



LEMO 4-pin

%C

# A probe with thermal shock resistance

The *CarboProbeZI Pro* features a ball as a measuring element. This proprietary concept allows us to provide you with a high-quality product, offering an excellent accuracy for the measurement of carbon potential (%C) and temperature ( $^{\circ}C/^{\circ}F$ ).

## A ball as a measuring element...

- > Very reliable and robust
- > Thermal shock resistance
- > Easily interchangeable



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# Specifications

Output O to 1200 mV

#### Readout impedance

This probe should be used with controlling, recording, and indicating instruments having input impedance of 8 megaohms or higher.

±0.05 weight percent C in normal operating range

Response time Less than 1.0 second

Thermocouple K, S, N, or without Operating temperatures 600°C (1100°F) to 1150°C (2100°F)

Mechanical shock Resists mild mechanical shock; handle carefully

Available lengths 500 mm (19.7"), 650 mm (25.6"), 750 mm (29.5"), 850 mm (33.5"), 1000 mm (39.4")

Reference air Uncontaminated dry air at maximum rate of 30 L/h (849.6 cfh)

Cleaning air Uncontaminated dry air at maximum rate of 300 L/h (8496 cfh)

External diameter 25 or 35 mm (with protective ceramic tube)

### **KEY FEATURES**

- Thermal shock resistant (can be placed into or removed from furnace quickly)
- Outer electrode has gone through a special surface treatment that reduces corrosion and metal dusting significantly
- Patented, interchangeable ZrO<sub>2</sub> ball used as a measuring element
- Can also be supplied with a protective ceramic outer tube
- · Ideal for use in carburizing, carbonitriding, neutral hardening, and gas generator applications
- Every probe is 100% tested with certification; certificates are enclosed with each probe
- High reliability of the probe thanks to a simple and effective concept
- Interchangeable with all oxygen probes or carbon sensors
- Low investment resulting in an important improvement of heat treatment