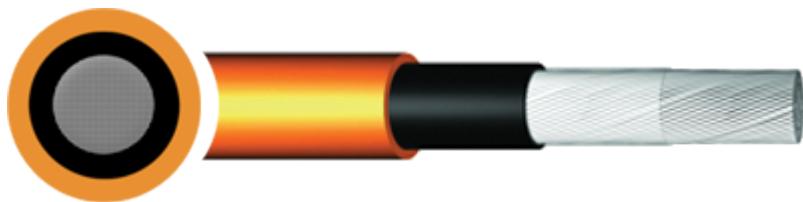


Welding Cable -BS638 Part 4, 0361TQ, EPR, CSP - 16mm to 185mm



0361TQ is an orange sleeved flexible welding cable used for connection of an electric welding machine to the welding gun. This cable carries large current for the purposes of welding metal together in automatic and manual welding machines. It is high quality cable for all work from occasional use to a 100% duty cycle.

Suitable for use in factory assembly lines, conveyor systems, machine tools and car manufacturing.

Key Features



Installation Guidelines

Should not be installed at temperatures below 0°C



Voltage Rating

100 Volts



Minimum Bending Radius

As Per Manufacturers Datasheet



Flame Retardancy

BS EN 50525-2-81



Temperature Limits

Ambient Temperature: -20°C to +85°C

Construction

- **Conductor:** Tinned annealed flexible stranded circular copper conductor Single Core
- **Insulation:** Neutral Ethylene Propylene Rubber (EPR)
- **Sheath:** CSP (chlorosulphonated polyethylene)
- **Sheath Colour:** Orange

Standards

- BS 638 Part 4, Flame retardant to BS EN 50525-2-81, Conforms to IEC 60332-1-2

Core Colours

All sizes available in neutral

Welding Cable -BS638 Part 4, 0361TQ, EPR, CSP - 16mm to 185mm - Dimensions

Reference	Conductor Size (mm2)	No Of Cores	Stranding(mm)	Outside Diameter(mm)	Overall Diameter(mm)	Weight(Kg/Km)	Gland Size
0361TQ16OR	16	1	513/0.20	235	11.5	235	20S
0361TQ25*	25	1	783/0.20	330	13	330	20
0361TQ35OR	35	1	1107/0.20	440	14.5	440	25
0361TQ50OR	50	1	1566/0.20	610	17	610	25
0361TQ70OR	70	1	2214/0.20	840	19.5	840	32
0361TQ95OR	95	1	2997/0.20	1120	22	1120	32
0361TQ120OR	120	1	608/0.50	1410	24	1410	32
0361TQ185OR	185	1	925/0.50	2100	29	2100	40

BS638 (Part 4) WELDING CABLE – CURRENT CARRYING CAPACITY (AMPS)

NOMINAL CROSS SECTIONAL AREA MM2	CURRENT RATING FOR SINGLE CYCLE OPERATION OVER A MAXIMUM PERIOD OF 5 MINUTES			
	100%	80%	60%	35%
16	135	145	175	230
25	180	195	230	300
35	225	245	290	375
50	285	305	365	480
70	355	385	460	600
95	430	470	560	730
120	500	540	650	850
150	580	630	750	980
185	665	720	860	1120

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 whole 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: $I = I_{100} \times \sqrt{F}$

Where: I: is the maximum permissible loading current for the required duty cycle.

I100 : 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 operation 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%

THE INFORMATION CONTAINED WITHIN THIS DATASHEET IS FOR GUIDANCE ONLY AND IS SUBJECT TO CHANGE WITHOUT NOTICE OR LIABILITY. WE BELIEVE THE INFORMATION IS CORRECT AT THE TIME OF PUBLICATION. PLEASE NOTE WHEN SELECTING CABLE ACCESSORIES THAT ACTUAL CABLE DIMENSIONS MAY VARY DUE TO MANUFACTURING TOLERANCES.

For more information contact: 01642 241 133



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