

Dust protected Compact-sized Snap Action Switches (Contact gap is more than 1mm) MQS-55AS Series

Features

- ◇ Flux-resistant construction with integrally molded terminals
- ◇ Suitable for the use in the watery, dusty and corrosive gas environment.
- ◇ 4 variations with low operating force (0.25N) to high operating force (1.47N)
- ◇ Lead wire terminal, PC board terminal, #110 Quick-connect terminal, PC board terminal Right/Left angle, Water protected type with hermetic sealed terminal are available.
- ◇ Contact gap is more than 1mm.



Actual size

Applications

- ◇ Door inter-lock switch office equipments (Printer, Copy machine and so on)

Products Number system

MQS-55AS - [] [] [] - [] - []

Operating force (Pin plunger type)

- | | |
|---------------------|---------------------|
| 1 : MAX0.74N(75gf) | 5 : MAX1.47N(150gf) |
| 3 : MAX0.98N(100gf) | 7 : MAX1.96N(200gf) |

Actuator

- | | | | |
|-------|----------------------|----------|--|
| Blank | : Pin plunger type | | |
| L1 | : Hinge short lever | L=5mm | |
| L | : Hinge lever | L=7.15mm | |
| L2 | : Hinge long lever | L=13.1mm | |
| L3 | : Hinge long lever | L=26.1mm | |
| D | : Hinge R2.5 lever | L=6.3mm | |
| D3 | : Hinge R1.3 lever | L=6.3mm | |
| D2 | : Hinge roller lever | L=5mm | |

Contact

- | | | | |
|-------|------------------------|----|--------------------------|
| Blank | : Silver alloy | AU | : Gold clad triple layer |
| U2 | : Gold clad twin layer | | |

Terminal

- | | | | | | |
|-------|-------------------------------|--|----|---------------------------------|--|
| Blank | : Lead wire terminal | | PR | : PC board terminal right angle | |
| P | : PC board terminal | | PL | : PC board terminal left angle | |
| F | : #110 Quick-connect terminal | | W | : Water protected terminal | |

Special code

- | | |
|---|--|
| R | : Possible lever reverse direction attachment type |
|---|--|

□ Typical Specifications

Item	Specifications							
Contact	Silver alloy contact type				Gold clad twin / triple layer contact type			
Operating force (Pin plunger type)	MAX 1.47N (150gf)	MAX 1.96N (200gf)	MAX 2.94N (300gf)	MAX 3.92N (400gf)	MAX 1.47N (150gf)	MAX 1.96N (200gf)	MAX 2.94N (300gf)	MAX 3.92N (400gf)
Ratings (Resistive load)	0.1A 125V AC 0.1A 30V DC	2A 125V AC 2A 30V DC			0.1A 125V AC 0.1A 30V DC			
Mechanical life	100,000 cycles							
Electrical life	100,000 cycles	50,000 cycles			100,000 cycles			
Contact resistance (Initial)	MAX 500 milliohm	MAX 30 milliohm			MAX 500 milliohm	MAX 100 milliohm		
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 Each direction Open contact shall be less than 1 ms at the above.							
Resistibility to shock (Pin plunger type)	MIN 5G	MIN 15G	MIN 30G		MIN 5G	MIN 15G	MIN 30G	
	Open contact shall be less than 1 ms at the above conditions.							
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							

□ Range of current

Contacts specification	Range of current				Operating force (MAX) (Pin plunger type)			
	1mA	10mA	100mA	2A	0.74N(75gf)	0.98N(100gf)	1.47N(150gf)	1.98N(200gf)
Silver alloy		↔			●			
				↔		●	●	●
Gold clad triple layer	↔				●	●	●	●
Gold clad twin layer	↔				●	●	●	●

□ Products line

◇ Silver alloy contact type (Lead wire terminal, PC board terminal, #110 Quick-connect terminal)

