

INDICATING LIGHTS

22.5 mm INDICATOR LIGHTS— COMPLETE ASSEMBLIES

OMPBD-IL
Series



- **Optically Enhanced Lens Style**
- **Complete One Piece Panel Mounting (Bulb Included)**
- **Incandescent or LED Bulbs Available for Multiple Voltages**
- **One Piece Part Number for Easy Ordering**
- **Available in 6 Colors: Red, Green, Amber, Blue, Yellow and Clear**
- **UL Type 4/4x/13, IP66**
- **Touch-Safe Screw Terminal Connections (IP2X)**

The D7D Monolithic Series indicator lights provide a price effective range for 22.5 mm signal control devices. Constructed from high quality industrial grade thermoplastic, these pilot lights feature a unique one piece body that incorporates both the front and rear panel components and the bulb into one element for quick assembly and ease of ordering.

These indicating lights are corrosion and UV resistant and meet the requirements for UL Type 4/4x/13 and IP66 sealing. They incorporate a low mounting profile and have an optically enhanced lens. The integrated LED bulbs have superior shock and vibration ratings, a life rating of up to 100,000 hours and leakage current protection up to 3 mA. LED bulbs are available in 24 Vac/dc, 120 and 240 Vac. The incandescent bulbs are front replaceable and are available in 6, 12, 24, 48 and 120 volts.

MECHANICAL RATINGS

Vibration (Assembled to Panel): Tested at 10 to 2000 Hz, 1.52 mm displacement (peak-to-peak) max/10 G max for 3 hr duration, no damage

Shock: Tested at ½ cycle sine wave for 11 ms; no damage at 100 G

Degree of Protection: IP66 (type 3/3R/4/4X/12/13)

Mechanical Durability Per EN 60947-5-1 (Annex C):

2,000,000 Cycles: Momentary pushbutton

300,000 Cycles: Selector switch and E-stop/push-pull

Operating Forces: Flush/extended = 9 N, E-stop = 36 N

Operating Torque (Typical Application with One Contact Block): Selector switch = 0.25 N•m

Contact Operation:

NO: Slow double make and break

NC: Slow double make and break—positive opening

Push Button Travel to Change Electrical State:

NO: 2.5 mm (0.1")

NC: 1.5 mm (0.060")

Note: Positive opening per EN60947-5-1 (applies to all NC contact block styles)



OMPBD7D-P4N5 120V, red LED indicating light.

All models shown larger than actual size.



OMPBD7D-P0D3 24 Vac/dc, amber incandescent indicating light.



OMPBD7D-P3N3 24V, green LED indicating light.

ENVIRONMENTAL

Temperature Range:

Operating: -25 to 60°C (-13 to 140°F)

Temperature Range:

Short Term Storage: -40 to 85°C (-40 to 185°F)

Humidity: 50 to 95% RH from 25 to 60°C (77 to 140°F)

UV RATINGS

All Plastic Non-Illuminated Pushbutton Caps and E-Stops:

UV grade polyester and polycarbonate blend, UL, UV Category (f2)

All Plastic Enclosures: UV grade polyester and polycarbonate blend, UL UV category (f1)

ELECTRICAL RATINGS

Standard Contact Block Ratings: B300, R300; AC 15, DC 13; 300 Vac; EN/IEC 60947-5-1 and UL 508, 17V, 5 mA min

LED MODULE RATING			
NOMINAL VOLTAGE	RANGE	NOMINAL CURRENT DRAW	FREQUENCY
24 Vac	20 to 26 Vac	32 mA	50/60 Hz
24 Vdc	18 to 30 Vdc	24 mA	DC
120 Vac	102 to 132 Vac	22 mA	50/60 Hz
240 Vac	204 to 264 Vac	22 mA	50/60 Hz

Thermal Current: 5 A max enclosed (40°C ambient) to UL508, EN/IEC 60947-5-1

Insulation Voltage (Ui): 300V

Wire Capacity (Screw Terminal):

#18 to 14 AWG (0.75 to 2.5 mm²), max (2) #14 AWG, uses same size wire only

Recommended Tightening Torque on Screw Terminals:

0.7 to 0.9 N•m (6 to 8 lb in)

Dielectric Strength (Minimum): 2500V for one minute

External Short Circuit Protection: 5 A type gL/gG cartridge fuse to EN 60269-2-1 or gN (Class J to UL 248-8 or Class CC to UL 248-4)

Electrical Shock Protection: Finger-safe conforming to IP2X

ILLUMINATION

LED Dominant Wavelength:

Green: 525 nm

Red: 629 nm

Yellow: 590 nm

Blue: 470 nm

LED Luminous Wavelength:

