

# NEMA HP8 (Type LS)

## Low Smoke, Cross-Linked Modified Polyethylene - 600V, 105°C

### APPLICATION

This irradiation cross-linked polyethylene insulated wire is formulated to be fire resistant and produce low levels of smoke when burned. It meets the U.S. Navy requirements for smoke, toxicity, and acid gas. The insulation combines excellent thermal stability with very good wet electrical values. Having thermostat mechanical characteristics, it provides a superior small diameter, electronic hook-up wire.

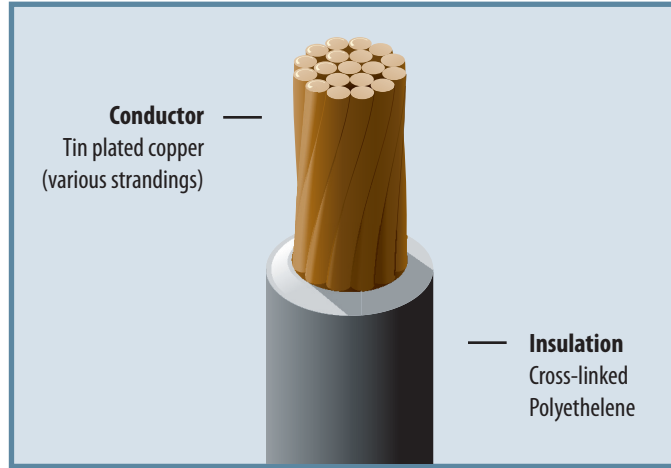
### CONDUCTOR

Soft annealed tin plated copper, stranding as listed in the below table.

### INSULATION

Extruded layer of Cross-linked Polyethylene.

Reference: MIL-DTL-16878/36



| Part Number           | Conductor |                 |                |               | Conductor Resistance @20°C |      | Max. Diameter |      | Weight  |       |
|-----------------------|-----------|-----------------|----------------|---------------|----------------------------|------|---------------|------|---------|-------|
|                       | Size      |                 | Strand-<br>ing | Mat-<br>erial | Ω/kft                      | Ω/km | Inch          | mm   | lbs/kft | kg/km |
|                       | AWG       | mm <sup>2</sup> |                |               |                            |      |               |      |         |       |
| <b>Type LS, 600 V</b> |           |                 |                |               |                            |      |               |      |         |       |
| HP8LS-BDB-X           | 26        | .14             | 7/34           | TC            | 43.4                       | 142  | .041          | 1.04 | 1.50    | 2.23  |
| HP8LS-BEB-X           | 24        | .23             | 7/32           |               | 27.0                       | 88.6 | .046          | 1.17 | 2.10    | 3.13  |
| HP8LS-BFB-X           | 22        | .35             | 7/30           |               | 17.1                       | 56.1 | .052          | 1.32 | 3.10    | 4.61  |
| HP8LS-BGE-X           | 20        | .62             | 19/32          |               | 9.88                       | 32.4 | .060          | 1.52 | 4.70    | 6.99  |
| HP8LS-BHE-X           | 18        | .96             | 19/30          |               | 6.23                       | 20.4 | .070          | 1.78 | 7.10    | 10.6  |
| HP8LS-BJE-X           | 16        | 1.23            | 19/29          |               | 4.81                       | 15.8 | .080          | 2.03 | 9.30    | 13.8  |
| HP8LS-BKE-X           | 14        | 1.94            | 19/27          |               | 3.06                       | 10.0 | .096          | 2.44 | 14.1    | 21.0  |
| HP8LS-BLE-X           | 12        | 3.08            | 19/25          |               | 1.92                       | 6.30 | .125          | 3.18 | 25.2    | 37.5  |
| HP8LS-BMG-X           | 10        | 4.74            | 37/26          |               | 1.26                       | 4.13 | .155          | 3.94 | 38.7    | 57.6  |
| HP8LS-BNL-X           | 8         | 8.61            | 133/29         |               | .701                       | 2.30 | .225          | 5.72 | 65.0    | 96.7  |
| HP8LS-BPL-X           | 6         | 13.6            | 133/27         |               | .445                       | 1.46 | .265          | 6.73 | 101     | 150   |
| HP8LS-BRL-X           | 4         | 22.0            | 133/25         |               | .280                       | .919 | .340          | 8.64 | 149     | 222   |
| HP8LS-BSP-X           | 2         | 34.0            | 665/30         |               | .183                       | .600 | .420          | 10.7 | 237     | 353   |

X = color. See page 67 for color designator.

The above part numbers represent the more popular constructions. However, other designs are available upon request.

All products are manufactured to meet RoHS compliance. For exceptions, please contact our sales department.

### APPROVALS AND RATINGS

NEMA HP8

105°C conductor temperature, 600 volt

US NAVY Acid Gas, Smoke, & Toxicity