

Halogen-free and/or Mud resistant cables for offshore installations



Construction

- 1** Conductor
Tinned annealed copper wire according to IEC 60228 Class 2 or Class 5
- 2** Fire proof layer
Mica / Glass tape
- 3** Insulation
HF EPR as per IEC 60092-360(351), thickness as per IEC 60092-376
- 4** Inner covering
Halogen free thermoset compound, thickness according to IEC 60092-376
- 5** Collective screen
Screened by copper or aluminium backed polyester tape with tinned copper drain wire
- 6** Braid armour
Tinned copper wire braid (O), Galvanized steel wire braid (C)
- 7** Outer sheath
Halogen free thermoset compound SHF2 or halogen free MUD resistant thermoset compound SHF MUD complying with IEC 60092-360(359) and / or NEK 606.

Marking

e.g. : [S.E.C. 250V S4/S8 BFOU\(C\)-M 2C X 0.75SQMM NEK 606 IEC 60332-3A IEC 60331 MUD SEOUL Year Length](#)

Applicable standards

NEK 606	Design standards
IEC 60092-350	Design standards
IEC 60092-352	Choice and installation of electric cables
IEC 60092-376	Design standards
IEC 60092-360(351, 359)	Insulating and sheathing materials
IEC 60331	Fire resisting test
IEC 60332-1	Flame retardant
IEC 60332-3-22 Cat.A	Flame retardant
IEC 60684-2	Fluorine content test
IEC 60754-1	Halogen gas emission test
IEC 60754-2	pH and conductivity test
IEC 61034-1,2	Smoke emission test
UL 1581	UV resistance (sunlight resistance)
CSA C 22.2 No.0.3	Cold bending test (at -40°C) and cold impact (at -35°C) test at low temperature (option)



-40 to 90 °C



Flame retardant
IEC 60332-1 (single)
IEC 60332-3.A (branched)
Fire retardant IEC 60331



Cold impact (-35 °C)
CSA C22.2 No.0.3
Special requirement



Halogen free



Weather
Resistance to severe
weather condition



Chemical attacks
Resistance to
chemicals



Mud
Resistance to
Mud



Oil
Resistance to
Enhanced oil

150/250V

Multi-core, Mica tape(HF-) EPR insulated, Collective screen, Halogen free Inner covering/Bedding, Braid armour, Halogen free SHF2 or SHF MUD Resistance Instrumentation/control cables(Flame and Fire resistant) BFOU(C), BFCU(C)

No. of Cores	Conductor		Insulation Thick mm	Inner Covering Overall dia. mm	Outer Diameter Nom. mm	Cable weight Approx. kg/km	Conductor Resistance(20°C) max. Ω/km	Inductance mH/km
	Area mm ²	Overall dia. mm						
	2	0.75						
3	0.75	1.11	0.6	9.3	13.1	290	24.8	0.80
4	0.75	1.11	0.6	10.1	14.5	330	24.8	0.80
5	0.75	1.11	0.6	11.0	15.5	410	24.8	0.80
6	0.75	1.11	0.6	12.0	16.5	460	24.8	0.80
7	0.75	1.11	0.6	12.0	16.5	470	24.8	0.80
8	0.75	1.11	0.6	12.9	17.5	520	24.8	0.80
9	0.75	1.11	0.6	13.9	18.6	570	24.8	0.80
10	0.75	1.11	0.6	15.0	20.0	640	24.8	0.80
12	0.75	1.11	0.6	15.5	20.5	680	24.8	0.80
14	0.75	1.11	0.6	16.3	21.4	740	24.8	0.80
15	0.75	1.11	0.6	16.7	21.9	770	24.8	0.80
16	0.75	1.11	0.6	17.2	22.4	800	24.8	0.80
19	0.75	1.11	0.6	18.1	23.4	880	24.8	0.80
21	0.75	1.11	0.6	19.1	24.5	960	24.8	0.80
23	0.75	1.11	0.6	20.0	25.5	1,020	24.8	0.80
24	0.75	1.11	0.6	21.2	26.9	1,110	24.8	0.80
27	0.75	1.11	0.6	21.7	27.4	1,170	24.8	0.80
30	0.75	1.11	0.6	22.5	28.3	1,240	24.8	0.80
33	0.75	1.11	0.6	23.4	29.3	1,320	24.8	0.80
37	0.75	1.11	0.6	24.3	30.3	1,430	24.8	0.80
44	0.75	1.11	0.6	27.4	34.2	1,700	24.8	0.80

