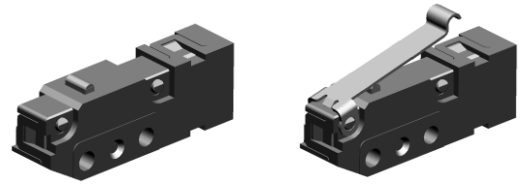


Compact-sized Snap Action Switches (Connector Connection Type) MQS-100 Series

Features

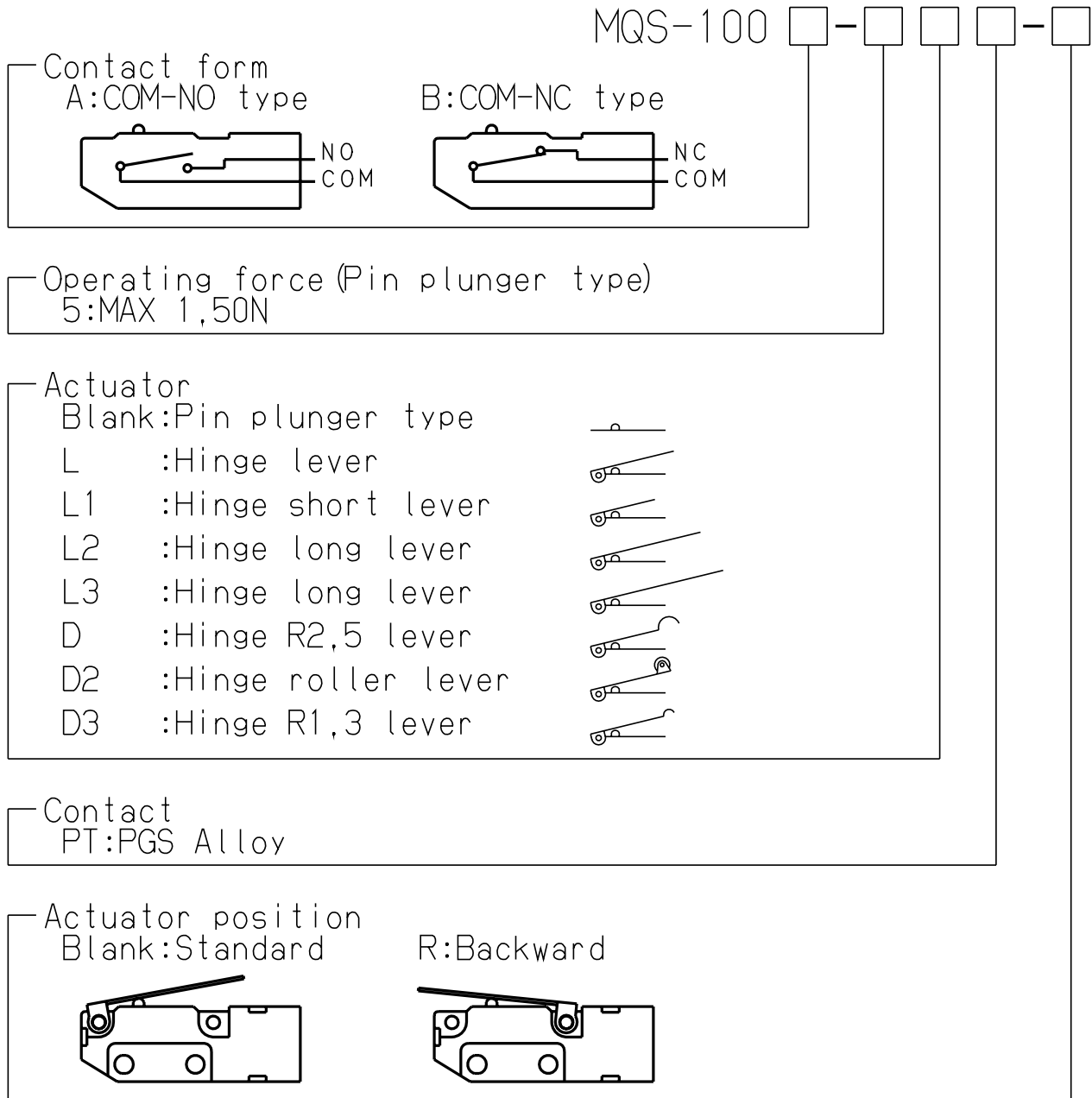
- ◇ S Model Micro Switch (Connector Connection Type).
- ◇ Mounting holes pitch is the same MQS-54/55 series.
- ◇ Mounting process is simplify by connector connection.
- ◇ Actuator position is 2 direction.



Applications

- ◇ Communication equipment (Telephone, Fax etc.)
- ◇ Home appliances (Air-conditioner, Washing machine, Cleaner etc.)
- ◇ For car (Shifter unit etc.)
- ◇ Amusement (Pachinko machine etc.)

