



**Part Number: 8049**

Magnet Wire, (1) 18 AWG Solid BC, PUR-NYL

[Request Sample](#)

## Product Description

One 18 AWG solid bare copper conductor, polyurethane/nylon insulation.

## Technical Specifications

### Physical Characteristics (Overall)

#### Conductor

| AWG | Stranding | Material         | No. of Conductors |
|-----|-----------|------------------|-------------------|
| 18  | Solid     | BC - Bare Copper | 1                 |

|                  |        |
|------------------|--------|
| Conductor Count: | 1      |
| Conductor Size:  | 18 AWG |

#### Insulation

| Material                       | Nominal Diameter | Nominal Wall Thickness |
|--------------------------------|------------------|------------------------|
| PUR/Nylon - Polyurethane/Nylon | 0.0424 in        | 0.001 in               |

#### Outer Jacket Material

| Material  | Max. Diameter |
|-----------|---------------|
| No Jacket | 0.0424 mm     |

### Construction and Dimensions

|                     |          |
|---------------------|----------|
| Min Increase in OD: | 0.001 in |
|---------------------|----------|

### Electrical Characteristics

#### Conductor DCR

| Nominal Conductor DCR |            |
|-----------------------|------------|
| 6.4 Ohm/1000ft        |            |
| Shielding:            | Unshielded |

#### Current

| Max. Recommended Current [A] |
|------------------------------|
| 2.3 A                        |

#### Voltage

| Breakdown Voltage                      |
|--|
| 2850 volts minimum at room temperature |

### Temperature Range

|                     |       |
|---------------------|-------|
| Non-UL Temp Rating: | 130°C |
|---------------------|-------|

### Mechanical Characteristics

|                        |              |
|------------------------|--------------|
| Approximate Length:    | 100 ft       |
| Turns Per Linear Inch: | 23.9         |
| Turns Per Square Inch: | 571          |
| Bulk Cable Weight:     | 5 lbs/1000ft |

## Standards

|                         |                      |
|-------------------------|----------------------|
| UL AWM Style:           | N/A                  |
| Military Specification: | J-W-1177/9           |
| Other Specification:    | NEMA-MW28-C (Single) |

## Applicable Environmental and Other Programs

|                                       |                               |
|---------------------------------------|-------------------------------|
| EU Directive 2000/53/EC (ELV):        | Yes                           |
| EU Directive 2003/96/EC (BFR):        | Yes                           |
| EU Directive 2011/65/EU (ROHS II):    | Yes                           |
| EU Directive 2012/19/EU (WEEE):       | Yes                           |
| EU Directive 2015/863/EU:             | Yes                           |
| EU Directive Compliance:              | EU Directive 2003/11/EC (BFR) |
| EU CE Mark:                           | Yes                           |
| EU RoHS Compliance Date (yyyy-mm-dd): | 2004-01-01                    |
| CA Prop 65 (CJ for Wire & Cable):     | Yes                           |
| MII Order #39 (China RoHS):           | Yes                           |

## Flammability, LSOH, Toxicity Testing

|                    |     |
|--------------------|-----|
| UL voltage rating: | N/A |
|--------------------|-----|

## Plenum/Non-Plenum

|               |    |
|---------------|----|
| Plenum (Y/N): | No |
|---------------|----|

## Part Number

### Variants

| Item # | Color |
|--------|-------|
| 8049   | None  |

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