



# GREAVES

## Adapters for “Flex cable” PT-FX Adapters

**FAQ** How should I adapt a flexible, high-strand cable to fit properly into a mechanical lug?

When terminating a high-strand, flexible cable into a mechanical lug, the twisting action of the set-screw of a mechanical lug deforms and/or cuts the fine wire strands; this has been seen to result in a hot joint and failure. Therefore, compression connectors are preferred for terminating high-strand, flexible cables. In addition, a flared barrel opening helps to gather the strands (which 'blossom' when cut) during installation.

Greaves PT-FX Series Shoo-Pin™ Flex Cable Adapter Plugs provide a Class B (copper “building wire”) tip for insertion into a mechanical lug. These all-copper compression adapters also incorporate a flared-barrel opening, which greatly aids installation; the smooth inside funnel shape helps assure that every strand slides easily into place the first time.

There are several styles of “flex cable”, and actual bundle dimensions often differ among manufacturers. So, proper barrel-size selection is critical. Typical cable dimension reference information is listed on a sizing chart in the Greaves catalog or website [www.greaves-usa.com](http://www.greaves-usa.com).

PT-FX Shoo-Pin™ Adapters are all-copper, fabricated of seamless copper tubing with a Class B (copper “building wire”) cable plug, or pin. Standard adapters range from the 50FX size for #4AWG Class H “rope”/ Class M “weld”/ 50.5MCM DLO (Diesel Locomotive) cable, through the 1111FX size for 800MCM Class H/ 700MCM Class M/ or 777.7MCM DLO cable. For other sizes or configurations, such as longer plug length, Greaves can quickly fabricate custom configurations.

Applications - Flex cable applications include:

- Vibration, motion, flexing
- Temporary wiring/hookups
- Pull-out drawers requiring movement
- Confined cabinet spaces where tight cable bends are needed.

Markets - Flex cable markets include:

- Marine and docking facilities - temporary hookups
- Offshore oil equipment / shipyards / military - skid mounted power systems
- Machinery - mining, welding, robotics - auto assembly plants
- Material handling - cranes and conveyors
- Amusement park rides
- Locomotive / railroad - manufacturing and rework shops
- Wind power turbines

Disconnect and reconnect

PT-FX Shoo-Pin™ adapters are recommended for situations requiring disconnect and reconnect on flex wire. If mechanical lugs are required, it is best to use lugs which incorporate an intermediate pressure pad to contact the wire, avoiding the twisting action of a set-screw directly on the wire strands. Greaves offers P-type mechanical lugs for this purpose.

Compression lugs

For some applications, lugs can be used rather than pin-type adapters. FX Series Shoo-In Compression Lugs allow reliable termination of high-strand flex cables. The lug is then directly bolted to a mounting pad.

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