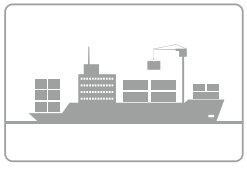
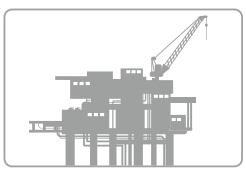
GRAND OCEAN





Offshore Cable

NEK TS 606 : 2022

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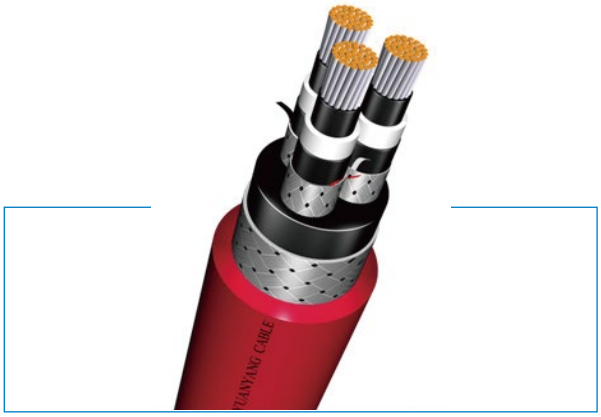
P106 BFOU /E/M/H/H-M 3.6/6kV
P107 BFOU /E/M/H/H-M 6/10(12)kV

Halogen free flame retardant offshore MV power cable

Basic type：RFOU/TFOU

NEK TS 606 oil / mud resistant property：

RFOU TFOU	Minimun requirements oil resistant
RFOU E TFOU E	Enhanced oil resistant
RFOU M TFOU M	Mud resistant
RFOU H TFOU H	Hydraulic/gear oil resistant
RFOU H-M TFOU H-M	Hydraulic/gear oil resistant & mud resistant



Rated Voltage：

P102 — 3.6/6(7.2)kV
P103 — 6/10(12)kV
P104 — 8.7/15(17.5)kV
P112 — 12/20(24)kV

Operating temperature：90℃

Standards applied

NEK TS 606	– Design
IEC 60092-354	– Design
IEC 60228	– Conductor
IEC 60092-360	– Insulation & Sheath
IEC 60332-1	– Flame Retardant
IEC 60332-3-22	– Flame Retardant
IEC 60754	– Halogen Free
IEC 61034	– Low Smoke

Application

Fixed installation for medium voltage (MV) power system in both EX-and safe areas, general purposes. For installation in areas exposed to MUD and drilling/cleaning fluids.

Construction

Item	Code	Material／Description
Conductor		Stranded tinned annealed copper (STC), Class 2 or Class 5
Conductor screen		Extruded semiconductive layer
Insulation	R	EPR
	T	XLPE
Insulation screen		Extruded semiconductive layer and tinned copper wire braid
Inner covering	F	Extruded Halogen-free compound
Braid armor	O	Tinned copper wire braid (TCWB)
Outer sheath	U	"Halogen-free thermoset compound type SHF2 as per ""NEK TS 606 oil / mud resistant property""
Outer sheath color		Red

Halogen free flame retardant offshore MV power cable

P102 RFOU/TFOU /E/M/H/H-M 3.6/6(7.2)kV

No. of cores&Cross section	Overall diameter	Approx. weight		Current ratings at 45°C
		RFOU	TFOU	
mm^2	mm		kg/km	A
1x 10	19.2±1.5	630	600	72
1x 16	20.9±2.0	750	716	96
1x 25	22.7±2.0	900	861	127
1x 35	25.7±2.0	1050	1006	157
1x 50	27.1±2.0	1230	1182	196
1x 70	29.2±2.0	1510	1455	242
1x 95	31.4±2.0	1840	1778	293
1x 120	33.8±2.0	2170	2103	339
1x 150	34.7±2.5	2490	2416	389
1x 185	37.6±2.5	3040	2960	444
1x 240	40.2±2.5	3710	3620	522
1x 300	43.2±2.5	4430	4331	601
3x 10	35.4±2.5	2540	2447	50
3x 16	44.8±2.5	2900	2796	67
3x 25	48.1±2.5	3470	3351	89
3x 35	50.9±3.0	4050	3917	110
3x 50	54.3±3.0	4720	4573	137
3x 70	58.7±3.0	5800	5632	169
3x 95	63.2±3.5	7050	6862	205
3x 120	67.3±3.5	8230	8023	237
3x 150	69.9±3.5	9460	9236	273
3x 185	75.8±4.0	10630	10385	311
3 x 25+1 x 16	48.1±2.5	3960	3808	89
3 x 35+1 x 25	51.8±3.0	4740	4568	110
3 x 50+1 x 25	54.7±3.0	5410	5224	137
3 x 70+1 x 35	59.3±3.0	6620	6409	169
3 x 95+1 x 50	64.4±3.5	8110	7874	205
3 x 120+1 x 70	68.7±3.5	9550	9289	237
3 x 150+1 x 95	73.4±4.0	11100	10813	273

P103 RFOU/TFOU /E/M/H/H-M 6/10(12)kV

No. of cores&Cross section	Overall diameter	Approx. weight		Current ratings at 45°C
		RFOU	TFOU	
mm^2	mm		kg/km	A
1x 16	23.7±2.0	820	766	96
1x 25	25.2±2.0	950	878	127
1x 35	26.5±2.0	1100	1030	157
1x 50	27.9±2.0	1270	1181	196
1x 70	30.1±2.0	1570	1491	242
1x 95	32.1±2.0	1910	1822	293
1x 120	33.8±2.0	2230	2134	339
1x 150	36.2±2.5	2640	2535	389
1x 185	38.4±2.5	3110	2908	444
1x 240	40.8±2.5	3810	3683	522
1x 300	43.7±3.0	4510	4371	601
3x 16	46.7±3.0	3120	2965	67
3x 25	50.1±3.0	3700	3525	89
3x 35	52.8±3.0	4270	4075	110
3x 50	55.9±3.5	4960	4746	137
3x 70	60.3±3.5	6030	5789	169
3x 95	65.1±4.0	7320	7050	205
3x 120	68.9±4.0	8500	8205	237
3x 150	72.8±4.5	9760	9440	273
3x 185	77.6±4.5	11070	10723	311
3 x 25+1 x 16	50.1±3.0	4230	4004	89
3 x 35+1 x 25	53.3±3.0	4960	4708	110
3 x 50+1 x 25	56.2±3.0	5640	5369	137
3 x 70+1 x 35	60.8±3.5	6890	6586	169
3 x 95+1 x 50	65.7±3.5	8350	8010	205
3 x 120+1 x 70	70.3±4.0	9850	9476	237
3 x 150+1 x 95	75.2±4.5	11330	10922	273

Halogen free flame retardant offshore MV power cable

P104 RFOU/TFOU /E/M/H/H-M 8.7/15(17.5)kV

No. of cores&Cross section	Overall diameter	Approx. weight		Current ratings at 45°C
		RFOU	TFOU	
mm^2	mm		kg/km	A
1x 25	27.7±2.0	1080	991	127
1x 35	29.3±2.0	1240	1142	157
1x 50	30.6±2.0	1430	1306	196
1x 70	32.4±2.0	1720	1608	242
1x 95	34.4±2.0	2070	1946	293
1x 120	36.8±2.0	2490	2355	339
1x 150	37.4±2.5	2840	2605	389
1x 185	40.7±2.5	3280	3123	444
1x 240	41.2±2.5	3990	3815	522
1x 300	44.0±3.0	4720	4529	601
3x 25	55.5±3.0	4350	4096	89
3x 35	58.6±3.0	4970	4690	110
3x 50	61.7±3.5	5670	5366	137
3x 70	66.0±3.5	6780	6439	169
3x 95	70.6±4.0	8110	7730	205
3x 120	74.3±4.0	9330	8918	237
3x 150	78.4±4.5	10630	10185	273
3x 185	84.1±4.5	13460	12978	311
3 x 25+1 x 16	55.7±3.0	4840	4512	89
3 x 35+1 x 25	58.8±3.0	5480	5116	110
3 x 50+1 x 25	61.9±3.5	5960	5572	137
3 x 70+1 x 35	66.0±3.5	7035	6602	169
3 x 95+1 x 50	71.0±4.0	8375	7895	205
3 x 120+1 x 70	75.3±4.0	9745	9221	237
3 x 150+1 x 95	79.4±4.5	11640	11070	273

P112 RFOU/TFOU /E/M/H/H-M 12/20(24)kV

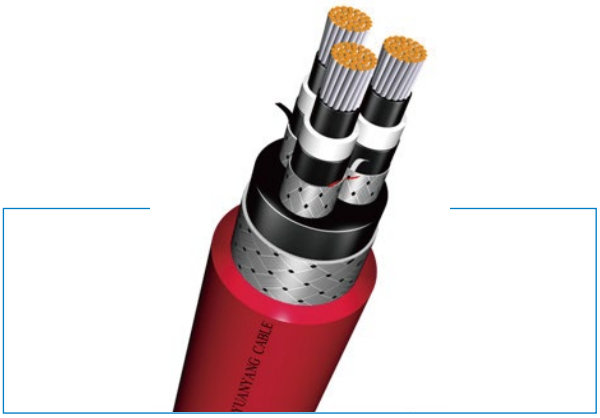
No. of cores&Cross section	Overall diameter	Approx. weight		Current ratings at 45°C
		RFOU	TFOU	
mm^2	mm		kg/km	A
1x 35	30.6±2.0	1600	1470	157
1x 50	32.1±2.0	1805	1664	196
1x 70	34.2±2.0	2205	2061	242
1x 95	36.4±2.0	2600	2354	293
1x 120	38.1±2.0	2930	2648	339
1x 150	40.0±2.5	3415	3230	389
1x 185	42.0±2.5	3895	3695	444
1x 240	45.2±2.5	4650	4428	522
1x 300	46.9±3.0	5425	5183	601
3x 35	61.2±3.0	5025	4657	110
3x 50	65.3±3.5	5700	5302	137
3x 70	68.7±3.5	6735	6292	169
3x 95	73.6±4.0	7985	7496	205
3x 120	77.1±4.0	9110	8581	237
3x 150	80.4±4.5	10640	10071	273
3x 185	85.0±4.5	12235	11622	311
3 x 35+1 x 25	62.6±3.5	6020	5543	110
3 x 50+1 x 25	66.4±3.5	6750	6243	137
3 x 70+1 x 35	69.1±4.0	7790	7228	169
3 x 95+1 x 50	74.5±4.0	9150	8530	205
3 x 120+1 x 70	78.7±4.5	10570	9896	237
3 x 150+1 x 95	87.0±4.5	12145	11416	273

Halogen free fire resistant offshore MV power cable

Basic type：BFOU

NEK TS 606 oil / mud resistant property：

BFOU	Minimun requirements oil resistant
BFOU E	Enhanced oil resistant
BFOU M	Mud resistant
BFOU H	Hydraulic/gear oil resistant
BFOU H-M	Hydraulic/gear oil resistant & mud resistant



Rated Voltage ：

P106 — 3.6/6(7.2)kV

P107 — 6/10(12)kV

Operating temperature ： 90℃

Standards applied

NEK TS 606	– Design
IEC 60092-354	– Design
IEC 60228	– Conductor
IEC 60092-360	– Insulation & Sheath
IEC 60332-1	– Flame Retardant
IEC 60332-3-22	– Flame Retardant
IEC 60331	– Fire resistant
IEC 60754	– Halogen Free
IEC 61034	– Low Smoke

Application

Fixed installation for medium voltage (MV) power system in both EX-and safe areas, general purposes. For installation in areas exposed to MUD and drilling/cleaning fluids.

Construction

Item	Code	Material／Description
Conductor		Stranded tinned annealed copper (STC), Class 2 or Class 5
Conductor screen		None
Insulation	B	Mica glass tape(MGT)+EPR Mica glass tape(MGT)+XLPE
Insulation screen		"Extruded semiconductive layer and tinned copper wire braid
Inner covering	F	Extruded Halogen-free compound
Braid armor	O	Tinned copper wire braid (TCWB)
Outer sheath	U	"Halogen-free thermoset compound type SHF2 as per ""NEK TS 606 oil / mud resistant property""
Outer sheath color		Red

Halogen free fire resistant offshore MV power cable

P106 BFOU /E/M/H/H-M 3.6/6(7.2)kV

No. of cores&Cross section	Overall diameter	Approx. weight		Current ratings at 45°C
		EPR	XLPE	
mm^2	mm		kg/km	A
1x 10	19.6±1.0	660	630	72
1x 16	21.5±1.5	780	746	96
1x 25	23.3±1.5	930	891	127
1x 35	26.2±1.5	1080	1036	157
1x 50	27.7±1.5	1270	1222	196
1x 70	29.8±1.5	1550	1495	242
1x 95	32.0±2.0	1870	1808	293
1x 120	34.4±2.0	2230	2163	339
1x 150	35.1±2.0	2590	2516	389
1x 185	38.3±2.0	3080	3000	444
1x 240	40.8±2.5	3760	3670	522
1x 300	43.7±2.5	4470	4371	601
3x 10	36.1±2.0	2640	2637	50
3x 16	45.3±2.0	3000	2896	67
3x 25	48.7±2.5	3570	3451	89
3x 35	51.5±2.5	4150	4017	110
3x 50	54.9±2.5	4830	4683	137
3x 70	59.2±3.0	5910	5742	169
3x 95	63.7±3.0	7160	6972	205
3x 120	67.9±3.5	8340	8133	237
3x 150	70.5±3.5	9570	9346	273
3x 185	76.4±4.0	10720	10475	311
3 x 25+1 x 16	55.2±2.5	4050	3898	89
3 x 35+1 x 25	59.8±3.0	4840	4668	110
3 x 50+1 x 25	65.0±3.0	5500	5314	137
3 x 70+1 x 35	69.5±3.0	6720	6509	169
3 x 95+1 x 50	73.9±3.5	8210	7974	205
3 x 120+1 x 70	75.8±4.0	9650	9389	237
3 x 150+1 x 95	79.9±4.0	11200	10913	273

P107 BFOU /E/M/H/H-M 6/10(12)kV

No. of cores&Cross section	Overall diameter	Approx. weight		Current ratings at 45°C
		EPR	XLPE	
mm^2	mm		kg/km	A
1x 16	24.3±1.5	830	776	96
1x 25	25.8±1.5	970	898	127
1x 35	27.1±1.5	1130	1060	157
1x 50	28.5±1.5	1310	1221	196
1x 70	30.7±1.5	1600	1521	242
1x 95	32.6±2.0	1940	1852	293
1x 120	34.4±2.0	2390	2294	339
1x 150	36.9±2.0	2750	2645	389
1x 185	39.1±2.5	4450	4248	444
1x 240	41.3±3.0	6740	6613	522
1x 300	44.3±3.5	9420	9281	601
3x 16	47.2±2.5	3250	3095	67
3x 25	50.7±2.5	3790	3615	89
3x 35	53.4±2.5	4370	4175	110
3x 50	56.5±3.0	5050	4836	137
3x 70	60.9±3.0	6120	5879	169
3x 95	65.6±3.0	7430	7160	205
3x 120	69.4±3.5	8610	8315	237
3x 150	73.4±3.5	9870	9550	273
3x 185	78.2±4.5	11180	10833	311
3 x 25+1 x 16	50.6±2.5	4320	4094	89
3 x 35+1 x 25	53.7±3.0	5070	4818	110
3 x 50+1 x 25	56.9±3.0	5750	5479	137
3 x 70+1 x 35	61.5±3.5	6980	6676	169
3 x 95+1 x 50	66.4±3.5	8460	8120	205
3 x 120+1 x 70	71.1±4.0	9950	9576	237
3 x 150+1 x 95	76.0±4.0	11440	11032	273

Offshore LV power cable

Halogen free flame retardant offshore
LV power cable ····· 9

P101 RFOU/TFOU /E/M/H/H-M 0.6/1kV
P111 RU/TU /E/M/H/H-M 0.6/1kV

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P105 BFOU /E/M/H/H-M 0.6/1kV
P110 BU /E/M/H/H-M 0.6/1kV

Halogen free flame retardant single wire ····· 29

P108 UX /E/M/H/H-M 0.6/1kV
P119 RX / TX 0.6/1kV

Halogen free flame retardant offshore LV power cable

Basic type: P101 RFOU/TFOU

NEK TS 606 oil / mud resistant property:

RFOU TFOU	Minimun requirements oil resistant
RFOU E TFOU E	Enhanced oil resistant
RFOU M TFOU M	Mud resistant
RFOU H TFOU H	Hydraulic/gear oil resistant
RFOU H-M TFOU H-M	Hydraulic/gear oil resistant & mud resistant

Rated Voltage: 0.6/1(1.2)kV

Operating temperature: 90℃

Standards applied

NEK TS 606	– Design
IEC 60092-353	– Design
IEC 60228	– Conductor
IEC 60092-360	– Insulation & Sheath
IEC 60332-1	– Flame Retardant
IEC 60332-3-22	– Flame Retardant
IEC 60754	– Halogen Free
IEC 61034	– Low Smoke

2

Application

Fixed installation for lower voltage (LV) power system in both EX-and safe areas, general purposes. For installation in areas exposed to MUD and drilling/cleaning fluids.

