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

CE | KC

Please scan the QR code to view details.

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)

ⓗ Control panel installation image

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

ʜ 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/s² or more (30 G or higher)
	Malfunction	100 m/s² 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

ʜ Panel cutout dimensions

[Unit: mm]

■ Ø30

■ Ø25

■ Ø22
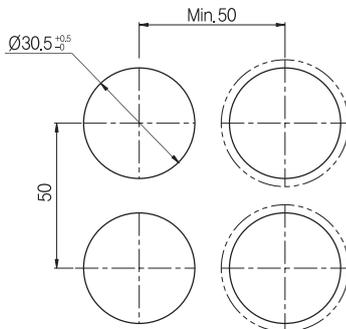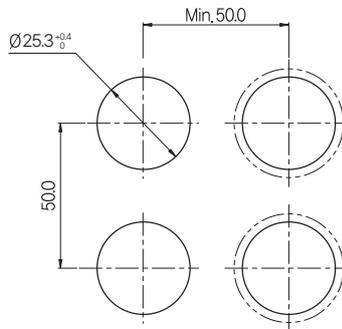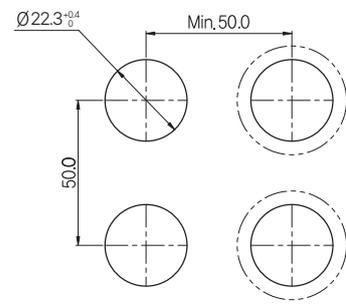
ʜ MR Accessories

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

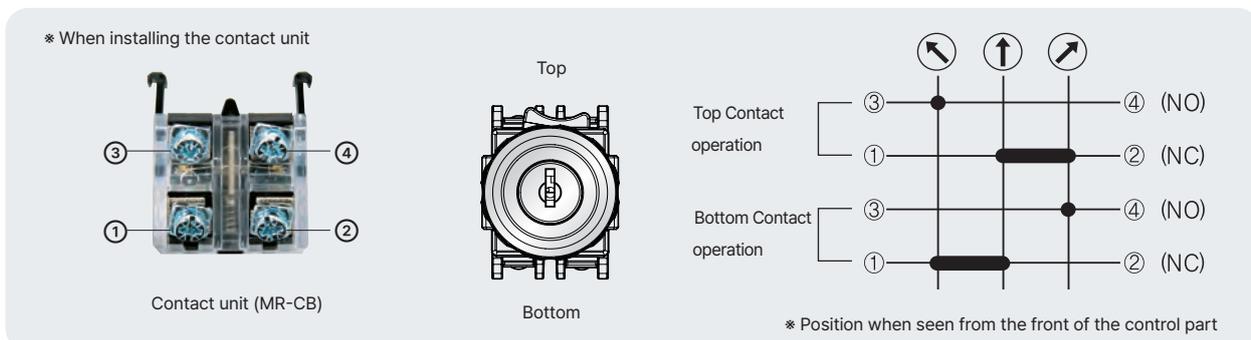| Category	Appearance	Type	Description
Contact unit		MR-CB	Hook-fixed contact unit consisting of 1a1b contacts assembled on a fixing plate
Fixing plate		MR-FP	Connects the control part with the contact unit and the lamp unit.
LED unit		MR-LA0	100 - 200 V a.c.
		MR-LA3	380 V a.c.
		MR-LD0	12 - 24 V d.c. / 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)

Top / Bottom

Top Contact operation

Bottom Contact operation

③ — ④ (NO)
① — ② (NC)
③ — ④ (NO)
① — ② (NC)

＊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)

Top / Bottom

Top Contact operation

Bottom Contact operation

③ — ④ (NO)
① — ② (NC)
③ — ④ (NO)
① — ② (NC)

＊Position when seen from the front of the control part
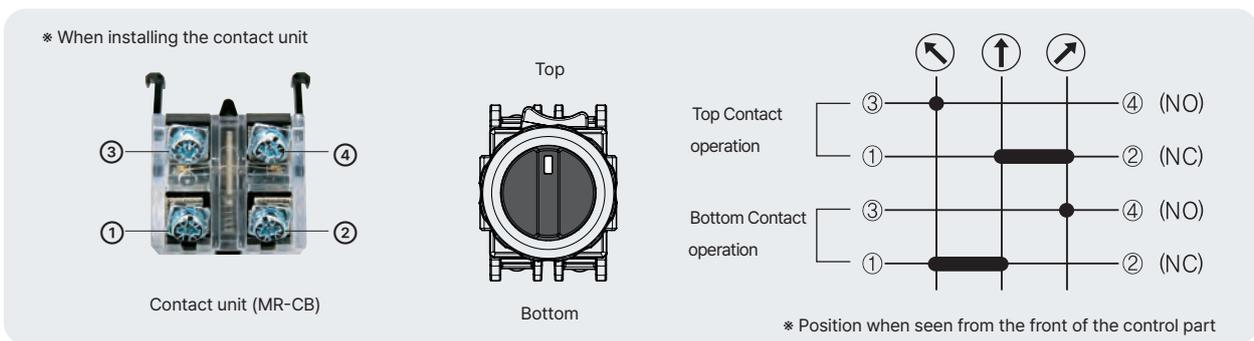
h Suffix code

■ MRF series

Category		Code			Description	
MRF-	□	□	□	□	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)	
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)	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	
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)	Aluminum guard
	N			Flat (Mounting hole: Ø25)	
	R			Protruding (Mounting hole: Ø22)	
	K			Flat (Mounting hole: Ø25)	Plastic guard
	T			Protruding (Mounting hole: Ø22)	
Rated input voltage		A0		100 - 240 V a.c.	LED (capacitor voltage drop)
		A3		380 V a.c.	
		A4		440 V a.c.	
		D0		12 - 24 V d.c. / a.c.	LED (resistor voltage drop type)
		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)	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	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	
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)	Aluminum guard
	N		Flat (Mounting hole: Ø25)	
	R		Protruding (Mounting hole: Ø22)	
	K		Flat (Mounting hole: Ø25)	Plastic guard
	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)	