Actuator	No	Operating force (MAX)	Lead wire terminal	PC board terminal	#110 Quick-connect terminal
			Products No.	Products No.	Products No.
Pin plunger type (Blank)	1	1.48N(150gf)	MQS-55AS-1-R	MQS-55AS-1-P-R	MQS-55AS-1-F-R
		1.96N(200gf)	MQS-55AS-3-R	MQS-55AS-3-P-R	MQS-55AS-3-F-R
		2.94N(300gf)	MQS-55AS-5-R	MQS-55AS-5-P-R	MQS-55AS-5-F-R
		3.92N(400gf)	MQS-55AS-7-R	MQS-55AS-7-P-R	MQS-55AS-7-F-R
Hinge short lever (L1)	2	0.58N(60gf)	MQS-55AS-1L1-R	MQS-55AS-1L1-P-R	MQS-55AS-1L1-F-R
		0.78N(80gf)	MQS-55AS-3L1-R	MQS-55AS-3L1-P-R	MQS-55AS-3L1-F-R
		1.18N(120gf)	MQS-55AS-5L1-R	MQS-55AS-5L1-P-R	MQS-55AS-5L1-F-R
		1.57N(160gf)	MQS-55AS-7L1-R	MQS-55AS-7L1-P-R	MQS-55AS-7L1-F-R
Hinge lever (L)	3	0.55N(56gf)	MQS-55AS-1L-R	MQS-55AS-1L-P-R	MQS-55AS-1L-F-R
		0.69N(70gf)	MQS-55AS-3L-R	MQS-55AS-3L-P-R	MQS-55AS-3L-F-R
		1.08N(110gf)	MQS-55AS-5L-R	MQS-55AS-5L-P-R	MQS-55AS-5L-F-R
		1.37N(140gf)	MQS-55AS-7L-R	MQS-55AS-7L-P-R	MQS-55AS-7L-F-R
Hinge long lever (L2)	4	0.49N(50gf)	MQS-55AS-3L2-R	MQS-55AS-3L2-P-R	MQS-55AS-3L2-F-R
		0.88N(90gf)	MQS-55AS-5L2-R	MQS-55AS-5L2-P-R	MQS-55AS-5L2-F-R
		0.98N(100gf)	MQS-55AS-7L2-R	MQS-55AS-7L2-P-R	MQS-55AS-7L2-F-R
Hinge long lever (L3)	5	0.39N(40gf)	MQS-55AS-3L3-R	MQS-55AS-3L3-P-R	MQS-55AS-3L3-F-R
		0.59N(60gf)	MQS-55AS-5L3-R	MQS-55AS-5L3-P-R	MQS-55AS-5L3-F-R
		0.78N(80gf)	MQS-55AS-7L3-R	MQS-55AS-7L3-P-R	MQS-55AS-7L3-F-R
Hinge R2.5 lever (D)	6	0.55N(56gf)	MQS-55AS-1D-R	MQS-55AS-1D-P-R	MQS-55AS-1D-F-R
		0.69N(70gf)	MQS-55AS-3D-R	MQS-55AS-3D-P-R	MQS-55AS-3D-F-R
		1.08N(110gf)	MQS-55AS-5D-R	MQS-55AS-5D-P-R	MQS-55AS-5D-F-R
		1.37N(140gf)	MQS-55AS-7D-R	MQS-55AS-7D-P-R	MQS-55AS-7D-F-R
Hinge R1.3 lever (D3)	7	0.55N(56gf)	MQS-55AS-1D3-R	MQS-55AS-1D3-P-R	MQS-55AS-1D3-F-R
		0.69N(70gf)	MQS-55AS-3D3-R	MQS-55AS-3D3-P-R	MQS-55AS-3D3-F-R
		1.08N(110gf)	MQS-55AS-5D3-R	MQS-55AS-5D3-P-R	MQS-55AS-5D3-F-R
		1.37N(140gf)	MQS-55AS-7D3-R	MQS-55AS-7D3-P-R	MQS-55AS-7D3-F-R
Hinge roller lever (D2)	8	0.59N(60gf)	MQS-55AS-1D2-R	MQS-55AS-1D2-P-R	MQS-55AS-1D2-F-R
		0.78N(80gf)	MQS-55AS-3D2-R	MQS-55AS-3D2-P-R	MQS-55AS-3D2-F-R
		1.18N(120gf)	MQS-55AS-5D2-R	MQS-55AS-5D2-P-R	MQS-55AS-5D2-F-R
		1.57N(160gf)	MQS-55AS-7D2-R	MQS-55AS-7D2-P-R	MQS-55AS-7D2-F-R

◇Silver alloy contact type (PC board terminal Right/Left angle, Water protected terminal)

