

Rubber Flexible

HOFR WELDING CABLE (0361TQ)

Specially flexible tinned annealed copper conductor, Ethylene Propylene (EP) Rubber insulated, Chlorosulphonated Polyethylene (CSP) sheathed. To BS638 Part 4.
Standard Colours: Black and Orange.

| SIZE SQ.MM | CLASS OF CONDUCTOR | MAXIMUM DIAMETER OF WIRES MM | MEAN THICKNESS OF INSULATION | NOMINAL OVERALL DIAMETER MM | APPROX WEIGHT KG/KM |
|---------------|--------------------------|---------------------------------------|---------------------------------------|--------------------------------------|---------------------------|
| 16 | 6 | 0.21 | 2.0 | 10.9 | 212 |
| 25 | 6 | 0.21 | 2.0 | 12.5 | 300 |
| 35 | 6 | 0.21 | 2.0 | 14.0 | 403 |
| 50 | 6 | 0.21 | 2.2 | 16.0 | 560 |
| 70 | 6 | 0.21 | 2.4 | 18.6 | 776 |
| 95 | 6 | 0.21 | 2.6 | 21.2 | 1035 |
| 120 | 5 | 0.51 | 2.8 | 23.1 | 1300 |
| 150 | 5 | 0.51 | 3.0 | 25.5 | 1650 |
| 185 | 5 | 0.51 | 3.2 | 27.9 | 1944 |

Operating temperature: Maximum 85°C, Minimum flexing -20°C
Minimum bending radius: 6 x overall diameter.

DUTY CYCLE. The duty cycle is defined as the time for which the current flows expressed as a percentage of the complete cycle, which is taken as 5 minutes. Since the length of time for which the current flows during welding operation varies from occasional to continuous, the duty cycle can vary from as little as 20% to maximum of 100% on automatic operation. As conductor temperature varies according to the time in use as well as current, ratings shown are given as a guide.

Automatic welding : Up to 100%
Semi - Automatic : 30 - 85%
Manual Welding : 30 - 60%

AMBIENT TEMPERATURES. Cable operating temperature also varies according to the prevailing ambient temperature. EPR/CSP cables are designed to give optimum performance up to an operating temperature of 85°C at an ambient temperature of 25°C. The Reduction factors for increased ambient temperatures are:

| | | | | | | |
|-----------------------|------|------|------|------|------|------|
| Ambient temperature : | 30°C | 35°C | 40°C | 45°C | 50°C | 55°C |
| Reduction Factor : | 0.96 | 0.91 | 0.87 | 0.82 | 0.76 | 0.79 |

OPERATIONS UNDER SEVERE CONDITIONS. High operating temperatures or prolonged maximum loading of the cable reduces the life or makes the cable too hot to handle. Thus under conditions where a long service life cannot be expected or where a high surface temperature is tolerable, the current rating for 25°C may be applied up to an ambient temperature of 40°C.