

Datasheet

IEC Glassfibre Insulated Flat Pair Thermocouple Cable

Types 'K' & 'T' 1/0.3 solid strand, or Type 'J' 7/0.2mm multi-strand – to IEC584



(Type 'K' 1/0.3mm shown – Type 'T' also available)



(Type 'J' 7/0.2mm)

- Glassfibre insulated extension cable in thermocouple types; KX, JX or TX
- Glassfibre insulated flat pair construction, conductors laid flat, Glassfibre insulated with Glassfibre overall, silicone varnished throughout
- Good temperature resistance but not suitable where fluids are present
- Types KX & TX available in solid 1/0.3mm conductors, JX in 7/0.2mm stranded conductors
- See below for available reel lengths
- All types; conductors are made from associated K, J or T thermocouple alloy type
- Tolerance Class 2 to IEC-584
- Insulation rating -60°C to 350°C (short periods up to 400°C)
- Colour code (cores & jacket) to IEC-584-3

T/C Type	Conductors	mm ²	Cores	Jacket	Reel Length	Allied Code	RS order code Code
KX	1/0.3mm	0.072	+Green/-White	Green	10 m	70641631	219-4589
KX	1/0.3mm	0.072	+Green/-White	Green	25 m	70641730	236-3836
KX	1/0.3mm	0.072	+Green/-White	Green	50 m	70657149	827-5833
KX	1/0.3mm	0.072	+Green/-White	Green	100 m	70657152	827-5842
KX	1/0.3mm	0.072	+Green/-White	Green	200 m	70657153	827-5845
JX	7/0.2mm	0.219	+Black/-White	Black	10 m	70657155	827-5851
JX	7/0.2mm	0.219	+Black/-White	Black	25 m	70644363	455-4264
JX	7/0.2mm	0.219	+Black/-White	Black	50 m	70657156	827-5855
JX	7/0.2mm	0.219	+Black/-White	Black	100 m	70657159	827-5864
TX	1/0.3mm	0.072	+Brown/-White	Brown	10 m	70641736	236-3909
TX	1/0.3mm	0.072	+Brown/-White	Brown	25 m	70657154	827-5849
TX	1/0.3mm	0.072	+Brown/-White	Brown	50 m	70657157	827-5858

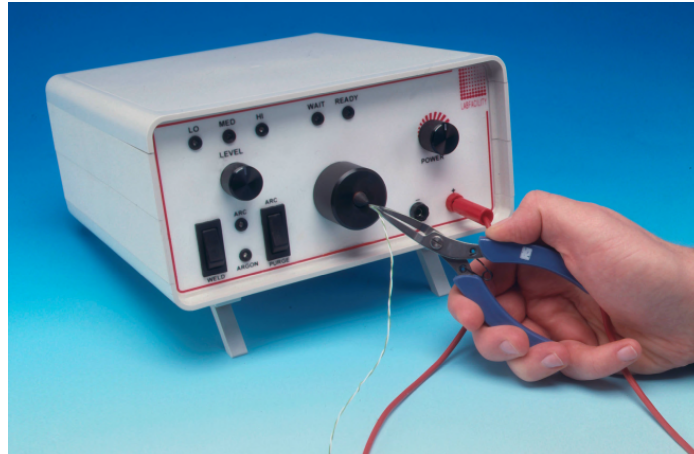
Overall sheath Dimensions (approx.)

Loop resistance (ohms per combined metre)

1/0.3mm	1.1mm x 1.7mm	Type K @ 14.1 Ohms/mtr
		Type T @ 7.2 Ohms/mtr
7/0.2mm	1.2mm x 1.9mm	Type J @ 2.7 Ohms/mtr
RS083/0816		

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

RS083/0816

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

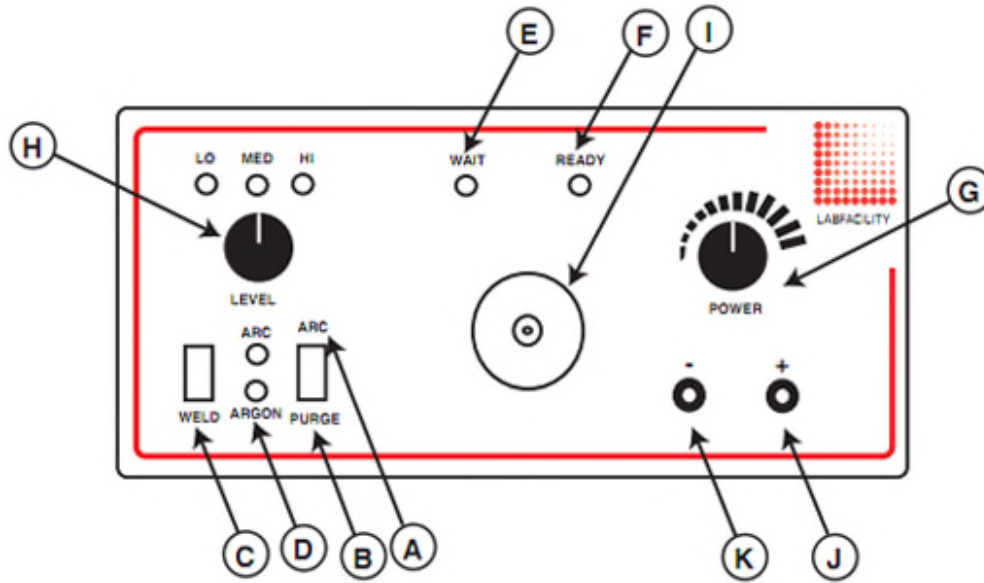
(Front View)



(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