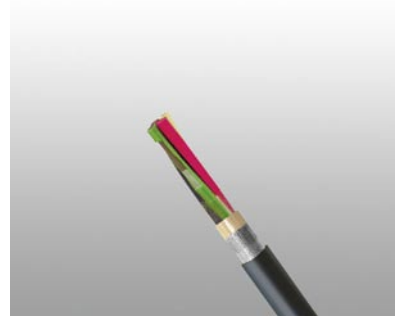
P5 or P5/P12 BFOU 0.6/1KV

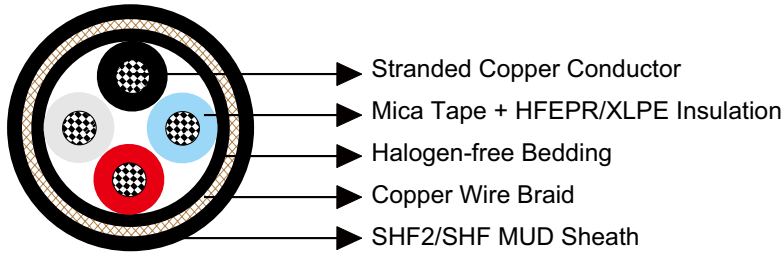
Applications



These cables are fire resistant, flame retardant, low smoke, halogen free and mud resistant, used for control, power and lighting systems.

Standards

- IEC 60092-353
- IEC 60092-351
- IEC 60092-359
- IEC 60331-21
- IEC 60332-1
- IEC 60332-3-22
- IEC 60754-1,2
- IEC 61034-1,2
- NEK 606:2004



Construction

- **Conductors:** Tinned annealed stranded compacted copper to IEC 60228 class 2.
- **Insulation:** Mica tape + Halogen free EPR/Mica tape + XLPE.
- **Bedding:** Halogen free compound.
- **Armour:** Tinned copper wire braid.
- **Outer Sheath:** Halogen free thermosetting compound, SHF2 (for TYPE P5). Halogen free, mud resistant thermosetting compound, SHF MUD (for TYPE P5/P12), coloured black.

Electrical Characteristics

Nominal Cross Section Area	mm²	1.5	2.5	4	6	10	16	25	35	50
Nominal Conductor Diameter	mm	1.6	2.1	2.6	3.2	4	5.1	6.5	7.4	8.7
Maximum DC Resistant@20℃	Ω/km	12.2	7.56	4.7	3.11	1.84	1.16	0.734	0.529	0.391

Continuous Current Rating@45℃ 1 Core	A	23	30	40	52	72	96	127	157	196
Continuous Current Rating@45℃ 2 Core	A	20	26	34	44	61	82	108	133	167
Continuous Current Rating@45℃ 3&4 Core	A	16	21	28	36	50	67	89	110	137
Short Circuit Current 1s	A	210	360	570	860	1430	2290	3580	5010	7150
Operating Voltage	KV	0.6/1	0.6/1	0.6/1	0.6/1	0.6/1	0.6/1	0.6/1	0.6/1	0.6/1

Nominal Cross Section Area	mm²	70	95	120	150	185	240	300	400	630
Nominal Conductor Diameter	mm	10.3	12.2	13.8	15.1	17.0	19.6	21.9	24.6	32.5
Maximum DC Resistant@20℃	Ω/km	0.27	0.195	0.154	0.126	0.1	0.0762	0.0607	0.0475	0.0286
Continuous Current Rating@45℃ 1 Core	A	242	293	339	389	444	522	601	690	890
Continuous Current Rating@45℃ 2 Core	A	206	249	288	331	444	444	511	587	757
Continuous Current Rating@45℃ 3&4 Core	A	169	205	237	272	311	365	421	483	623
Short Circuit Current 1s	A	10020	13590	17170	21460	26470	34340	42930	57230	90140
Operating Voltage	KV	0.6/1	0.6/1	0.6/1	0.6/1	0.6/1	0.6/1	0.6/1	0.6/1	0.6/1

Note: For more than 4-cores, the current ratings may be calculated from the following formula ($I_N = I_1 / \sqrt[3]{N}$), I_1= Current rating for 1-core, N = Number of cores.

Ambient Temperature Correction Factors

Ambient Temperature Correction Factors	35	40	45	50	55	60	65	70	75	80
Rating Factor	1.1	1.05	1.0	0.94	0.88	0.82	0.74	0.67	0.58	0.47

Mechanical and Thermal Properties

- Bending Radius: 8×OD (during installation); 6×OD (fixed installed)
- Temperature Range: -20℃ ~ +90℃

Dimensions and Weight

Construction No. of cores×Cross section(mm²)	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm		Nominal Overall Diameter mm	Nominal Weight kg/km
		Inner	Outer		
1×1.5	1.0	1.1	1.1	9.3	145
1×2.5	1.0	1.1	1.1	9.7	160
1×4	1.0	1.1	1.1	10.4	220
1×6	1.0	1.1	1.1	10.9	250
1×10	1.0	1.1	1.2	12.7	310

