

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



Construction

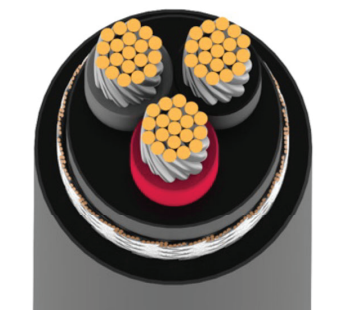
- 1** Conductor
Tinned annealed copper wire according to IEC 60228 Class 2 or Class 5
- 2** Insulation
HF EPR as per IEC 60092-360(351), thickness as per IEC 60092-353
- 3** Inner covering/Bedding
Halogen free thermoset compound, thickness according to IEC 60092-353
- 4** Braid armour
Tinned copper wire braid (O), Galvanized steel wire braid (C)
- 5** 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. 0.6/1kV P1/P8 RFOU-M 2 X 70SQMM NEK 606 IEC 60332-3A 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 60092-353	Design standards
IEC 60092-360(351, 359)	Insulating and sheathing materials
IEC 60332-1	Flame retardant (Single)
IEC 60332-3-22 Cat.A	Flame retardant (Bunched)
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 (bunched)



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

0.6/1kV

HF-EPR insulated, Halogen free Inner covering, Braid armour, Halogen free SHF2 or SHF MUD Resistance cables (Flame retardant) RFOU, RFCU

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	Current Rating Amp.
	Area mm ²	Overall dia. mm						
	1	1						
1	1.5	1.59	1.0	6.0	9.2	150	12.2	23
1	2.5	2.01	1.0	6.4	9.6	170	7.56	40
1	4	2.55	1.0	7.0	10.2	200	4.70	51
1	6	3.12	1.0	7.5	10.8	230	3.11	52
1	10	4.05	1.0	8.5	11.9	300	1.84	72
1	16	5.10	1.0	9.5	13.0	380	1.16	96
1	25	6.42	1.2	11.2	15.4	560	0.734	127
1	35	7.56	1.2	12.3	16.7	690	0.529	157
1	50	8.90	1.4	14.1	18.5	860	0.391	196
1	70	10.70	1.4	15.8	20.5	1,120	0.270	242
1	95	12.60	1.6	18.1	23.0	1,450	0.195	293
1	120	14.20	1.6	19.7	24.7	1,730	0.154	339
1	150	15.80	1.8	21.5	26.9	2,060	0.126	389
1	185	17.60	2.0	24.0	29.4	2,530	0.100	444
1	240	20.30	2.2	26.9	33.0	3,170	0.0762	522
1	300	22.70	2.4	30.2	36.6	4,040	0.0607	601

0.6/1kV

HF-EPR insulated, Halogen free Inner covering, Braid armour, Halogen free SHF2 or SHF MUD cables (Flame retardant) RFOU, RFCU

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	Current Rating Amp.
	Area mm ²	Overall dia. mm						
	2	1						
2	1.5	1.59	1.0	9.8	13.2	310	12.2	20
2	2.5	2.01	1.0	10.7	14.7	410	7.56	26
2	4	2.55	1.0	11.7	15.8	420	4.70	34
2	6	3.12	1.0	12.8	17.1	500	3.11	44
2	10	4.05	1.0	14.9	19.1	650	1.84	61
2	16	5.10	1.0	16.9	21.4	850	1.16	82
2	25	6.42	1.2	20.3	25.3	1,180	0.734	108
2	35	7.56	1.2	22.5	27.7	1,470	0.529	133
2	50	8.90	1.4	26.0	31.5	1,870	0.391	167
2	70	10.70	1.4	29.9	36.2	2,500	0.270	206
2	95	12.60	1.6	34.4	41.7	3,390	0.195	249
2	120	14.20	1.6	37.6	45.3	4,040	0.154	288
2	150	15.80	1.8	41.7	49.8	4,890	0.126	331
2	185	17.60	2.0	46.7	54.8	6,010	0.100	377
2	240	20.30	2.2	52.9	61.8	7,590	0.0762	444
2	300	22.70	2.4	58.6	68.0	9,280	0.0607	511

0.6/1kV

(HF-)EPR insulated, Halogen free Inner covering, Braid armour, Halogen free SHF2 or SHF MUD cables(Flame retardant) RFOU, RFCU

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	Current Rating Amp.
	Area mm ²	Overall dia. mm						
	3	1						
3	1.5	1.59	1.0	10.4	14.2	340	12.2	16
3	2.5	2.01	1.0	11.3	15.3	450	7.56	21
3	4	2.55	1.0	12.5	16.6	540	4.70	28
3	6	3.12	1.0	13.7	18.0	650	3.11	36
3	10	4.05	1.0	15.9	20.3	800	1.84	50
3	16	5.10	1.0	18.1	22.7	1,060	1.16	67
3	25	6.42	1.2	21.7	26.7	1,490	0.734	89
3	35	7.56	1.2	24.1	29.4	1,880	0.529	110
3	50	8.90	1.4	28.2	34.0	2,470	0.391	137
3	70	10.70	1.4	32.1	38.7	3,370	0.270	169
3	95	12.60	1.6	36.9	44.4	4,440	0.195	205
3	120	14.20	1.6	40.7	48.4	5,390	0.154	237
3	150	15.80	1.8	44.7	53.0	6,470	0.126	272
3	185	17.60	2.0	50.5	58.9	8,040	0.100	311
3	240	20.30	2.2	56.8	66.1	10,160	0.0762	365
3	300	22.70	2.4	62.9	72.7	12,480	0.0607	421

