

The Contact Pair's Close-open State Chart of the Selector Switches and Key-lock Switches.

a、The Contact Pair's Close-open State Chart of 2-position Selector Switch.

	Type		
1	Y090-11/2◆		
2	Y090-02/2◆		
3	Y090-20/2◆		
4	Y090-22/2◆		
5	Y090-13/2◆		
6	Y090-31/2◆		
7	Y090-04/2◆		
8	Y090-40/2◆		
9	Y090-42/2◆		
10	Y090-24/2◆		
11	Y090-06/2◆		
12	Y090-60/2◆		
13	Y090-33/2◆		
14	Y090-15/2◆		
15	Y090-51/2◆		

Note: 1、 express open state, express close state.
2、If you need other contact state, please tell us.

B、The Contact Pair's Close-open State Chart of 3-position Selector Switch.

	Type			
1	Y090-11/3◆			
2	Y090-02/3◆			
3	Y090-20/3◆			
4	Y090-22/3◆			
5	Y090-13/3◆			
6	Y090-31/3◆			
7	Y090-04/3◆			
8	Y090-40/3◆			
9	Y090-42/3◆			
10	Y090-24/3◆			
11	Y090-06/3◆			
12	Y090-60/3◆			
13	Y090-33/3◆			
14	Y090-15/3◆			
15	Y090-51/3◆			

PART NUMBERS ON THIS DRAWING

MR-Y090 MR-Y090-BD MR-Y090-D MR-Y090-DS MR-Y090-G MR-Y090-M MR-Y090-M-B MR-Y090-S
MR-Y090-S-FL MR-Y090-SM MR-Y090-TS MR-Y090-TSA MR-Y090-X MR-Y090-XB MR-Y090-Y
MR-Y090-YM MR-Y090E MR-Y090E-BD MR-Y090E-D MR-Y090E-DS MR-Y090E-G MR-Y090E-M
MR-Y090E-S MR-Y090E-TS MR-Y090E-TSA MR-Y090E-X MR-Y090E-XB MR-Y090E-Y MR-Y090E-YM

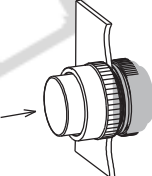
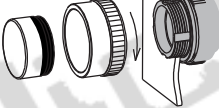
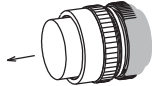
22 MM PUSH BUTTON		Micro-Ray	
MR-Y090 SERIES			
PART NO	MR-Y090		
DWG NO	MR-Y090	SHEET 1 OF 6	REV A
UNITS: mm	SCALE: NTS - DO NOT SCALE	SIZE A4	DATE 2026-09-22

Y090 Series model description

MR-Y090-□/◆/△/▲/※

Symbol	Symbol name	Specify	
MR-Y090	Series No.	Series number; if you need economic type, please add "E" at the end, i.e.: MR- 	
□	Contact structure	one group of switching elements	11(1NO1NC) / 10(1NO) / 01(1NC) / 20(2NO) / 02(2NC)
		two groups of switching elements	22(2NO2NC) / 40(4NO) / 04(4NC) / 31(3NO1NC) / 13(1NO3NC) 30(3NO) / 03(3NC) / 21(2NO1NC) / 12(1NO2NC)
		Three groups of switching elements configuration and so on, can choose the combination according to the need	
■	Operation type	No letter means Momentary D: Signal indicator / BD: Ball signal indicator / Z: latching button / G: High button / M: Mushroom button / ZM: latching mushroom button / TS: Emergency stop button / X: Rotary knob / XB: Knob / Y: Key Knob / YM: Mushroom Key Knob / M: Continuous Buzzer / S: Flashing Light / SM: Flashing Intermittent Buzzer	
◇	Selector button and key button operation position	2:Two position / 3:Three position	
◆	Selector Knob and Key Knob operation Type	1 maintain / 2 half return / 3 self return	
△	Lamp color	R: Red / G: Green / Y: Yellow / B: Blue / W: White/ N: Black	
▲	Lamp voltage	6V / 12V / 24V / 110V / 220V / 380V / No letter means no light	

Instruction



I ,Take out the head with a starter, and unscrew the aluminum screw.

