

## Datasheet

# IEC Thermocouple Extension Cable – PTFE Insulated Flat Pair

Available in Thermocouple Types K, J & T



Type 'K'



Type 'J'

(Type 'K' & 'J' shown – see below for other thermocouple types and corresponding colour codes)

- PTFE insulated flat pair cable
- Single pair of PTFE insulated conductors, laid flat with PTFE jacket
- Good mechanical strength and flexibility, resistant to oils, acids and other adverse fluids
- Suitable for steam & pressure applications, autoclaves, sterilisers etc.
- Thermocouple types K, J, & T with 7/0.2mm stranded conductors
- 1/0.3mm solid conductor option available for type T
- 10, 25 & 50 metre reel lengths
- Tolerance Class 1 for optimum accuracy
- Insulation rating -75°C to 260°C
- Colour code (cores & jacket) to IEC-584-3

T/C Type	Conductors	mm <sup>2</sup>	Cores	Jacket	Reel Length	Allied Code	RS order code
KX	7/0.2mm	0.219	+Green/-White	Green	10 metres	70657132	<b>827-5776</b>
KX	7/0.2mm	0.219	+Green/-White	Green	25 metres	70641732	<b>236-3858</b>
KX	7/0.2mm	0.219	+Green/-White	Green	50 metres	70657135	<b>827-5785</b>
JX	7/0.2mm	0.219	+Black/-White	Black	10 metres	70657139	<b>827-5798</b>
JX	7/0.2mm	0.219	+Black/-White	Black	25 metres	70644362	<b>455-4258</b>
JX	7/0.2mm	0.219	+Black/-White	Black	50 metres	70657142	<b>827-5808</b>
TX	1/0.3mm	0.072	+Brown/-White	Brown	10 metres	70657137	<b>827-5791</b>
TX	1/0.3mm	0.072	+Brown/-White	Brown	25 metres	70643610	<b>363-0418</b>
TX	1/0.3mm	0.072	+Brown/-White	Brown	50 metres	70657138	<b>827-5794</b>
TX	7/0.2mm	0.219	+Brown/-White	Brown	10 metres	70657136	<b>827-5788</b>
TX	7/0.2mm	0.219	+Brown/-White	Brown	25 metres	70641735	<b>236-3892</b>
TX	7/0.2mm	0.219	+Brown/-White	Brown	50 metres	70657134	<b>827-5782</b>

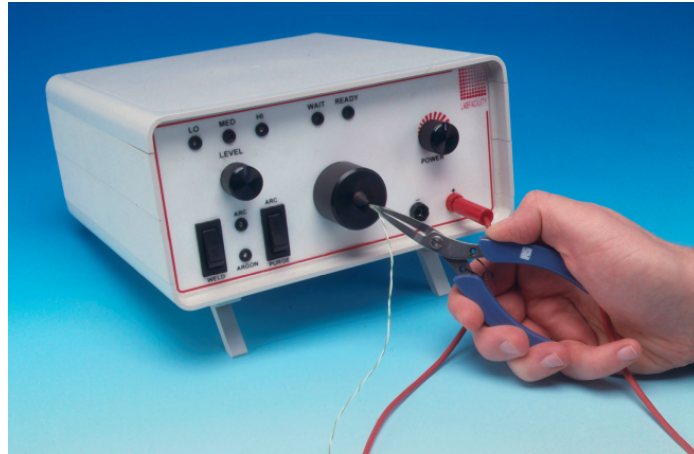
**Overall sheath Dimensions** (approx.)      **Loop resistance** (ohms per combined metre)

1/0.3mm      1.0mm x 1.6mm  
 7/0.2mm      1.2mm x 2.2mm

Type T @ 7.2 Ohms/mtr  
 Type K @ 4.5 Ohms/mtr  
 Type J @ 2.7 Ohms/mtr  
 Type T @ 2.3 Ohms/mtr

# Making your own thermocouples?

## L60 Thermocouple & Fine Wire Welder



The Thermocouple Welder is a compact, simple-to-use instrument designed for thermocouple and fine wire welding

It is primarily designed for use by sensor manufacturers to produce commercial grade thermocouple junctions; it is ideal for producing large numbers of exposed junction thermocouples for test and development laboratories. The L60 Thermocouple Welder is ideally suited to transducer and RTD extension lead attachment

Use of the Thermocouple Welder does not require special skills and most operatives will be capable of producing quality work with little practice. The instrument is supplied with a full range of user accessories including a footswitch

