

HIGH TEMP HEATER WIRE

DESCRIPTION

MPI Morheat stocks a wide variety of high temperature heating wire for most heating applications.



CONDUCTOR SIZE CONVERSION

GAUGE SIZE	CONDUCTOR OD (nominal)	METRIC SIZE
4 AWG	0.266" (6.76mm)	25.0 mm ²
6 AWG	0.202" (5.13mm)	16.0 mm ²
8 AWG	0.166" (4.22mm)	10.0 mm ²
10 AWG	0.110" (2.79mm)	6.0 mm ²
12 AWG	0.088" (2.24mm)	4.0 mm ²
14 AWG	0.069" (1.75mm)	2.5 mm ²
16 AWG	0.056" (1.42mm)	1.5 mm ²
18 AWG	0.047" (1.19mm)	0.75 mm ²
20 AWG	0.038" (0.97mm)	0.50 mm ²
22 AWG	0.029" (0.74mm)	0.34 mm ²
24 AWG	0.024" (0.61mm)	0.25 mm ²

(1 Conductor) TGGT WIRE 600V, 482°F(250°C), Nickel-Plated Copper

3% Nickel Plated Copper Conductors

Fiberglass with Teflon Impregnation



Teflon Fiberglass



FEATURES

- CONDUCTOR - 3% Nickel-Plated Copper Stranded
- INSULATION - PTFE Tape, Fiberglass Wrapped
- JACKET - Fiberglass Braid
- COATING - High Temperature Finish
- STANDARDS - UL5256, CSA#270403

DESCRIPTION

- Tough and Flexible high temperature wire that can withstand repeated flexing and mechanical abuse.
- Moisture + Fray resistant
- Asbestos Free

* Ampacity Assumptions

Conductor Temp - 250°C
Ambien Air Temp - 25°C

Correction Factor - Temp

Ambient 212°F(100°C) - 85%
Ambient 301°F(150°C) - 65%
Ambient 391°F(200°C) - 49%
Ambient 436°F(225°C) - 35%

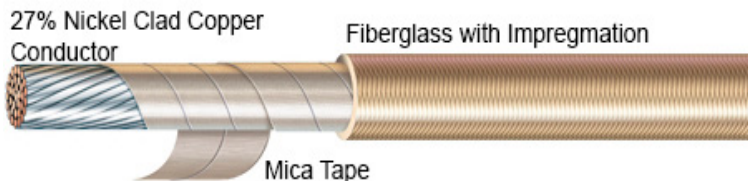
Full Spool Sizes

10-20 AWG 1000ft
6-8 AWG 500ft

STOCK - TGGT 600V, 482°F/250°C

PART#	AWG	STRANDS	OD (nom.) (inch/mm)	AMPACITY*
TGGT-20-FM	20 AWG	10 x 0.010"	0.079"/2.0mm	14
TGGT-18-FM	18 AWG	16 x 0.010"	0.087"/2.2mm	17
TGGT-16-FM	16 AWG	26 x 0.010"	0.110"/2.8mm	28
TGGT-14-FM	14 AWG	41 x 0.010"	0.122"/3.1mm	39
TGGT-12-FM	12 AWG	65 x 0.010"	0.142"/3.6mm	54
TGGT-10-FM	10 AWG	103 x 0.010"	0.177"/4.5mm	73
TGGT-8-FM	8 AWG	163 x 0.010"	0.217"/5.5mm	93
TGGT-6-FM	6 AWG	260 x 0.010"	0.267"/6.8mm	117

(1 Conductor) MGT WIRE 600V, 842°F(450°C), Nickel-Clad Copper



FEATURES

- CONDUCTOR - 27% Nickel-Clad Copper Stranded
- INSULATION - Mica Tape
- JACKET - Fiberglass Braid
- COATING - High Temperature Finish
- STANDARDS - UL5335, CSA#270403

DESCRIPTION

- Tough and Flexible high temperature wire that can withstand repeated flexing and mechanical abuse.
- Moisture + Fray resistant
- Asbestos Free

* Ampacity Assumptions

Conductor Temp - 250°C
Ambien Air Temp - 25°C

Correction Factor - Temp

Ambient 212°F(100°C) - 122%
Ambient 391°F(200°C) - 100%
Ambient 481°F(250°C) - 87%
Ambient 571°F(300°C) - 70%
Ambient 661°F(350°C) - 49%

Full Spool Sizes

10-20 AWG 1000ft
6-8 AWG 500ft

STOCK - MGT 600V, 842°F/450°C

PART#	AWG	STRANDS	OD (nom.) (inch/mm)	AMPACITY*
MGT-20-FM	20 AWG	10 x 0.010"	0.095"/2.4mm	27
MGT-18-FM	18 AWG	16 x 0.010"	0.106"/2.7mm	37
MGT-16-FM	16 AWG	26 x 0.010"	0.118"/3.0mm	48
MGT-14-FM	14 AWG	41 x 0.010"	0.134"/3.4mm	64
MGT-12-FM	12 AWG	65 x 0.010"	0.154"/3.9mm	85
MGT-10-FM	10 AWG	103 x 0.010"	0.205"/5.2mm	113
MGT-8-FM	8 AWG	163 x 0.010"	0.240"/6.1mm	126
MGT-6-FM	6 AWG	260 x 0.010"	0.283"/7.2mm	155

