



# CP2 Series

Ø22mm WIRE-PUSH-IN Unibody Switches



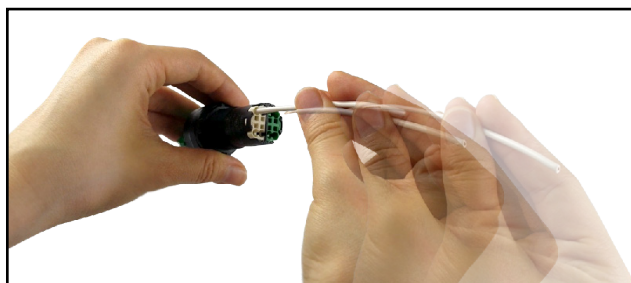
- Save time with quick WIRE-PUSH-IN system
- Spring clamps for strong wire holding force
- Compact unibody housing to reduce installation space
- Double wiring holes for common wiring
- IP66 waterproof (front operator)
- Accessories for contact blocks available (IP66/IP68)

## General Specifications

Insulation Resistance		100 MΩ above ( 500V DC High resistance meter )
Vibration Resistance	E-stop switches	Operation Extremes: 10-500Hz, Amplitude: 0.35mm, 50m/s <sup>2</sup> Damage Limits: 10-500Hz, Amplitude: 0.35mm, 50m/s <sup>2</sup>
	Pilot light Pushbutton, Illuminated pushbutton and Selector switch	Operation Extremes: 5-55Hz, Amplitude: 0.5mm Damage Limits: 30Hz, Amplitude: 1.5mm
Shock Resistance	E-stop switches	Operation Extremes: 150m/s <sup>2</sup> Damage Limits: 1,000m/s <sup>2</sup>
	Pilot light Pushbutton, Illuminated pushbutton and Selector switch	Operation Extremes: 100m/s <sup>2</sup> Damage Limits: 1,000m/s <sup>2</sup>
Dielectric Strength	Switch parts	Between charge and non-charged metal parts: 2,000V AC . 1minute
		Between abnormal terminals: 2,000V AC . 1minute
		Between Same polarity Terminals: 2,000V AC . 1minute
	Illuminated parts	Between Contact terminals and lamp terminals: 2,000V AC . 1minute
Ambient Temperature		Operation: -25 ~ +55°C( no freezing ), Storage: -45°C~+85°C
Ambient Humidity		45~85%RH
Degree of Protection		From panel front: IP66 / Terminal: IP20 (IP66 with silicon sleeve)
Certificate/Compliance		UL(E333442), CE

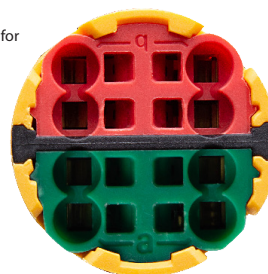
Contacts Rating	Rated Insulation Voltage		400 V				
	Rated Terminal Current		8A				
	Rated Operating Voltage		12V	24V	120V	240V	380V
	AC 50/60Hz	Resistive Load	8V	8A	8A	6A	3.8A
		Inductive Load	8V	8A	6A	3A	1.9A
	Rated Operating Voltage		12V	24V	125V	250V	400V
DC	Resistive Load	2.5V	2.5A	1.1A	0.55A	0.3A	
	Inductive Load	2.5V	2.5A	0.55A	0.27A	0.15A	

LED Rating	Type No	Rated voltage	Rated Current		Color code ①
	LAED-1 ①	12V AC/DC	2.2 mA (G) 10.0 mA (R . Y) 12.0 mA (S)		
LAED-2 ①	24V AC/DC				
LAED-H ①	110V AC/DC	1.2 mA (G) 1.3 mA (Y) 1.4 mA (R . S)			
LAED-M3 ①	230/240V AC/DC	1.1 mA (G) 1.2 mA (R . S . Y)			
LAED-11 ①	110VAC	2.8 mA (G)	10.5 mA (S)		
		10.6 mA (R)	10.5 mA (Y)		
LAED-22 ①	220V AC/DC	1.9 mA (G)	9.1 mA (S)		
		8.8 mA (R)	9.0 mA (Y)		