Construction

Item	Code	Material／Description
Conductor		Stranded tinned annealed copper (STC), Class 2 or Class 5
Conductor screen		Extruded semiconductive layer
Insulation	R	EPR
	T	XLPE
Inner covering	F	Extruded Halogen-free compound
Braid armor	O	Tinned copper wire braid (TCWB)
Outer sheath	U	"Halogen-free thermoset compound type SHF2 as per ""NEK TS 606 oil / mud resistant property""
Outer sheath color		Black

Halogen free flame retardant offshore LV power cable

P101 RFOU /E/M/H/H-M 0.6/1kV

No. of cores&Cross section	Overall diameter	Approx. weight	Current ratings at 45°C
mm^2	mm	kg/km	A
1x1	8.5±1.0	105	18
1x1.5	8.8±1.0	115	23
1x2.5	9.2±1.0	135	30
1x4	9.8±1.0	160	40
1x6	10.3±1.0	190	52
1x10	11.5±1.0	245	72
1x16	12.5±1.0	325	96
1x25	14.9±1.0	490	127
1x35	16.2±1.0	615	157
1x50	18.1±1.0	805	196
1x70	20.1±1.5	1040	242
1x95	22.5±1.5	1335	293
1x120	24.1±1.5	1640	339
1x150	26.3±1.5	1995	389
1x185	28.7±1.5	2410	444
1x240	32.4±2.0	3080	522
1x300	35.6±2.0	3770	601
2x1	12.2±1.0	185	15
2x1.5	12.8±1.0	205	20
2x2.5	14.3±1.0	280	26
2x4	15.5±1.0	335	34
2x6	16.7±1.0	400	44
2x10	18.8±1.0	525	61
2x16	20.9±1.5	690	82
2x25	24.7±1.5	965	108
2x35	27.5±1.5	1230	133
2x50	31.0±2.0	1625	167
2x70	35.1±2.0	2150	206
2x95	40.6±2.5	2910	249
2x120	44.2±2.5	3510	288
2x1+E	12.7±1.0	210	13
2x1.5+E	13.4±1.0	240	16
2x2.5+E	14.9±1.0	325	21
2x4+E	16.2±1.0	405	28
2x6+E	17.5±1.0	490	36
2x10+E	19.9±1.0	665	50
2x16+E	22.2±1.5	895	67
3x1	12.7±1.0	210	13
3x1.5	13.4±1.0	240	16
3x2.5	14.9±1.0	325	21
3x4	16.2±1.0	405	28
3x6	17.5±1.0	490	36
3x10	19.9±1.0	665	50
3x16	22.2±1.5	895	67
3x25	26.1±1.5	1275	89
3x35	29.1±1.5	1645	110
3x50	33.3±2.0	2240	137
3x70	38.2±2.0	3045	169
3x95	43.3±2.5	3985	205
3x120	47.6±2.5	4890	237
3x150	52.3±3.0	5680	272
3x185	57.9±3.0	6940	311
3x1+E	14.3±1.0	285	13
3x1.5+E	15.2±1.0	320	16
3x2.5+E	16.1±1.0	390	21

Halogen free flame retardant offshore LV power cable

P101 RFOU /E/M/H/H-M 0.6/1kV

No. of cores&Cross section	Overall diameter	Approx. weight	Current ratings at 45°C
mm^2	mm	kg/km	A
3x4+E	17.6±1.0	485	28
3x6+E	18.8±1.0	590	36
3x10+E	21.5±1.5	815	50
3x16+E	24.1±1.5	1115	67
4x1	14.3±1.0	285	13
4x1.5	15.2±1.0	320	16
4x2.5	16.1±1.0	390	21
4x4	17.6±1.0	485	28
4x6	18.8±1.0	590	36
4x10	21.5±1.5	815	50
4x16	24.1±1.5	1115	67
4x25	28.6±1.5	1610	89
4x35	31.9±2.0	2090	110
4x50	37.1±2.0	2955	137
4x70	42.1±2.5	3890	169
4x95	48.2±2.5	5165	205
4x120	52.5±3.0	6290	237
4x150	58.1±3.0	7330	272
5x1	15.8±1.0	325	11
7x1	17.0±1.0	385	9
10x1	20.6±1.5	515	8
12x1	21.1±1.5	570	8
14x1	22.2±1.5	630	7
16x1	23.3±1.5	690	7
19x1	24.2±1.5	770	7
24x1	28.0±1.5	950	6
27x1	28.5±1.5	1025	6
30x1	29.4±1.5	1105	6
33x1	30.6±2.0	1190	6
37x1	31.6±2.0	1290	5
5x1.5	16.3±1.0	370	13
7x1.5	17.6±1.0	445	12
10x1.5	21.4±1.5	600	11
12x1.5	22.2±1.5	670	10
14x1.5	23.1±1.5	740	10
16x1.5	24.1±1.5	815	9
19x1.5	25.4±1.5	920	9
24x1.5	29.2±1.5	1135	8
27x1.5	29.7±1.5	1225	8
30x1.5	30.9±2.0	1325	7
33x1.5	32.0±2.0	1435	7
37x1.5	33.2±2.0	1570	7
5x2.5	17.6±1.0	450	18
7x2.5	18.8±1.0	550	16
10x2.5	23.2±1.5	755	14
12x2.5	23.8±1.5	845	13
14x2.5	25.0±1.5	940	12
16x2.5	26.2±1.5	1045	12
19x2.5	27.6±1.5	1190	11
24x2.5	31.8±2.0	1475	10
27x2.5	32.4±2.0	1600	10
30x2.5	34.0±2.0	1775	10
33x2.5	35.2±2.0	1920	9
37x2.5	37.1±2.0	2200	9

Halogen free flame retardant offshore LV power cable

P101 TFOU /E/M/H/H-M 0.6/1kV

No. of cores&Cross section	Overall diameter	Approx. weight	Current ratings at 45°C
mm^2	mm	kg/km	A
1x1	7.8±1.0	90	18
1x1.5	8.1±1.0	100	23
1x2.5	8.7±1.0	115	30
1x4	9.3±1.0	140	40
1x6	9.8±1.0	165	52
1x10	10.8±1.0	220	72
1x16	12.0±1.0	300	96
1x25	14.3±1.0	455	127
1x35	15.6±1.0	580	157
1x50	17.3±1.0	755	196
1x70	19.3±1.0	990	242
1x95	21.4±1.5	1275	293
1x120	23.4±1.5	1560	339
1x150	25.6±1.5	1905	389
1x185	28.0±1.5	2305	444
1x240	31.1±2.0	2910	522
1x300	34.3±2.0	3595	601
2x1	10.8±1.0	150	15
2x1.5	11.6±1.0	170	20
2x2.5	12.4±1.0	205	26
2x4	14.3±1.0	290	34
2x6	15.3±1.0	350	44
2x10	17.5±1.0	470	61
2x16	19.7±1.0	635	82
2x25	23.3±1.5	895	108
2x35	26.1.±1.5	1150	133
2x50	29.1±1.5	1510	167
2x70	33.9±2.0	2040	206
2x95	38.6±2.0	2730	249
2x120	42.4±2.5	3335	288
2x1+E	11.4±1.0	170	13
2x1.5+E	12.1±1.0	200	16
2x2.5+E	12.9±1.0	240	21
2x4+E	14.9±1.0	350	28
2x6+E	16.2±1.0	430	36
2x10+E	18.4±1.0	595	50
2x16+E	20.7±1.5	815	67
3x1	11.4±1.0	170	13
3x1.5	12.1±1.0	200	16
3x2.5	12.9±1.0	240	21
3x4	14.9±1.0	350	28
3x6	16.2±1.0	430	36
3x10	18.4±1.0	595	50
3x16	20.7±1.5	815	67
3x25	24.8±1.5	1175	89
3x35	27.8±1.5	1535	110
3x50	31.0±2.0	2050	137
3x70	36.5±2.0	2890	169
3x95	41.2±2.5	3740	205
3x120	45.7±2.5	4645	237
3x150	50.4±2.5	5545	272
3x185	55.5±3.0	6725	311
3x1+E	12.1±1.0	195	13
3x1.5+E	12.9±1.0	230	16
3x2.5+E	14.5±1.0	325	21

Halogen free flame retardant offshore LV power cable

P101 TFOU /E/M/H/H-M 0.6/1kV

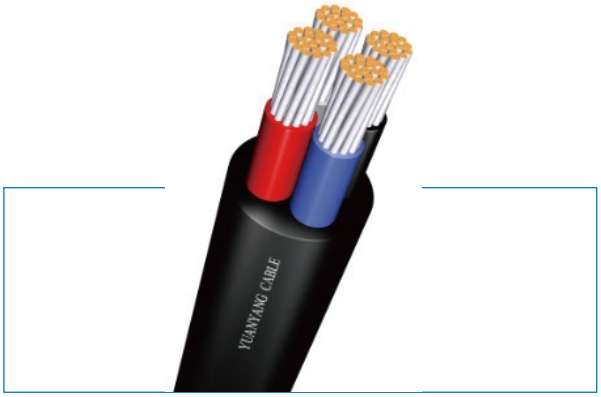
No. of cores&Cross section	Overall diameter	Approx. weight	Current ratings at 45°C
mm^2	mm	kg/km	A
3x4+E	16.0±1.0	415	28
3x6+E	17.4±1.0	520	36
3x10+E	19.9±1.0	730	50
3x16+E	22.6±1.5	1015	67
4x1	12.1±1.0	195	13
4x1.5	12.9±1.0	230	16
4x2.5	14.5±1.0	325	21
4x4	16.0±1.0	415	28
4x6	17.4±1.0	520	36
4x10	19.9±1.0	730	50
4x16	22.6±1.5	1015	67
4x25	26.9±1.5	1480	89
4x35	30.5±2.0	1950	110
4x50	34.5±2.0	2660	137
4x70	40.2±2.5	3685	169
4x95	45.6±2.5	4845	205
4x120	50.3±3.0	5980	237
4x150	55.9±3.0	7180	272
5x1	13.1±1.0	225	11
7x1	14.6±1.0	305	9
10x1	17.5±1.0	400	8
12x1	17.9±1.0	435	8
14x1	18.6±1.0	475	7
16x1	19.6±1.0	525	7
19x1	20.4±1.5	580	7
24x1	23.3±1.5	710	6
27x1	23.7±1.5	760	6
30x1	24.4±1.5	820	6
33x1	25.4±1.5	880	6
37x1	26.2±1.5	950	5
5x1.5	14.6±1.0	300	13
7x1.5	15.5±1.0	360	12
10x1.5	18.7±1.0	480	11
12x1.5	19.4±1.0	525	10
14x1.5	20.1±1.5	580	10
16x1.5	21.0±1.5	635	9
19x1.5	22.1±1.5	715	9
24x1.5	25.3±1.5	880	8
27x1.5	25.8±1.5	950	8
30x1.5	26.5±1.5	1020	7
33x1.5	27.6±1.5	1100	7
37x1.5	28.5±1.5	1200	7
5x2.5	15.7±1.0	375	18
7x2.5	16.9±1.0	455	16
10x2.5	20.5±1.5	615	14
12x2.5	20.9±1.5	685	13
14x2.5	22.1±1.5	765	12
16x2.5	23.0±1.5	850	12
19x2.5	24.1±1.5	960	11
24x2.5	27.9±1.5	1185	10
27x2.5	28.4±1.5	1285	10
30x2.5	29.3±1.5	1395	10
33x2.5	30.5±2.0	1510	9
37x2.5	31.5±2.0	1650	9

Halogen free flame retardant offshore LV power cable

Basic type：P111 RU/TU

NEK TS 606 oil / mud resistant property：

RU TU	Minimun requirements oil resistant
RU E TU E	Enhanced oil resistant
RU M TU M	Mud resistant
RU H TU H	Hydraulic/gear oil resistant
RU H-M TU H-M	Hydraulic/gear oil resistant & mud resistant



Rated Voltage：0.6/1(1.2)kV

Operating temperature：90℃

Standards applied

NEK TS 606	– Design
IEC 60092-353	– Design
IEC 60228	– Conductor
IEC 60092-360	– Insulation & Sheath
IEC 60332-1	– Flame Retardant
IEC 60332-3-22	– Flame Retardant
IEC 60754	– Halogen Free
IEC 61034	– Low Smoke

Application

Fixed installation for lower voltage (LV) power system in both EX-and safe areas, general purposes. For installation in areas exposed to MUD and drilling/cleaning fluids.

Construction

Item	Code	Material／Description
Conductor		Stranded tinned annealed copper (STC), Class 2 or Class 5
Insulation	R	EPR
	T	XLPE
Outer sheath	U	"Halogen-free thermoset compound type SHF2 as per ""NEK TS 606 oil / mud resistant property""
Outer sheath color		Black

Halogen free flame retardant offshore LV power cable

P111 RU /E/M/H/H-M 0.6/1kV

No. of cores&Cross section	Overall diameter	Approx. weight	Current ratings at 45°C
mm^2	mm	kg/km	A
1x1	5.5±1.0	41	18
1x1.5	5.8±1.0	49	23
1x2.5	6.2±1.0	62	30
1x4	6.7±1.0	80	40
1x6	7.2±1.0	103	52
1x10	8.3±1.0	153	72
1x16	9.4±1.0	215	96
1x25	11.3±1.0	327	127
1x35	12.6±1.0	429	157
1x50	14.4±1.0	573	196
1x70	16.2±1.0	784	242
1x95	18.8±1.0	1071	293
1x120	20.6±1.5	1328	339
1x150	22.7±1.5	1627	389
1x185	25.2±1.5	2026	444
1x240	28.5±1.5	2632	522
1x300	31.5±2.0	3273	601
2x1	9.3±1.0	93	15
2x1.5	9.8±1.0	110	20
2x2.5	10.6±1.0	140	26
2x4	12.0±1.0	189	34
2x6	13.0±1.0	240	44
2x10	15.2±1.0	353	61
2x16	17.5±1.0	504	82
2x25	21.1±1.5	760	108
2x35	23.8±1.5	1007	133
2x50	27.3±1.5	1339	167
2x70	31.2±2.0	1850	206
2x95	36.2±2.0	2528	249
2x120	39.6±2.0	3111	288
2x1+E	9.9±1.0	113	13
2x1.5+E	10.7±1.0	135	16
2x2.5+E	11.6±1.0	182	21
2x4+E	12.9±1.0	241	28
2x6+E	14.2±1.0	312	36
2x10+E	16.6±1.0	466	50
2x16+E	18.9±1.0	672	67
3x1	9.9±1.0	113	13
3x1.5	10.7±1.0	135	16
3x2.5	11.6±1.0	182	21
3x4	12.9±1.0	241	28
3x6	14.2±1.0	312	36
3x10	16.6±1.0	466	50
3x16	18.9±1.0	672	67
3x25	22.8±1.5	1035	89
3x35	25.8±1.5	1375	110
3x50	29.6±1.5	1834	137
3x70	34.0±2.0	2544	169
3x95	39.1±2.0	3482	205
3x120	43.0±2.5	4298	237
3x150	47.7±2.5	5283	272
3x185	52.9±3.0	6586	311
3x1+E	10.6±1.0	139	13
3x1.5+E	11.5±1.0	173	16
3x2.5+E	12.5±1.0	227	21

