

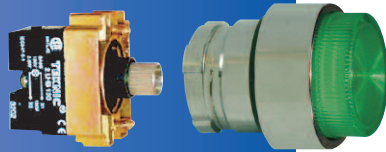
22mm LED Illuminated Metal Projecting Operators



Certified for
NEMA Type 4X
12 environment.

Projecting Momentary

with bulb, bulb holder
and mounting bracket



**SAMPLE
ASSEMBLY**



Replacement bulbs
available.
See page 39.

Color	Voltage	Cat No.
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12V AC/DC		
<input type="checkbox"/>	White	12V AC/DC 2ALP1LB-012
<input checked="" type="checkbox"/>	Green	12V AC/DC 2ALP3LB-012
<input checked="" type="checkbox"/>	Red	12V AC/DC 2ALP4LB-012
<input checked="" type="checkbox"/>	Amber	12V AC/DC 2ALP5LB-012
<input checked="" type="checkbox"/>	Blue	12V AC/DC 2ALP6LB-012
<input type="checkbox"/>	Clear	12V AC/DC 2ALP7LB-012
<input checked="" type="checkbox"/>	Yellow	12V AC/DC 2ALP8LB-012

24V AC/DC

<input type="checkbox"/>	White	24V AC/DC 2ALP1LB-024
<input checked="" type="checkbox"/>	Green	24V AC/DC 2ALP3LB-024
<input checked="" type="checkbox"/>	Red	24V AC/DC 2ALP4LB-024
<input checked="" type="checkbox"/>	Amber	24V AC/DC 2ALP5LB-024
<input checked="" type="checkbox"/>	Blue	24V AC/DC 2ALP6LB-024
<input type="checkbox"/>	Clear	24V AC/DC 2ALP7LB-024
<input checked="" type="checkbox"/>	Yellow	24V AC/DC 2ALP8LB-024

48V AC/DC

<input type="checkbox"/>	White	48V AC/DC 2ALP1LB-048
<input checked="" type="checkbox"/>	Green	48V AC/DC 2ALP3LB-048
<input checked="" type="checkbox"/>	Red	48V AC/DC 2ALP4LB-048
<input checked="" type="checkbox"/>	Amber	48V AC/DC 2ALP5LB-048
<input checked="" type="checkbox"/>	Blue	48V AC/DC 2ALP6LB-048
<input type="checkbox"/>	Clear	48V AC/DC 2ALP7LB-048
<input checked="" type="checkbox"/>	Yellow	48V AC/DC 2ALP8LB-048

110V AC

<input type="checkbox"/>	White	110V AC 2ALP1LB-110
<input checked="" type="checkbox"/>	Green	110V AC 2ALP3LB-110
<input checked="" type="checkbox"/>	Red	110V AC 2ALP4LB-110
<input checked="" type="checkbox"/>	Amber	110V AC 2ALP5LB-110
<input checked="" type="checkbox"/>	Blue	110V AC 2ALP6LB-110
<input type="checkbox"/>	Clear	110V AC 2ALP7LB-110
<input checked="" type="checkbox"/>	Yellow	110V AC 2ALP8LB-110

110V DC

<input type="checkbox"/>	White	110V DC 2ALP1LB-110D
<input checked="" type="checkbox"/>	Green	110V DC 2ALP3LB-110D
<input checked="" type="checkbox"/>	Red	110V DC 2ALP4LB-110D
<input checked="" type="checkbox"/>	Amber	110V DC 2ALP5LB-110D
<input checked="" type="checkbox"/>	Blue	110V DC 2ALP6LB-110D
<input type="checkbox"/>	Clear	110V DC 2ALP7LB-110D
<input checked="" type="checkbox"/>	Yellow	110V DC 2ALP8LB-110D

