

## Illuminated Pushbuttons (Assembled)



### Assembled Illuminated Pushbuttons

**A L (F) W 2 (B) 99 11 (D) (N) - R - (24V)**

**Function**

L: Momentary Action  
OL: Maintained Action

**Bezel Shape**

Blank: Octagonal (round lenses)  
F: Full Shroud (round lenses)  
Q: Square

**Series Designation**

W: TW series

**Lens Shape/Size**

2: Standard Extended (round or square)  
3: 29mm Mushroom  
4: 40mm Mushroom

**Lens Type**

Blank: Standard (ribbed)  
B: Engravable (smooth with insert)

**Illumination Circuit**

99: Full Voltage (lamp determines voltage)  
126:120V AC Step Down Transformer  
246:240V AC Step Down Transformer  
486:480V AC Step Down Transformer

**Lamp Voltage**

(Full Voltage Units Only)  
6V: 6V AC/DC  
12V: 12V AC/DC  
24V: 24V AC/DC  
120V:120V AC (LED only)  
240V: 240V AC (LED only)

**Lens Code**

A: Amber  
G: Green  
R: Red  
S: Blue  
W: White  
Y: Yellow

**Contact Terminal Style**

Blank: Standard  
N: Fingersafe

**Lamp Type**

Blank: Incandescent Lamp  
D: LED Lamp

**Contact Arrangement**

10: 1NO                    01: 1NC  
20: 2NO                    02: 2NC  
11: 1NO-1NC            22:2NO-2NC



1. Use only when interpreting part numbers. Do not use for developing part numbers.
2. Transformers step down to 6V.

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### Part Numbers: Illuminated Pushbuttons

Style	Contacts	Part Number		
		Momentary	Maintained	
	Transformer Type	1NO-1NC 2NO 2NC	ALW2 ④ 11⑤-② ALW2 ④ 20⑤-② ALW2 ④ 02⑤-②	AOLW2 ④ 11⑤-② AOLW2 ④ 20⑤-② AOLW2 ④ 02⑤-②
	Full Voltage	1NO-1NC 2NO 2NC	ALW29911⑤-②-③ ALW29920⑤-②-③ ALW29902⑤-②-③	AOLW29911⑤-②-③ AOLW29920⑤-②-③ AOLW29902⑤-②-③
	Transformer Type	1NO-1NC 2NO 2NC	ALFW2 ④ 11⑤-② ALFW2 ④ 20⑤-② ALFW2 ④ 02⑤-②	AOLFW2 ④ 11⑤-② AOLFW2 ④ 20⑤-② AOLFW2 ④ 02⑤-②
	Full Voltage	1NO-1NC 2NO 2NC	ALFW29911⑤-②-③ ALFW29920⑤-②-③ ALFW29902⑤-②-③	AOLFW29911⑤-②-③ AOLFW29920⑤-②-③ AOLFW29902⑤-②-③
	Transformer Type	1NO-1NC 2NO 2NC	ALW3 ④ 11⑤-② ALW3 ④ 20⑤-② ALW3 ④ 02⑤-②	AOLW3 ④ 11⑤-② AOLW3 ④ 20⑤-② AOLW3 ④ 02⑤-②
	Full Voltage	1NO-1NC 2NO 2NC	ALW39911⑤-②-③ ALW39920⑤-②-③ ALW39902⑤-②-③	AOLW39911⑤-②-③ AOLW39920⑤-②-③ AOLW39902⑤-②-③
	Transformer Type	1NO-1NC 2NO 2NC	ALW4 ④ 11⑤-② ALW4 ④ 20⑤-② ALW4 ④ 02⑤-②	AOLW4 ④ 11⑤-② AOLW4 ④ 20⑤-② AOLW4 ④ 02⑤-②
	Full Voltage	1NO-1NC 2NO 2NC	ALW49911⑤-②-③ ALW49920⑤-②-③ ALW49902⑤-②-③	AOLW49911⑤-②-③ AOLW49920⑤-②-③ AOLW49902⑤-②-③
	Transformer Type	1NO-1NC 2NO 2NC	ALQW2B ④ 11⑤-② ALQW2B ④ 20⑤-② ALQW2B ④ 02⑤-②	AOLQW2B ④ 11⑤-② AOLQW2B ④ 20⑤-② AOLQW2B ④ 02⑤-②
	Full Voltage	1NO-1NC 2NO 2NC	ALQW2B9911⑤-②-③ ALQW2B9920⑤-②-③ ALQW2B9902⑤-②-③	AOLQW2B9911⑤-②-③ AOLQW2B9920⑤-②-③ AOLQW2B9902⑤-②-③



- In place of ②, specify the Lens Color Code (see table above). Mushroom lenses not available in yellow.
- In place of ③, specify the Full Voltage Code (lamp voltage) (see table above).
- In place of ④, specify the Transformer Voltage Code (see table above).
- In place of ⑤, specify the Lamp Type Code from table above.
- For sub-assembly part numbers, see page A-135.
- For accessories, see page A-150.
- For dimensions, see page A-152.