Products Number system



□ Typical Specifications

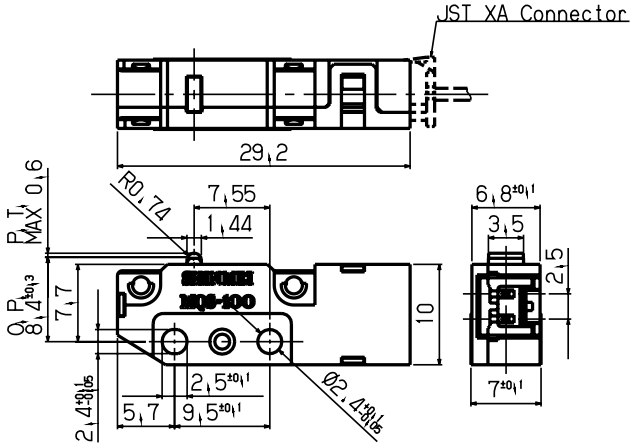
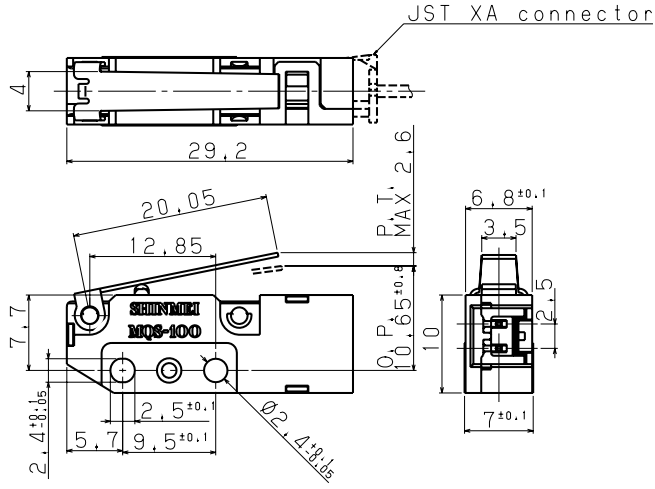
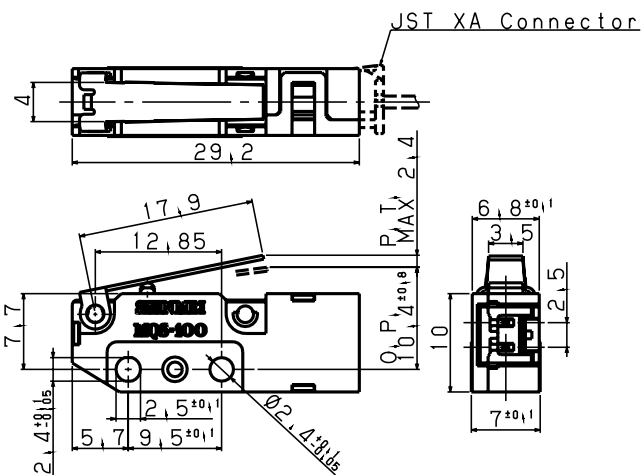
Item	Specifications
Contact	PGS alloy contact type
Operating force (Pin plunger type)	MAX 1.50 N
Ratings (Resistive load)	0.1A 30VDC
Mechanical life	500,000 cycles
Electrical life	200,000 cycles
Contact resistance (Initial)	MAX 100 milliohm *including lead wire and connector (AWG#28,length 50mm)
Insulation Resistance	MIN 100 megohm 500V DC
Withstanding voltage	Between open contacts : 1000V 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
Resistibility to shock (Pin plunger type)	MIN 300 m/s ²
Allowable operating speed (at no load)	0.1 to 1000 mm/sec.
Max. operating cycle rate (at no load)	400 times/min.
Operating temperature range	-25 to +85 degree Celsius
Ambient humidity	MAX 85%RH

□ Operating characteristic (Actuator position Standard)

No.	Actuator	O.F. MAX.	R.F. MIN	P.T. MAX	M.D. MAX	O.T. MIN	O.P.
1	Pin plunger type (Blank)	1.50 N	0.25 N	0.6 mm	0.1 mm	0.4 mm	8.4 plus or minus 0.3 mm
2	Hinge lever (L)	0.60 N	0.05 N	2.6 mm	0.8 mm	1.2 mm	10.65 plus or minus 0.8 mm
3	Hinge short lever (L1)	0.65 N	0.05 N	2.4 mm	0.5mm	1.1 mm	10.4 plus or minus 0.8 mm
4	Hinge long lever (L2)	0.50 N	0.02 N	3.6 mm	1.0 mm	1.3 mm	11.25 plus or minus 1.2 mm
5	Hinge long lever (L3)	0.26 N	0.01 N	5.7 mm	1.6mm	2.3 mm	12.1 plus or minus 2.2 mm
6	Hinge R2.5 lever (D)	0.50 N	0.06 N	2.6 mm	0.8 mm	1.2 mm	13.3 plus or minus 0.8 mm
7	Hinge roller lever (D2)	0.50 N	0.06 N	2.4 mm	0.8 mm	1.2 mm	15.7 plus or minus 0.8 mm
8	Hinge R1.3 lever (D3)	0.50 N	0.06 N	2.6 mm	0.8 mm	1.2 mm	12.2 plus or minus 0.8 mm

