

Data Sheet

 English (EN)

Product: Triple Cable Sets

Product Code: GHT 6001—6006

Product Code	Copper Cable (mm ²)	Length (m)	Current Rating (Amps)	Weight (kg)
GHT 6001	16	30	135	18
GHT 6002	16	15	135	8
GHT 6003	25	30	180	24
GHT 6004	25	15	180	
GHT 6005	35	30	225	
GHT 6006	35	15	225	



Picture illustrates GHT 6001

The triple cable set consists of two lengths of heat and oil resistant and flame retardant (HOFR), double insulated copper cable complete with two 300 amp female twistlock connectors on one end and two 300 amp male twistlock connectors on the opposite end. Running alongside the copper cable is a length of compensating cable which has a thermocouple socket on one end and a thermocouple plug on the opposite end.

Technical Information for Double Insulated Copper Cable:

Standard

BS638 Part 4

Conductor

Extra flexible class 6 tinned copper cable conductors to BS6 360 (flexible class 5 for 120mm² and above)

Separator

PETP tape separator (or paper)

Insulation

EPR Insulations to BS7655

Sheath

HOFR Sheath to BS7655

Voltage Rating

100V (450V for non-welding applications if suitably protected from mechanical danger)

Temperature Rating

-40 to +85^oC

Minimum Bending Radius

6 x overall diameter



Units 3—5 & 7 Venture Works
 Charleywood Road
 Knowsley Industrial Estate North
 Merseyside, L33 7SG
 Tel: +44 (0)151 548 5281
 enq@globeheat.com
www.globeheat.com

Duty Cycle and Current Carrying Capacity

The current carrying capacity of a welding cable depends on the length of the duty cycle. The duty cycle is the length of time during which a loaded current passes through the cable over an operation period of 5 minutes, expressed as a percentage of that period. For example, if the current is flowing for the full 5 minutes the duty cycle is 100% and if the current is flowing for 1 minute the duty cycle is 20%. As conductor temperature varies according to the time in use as well as current, ratings shown are given as a guide.

The permissible loading of the cable for duty cycles other than those shown in the table can be calculated using the following formula:

$$I = I_{100} \sqrt{F}$$

Where:

- I: is the maximum permissible loading current for the required duty cycle
- I_{100} : is the maximum permissible loading current for a duty cycle of 100%
- F: is the required duty cycle calculated as a percentage of the 5 minute operational period

Typical guidance values for different welding processes are as follows:

- Fully automatic welding 100%
- Semi Automatic Welding 65 – 85%
- Manual Welding 30 – 60%
- Very infrequent or occasional welding 20%

Loading Current Values (amperes)

Nominal Cross Sectional Area mm ²	100%	85%	60%	30%
16	135	145	175	230
25	180	195	230	300
35	225	245	290	375

Technical Information for Compensating Cable

Construction

- Thirteen Strands of 0.2mm OD thermocouple alloys.
- Each leg bunched
- PVC extruded with high temp PVC (Red / White)
- Pair laid flat
- High temp. PVC extruded overall (Red)

Conductor Material

- Positive leg: Copper Insulated Red
- Negative leg: Constantan Insulated White

Unit of Sale: Each