Halogen free flame retardant offshore LV power cable

P111 RU /E/M/H/H-M 0.6/1kV

No. of cores&Cross section	Overall diameter	Approx. weight	Current ratings at 45°C
mm^2	mm	kg/km	A
3x4+E	14.1±1.0	309	28
3x6+E	15.3±1.0	402	36
3x10+E	18.0±1.0	603	50
3x16+E	20.6±1.5	873	67
4x1	10.6±1.0	139	13
4x1.5	11.5±1.0	173	16
4x2.5	12.5±1.0	227	21
4x4	14.1±1.0	309	28
4x6	15.3±1.0	402	36
4x10	18.0±1.0	603	50
4x16	20.6±1.5	873	67
4x25	25.1±1.5	1344	89
4x35	28.4±1.5	1788	110
4x50	32.5±2.0	2386	137
4x70	37.3±2.0	3315	169
4x95	43.2±2.5	4539	205
4x120	47.5±2.5	5631	237
4x150	52.7±3.0	6918	272
5x1	11.8±1.0	159	11
7x1	12.8±1.0	204	9
10x1	16.4±1.0	290	8
12x1	17.0±1.0	340	8
14x1	17.9±1.0	386	7
16x1	18.8±1.0	431	7
19x1	20.0±1.5	506	7
24x1	23.5±1.5	640	6
27x1	24.0±1.5	702	6
30x1	25.1±1.5	780	6
33x1	26.1±1.5	846	6
37x1	27.0±1.5	933	5
5x1.5	12.6±1.0	192	13
7x1.5	13.7±1.0	248	12
10x1.5	17.7±1.0	362	11
12x1.5	18.3±1.0	417	10
14x1.5	19.2±1.0	473	10
16x1.5	20.4±1.5	540	9
19x1.5	21.5±1.5	624	9
24x1.5	25.5±1.5	801	8
27x1.5	26.0±1.5	880	8
30x1.5	27.1±1.5	964	7
33x1.5	28.2±1.5	1062	7
37x1.5	29.3±1.5	1172	7
5x2.5	13.6±1.0	255	18
7x2.5	15.0±1.0	342	16
10x2.5	19.2±1.0	487	14
12x2.5	20.1±1.5	574	13
14x2.5	21.0±1.5	654	12
16x2.5	22.4±1.5	747	12
19x2.5	23.6±1.5	866	11
24x2.5	28.0±1.5	1107	10
27x2.5	28.6±1.5	1222	10
30x2.5	29.6±1.5	1340	10
33x2.5	31.0±2.0	1476	9
37x2.5	32.2±2.0	1633	9

Halogen free flame retardant offshore LV power cable

P111 TU /E/M/H/H-M 0.6/1kV

No. of cores&Cross section	Overall diameter	Approx. weight	Current ratings at 45°C
mm^2	mm	kg/km	A
1x1	4.9±1.0	32	18
1x1.5	5.2±1.0	39	23
1x2.5	5.6±1.0	51	30
1x4	6.2±1.0	68	40
1x6	6.7±1.0	89	52
1x10	7.7±1.0	133	72
1x16	8.9±1.0	197	96
1x25	10.6±1.0	297	127
1x35	12.1±1.0	401	157
1x50	13.5±1.0	526	196
1x70	15.7±1.0	743	242
1x95	17.8±1.0	1008	293
1x120	19.8±1.0	1264	339
1x150	22.0±1.5	1551	389
1x185	24.2±1.5	1924	444
1x240	27.5±1.5	2513	522
1x300	30.3±2.0	3125	601
2x1	7.6±1.0	67	15
2x1.5	8.2±1.0	81	20
2x2.5	9.2±1.0	113	26
2x4	10.4±1.0	152	34
2x6	11.6±1.0	206	44
2x10	13.6±1.0	306	61
2x16	15.8±1.0	448	82
2x25	19.6±1.0	697	108
2x35	22.4±1.5	935	133
2x50	25.4±1.5	1235	167
2x70	29.6±1.5	1731	206
2x95	33.8±2.0	2343	249
2x120	37.6±2.0	2928	288
2x1+E	8.0±1.0	80	13
2x1.5+E	8.9±1.0	104	16
2x2.5+E	9.7±1.0	142	21
2x4+E	11.2±1.0	200	28
2x6+E	12.3±1.0	267	36
2x10+E	14.7±1.0	412	50
2x16+E	17.0±1.0	609	67
3x1	8.0±1.0	80	13
3x1.5	8.9±1.0	104	16
3x2.5	9.7±1.0	142	21
3x4	11.2±1.0	200	28
3x6	12.3±1.0	267	36
3x10	14.7±1.0	412	50
3x16	17.0±1.0	609	67
3x25	20.9±1.5	940	89
3x35	23.9±1.5	1267	110
3x50	27.1±1.5	1681	137
3x70	31.9±2.0	2387	169
3x95	36.4±2.0	3241	205
3x120	40.5±2.5	4056	237
3x150	45.2±2.5	4997	272
3x185	50.3±3.0	6248	311
3x1+E	8.9±1.0	102	13
3x1.5+E	9.7±1.0	128	16
3x2.5+E	10.6±1.0	176	21

Halogen free flame retardant offshore LV power cable

P111 TU /E/M/H/H-M 0.6/1kV

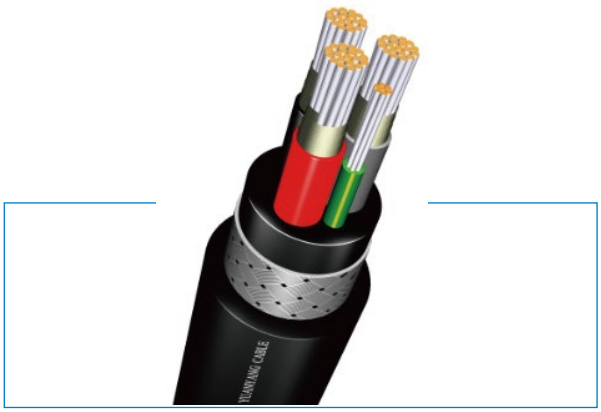
No. of cores&Cross section	Overall diameter	Approx. weight	Current ratings at 45°C
mm^2	mm	kg/km	A
3x4+E	12.3±1.0	251	28
3x6+E	13.5±1.0	338	36
3x10+E	16.1±1.0	525	50
3x16+E	18.7±1.0	782	67
4x1	8.9±1.0	102	13
4x1.5	9.7±1.0	128	16
4x2.5	10.6±1.0	176	21
4x4	12.3±1.0	251	28
4x6	13.5±1.0	338	36
4x10	16.1±1.0	525	50
4x16	18.7±1.0	782	67
4x25	23.2±1.5	1222	89
4x35	26.6±1.5	1649	110
4x50	30.4±2.0	2207	137
4x70	35.6±2.0	3131	169
4x95	40.4±2.5	4230	205
4x120	45.2±2.5	5320	237
4x150	50.4±3.0	6549	272
5x1	9.7±1.0	113	11
7x1	10.5±1.0	144	9
10x1	13.4±1.0	205	8
12x1	14.0±1.0	241	8
14x1	14.7±1.0	272	7
16x1	15.5±1.0	303	7
19x1	16.3±1.0	348	7
24x1	19.4±1.0	451	6
27x1	19.8±1.0	494	6
30x1	20.5±1.5	539	6
33x1	21.3±1.5	584	6
37x1	22.3±1.5	654	5
5x1.5	10.5±1.0	142	13
7x1.5	11.6±1.0	189	12
10x1.5	14.8±1.0	268	11
12x1.5	15.3±1.0	308	10
14x1.5	16.0±1.0	348	10
16x1.5	17.1±1.0	399	9
19x1.5	18.0±1.0	459	9
24x1.5	21.2±1.5	581	8
27x1.5	21.7±1.5	639	8
30x1.5	22.6±1.5	710	7
33x1.5	23.5±1.5	771	7
37x1.5	24.4±1.5	851	7
5x2.5	11.8±1.0	205	18
7x2.5	12.8±1.0	268	16
10x2.5	16.6±1.0	390	14
12x2.5	17.1±1.0	451	13
14x2.5	18.0±1.0	514	12
16x2.5	19.0±1.0	578	12
19x2.5	20.2±1.5	680	11
24x2.5	23.8±1.5	860	10
27x2.5	24.3±1.5	949	10
30x2.5	25.4±1.5	1054	10
33x2.5	26.4±1.5	1148	9
37x2.5	27.6±1.5	1284	9

Halogen free fire resistant offshore LV power cable

Basic type：P105 BFOU

NEK TS 606 oil / mud resistant property：

BFOU	Minimun requirements oil resistant
BFOU E	Enhanced oil resistant
BFOU M	Mud resistant
BFOU H	Hydraulic/gear oil resistant
BFOU H-M	Hydraulic/gear oil resistant & mud resistant



Rated Voltage：0.6/1(1.2)kV

Operating temperature：90℃

Standards applied

NEK TS 606	– Design
IEC 60092-353	– Design
IEC 60228	– Conductor
IEC 60092-360	– Insulation & Sheath
IEC 60332-1	– Flame Retardant
IEC 60332-3-22	– Flame Retardant
IEC 60331	– Fire resistant
IEC 60754	– Halogen Free
IEC 61034	– Low Smoke

Application

Fixed installation for lower voltage (LV) power system in both EX-and safe areas, general purposes. For installation in areas exposed to MUD and drilling/cleaning fluids.

Construction

Item	Code	Material／Description
Conductor		Stranded tinned annealed copper (STC), Class 2 or Class 5
Insulation	B	Mica glass tape(MGT)+EPR
		Mica glass tape(MGT)+XLPE
Inner covering	F	Extruded Halogen-free compound
Braid armor	O	Tinned copper wire braid (TCWB)
Outer sheath	U	"Halogen-free thermoset compound type SHF2 as per ""NEK TS 606 oil / mud resistant property""
Outer sheath color		Black

Halogen free fire resistant offshore LV power cable

P105 BFOU /E/M/H/H-M 0.6/1kV (EPR Insulation)

No. of cores&Cross section	Overall diameter	Approx. weight	Current ratings at 45°C
mm^2	mm	kg/km	A
1x1	9.1±1.0	115	18
1x1.5	9.4±1.0	130	23
1x2.5	9.8±1.0	145	30
1x4	10.4±1.0	170	40
1x6	10.9±1.0	200	52
1x10	12.1±1.0	260	72
1x16	13.1±1.0	340	96
1x25	15.5±1.0	510	127
1x35	17.0±1.0	640	157
1x50	18.6±1.0	830	196
1x70	20.6±1.5	1070	242
1x95	23.1±1.5	1380	293
1x120	24.9±1.5	1665	339
1x150	26.9±1.5	2025	389
1x185	29.3±1.5	2445	444
1x240	33.2±2.0	3120	522
1x300	36.7±2.0	3905	601
2x1	13.4±1.0	210	15
2x1.5	14.5±1.0	270	20
2x2.5	15.5±1.0	310	26
2x4	16.9±1.0	370	34
2x6	17.9±1.0	430	44
2x10	20.1±1.5	560	61
2x16	22.3±1.5	730	82
2x25	25.9±1.5	1005	108
2x35	28.7±1.5	1270	133
2x50	32.1±2.0	1670	167
2x70	37.0±2.0	2300	206
2x95	40.0±2.5	2950	249
2x120	45.8±2.5	3615	288
2x1+E	14.7±1.0	280	13
2x1.5+E	15.4±1.0	315	16
2x2.5+E	16.2±1.0	365	21
2x4+E	17.7±1.0	445	28
2x6+E	18.8±1.0	530	36
2x10+E	21.2±1.5	710	50
2x16+E	23.5±1.5	940	67
3x1	14.7±1.0	280	13
3x1.5	15.4±1.0	315	16
3x2.5	16.2±1.0	365	21
3x4	17.7±1.0	445	28
3x6	18.8±1.0	530	36
3x10	21.2±1.5	710	50
3x16	23.5±1.5	940	67
3x25	27.6±1.5	1330	89
3x35	30.6±2.0	1705	110
3x50	34.7±2.0	2310	137
3x70	39.5±2.0	3120	169
3x95	45.2±2.5	4115	205
3x120	49.1±2.5	4980	237
3x150	53.6±3.0	5765	272
3x185	59.2±3.5	7030	311
3x1+E	15.7±1.0	325	13
3x1.5+E	16.7±1.0	370	16
3x2.5+E	17.6±1.0	435	21

Halogen free fire resistant offshore LV power cable

P105 BFOU /E/M/H/H-M 0.6/1kV (EPR Insulation)

No. of cores&Cross section	Overall diameter	Approx. weight	Current ratings at 45°C
mm^2	mm	kg/km	A
3x4+E	19.3±1.0	535	28
3x6+E	20.5±1.5	645	36
3x10+E	23.1±1.5	870	50
3x16+E	25.7±1.5	1175	67
4x1	15.7±1.0	325	13
4x1.5	16.7±1.0	370	16
4x2.5	17.6±1.0	435	21
4x4	19.3±1.0	535	28
4x6	20.5±1.5	645	36
4x10	23.1±1.5	870	50
4x16	25.7±1.5	1175	67
4x25	30.2±2.0	1675	89
4x35	34.0±2.0	2195	110
4x50	38.8±2.0	3040	137
4x70	43.3±2.5	3980	169
4x95	49.9±2.5	5270	205
4x120	54.0±3.0	6400	237
4x150	59.2±3.0	7380	272
5x1	17.0±1.0	375	11
7x1	18.0±1.0	445	9
10x1	22.5±1.5	605	8
12x1	23.1±1.5	670	8
14x1	24.1±1.5	740	7
16x1	25.4±1.5	815	7
19x1	26.6±1.5	915	7
24x1	30.9±2.0	1130	6
27x1	31.5±2.0	1215	6
30x1	33.1±2.0	1350	6
33x1	34.2±2.0	1450	6
37x1	35.6±2.0	1580	5
5x1.5	17.8±1.0	420	13
7x1.5	18.0±1.0	485	12
10x1.5	23.7±1.5	695	11
12x1.5	24.4±1.5	770	10
14x1.5	25.6±1.5	855	10
16x1.5	26.8±1.5	945	9
19x1.5	28.3±1.5	1070	9
24x1.5	33.3±2.0	1360	8
27x1.5	33.9±2.0	1465	8
30x1.5	35.0±2.0	1585	7
33x1.5	36.9±2.0	1805	7
37x1.5	38.4±2.0	1970	7
5x2.5	18.9±1.0	500	18
7x2.5	20.5±1.5	620	16
10x2.5	25.5±1.5	850	14
12x2.5	26.2±1.5	950	13
14x2.5	27.6±1.5	1060	12
16x2.5	28.9±1.5	1175	12
19x2.5	30.5±2.0	1340	11
24x2.5	36.4±2.0	1795	10
27x2.5	37.1±2.0	1940	10
30x2.5	37.8±2.0	2005	10
33x2.5	39.8±2.0	2270	9
37x2.5	41.4±2.5	2485	9

Halogen free fire resistant offshore LV power cable

P105 BFOU /E/M/H/H-M 0.6/1kV (XLPE Insulation)

No. of cores&Cross section	Overall diameter	Approx. weight	Current ratings at 45°C
mm^2	mm	kg/km	A
1x1	8.5±1.0	100	18
1x1.5	8.8±1.0	110	23
1x2.5	9.2±1.0	130	30
1x4	9.8±1.0	150	40
1x6	10.3±1.0	180	52
1x10	11.5±1.0	235	72
1x16	12.5±1.0	310	96
1x25	14.9±1.0	470	127
1x35	16.4±1.0	595	157
1x50	17.8±1.0	775	196
1x70	20.0±1.5	1015	242
1x95	22.1±1.5	1300	293
1x120	23.9±1.5	1585	339
1x150	26.1±1.5	1930	389
1x185	27.9±1.5	2335	444
1x240	31.6±2.0	2940	522
1x300	34.8±2.0	3630	601
2x1	12.2±1.0	175	15
2x1.5	12.8±1.0	195	20
2x2.5	14.3±1.0	265	26
2x4	15.5±1.0	320	34
2x6	16.7±1.0	380	44
2x10	18.7±1.0	505	61
2x16	20.9±1.5	665	82
2x25	24.7±1.5	930	108
2x35	27.5±1.5	1190	133
2x50	30.5±2.0	1555	167
2x70	35.1±2.0	2085	206
2x95	39.8±2.0	2780	249
2x120	43.8±2.5	3390	288
2x1+E	12.7±1.0	200	13
2x1.5+E	13.4±1.0	225	16
2x2.5+E	14.9±1.0	310	21
2x4+E	16.2±1.0	385	28
2x6+E	17.5±1.0	470	36
2x10+E	19.9±1.0	635	50
2x16+E	22.2±1.5	860	67
3x1	12.7±1.0	200	13
3x1.5	13.4±1.0	225	16
3x2.5	14.9±1.0	310	21
3x4	16.2±1.0	385	28
3x6	17.5±1.0	470	36
3x10	19.9±1.0	635	50
3x16	22.2±1.5	860	67
3x25	26.1±1.5	1225	89
3x35	29.1±1.5	1590	110
3x50	32.3±2.0	2110	137
3x70	38.2±2.0	2960	169
3x95	42.5±2.5	3810	205
3x120	47.2±2.5	4725	237
3x150	51.8±3.0	5630	272
3x185	57.4±3.0	6870	311
3x1+E	14.3±1.0	265	13
3x1.5+E	15.0±1.0	305	16
3x2.5+E	16.0±1.0	365	21

Halogen free fire resistant offshore LV power cable

P105 BFOU /E/M/H/H-M 0.6/1kV (XLPE Insulation)

