



General Technical Data:

Conductor CSA	DC Resistance at 20°C, max	AC Resistance at 90°C, approx	Short Circuit Rating for 1 sec
mm ²	Ω/km	Ω/km	kA
1.5	12.1	15.4	0.21
2.5	7.41	9.45	0.36
4	4.61	5.88	0.57
6	3.08	3.93	0.86
10	1.83	2.33	1.43
16	1.15	1.47	2.29
25	0.727	0.927	3.58
35	0.524	0.668	5.01
50	0.387	0.494	7.15
70	0.268	0.342	10.01
95	0.193	0.247	13.6
120	0.153	0.197	17.2
150	0.124	0.16	21.5
185	0.0991	0.128	26.5
240	0.0754	0.0989	34.3
300	0.0601	0.0802	42.9
400	0.0470	0.0640	57.2

Installation Guide:

Minimum Bending Radius
15 x O.D.

Pulling Tension (pulling eye on conductor)
70 N/mm²



Quality & Reliability



NUHAS OMAN LLC

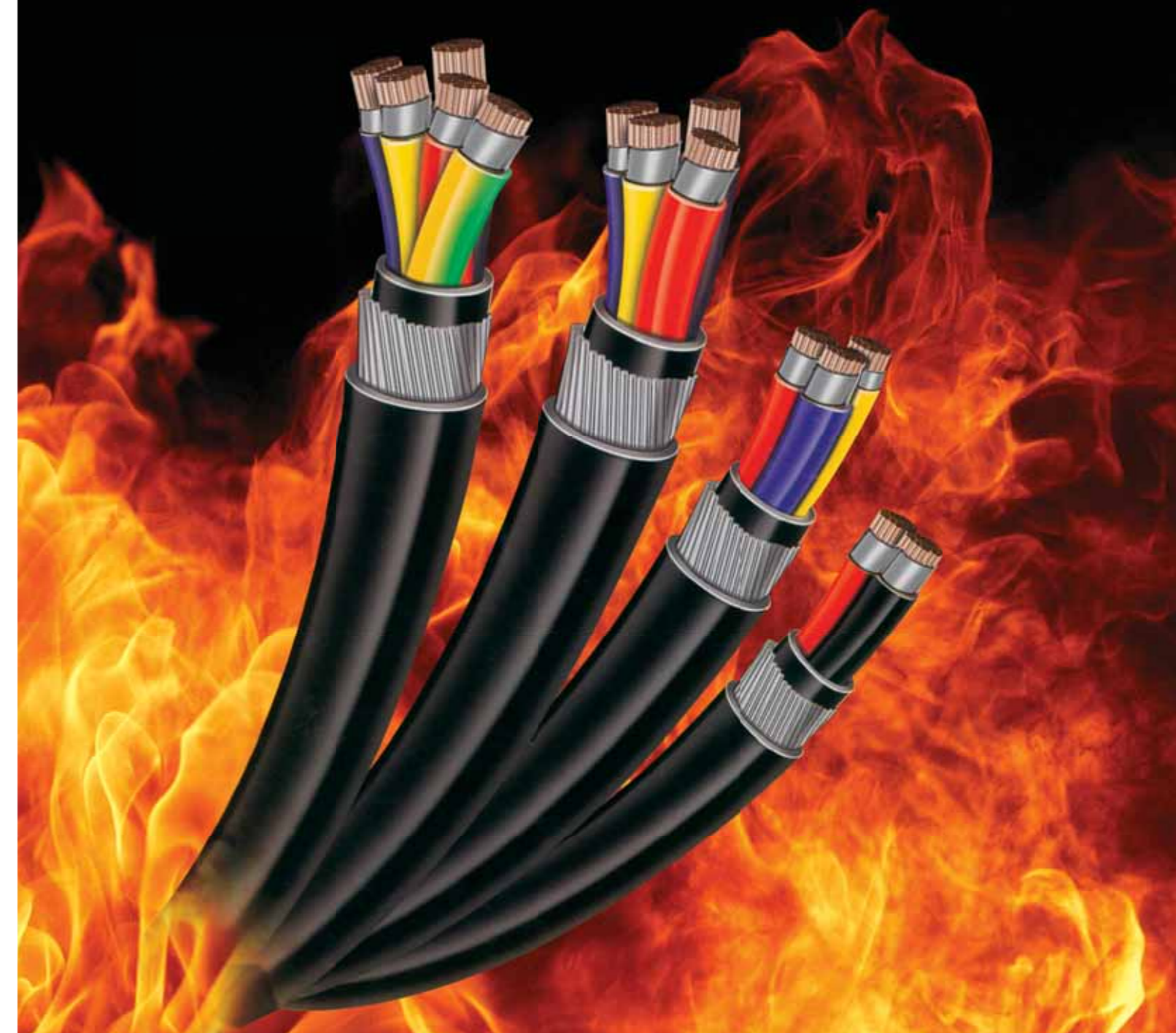
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AN ISO 9001: 2015 COMPANY



