



MR series

High-end switches with Ø22, Ø25, and Ø30 sizes, featuring various configurations with three types of aluminum guards and two types of plastic guards

Category	Push-button switch						
	Aluminum guard			Plastic guard			
	Flat Ø30	Flat Ø25	Protruding Ø22	Flat Ø25	Protruding Ø22		
Appearance 							
Suffix code	MRF-A(Ø30)	MRF-N(Ø25)	MRF-R(Ø22)	MRF-K(Ø25)	MRF-T(Ø22)		
Category	Illuminated push-button switch						
	Aluminum guard			Plastic guard			
	Flat Ø30	Flat Ø25	Protruding Ø22	Flat Ø25	Protruding Ø22	ON/OFF	
Appearance 							
Suffix code	MRX-A(Ø30)	MRX-N(Ø25)	MRX-R(Ø22)	MRX-K(Ø25)	MRX-T(Ø22)	MRX-WM2	
Category	Indicator						
	Aluminum guard			Plastic guard			
	Flat Ø30	Flat Ø25	Protruding Ø22	Flat Ø25	Protruding Ø22		
Appearance 							
Suffix code	MRP-A(Ø30)	MRP-N(Ø25)	MRP-R(Ø22)	MRP-K(Ø25)	MRP-T(Ø22)		
Category	Selector switch						
	Aluminum guard			Plastic guard			
	Flat Ø30	Flat Ø25	Protruding Ø22	Flat Ø25	Protruding Ø22		
Appearance 							
Suffix code	MRS-A(Ø30)	MRS-N(Ø25)	MRS-R(Ø22)	MRS-K(Ø25)	MRS-T(Ø22)		
Category	Illuminated selector switch						
	Aluminum guard			Plastic guard			
	Flat Ø30	Flat Ø25	Protruding Ø22	Flat Ø25	Protruding Ø22		
Appearance 							
Suffix code	MRT-A(Ø30)	MRT-N(Ø25)	MRT-R(Ø22)	MRT-K(Ø25)	MRT-T(Ø22)		
Appearance 							
Suffix code	MRT-A3(Ø30)	MRT-N3(Ø25)	MRT-R3(Ø22)	MRT-K3(Ø25)	MRT-T3(Ø22)		
Category	Key selector switch						
	Aluminum guard						
	Flat Ø30		Flat Ø25		Flat Ø22		
Appearance 							
Suffix code	MRK-A(Ø30)		MRK-N(Ø25)		MRK-R(Ø22)		

Category	Emergency stop switch				
	Aluminum guard			Plastic guard	
	Flat Ø30	Flat Ø25	Protruding Ø22	Flat Ø25	Protruding Ø22
Appearance 					
Suffix code	MRE-AM(Ø30)	MRE-NM(Ø25)	MRE-RM(Ø22)	MRE-KM(Ø25)	MRE-TM(Ø22)
Appearance 					
Suffix code	MRE-AR(Ø30)	MRE-NR(Ø25)	MRE-RR(Ø22)	MRE-KR(Ø25)	MRE-TR(Ø22)
Category	Illuminated emergency stop switch				
	Aluminum guard			Plastic guard	
	Flat Ø30	Flat Ø25	Protruding Ø22	Flat Ø25	Protruding Ø22
Appearance 					
Suffix code	MRA-AM(Ø30)	MRA-NM(Ø25)	MRA-RM(Ø22)	MRA-KM(Ø25)	MRA-TM(Ø22)
Appearance 					
Suffix code	MRA-AR(Ø30)	MRA-NR(Ø25)	MRA-RR(Ø22)	MRA-KR(Ø25)	MRA-TR(Ø22)
Category	Buzzer				
	Aluminum guard			Plastic guard	
	Flat Ø30	Flat Ø25	Protruding Ø22	Flat Ø25	Protruding Ø22
Appearance 					
Suffix code	MRB-A(Ø30)	MRB-N(Ø25)	MRB-R(Ø22)	MRB-K(Ø25)	MRB-T(Ø22)

h Control panel installation image

Aluminum guard			Plastic guard	
Flat Ø30 MRC-A	Flat Ø25 MRC-N	Protruding Ø22 MRC-R	Flat Ø25 MRC-K	Protruding Ø22 MRC-T
				

