



Type RHTW Hi-Temp Wire

Rated 1200°F., 600 Volts

CONSTRUCTION

Flexible, stranded, 27% Nickle-clad copper conductor insulated with high temp composite mica/glass tapes and jacketed with an ultra high temp glass braid impregnated with a high temp finish.

APPLICATION

For internal wiring of ovens and other equipment which operates at temperatures up to 1200°F. Also electric heaters, blast furnaces, coke ovens, basic oxygen furnaces, and cement kilns.

LISTINGS

Listed by Underwriter's Laboratories, Inc. under Style No 5107 and rated 450°C and 600 Volts. Manufacturer rated 1200°F and 600 Volts.

AVAILABILITY

Gaumer Company Houston Stock, 500 ft reels or cut to desired length.

RHTW Specifications:

Gaumer Catalog Number	Size		Stranding No./In.	Insl. Wall		Jacket Wall		Nominal OD		Approx. Weight.	
	AWG	MM2		Mils	MM	Jckt Mils	Jckt MM	Inches	MM	#/M ft	kg/km
RHTW-20	20	.508	10/.010	27	.686	8	.203	.108	2.74	12	17.9
RHTW-18	18	.823	16/.010	27	.686	8	.203	.118	3.00	15	22.4
RHTW-16	16	1.31	26/.010	27	.686	8	.203	.130	3.30	19	28.3
RHTW-14	14	2.08	41/.010	27	.686	8	.203	.148	3.76	26	38.7
RHTW-12	12	3.31	65/.010	27	.686	8	.203	.170	4.32	35	52.1
RHTW-10	10	5.26	105/.010	32	.813	16	.406	.225	5.72	54	80.5
RHTW-8	8	8.36	133/.010	32	.813	16	.406	.255	6.48	84	125.0
RHTW-6	6	13.3	133/.014	32	.813	16	.406	.310	7.88	120	179.0
RHTW-4	4	21.1	133/.018	32	.813	16	.406	.350	8.89	170	253.0

WIRE SELECTION CONSIDERATIONS

This chart should only be used as a guide. Many variables should be taken into account when selecting and installing Type RHTW High Temp Wire.

Amperage Chart: (amperes)

Wire Size AWG	Ampacity at Specified Temperature			
	500°F	750°F	875°F	1000°F
20	10	7	6	4
18	13	10	8	6
16	17	14	11	8
14	25	20	15	10
12	30	25	20	15
10	42	37	30	20
8	60	48	38	26
6	80	65	48	32
4	105	85	65	45

- 1] Several smaller circuits (10amp-40amp) as opposed to one larger circuit (50amp-100amp) is recommended. The smaller circuits can generally be tied together when connecting to the larger standard conductors (customer supplied) in a junction box external to the heat source.
- 2] Terminal connection studs on electric heaters often operate at higher temperatures than the air space around the terminals. Use of larger gauge wire under these circumstances is recommended.
- 3] If the Type RHTW wire is to be exposed to repeated flexing use of double loops at the flex point is recommended. Type RHTW should not be used in this type of application if the ambient is expected to exceed 750 °F.
- 4] Type RHTW conductors should not be completely surrounded or packed with insulation. If there is no other choice, contact Gaumer Company, Inc. for the best alternative plan of action.