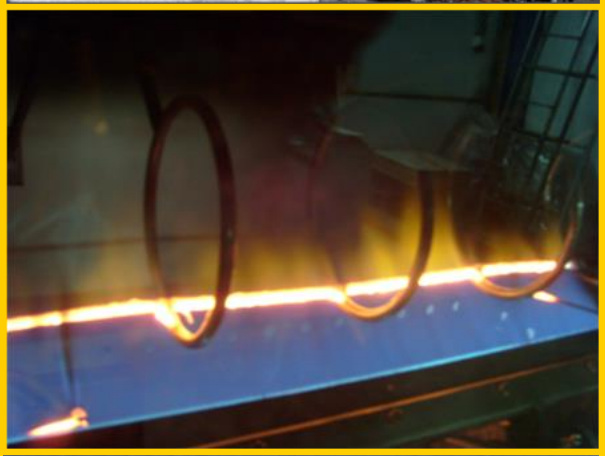






FIRE RESISTANT CABLES









GaryLion®

www.changfenggroup.com

ChangFeng Wire & Cable Co., Ltd
ICF Cable (Vietnam) Co Ltd
ICF Trusted Solutions Pte Ltd
Hacable Singapore Enterprise

COMPANY PROFILE

+ The Quality Management System Conforms to ISO9001
+ The Environmental Management System Conforms to ISO14001
+ The Occupational Health & Safety Management System Conforms to ISO45001
+ Achieving Vinyl Council Australia Best Environmental Practice PVC for PVC Electrical and Power Cables

CHANGFENG WIRE & CABLE CO LTD specializing in the manufacturing wire and cables supplies to the power generation & transmission, transportation, automation, building & construction and marine & offshore sectors.

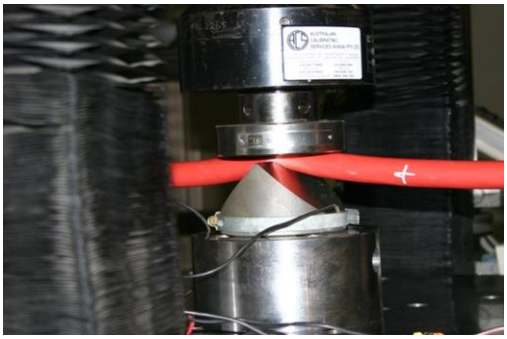
We manufacture superior quality standard products (up to 110KV) complying to international standards such as AS/NZS, IEC, BS, ASTM, UL, CSA etc. and we can also supply special cables in accordance to customers' requirements.

Our products are sucessfully exported to more than 30 countries around the world .

Using the most advanced production equipment and the most sophisticated inspection instruments, we delivered high quality cable products and services to meet our customer's need worldwide.















CONTENT

600/1000V, LSHF FIRE RESISTANT CABLE NON-ARMOURED

1 Core CU/MICA/XLPE(OR LSHF)/LSHF

2 Core CU/MICA/XLPE(OR LSHF)/LSHF

3 Core CU/MICA/XLPE(OR LSHF)/LSHF

4 Core CU/MICA/XLPE(OR LSHF)/LSHF

600/1000V, LSHF FIRE RESISTANT CABLE ARMOURED

1 Core CU/MICA/XLPE(OR LSHF)/LSHF/AWA/LSHF

2 Core CU/MICA/XLPE(OR LSHF)/LSHF/SWA/LSHF

3 Core CU/MICA/XLPE(OR LSHF)/LSHF/SWA/LSHF

4 Core CU/MICA/XLPE(OR LSHF)/LSHF/SWA/LSHF

LOW SMOKE HALOGEN FREE (LSHF)
FIRE RESISTANT CABLE NON ARMOURED
600/1000V XLPE OR LSHF INSULATED, LSHF SHEATHED

Application

Non-armoured fire-resistant cables are for general application in power and signal wirings where mechanical damages are not to be expected, not only for emergency circuits but for areas where maintaining circuit integrity and/or control of fire spread are deemed desirable.

