



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
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Physical Characteristics (Overall)

Conductor

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

Conductor Count:	1
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Insulation

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

Outer Jacket

Max. Diameter
0.0339 mm

Construction and Dimensions

Min Increase in OD:	0.001 in
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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
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Mechanical Characteristics

Approximate Length:	160 ft
Turns Per Linear Inch:	29.9

Turns Per Square Inch:	894
Bulk Cable Weight:	3.1 lbs/1000ft
Min. Bend Radius/Minor Axis:	0.14 in

Standards

Military Compliance:	J-W-1177/9
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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, LS0H, Toxicity Testing

UL voltage rating:	N/A
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Plenum/Non-Plenum

Plenum (Y/N):	No
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Related Part Numbers

Variants

Item #	Color	Put-Up Type	Length	UPC
8050	None	Reel	1 ft	612825194460

History

Update and Revision:	Revision Number: 0.381 Revision Date: 02-03-2025
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