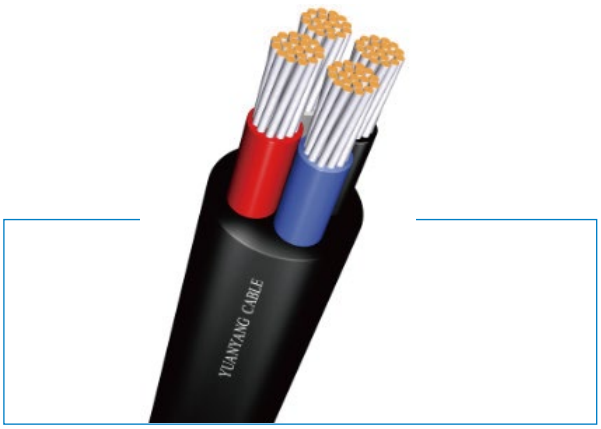
No. of cores&Cross section	Overall diameter	Approx. weight	Current ratings at 45°C
mm^2	mm	kg/km	A
3x4+E	17.6±1.0	460	28
3x6+E	18.8±1.0	565	36
3x10+E	21.5±1.5	780	50
3x16+E	24.1±1.5	1070	67
4x1	14.3±1.0	265	13
4x1.5	15.0±1.0	305	16
4x2.5	16.0±1.0	365	21
4x4	17.6±1.0	460	28
4x6	18.8±1.0	565	36
4x10	21.5±1.5	780	50
4x16	24.1±1.5	1070	67
4x25	28.6±1.5	1540	89
4x35	31.9±2.0	2015	110
4x50	36.6±2.0	2825	137
4x70	41.9±2.5	3775	169
4x95	47.3±2.5	4940	205
4x120	52.0±3.0	6075	237
4x150	57.3±3.0	7230	272
5x1	15.2±1.0	300	11
7x1	16.2±1.0	355	9
10x1	19.9±1.0	475	8
12x1	20.4±1.5	515	8
14x1	21.3±1.5	570	7
16x1	22.4±1.5	620	7
19x1	23.4±1.5	690	7
24x1	27.1±1.5	850	6
27x1	27.6±1.5	910	6
30x1	28.5±1.5	980	6
33x1	29.4±1.5	1050	6
37x1	30.6±2.0	1140	5
5x1.5	16.0±1.0	345	13
7x1.5	17.3±1.0	410	12
10x1.5	21.1±1.5	555	11
12x1.5	21.7±1.5	610	10
14x1.5	22.8±1.5	675	10
16x1.5	23.8±1.5	740	9
19x1.5	25.1±1.5	830	9
24x1.5	28.9±1.5	1025	8
27x1.5	29.4±1.5	1105	8
30x1.5	30.6±2.0	1195	7
33x1.5	31.6±2.0	1285	7
37x1.5	33.3±2.0	1430	7
5x2.5	17.3±1.0	420	18
7x2.5	18.5±1.0	510	16
10x2.5	22.9±1.5	695	14
12x2.5	23.5±1.5	775	13
14x2.5	24.7±1.5	860	12
16x2.5	25.9±1.5	955	12
19x2.5	27.1±1.5	1080	11
24x2.5	31.5±2.0	1340	10
27x2.5	32.1±2.0	1450	10
30x2.5	33.7±2.0	1610	10
33x2.5	34.9±2.0	1735	9
37x2.5	36.8±2.0	1995	9

Halogen free fire resistant offshore LV power cable

Basic type： P110 BU

NEK TS 606 oil / mud resistant property：

BU	Minimun requirements oil resistant
BU E	Enhanced oil resistant
BU M	Mud resistant
BU H	Hydraulic/gear oil resistant
BU H-M	Hydraulic/gear oil resistant & mud resistant



Rated Voltage： 0.6/1(1.2)kV

Operating temperature： 90℃

Standards applied

NEK TS 606	– Design
IEC 60092-353	– Design
IEC 60228	– Conductor
IEC 60092-360	– Insulation & Sheath
IEC 60332-1	– Flame Retardant
IEC 60332-3-22	– Flame Retardant
IEC 60331	– Fire resistant
IEC 60754	– Halogen Free
IEC 61034	– Low Smoke

Application

Fixed installation for lower voltage (LV) power system in both EX-and safe areas, general purposes. For installation in areas exposed to MUD and drilling/cleaning fluids.

Construction

Item	Code	Material／Description
Conductor		Stranded tinned annealed copper (STC), Class 2 or Class 5
Insulation	B	Mica glass tape(MGT)+EPR
		Mica glass tape(MGT)+XLPE
Outer sheath	U	"Halogen-free thermoset compound type SHF2 as per ""NEK TS 606 oil / mud resistant property""
Outer sheath color		Black

Halogen free fire resistant offshore LV power cable

P110 BU /E/M/H/H-M 0.6/1kV (EPR Insulation)

No. of cores&Cross section	Overall diameter	Approx. weight	Current ratings at 45°C
mm^2	mm	kg/km	A
1x1	5.9±1.0	45	18
1x1.5	6.2±1.0	55	23
1x2.5	6.6±1.0	65	30
1x4	7.2±1.0	85	40
1x6	7.7±1.0	110	52
1x10	8.9±1.0	160	72
1x16	10.1±1.0	230	96
1x25	11.8±1.0	340	127
1x35	13.1±1.0	450	157
1x50	14.9±1.0	620	196
1x70	16.9±1.0	835	242
1x95	19.4±1.0	1120	293
1x120	21.0±1.5	1380	339
1x150	23.2±1.5	1710	389
1x185	25.6±1.5	2100	444
1x240	28.9±1.5	2700	522
1x300	31.9±2.0	3350	601
2x1	10.2±1.0	95	15
2x1.5	10.8±1.0	110	20
2x2.5	11.8±1.0	140	26
2x4	13.0±1.0	180	34
2x6	14.2±1.0	230	44
2x10	16.2±1.0	368	61
2x16	18.4±1.0	516	82
2x25	22.2±1.5	781	108
2x35	25.0±1.5	1025	133
2x50	28.4±1.5	1353	167
2x70	32.2±2.0	1840	206
2x95	37.3±2.0	2505	249
2x120	40.6±2.5	3074	288
2x1+E	10.8±1.0	120	13
2x1.5+E	11.7±1.0	145	16
2x2.5+E	12.5±1.0	185	21
2x4+E	14.0±1.0	250	28
2x6+E	15.1±1.0	320	36
2x10+E	17.5±1.0	470	50
2x16+E	19.8±1.0	670	67
3x1	10.8±1.0	120	13
3x1.5	11.7±1.0	145	16
3x2.5	12.5±1.0	185	21
3x4	14.0±1.0	250	28
3x6	15.1±1.0	320	36
3x10	17.5±1.0	470	50
3x16	19.8±1.0	670	67
3x25	23.7±1.5	1044	89
3x35	26.7±1.5	1379	110
3x50	30.6±2.0	1870	137
3x70	34.7±2.0	2520	169
3x95	40.0±2.5	3385	205
3x120	43.9±2.5	4185	237
3x150	48.4±2.5	5199	272
3x185	53.6±3.0	6469	311
3x1+E	12.0±1.0	155	13
3x1.5+E	12.8±1.0	185	16
3x2.5+E	13.9±1.0	240	21

Halogen free fire resistant offshore LV power cable

P110 BU /E/M/H/H-M 0.6/1kV (EPR Insulation)

No. of cores&Cross section	Overall diameter	Approx. weight	Current ratings at 45°C
mm^2	mm	kg/km	A
3x4+E	15.4±1.0	320	28
3x6+E	16.8±1.0	415	36
3x10+E	19.4±1.0	605	50
3x16+E	22.0±1.5	875	67
4x1	12.0±1.0	155	13
4x1.5	12.8±1.0	185	16
4x2.5	13.9±1.0	240	21
4x4	15.4±1.0	320	28
4x6	16.8±1.0	415	36
4x10	19.4±1.0	605	50
4x16	22.0±1.5	875	67
4x25	26.3±1.5	1320	89
4x35	29.7±1.5	1765	110
4x50	34.0±2.0	2455	137
4x70	38.7±2.0	3320	169
4x95	44.7±2.5	4465	205
4x120	49.0±2.5	5525	237
4x150	54.0±3.0	6806	272
5x1	13.1±1.0	185	11
7x1	14.5±1.0	245	9
10x1	18.6±1.0	350	8
12x1	19.4±1.0	405	8
14x1	20.4±1.5	460	7
16x1	21.5±1.5	520	7
19x1	22.9±1.5	600	7
24x1	27.0±1.5	765	6
27x1	27.8±1.5	845	6
30x1	28.8±1.5	930	6
33x1	30.1±2.0	1020	6
37x1	31.3±2.0	1130	5
5x1.5	14.1±1.0	225	13
7x1.5	15.4±1.0	295	12
10x1.5	20.0±1.5	425	11
12x1.5	20.7±1.5	490	10
14x1.5	21.7±1.5	560	10
16x1.5	23.1±1.5	635	9
19x1.5	24.4±1.5	740	9
24x1.5	29.0±1.5	940	8
27x1.5	29.6±1.5	1040	8
30x1.5	30.9±2.0	1145	7
33x1.5	32.1±2.0	1250	7
37x1.5	33.6±2.0	1390	7
5x2.5	15.2±1.0	290	18
7x2.5	16.8±1.0	385	16
10x2.5	21.6±1.5	555	14
12x2.5	22.5±1.5	645	13
14x2.5	23.7±1.5	740	12
16x2.5	25.2±1.5	840	12
19x2.5	26.6±1.5	980	11
24x2.5	31.7±2.0	1250	10
27x2.5	32.3±2.0	1380	10
30x2.5	33.7±2.0	1525	10
33x2.5	35.0±2.0	1670	9
37x2.5	36.6±2.0	1855	9

Halogen free fire resistant offshore LV power cable

P110 BU /E/M/H/H-M 0.6/1kV (XLPE Insulation)

No. of cores&Cross section	Overall diameter	Approx. weight	Current ratings at 45°C
mm^2	mm	kg/km	A
1x1	5.3±1.0	38	18
1x1.5	5.6±1.0	45	23
1x2.5	6±1.0	57	30
1x4	6.5±1.0	74	40
1x6	7.1±1.0	97	52
1x10	8.1±1.0	141	72
1x16	9.3±1.0	206	96
1x25	11.2±1.0	314	127
1x35	12.5±1.0	413	157
1x50	14.1±1.0	546	196
1x70	16.1±1.0	759	242
1x95	18.2±1.0	1021	293
1x120	20.2±1.5	1278	339
1x150	22.4±1.5	1569	389
1x185	24.8±1.5	1956	444
1x240	27.9±1.5	2533	522
1x300	30.7±2.0	3143	601
2x1	9±1.0	88	15
2x1.5	9.6±1.0	104	20
2x2.5	10.4±1.0	132	26
2x4	11.8±1.0	178	34
2x6	12.8±1.0	227	44
2x10	15±1.0	336	61
2x16	17.2±1.0	480	82
2x25	20.8±1.5	728	108
2x35	23.6±1.5	965	133
2x50	26.6±1.5	1267	167
2x70	31±2.0	1778	206
2x95	35±2.0	2369	249
2x120	39±2.0	2968	288
2x1+E	9.5±1.0	107	13
2x1.5+E	10.2±1.0	127	16
2x2.5+E	11.2±1.0	172	21
2x4+E	12.5±1.0	227	28
2x6+E	13.6±1.0	296	36
2x10+E	16±1.0	443	50
2x16+E	18.3±1.0	641	67
3x1	9.5±1.0	107	13
3x1.5	10.2±1.0	127	16
3x2.5	11.2±1.0	172	21
3x4	12.5±1.0	227	28
3x6	13.6±1.0	296	36
3x10	16±1.0	443	50
3x16	18.3±1.0	641	67
3x25	22.4±1.5	990	89
3x35	25.4±1.5	1318	110
3x50	28.6±1.5	1737	137
3x70	33.4±2.0	2445	169
3x95	37.7±2.0	3273	205
3x120	42±2.5	4105	237
3x150	46.7±2.5	5052	272
3x185	51.8±3.0	6305	311
3x1+E	10.4±1.0	130	13
3x1.5+E	11.3±1.0	163	16
3x2.5+E	12.3±1.0	215	21

Halogen free fire resistant offshore LV power cable

P110 BU /E/M/H/H-M 0.6/1kV (XLPE Insulation)

No. of cores&Cross section	Overall diameter	Approx. weight	Current ratings at 45°C
mm^2	mm	kg/km	A
3x4+E	13.9±1.0	293	28
3x6+E	15.1±1.0	381	36
3x10+E	17.8±1.0	573	50
3x16+E	20.4±1.5	833	67
4x1	10.4±1.0	130	13
4x1.5	11.3±1.0	163	16
4x2.5	12.3±1.0	215	21
4x4	13.9±1.0	293	28
4x6	15.1±1.0	381	36
4x10	17.8±1.0	573	50
4x16	20.4±1.5	833	67
4x25	24.9±1.5	1286	89
4x35	28.2±1.5	1713	110
4x50	31.8±2.0	2262	137
4x70	37.1±2.0	3186	169
4x95	42.1±2.5	4291	205
4x120	46.8±2.5	5379	237
4x150	52.1±3.0	6618	272
5x1	11.5±1.0	159	11
7x1	12.5±1.0	201	9
10x1	16±1.0	281	8
12x1	16.7±1.0	329	8
14x1	17.6±1.0	371	7
16x1	18.5±1.0	415	7
19x1	19.7±1.0	485	7
24x1	23.2±1.5	611	6
27x1	23.7±1.5	669	6
30x1	24.8±1.5	742	6
33x1	25.7±1.5	805	6
37x1	26.7±1.5	885	5
5x1.5	12.3±1.0	191	13
7x1.5	13.4±1.0	245	12
10x1.5	17.4±1.0	352	11
12x1.5	18±1.0	403	10
14x1.5	18.9±1.0	456	10
16x1.5	20.1±1.5	518	9
19x1.5	21.2±1.5	598	9
24x1.5	25.2±1.5	763	8
27x1.5	25.7±1.5	839	8
30x1.5	26.7±2.0	917	7
33x1.5	27.9±2.0	1008	7
37x1.5	29±2.0	1112	7
5x2.5	13.4±1.0	255	18
7x2.5	14.8±1.0	337	16
10x2.5	19±1.0	474	14
12x2.5	19.8±1.0	556	13
14x2.5	20.8±1.5	632	12
16x2.5	22.2±1.5	719	12
19x2.5	23.4±1.5	832	11
24x2.5	27.8±1.5	1060	10
27x2.5	28.4±1.5	1168	10
30x2.5	29.4±1.5	1281	10
33x2.5	30.8±2.0	1408	9
37x2.5	32±2.0	1557	9

Halogen free flame retardant single wire

Earthing wire

Basic type：P108 UX

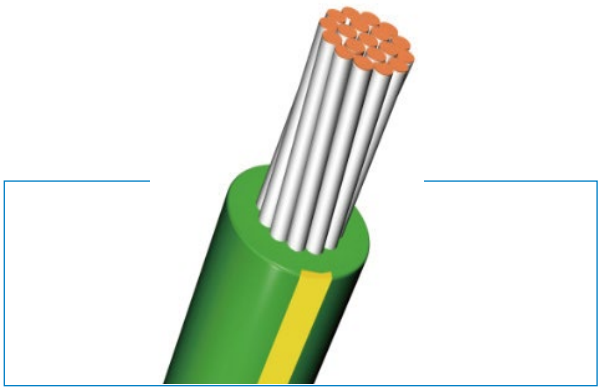
NEK TS 606 oil / mud resistant property：

UX	Minimun requirements oil resistant
UX E	Enhanced oil resistant
UX M	Mud resistant
UX H	Hydraulic/gear oil resistant
UX H-M	Hydraulic/gear oil resistant & mud resistant

Single wire Type ： P119 RX/TX

Rated Voltage ： 0.6/1(1.2)kV

Operating temperature ： 90℃



Standards applied

NEK TS 606	– Design
IEC 60092-353	– Design
IEC 60228	– Conductor
IEC 60092-360	– Insulation & Sheath
IEC 60332-1	– Flame Retardant
IEC 60754	– Halogen Free
IEC 61034	– Low Smoke

Application

Fixed installation for lower voltage (LV) power system in both EX-and safe areas, general purposes. For installation in areas exposed to MUD and drilling/cleaning fluids.

