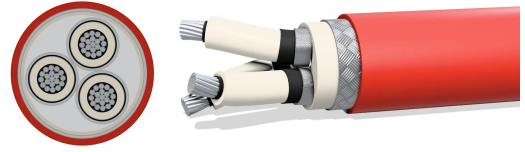


Application

RFOU 6/10 kV is a flame-retardant, halogen-free and mud-resistant medium-voltage power cable for fixed installation on offshore units, drilling rigs, FPSOs and ships, designed to NEK TS 606 (code P3/P10, now P103) and IEC 60092-354. Each tinned copper conductor is provided with a semi-conductive conductor screen, halogen-free EPR insulation, a semi-conductive insulation screen and an individual tinned copper wire braid screen; the laid-up cores are protected by a halogen-free inner sheath, a braid of tinned copper wires and a halogen-free, mud-resistant thermoset outer sheath. The cable is intended for medium-voltage power distribution up to 12 kV in safe and hazardous areas, including locations exposed to oil, drilling fluids and mud. It is not intended for applications requiring fire-resistant (circuit-integrity) cable.



CONSTRUCTION

Conductor	Tinned annealed stranded circular copper, class 2 acc. to IEC 60228.
Conductor screen	Extruded semi-conductive halogen-free compound.
Insulation	Halogen-free EPR compound, nominal thickness 3.4 mm.
Insulation screen	Extruded semi-conductive halogen-free compound.
Core screen	Braid of tinned copper wires on each core.
Inner sheath	Halogen-free, flame-retardant compound (with fillers) over the laid-up cores.
Armour	Braid of tinned copper wires.
Outer sheath	Halogen-free, flame-retardant and mud-resistant thermoset compound (SHF2), red.

ELECTRICAL & THERMAL PROPERTIES

Rated voltage U₀/U (U_m)	6/10 (12) kV.
Test voltage	21 kV AC, 5 min.
Standard	NEK TS 606; design acc. to IEC 60092-354; conductors acc. to IEC 60228.
Flame-retardant	Acc. to IEC 60332-1-2 and IEC 60332-3-22 Cat. A.
Halogen-free	Acc. to IEC 60754-1/-2; low smoke density acc. to IEC 61034-1/-2.
Mud-resistant	Yes, sheath resistant to oil and drilling mud acc. to NEK TS 606.
Max. conductor temperature	+90 °C.
Permitted outer cable temperature, fixed	-20 °C to +90 °C.
Min. bending radius, fixed	9 × outer diameter (15 × outer diameter during installation).
Reaction to fire (CPR)	Outside the scope of EN 50575 (shipboard / offshore cable, classified under IEC 60092 and marine type approval, not for permanent installation in construction works).

DIMENSIONS & TECHNICAL DATA

Cores × mm ²	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
1 × 16	1.16	24	960
3 × 16	1.16	46	3230
1 × 25	0.734	25.5	1130
3 × 25	0.734	49.2	3820
1 × 35	0.529	26.7	1280
3 × 35	0.529	51.9	4370
1 × 50	0.391	28.2	1480
3 × 50	0.391	54.9	5040
1 × 70	0.27	30	1770
3 × 70	0.27	59.4	6140
1 × 95	0.195	32.1	2130
3 × 95	0.195	63.9	7400
1 × 120	0.154	34.3	2500
3 × 120	0.154	67.6	8540
1 × 150	0.126	36.1	2860
3 × 150	0.126	71.4	9780
1 × 185	0.1	38.6	3410
3 × 185	0.1	75.9	11410
1 × 240	0.0762	41.9	4220
3 × 240	0.0762	83.2	14240
1 × 300	0.0607	44.5	4960
1 × 400	0.0475	48.5	6140
1 × 500	0.0369	51.4	7140
1 × 630	0.0286	56	8870

Outer diameters, weights and conductor resistance are the nominal manufacturer values of the leading reference source (tinned class-2 conductors, individually screened cores, constructions without earth core); all values are indicative and non-binding.