Actuator	No	Operating force (MAX)	PC board terminal right angle	PC board terminal left angle	Water protected terminal
			Products No.	Products No.	Products No.
Pin plunger type (Blank)	1	1.48N(150gf)	MQS-55AS-1-PR-R	MQS-55AS-1-PL-R	MQS-55AS-1-W-R
		1.96N(200gf)	MQS-55AS-3-PR-R	MQS-55AS-3-PL-R	MQS-55AS-3-W-R
		2.94N(300gf)	MQS-55AS-5-PR-R	MQS-55AS-5-PL-R	MQS-55AS-5-W-R
		3.92N(400gf)	MQS-55AS-7-PR-R	MQS-55AS-7-PL-R	MQS-55AS-7-W-R
Hinge short lever (L1)	2	0.58N(60gf)	MQS-55AS-1L1-PR-R	MQS-55AS-1L1-PL-R	MQS-55AS-1L1-W-R
		0.78N(80gf)	MQS-55AS-3L1-PR-R	MQS-55AS-3L1-PL-R	MQS-55AS-3L1-W-R
		1.18N(120gf)	MQS-55AS-5L1-PR-R	MQS-55AS-5L1-PL-R	MQS-55AS-5L1-W-R
		1.57N(160gf)	MQS-55AS-7L1-PR-R	MQS-55AS-7L1-PL-R	MQS-55AS-7L1-W-R
Hinge lever (L)	3	0.55N(56gf)	MQS-55AS-1L-PR-R	MQS-55AS-1L-PL-R	MQS-55AS-1L-W-R
		0.69N(70gf)	MQS-55AS-3L-PR-R	MQS-55AS-3L-PL-R	MQS-55AS-3L-W-R
		1.08N(110gf)	MQS-55AS-5L-PR-R	MQS-55AS-5L-PL-R	MQS-55AS-5L-W-R
		1.37N(140gf)	MQS-55AS-7L-PR-R	MQS-55AS-7L-PL-R	MQS-55AS-7L-W-R
Hinge long lever (L2)	4	0.49N(50gf)	MQS-55AS-3L2-PR-R	MQS-55AS-3L2-PL-R	MQS-55AS-3L2-W-R
		0.88N(90gf)	MQS-55AS-5L2-PR-R	MQS-55AS-5L2-PL-R	MQS-55AS-5L2-W-R
		0.98N(100gf)	MQS-55AS-7L2-PR-R	MQS-55AS-7L2-PL-R	MQS-55AS-7L2-W-R
Hinge long lever (L3)	5	0.39N(40gf)	MQS-55AS-3L3-PR-R	MQS-55AS-3L3-PL-R	MQS-55AS-3L3-W-R
		0.59N(60gf)	MQS-55AS-5L3-PR-R	MQS-55AS-5L3-PL-R	MQS-55AS-5L3-W-R
		0.78N(80gf)	MQS-55AS-7L3-PR-R	MQS-55AS-7L3-PL-R	MQS-55AS-7L3-W-R
Hinge R2.5 lever (D)	6	0.55N(56gf)	MQS-55AS-1D-PR-R	MQS-55AS-1D-PL-R	MQS-55AS-1D-W-R
		0.69N(70gf)	MQS-55AS-3D-PR-R	MQS-55AS-3D-PL-R	MQS-55AS-3D-W-R
		1.08N(110gf)	MQS-55AS-5D-PR-R	MQS-55AS-5D-PL-R	MQS-55AS-5D-W-R
		1.37N(140gf)	MQS-55AS-7D-PR-R	MQS-55AS-7D-PL-R	MQS-55AS-7D-W-R
Hinge R1.3 lever (D3)	7	0.55N(56gf)	MQS-55AS-1D3-PR-R	MQS-55AS-1D3-PL-R	MQS-55AS-1D3-W-R
		0.69N(70gf)	MQS-55AS-3D3-PR-R	MQS-55AS-3D3-PL-R	MQS-55AS-3D3-W-R
		1.08N(110gf)	MQS-55AS-5D3-PR-R	MQS-55AS-5D3-PL-R	MQS-55AS-5D3-W-R
		1.37N(140gf)	MQS-55AS-7D3-PR-R	MQS-55AS-7D3-PL-R	MQS-55AS-7D3-W-R
Hinge roller lever (D2)	8	0.59N(60gf)	MQS-55AS-1D2-PR-R	MQS-55AS-1D2-PL-R	MQS-55AS-1D2-W-R
		0.78N(80gf)	MQS-55AS-3D2-PR-R	MQS-55AS-3D2-PL-R	MQS-55AS-3D2-W-R
		1.18N(120gf)	MQS-55AS-5D2-PR-R	MQS-55AS-5D2-PL-R	MQS-55AS-5D2-W-R
		1.57N(160gf)	MQS-55AS-7D2-PR-R	MQS-55AS-7D2-PL-R	MQS-55AS-7D2-W-R

◇ Gold clad triple layer contact type (Lead wire terminal, PC board terminal, #110 Quick-connect terminal)

