



LIGHTWEIGHT COMPOSITE Shielding, Grounding, and Wire Cable Management for UAM EWIS Applications

Glenair is the go-to design partner for innovative solutions to electrical wire interconnect system (EWIS) problems in airframe applications. Our backshell and connector accessory design engineers are responsible for more problem-solving innovation in our industry than every other connector accessory supplier combined. Glenair can supply the lightest weight solution for all EWIS cable routing, shield termination, environmental sealing, and cable strain relief applications—all in conductively-plated engineering thermoplastic or galvanically-compatible plated aluminum. FAA type certification of new eVTOL air taxi designs will in part depend on the adoption of proven accessory hardware and wire protection systems with existing flight heritage.



Solid and slit lightweight color-coded wire protection conduit and fittings

Tubular EMC shielding and/or factory overbraiding available

MARKET REQUIREMENTS

- Lightweight, practical solutions to EMI / RFI shielding of EWIS cabling
- Proven lightning strike grounding solutions
- Compatible materials for both aluminum and composite airframes
- Galvanically-matched and compatible EWIS system components
- Expandable and scalable wire protection systems
- EWIS wire protection technologies with proven flight heritage and FAA, EASA, or OEM approval
- Labor-saving designs that improve ease-of-installation and maintenance cycle operations

LIGHTWEIGHT Problem-Solving EMC Shielding and EWIS System Grounding Technologies for aluminum and composite airframes

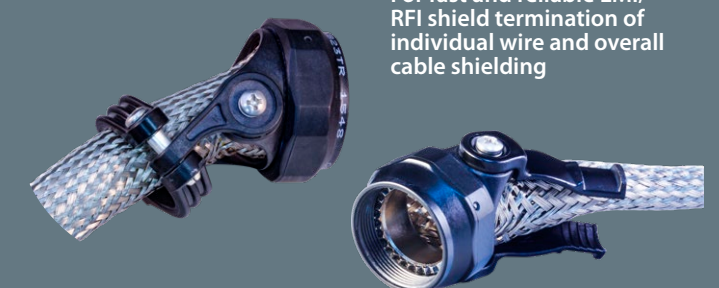


SWING-ARM WITH DROP-IN FOLLOWER FOR DIRECT TERMINATION OF OVERALL OR INDIVIDUAL WIRE SHIELDING



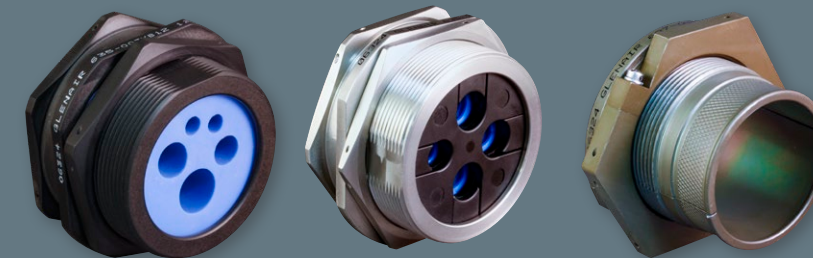
Two drop-in-follower designs, solid and slotted are available for all Swing-Arm styles

SWING-ARM AND SWING-ARM FLEX WITH OPTIONAL INTEGRATED SHIELD SOCK



For fast and reliable EMI/RFI shield termination of individual wire and overall cable shielding

PRESSURE BOUNDARY, FIREWALL, AND SPLIT-SHELL FEED-THRUS



Pressure boundary composite feed-thru

Firewall pressure boundary feed-thru

EMI/RFI split-shell metal feed-thru

- High-grade engineering thermoplastic or machined metal
- Six pressure-boundary feed-thru layouts with accommodation for 1 – 6 cables
- Split-shell jam nut versions with EMI/RFI shield termination porch
- O-ring sealed panel and box mounting interface

SHIELDING AND GROUNDING SOLUTIONS FOR ELECTROMAGNETIC COMPATIBILITY (EMC)



GroundControl Earth Bond system for composite fuselage equipment grounding

Tubular braiding and MasterWrap wraparound shielding for lightweight shielding applications

Lightweight, flexible ground straps and HSTs