Construction

Item	Code	Material／Description
Conductor		Stranded tinned annealed copper (STC), Class 2 or Class 5
Insulation	RX	EPR
	TX	XLPE
Outer sheath	UX	"Halogen-free thermoset compound type SHF2 as per ""NEK TS 606 oil / mud resistant property""
Sheath / insulation color		Yellow/green for earthing wire , P108 UX; Black, Blue or Red for single wire (general purposes), P119 RX/TX

Halogen free flame retardant single wire

P108 UX /E/M/H/H-M 0.6/1kV
P119 RX/TX 0.6/1kV

No. of cores& Cross section	Overall diameter		Approx. weight		Current ratings at 45°C
	P108 UX / P119 TX	P119 RX	P108 UX / P119 TX	P119 RX	
mm^2		mm		kg/km	A
1x1	5.0±0.5	5.6±0.5	36	43	18
1x1.5	5.4±0.5	5.9±0.5	42	50	23
1x2.5	5.7±0.6	6.3±0.6	55	63	30
1x4	6.3±0.6	6.9±0.7	73	82	40
1x6	6.8±0.7	7.5±0.7	95	105	52
1x10	7.9±0.7	8.5±0.8	140	151	72
1x16	8.8±0.8	9.7±0.8	202	218	96
1x25	10.8±0.8	11.4±0.8	311	325	127
1x35	12.1±0.9	12.9±0.9	411	432	157
1x50	13.7±0.9	14.5±0.9	547	570	196
1x70	15.9±1.0	16.5±1.0	770	790	242
1x95	17.9±1.0	19.0±1.1	1030	1077	293
1x120	19.9±1.1	20.7±1.1	1291	1325	339
1x150	22.1±1.2	22.9±1.2	1587	1624	389
1x185	24.3±1.3	25.3±1.3	1972	2023	444
1x240	27.4±1.4	28.7±1.4	2558	2628	522
1x300	30.3±1.5	31.7±1.6	3179	3270	601

Offshore communication and instrumentaion cable

Halogen free flame retardant offshore communication and instrumentaion cable ····· 32

S101 RFOU(i) / TFOU(i)/E/M/H/H-M 250V
S102 RFOU(c) / TFOU(c) /E/M/H/H-M 250V
RFOU(i&c)/TFOU(i&c) /E/M/H/H-M 250V
S105 RU(i) / TU(i) /E/M/H/H-M 250V
S106 RU(c) / TU(c) /E/M/H/H-M 250V
RU(i&c)/TU(i&c)/E/M/H/H-M 250V

Halogen free fire resistant offshore LV power cable ····· 50

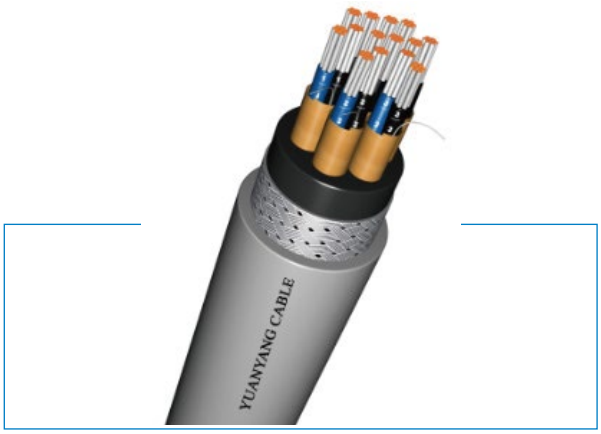
S103 BFOU(i) /E/M/H/H-M 250V
BFOU(i&c) /E/M/H/H-M 250V
S107 BU(i) /E/M/H/H-M 250V
S108 RU(c) /E/M/H/H-M 250V
RU(i&c) /E/M/H/H-M 250V

Halogen free flame retardant offshore communication and instrumentaion cable

Basic type：S101 RFOU(i)/TFOU(i)

NEK TS 606 oil / mud resistant property：

RFOU(i) TFOU(i)	Minimun requirements oil resistant
RFOU(i) E TFOU(i) E	Enhanced oil resistant
RFOU(i) M TFOU(i) M	Mud resistant
RFOU(i) H TFOU(i) H	Hydraulic/gear oil resistant
RFOU(i) H-M TFOU(i) H-M	Hydraulic/gear oil resistant & mud resistant



Rated Voltage： 250V

Operating temperature ：90℃

Standards applied

NEK TS 606	– Design
IEC 60092-376	– Design
IEC 60228	– Conductor
IEC 60092-360	– Insulation & Sheath
IEC 60332-1	– Flame Retardant
IEC 60332-3-22	– Flame Retardant
IEC 60754	– Halogen Free
IEC 61034	– Low Smoke

Application

Fixed installation for communication, instrumentation,control and alarm systems in both EX–and safe area. For installation in areas exposed to MUD and drilling/cleaning fluids.

Construction

Item	Code	Material／Description
Conductor		Stranded tinned annealed copper (STC), Class 2 or Class 5
Insulation	R	EPR
	T	XLPE
Twisting and individual screen	(i)	Color coded cores twisted pairs / triples, each pairs / triples are screened by copper backed polyester tape with a tinned copper drain wire and wrapped with polyester tape Pairs / triples are identified by printed numbers.
Inner covering	F	Extruded Halogen-free compound
Braid armor	O	Tinned copper wire braid (TCWB)
Outer sheath	U	Halogen-free thermoset compound type SHF2 as per "NEK TS 606 oil / mud resistant property"
Outer sheath color		Grey

Halogen free flame retardant offshore communication and instrumentaion cable

S101 RFOU(i) /E/M/H/H-M 250V

No. of pairs & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
1x2x0.75	10.6±1.5	147
2x2x0.75	15.8±1.5	290
3x2x0.75	16.5±1.5	337
4x2x0.75	18.0±1.5	402
5x2x0.75	19.2±1.5	459
7x2x0.75	20.9±2.0	564
10x2x0.75	25.9±2.0	776
12x2x0.75	26.6±2.0	859
14x2x0.75	27.8±2.0	950
16x2x0.75	29.3±2.0	1059
19x2x0.75	30.8±2.5	1192
24x2x0.75	36.2±2.5	1521
27x2x0.75	37.1±2.5	1657
37x2x0.75	41.3±3.0	2109
1x2x1.0	11.0±1.5	162
2x2x1.0	16.5±1.5	320
3x2x1.0	17.6±1.5	386
4x2x1.0	18.8±1.5	452
5x2x1.0	20.5±2.0	531
7x2x1.0	21.9±2.0	645
10x2x1.0	27.4±2.0	892
12x2x1.0	28.2±2.0	995
14x2x1.0	29.6±2.0	1119
16x2x1.0	31.3±2.5	1249
19x2x1.0	32.8±2.5	1408
24x2x1.0	38.6±2.5	1797
27x2x1.0	39.4±2.5	1945
37x2x1.0	44.0±3.0	2510
1x2x1.5	12.3±1.5	196
2x2x1.5	18.6±1.5	390
3x2x1.5	19.6±1.5	465
4x2x1.5	21.3±2.0	560
5x2x1.5	23.2±2.0	659
7x2x1.5	25.0±2.0	808
10x2x1.5	31.5±2.5	1135
12x2x1.5	32.4±2.5	1269
14x2x1.5	34.5±2.5	1461
16x2x1.5	36.3±2.5	1615
19x2x1.5	38.3±2.5	1843
24x2x1.5	44.6±3.0	2302
27x2x1.5	46.1±3.0	2556
37x2x1.5	51.6±3.5	3302
1x2x2.5	13.1±1.5	233
2x2x2.5	20.3±2.0	475
3x2x2.5	21.3±2.0	577
4x2x2.5	23.3±2.0	703
5x2x2.5	25.2±2.0	820
7x2x2.5	27.4±2.0	1035
10x2x2.5	35.0±2.5	1490
12x2x2.5	36.2±2.5	1680
14x2x2.5	38.1±2.5	1898
16x2x2.5	40.1±3.0	2122
19x2x2.5	42.1±3.0	2413
24x2x2.5	49.8±3.0	3087
27x2x2.5	51.1±3.5	3383
37x2x2.5	57.6±3.5	4455

No. of triples & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
1x3x0.75	11.0±1.5	165
2x3x0.75	17.4±1.5	346
3x3x0.75	18.2±1.5	407
4x3x0.75	19.6±1.5	478
5x3x0.75	21.2±2.0	561
7x3x0.75	23.0±2.0	693
10x3x0.75	28.7±2.0	959
12x3x0.75	29.5±2.0	1069
14x3x0.75	30.9±2.5	1189
16x3x0.75	32.7±2.5	1328
19x3x0.75	34.8±2.5	1547
24x3x0.75	40.6±3.0	1931
27x3x0.75	41.3±3.0	2087
37x3x0.75	46.6±3.0	2737
1x3x1.0	11.6±1.5	188
2x3x1.0	18.1±1.5	382
3x3x1.0	19.0±1.5	457
4x3x1.0	20.7±2.0	551
5x3x1.0	22.3±2.0	639
7x3x1.0	24.2±2.0	799
10x3x1.0	30.3±2.5	1107
12x3x1.0	31.4±2.5	1257
14x3x1.0	32.8±2.5	1401
16x3x1.0	35.0±2.5	1599
19x3x1.0	37.0±2.5	1829
24x3x1.0	43.1±3.0	2283
27x3x1.0	43.9±3.0	2477
37x3x1.0	49.6±3.0	3261
1x3x1.5	12.8±1.5	225
2x3x1.5	20.5±2.0	473
3x3x1.5	21.5±2.0	571
4x3x1.5	23.5±2.0	693
5x3x1.5	25.4±2.0	808
7x3x1.5	27.7±2.0	1018
10x3x1.5	35.4±2.5	1464
12x3x1.5	36.5±2.5	1646
14x3x1.5	38.4±2.5	1858
16x3x1.5	40.6±3.0	2078
19x3x1.5	42.7±3.0	2378
24x3x1.5	50.3±3.5	3020
27x3x1.5	51.6±3.5	3306
37x3x1.5	58.1±3.5	4344
1x3x2.5	13.6±1.5	273
2x3x2.5	22.0±2.0	573
3x3x2.5	23.4±2.0	719
4x3x2.5	25.4±2.0	871
5x3x2.5	27.7±2.0	1038
7x3x2.5	30.2±2.5	1325
10x3x2.5	38.8±2.5	1907
12x3x2.5	40.1±3.0	2180
14x3x2.5	42.0±3.0	2451
16x3x2.5	44.4±3.0	2750
19x3x2.5	47.3±3.0	3210
24x3x2.5	55.4±3.5	4041
27x3x2.5	56.8±3.5	4439
37x3x2.5	64.1±3.5	5869

Halogen free flame retardant offshore communication and instrumentaion cable

S101 TFOU(i) /E/M/H/H-M 250V

No. of pairs & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
1x2x0.75	10.2±1.5	136
2x2x0.75	15.1±1.5	267
3x2x0.75	15.7±1.5	308
4x2x0.75	16.8±1.5	357
5x2x0.75	18.3±1.5	417
7x2x0.75	19.6±1.5	499
10x2x0.75	24.2±2.0	686
12x2x0.75	24.9±2.0	757
14x2x0.75	26.2±2.0	850
16x2x0.75	27.4±2.0	931
19x2x0.75	28.9±2.0	1059
24x2x0.75	33.4±2.5	1306
27x2x0.75	34.6±2.5	1455
37x2x0.75	38.5±2.5	1847
1x2x1.0	10.6±1.5	150
2x2x1.0	15.8±1.5	297
3x2x1.0	16.5±1.5	347
4x2x1.0	18.0±1.5	415
5x2x1.0	19.2±1.5	476
7x2x1.0	20.9±2.0	587
10x2x1.0	25.9±2.0	809
12x2x1.0	26.6±2.0	898
14x2x1.0	27.8±2.0	996
16x2x1.0	29.3±2.0	1111
19x2x1.0	30.8±2.5	1254
24x2x1.0	36.2±2.5	1600
27x2x1.0	37.1±2.5	1746
37x2x1.0	41.3±3.0	2230
1x2x1.5	11.9±1.5	183
2x2x1.5	17.9±1.5	363
3x2x1.5	18.7±1.5	428
4x2x1.5	20.4±2.0	514
5x2x1.5	21.9±2.0	593
7x2x1.5	23.8±2.0	735
10x2x1.5	29.8±2.0	1020
12x2x1.5	30.7±2.5	1137
14x2x1.5	32.2±2.5	1279
16x2x1.5	34.5±2.5	1460
19x2x1.5	36.2±2.5	1647
24x2x1.5	42.1±3.0	2056
27x2x1.5	43.2±3.0	2245
37x2x1.5	48.8±3.0	2946
1x2x2.5	12.7±1.5	219
2x2x2.5	19.3±1.5	436
3x2x2.5	20.6±2.0	538
4x2x2.5	22.2±2.0	641
5x2x2.5	24.1±2.0	759
7x2x2.5	26.3±2.0	956
10x2x2.5	33.0±2.5	1329
12x2x2.5	34.6±2.5	1546
14x2x2.5	36.2±2.5	1728
16x2x2.5	38.2±2.5	1931
19x2x2.5	40.4±3.0	2215
24x2x2.5	47.4±3.0	2811
27x2x2.5	48.6±3.0	3078
37x2x2.5	54.4±3.5	4001

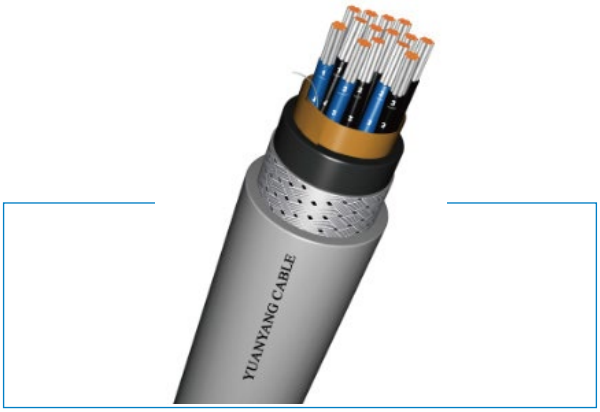
No. of triples & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
1x3x0.75	10.5±1.5	150
2x3x0.75	16.1±1.5	305
3x3x0.75	16.8±1.5	357
4x3x0.75	18.3±1.5	426
5x3x0.75	19.7±1.5	490
7x3x0.75	21.3±2.0	604
10x3x0.75	26.5±2.0	834
12x3x0.75	27.4±2.0	928
14x3x0.75	28.7±2.0	1042
16x3x0.75	30.1±2.5	1147
19x3x0.75	31.7±2.5	1308
24x3x0.75	37.3±2.5	1668
27x3x0.75	38.1±2.5	1802
37x3x0.75	42.5±3.0	2321
1x3x1.0	11.0±1.5	168
2x3x1.0	17.4±1.5	353
3x3x1.0	18.2±1.5	419
4x3x1.0	19.6±1.5	493
5x3x1.0	21.2±2.0	579
7x3x1.0	23.0±2.0	719
10x3x1.0	28.7±2.0	997
12x3x1.0	29.5±2.0	1114
14x3x1.0	30.9±2.5	1241
16x3x1.0	32.7±2.5	1388
19x3x1.0	34.8±2.5	1618
24x3x1.0	40.6±3.0	2021
27x3x1.0	41.3±3.0	2188
37x3x1.0	46.6±3.0	2876
1x3x1.5	12.3±1.5	207
2x3x1.5	19.2±1.5	423
3x3x1.5	20.5±2.0	519
4x3x1.5	22.2±2.0	618
5x3x1.5	24.0±2.0	728
7x3x1.5	26.1±2.0	912
10x3x1.5	32.9±2.5	1270
12x3x1.5	34.4±2.5	1472
14x3x1.5	36.0±2.5	1643
16x3x1.5	38.1±2.5	1837
19x3x1.5	40.1±3.0	2101
24x3x1.5	47.2±3.0	2669
27x3x1.5	48.4±3.0	2918
37x3x1.5	54.1±3.5	3781
1x3x2.5	13.2±1.5	255
2x3x2.5	21.2±2.0	533
3x3x2.5	22.4±2.0	656
4x3x2.5	24.4±2.0	804
5x3x2.5	26.6±2.0	956
7x3x2.5	29.0±2.0	1217
10x3x2.5	37.1±2.5	1748
12x3x2.5	38.3±2.5	1978
14x3x2.5	40.4±3.0	2242
16x3x2.5	42.6±3.0	2513
19x3x2.5	44.7±3.0	2868
24x3x2.5	52.9±3.5	3664
27x3x2.5	54.2±3.5	4022
37x3x2.5	61.0±3.5	5310

Halogen free flame retardant offshore communication and instrumentaion cable

Basic type： S102 RFOU(c)/TFOU(c)

NEK TS 606 oil / mud resistant property：

RFOU(c) TFOU(c)	Minimun requirements oil resistant
RFOU(c) E TFOU(c) E	Enhanced oil resistant
RFOU(c) M TFOU(c) M	Mud resistant
RFOU(c) H TFOU(c) H	Hydraulic/gear oil resistant
RFOU(c) H-M TFOU(c) H-M	Hydraulic/gear oil resistant & mud resistant



Rated Voltage： 250V

Operating temperature： 90℃

Standards applied

NEK TS 606	– Design
IEC 60092-376	– Design
IEC 60228	– Conductor
IEC 60092-360	– Insulation & Sheath
IEC 60332-1	– Flame Retardant
IEC 60332-3-22	– Flame Retardant
IEC 60754	– Halogen Free
IEC 61034	– Low Smoke

Application

Fixed installation for communication, instrumentation,control and alarm systems in both EX–and safe area. For installation in areas exposed to MUD and drilling/cleaning fluids.

