

Application

RFOU 0.6/1 kV is a flame-retardant, halogen-free and mud-resistant power and control cable for fixed installation on offshore units, drilling rigs, FPSOs and ships, designed to NEK TS 606 (code P1/P8, now P101) and IEC 60092-353. The tinned copper conductors are insulated with halogen-free EPR and 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 power distribution, lighting, control and trace-heating circuits below 1 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. Class 5 (flexible) on request.
Insulation	Halogen-free EPR compound.
Inner sheath	Halogen-free, flame-retardant compound.
Armour	Braid of tinned copper wires.
Outer sheath	Halogen-free, flame-retardant and mud-resistant thermoset compound (SHF2), black.
Core identification	Up to 4 cores: coloured cores acc. to NEK TS 606; 5 cores and more: white cores with black numbers.

ELECTRICAL & THERMAL PROPERTIES

Rated voltage U₀/U	0.6/1 kV (max. operating voltage 1.2 kV).
Test voltage	3.5 kV.
Standard	NEK TS 606; design acc. to IEC 60092-353; 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; 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	6 × outer diameter (8 × 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)
2 × 1	18.2	12.5	250
5 × 1	18.2	15	360
7 × 1	18.2	16	430
8 × 1	18.2	17.2	480
9 × 1	18.2	18.2	520
10 × 1	18.2	19.7	580
12 × 1	18.2	20.2	630
14 × 1	18.2	21.1	690
16 × 1	18.2	22.2	770
19 × 1	18.2	23.2	850
24 × 1	18.2	26.7	1040
27 × 1	18.2	27.2	1120
30 × 1	18.2	28.3	1220
37 × 1	18.2	30.4	1420
44 × 1	18.2	34.7	1750
1 × 1.5	12.2	9.3	150
2 × 1.5	12.2	13.1	290
3 × 1.5	12.2	13.7	320
4 × 1.5	12.2	14.8	380
5 × 1.5	12.2	15.8	430
7 × 1.5	12.2	17.1	500
8 × 1.5	12.2	18.2	550
9 × 1.5	12.2	19.5	610
10 × 1.5	12.2	20.9	670
12 × 1.5	12.2	21.5	730
14 × 1.5	12.2	22.6	820
16 × 1.5	12.2	23.6	900
19 × 1.5	12.2	24.9	1010
24 × 1.5	12.2	28.7	1250
27 × 1.5	12.2	29.3	1340
30 × 1.5	12.2	30.4	1460
37 × 1.5	12.2	33.5	1800
44 × 1.5	12.2	37.7	2190
1 × 2.5	7.56	9.7	170
2 × 2.5	7.56	14.1	340
3 × 2.5	7.56	14.7	380
4 × 2.5	7.56	15.8	450
5 × 2.5	7.56	17.1	520
7 × 2.5	7.56	18.3	600
8 × 2.5	7.56	19.7	670
9 × 2.5	7.56	21	740
10 × 2.5	7.56	22.7	820
12 × 2.5	7.56	23.3	910
14 × 2.5	7.56	24.4	1010
16 × 2.5	7.56	25.7	1120

Cores × mm2	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
19 × 2.5	7.56	26.9	1260
24 × 2.5	7.56	31.3	1570
27 × 2.5	7.56	31.9	1700
30 × 2.5	7.56	34	1940
37 × 2.5	7.56	36.9	2370
44 × 2.5	7.56	41.3	2790
1 × 4	4.7	10.2	200
2 × 4	4.7	15.1	400
3 × 4	4.7	15.8	460
4 × 4	4.7	17.2	550
5 × 4	4.7	18.5	640
1 × 6	3.11	10.8	230
2 × 6	3.11	16.3	480
3 × 6	3.11	17.3	570
4 × 6	3.11	18.6	680
5 × 6	3.11	20.3	810
1 × 10	1.84	11.9	290
2 × 10	1.84	18.3	610
3 × 10	1.84	19.2	730
4 × 10	1.84	21	900
5 × 10	1.84	22.9	1070
1 × 16	1.16	12.9	370
2 × 16	1.16	20.5	790
3 × 16	1.16	21.6	980
4 × 16	1.16	23.6	1210
5 × 16	1.16	25.8	1450
1 × 25	0.734	14.8	520
2 × 25	0.734	24.1	1120
3 × 25	0.734	25.6	1420
4 × 25	0.734	28.1	1770
5 × 25	0.734	30.8	2140
1 × 35	0.529	15.9	630
2 × 35	0.529	26.5	1390
3 × 35	0.529	28.2	1790
4 × 35	0.529	31	2250
5 × 35	0.529	34.8	2820
1 × 50	0.391	17.9	810
2 × 50	0.391	30.5	1820
3 × 50	0.391	32.3	2340
4 × 50	0.391	36.9	3150
5 × 50	0.391	40.4	3810
1 × 70	0.27	19.8	1060
2 × 70	0.27	34.9	2450
3 × 70	0.27	37.6	3290
4 × 70	0.27	41.4	4160
5 × 70	0.27	45.8	5110
1 × 95	0.195	22.3	1380

Cores × mm ²	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
2 × 95	0.195	40.3	3320
3 × 95	0.195	42.9	4340
4 × 95	0.195	47.8	5580
5 × 95	0.195	52.6	6810
1 × 120	0.154	23.8	1650
2 × 120	0.154	43.5	3950
3 × 120	0.154	47	5290
4 × 120	0.154	51.6	6700
5 × 120	0.154	57.7	8340
1 × 150	0.126	25.9	1970
2 × 150	0.126	48.1	4800
3 × 150	0.126	51.2	6320
4 × 150	0.126	57.4	8200
5 × 150	0.126	63.2	10030
1 × 185	0.1	28.6	2430
2 × 185	0.1	53.5	5910
3 × 185	0.1	57.8	7960
4 × 185	0.1	63.8	10140
5 × 185	0.1	70.4	12440
1 × 240	0.0762	31.8	3090
2 × 240	0.0762	60.7	7630
3 × 240	0.0762	64.7	10120
4 × 240	0.0762	71.6	12960
5 × 240	0.0762	79.7	16060
1 × 300	0.0607	36.2	3940
2 × 300	0.0607	66.7	9260
3 × 300	0.0607	71.3	12380
4 × 300	0.0607	79.4	16000
1 × 400	0.0475	40.5	5180
1 × 500	0.0369	44	6190
1 × 630	0.0286	48.8	7860

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