



FAQ What type of lug is best to terminate flexible, high-strand cable?

CAUTION

Do not to use mechanical set-screw type lugs (such as standard aluminum mechanical terminals and USA/PBS types) on high-strand flexible cables. The mechanical set-screw imparts a twisting action directly on the fine strands, which deforms and/or cuts the strands.

Compression Lugs

Cable manufacturers recommend compression connectors for terminating flexible, high-strand cables because they impart equal radial pressure around the wire and help to form a dense joint. Also, a flared opening gathers the strands (which 'blossom' when cut) during insertion, which helps to assure that every strand is gathered into the barrel.

Greaves Shoo-in™ Flex Cable Compression Lugs and Splices provide effective termination of high-strand flex cables as recommended by cable manufacturers. The smooth funnel shape of the flare assures that every strand slides easily into place.

Size selection is important, as there are several different classes of "flex cable" stranding with different dimensions, which can vary among manufacturers. A SIZING GUIDE and REFERENCE INFORMATION chart for most of these flex cables is shown on a table in the Greaves catalog. Shoo-in™ connectors are available in several styles; short-barrel lugs with one-hole mount, long-barrel lugs with one-hole or two-hole mount, and short barrel splices. All are fabricated of seamless tin-plated copper. Sizes range from the 50FX size for #4AWG Class H rope/Class M weld/50.5MCM DLO (Diesel Locomotive) cable, through the 1111FX size for 1250MCM Class H/1000MCM Class M/1111.1MCM DLO cable. Custom configurations can also be fabricated.

Applications - Flex cable applications include:

- Vibration, motion, flexing such as pull-out drawers
- Temporary wiring/hookups
- Confined cabinet spaces where tight 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
- Locomotive / railroad - manufacturing and rework shops
- Amusement park rides

Mechanical lugs

If mechanical lugs must be used to allow changeability, it is best to select a pressure-pad type which provides broad, static wire-surface contact pressure on the fine wire strands. The Greaves "P-clamp" type provides effective static pressure-pad clamping (similar to the radial wire pressure of compression connectors).

FAQFX

11/19/01

Rev 08/25/2010