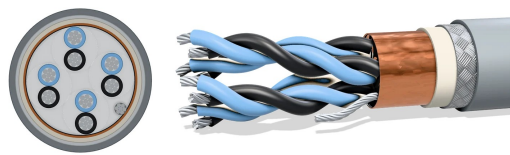


Application

RFOU(c) 250 V is a flame-retardant, halogen-free instrumentation and control cable for fixed installation on offshore units, drilling rigs, FPSOs and ships, designed to NEK TS 606 and IEC 60092-376. The tinned copper conductors are insulated with halogen-free EPR, twisted into pairs and protected by a collective screen, a braid of tinned copper wires and a halogen-free, mud-resistant thermoset outer sheath. The cable is intended for instrumentation, communication, control and alarm circuits in safe and hazardous areas, including installations exposed to oil, drilling fluids and mud. It is not intended for power distribution or for applications requiring fire-resistant (circuit-integrity) cable.



CONSTRUCTION

Conductor	Tinned annealed stranded copper, class 2 acc. to IEC 60228. Class 5 (flexible) on request.
Insulation	Halogen-free EPR compound.
Screen	Collective screen over the assembled pairs: copper-laminated polyester tape with tinned copper drain wire.
Armour	Braid of tinned copper wires over a halogen-free inner sheath.
Sheath	Halogen-free, flame-retardant and mud-resistant thermoset compound (SHF2), grey; blue for intrinsically safe circuits.
Core identification	Pair: black / light blue; triple: black / light blue / brown; elements progressively numbered.

ELECTRICAL & THERMAL PROPERTIES

Rated voltage Uo/U	150/250 V (max. operating voltage 300 V).
Test voltage	1.5 kV.
Standard	NEK TS 606; design acc. to IEC 60092-376; 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

Pairs × mm ²	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
1 × 0.75	26.3	11.1	200
2 × 0.75	26.3	15	295
3 × 0.75	26.3	15.6	355
4 × 0.75	26.3	16.4	390
5 × 0.75	26.3	17.8	540
6 × 0.75	26.3	19.1	610
7 × 0.75	26.3	19.1	625
8 × 0.75	26.3	20.7	680
9 × 0.75	26.3	21.8	745
10 × 0.75	26.3	22.9	760
12 × 0.75	26.3	23.4	810
14 × 0.75	26.3	24.5	875
15 × 0.75	26.3	26.1	960
16 × 0.75	26.3	26.5	1010
18 × 0.75	26.3	27.9	1080
19 × 0.75	26.3	28.2	1115
20 × 0.75	26.3	29.2	1210
21 × 0.75	26.3	30	1255
23 × 0.75	26.3	30.6	1355
24 × 0.75	26.3	31.9	1370
27 × 0.75	26.3	32.9	1480
30 × 0.75	26.3	34.1	1605
33 × 0.75	26.3	35.3	1725
37 × 0.75	26.3	36.9	1950
1 × 1	19.3	11.7	225
2 × 1	19.3	13.4	335
3 × 1	19.3	16.3	470
4 × 1	19.3	17.4	535
5 × 1	19.3	18.7	610
6 × 1	19.3	20.2	700
7 × 1	19.3	20.2	720
8 × 1	19.3	21.8	775
9 × 1	19.3	23.2	850
10 × 1	19.3	24.1	880
12 × 1	19.3	24.7	980
14 × 1	19.3	26	1030
15 × 1	19.3	27.8	1125
16 × 1	19.3	28.2	1175
18 × 1	19.3	29.5	1255
19 × 1	19.3	29.8	1295
20 × 1	19.3	31.1	1420
21 × 1	19.3	31.9	1475
23 × 1	19.3	32.7	1610
24 × 1	19.3	34.3	1620
27 × 1	19.3	35	1745

Pairs × mm2	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
30 × 1	19.3	36.7	1980
33 × 1	19.3	38	2130
37 × 1	19.3	39.3	2305
1 × 1.5	12.9	12.7	260
2 × 1.5	12.9	15.4	420
3 × 1.5	12.9	17.6	585
4 × 1.5	12.9	18.8	635
5 × 1.5	12.9	21.1	770
6 × 1.5	12.9	22.8	890
7 × 1.5	12.9	22.8	925
8 × 1.5	12.9	23.7	975
9 × 1.5	12.9	26.3	1060
10 × 1.5	12.9	27.4	1130
12 × 1.5	12.9	28.3	1270
14 × 1.5	12.9	29.5	1325
15 × 1.5	12.9	31.6	1445
16 × 1.5	12.9	32.1	1575
18 × 1.5	12.9	34.2	1670
19 × 1.5	12.9	34.5	1765
20 × 1.5	12.9	36	1895
21 × 1.5	12.9	37.3	2050
23 × 1.5	12.9	37.9	2185
24 × 1.5	12.9	39.8	2200
27 × 1.5	12.9	40.6	2390
30 × 1.5	12.9	42.1	2600
33 × 1.5	12.9	43.6	2805
37 × 1.5	12.9	45.4	3080
1 × 2.5	8.02	13.5	300
2 × 2.5	8.02	18.9	650
3 × 2.5	8.02	19.9	720
4 × 2.5	8.02	21.1	820
5 × 2.5	8.02	23	965
6 × 2.5	8.02	24.8	1105
7 × 2.5	8.02	24.8	1150
8 × 2.5	8.02	27	1255
9 × 2.5	8.02	28.8	1385
10 × 2.5	8.02	30	1430
12 × 2.5	8.02	31	1545
14 × 2.5	8.02	32.7	1730
15 × 2.5	8.02	35	1885
16 × 2.5	8.02	35.6	1970
18 × 2.5	8.02	37.9	2235
19 × 2.5	8.02	38.3	2315
20 × 2.5	8.02	39.9	2530
21 × 2.5	8.02	41	2630
23 × 2.5	8.02	41.8	2750
24 × 2.5	8.02	43.7	2850

