SYNTHETIC RUBBER FLEXIBLE CORD

CONSTRUCTION

Conductor	Finely stranded annealed copper conductor according to IEC 60228, class 5
Insulation	PVC compound
Insulation colour	

Number of cores	Colour of cores
2	BU BR
3	GN/YE BU BR
4	GN/YE BR BL GR
5	GN/YE BU BR BL GR

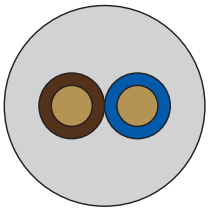
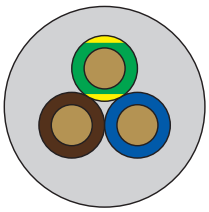
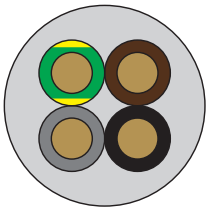
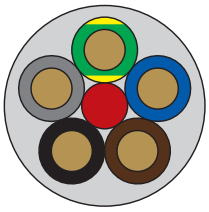
Sheath	Synthetic Rubber
Sheath colour	Black

TECHNICAL DATA

Temperature range	-5°C up to 70°C
Nominal voltage	300 / 500V
Test voltage	2kV / 15min
Behaviour in fire	Flame retardant (self-extinguishing) according to IEC 60332-1-2
Absense of harmful subtances	RoHS compliant

SYNTHETIC RUBBER FLEXIBLE CORD

300 / 500V
70°C

Cross-sectional view	Number and n minal r ss-se ti nal area f ndu t rs	hi kness f insulati n Spe ified value	hi kness f Sheath Spe ified value	Appr x. Overall diameter
	no./mm²	mm	mm	mm
	2 x 0.75	0.80	1.30	8.10
	2 x 1	0.80	1.30	8.40
	2 x 1.5	0.80	1.50	9.40
	2 x 2.5	0.90	1.70	11.10
	2 x 4	1.00	1.80	12.80
	2 x 6	1.10	2.15	14.90
	3 x 0.75	0.80	1.40	8.70
	3 x 1	0.80	1.40	9.10
	3 x 1.5	0.80	1.60	10.10
	3 x 2.5	0.90	1.80	11.90
	3 x 4	1.00	1.90	13.70
	3 x 6	1.10	2.30	16.00
	4 x 0.75	0.80	1.50	9.60
	4 x 1	0.80	1.50	10.00
	4 x 1.5	0.80	1.70	11.10
	4 x 2.5	0.90	1.90	13.10
	4 x 4	1.00	2.00	15.10
	4 x 6	1.10	2.40	17.60
	5 x 0.75	0.80	1.60	10.60
	5 x 1	0.80	1.60	11.10
	5 x 1.5	0.80	1.80	12.20
	5 x 2.5	0.90	2.00	14.40
	5 x 4	1.00	2.10	16.60
	5 x 6	1.10	2.50	19.30

PVC AUTO CABLE

70°C

CONSTRUCTION

Conductor	Finely stranded annealed copper conductor
Insulation	PVC compound
Insulation colour	Red, yellow, blue, black and green unless specified otherwise

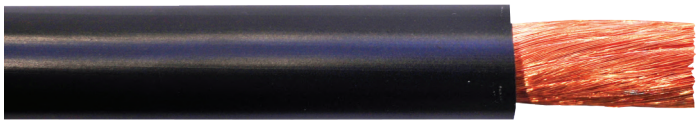
TECHNICAL DATA

Temperature range	-5°C up to 70°C
Test voltage	2kV/15min
Behaviour in fire	Flame retardant (self-extinguishing) according to IEC 60332-1-2
Absense of harmful subtances	RoHS compliant

Model	Thickness of insulation Specified value	Approx. overall Diameter	Maximum conductor resistance at 20°C
	mm	mm	Ω/km
14 / 026	0.75	2.65	26.30
28 / 026	0.75	3.10	13.20
35 / 026	0.80	3.30	10.50
44 / 026	0.85	3.60	8.40
65 / 026	0.85	4.00	5.70
100 / 026	1.05	5.00	3.70

SYNTHETIC RUBBER WELDING CABLE

BS EN 50525-2-81



CONSTRUCTION

Conductor	Finely stranded annealed copper conductor according to IEC 60228, class 5
Insulation	Synthetic Rubber
Insulation colour	Black

TECHNICAL DATA

Temperature range	-5°C up to 70°C
Nominal voltage	100 / 100V
Test voltage	1kV / 15min
Behaviour in fire	Flame retardant (self-extinguishing) according to IEC 60332-1-2
Absense of harmful subtances	RoHS compliant

SYNTHETIC RUBBER WELDING CABLE

BS EN 50525-2-81

100 / 100V
70°C

Nominal cross-sectional area of conductors	Maximum diameter of wires in conductor	Thickness of covering Specified value	Mean overall dimensions	
			Lower limit	Upper limit
mm^2	mm	mm	mm	mm
10	0.21	2.00	7.70	9.70
16	0.21	2.00	8.80	11.00
25	0.21	2.00	10.10	12.70
35	0.21	2.00	11.40	14.20
50	0.21	2.20	13.20	16.50
70	0.21	2.40	15.30	19.20
95	0.21	2.60	17.10	21.40
120	0.51	2.80	19.20	24.00
150	0.51	3.00	21.10	26.40
185	0.51	3.20	23.10	28.90

WELDING CABLE

ELECTRICAL CHARACTERISTICS

Current Carrying Capacity

NOMINAL CROSS SECTIONAL AREA	CURRENT RATING FOR SINGLE CYCLE OPERATION OVER A MAXIMUM PERIOD OF 5 MINUTES			
	Amps			
mm^2	100%	85%	60%	35%
10	100	103	108	122
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
240	780	850	975	1250

Ambient air temperature: 25°C
Maximum conductor temperature: 85°C

The above table is based on HD 516 S2:1997

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: $I = I100 \times \sqrt{100/F}$

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.

DE-RATING FACTORS

De-Rating Factor for Ambient Temperature 60°C Thermoplastic or Thermosetting Insulated Cords

AIR TEMPERATURE	25°C	30°C	35°C	40°C	45°C	50°C	55°C
DE-RATING FACTOR	1.0	0.96	0.91	0.87	0.82	0.76	0.71