

THHN / THWN

90°C, 600 V, UL listed, PVC + nylon single core



Technical data

- PVC + Nylon insulated single cores to UL Std.83 and UL Std.1063 (MTW)
- **Temperature range**
THHN dry environments: 90°C
THWN wet environments: 75°C
- **Nominal voltage**
600 V
- **Minimum bending radius**
8x core Ø
- **Test voltage** (Spark test)
 AWG 14 to AWG 10 = 7,5 kV
 AWG 8 to AWG 2/0 = 10 kV
 AWG 3/0 to AWG 4/0 = 12,5 kV
 kcmil 250 to kcmil 500 = 15 kV
 kcmil 600 to kcmil 1000 = 17,5 kV

Cable structure

- Bare copper conductor, with AWG dimensions
- Core insulation of PVC and Nylon-sheath
- Core identification coloured

Properties

Resistant against

- Oils
- Gasoline
- Water
- Acids
- Ozone
- Lyes
- Sunlight
- Abrasion

Note

- 1 kcmil = 1000 circ mils = 0,5067 mm².
- Please complete the part number for these cables by adding the suffix for the colour required as per the list:
 0 = green
 1 = black
 2 = blue
 3 = brown
 4 = red
 5 = white
 6 = grey
 7 = yellow
 8 = orange
 9 = pink

Application

For the electrical installation of machine tools and the relative control. THWN = Thermoplastic PVC-insulated building wire, Heat resistant 75°C, for Wet and dry locations, flame retardant. THHN = Thermoplastic PVC-insulated building wire, Nylon sheath, 90°C, 600 V, for dry and damp locations. **CE** = Product conforms with Low-Voltage Directive 2014/35/EU.

| Part no. | Cross-section mm ² | AWG-No. | Cond. make-up n x wire Ø | Outer Ø app. mm | Cop. weight kg / km | Weight app. kg / km |
|----------|-------------------------------|---------|--------------------------|-----------------|---------------------|---------------------|
| 6320x | 2,08 | 14 | 19 x 0,38 | 3,0 | 20,7 | 25,0 |
| 6321x | 3,32 | 12 | 19 x 0,48 | 3,4 | 33,0 | 37,0 |
| 6322x | 5,26 | 10 | 19 x 0,6 | 4,3 | 51,6 | 60,0 |
| 6323x | 8,35 | 8 | 19 x 0,75 | 5,5 | 80,6 | 95,0 |
| 6324x | 13,39 | 6 | 19 x 0,96 | 6,6 | 125,0 | 143,0 |
| 6325x | 21,14 | 4 | 19 x 1,19 | 8,4 | 201,0 | 229,0 |
| 6326x | 26,65 | 3 | 19 x 1,336 | 9,1 | 253,0 | 282,0 |
| 6327x | 33,61 | 2 | 19 x 1,5 | 10,0 | 317,0 | 349,0 |
| 6328x | 42,38 | 1 | 19 x 1,686 | 11,4 | 399,0 | 449,0 |
| 6329x | 53,47 | 1/0 | 19 x 1,89 | 12,4 | 500,0 | 557,0 |
| 6330x | 67,4 | 2/0 | 19 x 2,126 | 13,7 | 631,0 | 691,0 |
| 6331x | 84,97 | 3/0 | 19 x 2,387 | 15,0 | 792,0 | 861,0 |
| 6332x | 107,17 | 4/0 | 19 x 2,68 | 16,5 | 996,0 | 1069,0 |

| Part no. | Cross-section mm ² | AWG-No. | Cond. make-up n x wire Ø | Outer Ø app. mm | Cop. weight kg / km | Weight app. kg / km |
|----------|-------------------------------|------------|--------------------------|-----------------|---------------------|---------------------|
| 63331 | 127 | 250 kcmil | 37 x 2,088 | 18,29 | 1178,0 | 1277,0 |
| 63341 | 152 | 300 kcmil | 37 x 2,286 | 19,56 | 1410,0 | 1515,0 |
| 63351 | 178 | 350 kcmil | 37 x 2,47 | 21,08 | 1645,0 | 1753,0 |
| 63361 | 203 | 400 kcmil | 37 x 2,7 | 22,35 | 1902,0 | 1998,0 |
| 63371 | 254 | 500 kcmil | 37 x 2,95 | 24,13 | 2345,0 | 2466,0 |
| 63381 | 304 | 600 kcmil | 61 x 2,52 | 26,75 | 2920,0 | 3000,0 |
| 63391 | 380 | 750 kcmil | 61 x 2,82 | 29,36 | 3658,0 | 3713,0 |
| 63401 | 507 | 1000 kcmil | 61 x 3,25 | 33,27 | 4858,0 | 4870,0 |

Dimensions and specifications may be changed without prior notice. (RN06)