Construction :

Conductor :	Circular stranded or Compact round stranded anneal copper
Flame Barrier :	Mica tape
Insulation :	XLPE (Cross-linked Polyethylene) or LSHF
Filler (where applicable) :	LSHF or Polypropylene yarn
Binder Tape :	Polyester / Non-woven tape
Bedding :	-
Armouring :	-
Outer Sheath:	LSHF (Low Smoke Halogen Free) ST8

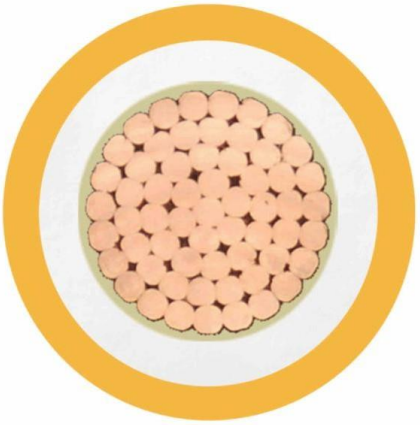
Technical Data :

Voltage :	0.6/1(1.2) kV
Reference :	IEC 60502-1, IEC 60331 OR SS 299/ BS 6387 CWZ IEC 60332-1, IEC 60332-3 IEC 61034, IEC 60754
AC Testing Voltage :	3.5kV
Max. Conductor Temperature :	90°C (normal operation)
Max. Conductor Temperature :	250°C (short circuit at 5s max. duration)
Special Properties upon request :	Anti-Termite Sheath Anti-Rodent Sheath UV-Resistant Sheath

LOW SMOKE HALOGEN FREE (LSHF)
FIRE RESISTANT CABLE NON ARMOURED
600/1000V XLPE OR LSHF INSULATED, LSHF SHEATHED

1 Core

CU/MICA/XLPE/LSHF
OR
CU/MICA/LSHF/LSHF

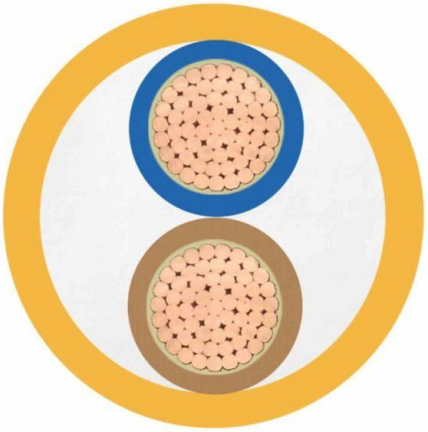


No. of cores	Nominal cross-sectional area of conductor	Number and diameter of wires	Thickness of insulation	Nom. Dia. Of Armour Wire	Thickness of oversheath	Approx overall diameter	Approx net weight XLPE insulation	Approx net weight LSHF insulation
no	mm^2	no/mm	mm	mm	mm	mm	Kg/km	Kg/km
1	1.5	7/0.53	0.7	-	1.4	7.1	60	65
1	2.5	7/0.67	0.7	-	1.4	7.5	70	75
1	4	7/0.85	0.7	-	1.4	8.1	90	100
1	6	7/1.04	0.7	-	1.4	8.6	115	120
1	10	7/1.35	0.7	-	1.4	9.6	165	170
1	16	7/1.70	0.7	-	1.4	10.6	230	235
1	25	7/2.14	0.9	-	1.4	12.3	325	340
1	35	7/2.52	0.9	-	1.4	13.6	425	440
1	50	19/1.78	1.0	-	1.4	15.0	555	575
1	70	19/2.14	1.1	-	1.4	17.0	765	795
1	95	19/2.52	1.1	-	1.5	19.2	1035	1065
1	120	37/2.03	1.2	-	1.5	21.5	1280	1320
1	150	37/2.25	1.4	-	1.6	23.7	1575	1625
1	185	37/2.52	1.6	-	1.6	26.0	1945	2005
1	240	61/2.25	1.7	-	1.7	29.0	2525	2600
1	300	61/2.52	1.8	-	1.8	31.8	3135	3225
1	400	61/2.85	2.0	-	1.9	35.4	3970	4085
1	500	61/3.20	2.2	-	2.0	39.2	5055	5200
1	630	127/2.52	2.4	-	2.2	44.0	6515	6690
1	800	127/2.85	2.6	-	2.3	48.9	8270	8480
1	1000	127/3.20	2.8	-	2.4	54.1	10340	10600