Actuator	No	Operating force (MAX)	Lead wire terminal	PC board terminal	#110 Quick-connect terminal
			Products No.	Products No.	Products No.
Pin plunger type (Blank)	1	1.48N(150gf)	MQS-55AS-1AU-R	MQS-55AS-1AU-P-R	MQS-55AS-1AU-F-R
		1.96N(200gf)	MQS-55AS-3AU-R	MQS-55AS-3AU-P-R	MQS-55AS-3AU-F-R
		2.94N(300gf)	MQS-55AS-5AU-R	MQS-55AS-5AU-P-R	MQS-55AS-5AU-F-R
		3.92N(400gf)	MQS-55AS-7AU-R	MQS-55AS-7AU-P-R	MQS-55AS-7AU-F-R
Hinge short lever (L1)	2	0.58N(60gf)	MQS-55AS-1L1AU-R	MQS-55AS-1L1AU-P-R	MQS-55AS-1L1AU-F-R
		0.78N(80gf)	MQS-55AS-3L1AU-R	MQS-55AS-3L1AU-P-R	MQS-55AS-3L1AU-F-R
		1.18N(120gf)	MQS-55AS-5L1AU-R	MQS-55AS-5L1AU-P-R	MQS-55AS-5L1AU-F-R
		1.57N(160gf)	MQS-55AS-7L1AU-R	MQS-55AS-7L1AU-P-R	MQS-55AS-7L1AU-F-R
Hinge lever (L)	3	0.55N(56gf)	MQS-55AS-1LAU-R	MQS-55AS-1LAU-P-R	MQS-55AS-1LAU-F-R
		0.69N(70gf)	MQS-55AS-3LAU-R	MQS-55AS-3LAU-P-R	MQS-55AS-3LAU-F-R
		1.08N(110gf)	MQS-55AS-5LAU-R	MQS-55AS-5LAU-P-R	MQS-55AS-5LAU-F-R
		1.37N(140gf)	MQS-55AS-7LAU-R	MQS-55AS-7LAU-P-R	MQS-55AS-7LAU-F-R
Hinge long lever (L2)	4	0.49N(50gf)	MQS-55AS-3L2AU-R	MQS-55AS-3L2AU-P-R	MQS-55AS-3L2AU-F-R
		0.88N(90gf)	MQS-55AS-5L2AU-R	MQS-55AS-5L2AU-P-R	MQS-55AS-5L2AU-F-R
		0.98N(100gf)	MQS-55AS-7L2AU-R	MQS-55AS-7L2AU-P-R	MQS-55AS-7L2AU-F-R
Hinge long lever (L3)	5	0.39N(40gf)	MQS-55AS-3L3AU-R	MQS-55AS-3L3AU-P-R	MQS-55AS-3L3AU-F-R
		0.59N(60gf)	MQS-55AS-5L3AU-R	MQS-55AS-5L3AU-P-R	MQS-55AS-5L3AU-F-R
		0.78N(80gf)	MQS-55AS-7L3AU-R	MQS-55AS-7L3AU-P-R	MQS-55AS-7L3AU-F-R
Hinge R2.5 lever (D)	6	0.55N(56gf)	MQS-55AS-1DAU-R	MQS-55AS-1DAU-P-R	MQS-55AS-1DAU-F-R
		0.69N(70gf)	MQS-55AS-3DAU-R	MQS-55AS-3DAU-P-R	MQS-55AS-3DAU-F-R
		1.08N(110gf)	MQS-55AS-5DAU-R	MQS-55AS-5DAU-P-R	MQS-55AS-5DAU-F-R
		1.37N(140gf)	MQS-55AS-7DAU-R	MQS-55AS-7DAU-P-R	MQS-55AS-7DAU-F-R
Hinge R1.3 lever (D3)	7	0.55N(56gf)	MQS-55AS-1D3AU-R	MQS-55AS-1D3AU-P-R	MQS-55AS-1D3AU-F-R
		0.69N(70gf)	MQS-55AS-3D3AU-R	MQS-55AS-3D3AU-P-R	MQS-55AS-3D3AU-F-R
		1.08N(110gf)	MQS-55AS-5D3AU-R	MQS-55AS-5D3AU-P-R	MQS-55AS-5D3AU-F-R
		1.37N(140gf)	MQS-55AS-7D3AU-R	MQS-55AS-7D3AU-P-R	MQS-55AS-7D3AU-F-R
Hinge roller lever (D2)	8	0.59N(60gf)	MQS-55AS-1D2AU-R	MQS-55AS-1D2AU-P-R	MQS-55AS-1D2AU-F-R
		0.78N(80gf)	MQS-55AS-3D2AU-R	MQS-55AS-3D2AU-P-R	MQS-55AS-3D2AU-F-R
		1.18N(120gf)	MQS-55AS-5D2AU-R	MQS-55AS-5D2AU-P-R	MQS-55AS-5D2AU-F-R
		1.57N(160gf)	MQS-55AS-7D2AU-R	MQS-55AS-7D2AU-P-R	MQS-55AS-7D2AU-F-R

◇ Gold clad triple layer contact type (PC board terminal Right/Left angle, Water protected terminal)