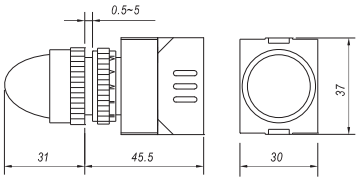
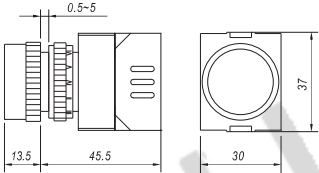
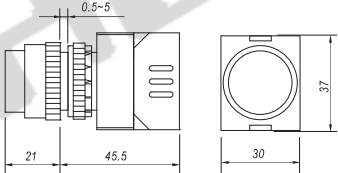
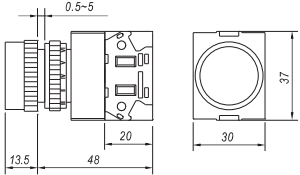
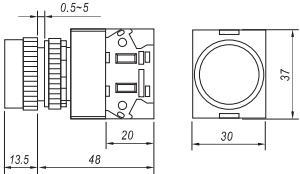
II ,Then put the switch into the panel's hole.

III ,Screw the screw, then put the head onto the switch.

PART NUMBERS ON THIS DRAWING

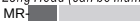
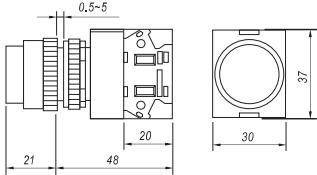
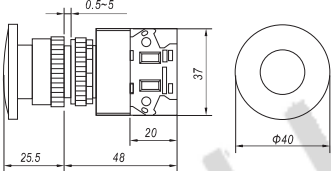
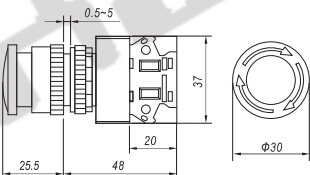
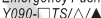
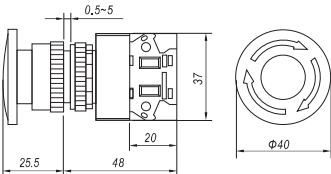
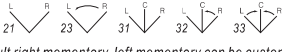
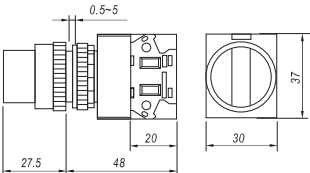
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MR-Y090-S-FL MR-Y090-SM MR-Y090-TS MR-Y090-TSA MR-Y090-X MR-Y090-XB MR-Y090-Y
MR-Y090-YM MR-Y090E MR-Y090E-BD MR-Y090E-D MR-Y090E-DS MR-Y090E-G MR-Y090E-M
MR-Y090E-S MR-Y090E-TS MR-Y090E-TSA MR-Y090E-X MR-Y090E-XB MR-Y090E-Y MR-Y090E-YM

22 MM PUSH BUTTON		Micro-Ray	
MR-Y090 SERIES			
PART NO	MR-Y090		
DWG NO	MR-Y090	SHEET 2 OF 6	REV A
UNITS: mm	SCALE: NTS - DO NOT SCALE	SIZE A4	DATE 2026-09-22

Product Picture	Description	Dimension
Domed Pilot Lamp MR-Y090-BD/△/▲	LED color△R G Y B W LED voltage▲6V / 12V / 24V / 110V / 220V / 380V IP degreeIP40 AccessoryT04 Sign Frame	
Fast Installation Pilot Lamp MR-Y090-DS/△/▲	LED color△R G Y B W LED voltage▲6V / 12V / 24V / 110V / 220V / 380V IP degreeIP40 AccessoryT04 Sign Frame	
Pilot Lamp MR-Y090-D/△/▲	LED color△R G Y B W LED voltage▲6V / 12V / 24V / 110V / 220V / 380V IP degreeIP40 AccessoryT04 Sign Frame	
Fast Installation Flat Head (can be illuminated) MR-Y090-□■S/△/▲	Contact□11: 1NO1NC / 10: 1NO / 01: 1NC Other switch combinations refer to the model description Operation■Z: Latching / No letter: Momentary LED color△R G Y B W N LED voltage▲6V / 12V / 24V / 110V / 220V / 380V IP degreeIP40 AccessorySeal cover T01 / Sign frame T04 / Protective cover T17	
Flat Head (can be illuminated) MR-Y090-□■/△/▲	Contact□11: 1NO1NC / 10: 1NO / 01: 1NC Other switch combinations refer to the model description Operation■Z: Latching / No letter: Momentary LED color△R G Y B W N LED voltage▲6V / 12V / 24V / 110V / 220V / 380V IP degreeIP40 AccessorySeal cover T01 / Sign frame T04 / Protective cover T17	

PART NUMBERS ON THIS DRAWING
MR-Y090 MR-Y090-BD MR-Y090-D MR-Y090-DS MR-Y090-G MR-Y090-M MR-Y090-M-B MR-Y090-S
MR-Y090-S-FL MR-Y090-SM MR-Y090-TS MR-Y090-TSA MR-Y090-X MR-Y090-XB MR-Y090-Y
MR-Y090-YM MR-Y090E MR-Y090E-BD MR-Y090E-D MR-Y090E-DS MR-Y090E-G MR-Y090E-M
MR-Y090E-S MR-Y090E-TS MR-Y090E-TSA MR-Y090E-X MR-Y090E-XB MR-Y090E-Y MR-Y090E-YM

