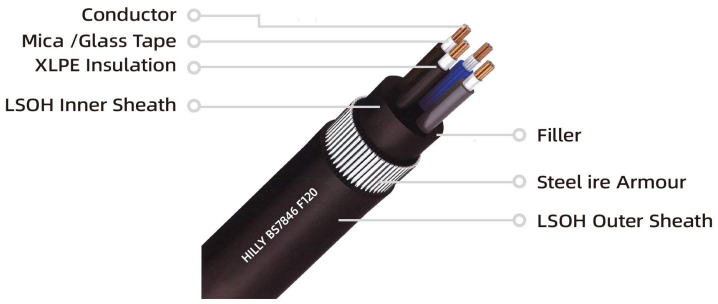
FR/Cu/XLPE/SWA/LSOH-F120

Mica/Glass Taped with XLPE Insulated,LSOH Sheathed,Armored,-Fire Resistant Cable,BS7846 F120

APPLICATION



◎ **Conductor:** IEC 60228 or BS EN 60228 Class 2

◎ **Insulation:** 90°C cross-linked XLPE insulation

-Identification: **2 Cores:** Brown,Blue
3 Cores: Brown,Blue,Yellow/Green or Brown, Black, Grey
4 Cores: Blue, Brown, Black, Grey
5 Cores: Green/Yellow, Blue, Brown, Black,Grey
Above 5 Cores: white color with black number
Other color available upon request

◎ **Bedding:** LSOH

◎ **Armour:** Galvanized steel wires for multi cores(SWA)

◎ **Sheath:** LSOH sheath
-Black color,other color available upon request

APPLICABLE STANDARDS

◎ **Design guidelines:** BS7846 F120
◎ **Circuit Integrity:** BS 6387 CWZ, BS 8491-120min
◎ **Acid gas emission:** BS EN60754-1
◎ **Flame retardant:** BS EN 60332-1-2,BS EN60332-3-24
◎ **Smoke density:** BS EN 61034-2

TECHNICAL CHARACTERISTICS

Working voltage	600/1000V
Minimum bending radius	Circular conductor: 6 X Overall diameter Shaped conductor: 8 X Overall diameter
Operating temperature	-15°C to +90°C

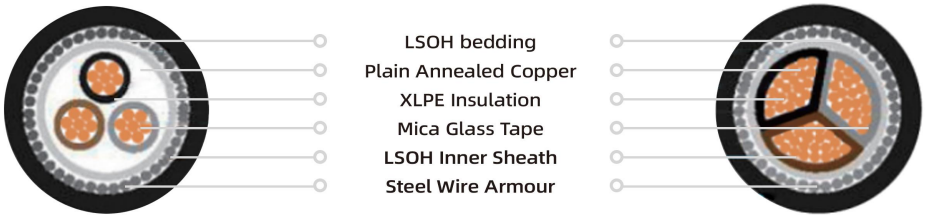
Two Cores-BS7846-F120



Nominal cross sectional area	Approx. diameter under armour	Approx. overall diameter	Approx. cable weight	Max conductor resistance at 20°C	Short circuit rating (1 sec)	Current Rating		Voltage Drop	
						single phase AC or DC cliped direct	single phase AC or DC free air	DC	single phase AC
mm²	mm	mm	kg/km	Ohms/km	kA	Amps		mV/A/m	
Two Core									
10	18.8	24.3	916.1	1.83	1.4	85	90	4.7	4.7
16	21.6	27.1	1256.7	1.15	2.2	110	115	2.9	2.9
25	25.0	30.7	1625.1	0.727	3.6	146	152	1.85	1.90
35	28.4	34.3	2183.2	0.524	5.00	180	188	1.35	1.35
50*	31.3	37.4	2605.1	0.387	7.10	219	228	0.98	1.00
70*	34.6	39.7	3112.9	0.268	10.00	279	291	0.67	0.69
95*	39.6	44.9	4196.5	0.193	13.60	338	354	0.49	0.52
120*	43.5	49.0	4956.0	0.153	17.20	392	410	0.39	0.42
150*	47.2	52.9	5786.7	0.124	21.40	451	472	0.31	0.35
185*	53.3	59.4	7446.4	0.0991	26.50	515	539	0.25	0.29
240*	58.6	64.9	9007.0	0.0754	34.30	607	636	0.195	0.24
300*	64.4	70.9	10741.0	0.0601	42.90	698	732	0.155	0.21
400*	71.1	78.0	13098.8	0.0470	57.20	787	847	0.120	0.19

