BrightConnX™ ANSI C136.41 FLB Series Bases & Domes

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

The BrightConnX™ FLB series base assembly provides a platform for a customer supplied PCBA providing photocell or other control functionality. The BrightConnX™ FLB base mates with the BrightConnX™ 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 BrightConnX™ 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.



TARGET MARKETS

- 0, 2 or 4 dimming contacts options
- RoHS Compliant
- Bases available in 76mm, 84mm diameter
- Domes available in 35mm, 50mm, 60mm, 75mm, 100mm & 130mm heights
- Domes available in Grey, Clear, Red, Black, White and Translucent colors

FEATURES	BENEFITS
0, 2 or 4 dimming contacts options	Supports power only, or power plus 1 or 2 sets of dimming and/or additional control functions
UL94V-0 rated engineering thermoplastic bases and UL94-5VA Polycarbonate domes	Meets critical safety standards
RoHS compliant	Meets environmental, health and safety requirement
Vented and non-vented base options are available for moisture control	Venting allows air pressure equalization while preventing moisture ingress to the photocell assembly
Utilizes twist lock technology	Provides securely latched power and signal interface
Integrated mating gaskets and O-rings on the bases	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: 30G, ½ sine, 11ms, per EIA-364-27
- Humidity: Per EIA-364-31, Method IV, Cond. B, Omitting 7b
- Vibration With Load: 15A load, per EIA-364-28, Cond. I
- Salt Spray: 240 hrs, per EIA364-26
- Durability: 25 cycles, per EIA-364-09
- Operating Temperature Range: -40°C to 85°C
- Temperature Rise: 30°C max ΔT @ 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: 600VAC/VDC
- Power Contact Current Rating: 15A max. per circuit @ 25°C
- Dimming Contact Current Rating: 1.5A max. per circuit @ 25°C, 30°C max. ΔT
- Dimming Contact Voltage Rating: 30VDC
- Contact Resistance LLCR: Δ30mΩ max.
- Insulation Resistance: 500MΩ min. @ 500VDC test voltage
- Dielectric Withstanding Voltage: 2500VAC

PACKAGING

- Box

SPECIFICATION

- Amphenol Specification: S6169C

ENVIRONMENTAL

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

APPROVALS & CERTIFICATION

- UL, Certification Number: E514916

TARGET MARKETS/APPLICATIONS



Roadway Lighting
Outdoor Lighting

Disclaimer
Please note that the above information is subject to change without notice.

PART NUMBER SELECTOR – BASES

FLB	—	P	X	X	—	0X	X

Series	
FLB	FLB Series ANSI C136.41

Part Description	
P	Base (Plug)

Base Diameter	
7	76.00mm
8	84.00mm

Number of Contacts	
0	3 Contacts (3 power, 0 Signal)
5	5 Contacts (3 Power, 2 Signal)
7	7 Contacts (3 Power, 4Signal)

Gasket Material		
76.00mm base diameter	00	EPDM
	01	SILICONE
84.00mm base diameter	00	SILICONE

Vent Options	
1	Non-vented
2	Vented

ENVIRONMENTAL CHARACTERISTICS

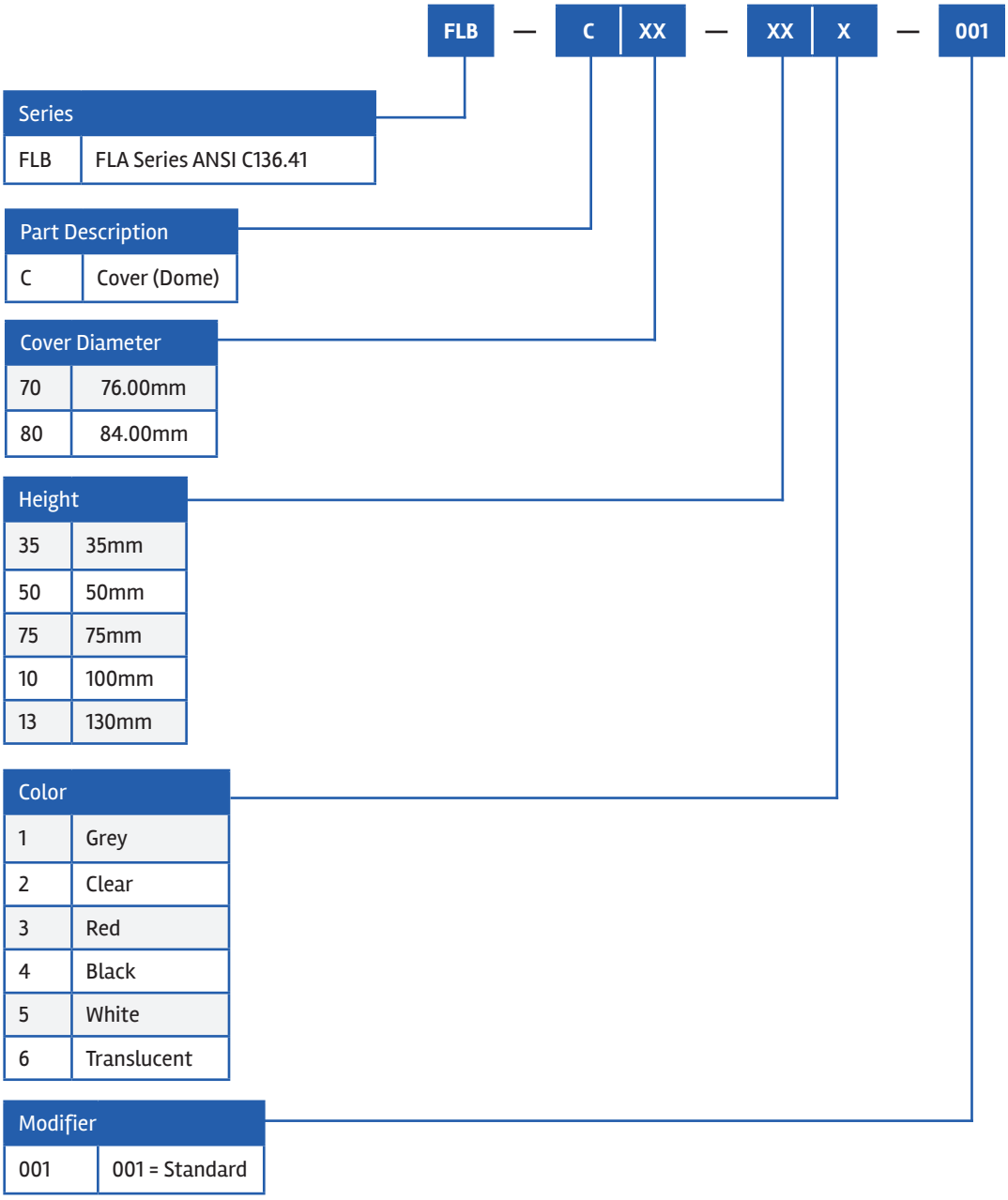
GASKET MATERIAL	IP RATING* (PER IEC 60529)	OPERATING TEMPERATURE
EPDM	IP53	-40°C to +65°C
SILICONE RUBBER	IP66	-40°C to +85°C

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
FLB Base NEMA ANSI C136.41, 84mm, 3 Power, 4 Signal, Non-Vented	FLB-P87-001

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PART NUMBER SELECTOR – DOMES



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
FLB Dome, NEMA ANSI C136.41, 84MM, 100mm Height, Grey	FLB-C80-101-001

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