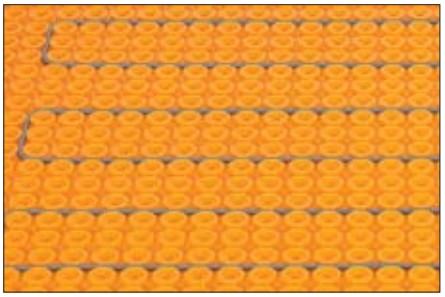
Schluter®-DITRA-HEAT-E-HK

Schluter®-DITRA-HEAT-E-HK are twisted pair heating cables designed for integration with the DITRA-HEAT uncoupling membrane in interior floor warming applications. The cables can be installed without returning to the thermostat and produce virtually zero electromagnetic fields.





BEFORE ordering heating cables, see IMPORTANT ordering information on page 123.

Schluter®-DITRA-HEAT-E-HK

Heating cable

Item No.	Heating Cable Length		Area Covered per Cable Spacing				Total Power	Avg. Power per Unit Area per Cable Spacing				Current	$ / Length
			Regular 3 Stud		Alternating 3-2 Stud			Regular 3 Stud		Alternating 3-2 Stud			
	(ft)	(m)	(ft^2)	(m^2)	(ft^2)	(m^2)	(W)	(Watts/ft^2)	(Watts/m^2)	(Watts/ft^2)	(Watts/m^2)	(Amps)	
Heating Cable (120 V)													
DHE HK 120 11	**35.3**	10.8	**10.7**	1.0	**8.9**	0.8	135	**12.6**	136	**15.2**	164	1.1	**266.93**
DHE HK 120 16	**52.9**	16.1	**16.0**	1.5	**13.3**	1.2	203	**12.7**	136	**15.2**	164	1.7	**297.73**
DHE HK 120 21	**70.5**	21.5	**21.3**	2.0	**17.8**	1.7	270	**12.7**	136	**15.2**	164	2.3	**357.02**
DHE HK 120 27	**88.2**	26.9	**26.7**	2.5	**22.2**	2.1	338	**12.7**	136	**15.2**	164	2.8	**383.62**
DHE HK 120 32	**105.8**	32.2	**32.0**	3.0	**26.7**	2.5	405	**12.7**	136	**15.2**	164	3.4	**415.05**
DHE HK 120 38	**124.1**	37.8	**37.5**	3.5	**31.3**	2.9	475	**12.7**	136	**15.2**	164	4.0	**444.81**
DHE HK 120 43	**141.1**	43.0	**42.7**	4.0	**35.6**	3.3	540	**12.7**	136	**15.2**	164	4.5	**470.80**
DHE HK 120 51	**169.8**	51.8	**51.4**	4.8	**42.8**	4.0	650	**12.7**	136	**15.2**	164	5.4	**528.54**
DHE HK 120 64	**212.9**	64.9	**64.4**	6.0	**53.7**	5.0	815	**12.7**	136	**15.2**	164	6.8	**586.48**
DHE HK 120 73	**240.2**	73.2	**72.7**	6.8	**60.6**	5.6	920	**12.7**	136	**15.2**	164	7.7	**644.29**
DHE HK 120 83	**275.5**	84.0	**83.3**	7.7	**69.4**	6.5	1055	**12.7**	136	**15.2**	164	8.8	**723.00**
DHE HK 120 92	**303.0**	92.4	**91.7**	8.5	**76.4**	7.1	1160	**12.7**	136	**15.2**	164	9.7	**789.32**
DHE HK 120 102	**336.9**	102.7	**101.9**	9.5	**84.9**	7.9	1290	**12.7**	136	**15.2**	164	10.7	**868.09**
DHE HK 120 113	**372.2**	113.4	**112.6**	10.5	**93.8**	8.7	1425	**12.7**	136	**15.2**	164	11.9	**948.53**
DHE HK 120 134	**444.0**	135.3	**134.3**	12.5	**111.9**	10.4	1700	**12.7**	136	**15.2**	164	14.2	**1,037.22**
Heating Cable (240 V)													
DHE HK 240 11	**35.3**	10.8	**10.7**	1.0	**8.9**	0.8	135	**12.6**	136	**15.2**	164	0.6	**266.93**
DHE HK 240 16	**53.1**	16.2	**16.1**	1.5	**13.4**	1.2	203	**12.6**	136	**15.2**	164	0.8	**297.43**
DHE HK 240 21	**70.6**	21.5	**21.4**	2.0	**17.8**	1.7	270	**12.7**	136	**15.2**	164	1.1	**357.24**
DHE HK 240 27	**88.2**	26.9	**26.7**	2.5	**22.2**	2.1	338	**12.7**	136	**15.2**	164	1.4	**383.41**
DHE HK 240 32	**105.8**	32.2	**32.0**	3.0	**26.7**	2.5	405	**12.7**	136	**15.2**	164	1.7	**415.05**
DHE HK 240 38	**124.1**	37.8	**37.5**	3.5	**31.3**	2.9	475	**12.7**	136	**15.2**	164	2.0	**444.64**
DHE HK 240 43	**141.0**	43.0	**42.6**	4.0	**35.5**	3.3	540	**12.7**	136	**15.2**	164	2.3	**470.62**
DHE HK 240 53	**176.3**	53.7	**53.3**	5.0	**44.4**	4.0	675	**12.7**	136	**15.2**	164	2.8	**528.64**
DHE HK 240 64	**211.6**	64.5	**64.0**	5.9	**53.3**	5.0	810	**12.7**	136	**15.2**	164	3.4	**586.38**
DHE HK 240 75	**248.2**	75.7	**75.1**	7.0	**62.6**	5.8	950	**12.7**	136	**15.2**	164	4.0	**644.33**
DHE HK 240 85	**282.1**	86.0	**85.3**	7.9	**71.1**	6.6	1080	**12.7**	136	**15.2**	164	4.5	**703.72**
DHE HK 240 103	**339.4**	103.4	**102.7**	9.5	**85.6**	7.9	1300	**12.7**	136	**15.2**	164	5.4	**791.38**
DHE HK 240 129	**425.8**	129.8	**128.8**	12.0	**107.3**	10.0	1630	**12.7**	136	**15.2**	164	6.8	**884.45**
DHE HK 240 145	**480.5**	146.5	**145.3**	13.5	**121.1**	11.3	1840	**12.7**	136	**15.2**	164	7.7	**961.26**
DHE HK 240 167	**551.0**	167.9	**166.7**	15.5	**138.9**	12.9	2110	**12.7**	136	**15.2**	164	8.8	**1,036.98**
DHE HK 240 183	**605.9**	184.7	**183.3**	17.0	**152.7**	14.2	2320	**12.7**	136	**15.2**	164	9.7	**1,138.53**
DHE HK 240 204	**673.8**	205.4	**203.8**	18.9	**169.9**	15.8	2580	**12.7**	136	**15.2**	164	10.7	**1,219.71**
DHE HK 240 225	**744.4**	226.9	**225.2**	20.9	**187.7**	17.4	2850	**12.7**	136	**15.2**	164	11.9	**1,309.80**