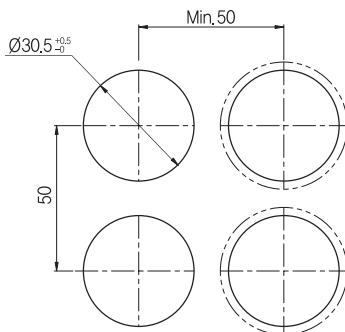
Specifications

Category		Description
Contact structure		M3.5 screw tightening, 1a1b
Contact operation		Snap-action
Panel thickness		1 to 6 mm (without accessories)
Terminal tightening torque		0.8 N·m or less
Nut tightening torque		2.0 N·m or less
Rated voltage		250 V a.c.
Rated current		5 A 250 V a.c.
Switching frequency		30 times/minute
Insulation resistance		100 MΩ or higher (500 V d.c.)
Dielectric strength		2,000 V a.c. 1 minute at 50/60 Hz
Contact resistance		50 mΩ or lower (initial value)
Vibration resistance		10 - 55 Hz, double amplitude: 1.5 mm
Shock resistance	Durability	300 m/s ² or more (30 G or higher)
	Malfunction	100 m/s ² or more (10 G or higher)
Life	Mechanical	More than 500,000 operations
	Electrical	More than 200,000 operations (at rated load)
Minimum load current		5 mA 24 V d.c., 10 mA 110 V d.c.
LAMP input power		100 - 240 V a.c. / 4.4 VA or lower (LED capacitor voltage drop type)
		380 V a.c. / 2.7 VA or lower (LED capacitor voltage drop type)
		12 - 24 V d.c. / a.c. / 18 mA or lower (LED resistor voltage drop type)
Buzzer volume		Approximately 90 dB
Ambient temperature		-20 to 55 °C (however, there should be no condensation or icing)
Ambient humidity		45 to 85% RH
Storage temperature		-40 to 70 °C

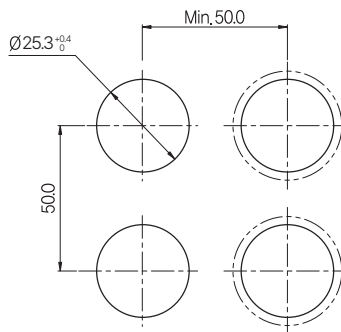
Panel cutout dimensions

[Unit: mm]

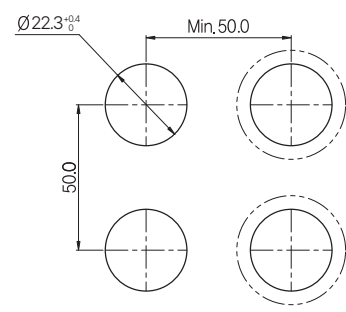
■ Ø30



■ Ø25



■ Ø22



MR Accessories

Category	Aluminum guard			Plastic guard	
	EN-36 (Ø30)	EN-26 (Ø22)	HEG-22	HEG-25F	HEG-30F
Applicable model	MRE-A MRA-A	MRE-R, MRE-T MRA-R, MRA-T	MRE-R, MRE-R, MRA-R, MRA-T	MRE-N, MRE-K, MRA-N, MRA-K	MRE-A, MRA-A
Appearance					
Category	Front protection cover			Tightening tool	
	HSC-22P (Protruding)	HSC-25F (Flat)	HSC-30F (Flat)	FIX HEAD-MR	FIX HANDLE
Applicable model	MRF-R, MRF-T, MRX-R, MRX-T	MRF-N, MRF-K, MRX-N, MRX-K	MRF-A, MRX-A	Ø22, Ø25, Ø30	Handle
Appearance					

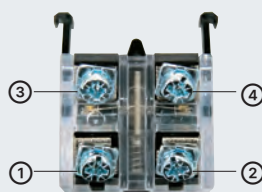
Components

Category	Appearance	Type	Description
Contact unit		MR-CB	Hook-fixed contact unit consisting of 1a1b contacts assembled on a fixing plate
Fixing plate		MR-FP	Connects the control part with the contact unit and the lamp unit.
LED unit		MR-LA0	100 - 200 V a.c.
		MR-LA3	380 V a.c.
		MR-LD0	12 - 24 V d.c. / a.c.
		MR-3SLA0	100 - 240 V a.c.
		MR-3SLD0	12 - 24 V a.c. / d.c.
Auxiliary cover		MR-AC	When using only one contact unit or lighting unit, install it as an auxiliary cover on the opposite side.
Nut tightening tool		QR-82	Use to tighten the fixing nuts on the back of the panel.
Tightening tool		FIX TOOL-MR	Use to tighten the fixing nuts on the back of the panel.
Contact protection cover		MR protection cover	Contact protection cover