Construction No. of cores×Cross section(mm²)	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm		Nominal Overall Diameter mm	Nominal Weight kg/km
		Inner	Outer		
1×16	1.0	1.1	1.2	13.9	390
1×25	1.2	1.1	1.3	16.3	585
1×35	1.2	1.1	1.3	17.2	690
1×50	1.4	1.1	1.4	19.0	890
1×70	1.4	1.1	1.4	20.6	1110
1×95	1.6	1.1	1.5	23.1	1440
1×120	1.6	1.2	1.6	25.0	1735
1×150	1.8	1.2	1.7	27.0	2060
1×185	2.0	1.2	1.7	29.4	2545
1×240	2.2	1.2	1.8	32.6	3170
1×300	2.4	1.2	1.9	35.3	3910
1×400	2.4	1.4	2.1	41.0	5100
1×630	2.8	1.4	2.3	48.5	7660
2×1.5	1.0	1.1	1.2	14.2	310
2×2.5	1.0	1.1	1.3	15.1	360
2×4	1.0	1.1	1.3	16.6	470
2×6	1.0	1.1	1.4	17.9	555
2×10	1.0	1.1	1.4	19.9	705
2×16	1.0	1.1	1.5	22.5	985
2×25	1.2	1.2	1.6	26.4	1360
2×35	1.2	1.2	1.7	28.4	1620
2×50	1.4	1.2	1.9	32.4	2290
2×70	1.4	1.2	2.1	38.0	3260
2×95	1.6	1.2	2.3	41.6	3910
2×120	1.6	1.4	2.4	45.3	4710
2×150	1.8	1.4	2.6	49.7	5670
2×185	2.0	1.4	2.7	54.3	6840
2×240	2.2	1.6	3.0	61.5	8790
2×300	2.4	1.6	3.2	67.8	10630
3×1.5	1.0	1.1	1.3	14.8	345
3×2.5	1.0	1.1	1.3	16.2	445
3×4	1.0	1.1	1.3	17.4	530
3×6	1.0	1.1	1.4	18.7	635
3×10	1.0	1.1	1.5	21.1	830
3×16	1.0	1.1	1.5	23.7	1160
3×25	1.2	1.2	1.7	28.1	1640
3×35	1.2	1.2	1.8	30.2	1980
3×50	1.4	1.2	2.0	34.3	2750
3×70	1.4	1.2	2.2	39.0	3675
3×95	1.6	1.4	2.4	44.7	4955

Fire Resistant Power and Control Cables

Construction No. of cores×Cross section(mm²)	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm		Nominal Overall Diameter mm	Nominal Weight kg/km
		Inner	Outer		
3×120	1.6	1.4	2.5	48.3	6035
3×150	1.8	1.4	2.7	53.2	7355
3×185	2.0	1.6	2.9	59.5	9025
3×240	2.2	1.6	3.2	66.5	11590
3×300	2.4	1.8	3.4	72.6	13740
4×1.5	1.0	1.1	1.3	16.4	400
4×2.5	1.0	1.1	1.3	17.3	505
4×4	1.0	1.1	1.4	18.8	620
4×6	1.0	1.1	1.4	20.1	750
4×10	1.0	1.1	1.5	22.7	985
4×16	1.0	1.2	1.6	25.9	1400
4×25	1.2	1.2	1.8	30.7	1995
4×35	1.2	1.2	1.9	33.1	2440
4×50	1.4	1.4	2.0	38.2	3430
4×70	1.4	1.4	2.2	42.7	4600
4×95	1.6	1.6	2.4	49.4	6135
4×120	1.6	1.6	2.5	53.6	7515
4×150	1.8	1.6	2.9	59.0	9010
4×185	2.0	1.6	3.1	64.7	11000
4×240	2.2	1.8	3.4	73.1	14160
4×300	2.4	1.8	3.7	80.7	17550
5×1.5	1.0	1.1	1.4	17.7	510
6×1.5	1.0	1.1	1.4	19.0	545
7×1.5	1.0	1.1	1.4	19.0	590
8×1.5	1.0	1.1	1.5	21.8	715
9×1.5	1.0	1.1	1.6	23.3	720
10×1.5	1.0	1.1	1.6	23.6	790
12×1.5	1.0	1.2	1.6	24.3	880
14×1.5	1.0	1.2	1.7	25.5	965
16×1.5	1.0	1.2	1.7	26.7	1035
19×1.5	1.0	1.2	1.7	27.4	1185
20×1.5	1.0	1.2	1.8	29.5	1260
23×1.5	1.0	1.2	1.9	31.8	1435
24×1.5	1.0	1.2	2.0	33.2	1510
27×1.5	1.0	1.2	2.0	33.9	1615
30×1.5	1.0	1.2	2.0	34.9	1735
32×1.5	1.0	1.4	2.0	35.5	1800
33×1.5	1.0	1.4	2.0	36.7	1940
37×1.5	1.0	1.4	2.0	38.0	2090
44×1.5	1.0	1.4	2.3	42.6	2460

Construction No. of cores×Cross section(mm²)	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm		Nominal Overall Diameter mm	Nominal Weight kg/km
		Inner	Outer		
5×2.5	1.0	1.1	1.4	18.8	595
6×2.5	1.0	1.1	1.4	20.4	650
7×2.5	1.0	1.1	1.4	20.4	700
8×2.5	1.0	1.1	1.5	23.5	790
9×2.5	1.0	1.1	1.6	25.1	860
10×2.5	1.0	1.1	1.6	25.4	955
12×2.5	1.0	1.2	1.6	26.1	1045
14×2.5	1.0	1.2	1.7	27.3	1160
16×2.5	1.0	1.2	1.8	28.8	1265
19×2.5	1.0	1.2	1.8	29.6	1445
20×2.5	1.0	1.2	1.9	31.8	1545
23×2.5	1.0	1.4	2.0	34.7	1805
24×2.5	1.0	1.4	2.0	35.8	1850
27×2.5	1.0	1.4	2.0	35.4	1970
30×2.5	1.0	1.4	2.1	38.1	2235
33×2.5	1.0	1.4	2.2	39.6	2390
37×2.5	1.0	1.4	2.3	41.2	2610
44×2.5	1.0	1.4	2.4	46.2	3075

Note: For XLPE insulated cable, a thinner insulation thickness is applied.