

WE INNOVATE

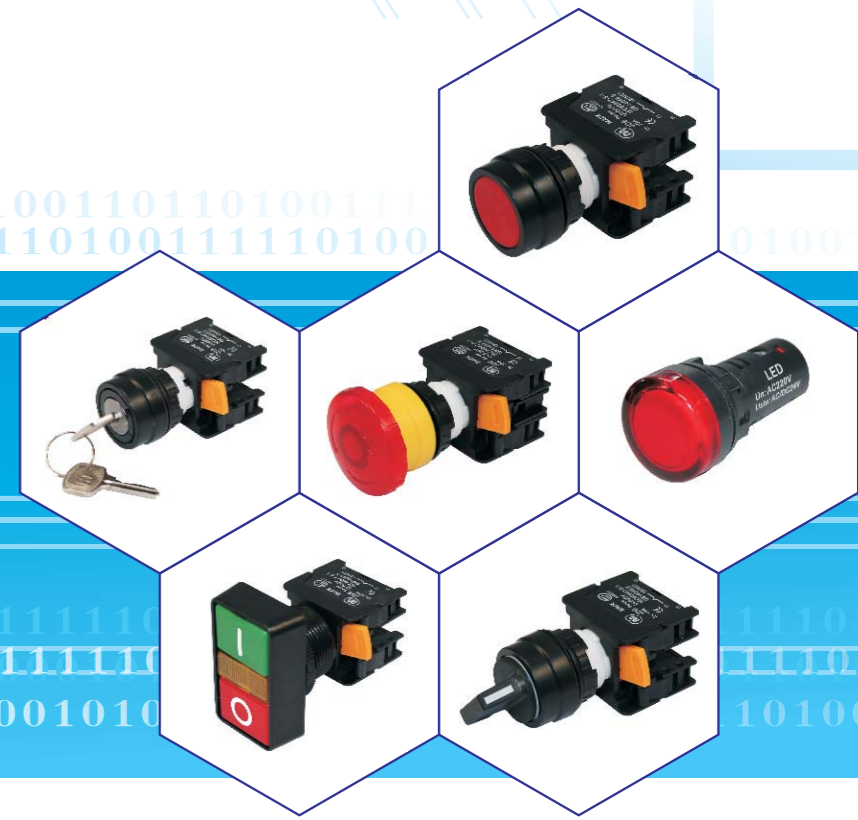


PUSH BUTTON ACTUATORS

2013-06

WE INNOVATE

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MACK ENTERPRISE CO., LTD.

www.mackelectrical.com

mack ELECTRICAL mack ELECTRICAL mack ELECTRICAL

Company History

Mack Electrical began back in 1982, but the seeds were planted in 1972, when Mr. Bob Yuan HSIAO, a well respected businessman from Taiwan, had the vision of bringing together his thoughts, theories and experiences from many successful years of business as a founding President with a number of different companies who were involved in the low voltage electrical manufacturing sector.

Mack Electrical today is one of the top three suppliers of low voltage products in Taiwan, has its own marketing and sales channels, and is a solely private business. The focus of this business is in the field of Low Voltage Electrical Apparatus with an ongoing development of products in the area of Push Buttons, Terminal Blocks, Tower Lights and Power Section Switches.

Mack has obtained globally recognized certificates including ISO9001, UL, CSA, CE and CCC. This certification, together with maintaining a high level of Quality Assurance, has allowed Mack products to be widely used in major construction projects in very prestigious and important industries, both in the domestic and export sectors.

Mack currently operates from its new 5000 square meter factory in the ZhangZhou Development Zone, Fujian Province, with the capacity for large scale production, a highly skilled workforce, and "state of the art" machinery allowing for high quality and fast turn-around of production needs.

Mack contracts necessary expertise from overseas in order to provide both domestic and international customers with the best possible products and services. Mr. Mark HSIAO, the eldest son of the founder, is the President of Mack Electrical operations in ZhangZhou and has been involved with the business for over 25 years.

Mack is constantly working on developing products to fill a void in the market in addition to specifically targeting the export market sector.

