



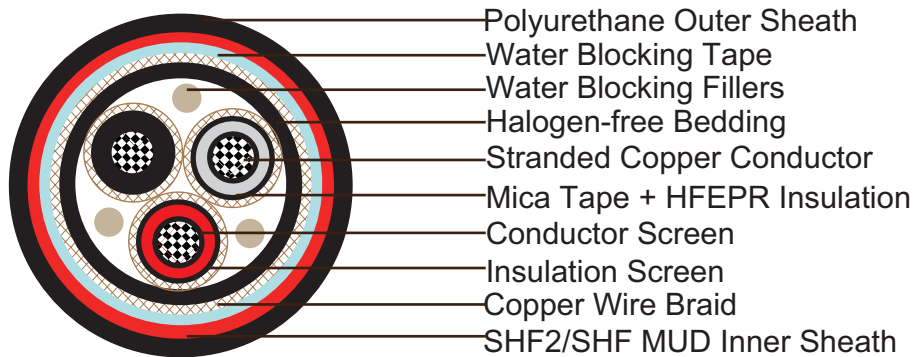
## Water Blocked P6 or P6/P13 BFOU 3.6/6kV

### Applications

These cables are partially water blocked, 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 60331-21
- IEC 60332-1
- IEC 60332-3-22
- IEC 60754-1,2
- IEC 61034-1,2
- NEK 606:2004
- VG 95218 part 29



### Construction

- **Conductors:** Circular tinned annealed stranded 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.
- **Filler:** Water blocking fillers, if required.
- **Bedding:** Halogen free compound, PETP wrapping tape will be applied over the bedding, if required.
- **Armour:** Tinned copper wire braid, PETP wrapping tape will be applied over the braiding, if required.
- **Water Blocking Elements:** Water blocking tape and strings for providing longitudinal water tightness.
- **Inner Sheath:** Halogen free thermosetting compound, SHF2 (for TYPE P6), or halogen free mud resistant thermosetting compound, SHF MUD (for TYPE P6/P13), coloured red.
- **Outer Sheath:** Polyurethane for providing transversal water tightness, PE is optional, but can not meet low smoke standard.





## Electrical Characteristics

Nominal Cross Section Area	mm <sup>2</sup>	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°C 1 Core	A	127	157	196	242	293	339	389
Continuous Current Rating@45°C 3 Core	A	89	110	137	169	205	237	272
Short Circuit Current 1s	A	3580	5010	7150	10020	13590	17170	21460
Operating Voltage	KV	3.6/6	3.6/6	3.6/6	3.6/6	3.6/6	3.6/6	3.6/6
Nominal Cross Section Area	mm <sup>2</sup>	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°C 1 Core	A	444	522	601	690	780	890	
Continuous Current Rating@45°C 3 Core	A	311	365	421	483	546	623	
Short Circuit Current 1s	A	26470	34340	42930	57230	71540	90140	
Operating Voltage	KV	3.6/6	3.6/6	3.6/6	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(mm <sup>2</sup> )	Nominal Insulation Thickness mm	Nominal Bedding Thickness mm	Nominal Inner Sheath Thickness mm	Nominal Outer Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
1×16	2.5	1.5	1.2	1.0	26.8±2	998
1×25	2.5	1.6	1.2	1.2	28.7±2	1166
1×35	2.5	1.6	1.2	1.2	30.0±2	1323
1×50	2.5	1.7	1.3	1.2	31.5±2	1533





# Caledonian

Any inquiries, please feel free to contact  
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Construction No. of cores×Cross section(mm <sup>2</sup> )	Nominal Insulation Thickness mm	Nominal Bedding Thickness mm	Nominal Inner Sheath Thickness mm	Nominal Outer Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
1×70	2.5	1.7	1.3	1.2	33.3±2	1827
1×95	2.5	1.8	1.4	1.4	36.0±2	2216
1×120	2.5	1.9	1.4	1.4	37.7±2	2552
1×150	2.5	1.9	1.4	1.4	39.7±2	3035
1×185	2.5	2.0	1.5	1.4	41.9±2	3539
1×240	2.6	2.1	1.6	1.6	45.4±2	4305
1×300	2.8	2.2	1.6	1.6	47.9±2	5051
1×400	3.0	2.3	1.7	1.6	51.3±2	6101
1×500	3.2	2.5	1.8	1.6	55.3±2	7382
1×630	3.2	2.6	1.9	1.6	59.7±2	9062
3×16	2.5	2.3	1.7	1.0	49.8±2	3728
3×25	2.5	2.5	1.8	1.2	53.9±2	4389
3×35	2.5	2.6	1.9	1.2	57.1±2	5061
3×50	2.5	2.7	1.9	1.2	59.8±2	5765
3×70	2.5	2.8	2.0	1.2	64.0±2	6920
3×95	2.5	3.0	2.1	1.4	69.0±2	8316
3×120	2.5	3.1	2.2	1.4	72.9±2	9608
3×150	2.5	3.3	2.3	1.4	76.8±2	10983
3×185	2.5	3.4	2.4	1.4	81.4±2	12611
3×240	2.6	3.7	2.6	1.6	89.5±2	15425
3×300	2.8	3.9	2.8	1.6	95.1±2	17987



Standard



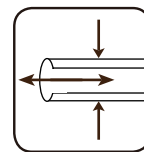
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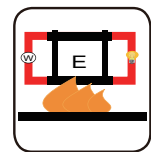
Standard



Standard



Water Tightness  
VG 95218-29



Circuit Integrity  
IEC 60331-21



Halogen Free  
IEC60754-1



Low Corrosivity  
IEC60754-2



Low Smoke Emission  
IEC 61034-1&2



Flame Retardancy  
IEC60332-1



Reduced Fire Propagation  
IEC60332-3-22