Green: 780 mcd

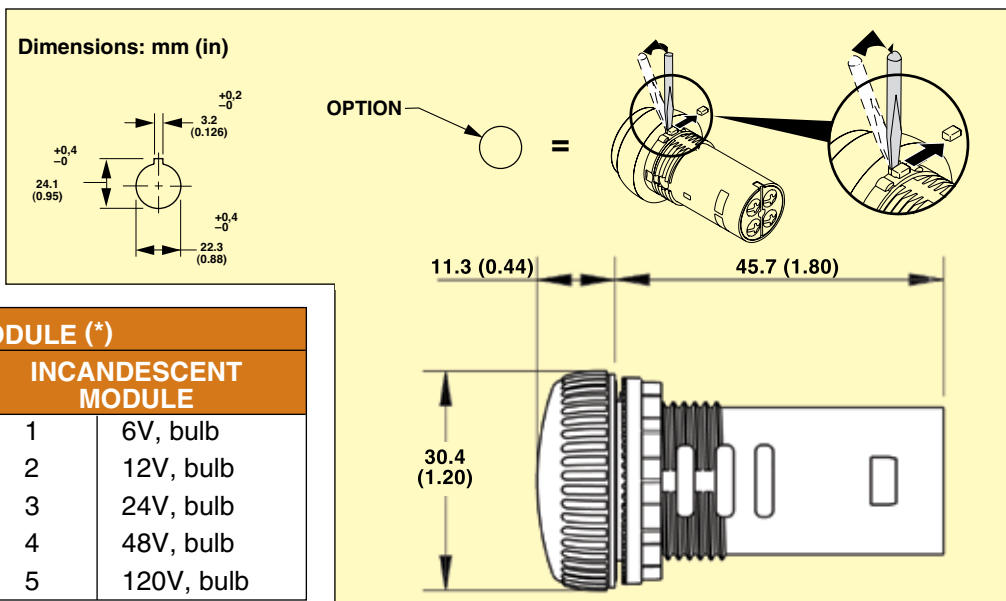
Red: 780 mcd

Yellow: 600 mcd

Blue: 168 mcd

White: 360 mcd

Note: Incandescent maximum wattage is 2.6 W



POWER MODULE (*)			
LED MODULE		INCANDESCENT MODULE	
3	24 Vac/dc	1	6V, bulb
5	120 Vac	2	12V, bulb
7	240 Vac	3	24V, bulb
		4	48V, bulb
		5	120V, bulb

To Order

MODEL NO.	COLOR	BULB STYLE	MODEL NO.	COLOR	BULB STYLE
OMPBD7D-P0N(*)	Amber	LED	OMPBD7D-P0D(*)	Amber	Incandescent
OMPBD7D-P3N(*)	Green	LED	OMPBD7D-P3D(*)	Green	Incandescent
OMPBD7D-P4N(*)	Red	LED	OMPBD7D-P4D(*)	Red	Incandescent
OMPBD7D-P5N(*)	Yellow	LED	OMPBD7D-P5D(*)	Yellow	Incandescent
OMPBD7D-P6N(*)	Blue	LED	OMPBD7D-P6D(*)	Blue	Incandescent
OMPBD7D-P7N(*)	Clear	LED	OMPBD7D-P7D(*)	Clear	Incandescent

REPLACEMENT INCANDESCENT BULBS

MODEL NO.	DESCRIPTION
OMPBD7-N65	6 Vac/dc bulb, 0.095 W, 150 mA
OMPBD7-N141	12 Vac/dc bulb, 1.12 W, 80 mA
OMPBD7-N157	24 Vac/dc bulb, 2.24 W, 70 mA
OMPBD7-N48	48 Vac/dc bulb, 2.40 W, 50 mA
OMPBD7-N130	130 Vac/dc bulb, 2.86 W, 220 mA

(*) Insert number for bulb voltage.

Ordering Examples: OMPBD7D-P3N5, green pilot light with integrated 120 Vac LED bulb.

OMPBD7D-P4D3, red pilot light with replaceable incandescent 24V bulb.

MATERIALS

Springs: Stainless steel and zinc coated music wire

Electrical Contacts: Brass with silver-nickel contacts

Terminals: Brass and phosphor bronze

Panel Gasket: Nitrile and polyester-based TPE

Seal: Nitrile

Button Cap/Mushroom Head: Polyester/polycarbonate blend

Lens (Pilot Light): Acrylic

Knob (Selector Switch): Glass filled polyamide

Bezel/Bushing, Housing: Glass filled polyester

Legend Frames: Glass filled polyamide

Mounting Ring: Glass filled polyamide

Terminal Screws: Zinc-plated steel with chromate

Lamp Socket: Brass and phosphor bronze

PRODUCT CERTIFICATIONS

Certifications: UL, CSA, CCC, CE

Conformity to Standards-CE Marked: UL 508, EN 60947-1, EN 60947-5-1, EN 60947-5-5

Terminal Identification: EN/IEC 60947-1