



NEK606 Water Blocked Offshore & Marine Cables

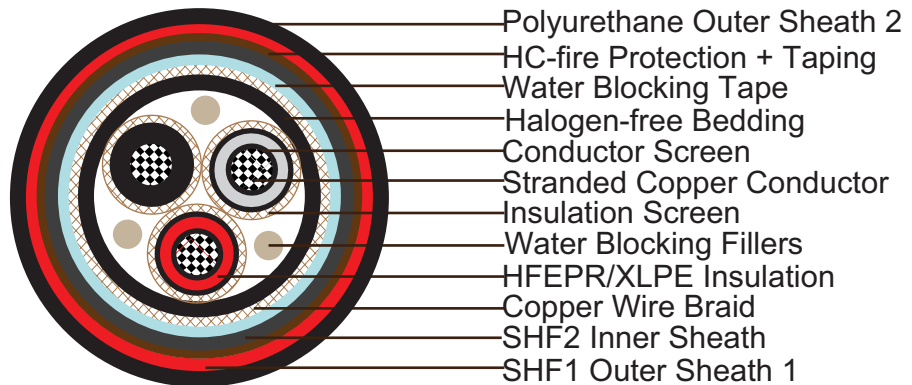
Water Blocked P30 RFOU-HCF / TFOU-HCF 6/10(12) kV

Applications

These cables are partially water blocked, fire resistant, flame retardant, low smoke and halogen free, used for emergency control, power and lighting systems that need to be operational during a 1100°C hydrocarbon fire.

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:** Halogen-free EPR. XLPE can be offered as an option.
- **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, coloured red.
- **HC-fire protection:** Extruded thermoplastic fire protection compound.
- **Taping:** Lapped glass fibre tape.

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- **Outer Sheath 1:** Flame retardant halogen-free thermoplastic compound, SHF1, coloured red.
- **Outer Sheath 2:** Polyurethane for providing transversal water tightness, PE is optional, but can not meet low smoke standard.

Optional

P31 RFOU-HCF / TFOU-HCF 8.7/15kV

P32 RFOU-HCF / TFOU-HCF 12/20(24) kV

P33 RFOU-HCF / TFOU-HCF 18/30(36) kV

Electrical Characteristics

Nominal Cross Section Area	mm ²	70	95	120	150	185	240	300
Nominal Conductor Diameter	mm	10.3	12.2	13.8	15.1	17.0	19.6	21.9
Maximum DC Resistant@20°C	Ω/km	0.27	0.195	0.154	0.126	0.1	0.0762	0.0607
Continuous Current Rating@45°C 1 Core	A	242	293	339	389	444	522	601
Continuous Current Rating@45°C 3 Core	A	169	205	237	272	311	365	421
Short Circuit Current 1s	A	10020	13590	17170	21460	26470	34340	42930
Operating Voltage	KV	6/10	6/10	6/10	6/10	6/10	6/10	6/10

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:** 20×OD (during installation); 12×OD (fixed installed)
- **Temperature Range:** -20°C ~ +90°C

Dimensions and Weight



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Construction No. of cores×Cross section(mm ²)	Nominal Insulation Thickness mm	Nominal Diameter Over Bedding mm	Nominal Diameter Over Inner Sheath mm	Nominal Overall Diameter mm	Nominal Weight kg/km
1×70	3.4	23.5	30.0	64.4±2	5481
1×95	3.4	25.5	32.0	67.3±2	6195
1×120	3.4	27.5	34.0	69.3±2	6657
1×150	3.4	28.5	35.0	70.3±2	7004
1×185	3.4	30.5	36.5	71.8±2	7686
1×240	3.4	33.0	39.0	75.2±2	8663
1×300	3.4	35.0	41.5	77.7±2	9744
3×50	3.4	47.0	55.0	91.4±2	11519
3×95	3.4	54.0	62.5	99.8±2	14942
3×150	3.4	60.0	70.5	108.8±2	18270



Standard



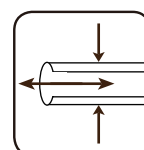
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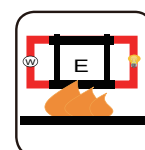
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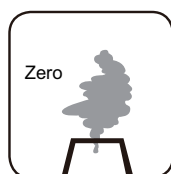
Standard



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