

Raychem MI HEATING CABLE

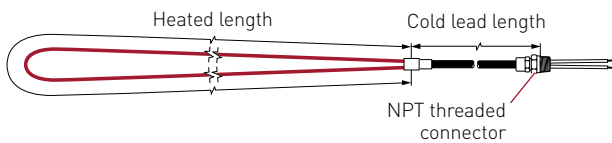
HDPE JACKETED, COPPER SHEATHED MI CABLE



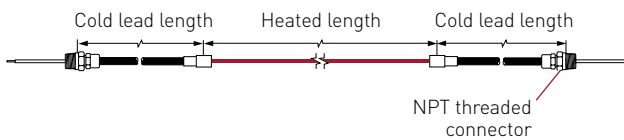
For surface snow melting in concrete, asphalt, and pavers

MI Heating Cable Configuration

Type SUA



Type SUB



PRODUCT OVERVIEW

The copper-sheathed, mineral insulated heating cables are covered with an extruded high-density polyethylene (HDPE) jacket and are supplied as complete factory-assembled cables ready to connect to a junction box. The series-type technology, inherent to all mineral insulated heating cables, provides a reliable and consistent heat source that is ideal for embedded snow melting applications.

The copper sheath provides an ideal ground path and allows for a rugged yet flexible heating cable that is easy to install.

For additional information, contact your Pentair Thermal Building Solutions representative or call (800) 545-6258.

CABLE CONSTRUCTION

Heating cable

Jacket	HDPE
Sheath	Seamless copper
Insulation	Magnesium oxide
Conductor type	Alloy or copper
Number of conductors	1
Insulation voltage rating	600 V
Cable diameter (with jacket)	0.200 to 0.303 in (5.1 to 7.7 mm)

Cold lead

Jacket	HDPE
Sheath	Seamless copper
Insulation	Magnesium oxide
Conductor type	Copper
Number of conductors	1 or 2
Insulation voltage rating	600 V
Cable diameter (with jacket)	0.310 to 0.420 in (7.9 to 10.7 mm)
Gland size (NPT)	1/2 in
Tail length	12 in (30 cm)

MINIMUM INSTALLATION TEMPERATURE

-4°F (-20°C)

