



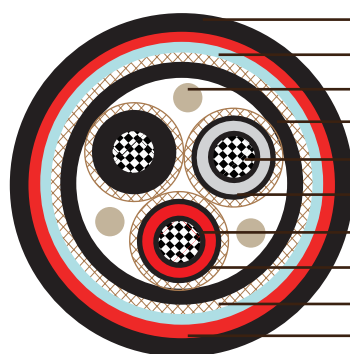
Water Blocked P3 or P3/P10 RFOU/TFOU 6/10KV

Applications

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



- Polyurethane Outer Sheath
- Water Blocking Tape
- Water Blocking Fillers
- Halogen-free Bedding
- Stranded Copper Conductor
- HFEP/ XLPE Insulation
- Conductor Screen
- Insulation Screen
- Copper Wire Braid
- SHF2/SHF MUD Inner Sheath

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 (for TFOU cable).
- **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 P3), or halogen free mud resistant thermosetting compound, SHF MUD (for TYPE P3/P10), 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 ²	16	25	35	50	70	95	120
Nominal Conductor Diameter	mm	5.2	6.5	7.4	8.7	10.3	12.2	13.8
Maximum DC Resistant@20°C	Ω/km	1.16	0.734	0.529	0.391	0.27	0.195	0.154
Continuous Current Rating@45°C 1 Core	A	96	127	157	196	242	293	339
Continuous Current Rating@45°C 3 Core	A	67	89	110	137	169	205	237
Short Circuit Current 1s	A	2290	3580	5010	7150	10020	13590	17170
Operating Voltage	KV	6/10	6/10	6/10	6/10	6/10	6/10	6/10
Nominal Cross Section Area	mm ²	150	185	240	300	400	500	630
Nominal Conductor Diameter	mm	15.1	17.0	19.6	21.9	24.5	27.5	32.3
Maximum DC Resistant@20°C	Ω/km	0.126	0.1	0.0762	0.0607	0.0475	0.0369	0.0286
Continuous Current Rating@45°C 1 Core	A	389	444	522	601	690	780	890
Continuous Current Rating@45°C 3 Core	A	272	311	365	421	483	546	623
Short Circuit Current 1s	A	21460	26470	34340	42930	57230	71540	90140
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:** 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	1.1	1.0	26.0±2	945
1×25	3.4	1.5	1.2	1.2	28.4±2	1197
1×35	3.4	1.6	1.2	1.2	29.3±2	1328
1×50	3.4	1.6	1.2	1.2	30.7±2	1533
1×70	3.4	1.7	1.3	1.2	32.4±2	1796
1×95	3.4	1.8	1.3	1.4	34.8±2	2163





Caledonian

Any inquiries, please feel free to contact
enquiry@shipboard-cables.com or kitty@shipboard-cables.com



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
1×120	3.4	1.8	1.4	1.4	36.6±2	2499
1×150	3.4	1.9	1.4	1.4	38.1±2	2835
1×185	3.4	2.0	1.5	1.4	40.6±2	3386
1×240	3.4	2.1	1.6	1.6	44.2±2	4190
1×300	3.4	2.2	1.6	1.6	46.9±2	4998
1×400	3.4	2.3	1.7	1.6	48.7±2	6195
1×500	3.4	2.4	1.8	1.6	52.7±2	7718
1×630	3.4	2.6	1.9	1.6	57.7±2	9188
3×16	3.4	2.3	1.7	1.0	48.0±2	3465
3×25	3.4	2.4	1.8	1.2	52.5±2	4100
3×35	3.4	2.5	1.8	1.2	54.6±2	4578
3×50	3.4	2.6	1.9	1.2	57.5±2	5444
3×70	3.4	2.7	2.0	1.2	61.3±2	6431
3×95	3.4	2.9	2.1	1.4	66.3±2	7875
3×120	3.4	3.0	2.2	1.4	70.4±2	9214
3×150	3.4	3.2	2.3	1.4	74.1±2	10747
3×185	3.4	3.4	2.4	1.4	76.8±2	11865
3×240	3.4	3.6	2.6	1.6	82.7±2	13965
3×300	3.4	3.8	2.7	1.6	88.2±2	17115



Standard



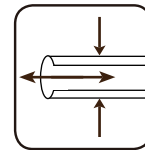
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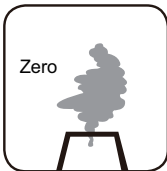
Standard



Standard



Water Tightness
VG 95218-29



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