Suitable for use with wires of up to 1.1mm diameter an argon gas shield facility is included but a satisfactory thermocouple junction is produced without the need for argon. The output energy of the L60 Thermocouple Welder can be varied up to 60 Joules

- Simple to use Thermocouple Welder
- Designed for the production of commercial grade thermocouple junctions
- Also suitable for other fine wire work
- Front panel or footswitch operation
- Argon gas shield facility

### Supplied complete with the following accessories:

- Wire Holding Pliers & Lead
- Safety Glasses
- Magnifying Eyeglass
- Carbon Electrodes
- Spare 2A Fuse
- Argon Hose
- Mains Lead
- Footswitch for greater ease of use



Carbon Electrode

### ORDERING INFORMATION

#### **MODEL**

FINE WIRE WELDER

Spare Carbon Electrodes (x5) for 1.1mm 250V Fine Wire Welder

#### **Allied Code**

70825788

70656473

#### **RS ORDER NUMBER**

**363-0351**

**814-0184**

RS069/0816

## **SPECIFICATIONS**

### **General**

Energy Output 0-60 Joules  
Welding Capacity Wires up to 1.1mm diameter  
Duty Cycle Minimum 5-10 welds/min

### **MECHANICAL**

Physical Dimensions 220mm Wide x 120mm High x 250mm Depth  
Weight 4kg

### **ELECTRICAL**

Power Supply 110-120 Vac or 220-250 Vac, 50-60Hz  
Power Consumption Max 170VA dropping to 20VA during charging

### **MAINTENANCE**

Apart from keeping the electrode in good order, no other maintenance is required

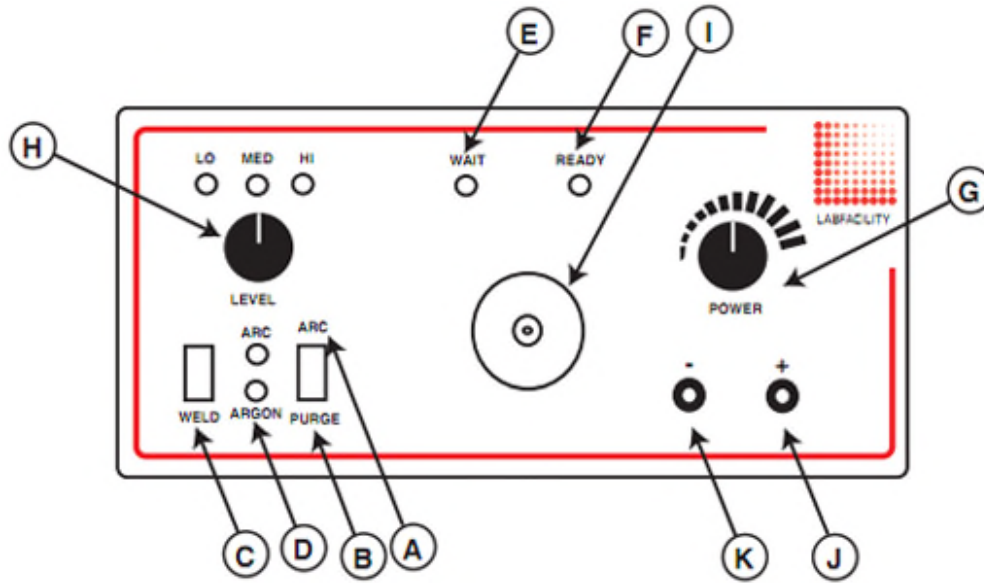
(Front View)



(Rear View)



**Thermocouple Welder Controls**



- A Arc Argon gas and weld current controlled by the “Weld” switch. LED indication
- B Purge Allows the gas line and electrode shield to be purged of air prior to a new welding period
- C Weld Switch Initiates a welding operation (in “arc” mode also opens the Argon valve)
- D Argon LED Indicates when the Argon control valve is open and gas is flowing
- E Wait LED Glows when weld charge is building
- F Ready LED “Ready to Weld” indication
- G Power Rotary control of the capacitor charge voltage
- H Level Selector Selects the total capacitance available giving the following values with LED indication
  - “LO” = 0 to 6 Joules
  - “MED” = 0 to 28 Joules
  - “HI” = 0 to 64 Joules

- I Electrode Holder Holds the replaceable carbon electrode which is accessible by removing the outer Argon Shield
- J Red Socket Output socket for using the pliers supplied
- K Black Socket Output socket, this provides an additional earth