## TECHNICAL SPECIFICATIONS FOR THE WIRE USED IN THE 4085 CABLE:

— Wire size: 16 AWG nickel plated copper

- Insulation material: silicone oxide

Color: red oxide

Maximum temperature: 482°F (250°C)
Nominal outside diameter: 0.265" (6.7mm)

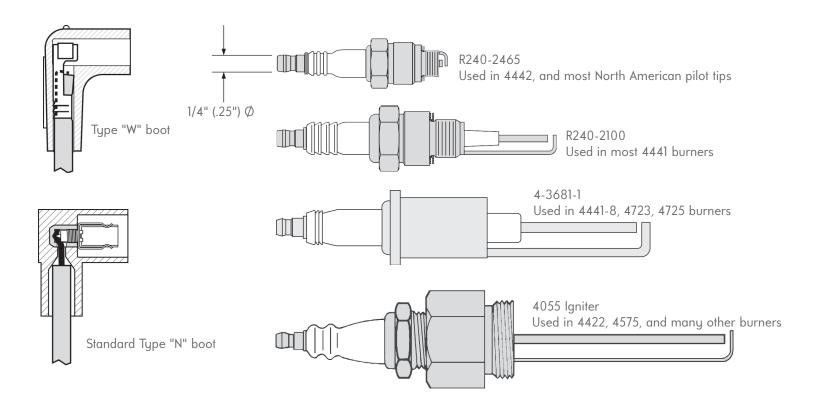
Voltage rating: 25 kVDC

 Standards: UL listed (file E61355) and RoHS complaint, UL 3257

Note: The wire used in 4085-ERA cables is slightly different.

## 1/4" Ø SPARK PLUG TERMINALS AND SNAP-LOCK FITTING

Most spark plugs supplied by Fives North American have a 1/4" terminal for electrical input. The boot connector end of most 4085 cables has a Snap-lock fitting that clips onto the 1/4" 0/40 spark plug terminal to make the electrical connection with the spark plug. In type "H" and "W" boots, the fitting sits deep within the boot. The boot material is flexible and fits tight around the insulator when connected on the spark plug terminal, so they work best on smaller diameter insulators. The type "N" boot is made from a ridged Nylon material and fits on every spark plug with a 1/4" 0/40 terminal because the boot ID is larger and the Snap-lock is mounted shallower in the boot. The type "N" boot does not seal around the insulator but it does shield the terminal connection. See page 2 for more details.



## **4085 CABLE TIPS:**

- For information on North American ignition transformers reference bulletin 4065.
- If a burner has an igniter and a flame rod, it's a good idea to use a different connector style for each to avoid connection errors.
- Do not run UV detector signal wire in conduit with ignition wires or 120 V lines. Flame rod and ignition wiring must be kept separated to avoid ignition flashover and false flame sensing.
- The length of the signal leads to a flame rod should be minimized (less than 60 feet) to avoid excessive capacitance in the wiring, which could result in erratic flame relay operation.
- Internal plant grounding cannot be relied upon to provide the source voltage for a flame rod. A separate grounding wire should be run from the combustion safeguard flame rod terminal to the burner ground. The flame rod signal wire should be attached to the amplifier terminal of the combustion safeguard.
- Stock a few spare cables and igniters in case they get damaged to help minimize down time.