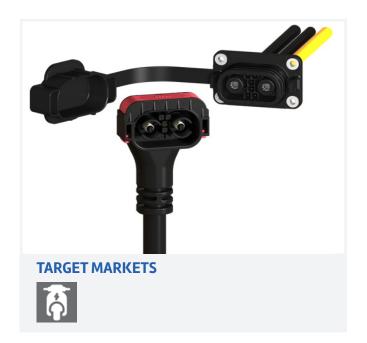


# DuraEV™

# PORTABLE AND FIXED BATTERY CHARGING AND DISCHARGING CONNECTORS

DuraEV<sup>™</sup> is a standard connector solution offered with 2 power and 4/6 signal pins which employs a patented contact system that is capable of carrying a continuous current of 70A with 10,000 mating cycles. IP67 rated in both mated and unmated conditions, DuraEV<sup>™</sup> has finger protection with first mate last break (FMLB) feature for power terminals, and connector position assurance (CPA) to ensure secure locking. They come with an IP cap for the socket side and an optional IP cap for the plug side to prevent the ingression of foreign materials.

- 10,000 mating cycles
- 70A continuous current
- IP67 rated in both mated and unmated condition (with IP cap on socket side)
- Finger protection
- PokaYoke to avoid mismating with FMLB for power terminals



#### **FEATURES**

- 10,000 mating cycles
- Upto 70A of rated current
- Hybrid 2 Power, 4/6 signal connector
- Employed UL94V-0 rated materials
- Operating temperature from -20°C to +90°C
- PokaYoke mating
- Finger protection
- FMLB (First Mate Last Break) for power terminals
- Positive latch and CPA feature
- Optional IP cap for plug
- Metal bush for panel fastening

#### **BENEFITS**

- Highly durable
- High amperage application
- Various range of applications
- Ensures application safety
- Suitable for wide range of application environments
- Easy and efficient assembly during mating
- Safe for manual handling during everyday use
- Power sequencing helps for safe plugging
- Ensures easy mating/unmating and provides secure locking
- Prevents ingression of foreign material
- Takes torque loads for efficient panel IP sealing

### **TECHNICAL INFORMATION**

#### **MATERIAL**

Housings: PA 66 GF30 and PBT GF30, UL94V-0 rated

• Gasket: Silicone Rubber, UL94-V-0 rated

• O-Ring: Silicone Rubber, UL94-V-0 rated

■ IP Cap: PA 66 GF30, UL94V-0 rated

■ Lanyard: TPE, UL94V-0 rated

• Plug Terminals: High Performance Cu Alloy

• Socket Terminals: High Performance Cu Alloy

#### **MECHANICAL PERFORMANCE**

Mating Cycles: 10000 cycles

■ Operating Temperature Range: -20°C to +90°C

■ Temperature Rise: IEC 60512-5-1

#### **ELECTRICAL PERFORMANCE**

Operating Voltage Rating: 120VDC

Operating Current Rating: 70A (16SQMM)

• Insulation Resistance: >5M $\Omega$ 

• Dielectric Strength: 500VDC

#### **PACKAGING**

Bulk Packaging

#### **ENVIRONMENTAL**

- IP67 Rated
- Random vibration at load and mechanical shock
- Climatic Endurance for Bodies
- Climatic Endurance for Contacts
- Salt Stress Endurance
- Dry Heat for Bodies
- Dry Heat for Contacts

#### **APPROVALS AND CERTIFICATIONS**

UL (employed UL certified material - connector level UL pending)

#### **SPECIFICATION**

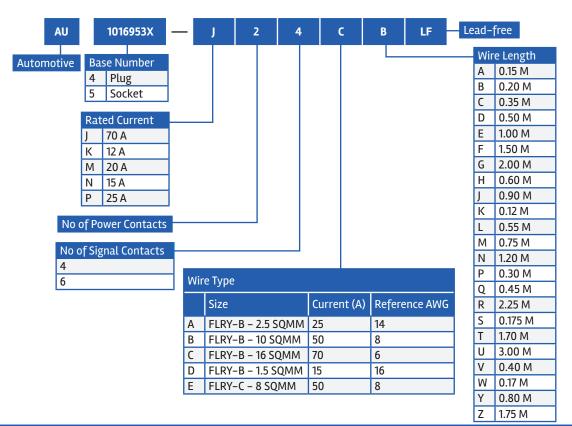
- Amphenol Application Specification: GS-20-0764
- Tested as per IEC 63066

#### **TARGET MARKETS/APPLICATIONS**



**EV** Charging

## PART NUMBER SELECTOR



ACPIDURAEV0123EA<sup>2</sup>