Nuhas FRC 500

Fire Resistant Cables



Fires can inflict widespread damage to life and property. The new Nuhas FRC 500 cables are designed to maintain Circuit Integrity during a fire and keep emergency systems working enabling evacuation, shutdown of critical operation, isolation of dangerous zones, etc.



Fire resistant cables have the ability to maintain the circuit integrity under fire for a stated period of time and under defined condition. These are mica glass taped, armoured cables with low emission of smoke and corrosive gases when affected by fire and mainly used for fixed installations. Nuhas Oman offers these fire resistant cables under the series FRC 500.

Construction: CU/MGT/XLPE/LSOH/SWA/LSOH	Operating / Short Circuit Temperature: 90°C / 250°C
Voltage: Uo/U (Um) : 0.6/1.0 (1.2) kV	Cable Standard: BS 7846:2015

Application:

Industrial areas, buildings or similar application where maintenance of power supply during a fire is required for defined period of time.

Cable Characteristics:

- Fire resistant category F2 of BS 7846, (BS 6387 cat. CWZ, 950°C for 3 hours).
BS 6387 Cat. CWZ test on cables is 'resistance to fire', 'resistant to fire with water spray' & 'resistant to fire with mechanical shock'
- Fire resistant category F120 of BS 7846 for enhanced fire protection.
- Flame retardant to BS EN 60332-3-24 (Cat.C)
- Smoke density as per BS EN 61034-2 (Light transmittance of min 70%)
- HCL acid gas content as per BS EN 60754-1 (Max 0.5%)

LPCB Product Approval:

Nuhas Oman Fire Resistant Cables - FRC 500 (2, 3 & 4 Core) are LPCB, UK approved (Certificate No. 1341a).

2 Core Cables



Conductor CSA	Insulation Thickness, nom	Bedding Thickness, nom	Armour Wire Diameter, nom	Outer Sheath Thickness, nom	Overall Diameter, approx	Weight of cable, approx
mm	mm	mm	mm	mm	mm	kg/km
1.5	0.6	0.8	0.9	1.3	13.0	320
2.5	0.7	0.8	0.9	1.4	14.5	400
4	0.7	0.8	0.9	1.4	15.5	460
6	0.7	0.8	0.9	1.4	16.5	550
10	0.7	0.8	0.9	1.5	18.5	710
16	0.7	0.8	1.25	1.5	21.0	1010
25	0.9	0.8	1.25	1.6	24.0	1350
35	0.9	1.0	1.6	1.7	27.5	1830
50	1.0	1.0	1.6	1.8	30.5	2260
70	1.1	1.0	1.6	1.9	34.5	2920
95	1.1	1.2	2.0	2.0	39.0	3960
120	1.2	1.2	2.0	2.1	42.5	4740
150	1.4	1.2	2.0	2.2	47.0	5690
185	1.6	1.4	2.5	2.4	52.5	7220
240	1.7	1.4	2.5	2.5	58.0	8890
300	1.8	1.6	2.5	2.6	63.0	10660
400	2.0	1.6	2.5	2.8	69.5	13060