LOW SMOKE HALOGEN FREE (LSHF)
FIRE RESISTANT CABLE NON ARMOURED
600/1000V XLPE OR LSHF INSULATED, LSHF SHEATHED

2 Cores

CU/MICA/XLPE/LSHF
OR
CU/MICA/LSHF/LSHF

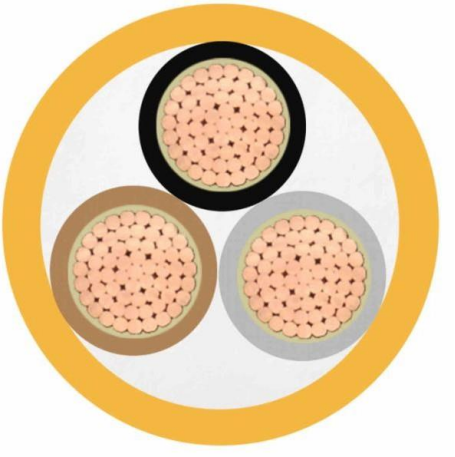


No. of cores	Nominal cross-sectional area of conductor	Number and diameter of wires	Thickness of insulation	Nom. Dia. Of Armour Wire	Thickness of oversheath	Approx overall diameter	Approx net weight XLPE insulation	Approx net weight LSHF insulation
no	mm^2	no/mm	mm	mm	mm	mm	Kg/km	Kg/km
2	1.5	7/0.53	0.7	-	1.8	12.0	190	200
2	2.5	7/0.67	0.7	-	1.8	12.5	225	235
2	4	7/0.85	0.7	-	1.8	14.0	295	305
2	6	7/1.04	0.7	-	1.8	15.0	360	375
2	10	7/1.35	0.7	-	1.8	17.0	490	510
2	16	7/1.70	0.7	-	1.8	19.0	665	685
2	25	7/2.14	0.9	-	1.8	22.0	935	965
2	35	7/2.52	0.9	-	1.8	24.0	1185	1220
2	50	19/1.78	1.0	-	1.8	27.0	1545	1590
2	70	19/2.14	1.1	-	1.8	30.5	2090	2145
2	95	19/2.52	1.1	-	1.9	34.5	2780	2845
2	120	37/2.03	1.2	-	2.0	38.0	3445	3520
2	150	37/2.25	1.4	-	2.2	42.5	4255	4360
2	185	37/2.52	1.6	-	2.3	46.5	5245	5375
2	240	61/2.25	1.7	-	2.5	52.5	6780	6940
2	300	61/2.52	1.8	-	2.6	57.5	8340	8520
2	400	61/2.85	2.0	-	2.9	64.0	10525	10750