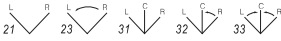
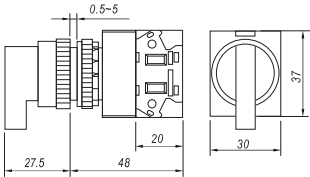
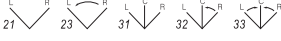
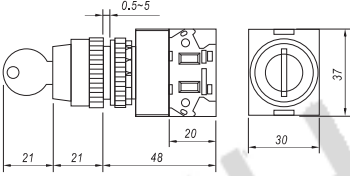
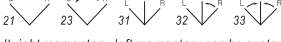
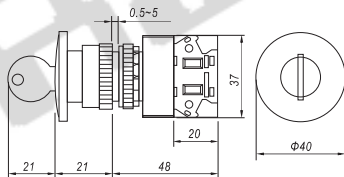
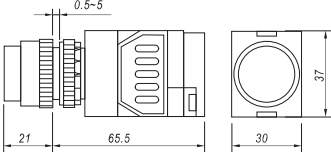
22 MM PUSH BUTTON MR-Y090 SERIES		Micro-Ray	
PART NO	MR-Y090		
DWG NO	MR-Y090	SHEET 3 OF 6	REV A
UNITS: mm	SCALE: NTS - DO NOT SCALE	SIZE A4	DATE 2026-09-22

Product Picture	Description	Dimension
Long Head (can be illuminated) MR-	Contact□11: 1NO1NC / 10: 1NO / 01: 1NC Other switch combinations refer to the model description Operation■Z: Latching / No letter: Momentary LED color△ LED voltage▲6V / 12V / 24V / 110V / 220V / 380V IP degreeIP40 AccessoryProtective cover T16	
Mushroom Push button (can be illuminated) MR-Y090-M/△/▲	Contact□11: 1NO1NC / 10: 1NO / 01: 1NC Other switch combinations refer to the model description Operation■Z: Latching / No letter: Momentary LED color△ LED voltage▲6V / 12V / 24V / 110V / 220V / 380V IP degreeIP40 AccessoryProtective cover T16	
Emergency Pushbutton (can be illuminated) MR-Y090-4C	Contact□11: 1NO1NC / 10: 1NO / 02: 2NC Other switch combinations refer to the model description LED color△ LED voltage▲6V / 12V / 24V / 110V / 220V / 380V IP degreeIP40 AccessoryWarning ring T14-2260 / T26 protection ring	
Emergency Pushbutton (can be illuminated) Y090-TS/△/▲	Contact□11: 1NO1NC / 10: 1NO / 02: 2NC Other switch combinations refer to the model description LED color△ LED voltage▲6V / 12V / 24V / 110V / 220V / 380V IP degreeIP40 AccessoryWarning ring T14-2260 / T26 protection ring	
Selector Switch (can be illuminated) Y090-X/◇◆/△/▲	Contact□11: 1NO1NC / 20: 2NO / 02: 2NC Other switch combinations refer to the model description Operation◇◆ (32 Default right momentary, left mementary can be customized) Contact, pls refer to "contact on/off chart" LED color△ LED voltage▲6V / 12V / 24V / 110V / 220V / 380V IP degreeIP40 AccessoryT04 sign frame	

PART NUMBERS ON THIS DRAWING

MR-Y090 MR-Y090-BD MR-Y090-D MR-Y090-DS MR-Y090-G MR-Y090-M MR-Y090-M-B MR-Y090-S
MR-Y090-S-FL MR-Y090-SM MR-Y090-TS MR-Y090-TSA MR-Y090-X MR-Y090-XB MR-Y090-Y
MR-Y090-YM MR-Y090E MR-Y090E-BD MR-Y090E-D MR-Y090E-DS MR-Y090E-G MR-Y090E-M
MR-Y090E-S MR-Y090E-TS MR-Y090E-TSA MR-Y090E-X MR-Y090E-XB MR-Y090E-Y MR-Y090E-YM

22 MM PUSH BUTTON		Micro-Ray	
MR-Y090 SERIES			
PART NO	MR-Y090		
DWG NO	MR-Y090	SHEET 4 OF 6	REV A
UNITS: mm	SCALE: NTS - DO NOT SCALE	SIZE A4	DATE 2026-09-22