Each heating cable includes 2 floor temperature sensors compatible with the Schluter®-DITRA-HEAT-E thermostats and features an approximately 7 ft *(2.1 m)* long cold lead.

Schluter®-DITRA-HEAT-E-HK Heating Cables 208 V Applications



Schluter®-DITRA-HEAT offers complete flexibility when creating warm floors in any application. DITRA-HEAT-E-HK heating cables are designed for use with common 120 V and 240 V power sources. 208 V power sources are used in some cases to handle larger loads (e.g., HVAC equipment, motors, etc.) or to improve energy efficiency.

Schluter-Systems recommends using the DITRA-HEAT-E-HK 240 V heating cables when a 208 V power source is present. However, this will reduce the heating power by 25% to 9.5 W/ft² at the standard 3-stud cable spacing, which may not be sufficient power to warm the floor in these applications. To offset the effect of the lower voltage, we recommend installing the heating cable at a 2-stud spacing in these applications. This results in an increased heating power of 14.2 W/ft², which will ensure adequate performance.

The heating cable will cover 33% less area when spaced at 2 studs compared to 3 studs. Therefore, a longer heating cable must be selected to cover a given area in these applications. Coverage for each 240 V heating cable spaced at 2 studs can be found in the table below.

DITRA-HEAT-E-HK 240 V Heating Cables in 208 V Applications at 2 Stud Spacing

Item No.	Length (ft - m)	Area (ft² - m²)	Power (W)	Average Power (W/ft² - W/m²)	Current (A)
DHE HK 240 11	**35.3** – 10.8	**7.1** – 0.7	101	**14.2** - 152.8	0.5
DHE HK 240 16	**53.1** – 16.2	**10.7** – 1.0	152	**14.2** - 152.8	0.7
DHE HK 240 21	**70.5** – 21.5	**14.2** – 1.3	203	**14.2** - 152.8	1.0
DHE HK 240 27	**88.2** – 26.9	**17.8** – 1.7	254	**14.2** - 152.8	1.2
DHE HK 240 32	**105.8** – 32.2	**21.3** – 2.0	304	**14.2** - 152.8	1.5
DHE HK 240 38	**124.1** – 37.8	**25.0** – 2.3	356	**14.2** - 152.8	1.7
DHE HK 240 43	**141** – 43.0	**28.4** – 2.6	405	**14.2** - 152.8	1.9
DHE HK 240 53	**176.3** – 53.7	**35.5** – 3.3	506	**14.2** - 152.8	2.4
DHE HK 240 64	**211.6** – 64.5	**42.7** – 4.0	608	**14.2** - 152.8	2.9
DHE HK 240 75	**248.2** – 75.7	**50.0** – 4.7	713	**14.2** - 152.8	3.4
DHE HK 240 85	**282.1** – 86.0	**56.9** – 5.3	810	**14.2** - 152.8	3.9
DHE HK 240 103	**339.4** – 103.4	**68.4** – 6.4	975	**14.2** - 152.8	4.7
DHE HK 240 129	**425.8** – 129.8	**85.8** – 8.0	1223	**14.2** - 152.8	5.9
DHE HK 240 145	**480.5** – 146.5	**96.9** – 9.0	1380	**14.2** - 152.8	6.6
DHE HK 240 167	**551** – 167.9	**111.1** – 10.3	1583	**14.2** - 152.8	7.6
DHE HK 240 183	**605.9** – 184.7	**122.1** – 11.4	1740	**14.2** - 152.8	8.4
DHE HK 240 204	**673.8** – 205.4	**135.8** – 12.6	1935	**14.2** - 152.8	9.3
DHE HK 240 225	**744.4** – 226.9	**150.1** – 13.9	2138	**14.2** - 152.8	10.3