#### ② Lens/LED Color Code

Color	Code
Amber	A
Green	G
Red	R
Blue	S
White	W
Yellow	Y

#### ③ Full Voltage Code

Voltage	Code
6V AC/DC	6V
12V AC/DC	12V
24V AC/DC	24V
120V AC	120V (LED only)
240V AC	240V (LED only)

#### ④ Transformer Voltage Codes

Voltage	Code
120VAC	126
240VAC	246
480VAC	486

#### ⑤ Lamp Type Code

Lamp	Code
Incandescent	Blank
LED	D



Mushroom lenses not available in yellow.



Transformers step down to 6V (use 6V lamp).

## Illuminated Pushbuttons (Sub-Assembled)

Transformer/Adaptor\* + Contacts + Lamp Holder + Operator + Lamp + Lens = Complete Part







\* Not applicable for full voltage units

### Part Numbers: Operators

Style	Part Number	
	Momentary	Maintained
Extended	ALW-0600	AOLW-0600
Extended with Full Shroud	ALFW-0600	AOLFW-0600
ø29mm/ø40mm Mushroom	ALW3-0600	AOLW3-0600
Square/Extended	ALQW-2B0600	AOLQW-2B0600



### Part Numbers: Lenses

Style	Part Number	
	Standard	Engravable
Round Extended 	ALW2LU-②	ALW2BLU-②
Ø 29mm Mushroom Head* 	ALW3LU-②	ALW3BLU-②
Ø 40mm Mushroom Head* 	ALW4LU-②	ALW4BLU-②
Square Extended 	—	ALQW2BLU-②



- In place of ②, specify the lens color code from table on the bottom right.
- \* Mushroom lens not available in yellow.
- Standard lenses have ribbed pattern, Engravable lenses are smooth and include an engravable insert.




### Part Numbers: Lamps

Type	Voltage	Part Number
LED 	6V AC/DC	LSTD-6②
	12V AC/DC	LSTD-1②
	24V AC/DC	LSTD-2②
	120V AC	LSTD-H2②
	240V AC	LSTD-M4②
Incandescent 	6.3V AC/DC	IS-6
	12V AC/DC	IS-12
	24V AC/DC	IS-24



- In place of ②, specify the LED Color Code.
- The LED contains a current-limiting resistor and a protection diode.

### Part Numbers: Lamp Circuit Components




Style	Application	Part Number
Short Lamp Holder 	Used with a Half-size Transformer and one contact block	TW-LH1
Long Lamp Holder 	Used with Full-size Transformer and two contact blocks Used with Half-size Transformer and three contact blocks Used with Full Voltage Adaptor and two contact blocks	TW-LH2
Lead Holder 	Used with TW-LH2 holder when using four contact blocks	HW-LH3


### ② LED/Lens Color Code

Color	Code
Amber	A
Green	G
Red	R
Blue	S
White	W
Yellow	Y





**Illuminated Pushbuttons (Sub-Assembled) con't**


**Part Numbers: Contact Blocks**

Description	Part Number	
	1NO	1NC
Standard Exposed Screw 	HW-C10 HW-C10R (early make)	HW-C01 HW-C01R (late break)
Fingersafe (IP20) 	HW-F10 HW-F10R (early make)	HW-F01 HW-F01R (late break)
Dummy Block 	TW-DB	

-  1. Dummy blocks (no contacts) are used with an odd number of contact blocks.
- 2. Use of early and late break contacts creates a make before break function

**Part Numbers: Transformers/Full Voltage Modules**

Style	Description	Part Number
Full Size Transformer 	Standard	120V AC TW-T126B
		240V AC TW-T246B
		480V AC TW-T486B
	Fingersafe	120V AC TW-F126B
		240V AC TW-F246B
		480V AC TW-F486B
Half Size Transformer 	120V AC	TW-T126SB
	240V AC	TW-T246SB
Full voltage model (use with even number of contacts) 	Standard	TW-DA1B
	Fingersafe	TW-DA1FB
Full voltage model (use with odd number of contacts) 	Standard	HW-DA1B
	Fingersafe	HW-DA1FB

-  All Transformers step down to 6V (use 6V lamp).

Switches & Pilot Devices