MINIMUM BENDING RADIUS

6 times cable diameter

MI HEATING CABLE FOR SURFACE SNOW MELTING

SUA/SUB HEATING CABLE SPECIFICATIONS

Catalog number	Config-uration	Heating cable reference	Heated length		Nominal power (watts)	Cable voltage (volts)	Cold lead length ¹		Cold lead code	Joint type	Nominal cable diameter		Resis-tance ² (ohms)	Tail size (AWG)
			(ft)	(m)			(ft)	(m)			(in)	(mm)		
120 Volts														
SUA5	A	61HD3610	40	12.2	550	120	7	2.1	H22A	Y	0.200	5.1	26.2	14
SUA9	A	61HD3200	66	20.1	1100	120	7	2.1	H22A	Y	0.248	6.3	13.1	14
208 Volts														
SUA4	A	61HD3390	68	20.7	1600	208	7	2.1	H22A	Y	0.212	5.4	27.0	14
SUA7	A	61HD3200	95	29.0	2300	208	7	2.1	H22A	Y	0.248	6.3	18.8	14
SUB1	B	61HE3105	132	40.2	3100	208	15	4.6	H25A	Y	0.254	6.5	14.0	14
SUB3	B	61HE4400	280	85.3	3900	208	15	4.6	H30A	Y	0.265	6.7	11.2	12
SUB5	B	61HE4300	260	79.2	5500	208	15	4.6	H40A	Y	0.272	6.9	7.9	10
SUB7	B	61HE4200	310	94.5	7000	208	15	4.6	H40A	Y	0.285	7.2	6.2	10
SUB9	B	61HC5651	630	192.0	9000	208	15	4.6	H60A	Y	0.274	7.0	4.7	8
SUB10	B	61HC5409	717	218.5	13000	208	15	4.6	H80A	Y	0.303	7.7	3.4	6
SUB1402	B	61HD3610	50	15.2	1400	208	15	4.6	H25A	Y	0.232	5.9	30.9	14
SUB1702	B	61HD3390	64	19.5	1700	208	15	4.6	H25A	Y	0.242	6.1	25.4	14
SUB2002	B	61HD3300	72	22.0	2000	208	15	4.6	H25A	Y	0.240	6.1	21.6	14
SUB2402	B	61HD3200	90	27.4	2400	208	15	4.6	H25A	Y	0.248	6.3	18.0	14
SUB2802	B	61HE3150	103	31.4	2800	208	15	4.6	H25A	Y	0.250	6.4	15.5	14
SUB3402	B	61HE3105	121	36.9	3400	208	15	4.6	H25A	Y	0.254	6.5	12.7	14
SUB3902	B	61HE4800	139	42.4	3900	208	15	4.6	H25A	Y	0.262	6.7	11.1	14
SUB4502	B	61HE4600	160	48.8	4500	208	15	4.6	H25A	Y	0.274	7.0	9.6	14
SUB5502	B	61HE4400	197	60.1	5500	208	15	4.6	H30A	Y	0.265	6.7	7.9	12
SUB6402	B	61HE4300	226	68.9	6400	208	15	4.6	H40A	Y	0.272	6.9	6.8	10
SUB7802	B	61HE4200	277	84.5	7800	208	15	4.6	H40A	Y	0.285	7.2	5.5	10
SUB10302	B	61HC4100	368	112.2	10300	208	15	4.6	H60A	Y	0.278	7.1	4.2	8
SUB12802	B	61HC5651	455	138.7	12800	208	15	4.6	H80A	Y	0.274	7.0	3.4	6
SUB16102	B	61HC5409	576	175.6	16100	208	15	4.6	H80A	Y	0.303	7.7	2.7	6
240 Volts														
SUA3	A	61HD3200	140	42.7	2000	240	7	2.1	H22A	Y	0.248	6.3	28.0	14
SUA8	A	61HE3105	177	53.9	3200	240	7	2.1	H22A	Y	0.254	6.5	18.0	14
SUB2	B	61HE4600	240	73.1	4000	240	15	4.6	H25A	Y	0.274	7.0	14.5	14
SUB3	B	61HE4400	280	85.3	5200	240	15	4.6	H30A	Y	0.265	6.7	11.2	12
SUB4	B	61HE4300	320	97.5	6000	240	15	4.6	H30A	Y	0.272	6.9	9.6	12
SUB5	B	61HE4300	260	79.2	7350	240	15	4.6	H40A	Y	0.272	6.9	7.9	10
SUB6	B	61HE4200	375	114.3	7500	240	15	4.6	H40A	Y	0.285	7.2	7.5	10
SUB7	B	61HE4200	310	94.5	9250	240	15	4.6	H40A	Y	0.285	7.2	6.2	10
SUB8	B	61HC4100	550	167.6	9000	240	15	4.6	H60A	Y	0.278	7.1	6.4	8
SUB9	B	61HC5651	630	192.0	12000	240	15	4.6	H60A	Y	0.274	7.0	4.7	8
SUB10	B	61HC5409	717	218.5	17000	240	15	4.6	H80A	Y	0.303	7.7	3.4	6
SUB1604	B	61HD3610	59	18.0	1600	240	15	4.6	H25A	Y	0.200	5.1	36.0	14
SUB2004	B	61HD3390	74	22.6	2000	240	15	4.6	H25A	Y	0.212	5.4	28.8	14
SUB2304	B	61HD3300	84	25.6	2300	240	15	4.6	H25A	Y	0.240	6.1	25.0	14
SUB2804	B	61HD3200	103	31.4	2800	240	15	4.6	H25A	Y	0.248	6.3	20.6	14
SUB3204	B	61HE3150	120	36.6	3200	240	15	4.6	H25A	Y	0.228	5.8	18.0	14

¹To modify cold lead length, contact your Pentair Thermal Building Solutions sales representative.

