

Conduit is an outstanding alternative to jacketed cables, especially for prototype assemblies, systems with extreme flexibility and physical protection requirements and also when the need for field repair or system expansion is anticipated. Polymer tubing versions are lightweight, durable, flexible and available in a broad range of material choices. Metal-core versions offer crush resistance and high-levels of EMI shielding. Connector-to-conduit backshells, transition fittings and special adapters are available in factory assembled and user installable styles. Conduit offers outstanding EMI, mechanical and environmental protection including,

- Easy on-site installation and repair
- Superior crush protection and resistance to projectile damage
- Reliable E and H field EMI shielding
- Superior flexibility compared to jacketed cables
- Superior durability and aging protection from heat, chemicals, and fluids.

Glenair is unique in the industry because we produce all our conduit component elements in-house, including extruded polymer tubing, braided EMI shielding, formed metal-core conduit, and machined, die-cast and injection molded backshells, adapters and fittings. In addition, we offer turnkey (wired and un-wired) conduit assemblies made from both Mil-qualified and Glenair commercial components.

WHY CHOOSE CONDUIT INSTEAD OF A STANDARD CABLE ASSEMBLY?

1 Ease of Installation and Repair

- *Factory terminated point-to-point and multi-branch assemblies deliver exceptional value and convenience.*
- *Conduit can be cut to length on-site and fitted with Glenair user-installable fittings—a faster and less costly solution compared to cabling with its long lead times and minimum orders.*
- *Conduit systems allow easy post-assembly access to wires for repairs, whether in the field or in the factory.*
- *For prototypes and mockups where wire routing lengths cannot be exactly determined before installation, the convenience of conduit as a wire protection solution is unmatched.*
- *Conduit systems are expandable, making it easy to add or remove wires as needed.*



2 Advanced EMI Protection

- *Metal-Core conduit provides optimal EMI/RFI shielding across all frequencies—H and E fields, TEMPEST and lightning strike.*
- *The continuously-wound and solder-sealed tubing completely encloses wire media—eliminating EMI susceptibility and emissions.*
- *Optional metallic or lightweight composite braided shielding provides an additional pathway to ground for EMI.*



3 Environmental and Mechanical Performance



- *Conduit is extremely flexible and offers wire routing versatility and environmental-sealing durability in repetitive flex applications*
- *Conduit delivers crush protection, abrasion protection, and high pull or tensile strength.*
- *Heat-resistant conduit materials, such as PFA, function in extreme temperatures from -95° to 500°F .*
- *High performance polymer materials are resistant to gamma radiation, ozone, fluids, fungus, and offer CBRN certification.*
- *Low smoke, zero halogen, low toxicity materials, such as PEEK, meet stringent environmental requirements.*