## Contact Block

- Two wiring holes per spring contact for common wiring or alternative use
- WIRE-PUSH-IN system to greatly reduce wiring time
- Spring clamps to increase wire holding force and stability
- Central partition structure between contact blocks to enhance electrical insulation
- Solid wire, strand wire or European terminal wiring can be used
- Contact blocks and lampholders are clearly recognizable with their colors



## Operator and Housing

- Compact unibody housing to reduce installation space
- Anti-rotation latch design on operators
- Mounting panel thickness: 0.8~12.0mm (standard type)

## Accessories

- Waterproof Silicon Sleeve: provides IP66 protection to contacts under the mounting panel
- Waterproof Cover: provides IP68 protection to contact blocks

# Ordering Information

## Pushbuttons Switches

CP2 ① ② - ③ ④ ⑤ E ⑥ ⑦ ⑧ - ⑨

① Bezel Material	Blank	Plastic Bezel			
	4	Metal Bezel			
② Style	B	Non-Illuminated Pushbutton Switch			
	L	Illuminated Pushbutton Switch			
③ Operator	A	Maintained			
	M	Momentary			
④ Shape	1	Flush	2	Extended	
	F2	Extended with Full Shroud	4	Φ40 Mushroom	
⑤ Marking Type	Blank	Unmarking Type			
	B	Marking Type			
⑥ Contact Arrangement	10	1NO	01	1NC	
	20*	2NO	02*	2NC	
	11*	1NO+1NC			
⑦ Operator Voltage	Blank	Non-Illumination Type	Q3**	LED 12V AC/DC	
	Q4**	LED 24V AC/DC	Q11**	LED 110V AC	
	Q22**	LED 220V AC			
⑧ Color	B*	Black	G	Green	
	R	Red	S	Blue	
	W	White	Y	Yellow	
⑨ Head	Blank	Standard			
	U	Silhouette			
	T	Extended Large frame			

\*Non-Illuminated only

\*\*Illuminated only

## Key Selector Switches

CP2 ① K - ② ③ E ④ - ⑤

① Bezel Material	Blank	Plastic Bezel			
	4	Metal Bezel			
② Action	2	2 Positions -45°~+45° Maintained	22	2 Positions 0°~+90° Maintained	
	23	2 Positions 0°~+45° Maintained	24	2 Positions 0°~+45° Spring Return from Right	
	3	3 Positions -45°~0°~+45° Maintained	31	3 Positions -45°~0°~+45° Spring Return from Right	
	32	3 Positions -45°~0°~+45° Spring Return from Left	33	3 Positions -45°~0°~+45° Spring Return Two-Way	
③ Function (2 position / 3 position)	A	Key removable in L+R / L+C+R	B	Key removable in L / L+C	
	C	Key removable in R / C+R	D*	Key removable in C	
	E*	Key removable in L+R	G*	Key removable in L	
	H*	Key removable in R			
④ Contact Arrangement (No.1 / No.2)	10	NO / X	01	NC / X	
	20	NO / NO	02	NC / NC	
	11	NO / NC	11N	NC / NO	
⑤ Head	Blank	Standard			
	U	Silhouette			
	T	Extended Large frame			

