

Dust protected Compact-sized Snap Action Switches

MQS-59 Series

Features

- ◇ Flux-resistant construction with integrally molded terminals.
- ◇ Suitable for the use in the watery, dusty and corrosive gas environment.

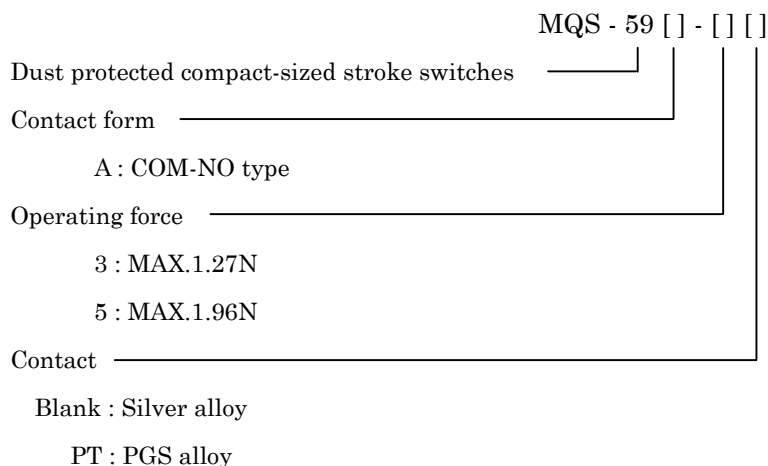


Actual size

Applications

- ◇ Cleaner , Refrigerator , Hot water pot
- ◇ Automotive products , Vending machine , Bathroom apparatus

Products Number system



Typical Specifications

Item	Specifications			
Contact	Silver alloy contact type		PGS alloy contact type	
Operating force (Pin plunger type)	MAX 1.27N	MAX 1.96	MAX 1.27N	MAX 1.96
Ratings (Resistive load)	1A 14VDC		0.1A 14VDC	
Mechanical life	300,000 cycles			
Electrical life	30,000 cycles		100,000 cycles	
Contact resistance (Initial)	MAX 30 milliohm		MAX 100 milliohm	
Insulation Resistance	MIN 100 megohm 500V DC			
Withstanding voltage	Between open contacts : 600V AC 1min		Between each terminal and non live metal part : 1500V AC 1min	
			Between each terminal and each : 1500V AC 1min	
Resistibility to vibration (Pin plunger type)	double amplitude : 1.5mm , frequency : 10 to 55Hz Each direction Open contact shall be less than 1 ms at the above conditions.			
Resistibility to shock (Pin plunger type)	Open contact shall be less than 1 ms at 30G.			
Allowable operating speed (at no load)	1 to 500 mm/sec.			
Max. operating cycle rate (at no load)	120 times/min.			
Operating temperature range	-20 to +70 degree Celsius			
Ambient humidity	MAX 85%RH			

▣ Products line

No	O.F. (MAX)	R.F. (MIN)	Silver alloy	PGS alloy
			Products No.	Products No.
1	1.23N	0.2N	MQS-59A-3	MQS-59A-3PT
	1.96N	0.3N	MQS-59A-5	MQS-59A-5PT

▣ Dimension

Unit : mm

No	Style	Operating characteristic	
1		Free Position	12.4 plus or minus 0.2mm
		Operating Position	11.7 plus or minus 0.4mm
		Limit Position MAX.	10mm

▣ Notes

- The appearance and specifications of the product may be modified without prior notice to improve its performance.
- This catalog shows only outline specifications. When using the product, please obtain formal specifications.
- Please see appendix [Cautions in Using Switches].
- Fix the switch by M2 screw with torque less than 9.8 N-cm(1 kg-cm)
Fixing with spring washers and adhesive are recommended to avoid the loose of the screw.
- Operating force applied to push button or actuator should be zero at free position and the force shall not be applied vertically to push button during the operation.
- O.T. (Over travel) shall be set between 80% and 100% of O.T. specifications.
- In connecting lead wires, care should be taken not to apply tension to terminal.
- In case of manual-soldering, soldering should be finished within 3 seconds by soldering iron of 30 W or with maximum tip temperature of 350 degree Celsius. Please do not apply pressure for 1 minute after soldering.
- Please design usage of switch in proper operation even if any standard value of operational characteristics changes by plus or minus 20 % .
- No dust, high humidity and organic gas should be found in the storage location.
- Please confirm the performance on actual operation by simulation with actual environment environments for high reliability.