Construction

Item	Code	Material／Description
Conductor		Stranded tinned annealed copper (STC), Class 2 or Class 5
Insulation	R	EPR
	T	XLPE
Twisting and collective screen	(c)	Color coded cores twisted pairs / triples,pairs / triples are l aid up and collectively screened by copper backed polyester tape with a tinned copper drain wire Pairs / triples are identified by printed numbers
Inner covering	F	Extruded Halogen-free compound
Braid armor	O	Tinned copper wire braid (TCWB)
Outer sheath	U	Halogen-free thermoset compound type SHF2 as per "NEK TS 606 oil / mud resistant property"
Outer sheath color		Grey

Halogen free flame retardant offshore communication and instrumentaion cable

S102 RFOU(c) /E/M/H/H-M 250V

No. of pairs & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
1x2x0.75	10.6±1.5	147
2x2x0.75	13.8±1.5	221
3x2x0.75	15.2±1.5	293
4x2x0.75	16.2±1.5	335
5x2x0.75	17.6±1.5	387
7x2x0.75	18.7±1.5	455
10x2x0.75	23.1±2.0	620
12x2x0.75	23.7±2.0	678
14x2x0.75	24.6±2.0	742
16x2x0.75	26.0±2.0	823
19x2x0.75	27.2±2.0	917
24x2x0.75	31.5±2.5	1138
27x2x0.75	32.1±2.5	1220
37x2x0.75	36.1±2.5	1569
1x2x1.0	11.0±1.5	160
2x2x1.0	15.3±1.5	286
3x2x1.0	16.0±1.5	328
4x2x1.0	17.3±1.5	384
5x2x1.0	18.5±1.5	437
7x2x1.0	19.8±1.5	518
10x2x1.0	24.4±2.0	708
12x2x1.0	25.2±2.0	780
14x2x1.0	26.4±2.0	870
16x2x1.0	27.7±2.0	953
19x2x1.0	29.1±2.0	1078
24x2x1.0	33.6±2.5	1326
27x2x1.0	34.8±2.5	1473
37x2x1.0	38.7±2.5	1860
1x2x1.5	12.3±1.5	194
2x2x1.5	17.0±1.5	343
3x2x1.5	18.0±1.5	408
4x2x1.5	19.3±1.5	475
5x2x1.5	21.0±2.0	554
7x2x1.5	22.6±2.0	667
10x2x1.5	28.1±2.0	917
12x2x1.5	29.1±2.0	1030
14x2x1.5	30.4±2.5	1139
16x2x1.5	32.0±2.5	1267
19x2x1.5	33.6±2.5	1425
24x2x1.5	39.7±2.5	1830
27x2x1.5	40.6±3.0	1974
37x2x1.5	45.0±3.0	2510
1x2x2.5	13.1±1.5	231
2x2x2.5	18.6±1.5	424
3x2x2.5	19.4±1.5	503
4x2x2.5	21.2±2.0	605
5x2x2.5	23.1±2.0	711
7x2x2.5	24.8±2.0	871
10x2x2.5	31.0±2.5	1205
12x2x2.5	32.1±2.5	1365
14x2x2.5	33.6±2.5	1523
16x2x2.5	35.9±2.5	1733
19x2x2.5	37.9±2.5	1980
24x2x2.5	44.1±3.0	2470
27x2x2.5	44.9±3.0	2680
37x2x2.5	50.6±3.5	3519

No. of triples & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
1x3x0.75	11.0±1.5	165
2x3x0.75	15.7±1.5	305
3x3x0.75	16.4±1.5	353
4x3x0.75	17.9±1.5	419
5x3x0.75	19.1±1.5	478
7x3x0.75	20.7±2.0	582
10x3x0.75	25.4±2.0	785
12x3x0.75	26.3±2.0	880
14x3x0.75	27.5±2.0	972
16x3x0.75	28.9±2.0	1080
19x3x0.75	30.3±2.5	1211
24x3x0.75	35.6±2.5	1542
27x3x0.75	36.3±2.5	1661
37x3x0.75	40.6±3.0	2128
1x3x1.0	11.6±1.5	188
2x3x1.0	16.5±1.5	341
3x3x1.0	17.5±1.5	405
4x3x1.0	18.8±1.5	475
5x3x1.0	20.4±2.0	553
7x3x1.0	21.8±2.0	668
10x3x1.0	27.1±2.0	919
12x3x1.0	27.9±2.0	1020
14x3x1.0	29.3±2.0	1146
16x3x1.0	30.8±2.5	1263
19x3x1.0	32.4±2.5	1437
24x3x1.0	38.2±2.5	1827
27x3x1.0	38.9±2.5	1974
37x3x1.0	43.5±3.0	2540
1x3x1.5	12.8±1.5	225
2x3x1.5	18.7±1.5	425
3x3x1.5	19.7±1.5	505
4x3x1.5	21.3±2.0	605
5x3x1.5	23.2±2.0	711
7x3x1.5	25.0±2.0	871
10x3x1.5	31.5±2.5	1221
12x3x1.5	32.4±2.5	1366
14x3x1.5	34.5±2.5	1569
16x3x1.5	36.2±2.5	1731
19x3x1.5	38.2±2.5	1976
24x3x1.5	44.4±3.0	2463
27x3x1.5	46.0±3.0	2735
37x3x1.5	51.4±3.5	3531
1x3x2.5	13.6±1.5	273
2x3x2.5	20.5±2.0	532
3x3x2.5	21.5±2.0	647
4x3x2.5	23.5±2.0	787
5x3x2.5	25.4±2.0	920
7x3x2.5	27.6±2.0	1162
10x3x2.5	35.3±2.5	1664
12x3x2.5	36.3±2.5	1877
14x3x2.5	38.2±2.5	2122
16x3x2.5	40.2±3.0	2373
19x3x2.5	42.2±3.0	2704
24x3x2.5	49.9±3.0	3449
27x3x2.5	51.2±3.5	3783
37x3x2.5	57.6±3.5	4982

Halogen free flame retardant offshore communication and instrumentaion cable

S102 RFOU(c) /E/M/H/H-M 250V

No. of pairs & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
1x2x0.75	10.2±1.5	136
2x2x0.75	13.2±1.5	204
3x2x0.75	13.7±1.5	231
4x2x0.75	15.4±1.5	304
5x2x0.75	16.4±1.5	342
7x2x0.75	17.7±1.5	407
10x2x0.75	21.5±2.0	543
12x2x0.75	22.0±2.0	590
14x2x0.75	23.2±2.0	655
16x2x0.75	24.2±2.0	713
19x2x0.75	25.3±2.0	790
24x2x0.75	29.3±2.0	982
27x2x0.75	29.8±2.0	1048
37x2x0.75	33.1±2.5	1311
1x2x1.0	10.6±1.5	150
2x2x1.0	13.8±1.5	227
3x2x1.0	15.2±1.5	300
4x2x1.0	16.2±1.5	344
5x2x1.0	17.6±1.5	397
7x2x1.0	18.7±1.5	467
10x2x1.0	23.1±2.0	636
12x2x1.0	23.7±2.0	696
14x2x1.0	24.6±2.0	763
16x2x1.0	26.0±2.0	845
19x2x1.0	27.2±2.0	943
24x2x1.0	31.5±2.5	1170
27x2x1.0	32.1±2.5	1255
37x2x1.0	36.1±2.5	1614
1x2x1.5	11.9±1.5	183
2x2x1.5	16.3±1.5	320
3x2x1.5	17.3±1.5	377
4x2x1.5	18.5±1.5	436
5x2x1.5	20.1±2.0	506
7x2x1.5	21.5±2.0	604
10x2x1.5	26.7±2.0	828
12x2x1.5	27.5±2.0	913
14x2x1.5	28.9±2.0	1021
16x2x1.5	30.3±2.5	1119
19x2x1.5	31.9±2.5	1269
24x2x1.5	37.5±2.5	1615
27x2x1.5	38.2±2.5	1734
37x2x1.5	42.6±3.0	2215
1x2x2.5	12.7±1.5	219
2x2x2.5	17.9±1.5	397
3x2x2.5	18.7±1.5	469
4x2x2.5	20.4±2.0	562
5x2x2.5	21.9±2.0	648
7x2x2.5	23.7±2.0	800
10x2x2.5	29.6±2.0	1105
12x2x2.5	30.5±2.5	1234
14x2x2.5	32.0±2.5	1387
16x2x2.5	34.3±2.5	1581
19x2x2.5	35.9±2.5	1783
24x2x2.5	41.8±3.0	2224
27x2x2.5	42.8±3.0	2429
37x2x2.5	48.3±3.0	3181

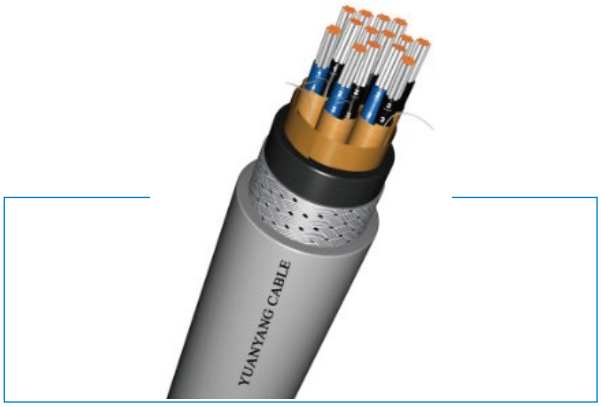
No. of triples & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
1x3x0.75	10.5±1.5	150
2x3x0.75	15.0±1.5	278
3x3x0.75	15.6±1.5	317
4x3x0.75	16.7±1.5	367
5x3x0.75	18.1±1.5	424
7x3x0.75	19.2±1.5	501
10x3x0.75	23.8±2.0	687
12x3x0.75	24.4±2.0	754
14x3x0.75	25.7±2.0	842
16x3x0.75	26.8±2.0	921
19x3x0.75	28.1±2.0	1030
24x3x0.75	32.7±2.5	1284
27x3x0.75	33.3±2.5	1380
37x3x0.75	37.5±2.5	1798
1x3x1.0	11.0±1.5	168
2x3x1.0	15.7±1.5	310
3x3x1.0	16.4±1.5	360
4x3x1.0	17.9±1.5	427
5x3x1.0	19.1±1.5	487
7x3x1.0	20.7±2.0	594
10x3x1.0	25.4±2.0	801
12x3x1.0	26.3±2.0	899
14x3x1.0	27.5±2.0	994
16x3x1.0	28.9±2.0	1105
19x3x1.0	30.3±2.5	1240
24x3x1.0	35.6±2.5	1578
27x3x1.0	36.3±2.5	1702
37x3x1.0	40.6±3.0	2183
1x3x1.5	12.3±1.5	207
2x3x1.5	17.9±1.5	389
3x3x1.5	18.8±1.5	459
4x3x1.5	20.4±2.0	547
5x3x1.5	21.9±2.0	630
7x3x1.5	23.8±2.0	778
10x3x1.5	29.6±2.0	1071
12x3x1.5	30.6±2.5	1196
14x3x1.5	32.1±2.5	1343
16x3x1.5	34.3±2.5	1528
19x3x1.5	36.0±2.5	1723
24x3x1.5	41.9±3.0	2148
27x3x1.5	43.0±3.0	2344
37x3x1.5	48.4±3.0	3064
1x3x2.5	13.2±1.5	255
2x3x2.5	19.4±1.5	483
3x3x2.5	20.7±2.0	595
4x3x2.5	22.4±2.0	712
5x3x2.5	24.2±2.0	839
7x3x2.5	26.3±2.0	1054
10x3x2.5	33.1±2.5	1465
12x3x2.5	34.6±2.5	1699
14x3x2.5	36.2±2.5	1901
16x3x2.5	38.3±2.5	2127
19x3x2.5	40.4±3.0	2438
24x3x2.5	47.4±3.0	3088
27x3x2.5	48.6±3.0	3383
37x3x2.5	54.3±3.5	4400

Halogen free flame retardant offshore communication and instrumentaion cable

Basic type ： RFOU(i&c)/TFOU(i&c)

NEK TS 606 oil / mud resistant property：

RFOU(i&c) TFOU(i&c)	Minimun requirements oil resistant
RFOU(i&c) E TFOU(i&c) E	Enhanced oil resistant
RFOU(i&c) M TFOU(i&c) M	Mud resistant
RFOU(i&c) H TFOU(i&c) H	Hydraulic/gear oil resistant
RFOU(i&c) H-M TFOU(i&c) H-M	Hydraulic/gear oil resistant & mud resistant



Rated Voltage ： 250V

Operating temperature ： 90℃

Standards applied

NEK TS 606	– Design
IEC 60092-376	– Design
IEC 60228	– Conductor
IEC 60092-360	– Insulation & Sheath
IEC 60332-1	– Flame Retardant
IEC 60332-3-22	– Flame Retardant
IEC 60754	– Halogen Free
IEC 61034	– Low Smoke

Application

Fixed installation for communication, instrumentation,control and alarm systems in both EX–and safe area. For installation in areas exposed to MUD and drilling/cleaning fluids.

Construction

Item	Code	Material／Description
Conductor		Stranded tinned annealed copper (STC), Class 2 or Class 5
Insulation	R	EPR
	T	XLPE
Individual & Collective screen	(i&c)	Color coded cores twisted pairs / triples, each pairs / triples are screened by copper backed polyester tape with a tinned copper drain wire and wrapped with polyester tape. Pairs / triples are identified by printed numbers
		Pairs/triples are laid up and collectively screened by copper backed polyester tape with a tinned copper drain wire
Inner covering	F	Extruded Halogen-free compound
Braid armor	O	Tinned copper wire braid (TCWB)
Outer sheath	U	Halogen-free thermoset compound type SHF2 as per "NEK TS 606 oil / mud resistant property"
Outer sheath color		Grey

Halogen free flame retardant offshore communication and instrumentaion cable

RFOU(i&c) /E/M/H/H-M 250V

No. of pairs & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
2x2x0.75	16.0±1.5	312
3x2x0.75	16.7±1.5	360
4x2x0.75	18.2±1.5	427
5x2x0.75	19.4±1.5	485
7x2x0.75	21.1±2.0	592
10x2x0.75	26.1±2.0	811
12x2x0.75	26.8±2.0	895
14x2x0.75	28.0±2.0	988
16x2x0.75	29.5±2.0	1098
19x2x0.75	31.0±2.5	1233
24x2x0.75	36.4±2.5	1569
27x2x0.75	37.3±2.5	1706
37x2x0.75	41.5±3.0	2163
2x2x1.0	16.7±1.5	345
3x2x1.0	17.8±1.5	413
4x2x1.0	19.0±1.5	480
5x2x1.0	20.7±2.0	561
7x2x1.0	22.2±2.0	677
10x2x1.0	27.6±2.0	931
12x2x1.0	28.6±2.0	1048
14x2x1.0	29.8±2.0	1161
16x2x1.0	31.5±2.5	1293
19x2x1.0	33.0±2.5	1455
24x2x1.0	38.8±2.5	1850
27x2x1.0	39.8±2.5	2018
37x2x1.0	44.2±3.0	2571
2x2x1.5	18.8±1.5	418
3x2x1.5	19.8±1.5	494
4x2x1.5	21.5±2.0	591
5x2x1.5	23.4±2.0	693
7x2x1.5	25.2±2.0	844
10x2x1.5	31.7±2.5	1180
12x2x1.5	32.7±2.5	1315
14x2x1.5	34.7±2.5	1510
16x2x1.5	36.5±2.5	1665
19x2x1.5	38.5±2.5	1896
24x2x1.5	44.8±3.0	2364
27x2x1.5	46.3±3.0	2620
37x2x1.5	51.8±3.5	3373
2x2x2.5	20.5±2.0	507
3x2x2.5	21.5±2.0	610
4x2x2.5	23.5±2.0	738
5x2x2.5	25.4±2.0	859
7x2x2.5	27.6±2.0	1076
10x2x2.5	35.3±2.5	1541
12x2x2.5	36.4±2.5	1732
14x2x2.5	38.3±2.5	1953
16x2x2.5	40.4±3.0	2180
19x2x2.5	42.5±3.0	2493
24x2x2.5	50.0±3.0	3158
27x2x2.5	51.3±3.5	3455
37x2x2.5	57.8±3.5	4535