²Resistance tolerance: +/- 10%

Tolerance on heating cable length: -0% to +3%

SUA/SUB HEATING CABLE SPECIFICATIONS

Catalog number	Config-uration	Heating cable reference	Heated length		Nominal power (watts)	Cable voltage (volts)	Cold lead length ¹		Cold lead code	Joint type	Nominal cable diameter		Resis-tance ² (ohms)	Tail size (AWG)
			(ft)	(m)			(ft)	(m)			(in)	(mm)		
240 Volts, cont.														
SUB3904	B	61HE3105	140	42.7	3900	240	15	4.6	H25A	Y	0.254	6.5	14.8	14
SUB4504	B	61HE4800	160	48.8	4500	240	15	4.6	H25A	Y	0.262	6.7	12.8	14
SUB5204	B	61HE4600	185	56.4	5200	240	15	4.6	H25A	Y	0.274	7.0	11.1	14
SUB6404	B	61HE4400	225	68.6	6400	240	15	4.6	H30A	Y	0.265	6.7	9.0	12
SUB7304	B	61HE4300	263	80.2	7300	240	15	4.6	H40A	Y	0.272	6.9	7.9	10
SUB9004	B	61HE4200	320	97.6	9000	240	15	4.6	H40A	Y	0.285	7.2	6.4	10
SUB11904	B	61HC4100	426	129.9	11900	240	15	4.6	H60A	Y	0.278	7.1	4.8	8
SUB14704	B	61HC5651	528	161.0	14700	240	15	4.6	H80A	Y	0.274	7.0	3.9	6
SUB18604	B	61HC5409	664	202.4	18600	240	15	4.6	H80A	Y	0.303	7.7	3.1	6
277 Volts and 480 Volts, 3-phase Wye														
SUA3	A	61HD3200	140	42.7	2740	277	7	2.1	H22A	Y	0.248	6.3	28.0	14
SUA8	A	61HE3105	177	53.9	4100	277	7	2.1	H22A	Y	0.254	6.5	18.7	14
SUB2	B	61HE4600	240	73.1	5300	277	15	4.6	H25A	Y	0.274	7.0	14.5	14
SUB3	B	61HE4400	280	85.3	6850	277	15	4.6	H30A	Y	0.265	6.7	11.2	12
SUB4	B	61HE4300	320	97.5	8000	277	15	4.6	H30A	Y	0.272	6.9	9.6	12
SUB6	B	61HE4200	375	114.3	10200	277	15	4.6	H40A	Y	0.285	7.2	7.5	10
SUB8	B	61HC4100	550	167.6	12200	277	15	4.6	H60A	Y	0.278	7.1	6.4	8
SUB9	B	61HC5651	630	192.0	16400	277	15	4.6	H60A	Y	0.274	7.0	4.7	8
SUB15	B	61HE4800	225	68.6	4250	277	15	4.6	H25A	Y	0.262	6.7	18.1	14
SUB16	B	61HE4400	310	94.5	6180	277	15	4.6	H25A	Y	0.265	6.7	12.4	14
SUB17	B	61HE4200	440	134.1	8700	277	15	4.6	H40A	Y	0.285	7.2	8.8	10
SUB18	B	61HC4100	560	170.7	12000	277	15	4.6	H60A	Y	0.278	7.1	6.4	8
SUB1807	B	61HD3610	70	21.3	1800	277	15	4.6	H25A	Y	0.200	5.1	42.6	14
SUB2307	B	61HD3390	85	25.9	2300	277	15	4.6	H25A	Y	0.212	5.4	33.4	14
SUB2707	B	61HD3300	95	29.0	2700	277	15	4.6	H25A	Y	0.240	6.1	28.4	14
SUB3207	B	61HD3200	119	36.3	3200	277	15	4.6	H25A	Y	0.248	6.3	24.0	14
SUB3807	B	61HE3150	135	41.2	3800	277	15	4.6	H25A	Y	0.228	5.8	20.2	14
SUB4507	B	61HE3105	162	49.4	4500	277	15	4.6	H25A	Y	0.254	6.5	17.1	14
SUB5207	B	61HE4800	184	56.1	5200	277	15	4.6	H25A	Y	0.262	6.7	14.8	14
SUB6007	B	61HE4600	213	64.9	6000	277	15	4.6	H25A	Y	0.274	7.0	12.8	14
SUB7307	B	61HE4400	262	79.9	7300	277	15	4.6	H30A	Y	0.265	6.7	10.5	12
SUB8507	B	61HE4300	300	91.5	8500	277	15	4.6	H40A	Y	0.272	6.9	9.0	10
SUB10307	B	61HE4200	372	113.4	10300	277	15	4.6	H40A	Y	0.285	7.2	7.4	10
SUB13707	B	61HC4100	491	149.7	13700	277	15	4.6	H60A	Y	0.278	7.1	5.6	8
SUB17207	B	61HC5651	600	182.9	17200	277	15	4.6	H80A	Y	0.274	7.0	4.5	6

