

## FLB Series Bases and Domes

### ANSI C136.41 COMPATIBLE BASES AND DOMES FOR ROADWAY AND OUTDOOR LIGHTING

The FLB series base assembly provides a platform for a customer supplied PCBA providing photocell or other control functionality. The FLB base mates with the FLA series receptacle and utilizes twist lock technology to provide a secure, integrated power and signal interface solution for use in roadway and area lighting applications. The FLB series cover couples with the base to provide IP66 protection (per IEC 60529) for the mated photocell/control assembly. All base assembly components meet the UL94V-0 flammability rating, and the cover meets the UL94-5VA flammability rating.

- 0, 2 or 4 dimming contacts options
- RoHS Compliant
- Bases available in 76mm diameter
- Domes available in 35mm, 50mm, 60mm, 75mm, 100mm & 130mm heights
- Domes available in Grey, Clear, Red, Black, White and Translucent colors



#### FEATURES

- 0, 2 or 4 dimming contacts options
- UL94V-0 rated engineering thermoplastic bases and UL94-5VA Polycarbonate domes
- RoHS compliant
- Vented and non-vented base options are available for moisture control
- Utilizes twist lock technology
- Integrated mating gaskets and O-rings on the bases

#### BENEFITS

- Supports power only, or power plus 1 or 2 sets of dimming and/or additional control functions
- Meets critical safety standards
- Meets environmental, health and safety requirement
- Venting allows air pressure equalization while preventing moisture ingress to the photocell assembly
- Provides securely latched power and signal interface
- Ensures IP66 rating performance to protect equipment from moisture ingress

## TECHNICAL INFORMATION

### MATERIAL

- Bases: Engineering thermoplastic, UL94V-0 flammability rated
- Domes: Polycarbonate, UL94V-5V flammability rated
- Mating Gasket: Self-adhesive EPDM/SILICONE foam rubber with self-adhesive, UL94V-0 flammability rating
- O-Ring: Silicone rubber, UL94V-0 flammability rating
- Dimming Contacts: Copper alloy plated with Nickel overall, matte Tin on the tails and 0.76µm Gold in the mating area
- Power Contacts: Copper alloy plated with tin over nickel

### MECHANICAL PERFORMANCE

- Thermal Shock: 25 cycles between -40°C and +105°C, per EIA-364-32
- Mechanical Shock: 30 G's, ½ sine, 11 ms, per EIA-364-27
- Humidity: Per EIA-364-31, Method IV, Cond. B, Omitting 7b
- Vibration with load: 15 A load, per EIA-364-28, Cond. I
- Salt Spray: 240 hrs, per EIA364-26
- Durability: 25 cycles, per EIA-364-09
- Operating Temperature: -40°C to 85°C
- Temperature Rise: 30°C max  $\Delta T$  @ rated current, per EIA-364-70
- Ingress Protection Ratings: IP66 (with approved domes)
- Impact Rating: IK09/Top Side and IK07 (side)

### ELECTRICAL CHARACTERISTICS

- Power Contact Voltage Rating: 600V AC/DC
- Power Contact Current Rating: 15A max. per circuit @ 25°C
- Dimming Contact Current Rating: 1.5A max per circuit @ 25°C, 30°C max  $\Delta T$
- Dimming Contact Voltage Rating: 30V DC
- Contact Resistance LLCR:  $\Delta 30m\Omega$  max.
- Insulation Resistance: 500M $\Omega$  min. @ 500VDC test voltage
- Dielectric Withstanding Voltage: 2500V AC