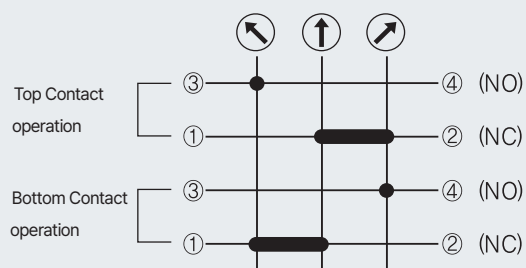
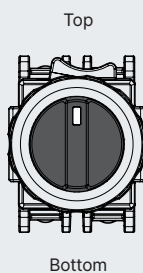
Selector contact operation

■ For 3-position selectors, refer to the contact operation diagram.

* When installing the contact unit



Contact unit (MR-CB)



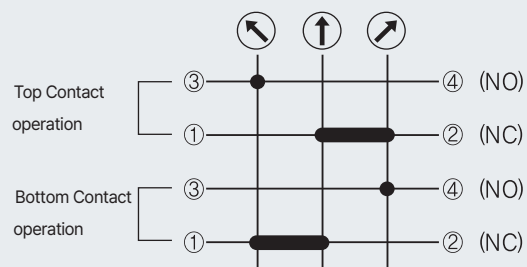
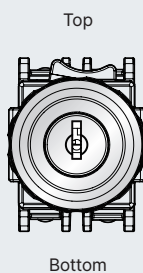
* Position when seen from the front of the control part

■ For 3-position selectors, refer to the contact operation diagram.

* When installing the contact unit



Contact unit (MR-CB)



* Position when seen from the front of the control part

Suffix code

■ MRF series

Category	Code				Description
MRF-	☐	☐	☐	☐	Push-button switch
Control part	A				Flat (Mounting hole: Ø30)
	N				Flat (Mounting hole: Ø25)
	R				Protruding (Mounting hole: Ø22)
	K				Flat (Mounting hole: Ø25)
	T				Protruding (Mounting hole: Ø22)
Operation features	M				Return action (Momentary)
	A				Hold action (Alternate)
Contact configuration		1			1a1b
		2			2a2b
Cap (LED) color				R	R (red), G (green), Y (yellow), A (blue), W (white)

■ MRE series

Category	Code				Description
MRE-	☐	☐	☐	☐	Emergency stop switch
Control part	A				Flat (Mounting hole: Ø30)
	N				Flat (Mounting hole: Ø25)
	R				Protruding (Mounting hole: Ø22)
	K				Flat (Mounting hole: Ø25)
	T				Protruding (Mounting hole: Ø22)
Operation features	M				Return action (Momentary)
	R				Push lock turn reset
Contact configuration		1			1a1b
		2			2a2b
Cap (LED) color				R	Red
				G	Green (except for the push lock turn reset)

■ MRP series

Category	Code				Description
MRP-	☐	☐	☐		Indicator
Control part	A				Flat (Mounting hole: Ø30)
	N				Flat (Mounting hole: Ø25)
	R				Protruding (Mounting hole: Ø22)
	K				Flat (Mounting hole: Ø25)
	T				Protruding (Mounting hole: Ø22)
Rated input voltage	A0				100 - 240 V a.c.
	A3				380 V a.c.
	A4				440 V a.c.
	D0				12 - 24 V d.c. / a.c.
	D1				100 - 125 V d.c.
Cap (LED) color				R	R (red), G (green), Y (yellow), A (blue), W (white)