3 Core Cables



Conductor CSA	Insulation Thickness, nom	Bedding Thickness, nom	Armour Wire Diameter, nom	Outer Sheath Thickness, nom	Overall Diameter, approx	Weight of cable, approx
mm	mm	mm	mm	mm	mm	kg/km
1.5	0.6	0.8	0.9	1.3	13.5	330
2.5	0.7	0.8	0.9	1.4	15.0	410
4	0.7	0.8	0.9	1.4	16.0	480
6	0.7	0.8	0.9	1.4	17.5	570
10	0.7	0.8	1.25	1.5	20.5	850
16	0.7	0.8	1.25	1.6	22.5	1090
25	0.9	1.0	1.6	1.7	24.0	1540
35	0.9	1.0	1.6	1.8	27.0	1930
50	1.0	1.0	1.6	1.8	29.5	2390
70	1.1	1.0	1.6	1.9	33.0	3130
95	1.1	1.2	2.0	2.1	37.5	4290
120	1.2	1.2	2.0	2.2	41.5	5180
150	1.4	1.4	2.5	2.3	46.5	6600
185	1.6	1.4	2.5	2.4	49.0	7760
240	1.7	1.4	2.5	2.6	55.0	9720
300	1.8	1.6	2.5	2.7	61.0	11840
400	2.0	1.6	2.5	2.9	65.5	14460

4 Core Cables



Conductor CSA	Insulation Thickness, nom	Bedding Thickness, nom	Armour Wire Diameter, nom	Outer Sheath Thickness, nom	Overall Diameter, approx	Weight of cable, approx
mm	mm	mm	mm	mm	mm	kg/km
1.5	0.6	0.8	0.9	1.3	14.5	380
2.5	0.7	0.8	0.9	1.4	16.0	470
4	0.7	0.8	0.9	1.4	17.5	560
6	0.7	0.8	1.25	1.5	20.0	790
10	0.7	0.8	1.25	1.5	22.0	1020
16	0.7	0.8	1.25	1.6	24.0	1320
25	0.9	1.0	1.60	1.7	27.5	1950
35	0.9	1.0	1.6	1.8	30.0	2420
50	1.0	1.0	1.6	1.9	32.5	3000
70	1.1	1.2	2.0	2.1	38.5	4270
95	1.1	1.2	2.0	2.2	42.0	5420
120	1.2	1.4	2.5	2.3	48.5	7070
150	1.4	1.4	2.5	2.4	52.0	8360
185	1.6	1.4	2.5	2.6	56.5	9970
240	1.7	1.6	2.5	2.7	63.5	12590
300	1.8	1.6	2.5	2.9	69.5	15230
400	2.0	1.8	3.2	3.2	79.0	19840

5 Core Cables



Conductor CSA	Insulation Thickness, nom	Bedding Thickness, nom	Armour Wire Diameter, nom	Outer Sheath Thickness, nom	Overall Diameter, approx	Weight of cable, approx
mm	mm	mm	mm	mm	mm	kg/km
1.5	0.6	0.8	0.9	1.4	15.5	440
2.5	0.7	0.8	0.9	1.4	17.5	540
4	0.7	0.8	0.9	1.5	19.0	650
6	0.7	0.8	1.25	1.5	21.0	900
10	0.7	0.8	1.25	1.6	23.5	1180
16	0.7	1.0	1.60	1.7	27.5	1740
25	0.9	1.0	1.6	1.8	32.0	2390
35	0.9	1.0	1.6	1.9	35.0	2980
50	1.0	1.2	2.0	2.0	40.0	4030
70	1.1	1.2	2.0	2.2	45.5	5310