Actuator	No	Operating force (MAX)	PC board terminal right angle	PC board terminal left angle	Water protected terminal
			Products No.	Products No.	Products No.
Pin plunger type (Blank)	1	1.48N(150gf)	MQS-55AS-1AU-PR-R	MQS-55AS-1AU-PL-R	MQS-55AS-1AU-W-R
		1.96N(200gf)	MQS-55AS-3AU-PR-R	MQS-55AS-3AU-PL-R	MQS-55AS-3AU-W-R
		2.94N(300gf)	MQS-55AS-5AU-PR-R	MQS-55AS-5AU-PL-R	MQS-55AS-5AU-W-R
		3.92N(400gf)	MQS-55AS-7AU-PR-R	MQS-55AS-7AU-PL-R	MQS-55AS-7AU-W-R
Hinge short lever (L1)	2	0.58N(60gf)	MQS-55AS-1L1AU-PR-R	MQS-55AS-1L1AU-PL-R	MQS-55AS-1L1AU-W-R
		0.78N(80gf)	MQS-55AS-3L1AU-PR-R	MQS-55AS-3L1AU-PL-R	MQS-55AS-3L1AU-W-R
		1.18N(120gf)	MQS-55AS-5L1AU-PR-R	MQS-55AS-5L1AU-PL-R	MQS-55AS-5L1AU-W-R
		1.57N(160gf)	MQS-55AS-7L1AU-PR-R	MQS-55AS-7L1AU-PL-R	MQS-55AS-7L1AU-W-R
Hinge lever (L)	3	0.55N(56gf)	MQS-55AS-1LAU-PR-R	MQS-55AS-1LAU-PL-R	MQS-55AS-1LAU-W-R
		0.69N(70gf)	MQS-55AS-3LAU-PR-R	MQS-55AS-3LAU-PL-R	MQS-55AS-3LAU-W-R
		1.08N(110gf)	MQS-55AS-5LAU-PR-R	MQS-55AS-5LAU-PL-R	MQS-55AS-5LAU-W-R
		1.37N(140gf)	MQS-55AS-7LAU-PR-R	MQS-55AS-7LAU-PL-R	MQS-55AS-7LAU-W-R
Hinge long lever (L2)	4	0.49N(50gf)	MQS-55AS-3L2AU-PR-R	MQS-55AS-3L2AU-PL-R	MQS-55AS-3L2AU-W-R
		0.88N(90gf)	MQS-55AS-5L2AU-PR-R	MQS-55AS-5L2AU-PL-R	MQS-55AS-5L2AU-W-R
		0.98N(100gf)	MQS-55AS-7L2AU-PR-R	MQS-55AS-7L2AU-PL-R	MQS-55AS-7L2AU-W-R
Hinge long lever (L3)	5	0.39N(40gf)	MQS-55AS-3L3AU-PR-R	MQS-55AS-3L3AU-PL-R	MQS-55AS-3L3AU-W-R
		0.59N(60gf)	MQS-55AS-5L3AU-PR-R	MQS-55AS-5L3AU-PL-R	MQS-55AS-5L3AU-W-R
		0.78N(80gf)	MQS-55AS-7L3AU-PR-R	MQS-55AS-7L3AU-PL-R	MQS-55AS-7L3AU-W-R
Hinge R2.5 lever (D)	6	0.55N(56gf)	MQS-55AS-1DAU-PR-R	MQS-55AS-1DAU-PL-R	MQS-55AS-1DAU-W-R
		0.69N(70gf)	MQS-55AS-3DAU-PR-R	MQS-55AS-3DAU-PL-R	MQS-55AS-3DAU-W-R
		1.08N(110gf)	MQS-55AS-5DAU-PR-R	MQS-55AS-5DAU-PL-R	MQS-55AS-5DAU-W-R
		1.37N(140gf)	MQS-55AS-7DAU-PR-R	MQS-55AS-7DAU-PL-R	MQS-55AS-7DAU-W-R
Hinge R1.3 lever (D3)	7	0.55N(56gf)	MQS-55AS-1D3AU-PR-R	MQS-55AS-1D3AU-PL-R	MQS-55AS-1D3AU-W-R
		0.69N(70gf)	MQS-55AS-3D3AU-PR-R	MQS-55AS-3D3AU-PL-R	MQS-55AS-3D3AU-W-R
		1.08N(110gf)	MQS-55AS-5D3AU-PR-R	MQS-55AS-5D3AU-PL-R	MQS-55AS-5D3AU-W-R
		1.37N(140gf)	MQS-55AS-7D3AU-PR-R	MQS-55AS-7D3AU-PL-R	MQS-55AS-7D3AU-W-R
Hinge roller lever (D2)	8	0.59N(60gf)	MQS-55AS-1D2AU-PR-R	MQS-55AS-1D2AU-PL-R	MQS-55AS-1D2AU-W-R
		0.78N(80gf)	MQS-55AS-3D2AU-PR-R	MQS-55AS-3D2AU-PL-R	MQS-55AS-3D2AU-W-R
		1.18N(120gf)	MQS-55AS-5D2AU-PR-R	MQS-55AS-5D2AU-PL-R	MQS-55AS-5D2AU-W-R
		1.57N(160gf)	MQS-55AS-7D2AU-PR-R	MQS-55AS-7D2AU-PL-R	MQS-55AS-7D2AU-W-R

◇ Gold clad twin layer contact type (Lead wire terminal, PC board terminal, #110 Quick-connect terminal)