We recommend consulting with a qualified electrician for design and installation of your DITRA-HEAT system on a 208 V power source. Keep in mind during design of the system that the DITRA-HEAT-E thermostats have an electrical current limit of 15 A.

IMPORTANT Ordering Information for Schluter®-DITRA-HEAT Cables

- Do not purchase a heating cable the same size as the area to be tiled; this will be too much heating cable!
- Very important: **Never CUT or modify the heating cable in any way.** This would change the cable resistance, will cause damage to the cable, and could cause cable overheating.
- A cable spacing of 3 studs is standard
- Cable may also be spaced at continuously alternating 3 stud – 2 stud – 3 stud intervals in isolated areas or over the entire floor. This practice may be desirable to increase heat output (e.g., over uninsulated on or below grade concrete subfloors) or to consume more cable length in a given area (e.g., when using the standard 3 stud spacing doesn't allow the selected cable to fit the floor area and respect minimum spacing requirements from walls, partitions, etc.)
- A cable spacing of 4 studs is not recommended, as it can produce inconsistent floor surface temperatures
- Minimum spacing from walls, partitions, and fixed cabinets is 2" *(50 mm)*.
- Minimum spacing from other heat sources (baseboard heaters, fireplaces, etc.) is 8" *(200 mm).*
- Minimum spacing from any plumbing drain and forced air heating ducts is 4" *(100 mm)*.
- Minimum spacing from the centerline of toilet drain is 7" *(180 mm)*.
- The heating section of the cable must be entirely installed under the floor covering. The installation is characterized as a Type C (Embedded Floor Warming) application. In order to prevent a fire hazard, do not install it anywhere else (e.g. in a wall).
- NEVER install the heating cable under vanities with no air space beneath, bathtub platforms, free-standing bathtubs with no air space beneath, kitchen cabinets or any other fixtures or in clothing closets. Excessive heat will build up in these confined spaces and may cause cable overheating.
- It is helpful to plan the location of a buffer zone, as it is not possible to predict where the heating cable will end. The buffer zone is an area where heating is not essential and heating cable installation is not planned (e.g., behind a toilet or adjacent to a door opening). This area allows for placement of excess heating cable. Heating cables may also be installed 6" *(150 mm)* from the wall to create a buffer zone.
- Heating cable testing is required while the heating cable is on the spool and at two subsequent steps during installation to ensure cable quality and for warranty purposes.

Schluter®-DITRA-HEAT-E-HK-RK Heating Cable Repair Kit and Schluter®-DITRA-HEAT-E-HK-SK Heating Cable Splice Kit

Schluter®-DITRA-HEAT-E-HK-RK is a repair kit for DITRA-HEAT-E-HK heating cables. The kit contains all the material to replace one section of heating cable (gray section) up to 10" *(25 cm)* long or less in the event of damage, such as cuts by other trades during installation.

Schluter®-DITRA-HEAT-E-HK-SK is a splice kit for DITRA-HEAT-E-HK heating cables. The kit contains all the material to replace one factory splice of the heating cable.

Please visit www.schluter.com for ordering information.

WARNINGS

- Heating cable repairs must be conducted by a qualified electrician in accordance with this heating cable repair procedure, the National Electric Code (USA) or Canadian Electric Code Part I (CAN) as applicable and the Schluter®-DITRA-HEAT Installation Handbook. All electrical connections must be made by a qualified electrician, according to the electrical and building codes effective in your region.
- **Prior to commencing a repair:** Any known deviations from the Schluter®-DITRA-HEAT Installation Handbook and/or applicable code(s) must be corrected. All cable installation and repair instructions must be followed in order to avoid personal injuries or property damage.
- Do not use these kits to splice different heating cables together. These kits are only intended for making repairs to a single cable.
- The heating cable cannot be shortened or altered to fit.
- **Very important:** Never CUT the heating cable. This could change the cable resistance and could lead to a fire.
- **WARRANTY DISCLAIMER:** Any deviation from the DITRA-HEAT Installation Handbook (which includes damage to the DITRA-HEAT-E-HK heating cables) voids the Schluter®-DITRA-HEAT Limited limited Warranty and warranty coverage is not reinstated upon repair of the heating cable. SCHLUTER SYSTEMS FURTHER DISCLAIMS ANY AND ALL WARRANTIES EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND ANY AND ALL LIABILITY ARISING FROM THE ELECTRICIAN SERVICES.