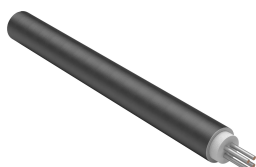


# System 2200 MI Wiring Alloy 825 Cable



nVent PYROTENAX System 2200 mineral insulated (MI) wiring cable is a range of MI wiring cable, with an Alloy 825 sheath and solid nickel conductors (600 V). It has a continuous exposure temperature of 1238 °F/670 °C and can withstand rapid-rise temperature excursions to 2200 °F/1200 °C. The inorganic cable construction provides superior fire resistance under conditions of both high heat flux and high temperature. Common applications include control/signal/instrumentation of motor operated valves during fire exposure ensuring that valves can be safely controlled and closed when required. It is typically supplied as a factory-assembled wiring unit complete with terminations at each end.

## FEATURES

Simple and fast to install: typically supplied as a factory-assembled Duoterm unit complete with terminations at each end, allowing for immediate installation in the field

Ideal for hazardous areas: the simplified installation of MI cable means that conduit systems and explosion-proof seals are not required, just connect the cable directly to the equipment or junction box

Increased safety: made of inorganic materials, it provides zero smoke generation, zero fuel contribution and zero flame spread; highly compacted magnesium oxide (MgO) insulation prevents the flow and transmission of explosive gases through the wiring cables

Fully tested and compliant: using the UL2196 electrical test procedure it maintains electrical circuit integrity for 2 hours during exposure to the UL 1709 fire test. The UL 1709 test, referenced in API 2218, replicates an intense hydrocarbon fire, reaching 1093 °C / 2000 °F in 5 minutes when subjected to a heat flux of 65,000 BTU/ft<sup>2</sup> hr (200 kW/m<sup>2</sup>) in an enclosed furnace

Reliable during long life: 30 year product warranty available

## SPECIFICATIONS

|                                   |                                  |
|-----------------------------------|----------------------------------|
| <b>Voltage Rating:</b>            | 600 V                            |
| <b>Max Operating Temperature:</b> | 670 °C                           |
| <b>Max Exposure Temperature:</b>  | 1200 °C                          |
| <b>Sheath Material:</b>           | Alloy 825                        |
| <b>Flame Retardant:</b>           | In Accordance with EN 60332-3-24 |
| <b>Insulation Material:</b>       | Magnesium Oxide                  |
| <b>Construction:</b>              | Mineral Insulated Cable          |
| <b>Conductor Material:</b>        | Nickel                           |

Table 1/1

| Catalog Number | Item Name                 | Core Quantity | Current Rating @ 75°C | Current Rating @ 90°C | Outer Diameter | AWG Size |
|----------------|---------------------------|---------------|-----------------------|-----------------------|----------------|----------|
| 355-16/2NI825  | 2C/23AWG/SYS<br>2200 600V | 2             | 11 A                  | 13 A                  | 9 mm           | #16      |
| 387-16/3NI825  |                           | 3             | 9 A                   | 11 A                  | 9.9 mm         | #16      |
| 402-14/2NI825  | 2C/21AWG/SYS<br>2200 600V | 2             | 15 A                  | 17 A                  | 10.2 mm        | #14      |
| 418-14/3NI825  | 3C/21AWG/SYS<br>2200 600V | 3             | 13 A                  | 15 A                  | 10.6 mm        | #14      |
| 434-13/3NI825  | 3C/20AWG/SYS<br>2200 600V | 3             | 14 A                  | 16 A                  | 11 mm          | #13      |
| 465-14/4NI825  | 4C/21AWG/SYS<br>2200 600V | 4             | 13 A                  | 15 A                  | 13.4 mm        | #14      |
| 465-12/3NI825  | 3C/19AWG/SYS<br>2200 600V | 3             | 16 A                  | 18 A                  | 11.8 mm        | #12      |
| 496-16/7NI825  | 7C/23AWG/SYS<br>2200 600V | 7             | 9 A                   | 11 A                  | 12.6 mm        | #16      |
| 496-12/4NI825  | 4C/19AWG/SYS<br>2200 600V | 4             | 15 A                  | 18 A                  | 12.6 mm        | #12      |
| 527-10/3NI825  | 3C/17AWG/SYS<br>2200 600V | 3             | 22 A                  | 25 A                  | 13.4 mm        | #10      |
| 543-14/7NI825  | 7C/21AWG/SYS<br>2200 600V | 7             | 13 A                  | 15 A                  | 13.8 mm        | #14      |
| 590-10/4NI825  | 4C/17AWG/SYS<br>2200 600V | 4             | 21 A                  | 24 A                  | 15 mm          | #10      |
| 590-11/5NI825  | 5C/10AWG/SYS<br>2200 600V | 5             | 18 A                  | 21 A                  | 15 mm          | #11      |
| 590-13/7NI825  | 7C/20AWG/SYS<br>2200 600V | 7             | 15 A                  | 18 A                  | 15 mm          | #13      |
| 637-8/4NI825   |                           | 4             | 27 A                  | 31 A                  | 16.2 mm        | #8       |
| 684-11/8NI825  | 8C/10AWG/SYS<br>2200 600V | 8             | 19 A                  | 22 A                  | 17.4 mm        | #11      |
| 700-14/10NI825 |                           | 10            | 13 A                  | 15 A                  | 17.8 mm        | #14      |

| CatalogNumber | Item Name                 | Core Quantity | Current Rating<br>@ 75°C | Current Rating<br>@ 90°C | Outer Diameter | AWG Size |
|---------------|---------------------------|---------------|--------------------------|--------------------------|----------------|----------|
| 714-7/5NI825  | 5C/15AWG/SYS<br>2200 600V | 5             | 29 A                     | 34 A                     | 18.1 mm        | #7       |
| 810-5/5NI825  | 5C/13AWG/SYS<br>2200 600V | 5             | 38 A                     | 45 A                     | 20.6 mm        | #5       |

## WARNING

nVent products shall be installed and used only as indicated in nVent's product instruction sheets and training materials. Instruction sheets are available at [www.nvent.com](http://www.nvent.com) and from your nVent customer service representative. Improper installation, misuse, misapplication or other failure to completely follow nVent's instructions and warnings may cause product malfunction, property damage, serious bodily injury and death and/or void your warranty.

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