0.6/1kV

(HF-)EPR insulated, Halogen free Inner covering, Braid armour, Halogen free SHF2 or SHF MUD cables(Flame retardant) RFOU, RFCU

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	Current Rating Amp.
	Area mm ²	Overall dia. mm						
	4	1						
4	1.5	1.59	1.0	11.4	15.4	430	12.2	16
4	2.5	2.01	1.0	12.4	16.4	510	7.56	21
4	4	2.55	1.0	13.7	17.9	630	4.70	28
4	6	3.12	1.0	15.0	19.4	760	3.11	36
4	10	4.05	1.0	17.5	21.9	970	1.84	50
4	16	5.10	1.0	19.9	24.7	1,290	1.16	67
4	25	6.42	1.2	24.0	28.8	1,850	0.734	89
4	35	7.56	1.2	26.7	32.2	2,350	0.529	110
4	50	8.90	1.4	31.3	37.8	3,200	0.391	137
4	70	10.70	1.4	35.6	42.8	4,240	0.270	169
4	95	12.60	1.6	41.4	49.1	5,670	0.195	205
4	120	14.20	1.6	45.2	53.3	6,860	0.154	237
4	150	15.80	1.8	50.1	58.9	8,310	0.126	272
4	185	17.60	2.0	56.1	65.0	10,260	0.100	311
4	240	20.30	2.2	63.2	73.3	13,000	0.0762	365

0.6/1kV

(HF-)EPR insulated, Halogen free Inner covering, Braid armour, Halogen free SHF2 or SHF MUD cables(Flame retardant) RFOU, RFCU

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	Current Rating Amp.
	Area mm ²	Overall dia. mm						
	5	1						
6	1	1.29	1.0	12.8	16.7	490	18.2	9
7	1	1.29	1.0	12.8	16.7	500	18.2	8
8	1	1.29	1.0	13.9	17.9	560	18.2	8
9	1	1.29	1.0	14.9	19.0	620	18.2	8
10	1	1.29	1.0	16.3	20.4	710	18.2	7
12	1	1.29	1.0	16.8	21.0	760	18.2	7
14	1	1.29	1.0	17.7	21.9	820	18.2	7
15	1	1.29	1.0	18.2	22.4	850	18.2	6
16	1	1.29	1.0	18.7	23.0	900	18.2	6
19	1	1.29	1.0	19.7	24.1	1,000	18.2	6
21	1	1.29	1.0	20.8	25.2	1,070	18.2	6
23	1	1.29	1.0	21.9	26.3	1,170	18.2	6
24	1	1.29	1.0	23.2	27.7	1,260	18.2	6
27	1	1.29	1.0	23.8	28.4	1,340	18.2	5
30	1	1.29	1.0	24.7	29.3	1,430	18.2	5
33	1	1.29	1.0	25.7	30.3	1,520	18.2	5
37	1	1.29	1.0	26.7	31.5	1,660	18.2	5
44	1	1.29	1.0	30.6	35.9	2,020	18.2	5

0.6/1kV

(HF-)EPR insulated, Halogen free Inner covering, Braid armour, Halogen free SHF2 or SHF MUD cables(Flame retardant) RFOU, RFCU

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	Current Rating Amp.
	Area mm ²	Overall dia. mm						
	5	1.5						
6	1.5	1.59	1.0	13.6	17.7	560	12.2	12
7	1.5	1.59	1.0	13.6	17.7	580	12.2	10
8	1.5	1.59	1.0	14.8	18.9	640	12.2	10
9	1.5	1.59	1.0	15.9	20.2	720	12.2	10
10	1.5	1.59	1.0	17.4	21.7	810	12.2	9
12	1.5	1.59	1.0	18.0	22.3	870	12.2	9
14	1.5	1.59	1.0	18.9	23.4	960	12.2	8
15	1.5	1.59	1.0	19.5	23.9	1,000	12.2	8
16	1.5	1.59	1.0	20.0	24.5	1,050	12.2	8
19	1.5	1.59	1.0	21.1	25.7	1,180	12.2	7
21	1.5	1.59	1.0	22.3	26.9	1,270	12.2	7
23	1.5	1.59	1.0	23.5	28.2	1,380	12.2	7
24	1.5	1.59	1.0	24.9	29.7	1,480	12.2	7
27	1.5	1.59	1.0	25.5	30.3	1,570	12.2	7
30	1.5	1.59	1.0	26.5	31.4	1,700	12.2	6
33	1.5	1.59	1.0	27.5	32.7	1,820	12.2	6
37	1.5	1.59	1.0	29.1	34.2	2,010	12.2	6
44	1.5	1.59	1.0	32.8	38.6	2,510	12.2	6

