

FLA Series Dimming Receptacles, Caps and Gaskets

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

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 available in fixed or rotatable configurations and are compliant with ANSI C136.41 FLA Dimming Receptacles feature UL94V-0 high temperature resistant housings and are rated up to 15A per power contact. NEMA/ANSI FLA-C Caps are available with open circuit, short circuit and short circuit with MOV function. FLA-2N Series mounting gaskets are also available in EPDM or Silicone Rubber versions for better water protection.

- 0, 2 or 4 dimming contacts options
- RoHS Compliant
- UL94V-0 high temperature resistant housing
- Operating temperature range from -40°C to $+85^{\circ}\text{C}$

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



TARGET MARKETS



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-degree 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: IK09/Top Side

RECEPTACLE ELECTRICAL CHARACTERISTICS

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

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)

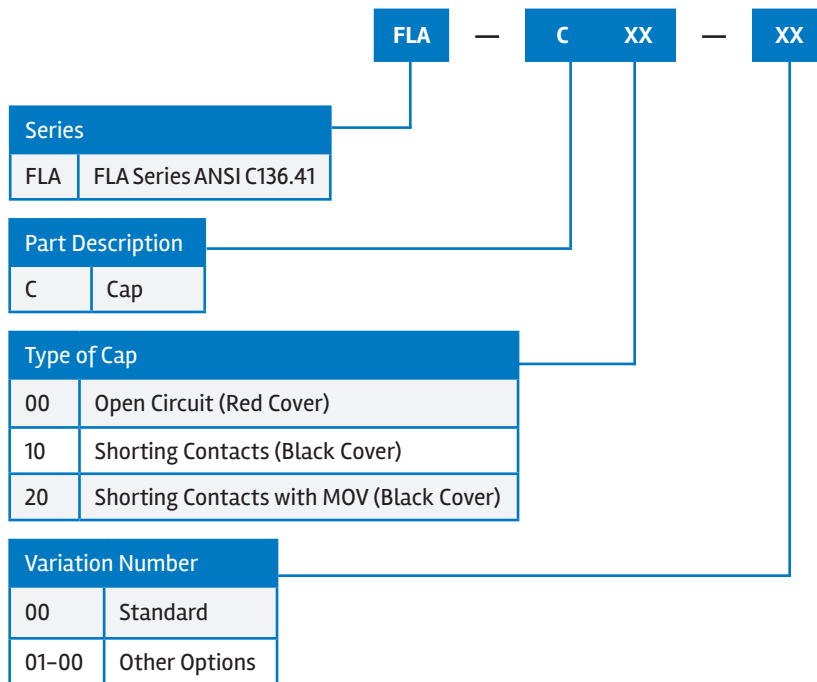
Other Options	
[blank]	Standard
01–99	Other Options

PART NUMBERS – RECEPTACLES /EXAMPLES

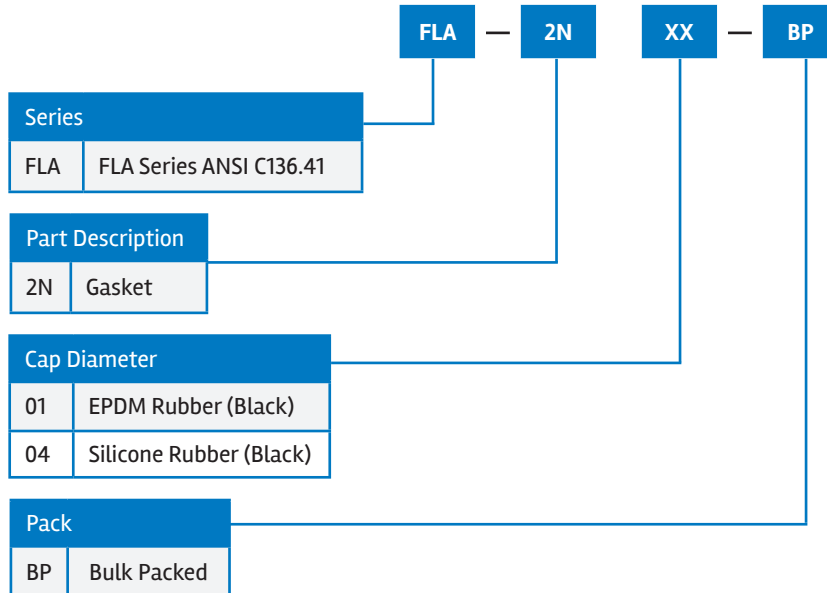
Descrption	Part Numbers
FLA Fixed Receptacle NEMA ANSI C136.41, No Dimming Contacts, 14AWG, 105C Wire Insulation	FLA-0141-30
FLA Fixed Receptacle NEMA ANSI C136.41, 4 Dimming Contacts, 16AWG, 105C Wire Insulation	FLA-4161-30
FLA Rotatable Receptacle NEMA ANSI C136.41, 2 Diming Contacts 14AWG, 105C Wire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