

Mineral Insulated Heating cable for Process and Freeze Protection

MSCP's Mineral Insulated (MI) heating cables are designed for freeze protection and process temperature maintenance with high-temperature maintain and withstand qualities up to 550°C, and are suitable for a wide range of industrial applications. The rugged MI cable construction is composed of a metal conductor inside a magnesium oxide insulation surrounded by a metal sheath, suitable for use in corrosive environments, including organic chemicals and corrosives commonly found in the oil, gas, and petrochemical industry. MI cables are approved for use in ordinary and in hazardous locations.

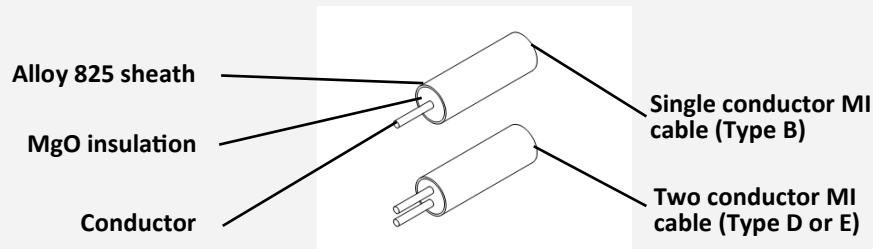
Advantages:

- High temperature withstand up to 550°C
- Multiple nominal outputs
- Factory assembled and ready to install
- Weather Resistant
- Approved for use in hazardous locations

Applications:

- Freeze protection
- Process temperature maintenance
- Pipes, vessel and tanks
- Heat tracing of instrumentation
- Chemical and petrochemical industries
- Oil and gas industries

Type MI



Technical Information

Data

Metal sheath	Incoloy Alloy 825 Nickel-Iron-Chromium
Insulation	Magnesium oxide
Voltage rating	300V or 600V
Maximum exposure temperature (power off)	550°C (1022°F)
Maximum Power output	197W/m (60W/ft)

Type MI

Classification	Class I Div 1 and 2 Groups A,B,C,D Class II Div 1 and 2 Groups E,F,G Class III For use in Zone 1 and Zone 2 Locations
Certificates	CSA file 110903_0_000
Standards	IEEE 515, CSA 22.2 130.16 IEC/IEEE 60079-30-1



Two conductor 300Vac

825 Sheath MI Heating Cable - Two Conductor 300Vac Heater Set Type D or E

MSCP PART NUMBER	RESISTANCE
3V2C0D164	0.164 ohms/m (0.05 ohms/ft)
3V2C0D229	0.230 ohms/m (0.07 ohms/ft)
3V2C0D328	0.328 ohms/m (0.1 ohms/ft)
3V2C0D492	0.492 ohms/m (0.15 ohms/ft)
3V2C0D656	0.656 ohms/m (0.2 ohms/ft)
3V2C0D820	0.820 ohms/m (0.25 ohms/ft)
3V2C0D984	0.984 ohms/m (0.3 ohms/ft)
3V2C1D164	1.64 ohms/m (0.5 ohms/ft)
3V2C1D229	2.30 ohms/m (0.7 ohms/ft)
3V2C1D328	3.28 ohms/m (1 ohms/ft)
3V2C1D459	4.59 ohms/m (1.4 ohms/ft)
3V2C1D558	5.58 ohms/m (1.7 ohms/ft)
3V2C1D656	6.56 ohms/m (2 ohms/ft)
3V2C1D820	8.20 ohms/m (2.5 ohms/ft)
3V2C1D886	8.86 ohms/m (2.7 ohms/ft)
3V2C2D105	10.5 ohms/m (3.2 ohms/ft)
3V2C2D131	13.1 ohms/m (4 ohms/ft)
3V2C2D164	16.4 ohms/m (5 ohms/ft)
3V2C2D197	19.7 ohms/m (6 ohms/ft)
3V2C2D246	24.6 ohms/m (7.5 ohms/ft)
3V2C2D295	29.5 ohms/m (9 ohms/ft)
3V2C2D361	36.1 ohms/m (11 ohms/ft)

