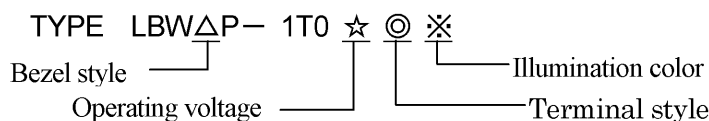


## FLUSH SILHOUETTE SWITCHES LBW SERIES PILOT LIGHTS

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1. Applicable standard
- JIS C8201-5-1
  - IEC60947-5-1
  - EN60947-5-1
  - UL508 (UL Recognition)
  - CSA C22.2 NO.14 (CSA Approval)

2. Operating conditions
- (1) Ambient temperature -25 to +55°C (no freezing)
  - (2) Storage temperature -30 to +80°C (no freezing)
  - (3) Relative humidity 45 to 85% (no condensation)
  - (4) Altitude 2000m maximum
  - (5) Pollution degree 3

3. LED ratings
- (1) Rated insulation voltage 30V
  - (2) Rated operating voltage — (☆) See the table bellow

Voltage code (☆)	(1)	(3)	(4)
Rated operating voltage	5V DC ±5%	12V AC/DC ±10%	24V AC/DC ±10%
Applicable LED unit	LB9Z-LED5※	LB9Z-LED1※	LB9Z-LED2※
Rated operating current	R, A, W: 18mA G, S: 6mA PW:5mA	R, A, W: 18mA G, S: 6mA PW:5mA	R, A, W: 18mA G, S: 6mA PW:5mA

Illumination color (※): Red (R), Green (G), Amber (A), White (W), Blue (S), Pure White (PW)

4. Constructions
- (1) Outside view See attached sheet
  - (2) Degree of protection IP65
  - (3) Bezel style— (△) Round/ black (6), Square/ black (7),  
Round/ metallic (6M), Square/ metallic (7M),
  - (4) Illumination color— (※)
    - (a) Colored lens type Red (R), Green (G), Yellow(Y), Amber (A), White (W), Blue (S), Pure White (PW)  
(A pure white LED unit shall be used for yellow illumination.)
    - (b) White lens type Red (WR), Green (WG), Amber (WA), Blue (WS)
  - (5) Illumination style Flat
  - (6) Terminal style— (◎) Solder/tab terminal (#110) (blank)  
PC board terminal (V)
  - (7) Applicable wire 1.25mm<sup>2</sup> maximum

( 8 ) Panel thickness	0.5 to 3.2 mm
( 9 ) Panel cut-out	Round: $\phi 22.3^{+0.2}$ mm Square: $\square 22.5^{+0.2}$ mm
( 1 0 ) Weight	Approx. 14g (Square)

## 5. Characteristics

( 1 ) Temperature rise	Terminal : 30°C maximum, Lens surface: 30°C maximum
( 2 ) Insulation resistance	100M $\Omega$ minimum (measured with a 500V DC megger)
( 3 ) Dielectric strength	2000V AC, 1minute (Between live and dead parts)
( 4 ) Vibration resistance	
(a) Operating extremes	Frequency 5 to 55Hz, Amplitude 0.5mm
(b) Damage limits	Frequency 5 to 55Hz, Amplitude 0.5mm
( 5 ) Shock resistance	
(a) Operating extremes	100 m/s <sup>2</sup>
(b) Damage limits	1000 m/s <sup>2</sup>
( 6 ) LED life (reference value)	30,000 hour (When, under 25 degrees environment, brightness reduces to 50% of initial values by the rating voltage, a rating electric current)
( 7 ) Mounting nut torque tightening	0.6 $\pm$ 0.1 N·m
( 8 ) Terminal strength	40N minimum