\*3 Position only

## Emergency Stop Switches

CP2 ① E - ② E ③ ④ R - ⑤

① Bezel Material	Blank	Plastic Bezel				
	4	Metal Bezel				
② Type	Bezel Hole ø34.6mm					
	BV*	Pull/Turn To Release ø40 Mushroom	LV**	Pull/Turn To Release ø40 Mushroom		
	BP*	Pull To Release ø40 Mushroom	LP**	Pull To Release ø40 Mushroom		
	BT*	Turn To Release ø40 Mushroom	LT**	Turn To Release ø40 Mushroom		
	Bezel Hole ø29.0mm					
	P3*	Pull to Release Φ30 Mushroom	P4*	Pull to Release Φ40 Mushroom		
	P6*	Pull to Release Φ60 Mushroom	T3*	Turn to Release Φ30 Mushroom		
	T4*	Turn to Release Φ40 Mushroom	T6*	Turn to Release Φ60 Mushroom		
	K3*	Key Release Φ30 Mushroom	K4*	Key Release Φ40 Mushroom		
	K6*	Key Release Φ60 Mushroom				
	③ Contact Arrangement	10	1NO	01	1NC	
		20*	2NO	02*	2NC	
11*		1NO+1NC				
④ Operator Voltage	Blank	Non-Illumination Type	Q3**	LED 12V AC/DC		
	Q4**	LED 24V AC/DC	Q11**	LED 110V AC		
	Q22**	LED 220V AC				
⑤ Head	Blank	Standard				
	T	Extended Large frame				

\*Non-Illuminated only

\*\*Illuminated only

## Selector Switches

CP2 ① ② - ③ ④ E ⑤ ⑥ ⑦ - ⑧

① Bezel Material	Blank	Plastic Bezel			
	4	Metal Bezel			
② Style	S	Non-Illuminated Selector Switch			
	F	Illuminated Selector Switch			
③ Action	2	2 Positions -45°~+45° Maintained	22	2 Positions 0°~+90° Maintained	
	23	2 Positions 0°~+45° Maintained	24	2 Positions 0°~+45° Spring Return from Right	
	3*	3 Positions -45°~0°~+45° Maintained	31*	3 Positions -45°~0°~+45° Spring Return from Right	
	32*	3 Positions -45°~0°~+45° Spring Return from Left	33*	3 Positions -45°~0°~+45° Spring Return Two-Way	
④ Lever	Blank	Standard Lever			
	L	Long Lever			
⑤ ***Contact Arrangement	10	1NO	01	1NC	
	20*	NO / NO	02*	NC / NC	
	11*	NO / NC	11N*	NC / NO	
⑥ Operator Voltage	Q2**	LED 6V AC/DC	Q3**	LED 12V AC/DC	
	Q4**	LED 24V AC/DC	Q11**	LED 110V AC	
	Q22**	LED 220V AC			
⑦ Color	B*	Black	G	Green	
	R	Red	S	Blue	
	W	White	Y	Yellow	
⑧ Head	Blank	Standard			
	U	Silhouette			
	T	Extended Large frame			

\*Non-Illuminated only

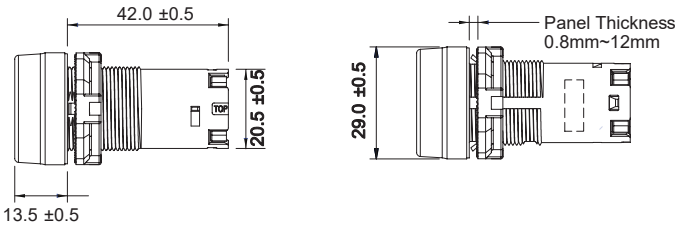
\*\*Illuminated only

\*\*\*Contact arrangement : 2 position (10, 01, 20, 02, 11), 3 position(20, 02, 11, 11N)

