

P7 or P7/P14 BFOU 6/10kV



- Armour
- Conductors
- Conductor Screen
- Insulation Screen
- Insulation
- Inner Sheath
- Outer Sheath

Applications :	These cables are fire resistant, flame retardant, low smoke, halogen free and mud resistant, used for fixed installation for medium voltage power.
Standards :	IEC 60092-354; IEC 60092-351; IEC 60092-359; IEC 60332-1; IEC 60331-21; IEC 60332-3-22; IEC 60754-1,2; IEC 61034-1,2; NEK 606:2004
Conductors :	Circular tinned annealed stranded compacted copper to IEC 60228 class 2.
Conductor Screen :	Semi conducting material.
Insulation :	Mica tape + Halogen free EPR.
Insulation Screen :	Semi conducting material and tinned copper wire braid.
Bedding :	Halogen free compound.
Armour :	Tinned copper wire braid.
Outer Sheath :	Halogen free thermosetting compound, SHF2 (for TYPE P7), or halogen free mud resistant thermosetting compound, SHF MUD (for TYPE P7/P14), coloured red.

Electrical Characteristics :

Nominal Cross Section Area	mm ²	25	35	50	70	95	120	150
Nominal Conductor Diameter	mm	6.5	7.4	8.7	10.3	12.2	13.8	15.1
Maximum DC Resistant@20°C	Ω/km	0.734	0.529	0.391	0.27	0.195	0.154	0.126
Continuous Current Rating@45°C1 Core	A	127	157	196	242	293	339	389
Continuous Current Rating@45°C3 Core	A	89	110	137	169	205	237	272
Short Circuit Current 1s	A	3580	5010	7150	10020	13590	17170	21460
Operating Voltage	KV	6/10	6/10	6/10	6/10	6/10	6/10	6/10
Nominal Cross Section Area	mm ²	185	240	300	400	500	630	
Nominal Conductor Diameter	mm	17.0	19.6	21.9	24.5	27.5	32.3	

Maximum DC Resistant@20°C	Ω/km	0.1	0.0762	0.0607	0.0475	0.0369	0.0286
Continuous Current Rating@45°C1 Core	A	444	522	601	690	780	890
Continuous Current Rating@45°C3 Core	A	311	365	421	483	546	623
Short Circuit Current 1s	A	26470	34340	42930	57230	71540	90140
Operating Voltage	KV	6/10	6/10	6/10	8.7/15	8.7/15	8.7/15

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 :15×OD (during installation); 9×OD (fixed installed).

Temperature Range : -20°C ~ +90°C.

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		
1×16	3.4	1.5	1.2	25.6	990
1×25	3.4	1.6	1.2	27.1	1150
1×35	3.4	1.7	1.2	28.5	1320
1×50	3.4	1.7	1.3	29.9	1500
1×70	3.4	1.8	1.3	31.9	1810
1×95	3.4	1.8	1.4	34.0	2160
1×120	3.4	1.9	1.4	36.1	2610
1×150	3.4	2.0	1.5	38.1	2990
1×185	3.4	2.0	1.5	39.9	3440
1×240	3.4	2.2	1.6	43.1	4180
1×300	3.4	2.3	1.7	45.9	4930
1×400	3.4	2.4	1.7	49.0	5900
1×500	3.4	2.5	1.8	52.5	7070
1×630	3.4	2.7	1.9	57.0	8690
3×16	3.4	2.4	1.8	50.2	3780
3×25	3.4	2.5	1.8	53.2	4380

3×35	3.4	2.6	1.9	56.4	5040
3×50	3.4	2.7	2.0	59.3	5740
3×70	3.4	2.9	2.1	63.7	6900
3×95	3.4	3.1	2.2	68.4	8270
3×120	3.4	3.2	2.3	72.1	9470
3×150	3.4	3.3	2.4	76.0	10800
3×185	3.4	3.5	2.5	80.8	12370
3×240	3.4	3.7	2.7	88.2	15040
3×300	3.4	3.9	2.9	94.0	17450