



**Product:** [8050](#)

Magnet Wire, #20 Sol BC, PUR/NYL Ins

[Request Sample](#)

## Product Description

Magnet Wire, 20AWG (Solid) Bare Copper, PUR/NYL Insulation, J-W-1177/9 MW 28-C

## Technical Specifications

### Product Overview

|                        |                        |
|------------------------|------------------------|
| Suitable Applications: | solderable magnet wire |
|------------------------|------------------------|

### Physical Characteristics (Overall)

#### Conductor

| AWG | Stranding | Material         | No. of Conductors |
|-----|-----------|------------------|-------------------|
| 20  | Solid     | BC - Bare Copper | 1                 |

|                  |   |
|------------------|---|
| Conductor Count: | 1 |
|------------------|---|

#### Insulation

| Material                         | Nominal Diameter | Nominal Wall Thickness |
|----------------------------------|------------------|------------------------|
| PUR/Nylon - Polyurethane + Nylon | 0.0339 in        | 0.001 in               |

#### Outer Jacket Material

| Max. Diameter |
|---------------|
| 0.0339 mm     |

### Construction and Dimensions

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

### Electrical Characteristics

#### Conductor DCR

| Nominal Conductor DCR |
|-----------------------|
| 10.1 Ohm/1000ft       |

#### Current

| Max. Recommended Current [A]               |
|--|
| Single conductor in free air @ 30°C: 1.5 A |

#### Voltage

| Breakdown Voltage                    |
|--------------------------------------|
| 2700 V Minimum (at Room Temperature) |

### Temperature Range

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

### Mechanical Characteristics

|                        |        |
|------------------------|--------|
| Approximate Length:    | 160 ft |
| Turns Per Linear Inch: | 29.9   |

|                        |                |
|------------------------|----------------|
| Turns Per Square Inch: | 894            |
| Bulk Cable Weight:     | 3.1 lbs/1000ft |

## Standards

|                      |                      |
|----------------------|----------------------|
| Military Compliance: | J-W-1177/9           |
| Other Compliance:    | 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:                           | Yes                           |
| MII Order #39 (China RoHS):           | Yes                           |

## Flammability, LS0H, Toxicity Testing

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

## Plenum/Non-Plenum

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

## Part Number

### Variants

| Item # | Color | Putup Type | Length | UPC          |
|--------|-------|------------|--------|--------------|
| 8050   | None  | Reel       | 1 ft   | 612825194460 |

## History

|                      |  |
|----------------------|--|
| Update and Revision: | Revision Number: 0.310 Revision Date: 07-26-2020 |
|----------------------|--|

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