Glenair CostSaver Composite EMI/RFI Junction Boxes Design Guide - Step Five

Step Five: Select Box Input-Output Components: Feed-Through Fittings



Designed for use with all types of shielded and unshielded cable and conduit, from less than 1/4" to 1 3/4" in diameter

Glenair manufactures a full spectrum line of feed-through fittings for routing wire, cable and conduit into and out of switch gear and other types of junction boxes. The fittings are also ideal for thru-panel and bulkhead applications.

From environmental sealers and EMI/RFI shield terminators to strain reliefs and shrink boot adapters—Glenair has the right box feed-through for every application requirement.

Stainless versions are available in every configuration, but as a design consideration, composite feedthroughs should be considered for all applications where weight savings and extended corrosion protection is desired. Our composite thermoplastic designs (component series 637-094) offer significant weight savings over stainless steel and, again, unlimited corrosion protection. Many of our most popular part numbers are in stock, in quantity and ready for immediate delivery.

It is particularly important not to specify aluminum alloy fittings for harsh environment box applications. Compared to aluminum alloy, Glenair composite fittings provide equal or improved RFI/EMI protection, and are made from the same high-grade ULTEM® engineering thermoplastic as our boxes. Composite feedthroughs are designed to meet RTCA/ DO-160C environmental conditions and physical strength requirements. Please consult the factory for assistance in selecting the best materials and platings for your application.

Braid Retention Glenair# 9-44-18/TN94-159

Fitting terminations shall be capable of providing 2.5 milliohms maximum resistance between braid and fitting interface when braid is subjected to a tensile load of 5 Kg applied gradually.

EMI Shielding MOD# ME1A24S136F

Shielding effectiveness Shipboard in accordance with M.O.D. Def Standard 59-41 DRE01. The Glenair box is subjected to an EMI field and measured to the level of shielding effectiveness per the Def standard 59-41 DRE01.

Indirect Lightning (Lightning Strike) LT# LT-95-1153, LT-00-1752

Testing in accordance with MIL-STD-1344. Item is subjected to Waveform 1 & 5B using a high current generator. The item must remain functional without degradation of unit's electrical performance. Waveform 1 and 5B are applied starting at 3ka increasing to 20ka checking continuity measurements at set intervals. Waveform 1 will additionally be subjected to an oscillatory wave starting at 30ka and increasing in 10ka steps until failure in continuity measured.



Glenair 147-021 and 147-022 Series Sound Powered Telephone Boxes for the US Navy are available in three box sizes with custom single, dual or quad jack receptacles

Humidity NTS# 575-9249

The test specimen is subjected to the humidity test specified in MIL-STD-1344 Method 1002 Test Condition Type II. The tested item shall exhibit no weight increase, swelling or other evidence of moisture absorption into the base material.

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