

Cartridge/Insertion Heaters



FIREROD Cartridge Heaters

Lead and Diameter Information

Standard Lead Specifications

Heater Diameter in. (mm)	Max. Voltage	Typical Lead Gauge Fiberglass	Size Tolerance Fiberglass	Typical Lead Gauge PTFE	Size Tolerance PTFE	Stainless Steel Hose I.D.	Stainless Steel Braid I.D.
1/8 (3)	300	24	0.044 - 0.058	24 solid	0.036 - 0.044	1/8	1/8
1/4 (6)	300	22	0.066 - 0.078	22	0.050 - 0.058	5/32	1/8
3/8 (10)	300	22	0.076 - 0.088	20	0.056 - 0.064	7/32	3/16
1/2 (13)	300	18	0.089 - 0.101	18	0.074 - 0.084	9/32	1/4
5/8 (16)	600	18	0.108 - 0.124	18	0.097 - 0.113	7/16	3/8
3/4 (19)	600	18	0.108 - 0.124	14	0.097 - 0.113	7/16	3/8
1 (25)	600	18	0.095 - 0.109	14	0.087 - 0.101	N/A	N/A

Lead length tolerances:

1 to 36 in. (25 to 914 mm) = -1/2 in. (13 mm), +1 1/2 in. (38 mm)

> 36 to 76 in. (914 to 1930 mm) = -1, +3 in. (-25 + 76 mm)

> 76 in. (1930 mm) = ±4 in. (102 mm)

Stainless steel hose and braid tolerances: same as lead wire.

Units constructed with 480V require MGT or PTFE leads. If connecting heaters in series above 300V, MGT leads are also required.

Ratings: GGS, 300V, 482°F (250°C)

MGT, 300V/600V, 842°F (450°C)

PTFE, 300V/600V, 392°F (200°C)

Silicone rubber, 600V, 302°F (150°C)

Additional Lead Specifications

Lead Gauge	Nickle Ampacity	N.C.C. Ampacity	SPC/NPC
26	2.5	4.2	6.0
24 stranded	3.1	5.2	7.5
24 solid	3.1	5.2	7.5
22	4.4	7.2	10.5
20	N/A	N/A	14.0
18	7.6	12.6	18.0
16	9.7	16.1	23.0
14	12.5	21.0	30.0
12	16.8	28.0	40.0
10	23.0	38.5	55.0

N.C.C. = Nickle-clad Copper

SPC = Silver Plated Copper

NPC = Nickle Plated Copper

GGS or MGT Fiberglass insulated leads are not carried by Watlow as SPC or NPC. Only Nickle or N.C.C.