230V AC

<input type="checkbox"/>	White	230V AC 2ALP1LB-230
<input checked="" type="checkbox"/>	Green	230V AC 2ALP3LB-230
<input checked="" type="checkbox"/>	Red	230V AC 2ALP4LB-230
<input checked="" type="checkbox"/>	Amber	230V AC 2ALP5LB-230
<input checked="" type="checkbox"/>	Blue	230V AC 2ALP6LB-230
<input type="checkbox"/>	Clear	230V AC 2ALP7LB-230
<input checked="" type="checkbox"/>	Yellow	230V AC 2ALP8LB-230

230V DC

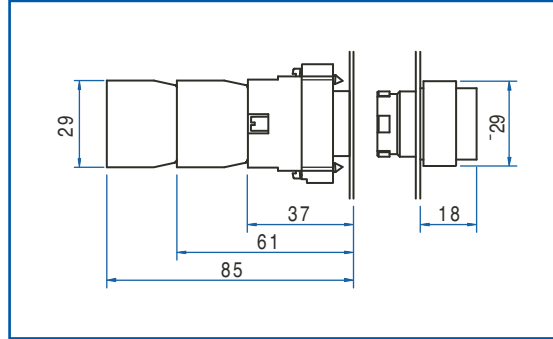
<input type="checkbox"/>	White	230V DC 2ALP1LB-230D
<input checked="" type="checkbox"/>	Green	230V DC 2ALP3LB-230D
<input checked="" type="checkbox"/>	Red	230V DC 2ALP4LB-230D
<input checked="" type="checkbox"/>	Amber	230V DC 2ALP5LB-230D
<input checked="" type="checkbox"/>	Blue	230V DC 2ALP6LB-230D
<input type="checkbox"/>	Clear	230V DC 2ALP7LB-230D
<input checked="" type="checkbox"/>	Yellow	230V DC 2ALP8LB-230D

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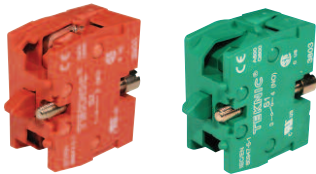
Dimensional Drawings

All dimensions shown in millimeters.
To convert to inches multiply by 0.03937

Projecting Momentary



Switch Contacts *(sold separately)*



- Heavy-duty contact blocks with mounting screws. Blocks can be stacked 2 blocks across by 3 blocks deep for a total of 6 circuits.
- Contact blocks are available with silver contacts or gold plated contacts
- Self-wiping contacts

Panel Mount

Normally Open Silver	S1
Normally Closed Silver	S2
Normally Open Gold Plated	S3
Normally Closed Gold Plated	S4

