CONSTRUCTION :

Conductor: Flexible Tinned Copper to BS6360

Insulation: Ethylene Propylene Rubber E.P.R ; Type FR1 (Voltage Categories A & C) & Type FR2 (Voltage Categories D & E) to BS 7655.

Sheath: Chlorosulphonated Polyethylene C.S.P. HOFR Black. To BS 6899

APPLICATION :

This range of Cables is designed as power leads for permanent connecton to coil winding motors, panel wiring and electrical machinery . They are able to withstand high temperature and immersion in varnish. Other applications include vehicle wiring. T he HOFR sheath resists oil and varnish and the stranding is designed as a compromise between flexibility and positional stability. Also suitable as an alternative to tri-rated and bi-rated cable in certain applications

TECHNICAL DATA :

Voltage Categories

A 300/500V

C 600/1000V

D 1900/3300V

E 3800/6600V

F 6350/11000V

Operating Temperature Range: -20oC to +70oC

Bending Radius: Up to 25mm2 = 6 x overall diameter

Above 25mm2 = 8 x overall diameter

SHEATH COLOUR :

0.5-10mm2: Red-Black

10mm2 above: Black only.

RELEVANT STANDARDS :

Cable in accordance with BS6195

Insulation & Sheath to BS6899

OPTIONS

Coiled end lead is also manufactured to BS6899 Type 5 - Silicon insulation 180oC Operating Temperature.

Voltage Category	Maximum Equipment Test Voltage (ACrms)	Nominal Voltage Rating of Cable Uo/U
A	2.5	300/500V
C	4.0	600/1000V
D	9.5	1900/3300V

E	17	3800/6600V

Core and Size mm sq	Stranding (Number of Strand/Strand Diameter	Nominal Thickness of Insulation mm				Nominal Overall Diameter mm for each voltage category			
		Voltage Category				Voltage Category			
		A	C	D	E	A	C	D	E
Mm	mm								
0.5	16/0.2	0.8	1.4	-	-	3.3	4.5	-	-
0.75	24/0.2	0.8	1.4	-	-	3.5	4.7	-	-
1.0	32/0.2	0.8	1.4	-	-	3.7	4.9	-	-
1.5	30/0.25	0.8	1.4	-	-	4.0	5.2	-	-
2.5	50/0.25	0.9	1.4	2.8	-	4.6	5.6	8.5	-
4.0	56/0.3	1.0	1.4	2.8	-	5.4	6.3	9.1	-
6.0	84/0.3	1.0	1.5	2.8	-	6.5	7.5	10.3	-
10	80/0.4	1.2	1.5	2.8	-	7.9	8.5	11.3	-
16	126/0.4	-	1.5	2.8	5.0	-	9.6	12.4	17.2
25	196/0.4	-	1.6	2.8	5.0	-	11.4	13.8	18.6
35	276/0.4	-	1.6	2.8	5.0	-	12.8	12.5	20.0
50	396/0.4	-	1.7	2.8	5.0	-	14.8	17.1	22.1
70	360/0.5	-	1.8	2.8	5.0	-	17.2	19.2	24.2
95	475/0.5	-	2.0	3.0	5.0	-	19.2	22.0	26.3
120	608/0.5	-	2.2	3.0	5.0	-	21.9	23.5	27.8
150	756/0.5	-	2.3	3.0	5.0	-	24.1	25.5	29.8
185	925/0.5	-	2.4	3.0	5.0	-	26.3	27.5	32.1
240	1221/0.5	-	2.4	3.0	5.0	-	28.3	30.6	35.1
300	1525/0.5	-	2.6	3.0	-	-	33.0	33.8	-
400	2013/0.5	-	2.8	3.0	-	-	37.4	37.8	-
630	2106/0.6	-	-	3.2	-	-	-	43.5	-

Correction Factors

For ambient air temperatures other than 40°C, the following factors should be applied:

Ambient Air Temp	Correction Factor	1.140	1.100	1.050	1.000	0.945	0.900	0.835	0.775	0.705	0.603	0.545	0.445

Where cables are to be grouped in free air, the following factors should be applied:

No. of Cables in Group	2	3	4	5	6	7	8
Correction Factor	0.80	0.70	0.70	0.60	0.56	0.50	0.50

Ambient air temperature 40°C

Conductor operating temperature 90°C

Electrical Characteristics

Resistance Values (ohms per kilometre)

Nominal Conductor Area	Nominal Conductor Stranding	Max. DC Resistance at 20°C	Max. Continuous Current Ratings (BS6195) Types
mm2	#/mm	ohms/Km	Amp
0.50	16/0.20	38.2000	13
0.75	24/0.20	25.4000	17
1.00	32/0.20	19.1000	20
1.50	30/0.25	13.0000	26
2.50	50/0.25	7.8200	36
4.00	56/0.30	4.8500	49
6.00	84/0.30	3.2300	64
10.00	80/0.40	1.8500	90
16.00	126/0.40	1.1800	120
25.00	196/0.40	0.7570	163
35.00	276/0.40	0.5380	203
50.00	396/0.40	0.3750	267
70.00	360/0.50	0.2640	324
95.00	475/0.50	0.2000	391
120.00	608/0.50	0.1560	455
150.00	756/0.50	0.1260	525
185.00	925/0.50	0.1030	600
240.00	1121/0.50	0.0778	725
300.00	1525/0.50	0.0623	840
400.00	2013/0.50	0.0472	1010
630.00	2160/0.60	0.0292	1450

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mm2	#/mm	ohms/Km	Amp
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0.75	24/0.20	25.4000	17
1.00	32/0.20	19.1000	20
1.50	30/0.25	13.0000	26
2.50	50/0.25	7.8200	36
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