

Single core heater with real cold ends (Standard)

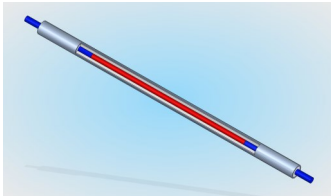
Core material	K = Constantan	Ni=Nickel	NC= NiCr80/20	BA=NiFe70/30				
Sheath material	VA=AISI 304L	VA2=AISI 304	VA3=AISI 316L	VA4=AISI 321	VA5=AISI 316TI	VA6=AISI 314	VA7=AISI 309	VA8=AISI 310S
	I=Inconel600	I2=Inconel601	I3=Inconel625	I4=Inconel800	I5=Inconel825			

Encoding scheme for requests and orders:

S - H - diameter [mm] - hot part-length [mm]

Example:

S-H-I-2,0-6000: Standard single core heater with real cold ends, sheath: „I“ (Inconel600), line resistance: 18,6Ohm +/-10%, 2,0mm sheath diameter, hot part length: 6000mm +/- 5%, cold part length min. 1500mm



Heater with real cold ends are without any change in diameter between heated part and cold ends.

ThermSys manufactures heaters in standard and customized designs with dedicated properties in line resistance and sheath materials

Ø [mm]	Hot part length [mm]	Line resistance hot part [Ohm] at 20°C	Order code	
			Sheath Inconel600	Sheath stainless steel AISI 321
1,0	250	3,1	S-H-I-1,0-250	S-H-VA4-1,0-250
1,0	500	6,2	S-H-I-1,0-500	S-H-VA4-1,0-500
1,0	750	9,3	S-H-I-1,0-750	S-H-VA4-1,0-750
1,0	1000	12,5	S-H-I-1,0-1000	S-H-VA4-1,0-1000
1,0	1500	18,6	S-H-I-1,0-1500	S-H-VA4-1,0-1500
1,0	2000	25,0	S-H-I-1,0-2000	S-H-VA4-1,0-2000
1,5	500	2,8	S-H-I-1,5-500	S-H-VA4-1,5-500
1,5	1000	5,5	S-H-I-1,5-1000	S-H-VA4-1,5-1000
1,5	1500	8,3	S-H-I-1,5-1500	S-H-VA4-1,5-1500
1,5	2000	11,0	S-H-I-1,5-2000	S-H-VA4-1,5-2000
1,5	3000	16,5	S-H-I-1,5-3000	S-H-VA4-1,5-3000
1,5	4000	22,0	S-H-I-1,5-4000	S-H-VA4-1,5-4000
1,5	6000	33,0	S-H-I-1,5-6000	S-H-VA4-1,5-6000
2,0	500	1,6	S-H-I-2,0-500	S-H-VA4-2,0-500
2,0	1000	3,1	S-H-I-2,0-1000	S-H-VA4-2,0-1000
2,0	1500	4,7	S-H-I-2,0-1500	S-H-VA4-2,0-1500
2,0	2000	6,2	S-H-I-2,0-2000	S-H-VA4-2,0-2000
2,0	3000	9,3	S-H-I-2,0-3000	S-H-VA4-2,0-3000
2,0	4000	12,5	S-H-I-2,0-4000	S-H-VA4-2,0-4000
2,0	5000	15,5	S-H-I-2,0-5000	S-H-VA4-2,0-5000
2,0	6000	18,6	S-H-I-2,0-6000	S-H-VA4-2,0-6000
2,0	8000	25,0	S-H-I-2,0-8000	S-H-VA4-2,0-8000
3,0	5000	7,0	S-H-I-3,0-5000	S-H-VA4-3,0-5000
3,0	8000	11,2	S-H-I-3,0-8000	S-H-VA4-3,0-8000
3,0	10000	14,0	S-H-I-3,0-10000	S-H-VA4-3,0-10000

Technical data's / Handling:

- Resistance tolerance: +/-10% (standard)
- Sheath-Ø-tolerance: +/-0,05mm
- Core material: NiCr80/20 (standard)
- Sheath material: VA4 or I (standard)
- Bending radius: 2 - 3 x sheath-Ø
- Do not bend heater to often - depending from bending ratio and accumulated plastic deformations of the heater materials !
- Hot part length tolerance: hot part < 2m: +/-10%, above +/-5%
- Cold part length:
 - ≤ 1m hot part = min 750mm
 - > 1m hot part = min 1500mm
- Max. voltage / power over sheath depending on sheath diameter, temperature gradient heater to heated parts / thermodynamic max. possible flow energy from heater to heated part and heating up cycles. Please refer to our technical sheet "Handling and operation of ThermSys mineral insulated heaters and applications" we send on request or you can download on our website.
- Mineral insulation: Magnesium Oxide (MgO), other insulation on request
- Recommended use:
 - Stainless steel sheath up to 600°C,
 - Inconel600 sheath up to 1000°C

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