Conductor area. (mm ²)	Capacitance (mF/km)		Inductance (mH/km)	
	Shielded	Unshielded	Shielded	Unshielded
0.75	90	80	0.80	0.80
1.0	100	85	0.75	0.75
1.5	115	110	0.70	0.70
2.5	135	110	0.67	0.67

150/250V

Multi-core, Mica tape(HF-) EPR insulated, Collective screen, Halogen free Inner covering/Bedding, Braid armour, Halogen free SHF2 or SHF MUD Resistance Instrumentation/control cables(Flame and Fire resistant) BFOU(C), BFCU(C)

No. of Cores	Conductor		Insulation Thick mm	Inner Covering Overall dia. mm	Outer Diameter Nom. mm	Cable weight Approx. kg/km	Conductor Resistance(20°C) max. Ω/km	Inductance mH/km
	Area mm ²	Overall dia. mm						
	2	1.00						
3	1.00	1.29	0.6	9.7	14.2	320	18.2	0.75
4	1.00	1.29	0.6	10.6	15.2	360	18.2	0.75
5	1.00	1.29	0.6	11.6	16.2	450	18.2	0.75
6	1.00	1.29	0.6	12.5	17.3	500	18.2	0.75
7	1.00	1.29	0.6	12.5	17.3	510	18.2	0.75
8	1.00	1.29	0.6	13.5	18.4	570	18.2	0.75
9	1.00	1.29	0.6	14.5	19.6	630	18.2	0.75
10	1.00	1.29	0.6	15.8	21.0	700	18.2	0.75
12	1.00	1.29	0.6	16.3	21.5	760	18.2	0.75
14	1.00	1.29	0.6	17.2	22.5	820	18.2	0.75
15	1.00	1.29	0.6	17.6	23.0	850	18.2	0.75
16	1.00	1.29	0.6	18.1	23.5	890	18.2	0.75
19	1.00	1.29	0.6	19.1	24.6	990	18.2	0.75
21	1.00	1.29	0.6	20.1	25.7	1,060	18.2	0.75
23	1.00	1.29	0.6	21.1	26.9	1,140	18.2	0.75
24	1.00	1.29	0.6	22.3	28.3	1,240	18.2	0.75
27	1.00	1.29	0.6	22.8	28.9	1,300	18.2	0.75
30	1.00	1.29	0.6	23.7	29.8	1,400	18.2	0.75
33	1.00	1.29	0.6	24.6	30.8	1,490	18.2	0.75
37	1.00	1.29	0.6	25.6	31.9	1,600	18.2	0.75
44	1.00	1.29	0.6	29.3	36.5	1,970	18.2	0.75

Conductor area, (mm ²)	Capacitance (mF/km)		Inductance (mH/km)	
	Shielded	Unshielded	Shielded	Unshielded
0.75	90	80	0.80	0.80
1.0	100	85	0.75	0.75
1.5	115	110	0.70	0.70
2.5	135	110	0.67	0.67

150/250V

Multi-core, Mica tape(HF-) EPR insulated, Collective screen, Halogen free Inner covering/Bedding, Braid armour, Halogen free SHF2 or SHF MUD Resistance Instrumentation/control cables(Flame and Fire resistant) BFOU(C), BFCU(C)