### PACKAGING

- Box

### SPECIFICATION

- Amphenol Specification: S6169C

### ENVIRONMENTAL

- RoHS compliant per EU directive 2011/65/EU and amendments

### APPROVALS & CERTIFICATION

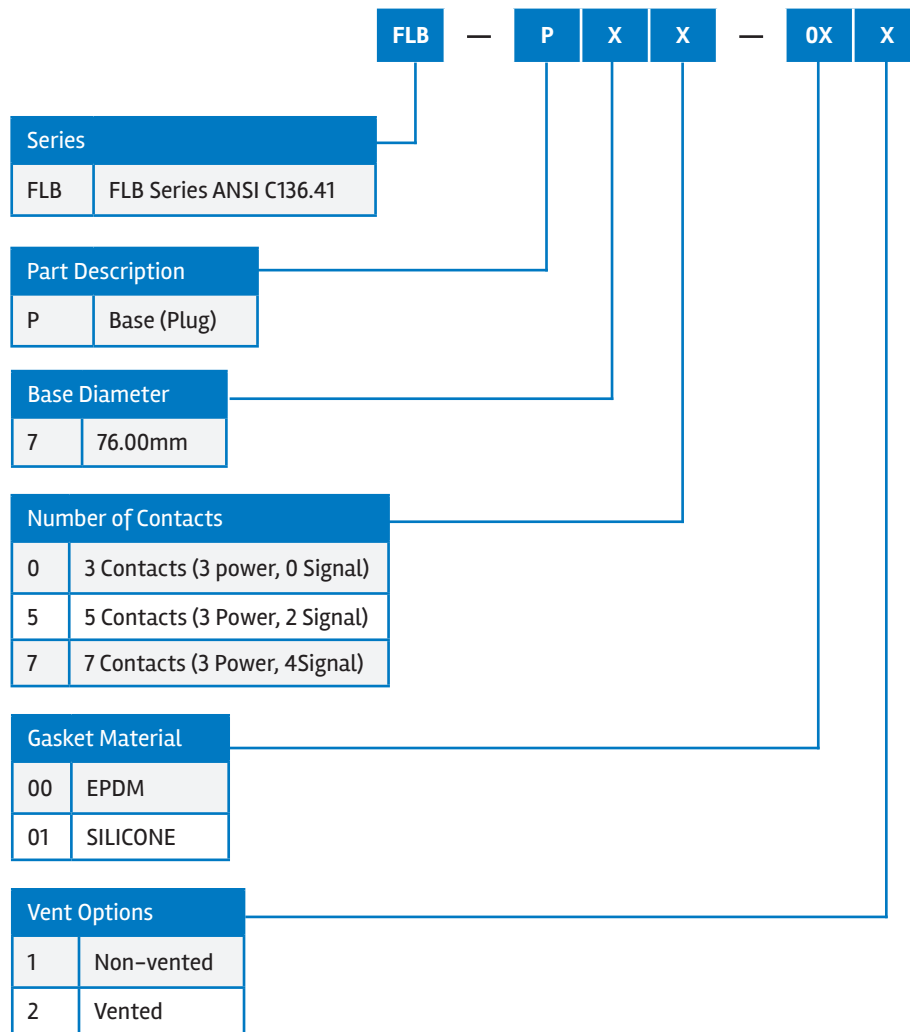
- UL Pending

### TARGET MARKETS/APPLICATIONS



Roadway Lighting  
Outdoor Lighting

## PART NUMBER SELECTOR – BASES



## ENVIRONMENTAL CHARACTERISTICS

| GASKET MATERIAL | IP RATING* (PER IEC 60529) | OPERATING TEMPERATURE |
|-----------------|----------------------------|-----------------------|
| EPDM            | IP53                       | –40°C to +65°C        |
| SILICONE RUBBER | IP66                       | –40°C to +85°C        |

## PART NUMBERS – BASES /EXAMPLES

| Description                                                      | Part Numbers |
|------------------------------------------------------------------|--------------|
| FLB Base NEMA ANSI C136.41, 76mm, 3 Power, No Signal, Non-Vented | FLB–P70–001  |
| FLB Base NEMA ANSI C136.41, 76mm, 3 Power, 2 Signal, Non-Vented  | FLB–P75–001  |
| FLB Base NEMA ANSI C136.41, 76mm, 3 Power, 4 Signal, Non-Vented  | FLB–P77–001  |

## PART NUMBER SELECTOR – DOMES

|  |            |   |          |           |   |           |          |   |            |
|--|------------|---|----------|-----------|---|-----------|----------|---|------------|
|  | <b>FLB</b> | — | <b>C</b> | <b>XX</b> | — | <b>XX</b> | <b>X</b> | — | <b>001</b> |
|--|------------|---|----------|-----------|---|-----------|----------|---|------------|

| Series |                         |
|--------|-------------------------|
| FLB    | FLA Series ANSI C136.41 |

| Part Description |              |
|------------------|--------------|
| C                | Cover (Dome) |

| Cover Diameter |         |
|----------------|---------|
| 70             | 76.00mm |

| Height |       |
|--------|-------|
| 35     | 35mm  |
| 50     | 50mm  |
| 75     | 75mm  |
| 10     | 100mm |
| 13     | 130mm |

| Color |             |
|-------|-------------|
| 1     | Grey        |
| 2     | Clear       |
| 3     | Red         |
| 4     | Black       |
| 5     | White       |
| 6     | Translucent |

| Modifier |                |
|----------|----------------|
| 001      | 001 = Standard |

## PART NUMBERS – DOMES/ EXAMPLES

| Description                                          | Part Numbers    |
|------------------------------------------------------|-----------------|
| FLB Dome, NEMA ANSI C136.41, 76mm, 35mm Height, Grey | FLB-C70-351-001 |
| FLB Dome, NEMA ANSI C136.41, 76mm, 50mm Height, Grey | FLB-C70-501-001 |