GENERAL WELDING
EPM/CM OR EPM/CR CABLE

CABLE DESCRIPTION

Single core flexible copper conductors to SANS 1411 Part 1, EPM (Ethylene-propylene monomer) insulated, CM (Chloronated Polyethylene) or CR (Polychloropene) sheathed, heavy duty welding cables.

INSTALLATION INFORMATION

Heavy duty welding for:

- Indoor and outdoor electric welding equipment.

PROPERTIES

Specification	:	SANS 1576
Voltage Rating	:	100 V ac or dc to earth for welding applications
Core Identification	:	EPM/CM - Outer CM sheath is coloured
		EPM/CR - EPM insulation is coloured and CR sheath is black
Packaging	:	100m shrink-wrapped coils

TECHNICAL DATA

PHYSICAL PROPERTIES

Colour Code	Conductor				Dimensions		Approx. Cable Mass
	Conductor Size	Maximum Diameter of wires	Approx. Diameter	Maximum resistance of untinned conductor at 20°C	Nominal Thickness of Insulation	Approx. Overall Diameter	
	(mm²)	(mm)	(mm)	(Ω/km)	(mm)	(mm)	(kg/m)
Green	16	0,31	5,4	1,210	2,0	9,4	0,23
Blue	25	0,31	7,2	0,780	2,0	11,2	0,33
Grey	35	0,31	8,5	0,554	2,0	12,5	0,44
Red	50	0,31	10,1	0,386	2,2	14,6	0,61
Brown	70	0,31	11,7	0,272	2,4	16,6	0,81
Yellow	95	0,51	14,1	0,206	2,6	19,3	1,08
Black	120	0,51	15,5	0,161	2,8	21,5	1,41

ELECTRICAL PROPERTIES

Conductor Size	Class of Welding					D.C. Voltage Drop
	Automatic		Manual		Very Intermittent	
	Semi-automatic					
	* Maximum current rating (A) for duty cycles of					
(mm²)	100%	85%	60%	30%	20%	mV/A/m
16	130	140	170	235	290	2,92
25	175	190	225	320	390	1,90
35	215	235	280	395	480	1,35
50	270	295	350	495	630	0,95
70	340	370	440	620	790	0,67
95	420	445	530	750	940	0,50
120	460	500	610	870	1090	0,38

*** Note:** - Assumed ambient air temperature 30°C.
- Assumed maximum conductor temperature 85°C.
- Derating of maximum current for other ambient temperatures - use rating factor X as given below:

Ambient temperature, °C	:	25	30	35	40	45
Rating factor, X	:	1,04	1,00	0,95	0,91	0,85