Company Core Values

MACK ELECTRICAL adheres to the following Core Values:-
Personal and Professional Working Relationships
Complete Trust and Respect for each person on Our Team
Quality is our Business



ISO9001:2008

RoHS

KEMA
EUR

UL
E166130

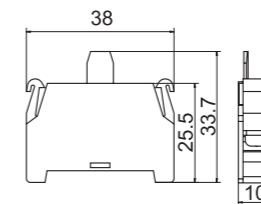
SA
NRTL/C
LR109182

CE

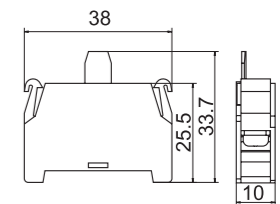
CCC
A056237

ACCESSORIES AND SPARE PARTS

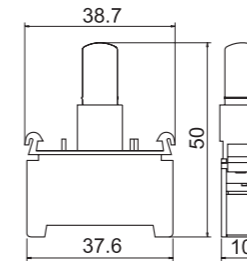
MB-10
CONTACT BLOCK (1NO=1A)



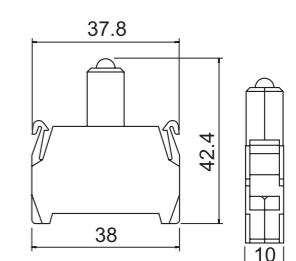
MB-01
CONTACT BLOCK (1NC=1B)



MB-LB
LAMP HOLDER



MB-LE
LED INTEGRATED LAMP HOLDER



FILAMENT BULB



CODE	VOLTAGE	CODE	VOLTAGE
D1	AC/DC6V	D3	AC/DC18V
D2	AC/DC12V	D4	AC/DC24V

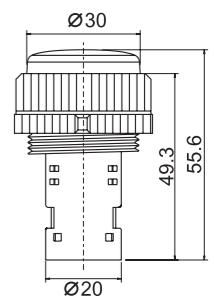
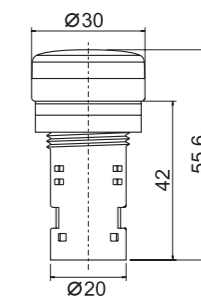
NEON BULB



CODE	VOLTAGE	CODE	VOLTAGE
N1	AC110V	N3	AC380V
N2	AC220V	N4	AC440V

Φ22mm/Φ30mm PILOT LIGHTS

ML-22C(E)/ML-30C(E)