Pairs × mm2	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
27 × 2.5	8.02	45.1	3150
30 × 2.5	8.02	46.8	3435
33 × 2.5	8.02	48.5	3715
37 × 2.5	8.02	50.2	4040

Triples × mm2	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
1 × 0.75	26.3	11.7	230
2 × 0.75	26.3	14.5	360
3 × 0.75	26.3	16.2	415
4 × 0.75	26.3	17.6	540
5 × 0.75	26.3	19.1	645
6 × 0.75	26.3	21.1	755
7 × 0.75	26.3	21.1	780
8 × 0.75	26.3	22.6	845
9 × 0.75	26.3	23.9	945
10 × 0.75	26.3	25.7	960
12 × 0.75	26.3	26.4	1080
14 × 0.75	26.3	27.5	1150
15 × 0.75	26.3	28.5	1230
16 × 0.75	26.3	29.2	1310
18 × 0.75	26.3	30.7	1405
19 × 0.75	26.3	31	1475
20 × 0.75	26.3	31.8	1560
21 × 0.75	26.3	32.7	1640
23 × 0.75	26.3	34.1	1795
24 × 0.75	26.3	34.6	1830
27 × 0.75	26.3	36.8	2040
30 × 0.75	26.3	38.3	2210
32 × 0.75	26.3	39.5	2345
1 × 1	19.3	12	250
2 × 1	19.3	17	520
3 × 1	19.3	17.4	540
4 × 1	19.3	18.7	625
5 × 1	19.3	20.2	745
6 × 1	19.3	22.4	875
7 × 1	19.3	22.4	905
8 × 1	19.3	23.8	980
9 × 1	19.3	25.4	1080
10 × 1	19.3	27.1	1150
12 × 1	19.3	28.1	1265
14 × 1	19.3	29.2	1355
15 × 1	19.3	30.1	1440
16 × 1	19.3	31.1	1570
18 × 1	19.3	32.8	1675
19 × 1	19.3	33.3	1750
20 × 1	19.3	34.1	1880
21 × 1	19.3	34.8	1950

Triples × mm ²	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
23 × 1	19.3	36.6	2215
24 × 1	19.3	37.3	2200
27 × 1	19.3	39.2	2425
30 × 1	19.3	40.8	2630
32 × 1	19.3	42.1	2790
1 × 1.5	12.9	13.2	295
2 × 1.5	12.9	17	490
3 × 1.5	12.9	19.5	685
4 × 1.5	12.9	20.9	785
5 × 1.5	12.9	21	820
6 × 1.5	12.9	22.8	960
7 × 1.5	12.9	25.1	1135
8 × 1.5	12.9	27	1270
9 × 1.5	12.9	28.9	1445
10 × 1.5	12.9	31.1	1450
12 × 1.5	12.9	31.5	1710
14 × 1.5	12.9	33.8	1815
15 × 1.5	12.9	34.8	1930
16 × 1.5	12.9	36	2110
18 × 1.5	12.9	38.1	2305
19 × 1.5	12.9	38.6	2375
20 × 1.5	12.9	39.6	2580
21 × 1.5	12.9	40.4	2680
23 × 1.5	12.9	42	2925
24 × 1.5	12.9	42.7	3140
27 × 1.5	12.9	45.3	3250
30 × 1.5	12.9	47.4	3555
32 × 1.5	12.9	48.6	3745
1 × 2.5	8.02	14.3	360
2 × 2.5	8.02	20.5	785
3 × 2.5	8.02	21.2	875
4 × 2.5	8.02	22.9	1035
5 × 2.5	8.02	24.8	1205
6 × 2.5	8.02	27.8	1430
7 × 2.5	8.02	27.8	1505
8 × 2.5	8.02	29.6	1625
9 × 2.5	8.02	31.7	1855
10 × 2.5	8.02	34.4	1890
12 × 2.5	8.02	35.5	2110
14 × 2.5	8.02	37.6	2445
15 × 2.5	8.02	38.9	2620
16 × 2.5	8.02	40	2755
18 × 2.5	8.02	42	3010
19 × 2.5	8.02	42.4	3125
20 × 2.5	8.02	43.5	3360
21 × 2.5	8.02	44.9	3555
23 × 2.5	8.02	46.7	3885

Triples × mm ²	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
24 × 2.5	8.02	47.5	3870
27 × 2.5	8.02	50	4280
30 × 2.5	8.02	52.3	4695
32 × 2.5	8.02	53.8	4960

Outer diameters, weights and conductor resistance are the nominal manufacturer values of the leading reference source (pair constructions $n \times 2 \times \text{mm}^2$, tinned class-2 conductors); all values are indicative and non-binding.