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²Resistance tolerance: +/- 10%

Tolerance on heating cable length: -0% to +3%

MI HEATING CABLE FOR SURFACE SNOW MELTING

SUA/SUB HEATING CABLE SPECIFICATIONS

Catalog number	Config-uration	Heating cable reference	Heated length		Nominal power (watts)	Cable voltage (volts)	Cold lead length ¹		Cold lead code	Joint type	Nominal cable diameter		Resis-tance ² (ohms)	Tail size (AWG)
			(ft)	(m)			(ft)	(m)			(in)	(mm)		
347 Volts and 600 Volts, 3-phase Wye														
SUB2305	B	61HD3610	85	25.9	2300	347	15	4.6	H25A	Y	0.200	5.1	52.4	14
SUB2905	B	61HD3390	107	32.6	2900	347	15	4.6	H25A	Y	0.212	5.4	41.5	14
SUB3405	B	61HD3300	119	36.3	3400	347	15	4.6	H25A	Y	0.240	6.1	35.4	14
SUB4105	B	61HD3200	148	45.1	4100	347	15	4.6	H25A	Y	0.248	6.3	29.4	14
SUB4705	B	61HE3150	171	52.1	4700	347	15	4.6	H25A	Y	0.228	5.8	25.6	14
SUB5605	B	61HE3105	205	62.5	5600	347	15	4.6	H25A	Y	0.254	6.5	21.5	14
SUB6505	B	61HE4800	231	70.4	6500	347	15	4.6	H25A	Y	0.262	6.7	18.5	14
SUB7505	B	61HE4600	267	81.4	7500	347	15	4.6	H25A	Y	0.274	7.0	16.1	14
SUB9205	B	61HE4400	327	99.7	9200	347	15	4.6	H30A	Y	0.265	6.7	13.1	12
SUB10605	B	61HE4300	380	115.9	10600	347	15	4.6	H40A	Y	0.272	6.9	11.4	10
SUB13005	B	61HE4200	463	141.2	13000	347	15	4.6	H40A	Y	0.285	7.2	9.3	10
SUB17205	B	61HC4100	614	187.2	17200	347	15	4.6	H60A	Y	0.278	7.1	7.0	8
480 Volts														
SUB19	B	61HD3200	245	74.7	4700	480	15	4.6	H25A	Y	0.248	6.3	49.0	14
SUB20	B	61HE3105	340	103.6	6450	480	15	4.6	H25A	Y	0.254	6.5	35.7	14
SUB21	B	61HE4600	440	134.1	8700	480	15	4.6	H25A	Y	0.274	7.0	26.5	14
SUB22	B	61HE4400	525	160.0	11000	480	15	4.6	H25A	Y	0.265	6.7	20.9	14
SUB3208	B	61HD3610	118	36.0	3200	480	15	4.6	H25A	Y	0.200	5.1	72.0	14
SUB4008	B	61HD3390	147	44.8	4000	480	15	4.6	H25A	Y	0.212	5.4	57.6	14
SUB4708	B	61HD3300	163	49.7	4700	480	15	4.6	H25A	Y	0.240	6.1	49.0	14
SUB5708	B	61HD3200	202	61.6	5700	480	15	4.6	H25A	Y	0.248	6.3	40.4	14
SUB6608	B	61HE3150	233	71.0	6600	480	15	4.6	H25A	Y	0.228	5.8	34.9	14
SUB7908	B	61HE3105	278	84.8	7900	480	15	4.6	H25A	Y	0.254	6.5	29.2	14
