

BrightConnX™ ANSI C136.41 FLA Series Receptacles & Caps

DIMMING RECEPTACLES, CAPS AND GASKETS, FOR ROADWAY AND OUTDOOR LIGHTING

BrightConnX™ FLA Series Dimming Receptacle – ANSI C136.41 is designed with power and dimming/signal contacts to provide a connection between dimmable photocell and the luminaire for commercial and utility lighting. The locking type receptacles are compliant with ANSI C136.10. BrightConnX™ FLA Dimming Receptacle comes with UL94V-0 high temperature resistant housing and are rated up to 15A per power contact.

- 0, 2 or 4 dimming contacts options
- RoHS Compliant
- UL94V-0 high temperature resistant housing
- Operating temperature range from -40°C to +85°C



TARGET MARKETS



FEATURES

- 0, 2 or 4 dimming contacts options
- UL94V-0 rated high temperature resistant housing
- Receptacle comes pre-terminated with power wire ranging from 16AWG to 14AWG rated at 105°C or 150°C
- Rotatable configurations available
- Tool-less rotatable configurations available
- EPDM or Silicone Rubber gaskets available
- Protective caps with shorting or non-shorting function and integrated sealing gasket
- RoHS compliant

BENEFITS

- Supports Power only, or power plus 1 or 2 sets of dimming and/or additional control functions
- Ensures application safety
- Ease of integration into new or existing light fixtures
- Enhanced 360° alignment capability
- Spring mounted, no tools required to install or adjust
- Silicone gasket provides higher temperature capability and enhanced set resistance
- Ensure environmental protection in absence of a dimming/ photocell module.
- RoHS compliant

TECHNICAL INFORMATION

MATERIAL

- Housings: High temperature resistant thermoplastic, UL94V-0 rated, Black
- Material for Gasket: EPDM or Silicone Rubber
- Dimmable Contacts: Copper Alloy plated with 0.76µm (30µ") min. Gold over Nickel
- Dimmable Contact Wire: Copper with PVC insulation, UL 10070, 18AWG
- Power Contacts: Copper Alloy plated with Tin over Nickel
- Power Contact Wire: Copper with PVC insulation, UL 10070, 14AWG or 16AWG

MECHANICAL PERFORMANCE

- Thermal Shock: 25 cycles from -40°C and 105°C, per EIA-364-32
- Mechanical Shock: 30 G's, 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, Condition I
- Salt Spray: 240 hrs, per EIA364-26
- Durability: 25 cycles, per EIA-364-09
- Operating Temperature – Receptacle : -40°C to +85°C
- Operating Temperature – Gaskets:
 - -40°C to +50°C (EPDM Rubber)
 - -40°C to +150°C (Silicone Rubber)
- Temperature Rise: 30°C max ΔT at rated current, per EIA-364-70
- Ingress Protection Ratings: IP66 (with approved gaskets and caps)
- Impact Rating: IK08/Top Side

RECEPTACLE ELECTRICAL CHARACTERISTICS

- Power Contact Voltage Rating: 600VAC/VDC
- Power Contact Current Rating: 15A max. per circuit at 25°C
- Dimming Contact Voltage Rating: 30VDC
- Contact Resistance LLCR: Δ30mΩ max.
- Insulation Resistance: 500MΩ min. at 500VDC test voltage
- Dielectric Withstanding Voltage: 2500VAC

PACKAGING

- Box

SPECIFICATION

- Amphenol Specification: S6143C

ENVIRONMENTAL

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

APPROVALS & CERTIFICATION

- UL, Certification Number: E514916

TARGET MARKETS/APPLICATIONS



Roadway Lighting
Outdoor Lighting
Area Lighting

PART NUMBER SELECTOR – FLA FIXED ROTATABLE RECEPTACLE

FLA — X X XX X — XX — XX

Series
FLA Series ANSI C 136.41

Fixed / Rotatable

–	Fixed
R	Rotatable
C	Custom

Number of Dimming Contacts

0	No Dimming Contacts
2	2 Dimming Contacts
4	4 Dimming Contacts

Power Contact Wire Gauge

14	14 AWG
16	16 AWG

Wire Options

1	–40°C to +105°C – UL AWM Style wire 1015/10070 – 600V AC
2	–40°C to +150°C – UL AWM Style wire 3289 – 600V AC
3	–40°C to +125°C – UL AWM Style wire 3173 – 600V AC