Actuator	No	Operating force (MAX)	Lead wire terminal	PC board terminal	#110 Quick-connect terminal
			Products No.	Products No.	Products No.
Pin plunger type (Blank)	1	1.48N(150gf)	MQS-55AS-1U2-R	MQS-55AS-1U2-P-R	MQS-55AS-1U2-F-R
		1.96N(200gf)	MQS-55AS-3U2-R	MQS-55AS-3U2-P-R	MQS-55AS-3U2-F-R
		2.94N(300gf)	MQS-55AS-5U2-R	MQS-55AS-5U2-P-R	MQS-55AS-5U2-F-R
		3.92N(400gf)	MQS-55AS-7U2-R	MQS-55AS-7U2-P-R	MQS-55AS-7U2-F-R
Hinge short lever (L1)	2	0.58N(60gf)	MQS-55AS-1L1U2-R	MQS-55AS-1L1U2-P-R	MQS-55AS-1L1U2-F-R
		0.78N(80gf)	MQS-55AS-3L1U2-R	MQS-55AS-3L1U2-P-R	MQS-55AS-3L1U2-F-R
		1.18N(120gf)	MQS-55AS-5L1U2-R	MQS-55AS-5L1U2-P-R	MQS-55AS-5L1U2-F-R
		1.57N(160gf)	MQS-55AS-7L1U2-R	MQS-55AS-7L1U2-P-R	MQS-55AS-7L1U2-F-R
Hinge lever (L)	3	0.55N(56gf)	MQS-55AS-1LU2-R	MQS-55AS-1LU2-P-R	MQS-55AS-1LU2-F-R
		0.69N(70gf)	MQS-55AS-3LU2-R	MQS-55AS-3LU2-P-R	MQS-55AS-3LU2-F-R
		1.08N(110gf)	MQS-55AS-5LU2-R	MQS-55AS-5LU2-P-R	MQS-55AS-5LU2-F-R
		1.37N(140gf)	MQS-55AS-7LU2-R	MQS-55AS-7LU2-P-R	MQS-55AS-7LU2-F-R
Hinge long lever (L2)	4	0.49N(50gf)	MQS-55AS-3L2U2-R	MQS-55AS-3L2U2-P-R	MQS-55AS-3L2U2-F-R
		0.88N(90gf)	MQS-55AS-5L2U2-R	MQS-55AS-5L2U2-P-R	MQS-55AS-5L2U2-F-R
		0.98N(100gf)	MQS-55AS-7L2U2-R	MQS-55AS-7L2U2-P-R	MQS-55AS-7L2U2-F-R
Hinge long lever (L3)	5	0.39N(40gf)	MQS-55AS-3L3U2-R	MQS-55AS-3L3U2-P-R	MQS-55AS-3L3U2-F-R
		0.59N(60gf)	MQS-55AS-5L3U2-R	MQS-55AS-5L3U2-P-R	MQS-55AS-5L3U2-F-R
		0.78N(80gf)	MQS-55AS-7L3U2-R	MQS-55AS-7L3U2-P-R	MQS-55AS-7L3U2-F-R
Hinge R2.5 lever (D)	6	0.55N(56gf)	MQS-55AS-1DU2-R	MQS-55AS-1DU2-P-R	MQS-55AS-1DU2-F-R
		0.69N(70gf)	MQS-55AS-3DU2-R	MQS-55AS-3DU2-P-R	MQS-55AS-3DU2-F-R
		1.08N(110gf)	MQS-55AS-5DU2-R	MQS-55AS-5DU2-P-R	MQS-55AS-5DU2-F-R
		1.37N(140gf)	MQS-55AS-7DU2-R	MQS-55AS-7DU2-P-R	MQS-55AS-7DU2-F-R
Hinge R1.3 lever (D3)	7	0.55N(56gf)	MQS-55AS-1D3U2-R	MQS-55AS-1D3U2-P-R	MQS-55AS-1D3U2-F-R
		0.69N(70gf)	MQS-55AS-3D3U2-R	MQS-55AS-3D3U2-P-R	MQS-55AS-3D3U2-F-R
		1.08N(110gf)	MQS-55AS-5D3U2-R	MQS-55AS-5D3U2-P-R	MQS-55AS-5D3U2-F-R
		1.37N(140gf)	MQS-55AS-7D3U2-R	MQS-55AS-7D3U2-P-R	MQS-55AS-7D3U2-F-R
Hinge roller lever (D2)	8	0.59N(60gf)	MQS-55AS-1D2U2-R	MQS-55AS-1D2U2-P-R	MQS-55AS-1D2U2-F-R
		0.78N(80gf)	MQS-55AS-3D2U2-R	MQS-55AS-3D2U2-P-R	MQS-55AS-3D2U2-F-R
		1.18N(120gf)	MQS-55AS-5D2U2-R	MQS-55AS-5D2U2-P-R	MQS-55AS-5D2U2-F-R
		1.57N(160gf)	MQS-55AS-7D2U2-R	MQS-55AS-7D2U2-P-R	MQS-55AS-7D2U2-F-R

◇ Gold clad twin layer contact type (PC board terminal Right/Left angle, Water protected terminal)