SUB9008	B	61HE4800	320	97.6	9000	480	15	4.6	H25A	Y	0.262	6.7	25.6	14
SUB10408	B	61HE4600	368	112.2	10400	480	15	4.6	H25A	Y	0.274	7.0	22.2	14
SUB12808	B	61HE4400	450	137.2	12800	480	15	4.6	H30A	Y	0.265	6.7	18.0	12
SUB14808	B	61HE4300	520	158.5	14800	480	15	4.6	H40A	Y	0.272	6.9	15.6	10
SUB18008	B	61HE4200	640	195.1	18000	480	15	4.6	H40A	Y	0.285	7.2	12.8	10
600 Volts														
SUB11	B	61HD3390	225	68.6	4100	600	15	4.6	H25A	Y	0.212	5.4	87.8	14
SUB12	B	61HD3200	310	94.5	5800	600	15	4.6	H25A	Y	0.248	6.3	62.1	14
SUB13	B	61HE3105	428	130.5	8000	600	15	4.6	H25A	Y	0.254	6.5	45.0	14
SUB14	B	61HE4600	548	167.0	11000	600	15	4.6	H25A	Y	0.274	7.0	32.7	14
SUB4006	B	61HD3610	147	44.8	4000	600	15	4.6	H25A	Y	0.200	5.1	90.0	14
SUB5106	B	61HD3390	181	55.2	5100	600	15	4.6	H25A	Y	0.212	5.4	70.6	14
SUB5806	B	61HD3300	207	63.1	5800	600	15	4.6	H25A	Y	0.240	6.1	62.1	14
SUB7106	B	61HD3200	254	77.4	7100	600	15	4.6	H25A	Y	0.248	6.3	50.7	14
SUB8206	B	61HE3150	293	89.3	8200	600	15	4.6	H25A	Y	0.228	5.8	43.9	14
SUB9806	B	61HE3105	350	106.7	9800	600	15	4.6	H25A	Y	0.254	6.5	36.7	14
SUB11206	B	61HE4800	402	122.6	11200	600	15	4.6	H25A	Y	0.262	6.7	32.1	14
SUB13006	B	61HE4600	462	140.9	13000	600	15	4.6	H25A	Y	0.274	7.0	27.7	14
SUB15906	B	61HE4400	566	172.6	15900	600	15	4.6	H30A	Y	0.265	6.7	22.6	12

¹To modify cold lead length, contact your Pentair Thermal Building Solutions sales representative.

²Resistance tolerance: +/- 10%

Tolerance on heating cable length: -0% to +3%

APPROVALS



Nonhazardous Locations

GROUND-FAULT PROTECTION

To minimize the danger of fire from sustained electrical arcing if the heating cable is damaged or improperly installed, and to comply with the requirements of Pentair Thermal Building Solutions, agency certifications, and national electrical codes, ground-fault equipment protection must be used on each heating cable branch circuit. Arcing may not be stopped by conventional circuit protection. Many Raychem control and monitoring systems meet the ground-fault protection requirement.



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