No. of Cores	Conductor		Insulation Thick mm	Inner Covering Overall dia. mm	Outer Diameter Nom. mm	Cable weight Approx. kg/km	Conductor Resistance(20°C) max. Ω/km	Inductance mH/km
	Area mm ²	Overall dia. mm						
	2	1.5						
3	1.5	1.59	0.7	10.5	14.8	360	12.2	0.70
4	1.5	1.59	0.7	11.5	15.9	460	12.2	0.70
5	1.5	1.59	0.7	12.6	17.4	520	12.2	0.70
6	1.5	1.59	0.7	13.7	18.7	590	12.2	0.70
7	1.5	1.59	0.7	13.7	18.7	610	12.2	0.70
8	1.5	1.59	0.7	14.8	19.9	670	12.2	0.70
9	1.5	1.59	0.7	15.9	21.2	740	12.2	0.70
10	1.5	1.59	0.7	17.3	22.8	840	12.2	0.70
12	1.5	1.59	0.7	17.9	23.4	900	12.2	0.70
14	1.5	1.59	0.7	18.8	24.5	990	12.2	0.70
15	1.5	1.59	0.7	19.3	25.0	1,030	12.2	0.70
16	1.5	1.59	0.7	19.9	25.6	1,080	12.2	0.70
19	1.5	1.59	0.7	21.0	26.9	1,190	12.2	0.70
21	1.5	1.59	0.7	22.1	28.1	1,300	12.2	0.70
23	1.5	1.59	0.7	23.2	29.4	1,390	12.2	0.70
24	1.5	1.59	0.7	24.6	31.0	1,510	12.2	0.70
27	1.5	1.59	0.7	25.2	31.6	1,600	12.2	0.70
30	1.5	1.59	0.7	26.1	32.7	1,720	12.2	0.70
33	1.5	1.59	0.7	27.2	34.3	1,840	12.2	0.70
37	1.5	1.59	0.7	28.7	35.5	2,030	12.2	0.70
44	1.5	1.59	0.7	32.3	40.0	2,530	12.2	0.70

Conductor area. (mm ²)	Capacitance (mF/km)		Inductance (mH/km)	
	Shielded	Unshielded	Shielded	Unshielded
0.75	90	80	0.80	0.80
1.0	100	85	0.75	0.75
1.5	115	110	0.70	0.70
2.5	135	110	0.67	0.67

150/250V

Multi-core, Mica tape(HF-) EPR insulated, Collective screen, Halogen free Inner covering/Bedding, Braid armour, Halogen free SHF2 or SHF MUD Resistance Instrumentation/control cables(Flame and Fire resistant) BFOU(C), BFCU(C)

No. of Cores	Conductor		Insulation Thick mm	Inner Covering Overall dia. mm	Outer Diameter Nom. mm	Cable weight Approx. kg/km	Conductor Resistance(20°C) max. Ω/km	Inductance mH/km
	Area mm ²	Overall dia. mm						
	2	2.5						
3	2.5	2.01	0.7	11.5	15.8	470	7.56	0.67
4	2.5	2.01	0.7	12.5	17.0	540	7.56	0.67
5	2.5	2.01	0.7	13.7	18.7	620	7.56	0.67
6	2.5	2.01	0.7	15.0	20.0	700	7.56	0.67
7	2.5	2.01	0.7	15.0	20.0	730	7.56	0.67
8	2.5	2.01	0.7	16.2	21.4	820	7.56	0.67
9	2.5	2.01	0.7	17.5	22.8	900	7.56	0.67
10	2.5	2.01	0.7	19.0	24.6	1,030	7.56	0.67
12	2.5	2.01	0.7	19.7	25.3	1,110	7.56	0.67
14	2.5	2.01	0.7	20.7	26.5	1,220	7.56	0.67
15	2.5	2.01	0.7	21.3	27.1	1,280	7.56	0.67
16	2.5	2.01	0.7	21.9	27.8	1,340	7.56	0.67
19	2.5	2.01	0.7	23.1	29.1	1,490	7.56	0.67
21	2.5	2.01	0.7	24.3	30.5	1,630	7.56	0.67
23	2.5	2.01	0.7	25.6	31.9	1,750	7.56	0.67
24	2.5	2.01	0.7	27.2	34.1	1,890	7.56	0.67
27	2.5	2.01	0.7	27.8	34.8	2,010	7.56	0.67
30	2.5	2.01	0.7	29.3	36.0	2,210	7.56	0.67
33	2.5	2.01	0.7	30.4	37.8	2,370	7.56	0.67
37	2.5	2.01	0.7	31.6	39.1	2,680	7.56	0.67
44	2.5	2.01	0.7	35.7	43.7	3,190	7.56	0.67

Conductor area. (mm ²)	Capacitance (mF/km)		Inductance (mH/km)	
	Shielded	Unshielded	Shielded	Unshielded
0.75	90	80	0.80	0.80
1.0	100	85	0.75	0.75
1.5	115	110	0.70	0.70
2.5	135	110	0.67	0.67