0.6/1kV

(HF-)EPR insulated, Halogen free Inner covering, Braid armour, Halogen free SHF2 or SHF MUD cables(Flame retardant) RFOU, RFCU

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	Current Rating Amp.
	Area mm ²	Overall dia. mm						
	5	2.5						
6	2.5	2.01	1.0	14.9	19.1	670	7.56	16
7	2.5	2.01	1.0	14.9	19.1	700	7.56	15
8	2.5	2.01	1.0	16.2	20.4	790	7.56	15
9	2.5	2.01	1.0	17.5	21.8	870	7.56	15
10	2.5	2.01	1.0	19.1	23.6	1,000	7.56	13
12	2.5	2.01	1.0	19.7	24.2	1,080	7.56	12
14	2.5	2.01	1.0	20.8	25.4	1,190	7.56	12
15	2.5	2.01	1.0	21.4	26.0	1,240	7.56	12
16	2.5	2.01	1.0	22.0	26.7	1,310	7.56	11
19	2.5	2.01	1.0	23.2	28.0	1,470	7.56	10
21	2.5	2.01	1.0	24.5	29.0	1,590	7.56	10
23	2.5	2.01	1.0	25.8	30.9	1,740	7.56	10
24	2.5	2.01	1.0	27.4	32.6	1,870	7.56	10
27	2.5	2.01	1.0	28.1	33.2	1,980	7.56	10
30	2.5	2.01	1.0	29.6	34.7	2,190	7.56	9
33	2.5	2.01	1.0	30.8	36.2	2,340	7.56	9
37	2.5	2.01	1.0	32.0	37.8	2,660	7.56	8
44	2.5	2.01	1.0	36.2	42.5	3,200	7.56	8

0.6/1kV

(HF-)EPR insulated, Halogen free Inner covering, Braid armour, Halogen free SHF2 or SHF MUD cables(Flame retardant) RFOU, RFCU

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	Current Rating Amp.
	Area mm ²	Overall dia. mm						
	2+E	25						
	16	5.10	1.0					
2+E	35	7.56	1.2	23.7	29.1	1,800	0.529	133
	25	6.42	1.2					
2+E	50	8.90	1.4	26.6	32.8	2,180	0.391	167
	25	6.42	1.2					
2+E	70	10.70	1.4	30.5	37.5	2,900	0.270	206
	35	7.56	1.2					
2+E	95	12.60	1.6	35.1	43.0	3,960	0.195	249
	50	8.90	1.4					
2+E	120	14.20	1.6	38.6	47.2	4,890	0.154	288
	70	10.70	1.4					
2+E	150	15.80	1.8	43.2	51.9	5,990	0.126	331
	95	12.60	1.6					
2+E	185	17.60	2.0	47.4	56.7	7,130	0.100	377
	95	12.60	1.6					
2+E	240	20.30	2.2	53.4	63.6	9,000	0.0762	444
	120	14.20	1.6					

0.6/1kV (HF-)EPR insulated, Halogen free Inner covering, Braid armour, Halogen free SHF2 or SHF MUD cables(Flame retardant) RFOU, RFCU

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	Current Rating Amp.
	Area mm ²	Overall dia. mm						
	3+E	25						
	16	5.10	1.0					
3+E	35	7.56	1.2	26.2	31.5	2,210	0.529	110
		25	6.42					
3+E	50	8.90	1.4	29.8	35.3	2,780	0.391	137
		25	6.42					
3+E	70	10.70	1.4	33.8	40.2	3,780	0.270	169
		35	7.56					
3+E	95	12.60	1.6	39.5	46.3	4,990	0.195	205
		50	8.90					
3+E	120	14.20	1.6	43.5	50.7	6,180	0.154	237
		70	10.70					
3+E	150	15.80	1.8	49.0	56.3	7,680	0.126	272
		95	12.60					
3+E	185	17.60	2.0	53.1	61.1	9,080	0.100	311
		95	12.60					
3+E	240	20.30	2.2	59.7	68.2	11,430	0.0762	365
		120	14.20					

0.6/1kV (HF-)EPR insulated, Halogen free Inner covering, Braid armour, Halogen free SHF2 or SHF MUD cables(Flame retardant) RFOU, RFCU

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	Current Rating Amp.
	Area mm ²	Overall dia. mm						
	4+E	25						
	16	5.10	1.0					
4+E	35	7.56	1.2	29.6	35.1	2,690	0.529	110
		25	6.42					
4+E	50	8.90	1.4	33.4	39.7	3,510	0.391	137
		25	6.42					
4+E	70	10.70	1.4	38.5	44.9	4,650	0.270	169
		35	7.56					
4+E	95	12.60	1.6	44.5	51.6	6,310	0.195	205
		50	8.90					
4+E	120	14.20	1.6	49.3	56.8	7,830	0.154	237
		70	10.70					
4+E	150	15.80	1.8	54.9	62.7	9,610	0.126	272
		95	12.60					
4+E	185	17.60	2.0	59.9	68.3	11,450	0.100	311
		95	12.60					
4+E	240	20.30	2.2	67.9	77.0	14,650	0.0762	365
		120	14.20					