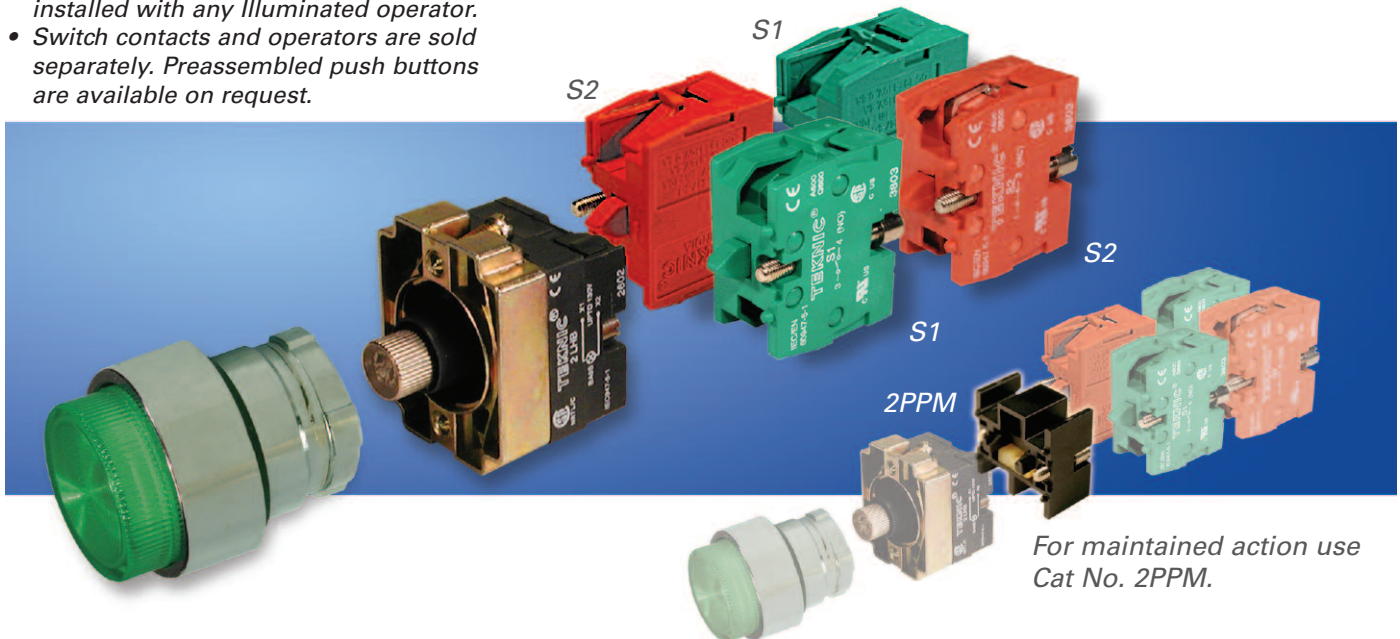
Base Mount*

Normally Open Silver	S5
Normally Closed Silver	S6
Normally Open Gold Plated	S7
Normally Closed Gold Plated	S8

* For use with non-illuminated operators in thermoplastic or aluminum enclosures listed on pages 30 and 36-37.

Exploded Assembly View

- Up to four switch contacts can be installed with any illuminated operator.
- Switch contacts and operators are sold separately. Preassembled push buttons are available on request.



For maintained action use
Cat No. 2PPM.

22mm Specifications

Electrical and Mechanical Characteristics

Standard conformity:	IEC 60947-5-1
Approvals:	VDE0660 CSA - C22.2 No. 14-95 UL508 IEC 947 - 5 (1) 1990, IS 13947 ASTA UK certified as per IEC 947 - 5 - (1) 1990
Degree of protection:	IP 65 as per IEC 529 NEMA Type 4X, 12 as per UL50
Temperature Range:	- 25°C to + 70°C (-13°F to +158°F)

Contact Block

Rated voltage:	600V AC /DC
Rated current:	10A AC / 2.5A DC
Contact operation:	self-wiping, slow break NO or NC
UL508 rating (pilot duty):	
CSA - C22.2 No. 14-95:	A600: 10A; 600V AC Q600: 2.5A; 600V DC
Make and break capacity	
IEC 947 - 5 - (1) 1990:	AC 15 4A, 415V AC DC 13 0.5A, 110V DC
Terminal capacity:	minimum 20 AWG (0.5 mm ²) maximum 2x16 AWG (2 x 1.5 mm ²) or 14 AWG (2.5 mm ²)
Terminal marking:	1-2 for NC, 3-4 for NO
Short circuit protection:	10A cartridge fuse HRC type, rated for resistive loads
Mechanical life:	1 million operations

Modules for Pilot Lights & Illuminated Switches with LED Bulbs

Current consumption (applicable to all colors)	
24 VAC/DC, 100 VAC & 240 VAC:	max. 20 mA
110 VDC:	max. 15 mA
220 VDC:	max. 10 mA
Service life (at nominal voltage and at ambient temperature of 25°C):	100,000 hours
Voltage limits (nominal voltage):	<20% of rated voltage>
Short circuit protection:	on specific request
Terminal capacity:	min. 1 x 0.5 mm ² (20 AWG), max. 2 x 1.5 mm ² (2x16 AWG) or 1 x 2.5 mm ² (1x14 AWG)