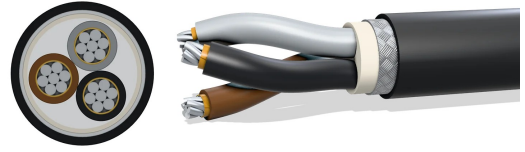


Application

BFOU 0.6/1 kV is a fire-resistant, 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 P5/P12, now P105) and IEC 60092-353. The tinned copper conductors carry a mica-tape fire barrier under the halogen-free EPR insulation, so that the circuit remains functional during a fire acc. to IEC 60331; the 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 emergency and safety circuits that must keep operating in a fire, such as fire-fighting, emergency lighting, shutdown and alarm systems, as well as general power, lighting and control circuits below 1 kV in safe and hazardous areas, including locations exposed to oil, drilling fluids and mud.



CONSTRUCTION

Conductor	Tinned annealed stranded circular 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.
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 Uo/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.
Fire-resistant	Circuit integrity acc. to IEC 60331-1/-2.
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	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 × mm2	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
1 × 1	18.2	8.8	120
2 × 1	18.2	13.3	235
3 × 1	18.2	14.6	315
4 × 1	18.2	15.7	360
5 × 1	18.2	15.8	370
6 × 1	18.2	17.1	425
7 × 1	18.2	17.1	440
8 × 1	18.2	18.2	490
9 × 1	18.2	19.6	550
10 × 1	18.2	21	585
12 × 1	18.2	21.6	640
14 × 1	18.2	22.7	715
16 × 1	18.2	23.8	785
19 × 1	18.2	25.1	865
20 × 1	18.2	25.8	930
23 × 1	18.2	27.6	1040
24 × 1	18.2	29	1085
27 × 1	18.2	29.6	1160
30 × 1	18.2	30.7	1265
33 × 1	18.2	31.8	1355
37 × 1	18.2	33.4	1495
44 × 1	18.2	37.7	1840
1 × 1.5	12.2	9.1	135
2 × 1.5	12.2	14.6	300
3 × 1.5	12.2	15.3	350
4 × 1.5	12.2	16.6	410
5 × 1.5	12.2	16.8	430
6 × 1.5	12.2	18	485
7 × 1.5	12.2	18	505
8 × 1.5	12.2	19.4	n/a
9 × 1.5	12.2	20.7	635
10 × 1.5	12.2	22.4	685
12 × 1.5	12.2	23	755
14 × 1.5	12.2	24.1	835
16 × 1.5	12.2	25.4	935
19 × 1.5	12.2	26.6	1025
20 × 1.5	12.2	27.5	1105
23 × 1.5	12.2	29.3	1225
24 × 1.5	12.2	31	1295
27 × 1.5	12.2	31.6	1390
30 × 1.5	12.2	33.2	1540
33 × 1.5	12.2	34.3	1655
37 × 1.5	12.2	36.1	1870
44 × 1.5	12.2	40.3	2205
1 × 2.5	7.56	9.5	150

Cores × mm2	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
2 × 2.5	7.56	15.4	350
3 × 2.5	7.56	16.1	400
4 × 2.5	7.56	17.6	480
5 × 2.5	7.56	17.9	505
6 × 2.5	7.56	19.4	570
7 × 2.5	7.56	19.4	610
8 × 2.5	7.56	20.7	685
9 × 2.5	7.56	22.3	770
10 × 2.5	7.56	24	825
12 × 2.5	7.56	24.9	930
14 × 2.5	7.56	26	1035
16 × 2.5	7.56	27.5	1155
19 × 2.5	7.56	28.8	1280
20 × 2.5	7.56	29.6	1365
23 × 2.5	7.56	31.7	1530
24 × 2.5	7.56	33.9	1640
27 × 2.5	7.56	36.3	2005
30 × 2.5	7.56	37.6	2160
33 × 2.5	7.56	39.1	2350
37 × 2.5	7.56	44.2	2825
1 × 4	4.7	10	175
2 × 4	4.7	16.6	410
3 × 4	4.7	17.4	480
4 × 4	4.7	18.8	570
1 × 6	3.11	10.6	205
2 × 6	3.11	17.8	485
3 × 6	3.11	18.7	580
4 × 6	3.11	20.4	700
1 × 10	1.84	11.7	260
2 × 10	1.84	19.8	620
3 × 10	1.84	20.9	760
4 × 10	1.84	22.8	935
1 × 16	1.16	12.7	340
2 × 16	1.16	22	805
3 × 16	1.16	23.2	1010
4 × 16	1.16	25.4	1250
1 × 25	0.734	15.1	510
2 × 25	0.734	25.6	1125
3 × 25	0.734	27.1	1425
4 × 25	0.734	29.7	1785
1 × 35	0.529	16.2	620
2 × 35	0.529	28	1385
3 × 35	0.529	29.6	1775
4 × 35	0.529	33.1	2275
1 × 50	0.391	18.3	800
2 × 50	0.391	32.3	1835
3 × 50	0.391	34.4	2385

Cores × mm ²	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
4 × 50	0.391	38.5	3115
1 × 70	0.27	20.2	1045
2 × 70	0.27	36.5	2470
3 × 70	0.27	38.9	3235
4 × 70	0.27	42.8	4095
1 × 95	0.195	22.6	1345
2 × 95	0.195	41.3	3195
3 × 95	0.195	44.3	4240
4 × 95	0.195	49	5405
1 × 120	0.154	24.3	1635
2 × 120	0.154	45.2	3920
3 × 120	0.154	48.2	5200
4 × 120	0.154	53.3	6650
1 × 150	0.126	26.5	1975
2 × 150	0.126	49.6	4735
3 × 150	0.126	52.9	6310
4 × 150	0.126	58.9	8140
1 × 185	0.1	28.7	2350
2 × 185	0.1	53.8	5625
3 × 185	0.1	58	7605
4 × 185	0.1	64.1	9755
1 × 240	0.0762	32.5	3075
2 × 240	0.0762	61.4	7380
3 × 240	0.0762	65.7	9940
4 × 240	0.0762	73	12830
1 × 300	0.0607	35.2	3675
3 × 300	0.0607	71.8	11960
4 × 300	0.0607	79.7	15430

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