Product Picture	Description	Dimension
Lever Selector Switch MR-	Contact□ 11: 1NO1NC / 20: 2NO / 02: 2NC Other switch combinations refer to the model description Operation◇◆ (32 Default right momentary, left mementary can be customized) Contact, pls refer to "contact on/off chart" LED color△ R G B IP degree IP40 Accessory T04 sign frame	
Key-lock Switch MR-	Contact□ 11: 1NO1NC / 20: 2NO / 02: 2NC Other switch combinations refer to the model description Operation◇◆ (32 Default right momentary, left mementary can be customized) Contact, pls refer to "contact on/off chart" IP degree IP40 Accessory T04 sign frame	
Mushroom Key-lock Switch MR-Y090-□ YM/◇◆/△	Contact□ 11: 1NO1NC / 20: 2NO / 02: 2NC Other switch combinations refer to the model description Operation◇◆ (32 Default right momentary, left mementary can be customized) Contact, pls refer to "contact on/off chart" LED color△ R G IP degree IP40 Accessory T04 sign frame	
Buzzer MR-Y090-M/▲ MR-Y090-S/△/▲ MR-Y090-SM/△/▲	LED color△ R LED voltage▲ 6V / 12V / 24V / 110V / 220V IP degree IP40 Rated sound intensity 75dB (1m) (rated voltage) Frequency 2.3kHz 300Hz	

PART NUMBERS ON THIS DRAWING

MR-Y090 MR-Y090-BD MR-Y090-D MR-Y090-DS MR-Y090-G MR-Y090-M MR-Y090-M-B MR-Y090-S
MR-Y090-S-FL MR-Y090-SM MR-Y090-TS MR-Y090-TSA MR-Y090-X MR-Y090-XB MR-Y090-Y
MR-Y090-YM MR-Y090E MR-Y090E-BD MR-Y090E-D MR-Y090E-DS MR-Y090E-G MR-Y090E-M
MR-Y090E-S MR-Y090E-TS MR-Y090E-TSA MR-Y090E-X MR-Y090E-XB MR-Y090E-Y MR-Y090E-YM

22 MM PUSH BUTTON			Micro-Ray	
MR-Y090 SERIES				
PART NO	MR-Y090			
DWG NO	MR-Y090		SHEET 5 OF 6	REV A
UNITS: mm		SCALE: NTS - DO NOT SCALE	SIZE A4	DATE 2026-09-22

Refer to MR-Y090 product selection

P/N	Fast Installation Pilot Lamp Y090E-DS/△/▲/※	Round Pilot Lamp MR-Y090E-D/△/▲	Domed Pilot Lamp MR-Y090E-BD/△/▲	Fast Installation Flat Head (can be illuminated) MR-Y090E-□■S/△/※ MR-Y090E-□■S/△/▲/※
Shape				

P/N	Flat Head(can be illuminated) MR-Y090E-□■/△/※ MR-Y090E-□■/△/▲/※	Long Head(can be illuminated) MR-Y090E-□■G/△ MR-Y090E-□■G/△/▲	Mushroom Pushbutton (can be illuminated) MR-Y090E-□■M/△ MR-Y090E-□■M/△/▲	Φ30mm Emergency Pushbutton (can be illuminated) MR-Y090E-□TSA/△ MR-Y090E-□TSA/△/▲
Shape				

P/N	Φ40mm Emergency Pushbutton (can be illuminated) MR-Y090E-□TS/△ Y090E-□TS/△/▲	Selector Switch (can be illuminated) MR-Y090E-□X/◇◆/△ MR-Y090E-□X/◇◆/△/▲	Lever Switch MR-Y090E-□XB/◇◆/△	Key-lock Switch MR-Y090E-□Y/◇◆
Shape				

P/N	Mushroom Key-lock Switch MR-Y090E-□YM/◇◆/△			
Shape				

PART NUMBERS ON THIS DRAWING
MR-Y090 MR-Y090-BD MR-Y090-D MR-Y090-DS MR-Y090-G MR-Y090-M MR-Y090-M-B MR-Y090-S
MR-Y090-S-FL MR-Y090-SM MR-Y090-TS MR-Y090-TSA MR-Y090-X MR-Y090-XB MR-Y090-Y
MR-Y090-YM MR-Y090E MR-Y090E-BD MR-Y090E-D MR-Y090E-DS MR-Y090E-G MR-Y090E-M
MR-Y090E-S MR-Y090E-TS MR-Y090E-TSA MR-Y090E-X MR-Y090E-XB MR-Y090E-Y MR-Y090E-YM

22 MM PUSH BUTTON MR-Y090 SERIES		Micro-Ray	
PART NO	MR-Y090		
DWG NO	MR-Y090	SHEET 6 OF 6	REV A
UNITS: mm	SCALE: NTS - DO NOT SCALE	SIZE A4	DATE 2026-09-22