Series

ELK-MI Mineral Insulated (M.I.) Alloy 825 Cable Assembly



Single Conductor



Double Conductor

 Features

Outer jacket - Alloy 825.

**Assembly components** - Alloy 825.

Bus wire - Conductor type might vary depending on model

 (Nichrome, KP, Constantan, Alloy (30, 60, 90), Copper).

Cold lead length - 6 ft. (1.8 m) cold lead includes 18 in. (45 cm) flexible cord.

Ambient temperature - -60 °C to +60 °C (-76 °F to +140 °F).

Maximum operating

temperature (power on) - 700 °C (1292 °F).

Nominal voltage - Up to 600V.

Bending radius, minimum - Diameter x 6.

Installation temperature,

minimum - -60 °C (-76 °F).

Classification - Class I, Division 2, Groups A, B, C, D.

 - Class II, Division 1, Groups E, F, G.

 - Class III, Division 1.

 - Class I, Zone 1, AEx/Ex d e IIC T1…T6.

Standards - CSA C22.2 130-16.

* UL 60079-30-1.

Certification - FM 18 US0191X.

* FM 18 CA0089X.

Rating - Moisture proof, may be immersed in fluids.

Warranty - 1-year basic warranty on the heating cable.

Application - Temperature maintenance, silos, vessels, tanks, pipelines, chemical and petrochemical

 industries, oil and gas industry, industrial processes, mobile processing facilities, vacuum

 processes, freeze prevention.

**Models**

|  |  |
| --- | --- |
| **Double Conductor** | **Single Conductor** |
| **300V** | **600V** | **600V** |
| **Product #** | **Dia.in.** | **Ω/ft.** | **Dia.mm** | **Ω/m** | **Conductor****Type** | **Product #** | **Dia.****in.** | **Ω/ft.** | **Dia.mm** | **Ω/m** | **Conductor****Type** | **Product #** | **Dia.****in.** | **Ω/ft.** | **Dia.mm** | **Ω/m** | **Type de conducteur**  |
| **11E0L-2S** | 0.16 | 11 | 4.1 | 36.089 | Nichrome R | **11E0H-2S** | 0.22 | 11 | 5.6 | 36.089 | Nichrome R | **30E1H-1S** | 0.17 | 3 | 4.3 | 9.842 | Nichrome R |
| **90E1L-2S** | 0.16 | 9 | 4.1 | 29.527 | Nichrome R | **90E1H-2S** | 0.23 | 9 | 5.7 | 29.527 | Nichrome R | **20E1H-1S** | 0.17 | 2 | 4.3 | 6.562 | Nichrome R |
| **75E1L-2S** | 0.16 | 7.5 | 4.1 | 24.606 | Nichrome R | **75E1H-2S** | 0.24 | 7.5 | 6.0 | 24.606 | Nichrome R | **19E1H-1S** | 0.17 | 1.88 | 4.3 | 6.168 | Nichrome R |
| **60E1L-2S** | 0.16 | 6 | 4.1 | 19.685 | Nichrome R | **60E1H-2S** | 0.23 | 6 | 5.8 | 19.685 | Nichrome R | **16E1H-1S** | 0.17 | 1.6 | 4.3 | 5.249 | Nichrome A |
| **50E1L-2S** | 0.16 | 5 | 4.1 | 16.404 | Nichrome R | **40E1H-2S** | 0.24 | 4 | 6.1 | 13.123 | Nichrome A | **13E1H-1S** | 0.17 | 1.3 | 4.3 | 4.265 | Nichrome A |
| **40E1L-2S** | 0.16 | 4 | 4.1 | 13.123 | Nichrome A | **30E1H-2S** | 0.26 | 3 | 6.5 | 9.842 | Nichrome A | **12E1H-1S** | 0.17 | 1.22 | 4.3 | 4.003 | Nichrome A |
| **32E1L-2S** | 0.16 | 3.2 | 4.1 | 10.498 | KP | **20E1H-2S** | 0.26 | 2 | 6.5 | 6.562 | Nichrome R | **10E1H-1S** | 0.17 | 1 | 4.3 | 3.281 | KP |
| **27E1L-2S** | 0.16 | 2.7 | 4.1 | 8.858 | KP | **14E1H-2S** | 0.26 | 1.4 | 6.5 | 4.593 | Constantan | **85E2H-1S** | 0.17 | 0.85 | 4.3 | 2.789 | KP |
| **25E1L-2S** | 0.16 | 2.5 | 4.1 | 8.202 | Constantan | **10E1H-2S** | 0.26 | 1 | 6.5 | 3.281 | KP | **70E2H-1S** | 0.17 | 0.7 | 4.3 | 2.297 | Constantan |
| **20E1L-2S** | 0.16 | 2 | 4.1 | 6.562 | Constantan | **70E2H-2S** | 0.27 | 0.7 | 6.7 | 2.297 | Constantan | **50E2H-1S** | 0.17 | 0.5 | 4.3 | 1.640 | Constantan |
| **17E1L-2S** | 0.16 | 1.7 | 4.1 | 5.577 | Constantan | **50E2H-2S** | 0.28 | 0.5 | 7.1 | 1.640 | Constantan | **38E2H-1S** | 0.17 | 0.38 | 4.3 | 1.247 | Constantan |
| **14E1L-2S** | 0.16 | 1.4 | 4.1 | 4.593 | Constantan | **30E2H-2S** | 0.3 | 0.3 | 7.6 | 0.984 | Constantan | **30E2H-1S** | 0.17 | 0.3 | 4.3 | 0.984 | Constantan |
| **10E1L-2S** | 0.17 | 1 | 4.2 | 3.281 | Constantan | **23E2H-2S** | 0.28 | 0.23 | 6.9 | 0.755 | Alloy 90 | **25E2H-1S** | 0.17 | 0.25 | 4.3 | 0.820 | Constantan |
| **70E2L-2S** | 0.18 | 0.7 | 4.3 | 2.297 | Constantan | **20E2H-2S** | 0.26 | 0.2 | 6.5 | 0.656 | Alloy 90 | **20E2H-1S** | 0.18 | 0.2 | 4.4 | 0.656 | Constantan |
| **50E2L-2S** | 0.19 | 0.5 | 4.8 | 1.640 | Alloy 60 | **15E2H-2S** | 0.27 | 0.15 | 6.7 | 0.492 | Alloy 90 | **17E2H-1S** | 0.18 | 0.17 | 4.3 | 0.558 | Constantan |
| **30E2L-2S** | 0.17 | 0.3 | 4.3 | 0.984 | Alloy 60 | **10E2H-2S** | 0.28 | 0.1 | 7.1 | 0.328 | Alloy 60 | **15E2H-1S** | 0.17 | 0.15 | 4.3 | 0.492 | Alloy 60 |
| **25E2L-2S** | 0.17 | 0.25 | 4.3 | 0.820 | Alloy 60 | **70E3H-2S** | 0.3 | 0.07 | 7.5 | 0.230 | Alloy 60 | **12E2H-1S** | 0.17 | 0.12 | 4.3 | 0.394 | Alloy 60 |
| **20E2L-2S** | 0.17 | 0.2 | 4.3 | 0.656 | Alloy 60 | **50E3H-2S** | 0.31 | 0.05 | 7.9 | 0.164 | Alloy 60 | **10E2H-1S** | 0.17 | 0.1 | 4.3 | 0.328 | Alloy 60 |
| **15E2L-2S** | 0.18 | 0.15 | 4.4 | 0.492 | Alloy 60 | **40E3H-2S** | 0.33 | 0.04 | 8.3 | 0.131 | Alloy 60 | **80E3H-1S** | 0.17 | 0.08 | 4.3 | 0.262 | Alloy 60 |
| **10E2L-2S** | 0.19 | 0.1 | 4.8 | 0.328 | Alloy 30 | **30E3H-2S** | 0.35 | 0.03 | 8.8 | 0.098 | Alloy 60 | **70E3H-1S** | 0.17 | 0.07 | 4.3 | 0.230 | Alloy 60 |
| **70E3L-2S** | 0.21 | 0.07 | 5.2 | 0.230 | Alloy 30 | **20E3H-2S** | 0.27 | 0.02 | 6.9 | 0.066 | Copper | **60E3H-1S** | 0.17 | 0.06 | 4.3 | 0.197 | Alloy 60 |
| **50E3L-2S** | 0.23 | 0.05 | 5.7 | 0.164 | Alloy 30 | **16E3H-2S** | 0.28 | 0.016 | 7.1 | 0.052 | Copper | **40E3H-1S** | 0.18 | 0.04 | 4.4 | 0.131 | Alloy 60 |
| **-** | - | - | - | - | - | **13E3H-2S** | 0.29 | 0.013 | 7.4 | 0.043 | Copper | **30E3H-1S** | 0.19 | 0.03 | 4.7 | 0.098 | Alloy 60 |
| **-** | - | - | - | - | - | **10E3H-2S** | 0.3 | 0.01 | 7.6 | 0.033 | Copper | **20E3H-1S** | 0.2 | 0.02 | 5.1 | 0.066 | Alloy 60 |
| **-** | - | - | - | - | - | **-** | - | - | - |  |  | **10E3H-1S** | 0.17 | 0.01 | 4.3 | 0.033 | Copper |
| **-** | - | - | - | - | - | **-** | - | - | - |  | - | **65E4H-1S** | 0.18 | 0.0065 | 4.3 | 0.021 | Copper |
| **-** | - | - | - | - | - | **-** | - | - | - |  | - | **40E4H-1S** | 0.19 | 0.0041 | 4.8 | 0.013 | Copper |