Dimensions

Unit : mm

No	Style	Operating characteristics	
1	<p>Pin plunger type</p> 	P.T. MAX	0.6 mm
		M.D. MAX	0.1 mm
		O.T. MIN	0.4 mm
		O.P. From fixing hole	8.4 plus or minus 0.3 mm
2	<p>Hinge lever (L)</p> 	P.T. MAX	2.6mm
		M.D. MAX	0.8mm
		O.T. MIN	1.2mm
		O.P. From fixing hole	10.65 plus or minus 0.8mm
3	<p>Hinge Short lever (L1)</p> 	P.T. MAX	2.4mm
		M.D. MAX	0.5mm
		O.T. MIN	1.1mm
		O.P. From fixing hole	10.4 plus or minus 0.8mm

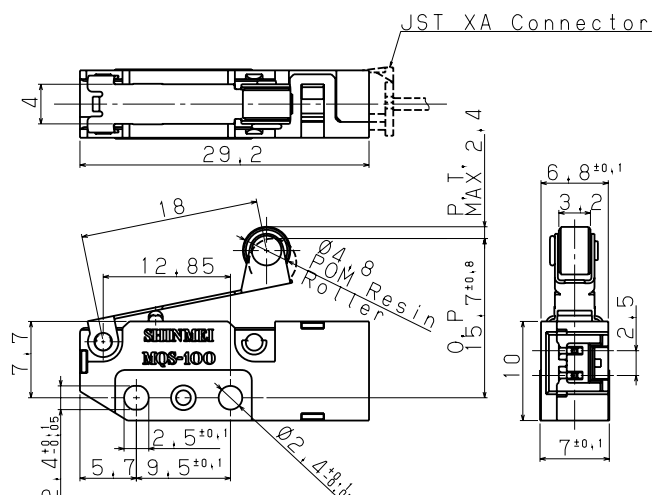
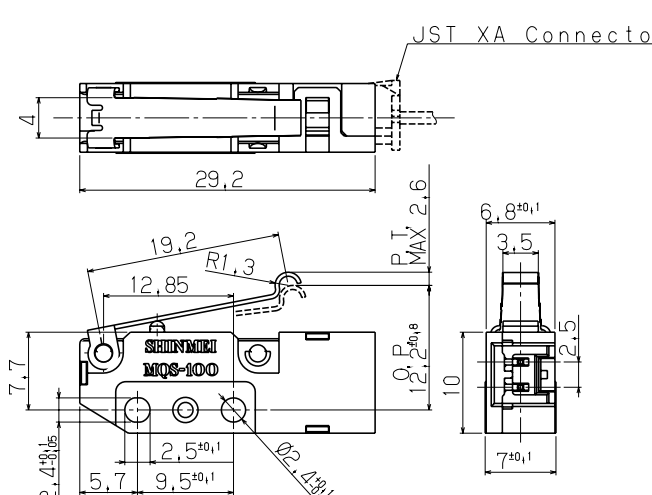
Dimensions

Unit : mm

No	Style	Operating characteristic	
4	<p>Hinge long lever (L2)</p>	P.T. MAX	3.6mm
		M.D. MAX	1.0mm
		O.T. MIN	1.3mm
		O.P. From fixing hole	11.25 plus or minus 0.8mm
5	<p>Hinge long lever (L3)</p>	P.T. MAX	5.7mm
		M.D. MAX	1.6mm
		O.T. MIN	2.3mm
		O.P. From fixing hole	12.1 plus or minus 2.2mm
6	<p>Hinge R2.5 lever (D)</p>	P.T. MAX	2.6mm
		M.D. MAX	0.8mm
		O.T. MIN	1.2mm
		O.P. From fixing hole	13.3 plus or minus 0.8mm

Dimension

Unit : mm

No	Style	Operating characteristic	
7	Hinge roller lever (D2) 	P.T. MAX	2.4mm
		M.D. MAX	0.8mm
		O.T. MIN	1.2mm
		O.P. From fixing hole	15.7 plus or minus 0.8mm
8	Hinge R1.3 lever (D3) 	P.T. MAX	2.6mm
		M.D. MAX	0.8mm
		O.T. MIN	1.2mm
		O.P. From fixing hole	12.2 plus or minus 0.8mm

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 M2.3 screw with torque less than 29.4 N-cm(3 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.
- 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.
- Please use JST XA connector for wiring.
Contact : SXA-001T-P-0.6
Housing : XAP-02V-1
- Please insert straight connector in. When inserted diagonally, near insert entrance, insertion force may become stronger.
- When attached connector, please consider it that load all the time do not be added to connector and lead wire.
Contact fault may occur.