R G Y O BL W

ML-22C(S)
W/BUZZER



R B

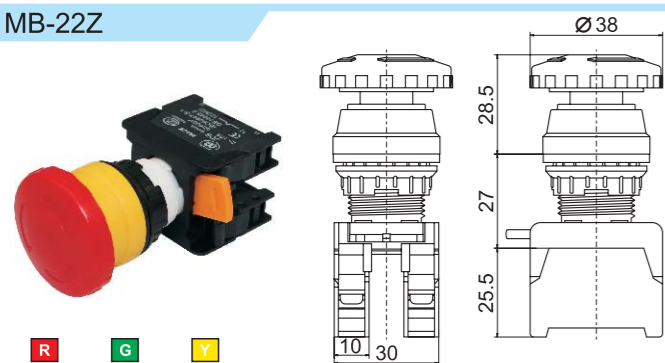
ML-22C(SH)
W/BUZZER & LED LIGHT



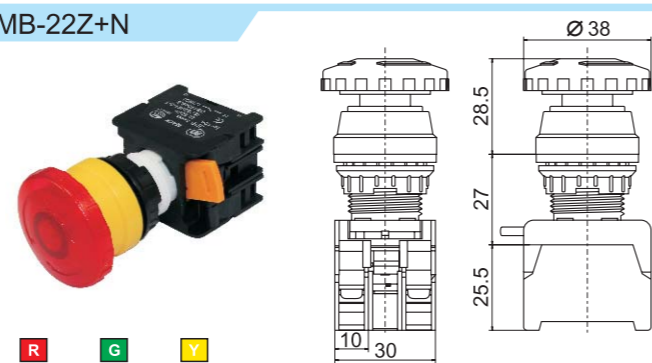
R

PUSH BUTTON ACTUATORS

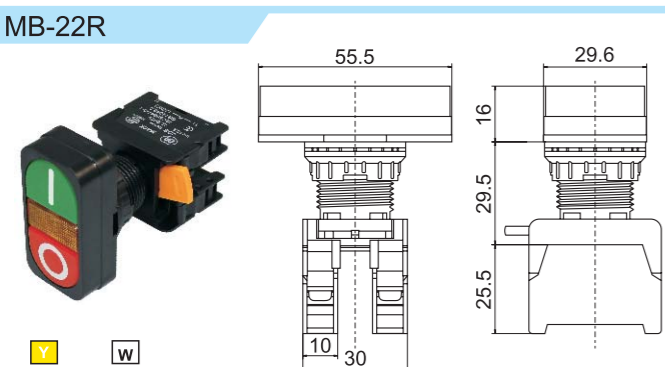
MB-22Z



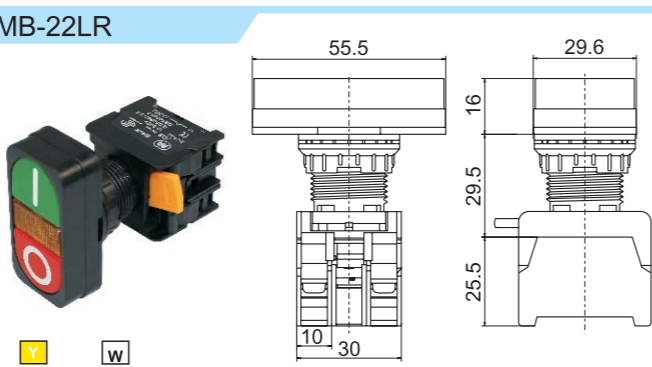
MB-22Z+N



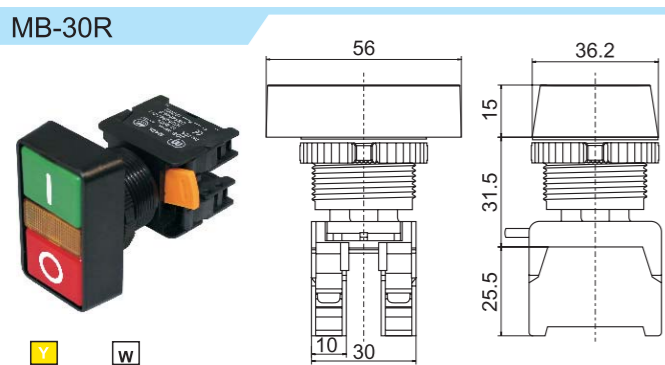
MB-22R



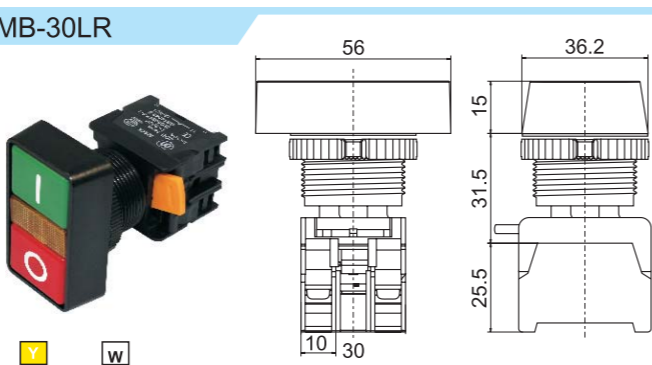
MB-22LR



MB-30R

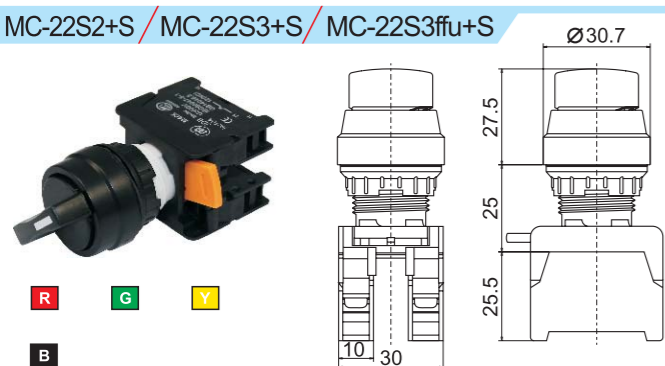


MB-30LR

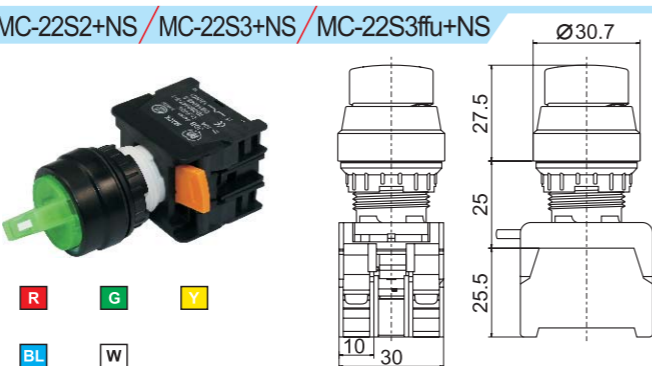


