

# TYPE S PLATINUM THERMOCOUPLES FOR L&L KILNS

## THE BEST THERMOCOUPLE

The standard thermocouple used on the DynaTrol is Type K. The most common thermocouple configuration that we use is an 8 gauge exposed Type K thermocouple protected with a mullite ceramic protection tube (standard on Easy-fire, Easy-Fire XT, School-Master, Jupiter, eQuad-Pro, Hercules, Easy-Load, DaVinci, Liberty-Belle and Doll kilns).

The very best thermocouple for constant high fire applications is a Type S platinum thermocouple with an alumina sheath. This is standard on the JH Series kilns and is recommended for the most extreme conditions (like firing crystalline glazes). You can special order a DynaTrol with Type S thermocouples. The control is hard programmed for this (to avoid potential misfiring) and special calibrated wire connects the platinum thermocouples with the control.

*Below is Type S Platinum Thermocouple:*



## TECHNICAL INFORMATION

Type S thermocouples are composed of a positive leg which is 90% platinum and 10% Rhodium, and a negative leg which is 100% platinum. It is usable from 32°F to 2700°F. (0°C to 1480°C). It has a different EMF output than Type K thermocouples (meaning the same temperature will produce different voltages to the control which must then be interpreted differently).

At temperatures used in pottery kilns (even the highest 2400°F) these thermocouples can last for a very long time (as long as they are not mechanically broken).

The lead wires that go from the Type S thermocouple to the control are a special grade that is not interchangeable with Type K lead wire.

On DynaTrols used before Jan 1, 2006 this is not a retrofittable option.

On DynaTrol 700 controls (used after Jan 1, 2006) the control can be easily converted from Type K to Type S in

the field. You will still need to change the lead wire. Contact L&L for more information.

## DESCRIPTION

The Type S thermocouples that we provide have a 5/16" OD alumina sheath. They are ungrounded. There are three lengths. The short one used in the Easy-fire, Easy-Fire XT, Jupiter, eQuad-Pro, JH Series, DaVinci, and Doll kilns is 120 mm (4.75") long. The medium one used in the Hercules and Easy-Load front-loading kilns is 160 mm long (6.3"). There is a special order extra long one used in the discontinued Renaissance front-loading kilns which is 220 mm long (8.66"). Termination is in the ceramic terminal block.

## ORDERING

### PART NUMBER: T-G-SXXX/00

#### Type-S Thermocouple - 120 mm (Standard Length).

Type S Platinum Thermocouple with Alumina Protection Tube and Terminal Block - Unit is 120 mm (4-3/4") Long x 1/4" Diameter. Can be used on any polygonal, square, or rectangular kilns with standard 2-1/2" or 3" brick insulation using a DynaTrol control board. Not for use on any Front-Loading kilns, or custom kilns with more than 3" of insulation. Nor for use with any kilns not using a DynaTrol or Genesis control board.

[hotkilns.com/type-s-thermocouple-standard](http://hotkilns.com/type-s-thermocouple-standard)

### PART NUMBER: T-G-SXXX/06

#### Type-S Thermocouple - 160 mm (Medium length).

Type S Platinum Thermocouple with Alumina Protection Tube and Terminal Block - Unit is 160 mm (6-5/16") Long x 1/4" Diameter. Used on Hercules and Easy-Load kilns where wall thickness is 5".

[hotkilns.com/type-s-thermocouple-long](http://hotkilns.com/type-s-thermocouple-long)

**NOTE: Type S thermocouples can be ordered with a kiln as part of the original equipment on all kilns that have a DynaTrol or Genesis Control.**