(3&4 Conductor) SIHF WIRE 600V, 355°F(180°C), Tin-Plated Copper



FEATURES

- CONDUCTOR - Tin-Plated Copper Stranded
- INSULATION - Extruded Silicone Rubber
- JACKET - Extruded Silicone Rubber
- COATING - None
- STANDARDS - UL4476 - max 300°F(150°C)

DESCRIPTION

- Tough and Flexible high temperature wire that can withstand repeated flexing and mechanical abuse.
- Moisture resistant + Fray resistant + Asbestos Free

* Ampacity Assumptions

Conductor Temp - 150°C
Ambien Air Temp - 40°C
ambient air

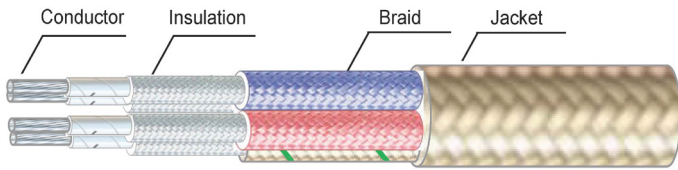
Correction Factor - Temp

Ambient 212°F(100°C) - 79%
Ambient 301°F(150°C) - 50%
Ambient 355°F(180°C) - 35%

STOCK - SEW-2 600V, 355°F/150°C

PART#	# COND	AWG	STRANDS (each cond.)	OD (nom.) (inch/mm)	AMPACITY*
SIHF-FM-16/3	3	16 AWG	26 x 0.010"	0.351"/8.9mm	33
SIHF-FM-16/4	4	16 AWG	26 x 0.010"	0.378"/9.6mm	28
SIHF-FM-14/3	3	14 AWG	41 x 0.010"	0.382"/9.7mm	48
SIHF-FM-14/4	4	14 AWG	41 x 0.010"	0.418"/10.6mm	43
SIHF-FM-12/3	3	12 AWG	65 x 0.010"	0.426"/10.8mm	61
SIHF-FM-12/4	4	12 AWG	65 x 0.010"	0.476"/12.1mm	54
SIHF-FM-10/3	3	10 AWG	103 x 0.010"	0.532"/13.5mm	80
SIHF-FM-10/4	4	10 AWG	103 x 0.010"	0.579"/14.7mm	72

(3&4 Conductor) TGGT WIRE 600V, 482°F(250°C), Nickel-Plated Copper



Conductor Colors

- 3 Conductor - Black, Red, Beige+Green Stripe
- 4 Conductor - Black, Red, Blue, Tan+Green Stripe

FEATURES

- CONDUCTOR - 3% Nickel-Plated Copper Stranded
- INSULATION - PTFE Tape, Fiberglass Wrapped
- JACKET - Fiberglass Braid
- COATING - High Temperature Finish
- STANDARDS - UL5256, CSA#270403

DESCRIPTION

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STOCK - TGGT 600V, 482°F/250°C

PART#	# COND	AWG	STRANDS	OD (nom.) (inch/mm)	AMPACITY*
TGGT-16/3-FM	3	16 AWG	26 x 0.010"	0.252"(6.4mm)	28
TGGT-16/4-FM	4	16 AWG	26 x 0.010"	0.284"(7.2mm)	22
TGGT-14/3-FM	3	14 AWG	41 x 0.010"	0.280"(7.1mm)	35
TGGT-14/4-FM	4	14 AWG	41 x 0.010"	0.311"(7.9mm)	31
TGGT-12/3-FM	3	12 AWG	65 x 0.010"	0.323"(8.2mm)	48
TGGT-12/4-FM	4	12 AWG	65 x 0.010"	0.358"(9.1mm)	43
TGGT-10/3-FM	3	10 AWG	103 x 0.010"	0.413"(10.5mm)	65
TGGT-10/4-FM	4	10 AWG	103 x 0.010"	0.461"(11.7mm)	58
TGGT-8/3-FM	3	8 AWG	163 x 0.010"	0.480"(12.2mm)	84
TGGT-8/4-FM	4	8 AWG	163 x 0.010"	0.539"(13.7mm)	74

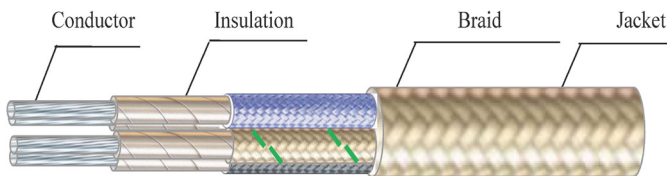
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MGT-14/3-FM	3	14 AWG	41 x 0.010"	0.280"(7.7mm)	58
MGT-14/4-FM	4	14 AWG	41 x 0.010"	0.311"(8.6mm)	51
MGT-12/3-FM	3	12 AWG	65 x 0.010"	0.323"(8.8mm)	76
MGT-12/4-FM	4	12 AWG	65 x 0.010"	0.358"(9.8mm)	68
MGT-10/3-FM	3	10 AWG	103 x 0.010"	0.413"(11.6mm)	101
MGT-10/4-FM	4	10 AWG	103 x 0.010"	0.461"(13.0mm)	90
MGT-8/4-FM	4	8 AWG	163 x 0.010"	0.480"(15.1mm)	101

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