No. of triples & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
2x3x0.75	17.6±1.5	369
3x3x0.75	18.4±1.5	432
4x3x0.75	19.8±1.5	505
5x3x0.75	21.4±2.0	589
7x3x0.75	23.2±2.0	724
10x3x0.75	28.9±2.0	998
12x3x0.75	29.7±2.0	1109
14x3x0.75	31.3±2.5	1245
16x3x0.75	32.9±2.5	1371
19x3x0.75	35.0±2.5	1593
24x3x0.75	40.8±3.0	1985
27x3x0.75	41.5±3.0	2142
37x3x0.75	46.8±3.0	2799
2x3x1.0	18.3±1.5	409
3x3x1.0	19.2±1.5	486
4x3x1.0	20.9±2.0	582
5x3x1.0	22.5±2.0	671
7x3x1.0	24.4±2.0	834
10x3x1.0	30.5±2.5	1151
12x3x1.0	31.6±2.5	1301
14x3x1.0	33.0±2.5	1447
16x3x1.0	35.3±2.5	1648
19x3x1.0	37.2±2.5	1880
24x3x1.0	43.3±3.0	2343
27x3x1.0	44.1±3.0	2538
37x3x1.0	49.8±3.0	3329
2x3x1.5	20.7±2.0	503
3x3x1.5	21.7±2.0	602
4x3x1.5	23.7±2.0	727
5x3x1.5	25.8±2.0	856
7x3x1.5	27.9±2.0	1057
10x3x1.5	35.6±2.5	1513
12x3x1.5	36.9±2.5	1714
14x3x1.5	38.6±2.5	1911
16x3x1.5	40.8±3.0	2134
19x3x1.5	43.0±3.0	2437
24x3x1.5	50.5±3.5	3089
27x3x1.5	51.8±3.5	3376
37x3x1.5	58.3±3.5	4423
2x3x2.5	22.3±2.0	607
3x3x2.5	23.6±2.0	755
4x3x2.5	25.8±2.0	921
5x3x2.5	27.9±2.0	1079
7x3x2.5	30.4±2.5	1370
10x3x2.5	39.0±2.5	1963
12x3x2.5	40.4±3.0	2237
14x3x2.5	42.2±3.0	2511
16x3x2.5	44.6±3.0	2813
19x3x2.5	47.5±3.0	3277
24x3x2.5	55.6±3.5	4118
27x3x2.5	57.0±3.5	4519
37x3x2.5	64.3±3.5	5958

Halogen free flame retardant offshore communication and instrumentaion cable

TFOU(i&c) /E/M/H/H-M 250V

No. of pairs & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
2x2x0.75	15.3±1.5	288
3x2x0.75	15.9±1.5	329
4x2x0.75	17.3±1.5	388
5x2x0.75	18.5±1.5	442
7x2x0.75	19.8±1.5	525
10x2x0.75	24.4±2.0	719
12x2x0.75	25.1±2.0	791
14x2x0.75	26.4±2.0	885
16x2x0.75	27.6±2.0	968
19x2x0.75	29.1±2.0	1098
24x2x0.75	33.6±2.5	1351
27x2x0.75	34.8±2.5	1501
37x2x0.75	38.7±2.5	1898
2x2x1.0	16.0±1.5	321
3x2x1.0	16.7±1.5	372
4x2x1.0	18.2±1.5	442
5x2x1.0	19.4±1.5	504
7x2x1.0	21.1±2.0	618
10x2x1.0	26.1±2.0	846
12x2x1.0	26.8±2.0	937
14x2x1.0	28.0±2.0	1036
16x2x1.0	29.5±2.0	1153
19x2x1.0	31.0±2.5	1298
24x2x1.0	36.4±2.5	1650
27x2x1.0	37.3±2.5	1797
37x2x1.0	41.5±3.0	2287
2x2x1.5	18.1±1.5	389
3x2x1.5	18.9±1.5	456
4x2x1.5	20.6±2.0	544
5x2x1.5	22.2±2.0	625
7x2x1.5	24.0±2.0	770
10x2x1.5	30.1±2.5	1062
12x2x1.5	30.9±2.5	1180
14x2x1.5	32.4±2.5	1324
16x2x1.5	34.7±2.5	1509
19x2x1.5	36.4±2.5	1698
24x2x1.5	42.5±3.0	2134
27x2x1.5	43.4±3.0	2305
37x2x1.5	49.0±3.0	3013
2x2x2.5	19.6±1.5	467
3x2x2.5	20.8±2.0	571
4x2x2.5	22.4±2.0	676
5x2x2.5	24.3±2.0	796
7x2x2.5	26.5±2.0	996
10x2x2.5	33.2±2.5	1378
12x2x2.5	34.8±2.5	1596
14x2x2.5	36.4±2.5	1780
16x2x2.5	38.4±2.5	1986
19x2x2.5	40.6±3.0	2273
24x2x2.5	47.6±3.0	2878
27x2x2.5	48.8±3.0	3146
37x2x2.5	54.6±3.5	4077

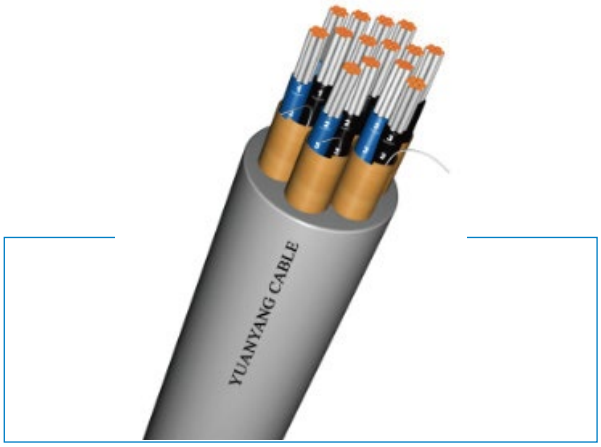
No. of triples & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
2x3x0.75	16.3±1.5	327
3x3x0.75	17.3±1.5	388
4x3x0.75	18.5±1.5	451
5x3x0.75	20.1±2.0	526
7x3x0.75	21.5±2.0	633
10x3x0.75	26.7±2.0	870
12x3x0.75	27.6±2.0	965
14x3x0.75	28.9±2.0	1080
16x3x0.75	30.3±2.5	1188
19x3x0.75	31.9±2.5	1350
24x3x0.75	37.5±2.5	1718
27x3x0.75	38.3±2.5	1853
37x3x0.75	42.7±3.0	2378
2x3x1.0	17.6±1.5	379
3x3x1.0	18.4±1.5	446
4x3x1.0	19.8±1.5	522
5x3x1.0	21.4±2.0	611
7x3x1.0	23.2±2.0	753
10x3x1.0	28.9±2.0	1038
12x3x1.0	29.7±2.0	1156
14x3x1.0	31.3±2.5	1299
16x3x1.0	32.9±2.5	1434
19x3x1.0	35.0±2.5	1666
24x3x1.0	40.8±3.0	2077
27x3x1.0	41.5±3.0	2245
37x3x1.0	46.8±3.0	2940
2x3x1.5	19.4±1.5	452
3x3x1.5	20.7±2.0	549
4x3x1.5	22.4±2.0	651
5x3x1.5	24.2±2.0	763
7x3x1.5	26.3±2.0	950
10x3x1.5	33.1±2.5	1316
12x3x1.5	34.6±2.5	1521
14x3x1.5	36.2±2.5	1693
16x3x1.5	38.3±2.5	1890
19x3x1.5	40.4±3.0	2157
24x3x1.5	47.4±3.0	2733
27x3x1.5	48.6±3.0	2984
37x3x1.5	54.3±3.5	3854
2x3x2.5	21.4±2.0	566
3x3x2.5	22.6±2.0	691
4x3x2.5	24.6±2.0	842
5x3x2.5	26.8±2.0	997
7x3x2.5	29.2±2.0	1260
10x3x2.5	37.3±2.5	1802
12x3x2.5	38.5±2.5	2033
14x3x2.5	40.6±3.0	2300
16x3x2.5	42.8±3.0	2574
19x3x2.5	44.9±3.0	2932
24x3x2.5	53.1±3.5	3739
27x3x2.5	54.4±3.5	4098
37x3x2.5	61.3±3.5	5395

Halogen free flame retardant offshore communication and instrumentaion cable

Basic type ： S105 RU(i)/TU(i)

NEK TS 606 oil / mud resistant property :

RU(i) TU(i)	Minimun requirements oil resistant
RU(i) E TU(i) E	Enhanced oil resistant
RU(i) M TU(i) M	Mud resistant
RU(i) H TU(i) H	Hydraulic/gear oil resistant
RU(i) H-M TU(i) H-M	Hydraulic/gear oil resistant & mud resistant



Rated Voltage ： 250V

Operating temperature ： 90℃

Standards applied

NEK TS 606	– Design
IEC 60092-376	– Design
IEC 60228	– Conductor
IEC 60092-360	– Insulation & Sheath
IEC 60332-1	– Flame Retardant
IEC 60332-3-22	– Flame Retardant
IEC 60754	– Halogen Free
IEC 61034	– Low Smoke

Application

Fixed installation for communication, instrumentation,control and alarm systems in both EX–and safe area. For installation in areas exposed to MUD and drilling/cleaning fluids.

Construction

Item	Code	Material／Description
Conductor		Stranded tinned annealed copper (STC), Class 2 or Class 5
Insulation	R	EPR
	T	XLPE
Twisting and individual screen	(i)	Color coded cores twisted pairs / triples, each pairs / triples are screened by copper backed polyester tape with a tinned copper drain wire and wrapped with polyester tape Pairs / triples are identified by printed numbers.
Outer sheath	U	Halogen-free thermoset compound type SHF2 as per "NEK TS 606 oil / mud resistant property"
Outer sheath color		Grey

Halogen free flame retardant offshore communication and instrumentaion cable

S105 RU(i) /E/M/H/H-M 250V

No. of pairs & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
1x2x0.75	7.3±1.0	63
2x2x0.75	12.0±1.5	127
3x2x0.75	12.7±1.5	166
4x2x0.75	13.9±1.5	207
5x2x0.75	15.4±1.5	255
7x2x0.75	16.8±1.5	333
10x2x0.75	21.8±2.0	483
12x2x0.75	22.6±2.0	557
14x2x0.75	23.9±2.0	645
16x2x0.75	25.3±2.0	724
19x2x0.75	26.9±2.0	850
24x2x0.75	31.9±2.5	1086
27x2x0.75	32.7±2.5	1196
37x2x0.75	37.0±2.5	1609
1x2x1.0	7.7±1.0	73
2x2x1.0	12.7±1.5	149
3x2x1.0	13.5±1.5	197
4x2x1.0	15.0±1.5	253
5x2x1.0	16.4±1.5	305
7x2x1.0	18.1±1.5	409
10x2x1.0	23.5±2.0	591
12x2x1.0	24.3±2.0	684
14x2x1.0	25.8±2.0	791
16x2x1.0	27.2±2.0	889
19x2x1.0	28.9±2.0	1043
24x2x1.0	34.3±2.5	1331
27x2x1.0	35.2±2.5	1469
37x2x1.0	39.7±2.5	1975
1x2x1.5	8.9±1.0	96
2x2x1.5	14.8±1.5	194
3x2x1.5	15.7±1.5	257
4x2x1.5	17.5±1.5	332
5x2x1.5	19.1±1.5	400
7x2x1.5	21.1±2.0	535
10x2x1.5	27.5±2.0	773
12x2x1.5	28.6±2.0	908
14x2x1.5	30.1±2.5	1035
16x2x1.5	32.0±2.5	1179
19x2x1.5	33.8±2.5	1367
24x2x1.5	40.4±3.0	1759
27x2x1.5	41.2±3.0	1940
37x2x1.5	46.7±3.0	2608
1x2x2.5	9.8±1.0	125
2x2x2.5	16.2±1.5	252
3x2x2.5	17.5±1.5	348
4x2x2.5	19.2±1.5	442
5x2x2.5	21.3±2.0	546
7x2x2.5	23.5±2.0	734
10x2x2.5	30.6±2.5	1057
12x2x2.5	31.9±2.5	1245
14x2x2.5	33.6±2.5	1424
16x2x2.5	35.7±2.5	1621
19x2x2.5	37.9±2.5	1903
24x2x2.5	44.9±3.0	2418
27x2x2.5	46.2±3.0	2697
37x2x2.5	52.3±3.5	3629

No. of triples & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
1x3x0.75	7.7±1.0	77
2x3x0.75	13.3±1.5	159
3x3x0.75	14.1±1.5	210
4x3x0.75	15.7±1.5	271
5x3x0.75	17.4±1.5	333
7x3x0.75	18.9±1.5	436
10x3x0.75	24.6±2.0	632
12x3x0.75	25.7±2.0	742
14x3x0.75	27.0±2.0	846
16x3x0.75	28.8±2.0	964
19x3x0.75	30.4±2.5	1116
24x3x0.75	36.1±2.5	1424
27x3x0.75	37.0±2.5	1587
37x3x0.75	41.7±3.0	2114
1x3x1.0	8.1±1.0	90
2x3x1.0	14.0±1.5	186
3x3x1.0	15.2±1.5	256
4x3x1.0	16.6±1.5	323
5x3x1.0	18.4±1.5	399
7x3x1.0	20.4±2.0	535
10x3x1.0	26.4±2.0	772
12x3x1.0	27.4±2.0	896
14x3x1.0	28.9±2.0	1036
16x3x1.0	30.6±2.5	1166
19x3x1.0	32.6±2.5	1369
24x3x1.0	38.6±2.5	1743
27x3x1.0	39.4±2.5	1926
37x3x1.0	44.7±3.0	2595
1x3x1.5	9.5±1.0	120
2x3x1.5	16.4±1.5	247
3x3x1.5	17.7±1.5	340
4x3x1.5	19.4±1.5	430
5x3x1.5	21.5±2.0	530
7x3x1.5	23.8±2.0	713
10x3x1.5	30.9±2.5	1026
12x3x1.5	32.2±2.5	1208
14x3x1.5	34.1±2.5	1395
16x3x1.5	36.1±2.5	1571
19x3x1.5	38.3±2.5	1843
24x3x1.5	45.7±3.0	2364
27x3x1.5	46.7±3.0	2612
37x3x1.5	52.8±3.5	3511
1x3x2.5	10.3±1.5	160
2x3x2.5	18.2±1.5	335
3x3x2.5	19.3±1.5	457
4x3x2.5	21.5±2.0	594
5x3x2.5	23.8±2.0	733
7x3x2.5	26.3±2.0	991
10x3x2.5	34.5±2.5	1439
12x3x2.5	35.7±2.5	1679
14x3x2.5	37.8±2.5	1942
16x3x2.5	40.1±3.0	2210
19x3x2.5	42.6±3.0	2596
24x3x2.5	50.5±3.5	3292
27x3x2.5	51.9±3.5	3672
37x3x2.5	58.8±3.5	4946

Halogen free flame retardant offshore communication and instrumentaion cable

S105 TU(i) /E/M/H/H-M 250V

No. of pairs & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
1x2x0.75	6.9±1.0	56
2x2x0.75	11.0±1.5	108
3x2x0.75	11.9±1.5	146
4x2x0.75	13.0±1.5	182
5x2x0.75	14.5±1.5	225
7x2x0.75	15.7±1.5	291
10x2x0.75	20.4±2.0	423
12x2x0.75	21.0±2.0	486
14x2x0.75	22.2±2.0	553
16x2x0.75	23.5±2.0	630
19x2x0.75	24.9±2.0	729
24x2x0.75	29.5±2.0	934
27x2x0.75	30.2±2.5	1027
37x2x0.75	34.2±2.5	1383
1x2x1.0	7.3±1.0	66
2x2x1.0	12.0±1.5	134
3x2x1.0	12.7±1.5	176
4x2x1.0	13.9±1.5	220
5x2x1.0	15.4±1.5	272
7x2x1.0	16.8±1.5	356
10x2x1.0	21.8±2.0	516
12x2x1.0	22.6±2.0	596
14x2x1.0	23.9±2.0	691
16x2x1.0	25.3±2.0	776
19x2x1.0	26.9±2.0	912
24x2x1.0	31.9±2.5	1165
27x2x1.0	32.7±2.5	1285
37x2x1.0	37.0±2.5	1730
1x2x1.5	8.3±1.0	83
2x2x1.5	13.8±1.5	169
3x2x1.5	14.9±1.5	230
4x2x1.5	16.3±1.5	289
5x2x1.5	18.1±1.5	357
7x2x1.5	19.8±1.5	468
10x2x1.5	26.0±2.0	689
12x2x1.5	26.8±2.0	796
14x2x1.5	28.2±2.0	907
16x2x1.5	30.1±2.5	1034
19x2x1.5	31.9±2.5	1213
24x2x1.5	37.9±2.5	1546
27x2x1.5	38.7±2.5	1704
37x2x1.5	43.9±3.0	2292
1x2x2.5	9.4±1.0	115
2x2x2.5	15.5±1.5	231
3x2x2.5	16.5±1.5	311
4x2x2.5	18.3±1.5	403
5x2x2.5	20.3±2.0	497
7x2x2.5	22.3±2.0	658
10x2x2.5	29.1±2.0	962
12x2x2.5	30.2±2.5	1118
14x2x2.5	31.9±2.5	1293
16x2x2.5	33.7±2.5	1456
19x2x2.5	35.9±2.5	1711
24x2x2.5	42.7±3.0	2195
27x2x2.5	43.7±3.0	2427
37x2x2.5	49.5±3.0	3267

