



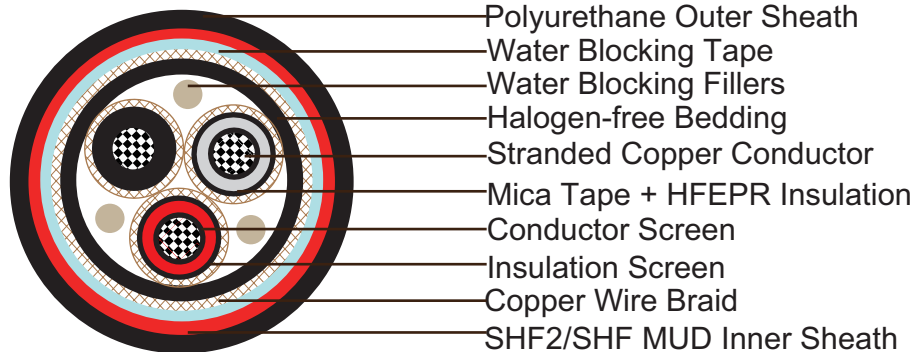
Water Blocked P7 or P7/P14 BFOU 6/10kV

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 P7), or halogen free mud resistant thermosetting compound, SHF MUD (for TYPE P7/P14), coloured red.
- **Outer Sheath:** Polyurethane for providing transversal water tightness, PE is optional, but can not meet low smoke standard.



NEK606 Water Blocked Offshore & Marine Cables

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°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	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°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	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(mm ²)	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	3.4	1.5	1.2	1.0	27.6±2	1040
1×25	3.4	1.6	1.2	1.2	29.5±2	1208
1×35	3.4	1.7	1.2	1.2	30.9±2	1386
1×50	3.4	1.7	1.3	1.2	32.3±2	1575

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Construction No. of cores×Cross section(mm ²)	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	3.4	1.8	1.3	1.2	34.3±2	1901
1×95	3.4	1.8	1.4	1.4	36.8±2	2268
1×120	3.4	1.9	1.4	1.4	38.9±2	2741
1×150	3.4	2.0	1.5	1.4	40.9±2	3140
1×185	3.4	2.0	1.5	1.4	42.7±2	3612
1×240	3.4	2.2	1.6	1.6	46.3±2	4389
1×300	3.4	2.3	1.7	1.6	49.1±2	5177
1×400	3.4	2.4	1.7	1.6	52.2±2	6195
1×500	3.4	2.5	1.8	1.6	55.7±2	7424
1×630	3.4	2.7	1.9	1.6	60.2±2	9125
3×16	3.4	2.4	1.8	1.0	52.2±2	3969
3×25	3.4	2.5	1.8	1.2	55.6±2	4599
3×35	3.4	2.6	1.9	1.2	58.8±2	5292
3×50	3.4	2.7	2.0	1.2	61.7±2	6027
3×70	3.4	2.9	2.1	1.2	66.1±2	7245
3×95	3.4	3.1	2.2	1.4	71.2±2	8684
3×120	3.4	3.2	2.3	1.4	74.9±2	9944
3×150	3.4	3.3	2.4	1.4	78.8±2	11340
3×185	3.4	3.5	2.5	1.4	83.6±2	12989
3×240	3.4	3.7	2.7	1.6	91.4±2	15792
3×300	3.4	3.9	2.9	1.6	97.2±2	18323



Standard



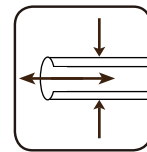
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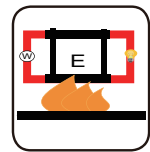
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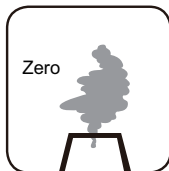
Standard



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