

Datasheet

IEC PVC Insulated Flat Pair Thermocouple Extension & Compensating Cable

PVC Insulated Flat Pair (to IEC-584)

- PVC insulated flat pair construction
- Conductors laid flat PVC insulated with overall PVC sheath
- All round general purpose cable, both waterproof and very flexible
- Thermocouple extension types for K, J, T & N
- Compensating types VX (KCB) & U (RCA) for types K & R/S Thermocouples respectively
- Stranded conductors available, either 7/0.2mm, 13/0.2mm or 23/0.2mm
- Available in 10, 25, 100 & 200 metre lengths
- Tolerance Class 2
- Insulation rating -10°C to 105°C
- Colour code (cores & jacket) to IEC-584-3



Compensating cable resembles the thermoelectric characteristic of the relevant thermocouple over a limited ambient temperature range, 0° to 80°C typically. Since these cables are made from low cost materials, cost savings can be achieved on plant installations compared with running true thermocouple extension cable.

Extension cable (true thermocouple material) should be used for maximum accuracy.

	Conductors	Cores	Jacket	Reel Length	Allied Code	RS order code
Extension:						
KX	7/0.2mm	+Green/-White	Green	10 metres	70657084	827-5615
KX	7/0.2mm	+Green/-White	Green	25 metres	70641729	236-3820
KX	7/0.2mm	+Green/-White	Green	50 metres	70657085	827-5619
KX	7/0.2mm	+Green/-White	Green	100 metres	70646156	611-7889
KX	7/0.2mm	+Green/-White	Green	200 metres	70657088	827-5628
KX	13/0.2mm	+Green/-White	Green	25 metres		827-5883
KX	13/0.2mm	+Green/-White	Green	50 metres		827-5892
KX	23/0.2mm	+Green/-White	Green	25 metres		827-5895
EX	7/0.2mm	+Purple/-White	Purple	10 metres		136-5863
EX	7/0.2mm	+Purple/-White	Purple	25 metres		136-5864
JX	7/0.2mm	+Black/-White	Black	10 metres	70641640	219-4753
JX	7/0.2mm	+Black/-White	Black	25 metres	70657078	827-5592
JX	7/0.2mm	+Black/-White	Black	50 metres	70657079	827-5596
JX	7/0.2mm	+Black/-White	Black	100 metres	70641737	236-3915
JX	7/0.2mm	+Black/-White	Black	200 metres	70657081	827-5606
TX	7/0.2mm	+Brown/-White	Brown	10 metres	70641637	219-4703
TX	7/0.2mm	+Brown/-White	Brown	25 metres	70641734	236-3870
TX	7/0.2mm	+Brown/-White	Brown	50 metres	70657095	827-5653
TX	7/0.2mm	+Brown/-White	Brown	100 metres	70651749	762-1146

TX	7/0.2mm	+Brown/-White	Brown	200 metres	70657098	827-5662
TX	13/0.2mm	+Brown/-White	Brown	25 metres		827-5899
NX	7/0.2mm	+Pink/-White	Pink	10 metres	70641635	219-4668
NX	7/0.2mm	+Pink/-White	Pink	25 metres	70657091	827-5637
NX	7/0.2mm	+Pink/-White	Pink	50 metres	70657089	827-5631
NX	7/0.2mm	+Pink/-White	Pink	100 metres	70657092	827-5640

	Conductors	Cores	Jacket	Reel Length	Allied Code	RS order code
Compensating:						
VX (KCB)	7/0.2mm	+Green/-White	Green	10 metres	70657082	827-5609
VX (KCB)	7/0.2mm	+Green/-White	Green	25 metres	70641629	219-4551
VX (KCB)	7/0.2mm	+Green/-White	Green	50 metres	70657080	827-5603
VX (KCB)	7/0.2mm	+Green/-White	Green	100 metres	70641630	219-4573
VX (KCB)	7/0.2mm	+Green/-White	Green	200 metres	70657083	827-5612
VX (KCB)	13/0.2mm	+Green/-White	Green	10 metres	70657086	827-5621
VX (KCB)	13/0.2mm	+Green/-White	Green	25 metres	70657087	827-5625
VX (KCB)	13/0.2mm	+Green/-White	Green	50 metres	70657090	827-5634
VX (KCB)	13/0.2mm	+Green/-White	Green	100 metres	70651750	762-1152
U (RCA)	7/0.2mm	+Orange/-White	Orange	10 metres	70657096	827-5656
U (RCA)	7/0.2mm	+Orange/-White	Orange	25 metres	70646158	611-7902
U (RCA)	7/0.2mm	+Orange/-White	Orange	50 metres	70657097	827-5659
U (RCA)	13/0.2mm	+Orange/-White	Orange	10 metres	70641641	219-4769
U (RCA)	13/0.2mm	+Orange/-White	Orange	25 metres	70657093	827-5643
U (RCA)	13/0.2mm	+Orange/-White	Orange	50 metres	70657094	827-5647

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

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

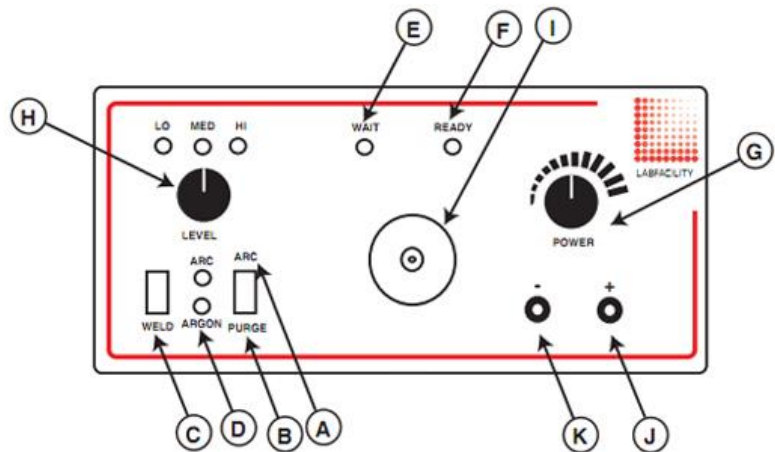
(Front View)



(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 | Glow 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 |