MSS

600°C

Mineral Insulated Heating Cable

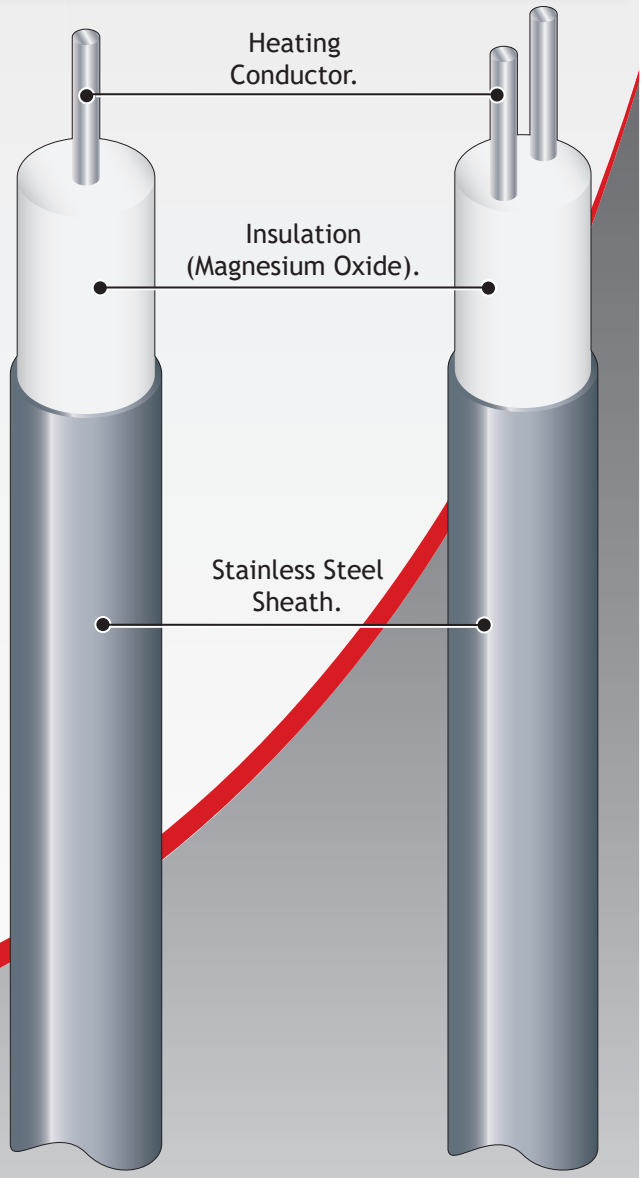
MINERALINSULATED

Stainless Steel Sheathed

- Twin core or single core.
- High temperature withstand
- Factory terminated.
- Suitable for use in safe and hazardous areas.
- Available for different voltages.

FEATURES

The **MSS** range of stainless steel sheathed Mineral Insulated (MI) heating cable has been developed to meet the specific need for a cable having a high temperature capability and electrical resistance values needed for long circuit lengths. To meet the requirement, HTL combined a stainless steal sheath with heating conductors to enable an operating temperature of 600°C with resistance values from 2.1Ω/km up to 36100Ω/km per conductor. MI cables have excellent mechanical strength and are resistant to corrosion. They are series resistance heaters which must be designed to provide the required heat output.



Single Conductor Cable

Dual Conductor Cable

2776

HEAT TRACE

The Heat Tracing Authority™

MSS 21052024

SPECIFICATION

MAXIMUM WITHSTAND: 600ºC (1112ºF)

AMBIENT TEMPERATURE RANGE: -80ºC to +40ºC (-112ºF to +104ºF)

MINIMUM INSTALLATION TEMPERATURE: -80ºC (-112ºF)

APPROVAL DETAILS:

ATEX - CML 18ATEX3390
IECEx - CML 18.0207
CCC - 2022312312000167

ATEX & IECEx MARKINGS:

Ⓔx II 2 G D
Ex 60079-30-1 IIC T1 to T6 Gb
Ex 60079-30-1 IIIC T450˚C to T85ºC Db

EN IEC 60079-0:2018
EN 60079-30-1:2017

IEC 60079-0: 2017
IEC/IEEE 60079-30-1: 2015

HEATING CABLE ORDERING CODE

Digit	M	SS	B	16N6300	60	152	240	E1
		1	2	3	4	5	6	7

Digit number	Description	
1	Sheath material	SS - Stainless Steel
2	Cable configuration	See Cable Configurations
3	cable reference	See Tables 1, 2, 3 & 4
4	cable length	in meter (m)
5	cable wattage	in watt (W)
6	operational voltage	in volt (V)
7	Gland size	see Table 4 - Gland Size

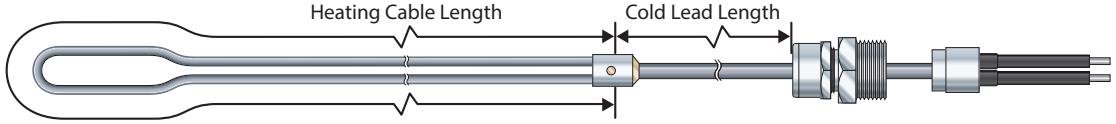
HEATING CABLE DECODING

Digit	1	6	N	6300
	1	2	3	4

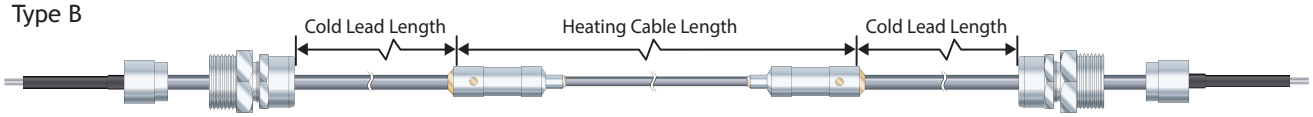
Digit number	Description	
1	Number of conductors	1 or 2
2	Maximum voltage rating	3=300V, 6=600V
3	Conductor material	K,N,C
4	Cable resistance×1000	6300=6.3Ω/m×1000

CABLE CONFIGURATIONS

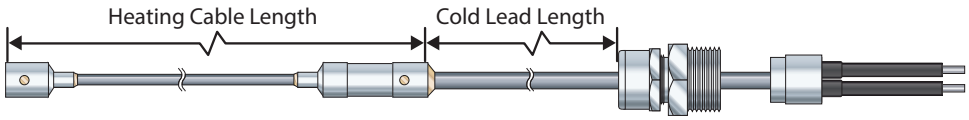
Type A



Type B



Type D



Type E

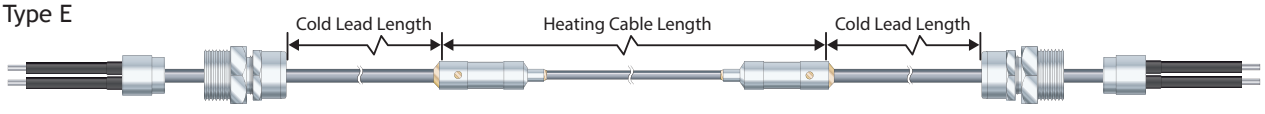


TABLE 1 - CABLE REFERENCES (SINGLE CONDUCTOR 600V) - PART 1 OF 2

CABLE REF	DIAMETER (mm)	RESIST.at 20°C (Ω/m)*	NOMINAL LENGTH (m)	NOMINAL WEIGHT (kg/km)
16C2.1	6.8	0.0021	130	218.0
16C3.4	5.9	0.0034	170	158.1
16C5.3	5.3	0.0053	210	121.8
16C8.5	4.7	0.0085	195	92.4
16C13	4.3	0.013	240	74.3
16C21	4.0	0.021	210	65.4

SPECIFICATION

TABLE 1 - CABLE REFERENCES (SINGLE CONDUCTOR 600V) - PART 2 OF 2

16K40	5.8	0.04	170	154.9
16K50	5.4	0.05	200	131.9
16K60	5.2	0.06	210	119.9
16K80	4.8	0.08	190	99.4
16K100	4.7	0.10	195	91.9
16K120	4.5	0.12	210	82.2
16N160	6.5	0.16	140	193.9
16N200	5.9	0.2	170	159.7
16N250	5.3	0.25	210	128.9
16N400	4.7	0.4	200	95.9
16N500	4.5	0.5	215	86.0
16N630	4.3	0.63	235	76.6
16N1000	3.9	1.0	290	60.9
16N1600	3.6	1.6	335	50.8
16N2500	3.4	2.5	300	45.5
16N2800	3.4	2.8	300	45.3
16N3300	3.2	3.3	300	45.1
16N4000	3.2	4.0	335	39.9
16N5200	3.2	5.2	335	39.6
16N6300	3.2	6.3	335	39.0
16N10000	3.2	10	335	38.7