LOW SMOKE HALOGEN FREE (LSHF)
FIRE RESISTANT CABLE NON ARMOURED
600/1000V XLPE OR LSHF INSULATED, LSHF SHEATHED

3 Cores

CU/MICA/XLPE/LSHF
OR
CU/MICA/LSHF/LSHF

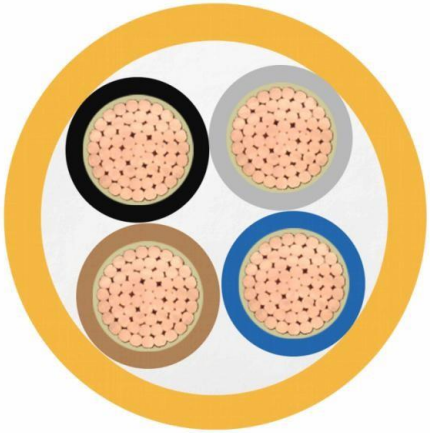


No. of cores	Nominal cross-sectional area of conductor	Number and diameter of wires	Thickness of insulation	Nom. Dia. Of Armour Wire	Thickness of oversheath	Approx overall diameter	Approx net weight XLPE insulation	Approx net weight LSHF insulation
no	mm^2	no/mm	mm	mm	mm	mm	Kg/km	Kg/km
3	1.5	7/0.53	0.7	-	1.8	12.5	215	230
3	2.5	7/0.67	0.7	-	1.8	13.5	265	280
3	4	7/0.85	0.7	-	1.8	15.0	350	365
3	6	7/1.04	0.7	-	1.8	16.0	435	455
3	10	7/1.35	0.7	-	1.8	18.0	600	630
3	16	7/1.70	0.7	-	1.8	20.5	835	865
3	25	7/2.14	0.9	-	1.8	23.5	1185	1230
3	35	7/2.52	0.9	-	1.8	25.5	1520	1575
3	50	19/1.78	1.0	-	1.8	29.0	1995	2065
3	70	19/2.14	1.1	-	1.9	33.0	2745	2830
3	95	19/2.52	1.1	-	2.0	37.0	3660	3760
3	120	37/2.03	1.2	-	2.1	41.0	4560	4675
3	150	37/2.25	1.4	-	2.3	45.5	5630	5780
3	185	37/2.52	1.6	-	2.4	50.5	6945	7135
3	240	61/2.25	1.7	-	2.6	56.5	8995	9230
3	300	61/2.52	1.8	-	2.7	62.0	11100	11375
3	400	61/2.85	2.0	-	3.0	69.0	14045	14380

LOW SMOKE HALOGEN FREE (LSHF)
FIRE RESISTANT CABLE NON ARMOURED
600/1000V XLPE OR LSHF INSULATED, LSHF SHEATHED

4 Cores

CU/MICA/XLPE/LSHF
OR
CU/MICA/LSHF/LSHF



No. of cores	Nominal cross-sectional area of conductor	Number and diameter of wires	Thickness of insulation	Nom. Dia. Of Armour Wire	Thickness of oversheath	Approx overall diameter	Approx net weight XLPE insulation	Approx net weight LSHF insulation
No	mm^2	no/mm	mm	mm	mm	mm	Kg/km	Kg/km
4	1.5	7/0.53	0.7	-	1.8	13.5	260	280
4	2.5	7/0.67	0.7	-	1.8	14.5	320	340
4	4	7/0.85	0.7	-	1.8	16.5	425	450
4	6	7/1.04	0.7	-	1.8	17.5	535	560
4	10	7/1.35	0.7	-	1.8	20.0	750	785
4	16	7/1.70	0.7	-	1.8	22.5	1040	1080
4	25	7/2.14	0.9	-	1.8	26.0	1495	1555
4	35	7/2.52	0.9	-	1.8	28.5	1930	2000
4	50	19/1.78	1.0	-	1.8	32.0	2535	2625
4	70	19/2.14	1.1	-	2.0	36.5	3510	3625
4	95	19/2.52	1.1	-	2.1	41.5	4710	4840
4	120	37/2.03	1.2	-	2.3	45.5	5885	6040
4	150	37/2.25	1.4	-	2.4	50.5	7230	7435
4	185	37/2.52	1.6	-	2.6	56.0	8955	9215
4	240	61/2.25	1.7	-	2.8	63.0	11615	11930
4	300	61/2.52	1.8	-	3.0	69.0	14360	14720
4	400	61/2.85	2.0	-	3.3	77.0	18175	18625

LOW SMOKE HALOGEN FREE (LSHF)
FIRE RESISTANT CABLE ARMOURED
600/1000V XLPE OR LSHF Insulated, LSHF Sheathed

Application

Armoured fire resistant cables are designed for direct impact, general application in power and signal wirings, not only for emergency circuits but for areas where maintaining circuit integrity and/or control of fire spread are deemed desirable.