SELECTOR SWITCH ACTUATORS

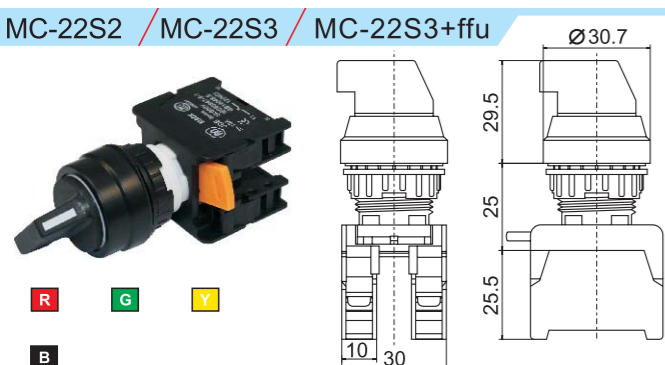
MC-22S2+S / MC-22S3+S / MC-22S3ffu+S



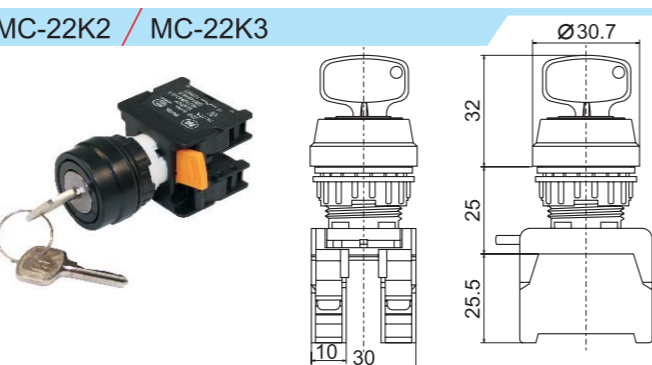
MC-22S2+NS / MC-22S3+NS / MC-22S3ffu+NS



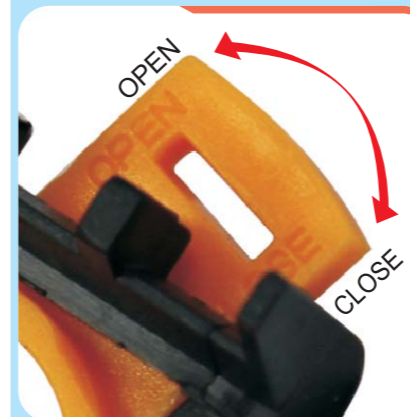
MC-22S2 / MC-22S3 / MC-22S3+ffu



MC-22K2 / MC-22K3



FEATURES



Brand-new "Snap On" mechanism
 "Tool-Free" Push Button Replacement - simply snap on the contact element (push Yellow Holder to "Close" direction for disassembly, "OPEN" for assembly)



