



High-Temperature M-PAHs Magnet Wire (Up To 450° C)

The conductor is enameled in a high temperature/voltages M-PAHs (Modified Polyamideimides hydrocarbons) tape wrap laminate, allowing an operating temperature range between -200 to 450° C and voltage rating up to 300-1000 VDC depending on insulation thickness and operating conditions.



Performance

Voltage Rating: 300-1000 VDC

Temperature Rating: -200 – +450° C

Spark Voltage Test: 500-5000 VDC

Operating Lifetime: up to 20,000 Hours*

Construction Details:

Insulation: High-Temp M-PAHs Tape Wrap
Thickness 0.015mm and up.

Conductor: Silver-Plated Copper (S), Pure Copper (C), or Nickel-Plated Copper (NPC). Note – X is the placeholder of conductor in P/N

P/N	AWG Size	Stranding	Conductor Diameter (inch/mm)	Maximum Resistance $\Omega/1000'$ (Ω/km)*
HMP-1037-X	10	37/26	0.108 (2.74)	1.11 (3.64)
HMP-1219-X	12	19/25	0.084 (2.13)	1.70 (5.58)
HMP-1419-X	14	19/27	0.067 (1.70)	2.70 (8.86)
HMP-1619-X	16	19/29	0.053 (1.35)	4.27 (14.01)
HMP-1819-X	18	19/30	0.047 (1.19)	5.46 (17.91)
HMP-1801-X	18	SOLID	0.040 (1.02)	6.39 (20.95)
HMP-1901-X	19	SOLID	0.036 (.91)	8.05 (26.42)
HMP-2019-X	20	19/32	0.038 (.97)	9.19 (30.1)
HMP-2001-X	20	SOLID	0.032 (.813)	10.15 (33.31)
HMP-2101-X	21	SOLID	0.028 (.724)	12.80 (42.00)
HMP-2201-X	22	SOLID	0.025 (.645)	17.00 (55.80)
HMP-2301-X	23	SOLID	0.023 (.574)	20.36 (66.79)
HMP-2401-X	24	SOLID	0.020 (.511)	25.67 (84.22)
HMP-2501-X	25	SOLID	0.018 (.455)	32.37 (106.2)
HMP-2601-X	26	SOLID	0.016 (.404)	40.81 (133.9)
HMP-2701-X	27	SOLID	0.014 (.361)	51.47 (168.9)
HMP-2801-X	28	SOLID	0.013 (.320)	64.90 (212.9)
HMP-2901-X	29	SOLID	0.011 (.287)	81.84 (268.5)
HMP-3001-X	30	SOLID	0.010 (.254)	103.2 (338.6)
HMP-3101-X	31	SOLID	0.0089 (.226)	130.1 (427.0)
HMP-3201-X	32	SOLID	0.0079 (.202)	164.0 (538.0)
HMP-3301-X	33	SOLID	0.0071 (.179)	207.0 (679.0)
HMP-3401-X	34	SOLID	0.0063 (.160)	260.9 (856.0)
HMP-3501-X	35	SOLID	0.0056 (.142)	332.5 (1,091)
HMP-3601-X	36	SOLID	0.0050 (.127)	414.5 (1,360)
HMP-3701-X	37	SOLID	0.0044 (.113)	522.7 (1,715)
HMP-3801-X	38	SOLID	0.0039 (.100)	659.3 (2,163)

*Maximum Resistance refers to that of Pure Copper

* 250°C – 20,000-30,000 Hours. 300°C – 10,000-20,000 Hours. 350°C – 2000-5000 Hours. 450°C – 5-10 Hours. Operating Lifetime varies tremendously based on operating temperatures, operating conditions ect. and specific operating lifetimes should be determined by the client final test. T-Axel Inc makes no guarantee on operating lifetime.

For applications higher than 450C, please contact T-Axel

Main Application should be in high temperature magnet wire but can also be used as lead wires in some circumstances. Please consult T-Axel to determine if your application is suitable.