pushbutton Switch.

4. Test Sequence :

	ITEM	DESCRIPTION	TEST CONDITIONS	REQUIREMENTS
APPEARANCE	1	Visual Examination	By Visual Examination check without and out pressure & testing.	There shall be no defects that affect the serviceability of the product.
ELECTRIC PERFORMANCE	2	Contact Resistance	To be measured between the two terminals associated with each switch pole.	50mΩ Max.
	3	Insulation Resistance	Measurements shall be made following application of 500 VDC / 100mA potential across terminals and cover for 1 minute.	1000MΩ min.
	4	Dielectric Withstanding Voltage	①2000VAC(50Hz or 60Hz) / between terminals /1minute. ②2000 VAC(50Hz or 60Hz) /between terminals and frame/ 1minute.	There shall be no breakdown or flashover.

MECHANICAL PERFORMANCE	ITEM	DESCRIPTION	TEST CONDITIONS	REQUIREMENTS													
	5	Operation pressure	MODEL-1305N MECHANICAL TEST 500gram、1000gram、2000gram.	1Pole about 2.5 ± IN. 2Pole about 3.5 ± IN.													
	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 border="1"> <thead> <tr> <th>IK Degree</th> <th>Weight (kg)</th> <th>Original Height (cm)</th> <th>Impact Energy</th> <th>Impact Diagram</th> </tr> </thead> <tbody> <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> </tbody> </table>	IK Degree	Weight (kg)	Original Height (cm)	Impact Energy	Impact Diagram	08	1.25 kg	40cm	5J		10	5.0kg	40cm	20J	After three mechanical impact with corresponding grade energy at the same position of the crust, the switch has no harmful effect.
IK Degree	Weight (kg)	Original Height (cm)	Impact Energy	Impact Diagram													
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 : 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)	①Dielectric Strength : between terminals :1000VAC. between terminals of opposite polarity :2000VAC. ②Insulation Resistance : 1000MΩ (at 500VDC)min. ③Contact Resistance : 100mΩ Max.													
			④Mechanical Life Test : Resettable : 1,000,000 cycles. Self-locking: 500,000 cycles.														

ITEM	DESCRIPTION	TEST CONDITIONS	REQUIREMENTS
11	Resistance Low Temperature	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for 1 hour before the measurements are made: ① Temperature : $-20\pm 3^{\circ}\text{C}$. ② Time : 96 hours.	As shown in item 2-4.
12	Resistance High Temperature	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for 1 hour before the measurements are made: ① Temperature : $55\pm 3^{\circ}\text{C}$. ② Time : 96 hours.	As shown in item 2-4.
13	Resistance Humidity	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for 1 hour before the measurements are made: ① Temperature: $40\pm 2^{\circ}\text{C}$ ② Relative Humidity: 90-95% ③ Time: 96 hours.	① Contact Resistance: $100\text{ m}\Omega$ Max. ② Insulation Resistance: $1000\text{M}\Omega$ min.

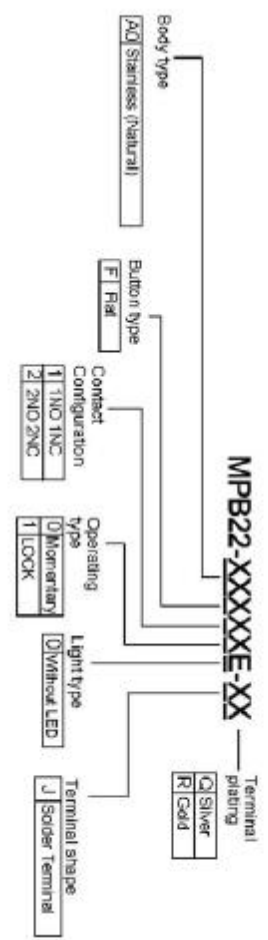
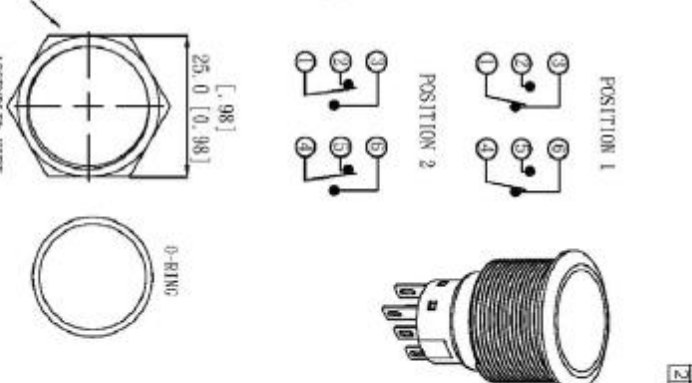
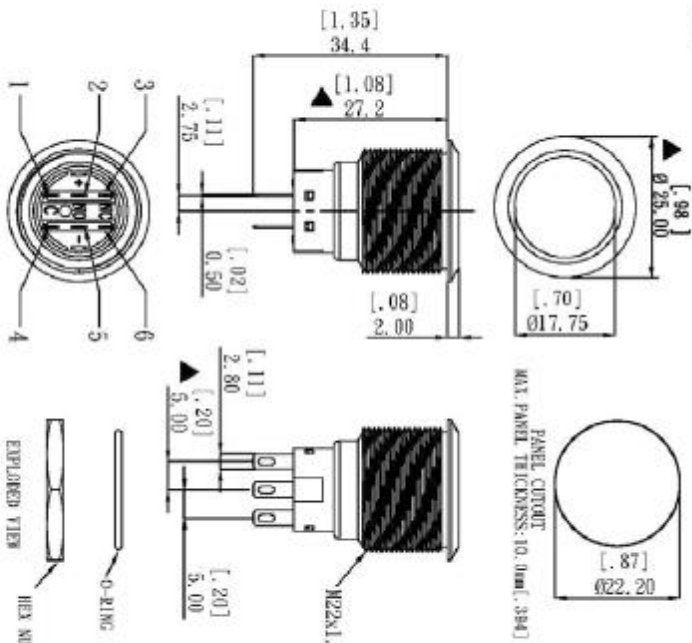
HUMIDITY RESISTANCE

	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±2°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: ③Please make sure that there is no flux rose over the surface of the PCB.	④Shall be free from pronounced backlash and falling-off or breakage terminals. ⑤As 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.

MATERIAL:
 BUSHING: Stainless Steel
 BASE: PBT(U.L. 94-V0), PC(U.L. 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

1. CONTACT MATERIAL: O-SILVER
 R= Brass, Coin silver, Gold plated
 2. RATING: 16 SA, 250VAC, resistive load, 3A, 250VAC
 3. ELECTRICAL LIFE: 50,000 MAKE-AND-BREAK CYCLES AT FULL LOAD
 4. MECHANICAL LIFE: Momentary 1,000,000
 SELF-LOCK 500,000
 5. INSULATION RESISTANCE: 1,000MΩ MIN. AT 500VDC.
 6. DIELECTRIC STRENGTH: 2,000V RMS@sea level
 7. CONTACT RESISTANCE: 50mΩ MAX @ 1A, 12VDC (initial value)
 8. OPERATING TEMPERATURE: -20°C to 55°C
 9. TRAVEL: ABOUT 3.2mm
 10. OPERATION PRESSURE: 100g 1.5-2.5N / 200g 2.2-3.5N
 11. INGRESS PROTECTION: IP67, IK10 (Stainless)
 12. TORQUE: 5-14Nm

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