Construction :

Conductor :	Circular stranded or Compact round stranded anneal copper
Flame Barrier :	Mica tape
Insulation :	XLPE (Cross-linked Polyethylene) or LSHF
Filler (where applicable) :	LSHF or Polypropylene yarn
Binder Tape :	Polyester / Non-woven tape
Bedding :	LSHF (Low Smoke Halogen Free) ST8
Armouring :	Aluminum wires (AWA) for single core or Galvanized steel wires (SWA) for multicores
Outer Sheath:	LSHF (Low Smoke Halogen Free) ST8

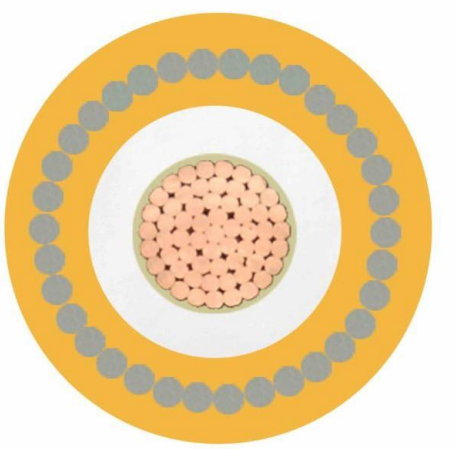
Technical Data :

Voltage :	0.6/1(1.2) kV
Reference :	IEC 60502-1, IEC 60331 OR SS 299/ BS 6387 CWZ IEC 60332-1, IEC 60332-3 IEC 61034, IEC 60754
AC Testing Voltage :	3.5kV
Max. Conductor Temperature :	90°C (normal operation)
Max. Conductor Temperature :	250°C (short circuit at 5s max. duration)
Special Properties upon request :	Anti-Termite Sheath Anti-Rodent Sheath UV-Resistant Sheath

LOW SMOKE HALOGEN FREE (LSHF) FIRE RESISTANT CABLE ARMOURED 600/1000V XLPE OR LSHF Insulated, LSHF Sheathed

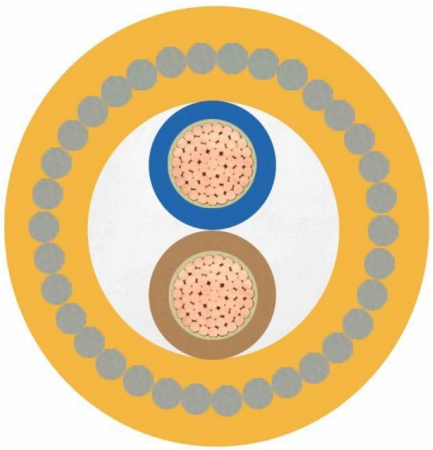
1 Core

CU/MICA/XLPE/LSHF/AWA/LSHF
OR
CU/MICA/LSHF/LSHF/AWA/LSHF



No. of cores	Nominal cross-sectional area of conductor	Number and diameter of wires	Thickness of insulation	Thickness of bedding	Nom. Dia. Of Armour Wire	Thickness of oversheath	Approx overall diameter	Approx net weight XLPE insulation	Approx net weight LSHF insulation
no	mm^2	no/mm	mm	mm	mm	mm	mm	Kg/km	Kg/km
1	50	19/1.78	1.0	0.8	1.25	1.8	19.9	760	780
1	70	19/2.14	1.1	0.8	1.25	1.8	22.0	990	1015
1	95	19/2.52	1.1	0.8	1.25	1.8	23.9	1285	1315
1	120	37/2.03	1.2	0.8	1.25	1.8	26.2	1550	1590
1	150	37/2.25	1.4	1.0	1.60	1.8	29.3	1960	2010
1	185	37/2.52	1.6	1.0	1.60	1.8	31.6	2380	2440
1	240	61/2.25	1.7	1.0	1.60	1.8	34.4	2990	3070
1	300	61/2.52	1.8	1.0	1.60	1.9	37.3	3640	3730
1	400	61/2.85	2.0	1.2	2.00	2.0	42.1	4680	4785
1	500	61/3.20	2.2	1.2	2.00	2.1	45.8	5840	5975
1	630	127/2.52	2.4	1.2	2.00	2.2	50.4	7370	7540
1	800	127/2.85	2.6	1.4	2.50	2.4	57.0	9505	9720
1	1000	127/3.20	2.8	1.4	2.50	2.5	62.1	11695	11950