Expandable contact element for various requirements and more flexible in use



IP65 Degree of Protection Rating



All the series elements have an ergonomic design



Key-operated mechanism will provide a safe working environment



ORDERING

1 — Type of Push Button Actuators { MB
MC

2 — Installation Diameter { Ø22
Ø25

3 — Type of Push Button Actuators

F	Flush	LF	Illuminated Flush
P	Extended	LP	Illuminated Extended
M	Mushroom	LM	Illuminated Mushroom
Z	Emergency Stop	Z+N	Illuminated Emergency Stop
R	Double-touch	LR	Illuminated Double-touch
S2	Long Knob (2 Positions)	S2+NS	Illuminated Standard Knob (2 Positions)
S3	Long Knob (3 Positions)	S3+NS	Illuminated Standard Knob (2 Positions)
S2+S	Standard Knob (2 Positions)	K2	Key Operated (2 positions)
S3+S	Standard Knob (3 Positions)	K3	Key Operated (3 positions)

4 — Function →

ffu	Spring Return from Two Ways	a	Left	au	Left or Right
		a0	Center	aaU	All Positions

* Key Extraction Positions

5 — Contact Blocks →

Codes					
	10	01	11	20	02
	(N/O,1A)	(N/C,1B)	(N/O+N/C,1A1B)	(2N/C,2B)	(2N/O,2A)

6 — Colours → **R** **G** **Y** **BL** **W** **B**

7 — Bulb Types & Voltages

Filament	D1=AC/DC6V	D2=AC/DC12V	D3=AC/DC12V	D4=AC/DC24V
Neon	N1=AC110V	N2=AC220V	N3=AC380V	N4=AC440V
LED	D4L=AC/DC24V	N1L=AC110V	N2L=AC220V	N3L=AC380V

PILOT LIGHTS

ML — **1** — C(E) — **2** — **3**

1 — Installation Diameter → { 22
30

C(E) — LED

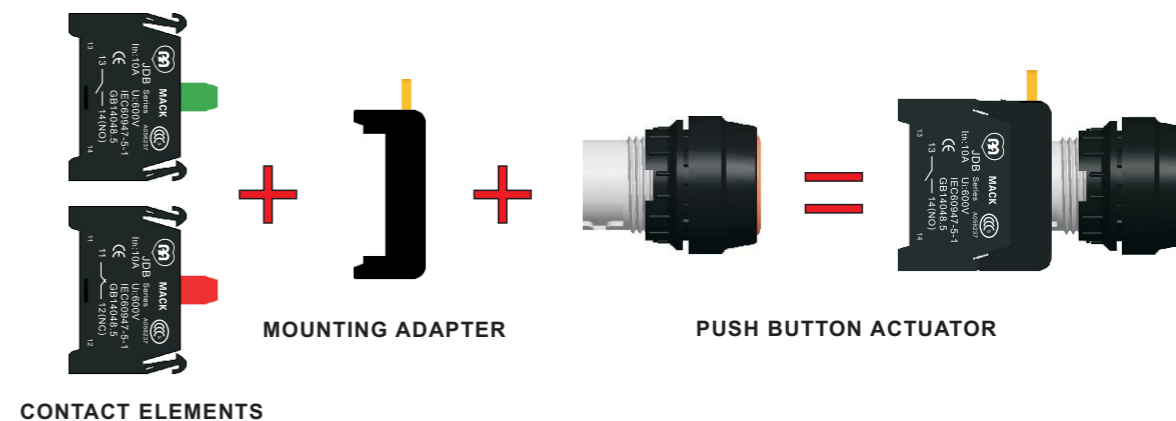
2 — Colours → **R** **G** **O** **Y** **BL** **W**

3 — Bulb Type & Voltages

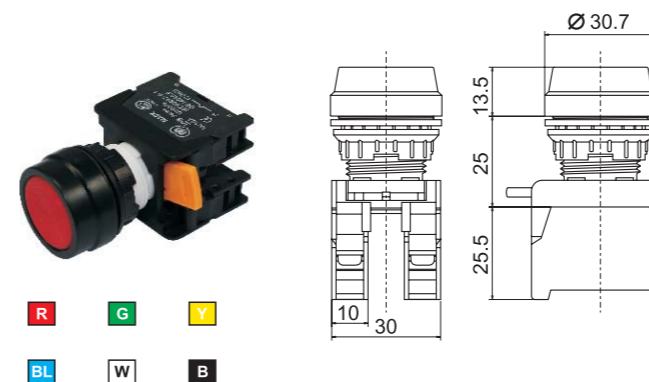
LED	D2L=AC/DC12V	D4L=AC/DC24V	N1L=AC110V	N2L=AC220V	N3L=AC380V
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PUSH BUTTON ACTUATORS