Actuator	No	Operating force (MAX)	PC board terminal right angle	PC board terminal left angle	Water protected terminal
			Products No.	Products No.	Products No.
Pin plunger type (Blank)	1	1.48N(150gf)	MQS-55AS-1U2-PR-R	MQS-55AS-1U2-PL-R	MQS-55AS-1U2-W-R
		1.96N(200gf)	MQS-55AS-3U2-PR-R	MQS-55AS-3U2-PL-R	MQS-55AS-3U2-W-R
		2.94N(300gf)	MQS-55AS-5U2-PR-R	MQS-55AS-5U2-PL-R	MQS-55AS-5U2-W-R
		3.92N(400gf)	MQS-55AS-7U2-PR-R	MQS-55AS-7U2-PL-R	MQS-55AS-7U2-W-R
Hinge short lever (L1)	2	0.58N(60gf)	MQS-55AS-1L1U2-PR-R	MQS-55AS-1L1U2-PL-R	MQS-55AS-1L1U2-W-R
		0.78N(80gf)	MQS-55AS-3L1U2-PR-R	MQS-55AS-3L1U2-PL-R	MQS-55AS-3L1U2-W-R
		1.18N(120gf)	MQS-55AS-5L1U2-PR-R	MQS-55AS-5L1U2-PL-R	MQS-55AS-5L1U2-W-R
		1.57N(160gf)	MQS-55AS-7L1U2-PR-R	MQS-55AS-7L1U2-PL-R	MQS-55AS-7L1U2-W-R
Hinge lever (L)	3	0.55N(56gf)	MQS-55AS-1LU2-PR-R	MQS-55AS-1LU2-PL-R	MQS-55AS-1LU2-W-R
		0.69N(70gf)	MQS-55AS-3LU2-PR-R	MQS-55AS-3LU2-PL-R	MQS-55AS-3LU2-W-R
		1.08N(110gf)	MQS-55AS-5LU2-PR-R	MQS-55AS-5LU2-PL-R	MQS-55AS-5LU2-W-R
		1.37N(140gf)	MQS-55AS-7LU2-PR-R	MQS-55AS-7LU2-PL-R	MQS-55AS-7LU2-W-R
Hinge long lever (L2)	4	0.49N(50gf)	MQS-55AS-3L2U2-PR-R	MQS-55AS-3L2U2-PL-R	MQS-55AS-3L2U2-W-R
		0.88N(90gf)	MQS-55AS-5L2U2-PR-R	MQS-55AS-5L2U2-PL-R	MQS-55AS-5L2U2-W-R
		0.98N(100gf)	MQS-55AS-7L2U2-PR-R	MQS-55AS-7L2U2-PL-R	MQS-55AS-7L2U2-W-R
Hinge long lever (L3)	5	0.39N(40gf)	MQS-55AS-3L3U2-PR-R	MQS-55AS-3L3U2-PL-R	MQS-55AS-3L3U2-W-R
		0.59N(60gf)	MQS-55AS-5L3U2-PR-R	MQS-55AS-5L3U2-PL-R	MQS-55AS-5L3U2-W-R
		0.78N(80gf)	MQS-55AS-7L3U2-PR-R	MQS-55AS-7L3U2-PL-R	MQS-55AS-7L3U2-W-R
Hinge R2.5 lever (D)	6	0.55N(56gf)	MQS-55AS-1DU2-PR-R	MQS-55AS-1DU2-PL-R	MQS-55AS-1DU2-W-R
		0.69N(70gf)	MQS-55AS-3DU2-PR-R	MQS-55AS-3DU2-PL-R	MQS-55AS-3DU2-W-R
		1.08N(110gf)	MQS-55AS-5DU2-PR-R	MQS-55AS-5DU2-PL-R	MQS-55AS-5DU2-W-R
		1.37N(140gf)	MQS-55AS-7DU2-PR-R	MQS-55AS-7DU2-PL-R	MQS-55AS-7DU2-W-R
Hinge R1.3 lever (D3)	7	0.55N(56gf)	MQS-55AS-1D3U2-PR-R	MQS-55AS-1D3U2-PL-R	MQS-55AS-1D3U2-W-R
		0.69N(70gf)	MQS-55AS-3D3U2-PR-R	MQS-55AS-3D3U2-PL-R	MQS-55AS-3D3U2-W-R
		1.08N(110gf)	MQS-55AS-5D3U2-PR-R	MQS-55AS-5D3U2-PL-R	MQS-55AS-5D3U2-W-R
		1.37N(140gf)	MQS-55AS-7D3U2-PR-R	MQS-55AS-7D3U2-PL-R	MQS-55AS-7D3U2-W-R
Hinge roller lever (D2)	8	0.59N(60gf)	MQS-55AS-1D2U2-PR-R	MQS-55AS-1D2U2-PL-R	MQS-55AS-1D2U2-W-R
		0.78N(80gf)	MQS-55AS-3D2U2-PR-R	MQS-55AS-3D2U2-PL-R	MQS-55AS-3D2U2-W-R
		1.18N(120gf)	MQS-55AS-5D2U2-PR-R	MQS-55AS-5D2U2-PL-R	MQS-55AS-5D2U2-W-R
		1.57N(160gf)	MQS-55AS-7D2U2-PR-R	MQS-55AS-7D2U2-PL-R	MQS-55AS-7D2U2-W-R