■ MRS series

Category	Code				Description
MRS -	☐	☐	☐		Selector switch
Control part	A				Flat (Mounting hole: Ø30)
	N				Flat (Mounting hole: Ø25)
	R				Protruding (Mounting hole: Ø22)
	K				Flat (Mounting hole: Ø25)
	T				Protruding (Mounting hole: Ø22)
Operation features	2A				2-position hold action
	2R				2-position return action
	3A				3-position hold action
	3R				3-position left/right return
Contact configuration		1			1a1b
		2			2a2b
Cap (LED) color					Black (solid color)

■ MRB series

Category	Code				Description
MRB-	☐	☐			Buzzer
Control part	A				Flat (Mounting hole: Ø30)
	N				Flat (Mounting hole: Ø25)
	R				Protruding (Mounting hole: Ø22)
	K				Flat (Mounting hole: Ø25)
	T				Protruding (Mounting hole: Ø22)
Rated input voltage	A0				100 - 240 V a.c.
	D0				12 - 24 V d.c. / a.c.

MRK series

Category	Code				Description	
MRK-	☐	☐	☐	☐	Key selector switch	
Control part	A				Flat (Mounting hole: Ø30)	Aluminum guard
	N				Flat (Mounting hole: Ø25)	
	R				Protruding (Mounting hole: Ø22)	
Operation features		2A			2-position hold action	Refer to the contact operation diagram (2a2b contact for 3-position switches)
		2R			2-position return action	
		3A			3-position hold action	
		3R			3-position left/right return action	
Contact configuration		1			1a1b	
		2			2a2b	
Key removal position (key selector switch)				L	Left	For 2-position switches, the key can be removed at positions other than the center
				R	Right	
				C	Center	
				D	Left and right	
				E	All directions	
Cap (LED) color				Aluminum (matte chrome-plated)		

MRT series

Category	Code				Description	
MRT-	☐	☐	☐	☐	Illuminated selector switch	
Control part	A				Flat (Mounting hole: Ø30)	Aluminum guard
	N				Flat (Mounting hole: Ø25)	
	R				Protruding (Mounting hole: Ø22)	
	K				Flat (Mounting hole: Ø25)	Plastic guard
	T				Protruding (Mounting hole: Ø22)	
Operation features	2A				2-position hold action	
	2R				2-position return action	
	3A				3-position hold action	
	3R				3-position left/right return action	
Contact configuration		1			1a1b	
		2			2a2b	
Power voltage			A0		100 - 240 V a.c.	LED (capacitor voltage drop type)
			A3		380 V a.c.	
			D0		12 - 24 V d.c. / a.c.	LED (resistor voltage drop type)
Cap (LED) color				R	R (red), G (green), Y (yellow), A (blue), W (white)	

MRX series

Category	Code				Description	
MRX-	☐	☐	☐	☐	Illuminated push-button switch	
Control part	A				Flat (Mounting hole: Ø30)	Aluminum guard
	N				Flat (Mounting hole: Ø25)	
	R				Protruding (Mounting hole: Ø22)	
	K				Flat (Mounting hole: Ø25)	Plastic guard
	T				Protruding (Mounting hole: Ø22)	
	W				ON/OFF indication type	
Operation features	M				Return action (Momentary)	
	A				Hold action (Alternate)	
Contact configuration		1			1a1b	
		2			2a2b	
Rated input voltage			A0		100 - 240 V a.c.	LED (capacitor voltage drop type)
			A3		380 V a.c.	
			D0		12 - 24 V d.c. / a.c.	LED (resistor voltage drop type)
Cap (LED) color				R	R (red), G (green), Y (yellow), A (blue), W (white)	

MRA series

Category	Code				Description	
MRA-	☐	☐	☐	☐	Illuminated emergency stop switch	
Control part	A				Flat (Mounting hole: Ø30)	Aluminum guard
	N				Flat (Mounting hole: Ø25)	
	R				Protruding (Mounting hole: Ø22)	
	K				Flat (Mounting hole: Ø25)	Plastic guard
	T				Protruding (Mounting hole: Ø22)	
Operation features	M				Return action (Momentary)	
	R				Push lock turn reset	
Contact configuration		1			1a1b	
		2			2a2b	
Power voltage			A0		100 - 240 V a.c.	LED (capacitor voltage drop type)
			A3		380 V a.c.	
			D0		12 - 24 V d.c. / a.c.	LED (resistor voltage drop type)
Cap (LED) color				R	Red	
				G	Green (except for the push lock turn reset)	