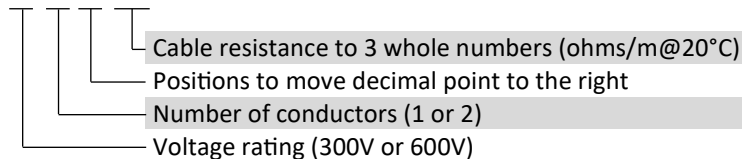
Two conductor 600Vac

825 Sheath MI Heating Cable - Two Conductor 600Vac Heater Set Type D or E

MSCP PART NUMBER	RESISTANCE
6V2C0D043	0.043 ohms/m (0.013 ohms/ft)
6V2C0D066	0.066 ohms/m (0.02 ohms/ft)
6V2C0D098	0.098 ohms/m (0.03 ohms/ft)
6V2C0D131	0.131 ohms/m (0.04 ohms/ft)
6V2C0D164	0.164 ohms/m (0.05 ohms/ft)
6V2C0D229	0.230 ohms/m (0.07 ohms/ft)
6V2C0D328	0.328 ohms/m (0.1 ohms/ft)
6V2C0D492	0.492 ohms/m (0.15 ohms/ft)
6V2C0D656	0.656 ohms/m (0.2 ohms/ft)
6V2C0D984	0.984 ohms/m (0.3 ohms/ft)
6V2C1D164	1.64 ohms/m (0.5 ohms/ft)
6V2C1D229	2.30 ohms/m (0.7 ohms/ft)
6V2C1D328	3.28 ohms/m (1 ohms/ft)
6V2C1D656	6.56 ohms/m (2 ohms/ft)
6V2C2D131	13.1 ohms/m (4 ohms/ft)
6V2C2D197	19.7 ohms/m (6 ohms/ft)
6V2C2D295	29.5 ohms/m (9 ohms/ft)
6V2C2D361	36.1 ohms/m (11 ohms/ft)

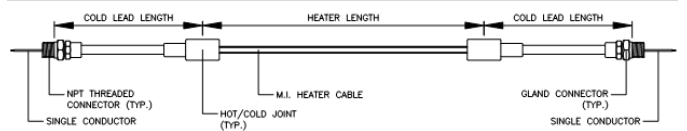
MI CABLE REFERENCE

6V 2C 1D 328



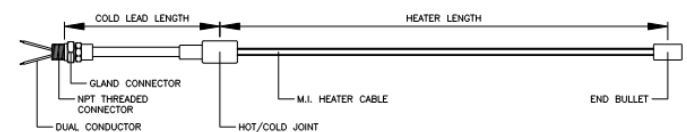
600 Volt 2-Conductor 3.28 ohms/m

MI CABLE DESIGNS



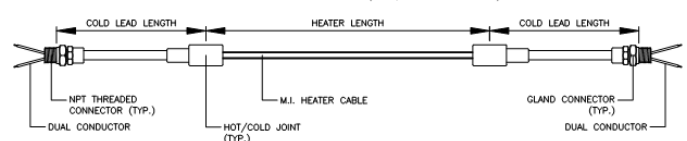
DESIGN B

SINGLE CONDUCTOR CABLE (6V1C SERIES ONLY)



DESIGN D

DUAL CONDUCTOR CABLE (3V2C, 6V2C SERIES ONLY)



DESIGN E

DUAL CONDUCTOR CABLE (3V2C, 6V2C SERIES ONLY)

Technical Information

Type MI

One conductor 600Vac

825 Sheath MI Heating Cable—One Conductor 600Vac Heater Set Type B

MSCP PART NUMBER	RESISTANCE
6V1COD066	0.066 ohms/m (0.02 ohms/ft)
6V1COD098	0.098 ohms/m (0.03 ohms/ft)
6V1COD131	0.131 ohms/m (0.04 ohms/ft)
6V1COD197	0.197 ohms/m (0.06 ohms/ft)
6V1COD229	0.230 ohms/m (0.07 ohms/ft)
6V1COD262	0.262 ohms/m (0.08 ohms/ft)
6V1COD328	0.328 ohms/m (0.1 ohms/ft)
6V1COD492	0.492 ohms/m (0.15 ohms/ft)
6V1COD558	0.558 ohms/m (0.17 ohms/ft)
6V1COD656	0.656 ohms/m (0.2 ohms/ft)
6V1COD820	0.820 ohms/m (0.25 ohms/ft)
6V1COD984	0.984 ohms/m (0.3 ohms/ft)
6V1C1D125	1.25 ohms/m (0.38 ohms/ft)
6V1C1D164	1.64 ohms/m (0.5 ohms/ft)
6V1C1D229	2.30 ohms/m (0.7 ohms/ft)
6V1C1D279	2.79 ohms/m (0.85 ohms/ft)
6V1C1D328	3.28 ohms/m (1 ohms/ft)
6V1C1D427	4.27 ohms/m (1.3 ohms/ft)
6V1C1D525	5.25 ohms/m (1.6 ohms/ft)
6V1C1D656	6.56 ohms/m (2 ohms/ft)

Cold leads

825 Sheath Cold Lead Cable - Two Conductor 300Vac

MSCP PART NUMBER	CONDUCTOR SIZE	MAXIMUM CURRENT
3V2C15A	14 AWG	15A
3V2C20A	12 AWG	20A

825 Sheath Cold Lead Cable - Two Conductor 600Vac

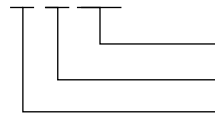
MSCP PART NUMBER	CONDUCTOR SIZE	MAXIMUM CURRENT
6V2C15A	14 AWG	15A
6V2C20A	12 AWG	20A
6V2C30A	10 AWG	30A

825 Sheath Cold Lead Cable - One Conductor 600Vac

MSCP PART NUMBER	CONDUCTOR SIZE	MAXIMUM CURRENT
6V1C20A	14 AWG	20A
6V1C25A	12 AWG	25A
6V1C40A	10 AWG	40A
6V1C70A	8 AWG	70A

Cold lead key

6V 1C 20A



Maximum current rating
Number of conductors (1 or 2)
Voltage Rating (300V or 600V)