TABLE 2 - CABLE REFERENCES (DUAL CONDUCTOR 600V)

CABLE REF	DIAMETER (mm)	RESIST.at 20°C (Ω/m)*	NOMINAL LENGTH (m)	NOMINAL WEIGHT (kg/km)
26C8.4	9.8	0.0084	60	400.3
26C13.4	8.7	0.0134	75	308.6
26C21	7.9	0.021	95	246.9
26C34	7.3	0.034	110	208.1
26C54	6.3	0.054	145	153.9
26C85	5.6	0.085	185	120.8
26C130	5.3	0.13	215	104.8
26K180	7.9	0.18	95	255.9
26K260	7.4	0.26	105	220.5
26K360	6.8	0.36	130	180.8
26K500	6.4	0.5	145	159.3
26K650	5.9	0.65	165	131.3
26K1000	5.7	1.0	175	124.4
26K1300	6.2	1.3	150	147.3
26K2000	5.8	2.0	170	125.9
26K3300	5.4	3.3	205	109.1
26N4600	5.8	4.6	170	130.3
26N8000	5.4	8.0	205	111.5
26N13000	5.0	13.0	140	95.0
26N27000	4.8	27.0	150	87.1
26N40000	4.6	40.0	160	79.7
26N60000	4.4	60.0	175	72.8
26N72000	4.2	72.0	190	66.3

* Resistance is total for both conductors in series.

TABLE 3 - CABLE REFERENCES (DUAL CONDUCTOR 300V)

CABLE REF	DIAMETER (mm)	RESIST.at 20°C (Ω/m)*	NOMINAL LENGTH (m)	NOMINAL WEIGHT (kg/km)
23K210	5.4	0.21	200	118.5
23K300	5.0	0.3	240	99.4
23K400	4.8	0.4	250	90.2
23K480	4.8	0.48	250	89.4
23K650	4.6	0.65	200	82.9
23K1000	4.1	1.0	210	64.8
23K1300	3.8	1.3	240	55.4
23K2000	5.0	2.0	235	97.2
23K2400	4.8	2.4	250	89.3
23K3000	4.6	3.0	200	80.5
23N4600	4.8	4.6	250	89.6
23N7500	4.6	7.5	200	80.0
23N11200	4.4	11.2	180	74.0
23N14000	4.2	14.0	200	67.4
23N18000	3.8	18.0	240	55.1
23N26000	3.6	26.0	270	49.2
23N40000	3.4	40.0	300	43.8
23N50000	3.4	50.0	300	43.7
23N60000	3.4	60.0	300	43.6
23N72000	3.4	72.0	300	43.6

Note: For the required voltage 600 V above application, please contact us.

* Resistance is total for both conductors in series.

TABLE 4 - GLAND SIZE

	Design A, D, E			Design B		
Max.voltage	Max.current	Gland size		Max.current	Gland size	
(V)	(amps)	(NPT)	(Metric)	(amps)	(NPT)	(Metric)
600	15	1/2”	M20	20	1/2”	M20
600	20	1/2”	M20	25	1/2”	M20
600	30	3/4”	M25	40	3/4”	M25
600	50	3/4”	M25	70	3/4”	M25
600	70	3/4”	M25	100	3/4”	M25

Note1: 2-meter-long cold lead is supplied with heating cable. For special requirement, please contact us.

TABLE 5 - CORROSION RESISTANCE

SUBSTANCE	
Sulphuric Acid	Not Recommended
Hydrochloric Acid	Not Recommended
Hydrofluoric Acid	Not Recommended
Phosphoric Acid	Not Recommended
Nitric Acid	Check for Specific Data
Organic Acid	Suitable under Most Conditions
Alkalis	Acceptable
Sea Water	Not Recommended
Chloride	Not Recommended

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