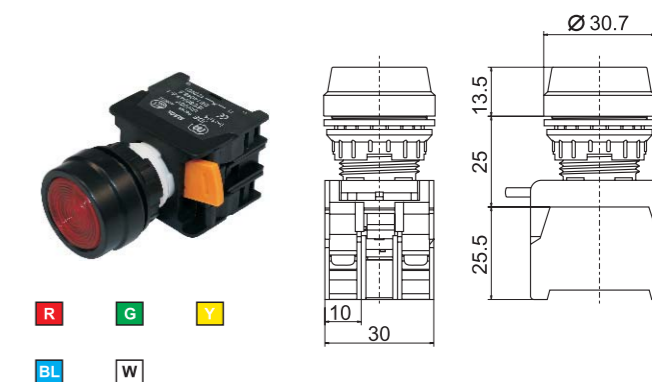
COMPONENTS SELECTION GUIDE



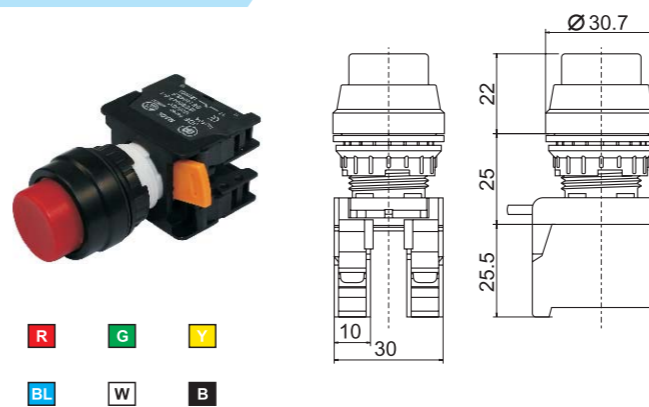
MB-22F



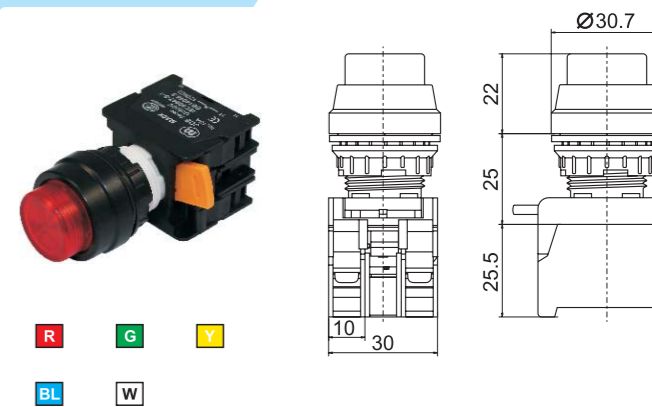
MB-22LF



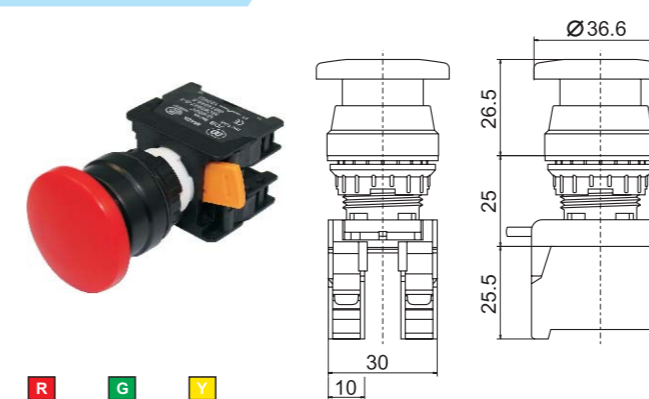
MB-22P



MB-22LP



MB-22M



MB-22LM

