



**Product:** [8051](#)

Magnet Wire, #22 Sol BC, PUR/NYL Ins

[Request Sample](#)

## Product Description

Magnet Wire, 22AWG (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 |
|-----|-----------|------------------|-------------------|
| 22  | Solid     | BC - Bare Copper | 1                 |

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

#### Insulation

| Material                         | Nominal Diameter | Nominal Wall Thickness |
|----------------------------------|------------------|------------------------|
| PUR/Nylon - Polyurethane + Nylon | 0.0270 in        | 0.001 in               |

#### Outer Jacket

| Max. Diameter |
|---------------|
| 0.027 mm      |

### Construction and Dimensions

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

### Electrical Characteristics

#### Conductor DCR

| Nominal Conductor DCR |
|-----------------------|
| 16.2 Ohm/1000ft       |

#### Current

| Max. Recommended Current [A]               |
|--|
| Single conductor in free air @ 30°C: 0.9 A |

#### Voltage

| Breakdown Voltage                    |
|--------------------------------------|
| 2575 V Minimum (at Room Temperature) |

### Temperature Range

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

### Mechanical Characteristics

|                        |        |
|------------------------|--------|
| Approximate Length:    | 254 ft |
| Turns Per Linear Inch: | 37.5   |

|                              |              |
|------------------------------|--------------|
| Turns Per Square Inch:       | 1406         |
| Bulk Cable Weight:           | 2 lbs/1000ft |
| Min. Bend Radius/Minor Axis: | 0.11 in      |

## Standards

|                      |            |
|----------------------|------------|
| Military Compliance: | J-W-1177/9 |
|----------------------|------------|

## 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 2):            | Yes                           |
| EU Directive 2012/19/EU (WEEE):              | Yes                           |
| EU Directive 2015/863/EU (RoHS 2 amendment): | Yes                           |
| EU Directive Compliance:                     | EU Directive 2003/11/EC (BFR) |
| EU CE Mark:                                  | Yes                           |
| CA Prop 65:                                  | Yes                           |
| MII Order #39 (China RoHS):                  | Yes                           |

## Flammability, LSOH, Toxicity Testing

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

## Plenum/Non-Plenum

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

## Related Part Numbers

### Variants

| Item # | Color | Put-Up Type | Length | UPC          |
|--------|-------|-------------|--------|--------------|
| 8051   | None  | Reel        | 1 ft   | 612825194477 |

## History

|                      |  |
|----------------------|--|
| Update and Revision: | Revision Number: 0.381 Revision Date: 05-05-2023 |
|----------------------|--|

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