□ Operating characteristic

Actuator	Operating force code	O.F. MAX.	R.F. MIN	P.T. MAX	M.D. MAX	O.T. MIN	O.P.
Pin plunger type (Blank)	1	1.48N(150gf)	0.098N(10gf)	0.7mm	0.25mm	0.3mm	8.4 plus or minus 0.35mm
	3	1.96N(200gf)	0.147N(15 gf)				
	5	2.94N(300gf)	0.196N(20gf)				
	7	3.92N(400gf)	0.245N(25gf)				
Hinge short lever (L1)	1	0.58N(60gf)	0.020N(2gf)	3.0mm	1.25mm	0.6mm	8.8 plus or minus 1.0mm
	3	0.78N(80gf)	0.034N(3.5gf)				
	5	1.18N(120gf)	0.039N(4gf)				
	7	1.57N(160gf)	0.049N(5gf)				
Hinge lever (L)	1	0.55N(56gf)	0.017N(1.7gf)	3.3mm	2.0mm	0.85mm	8.8 plus or minus 1.0mm
	3	0.69N(70gf)	0.029N(3gf)				
	5	1.08N(110gf)	0.034N(3.5gf)				
	7	1.37N(140gf)	0.039N(4gf)				
Hinge long lever (L2)	3	0.49N(50gf)	0.025N(2.5gf)	4.0mm	2.5mm	1.2mm	8.8 plus or minus 1.4mm
	5	0.88N(90gf)	0.029N(3gf)				
	7	0.98N(100gf)	0.034N(3.5gf)				
Hinge long lever (L3)	3	0.39N(40gf)	0.010N(1gf)	7.0mm	4.5mm	1.3mm	8.8 plus or minus 3.4mm
	5	0.59N(60gf)	0.015N(1.5gf)				
	7	0.78N(80gf)	0.020N(2gf)				
Hinge R2.5 lever (D)	1	0.55N(56gf)	0.017N(1.7gf)	3.3mm	2.0mm	0.75mm	11.65 plus or minus 1.0mm
	3	0.69N(70gf)	0.029N(3gf)				
	5	1.08N(110gf)	0.034N(3.5gf)				
	7	1.37N(140gf)	0.039N(4gf)				
Hinge R1.3 lever (D3)	1	0.55N(56gf)	0.017N(1.7gf)	3.3mm	2.0mm	0.75mm	10.7 plus or minus 1.0mm
	3	0.69N(70gf)	0.029N(3gf)				
	5	1.08N(110gf)	0.034N(3.5gf)				
	7	1.37N(140gf)	0.039N(4gf)				
Hinge roller lever (D2)	1	0.59N(60gf)	0.020N(2gf)	3.0mm	1.25mm	0.6mm	14.5 plus or minus 1.0mm
	3	0.78N(80gf)	0.034N(3.5gf)				
	5	1.18N(120gf)	0.039N(4gf)				
	7	1.57N(160gf)	0.049N(5gf)				

Terminal dimensions

Unit : mm

Lead wire terminal	PC board terminal
	<p>PC board pattern</p>
#110 quick-connect terminal	PC board terminal right angle
	<p>PC board pattern</p>
PC board terminal left angle	Water protected type with hermetic sealed terminal

Dimensions

Unit : mm

No	Style	Operating characteristic	
1	<p>Pin plunger type</p>	P.T. MAX	0.7mm
		M.D. MAX	0.25mm
		O.T. MIN	0.3mm
		O.P. From fixing hole	8.4 plus or minus 0.35mm
		O.P. From fixing face	11.8 plus or minus 0.45mm
2	<p>Hinge short lever L=5mm</p>	P.T. MAX	3.0mm
		M.D. MAX	1.25mm
		O.T. MIN	0.6mm
		O.P. From fixing hole	8.8 plus or minus 1.0mm
		O.P. From fixing face	12.2 plus or minus 1.1mm
3	<p>Hinge lever L=7.15mm</p>	P.T. MAX	3.3mm
		M.D. MAX	2.0mm
		O.T. MIN	0.85mm
		O.P. From fixing hole	8.8 plus or minus 1.0mm
		O.P. From fixing face	12.2 plus or minus 1.1mm

Dimensions

Unit : mm

No	Style	Operating characteristic	
4	<p>Hinge long lever L=13.1mm</p>	P.T. MAX	4.0mm
		M.D. MAX	2.5mm
		O.T. MIN	1.2mm
		O.P. From fixing hole	8.8 plus or minus 1.4mm
		O.P. From fixing face	12.2 plus or minus 1.5mm
5	<p>Hinge long lever L=26.1mm</p>	P.T. MAX	7.0mm
		M.D. MAX	4.5mm
		O.T. MIN	1.3mm
		O.P. From fixing hole	8.8 plus or minus 3.4mm
		O.P. From fixing face	12.2 plus or minus 3.5mm
6	<p>Hinge R2.5 lever L=6.3mm</p>	P.T. MAX	3.3mm
		M.D. MAX	2.0mm
		O.T. MIN	0.75mm
		O.P. From fixing hole	11.65 plus or minus 1.0mm
		O.P. From fixing face	15.05 plus or minus 1.1mm

Dimensions

Unit : mm

No	Style	Operating characteristic	
7	Hinge R1.3 lever L=6.3mm 	P.T. MAX	3.3mm
		M.D. MAX	2.0mm
		O.T. MIN	0.75mm
		O.P. From fixing hole	10.7 plus or minus 1.0mm
		O.P. From fixing face	14.1 plus or minus 1.1mm
8	Hinge roller lever L=5mm 	P.T. MAX	3.0mm
		M.D. MAX	1.25mm
		O.T. MIN	0.6mm
		O.P. From fixing hole	14.5 plus or minus 1.0mm
		O.P. From fixing face	17.9 plus or minus 1.1mm

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.
- 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.