※Shaped stranded conductor(class 2)

Three Cores-BS7846-F120



Nominal cross sectional area	Approx. diameter under armour	Approx. overall diameter	Approx. cable weight	Max conductor resistance at 20°C	Short circuit rating (1 sec)	Current Rating		Voltage Drop
						three phase AC cliped direct	three phase AC free air	three phase AC
mm²	mm	mm	kg/km	Ohms/km	kA	Amps		mV/A/m
Three Core								
10	20.7	26.2	1212.1	1.83	1.4	73	78	4.0
16	22.9	28.6	1492.4	1.15	2.2	94	99	2.5
25	27.7	33.6	2192.8	0.727	3.6	124	131	1.65
35	30.2	36.3	2637.8	0.524	5.00	154	162	1.15
50*	29.3	35.4	2864.2	0.387	7.10	187	197	0.87
70*	31.5	36.6	3466.7	0.268	10.00	238	251	0.60
95*	37.8	43.3	4822.1	0.193	13.60	289	304	0.45
120*	39.7	45.4	5625.0	0.153	17.20	335	353	0.37
150*	46.0	51.9	7283.2	0.124	21.40	386	406	0.30
185*	49.0	55.1	8528.9	0.0991	26.50	441	463	0.26
240*	54.0	60.5	10477.1	0.0754	34.30	520	546	0.21
300*	58.7	65.4	12634.2	0.0601	42.90	599	628	0.185
400*	74.6	81.7	16436.7	0.0470	57.20	673	728	0.165

※Shaped stranded conductor(class 2)

Four Cores-BS7846-F120



Nominal cross sectional area	Approx. diameter under armour	Approx. overall diameter	Approx. cable weight	Max conductor resistance at 20°C	Short circuit rating (1 sec)	Current Rating		Voltage Drop
						three phase AC cliped direct	three phase AC free air	three phase AC
mm²	mm	mm	kg/km	Ohms/km	kA	Amps		mV/A/m
Four Core								
4	15.1	22.2	816.5	4.61	0.57	42	44	10
6.0	16.5	24.5	1098.0	3.08	0.86	53	56	6.8
10	20.1	28.1	1420.6	1.83	1.4	73	78	4.0
16	22.6	30.8	1774.8	1.15	2.2	94	99	2.5
25	27.2	36.3	2608.0	0.727	3.6	124	131	1.65
35	29.9	39.2	3173.7	0.524	5.00	154	162	1.15
50*	30.3	39.8	3588.7	0.387	7.10	187	197	0.87
70*	34.4	43.9	4820.9	0.268	10.00	238	251	0.60
95*	39.3	49.0	6103.8	0.193	13.60	289	304	0.45
120*	42.3	53.2	7677.8	0.153	17.20	335	353	0.37
150*	46.9	58.0	9142.2	0.124	21.40	386	406	0.30
185*	52.9	64.4	11014.5	0.0991	26.50	441	463	0.26
240*	59.5	71.2	13664.6	0.0754	34.30	520	546	0.21
300*	65.8	77.9	16437.0	0.0601	42.90	599	628	0.185
400*	73.13	87.1	21436.0	0.0470	57.20	673	728	0.165

TEMPERATURE RATING FACTORS

Ambient Temperature °C	25	30	35	40	45	50	55	60	65
Rating Factor	1.02	1.00	0.96	0.91	0.87	0.82	0.76	0.71	0.65

※**Note:** Ambient Temperature 30°C
Ground ambient temperature 20°C
Conductor Operation Temperature 90°C
If current rating and buildings is required reference should be made to BS7671 (IEE Wiring Regs)
Complied with the HongKong EMSD COP,and the rating is the average of the conductor cross sectional area and