

DuraEV™

PORTABLE AND FIXED BATTERY CHARGING AND DISCHARGING CONNECTORS

DuraEV™ is a standard connector solution with cable assemblies offered with 2 power and 4/6 signal pins which employs a patented contact system capable of carrying a continuous current from 15A up to 70A with 10,000 mating cycles. IP67 rated in both mated and unmated conditions (with IP cap on socket side), DuraEV™ 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 ingress 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 mismatching with FMLB for power terminals
- Mechanical Vibration Compliance as per IEC 63066 additionally under load (Rated Current)



TARGET MARKETS



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 ingress of foreign material
- Takes torque loads for efficient panel IP sealing

▶ DuraEV™ Portable and Fixed Battery Charging Connectors

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 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

ELECTRICAL PERFORMANCE

- Temperature Rise: IEC 60512-5-1
- Operating Voltage Rating: 120VDC
- Operating Current Rating: 70A (16SQMM)
- Insulation Resistance: >5MΩ
- 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)

SPECIFICATION

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

USAGE GUIDELINES

- Product not to be used for hot plugging applications

TARGET MARKETS/APPLICATIONS



EV Charging

PART NUMBER SELECTOR

Find part number details using the search box on www.amphenol-cs.com

AU **1016953X** — **J** **2** **4** **C** **B** **LF** — **Lead-free**

| Automotive | | Base Number | | Rated Current (A) | | No of Power Contacts | | No of Signal Contacts | | Wire Type | | | | Wire Length | |
|------------|--|-------------|------------------|-------------------|-----|----------------------|--|-----------------------|--|-----------|--------------------|----|----|-------------|--------|
| | | 4 | Plug | G | 50A | | | 4 | | A | FLRY-B - 2.5 SQMM | 25 | 14 | A | 0.15M |
| | | 5 | Socket | J | 70A | | | 6 | | B | FLRY-B - 10 SQMM | 50 | 8 | B | 0.20M |
| | | 8 | Plug with IP cap | K | 12A | | | | | C | FLRY-B - 16 SQMM | 70 | 6 | C | 0.35M |
| | | | | M | 20A | | | | | D | FLRY-B - 1.5 SQMM | 15 | 16 | D | 0.50M |
| | | | | N | 15A | | | | | E | FLRY-C - 8 SQMM | 50 | 8 | E | 1.00M |
| | | | | P | 25A | | | | | F | SILICONE - 10 SQMM | 50 | 8 | F | 1.50M |
| | | | | | | | | | | G | | | | G | 2.00M |
| | | | | | | | | | | H | | | | H | 0.60M |
| | | | | | | | | | | J | | | | J | 0.90M |
| | | | | | | | | | | K | | | | K | 0.12M |
| | | | | | | | | | | L | | | | L | 0.55M |
| | | | | | | | | | | M | | | | M | 0.75M |
| | | | | | | | | | | N | | | | N | 1.20M |
| | | | | | | | | | | P | | | | P | 0.30M |
| | | | | | | | | | | Q | | | | Q | 0.45M |
| | | | | | | | | | | R | | | | R | 2.25M |
| | | | | | | | | | | S | | | | S | 0.175M |
| | | | | | | | | | | T | | | | T | 1.70M |
| | | | | | | | | | | U | | | | U | 3.00M |
| | | | | | | | | | | V | | | | V | 0.40M |
| | | | | | | | | | | W | | | | W | 0.17M |
| | | | | | | | | | | Y | | | | Y | 0.80M |
| | | | | | | | | | | Z | | | | Z | 1.75M |
| | | | | | | | | | | 2 | | | | 2 | 5.0M |

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