LOW SMOKE HALOGEN FREE (LSHF)
FIRE RESISTANT CABLE ARMOURED
600/1000V XLPE OR LSHF Insulated, LSHF Sheathed



2 Cores

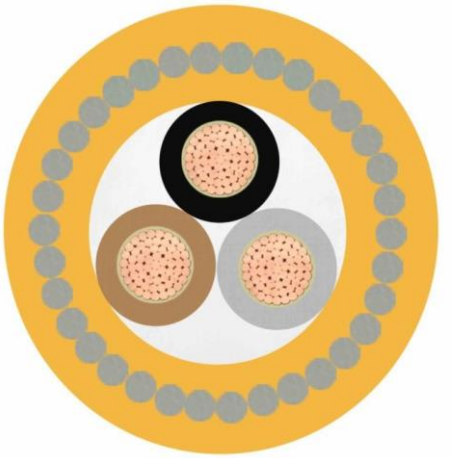
CU/MICA/XLPE/LSHF/SWA/LSHF
OR
CU/MICA/LSHF/LSHF/SWA/LSHF

No. of cores	Nominal cross-sectional area of conductor	Number and diameter of wires	Thickness of insulation	Thickness of bedding	Nom. Dia. Of Armour Wire	Thickness of oversheath	Approx overall diameter	Approx net weight XLPE insulation	Approx net weight LSHF insulation
no	mm^2	no/mm	mm	mm	mm	mm	mm	Kg/km	Kg/km
2	1.5	7/0.53	0.7	0.8	0.90	1.8	15.3	400	415
2	2.5	7/0.67	0.7	0.8	0.90	1.8	16.3	460	470
2	4	7/0.85	0.7	0.8	0.90	1.8	17.3	550	560
2	6	7/1.04	0.7	0.8	0.90	1.8	18.8	630	645
2	10	7/1.35	0.7	0.8	0.90	1.8	20.6	805	825
2	16	7/1.70	0.7	0.8	1.25	1.8	23.1	1155	1180
2	25	7/2.14	0.9	0.8	1.25	1.8	26.4	1510	1540
2	35	7/2.52	0.9	1.0	1.60	1.8	29.2	2045	2080
2	50	19/1.78	1.0	1.0	1.60	1.8	32.0	2515	2560
2	70	19/2.14	1.1	1.0	1.60	1.9	36.0	3215	3270
2	95	19/2.52	1.1	1.2	2.00	2.0	41.0	4390	4455
2	120	37/2.03	1.2	1.2	2.00	2.1	44.5	5175	5255
2	150	37/2.25	1.4	1.2	2.00	2.2	49.0	6155	6260
2	185	37/2.52	1.6	1.4	2.50	2.4	54.5	7920	8050
2	240	61/2.25	1.7	1.4	2.50	2.5	60.5	9730	9885
2	300	61/2.52	1.8	1.6	2.50	2.6	66.0	11630	11815
2	400	61/2.85	2.0	1.6	2.50	2.8	73.0	14235	14465

