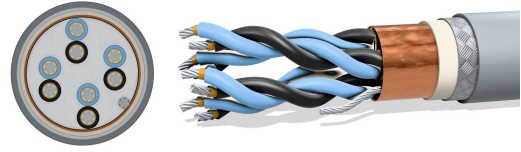


Application

BFOU(c) 250 V is a fire-resistant, flame-retardant and 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 carry a mica-tape fire barrier under the halogen-free EPR insulation, are 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 maintains circuit integrity under fire conditions and is intended for instrumentation, communication, control, alarm and emergency-system circuits in safe and hazardous areas, including installations exposed to oil, drilling fluids and mud. It is not intended for power distribution.



CONSTRUCTION

Conductor	Tinned annealed stranded copper, class 2 acc. to IEC 60228. Class 5 (flexible) on request.
Fire barrier	Mica/glass tape applied over the conductor.
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 mud-resistant grade), grey; blue for intrinsically safe circuits.
Core identification	Pair: black / light blue; pairs 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.
Fire-resistant	Circuit integrity acc. to IEC 60331-21.
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 × mm2	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
1 × 0.75	26.3	12.1	230
2 × 0.75	26.3	16.4	460
3 × 0.75	26.3	17.2	495
4 × 0.75	26.3	18.2	555
5 × 0.75	26.3	19.8	640
6 × 0.75	26.3	21.2	725
7 × 0.75	26.3	21.2	740
8 × 0.75	26.3	23.1	805
9 × 0.75	26.3	24.3	900
10 × 0.75	26.3	25.6	880
12 × 0.75	26.3	26.2	955
14 × 0.75	26.3	27.3	1035
15 × 0.75	26.3	29.2	1130
16 × 0.75	26.3	29.7	1175
18 × 0.75	26.3	31.3	1275
19 × 0.75	26.3	31.6	1315
20 × 0.75	26.3	33.3	1475
21 × 0.75	26.3	34.1	1530
23 × 0.75	26.3	34.6	1635
24 × 0.75	26.3	36.8	1730
27 × 0.75	26.3	37.5	1850
30 × 0.75	26.3	38.9	2005
33 × 0.75	26.3	40.3	2155
37 × 0.75	26.3	41.7	2325
1 × 1	19.3	12.5	245
2 × 1	19.3	17.2	515
3 × 1	19.3	17.9	550
4 × 1	19.3	19	615
5 × 1	19.3	20.6	710
6 × 1	19.3	22.4	820
7 × 1	19.3	22.4	845
8 × 1	19.3	24.1	905
9 × 1	19.3	25.7	1035
10 × 1	19.3	26.8	995
12 × 1	19.3	27.4	1080
14 × 1	19.3	28.9	1195
15 × 1	19.3	30.9	1305
16 × 1	19.3	31.4	1355
18 × 1	19.3	33.4	1500
19 × 1	19.3	33.7	1550
20 × 1	19.3	35	1685
21 × 1	19.3	36.5	1850
23 × 1	19.3	37	1975
24 × 1	19.3	38.9	1990
27 × 1	19.3	39.6	2135

Pairs × mm2	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
30 × 1	19.3	40.9	2300
33 × 1	19.3	42.5	2495
37 × 1	19.3	44.3	2735
1 × 1.5	12.9	13.5	285
2 × 1.5	12.9	18.9	620
3 × 1.5	12.9	19.9	675
4 × 1.5	12.9	21.1	760
5 × 1.5	12.9	23	885
6 × 1.5	12.9	24.8	1020
7 × 1.5	12.9	24.8	1045
8 × 1.5	12.9	27	1140
9 × 1.5	12.9	28.8	1300
10 × 1.5	12.9	30	1240
12 × 1.5	12.9	31	1375
14 × 1.5	12.9	32.7	1530
15 × 1.5	12.9	35	1670
16 × 1.5	12.9	35.6	1745
18 × 1.5	12.9	37.9	1980
19 × 1.5	12.9	38.3	2045
20 × 1.5	12.9	39.9	2245
21 × 1.5	12.9	41	2335
23 × 1.5	12.9	41.8	2525
24 × 1.5	12.9	43.7	2510
27 × 1.5	12.9	45.1	2765
30 × 1.5	12.9	46.8	3010
33 × 1.5	12.9	48.5	3245
37 × 1.5	12.9	50.2	3515
1 × 2.5	8.02	14.5	335
2 × 2.5	8.02	20.4	740
3 × 2.5	8.02	21.3	800
4 × 2.5	8.02	22.8	930
5 × 2.5	8.02	24.7	1075
6 × 2.5	8.02	26.9	1245
7 × 2.5	8.02	26.9	1290
8 × 2.5	8.02	29.3	1405
9 × 2.5	8.02	31.3	1605
10 × 2.5	8.02	33.2	1585
12 × 2.5	8.02	34	1745
14 × 2.5	8.02	35.6	1920
15 × 2.5	8.02	38.8	2205
16 × 2.5	8.02	39.4	2300
18 × 2.5	8.02	41.5	2500
19 × 2.5	8.02	41.9	2590
20 × 2.5	8.02	43.5	2815
21 × 2.5	8.02	45.2	2990
23 × 2.5	8.02	45.8	3215
24 × 2.5	8.02	48.2	3230

Pairs × mm ²	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
27 × 2.5	8.02	49.4	3515
30 × 2.5	8.02	51	3810
33 × 2.5	8.02	53.1	4145
37 × 2.5	8.02	54.9	4500

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.