

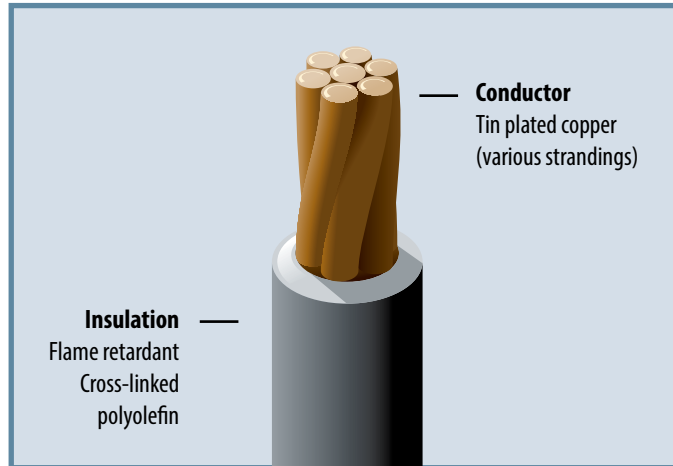
# NEMA HP5 (Type LX)

Cross-Linked Modified Polyethylene  
3000V, 125°C

## APPLICATION

This irradiated polyolefin insulated wire has outstanding flame retardant and high temperature characteristics. It combines excellent thermal stability and high electrical values to provide a superior, small diameter, electronic hook-up wire. The wire passes the difficult VW-1 fire test, has thermoset mechanical characteristics, and very low levels of corrosive content. The wires offer a cost effective alternative to the more expensive fluoropolymers such as PTFE and ETFE.

Reference: MIL-DTL-16878/16



## CONDUCTOR

Soft annealed tin plated copper, stranded as listed below.

## INSULATION

Extruded layer of irradiation cross-linked polyolefin meeting the requirements of specifications DDA 1066.

| Part Number         | Conductor |                 |                |          | Conductor Resistance<br>@20°C |       | Max. Diameter |      | Weight  |       |
|---------------------|-----------|-----------------|----------------|----------|-------------------------------|-------|---------------|------|---------|-------|
|                     | Size      |                 | Strand-<br>ing | Material |                               |       |               |      |         |       |
|                     | AWG       | mm <sup>2</sup> |                |          | Ω/kft                         | Ω/km  | Inch          | mm   | lbs/kft | kg/km |
| HP-5 TYPE LX, 3000V |           |                 |                |          |                               |       |               |      |         |       |
| HP5LX-BDB-X         | 26        | .14             | 7/34           | TC       | 43.4                          | 142   | .085          | 2.16 | 3.9     | 5.80  |
| HP5LX-BEB-X         | 24        | .23             | 7/32           |          | 27.0                          | 88.6  | .090          | 2.29 | 4.7     | 6.99  |
| HP5LX-BFB-X         | 22        | .35             | 7/30           |          | 17.1                          | 56.1  | .098          | 2.49 | 5.9     | 8.78  |
| HP5LX-BGE-X         | 20        | .62             | 19/32          |          | 9.88                          | 32.4  | .105          | 2.67 | 7.4     | 11.0  |
| HP5LX-BHE-X         | 18        | .96             | 19/30          |          | 6.23                          | 20.4  | .114          | 2.89 | 10.0    | 14.9  |
| HP5LX-BJE-X         | 16        | 1.23            | 19/29          |          | 4.81                          | 15.8  | .123          | 3.12 | 14.0    | 21    |
| HP5LX-BKE-X         | 14        | 1.94            | 19/27          |          | 3.06                          | 10.04 | .138          | 3.51 | 19.4    | 29    |
| HP5LX-BLE-X         | 12        | 3.08            | 19/25          |          | 1.92                          | 6.30  | .171          | 4.34 | 28.2    | 42    |
| HP5LX-BMG-X         | 10        | 4.74            | 37/26          |          | 1.26                          | 4.13  | .189          | 4.80 | 38.7    | 57    |
| HP5LX-BNL-X         | 8         | 8.61            | 133/29         |          | .701                          | 2.30  | .254          | 6.45 | 70.1    | 104   |
| HP5LX-BPL-X         | 6         | 13.6            | 133/27         |          | .445                          | 1.46  | .298          | 7.57 | 107     | 159   |
| HP5LX-BRL-X         | 4         | 22.0            | 133/25         |          | .280                          | .919  | .366          | 9.30 | 166     | 247   |
| HP5LX-BSP-X         | 2         | 34.0            | 665/30         |          | .183                          | .600  | .435          | 11.0 | 256     | 380   |
| HP5LX-BTR-X         | 1         | 41.0            | 817/30         |          | .149                          | .489  | .488          | 12.4 | 314     | 467   |
| HP5LX-BUS-X         | 1/0       | 53.0            | 1045/30        |          | .116                          | .381  | .538          | 13.7 | 399     | 593   |
| HP5LX-BWT-X         | 2/0       | 67.0            | 1330/30        |          | .091                          | .299  | .599          | 15.0 | 498     | 741   |
| HP5LX-BYV-X         | 3/0       | 85.0            | 1672/30        |          | .071                          | .233  | .681          | 17.0 | 628     | 934   |
| HP5LX-BZW-X         | 4/0       | 107             | 2109/30        |          | .056                          | .184  | .733          | 19.0 | 785     | 1168  |

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

125°C conductor temperature,  
3000 volt.

NEMA HP-5 Type LX – MIL-W-16878/16