**Made to order product, standard production lead time of 6 weeks, please contact factory for design and quote.**

**Cold Lead Sizes**

|  |  |
| --- | --- |
| **Double Conductor** | **Single Conductor** |
| **Size** | **Max. Current(A)** | **Gland Diameter(NPT)** | **Size** | **Max. Current(A)** | **Gland Diameter(NPT)** |
| **AWG** | **CEC** | **NEC** | **CEC** | **NEC** | **AWG** | **CEC** | **NEC** | **CEC** | **NEC** |
| 14 | 15 | 25 | 1/2''(12.7 mm) | 1/2''(12.7 mm) | 14 | 20 | 30 | 1/2''(12.7 mm) | 1/2''(12.7 mm) |
| 12 | 20 | 30 | 12 | 25 | 40 |
| 10 | 30 | 40 | 10 | 40 | 55 |
| 8 | 50 | 55 | 8 | 70 | 75 |

**Configurations**

|  |  |
| --- | --- |
| **Design B** | Single conductor cold lead M.I. Heater with clean laser hot to cold on both ends. |
| **Design D** | Two conductor cold lead M.I. Heater with clean laser seal hot to cold on one end.Clean laser seal hot to hot at opposite ends. |
| **Design E** | Two conductor cold lead M.I. Heater with clean laser seal hot to cold on both ends. |

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**Specifications may change without prior notice**

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| Project: | ApprovalInformation |
| Consultant Engineer: |
| Electricial Contractor: |
| Distributor: |
| Date: |
| Contact in Ouellet: |
| Comments: |