Connector Wire Length

30	30 = 305mm (Standard)
----	-----------------------

Other Options

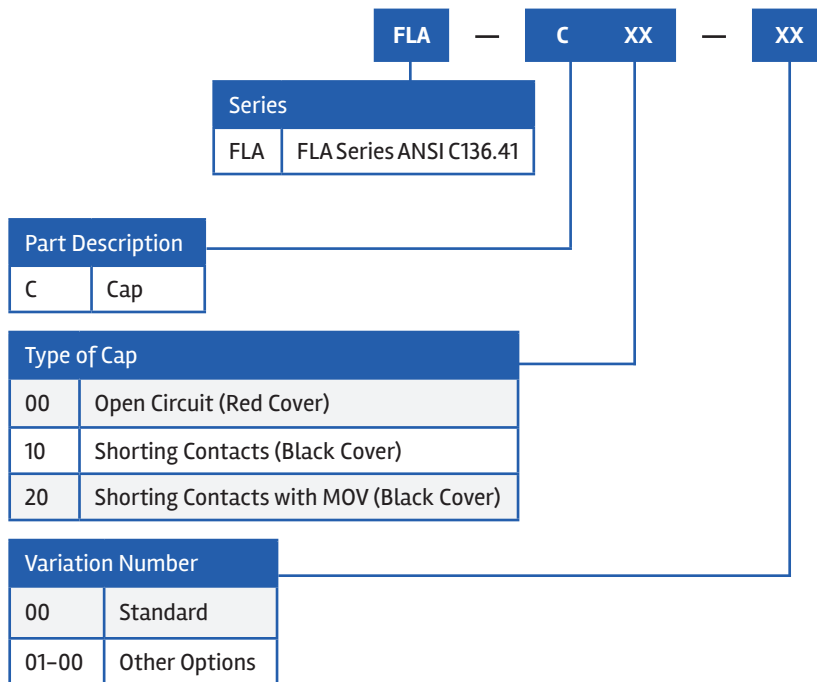
[blank]	Standard
01–99	Other Options

PART NUMBERS – RECEPTACLES /EXAMPLES

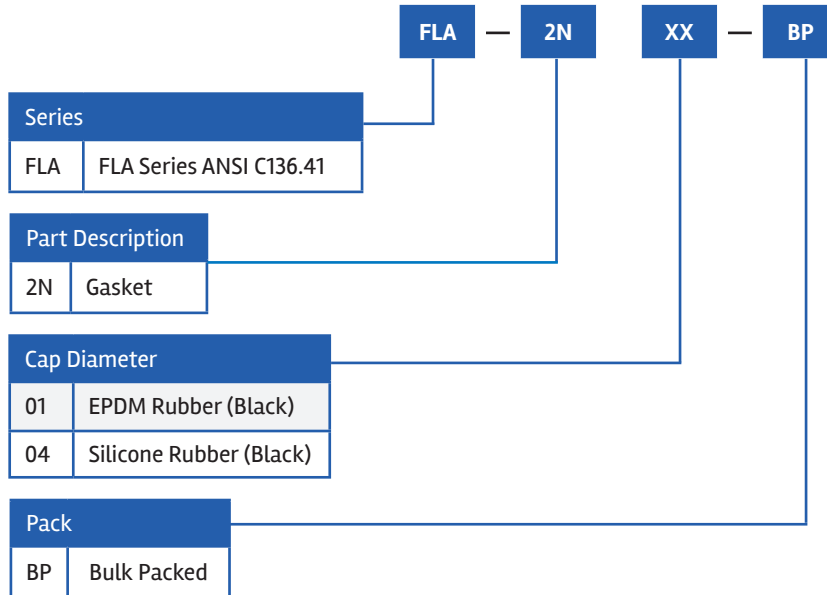
Description	Part Numbers
FLA Fixed Receptacle NEMA ANSI C136.41, No Dimming Contacts, 14AWG, 105C Wire Insulation	FLA-0141-30
FLA Fixed Receptacle NEMA ANSI C136.41, 4 Dimming Contacts, 16AWG, 105C Wire Insulation	FLA-4161-30
FLA Rotatable Receptacle NEMA ANSI C136.41, 2 Diming Contacts 14AWG, 105C Wire Insulation	FLA-R2141-30

All receptacles feature 3 twist–lock power contacts

PART NUMBER SELECTOR – CAPS



PART NUMBER SELECTOR – MOUNTING GASKETS



PART NUMBERS – CAPS & GASKETS/ EXAMPLES

Description	Part Numbers
FLA Open Cap NEMA ANSI C136.41, Open Circuit	FLA-C00-00
FLA Shorting Cap NEMA ANSI C136.41, Shorting Contacts	FLA-C10-00
FLA Shorting Cap NEMA ANSI C136.41, Shorting Contacts with MOV	FLA-C20-00
FLA Panel Gasket NEMA ANSI C136.41, EPDM Rubber, Black	FLA-2N-01BP
FLA Panel Gasket NEMA ANSI C136.41, Silicone Rubber, Black	FLA-2N-04BP

ACPABCXFLA053EA4