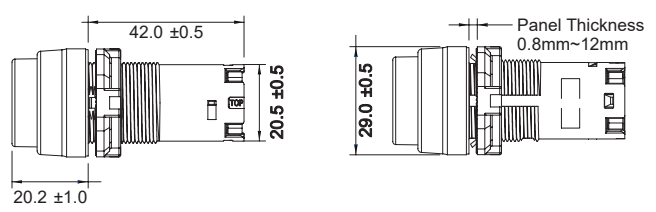
# Dimensions

Unit: mm

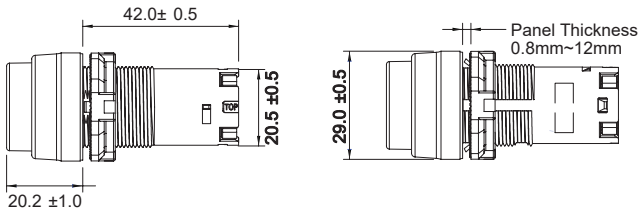
CP2B-A1E, CP2L-M1E, CP2B-M1E



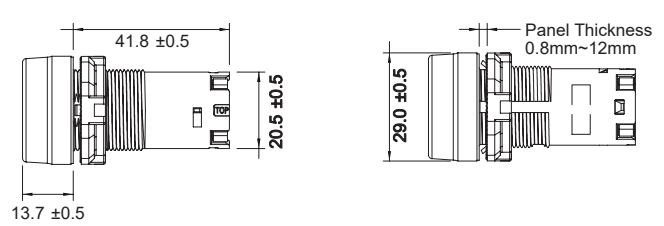
CP2L-A2E



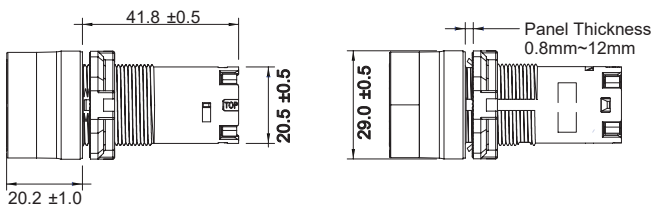
CP2L-M2E, CP2B-M2E



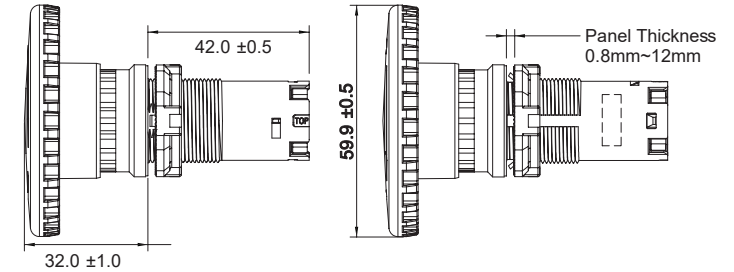
CP2L-A1E



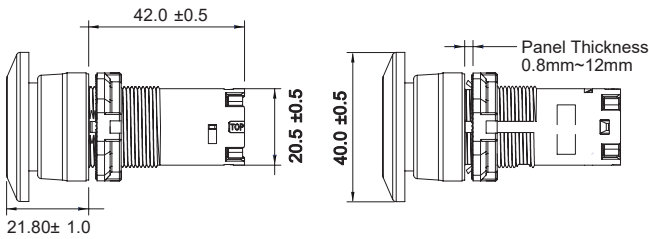
CP2L-AF2E, CP2B-MF2E



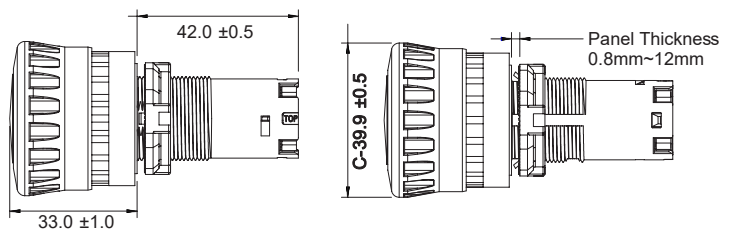
CP2E-T6E



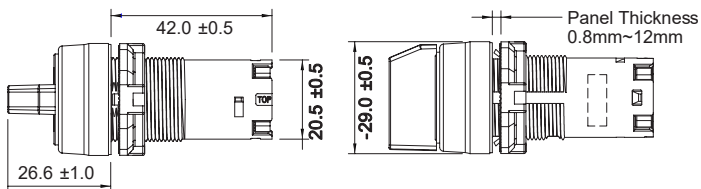
CP2L-A4E, CP2B-M4E



CP2E-BV, CP2E-LPE, CP2E-LTE, CP2E-LVE, CP2E-BPE



CP2S



CP2K