LOW SMOKE HALOGEN FREE (LSHF)
FIRE RESISTANT CABLE ARMOURED
600/1000V XLPE OR LSHF Insulated, LSHF Sheathed

3 Cores

CU/MICA/XLPE/LSHF/SWA/LSHF
OR
CU/MICA/LSHF/LSHF/SWA/LSHF

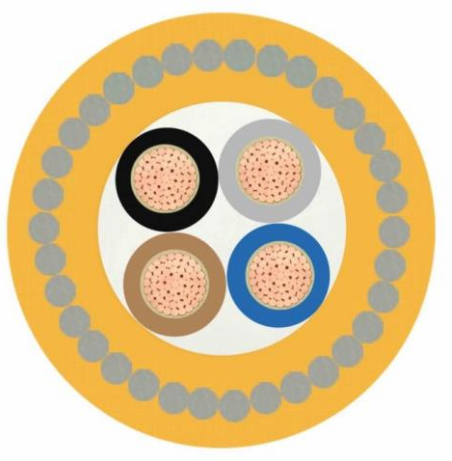


No. of cores	Nominal cross-sectional area of conductor	Number and diameter of wires	Thickness of insulation	Thickness of bedding	Nom. Dia. Of Armour Wire	Thickness of oversheath	Approx overall diameter	Approx net weight XLPE insulation	Approx net weight LSHF insulation
no	mm^2	no/mm	mm	mm	mm	mm	mm	Kg/km	Kg/km
3	1.5	7/0.53	0.7	0.8	0.90	1.8	15.8	440	455
3	2.5	7/0.67	0.7	0.8	0.90	1.8	16.8	505	520
3	4	7/0.85	0.7	0.8	0.90	1.8	18.3	615	635
3	6	7/1.04	0.7	0.8	0.90	1.8	19.8	720	740
3	10	7/1.35	0.7	0.8	1.25	1.8	22.1	1110	1135
3	16	7/1.70	0.7	0.8	1.25	1.8	24.6	1365	1395
3	25	7/2.14	0.9	1.0	1.60	1.8	28.7	2020	2070
3	35	7/2.52	0.9	1.0	1.60	1.8	31.0	2430	2485
3	50	19/1.78	1.0	1.0	1.60	1.8	34.0	3020	3090
3	70	19/2.14	1.1	1.0	1.60	1.9	38.0	3925	4010
3	95	19/2.52	1.1	1.2	2.00	2.0	43.5	5360	5460
3	120	37/2.03	1.2	1.2	2.00	2.1	47.5	6400	6520
3	150	37/2.25	1.4	1.4	2.50	2.2	53.0	8160	8310
3	185	37/2.52	1.6	1.4	2.50	2.4	58.0	9725	9920
3	240	61/2.25	1.7	1.4	2.50	2.5	64.5	12115	12350
3	300	61/2.52	1.8	1.6	2.50	2.6	70.0	14570	14845
3	400	61/2.85	2.0	1.6	2.50	2.8	79.0	18915	19260

LOW SMOKE HALOGEN FREE (LSHF)
FIRE RESISTANT CABLE ARMOURED
600/1000V XLPE OR LSHF Insulated, LSHF Sheathed

4 Cores

CU/MICA/XLPE/LSHF/SWA/LSHF
OR
CU/MICA/LSHF/LSHF/SWA/LSHF



No. of cores	Nominal cross-sectional area of conductor	Number and diameter of wires	Thickness of insulation	Thickness of bedding	Nom. Dia. Of Armour Wire	Thickness of oversheath	Approx overall diameter	Approx net weight XLPE insulation	Approx net weight LSHF insulation
no	mm^2	no/mm	mm	mm	mm	mm	mm	Kg/km	Kg/km
4	1.5	7/0.53	0.7	0.8	0.90	1.8	16.8	500	520
4	2.5	7/0.67	0.7	0.8	0.90	1.8	17.8	580	605
4	4	7/0.85	0.7	0.8	0.90	1.8	19.8	710	735
4	6	7/1.04	0.7	0.8	1.25	1.8	21.6	975	1000
4	10	7/1.35	0.7	0.8	1.25	1.8	24.1	1315	1350
4	16	7/1.70	0.7	0.8	1.25	1.8	26.4	1620	1660
4	25	7/2.14	0.9	1.0	1.60	1.8	31.2	2400	2465
4	35	7/2.52	0.9	1.0	1.60	1.8	33.5	2930	3000
4	50	19/1.78	1.0	1.0	1.60	1.9	37.5	3705	3790
4	70	19/2.14	1.1	1.2	2.00	2.1	43.0	5175	5290
4	95	19/2.52	1.1	1.2	2.00	2.2	48.0	6590	6720
4	120	37/2.03	1.2	1.4	2.50	2.3	53.5	8415	8570
4	150	37/2.25	1.4	1.4	2.50	2.4	58.5	10045	10250
4	185	37/2.52	1.6	1.4	2.50	2.6	63.5	12015	12275
4	240	61/2.25	1.7	1.6	2.50	2.7	71.0	15115	15430
4	300	61/2.52	1.8	1.6	2.50	2.9	78.5	19130	19500
4	400	61/2.85	2.0	1.8	3.15	3.2	87.0	23710	24170

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2, Woodlands Sector 1, #01-21 , Woodlands
Spectrum 1, Singapore 636901
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Email:Sales@hacable.com.sg
www.hacable.org

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