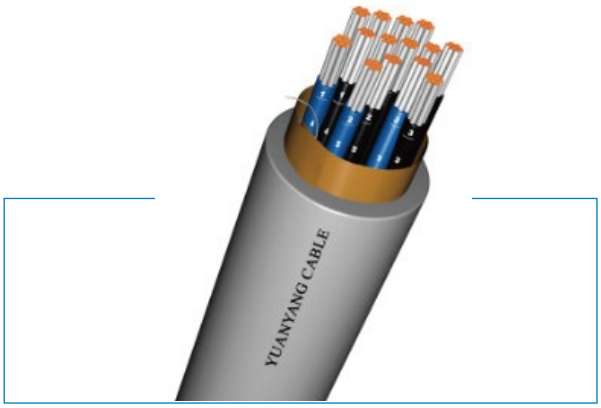
No. of triples & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
1x3x0.75	7.2±1.0	67
2x3x0.75	12.3±1.5	138
3x3x0.75	13.0±1.5	181
4x3x0.75	14.5±1.5	234
5x3x0.75	15.8±1.5	281
7x3x0.75	17.5±1.5	375
10x3x0.75	22.5±2.0	533
12x3x0.75	23.5±2.0	628
14x3x0.75	24.6±2.0	714
16x3x0.75	26.2±2.0	814
19x3x0.75	27.7±2.0	943
24x3x0.75	32.9±2.5	1205
27x3x0.75	33.6±2.5	1328
37x3x0.75	38.1±2.5	1789
1x3x1.0	7.7±1.0	80
2x3x1.0	13.3±1.5	166
3x3x1.0	14.1±1.5	221
4x3x1.0	15.7±1.5	286
5x3x1.0	17.4±1.5	352
7x3x1.0	18.9±1.5	463
10x3x1.0	24.6±2.0	669
12x3x1.0	25.7±2.0	787
14x3x1.0	27.0±2.0	898
16x3x1.0	28.8±2.0	1024
19x3x1.0	30.4±2.5	1187
24x3x1.0	36.1±2.5	1514
27x3x1.0	37.0±2.5	1688
37x3x1.0	41.7±3.0	2252
1x3x1.5	8.9±1.0	107
2x3x1.5	15.4±1.5	219
3x3x1.5	16.4±1.5	293
4x3x1.5	18.3±1.5	380
5x3x1.5	20.2±2.0	468
7x3x1.5	22.0±2.0	617
10x3x1.5	29.0±2.0	903
12x3x1.5	30.0±2.0	1047
14x3x1.5	31.7±2.5	1211
16x3x1.5	33.6±2.5	1363
19x3x1.5	35.7±2.5	1600
24x3x1.5	42.5±3.0	2055
27x3x1.5	43.5±3.0	2270
37x3x1.5	49.2±3.0	3051
1x3x2.5	9.9±1.0	146
2x3x2.5	17.4±1.5	306
3x3x2.5	18.5±1.5	415
4x3x2.5	20.6±2.0	539
5x3x2.5	22.6±2.0	654
7x3x2.5	25.0±2.0	885
10x3x2.5	32.7±2.5	1287
12x3x2.5	33.8±2.5	1502
14x3x2.5	35.9±2.5	1739
16x3x2.5	38.2±2.5	1979
19x3x2.5	40.5±3.0	2324
24x3x2.5	48.3±3.0	2973
27x3x2.5	49.3±3.0	3291
37x3x2.5	55.7±3.5	4433

Halogen free flame retardant offshore communication and instrumentaion cable

Basic type ： S106 RU(c)/TU(c)

NEK TS 606 oil / mud resistant property：

RU(c) TU(c)	Minimun requirements oil resistant
RU(c) E TU(c) E	Enhanced oil resistant
RU(c) M TU(c) M	Mud resistant
RU(c) H TU(c) H	Hydraulic/gear oil resistant
RU(c) H-M TU(c) H-M	Hydraulic/gear oil resistant & mud resistant



Rated Voltage ： 250V

Operating temperature ： 90℃

Standards applied

NEK TS 606	– Design
IEC 60092-376	– Design
IEC 60228	– Conductor
IEC 60092-360	– Insulation & Sheath
IEC 60332-1	– Flame Retardant
IEC 60332-3-22	– Flame Retardant
IEC 60754	– Halogen Free
IEC 61034	– Low Smoke

Application

Fixed installation for communication, instrumentation,control and alarm systems in both EX–and safe area. For installation in areas exposed to MUD and drilling/cleaning fluids.

Construction

Item	Code	Material／Description
Conductor		Stranded tinned annealed copper (STC), Class 2 or Class 5
Insulation	R	EPR
	T	XLPE
Twisting and collective screen	(c)	Color coded cores twisted pairs / triples,pairs / triples are l aid up and collectively screened by copper backed polyester tape with a tinned copper drain wire Pairs / triples are identified by printed numbers
Outer sheath	U	Halogen-free thermoset compound type SHF2 as per "NEK TS 606 oil / mud resistant property"
Outer sheath color		Grey

Halogen free flame retardant offshore communication and instrumentaion cable

S106 RU(c) /E/M/H/H-M 250V

No. of pairs & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
1x2x0.75	7.3±1.0	63
2x2x0.75	10.5±1.5	108
3x2x0.75	11.1±1.5	135
4x2x0.75	12.4±1.5	170
5x2x0.75	13.5±1.5	200
7x2x0.75	14.9±1.5	261
10x2x0.75	19.0±1.5	366
12x2x0.75	19.7±1.5	417
14x2x0.75	20.8±2.0	479
16x2x0.75	21.9±2.0	534
19x2x0.75	23.4±2.0	623
24x2x0.75	27.5±2.0	783
27x2x0.75	28.1±2.0	857
37x2x0.75	31.8±2.5	1143
1x2x1.0	7.7±1.0	73
2x2x1.0	11.2±1.5	127
3x2x1.0	12.2±1.5	166
4x2x1.0	13.2±1.5	201
5x2x1.0	14.7±1.5	245
7x2x1.0	15.9±1.5	311
10x2x1.0	20.6±2.0	447
12x2x1.0	21.3±2.0	510
14x2x1.0	22.4±2.0	576
16x2x1.0	23.8±2.0	654
19x2x1.0	25.1±2.0	751
24x2x1.0	29.7±2.0	958
27x2x1.0	30.4±2.5	1050
37x2x1.0	34.4±2.5	1402
1x2x1.5	8.9±1.0	96
2x2x1.5	13.1±1.5	169
3x2x1.5	13.9±1.5	216
4x2x1.5	15.5±1.5	273
5x2x1.5	17.0±1.5	325
7x2x1.5	18.7±1.5	428
10x2x1.5	24.2±2.0	613
12x2x1.5	25.1±2.0	703
14x2x1.5	26.5±2.0	809
16x2x1.5	28.0±2.0	905
19x2x1.5	29.7±2.0	1057
24x2x1.5	35.3±2.5	1344
27x2x1.5	36.1±2.5	1477
37x2x1.5	40.8±3.0	1972
1x2x2.5	9.8±1.0	125
2x2x2.5	14.8±1.5	231
3x2x2.5	15.6±1.5	300
4x2x2.5	17.4±1.5	382
5x2x2.5	19.0±1.5	458
7x2x2.5	20.9±2.0	606
10x2x2.5	27.1±2.0	867
12x2x2.5	28.1±2.0	1002
14x2x2.5	29.7±2.0	1155
16x2x2.5	31.6±2.5	1311
19x2x2.5	33.4±2.5	1518
24x2x2.5	39.8±2.5	1945
27x2x2.5	40.7±3.0	2143
37x2x2.5	46.0±3.0	2870

No. of triples & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
1x3x0.75	7.7±1.0	77
2x3x0.75	11.9±1.5	143
3x3x0.75	12.6±1.5	183
4x3x0.75	13.8±1.5	225
5x3x0.75	15.3±1.5	275
7x3x0.75	16.6±1.5	353
10x3x0.75	21.5±2.0	508
12x3x0.75	22.3±2.0	582
14x3x0.75	23.6±2.0	670
16x3x0.75	24.9±2.0	749
19x3x0.75	26.4±2.0	876
24x3x0.75	31.3±2.5	1115
27x3x0.75	32.0±2.5	1225
37x3x0.75	36.1±2.5	1622
1x3x1.0	8.1±1.0	90
2x3x1.0	12.7±1.5	169
3x3x1.0	13.4±1.5	217
4x3x1.0	15.0±1.5	276
5x3x1.0	16.3±1.5	329
7x3x1.0	18.0±1.5	433
10x3x1.0	23.3±2.0	621
12x3x1.0	24.0±2.0	713
14x3x1.0	25.3±2.0	810
16x3x1.0	26.9±2.0	921
19x3x1.0	28.6±2.0	1076
24x3x1.0	33.7±2.5	1353
27x3x1.0	34.6±2.5	1504
37x3x1.0	39.0±2.5	1995
1x3x1.5	9.5±1.0	120
2x3x1.5	14.9±1.5	227
3x3x1.5	15.8±1.5	296
4x3x1.5	17.5±1.5	377
5x3x1.5	19.1±1.5	452
7x3x1.5	21.1±2.0	599
10x3x1.5	27.5±2.0	859
12x3x1.5	28.6±2.0	1004
14x3x1.5	30.1±2.5	1142
16x3x1.5	31.9±2.5	1297
19x3x1.5	33.7±2.5	1501
24x3x1.5	40.1±3.0	1923
27x3x1.5	41.1±3.0	2120
37x3x1.5	46.5±3.0	2840
1x3x2.5	10.3±1.5	160
2x3x2.5	16.4±1.5	306
3x3x2.5	17.7±1.5	416
4x3x2.5	19.4±1.5	524
5x3x2.5	21.5±2.0	643
7x3x2.5	23.7±2.0	859
10x3x2.5	30.8±2.5	1228
12x3x2.5	32.0±2.5	1441
14x3x2.5	33.7±2.5	1647
16x3x2.5	35.8±2.5	1871
19x3x2.5	38.0±2.5	2192
24x3x2.5	45.0±3.0	2778
27x3x2.5	46.3±3.0	3095
37x3x2.5	52.3±3.5	4156

Halogen free flame retardant offshore communication and instrumentaion cable

S106 TU(c) /E/M/H/H-M 250V

No. of pairs & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
1x2x0.75	6.9±1.0	56
2x2x0.75	9.9±1.0	95
3x2x0.75	10.4±1.5	117
4x2x0.75	11.3±1.5	141
5x2x0.75	12.6±1.5	172
7x2x0.75	13.6±1.5	216
10x2x0.75	17.7±1.5	311
12x2x0.75	18.2±1.5	352
14x2x0.75	19.1±1.5	396
16x2x0.75	20.4±2.0	450
19x2x0.75	21.4±2.0	514
24x2x0.75	25.3±2.0	647
27x2x0.75	26.0±2.0	718
37x2x0.75	29.2±2.0	942
1x2x1.0	7.3±1.0	66
2x2x1.0	10.5±1.5	112
3x2x1.0	11.1±1.5	140
4x2x1.0	12.4±1.5	176
5x2x1.0	13.5±1.5	207
7x2x1.0	14.9±1.5	269
10x2x1.0	19.0±1.5	378
12x2x1.0	19.7±1.5	430
14x2x1.0	20.8±2.0	494
16x2x1.0	21.9±2.0	551
19x2x1.0	23.4±2.0	643
24x2x1.0	27.5±2.0	807
27x2x1.0	28.1±2.0	884
37x2x1.0	31.8±2.5	1180
1x2x1.5	8.3±1.0	83
2x2x1.5	12.5±1.5	151
3x2x1.5	13.2±1.5	191
4x2x1.5	14.7±1.5	241
5x2x1.5	16.0±1.5	285
7x2x1.5	17.7±1.5	373
10x2x1.5	22.9±2.0	535
12x2x1.5	23.6±2.0	611
14x2x1.5	24.9±2.0	691
16x2x1.5	26.4±2.0	784
19x2x1.5	27.9±2.0	901
24x2x1.5	33.1±2.5	1148
27x2x1.5	33.7±2.5	1259
37x2x1.5	38.2±2.5	1681
1x2x2.5	9.4±1.0	115
2x2x2.5	13.8±1.5	203
3x2x2.5	14.9±1.5	271
4x2x2.5	16.3±1.5	337
5x2x2.5	18.1±1.5	412
7x2x2.5	19.7±1.5	534
10x2x2.5	25.8±2.0	777
12x2x2.5	26.6±2.0	896
14x2x2.5	28.0±2.0	1018
16x2x2.5	29.8±2.0	1158
19x2x2.5	31.6±2.5	1353
24x2x2.5	37.5±2.5	1718
27x2x2.5	38.4±2.5	1893
37x2x2.5	43.4±3.0	2534

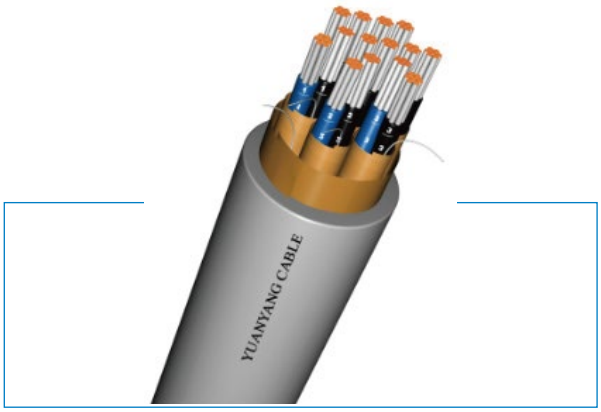
No. of triples & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
1x3x0.75	7.2±1.0	67
2x3x0.75	10.9±1.5	120
3x3x0.75	11.8±1.5	157
4x3x0.75	12.9±1.5	192
5x3x0.75	14.0±1.5	228
7x3x0.75	15.4±1.5	298
10x3x0.75	19.8±1.5	419
12x3x0.75	20.6±2.0	489
14x3x0.75	21.6±2.0	552
16x3x0.75	23.0±2.0	627
19x3x0.75	24.2±2.0	720
24x3x0.75	28.8±2.0	920
27x3x0.75	29.4±2.0	1008
37x3x0.75	33.1±2.5	1331
1x3x1.0	7.7±1.0	80
2x3x1.0	11.9±1.5	149
3x3x1.0	12.6±1.5	189
4x3x1.0	13.8±1.5	233
5x3x1.0	15.3±1.5	284
7x3x1.0	16.6±1.5	365
10x3x1.0	21.5±2.0	524
12x3x1.0	22.3±2.0	601
14x3x1.0	23.6±2.0	692
16x3x1.0	24.9±2.0	774
19x3x1.0	26.4±2.0	905
24x3x1.0	31.3±2.5	1152
27x3x1.0	32.0±2.5	1266
37x3x1.0	36.1±2.5	1676
1x3x1.5	8.9±1.0	107
2x3x1.5	13.8±1.5	195
3x3x1.5	15.0±1.5	260
4x3x1.5	16.3±1.5	322
5x3x1.5	18.1±1.5	394
7x3x1.5	19.8±1.5	511
10x3x1.5	25.8±2.0	744
12x3x1.5	26.7±2.0	856
14x3x1.5	28.1±2.0	973
16x3x1.5	29.8±2.0	1105
19x3x1.5	31.7±2.5	1291
24x3x1.5	37.6±2.5	1641
27x3x1.5	38.5±2.5	1806
37x3x1.5	43.5±3.0	2416
1x3x2.5	9.9±1.0	146
2x3x2.5	15.6±1.5	276
3x3x2.5	16.6±1.5	367
4x3x2.5	18.5±1.5	470
5x3x2.5	20.4±2.0	575
7x3x2.5	22.3±2.0	756
10x3x2.5	29.2±2.0	1096
12x3x2.5	30.2±2.5	1271
14x3x2.5	31.9±2.5	1466
16x3x2.5	33.8±2.5	1651
19x3x2.5	35.9±2.5	1934
24x3x2.5	42.7±3.0	2472
27x3x2.5	43.7±3.0	2732
37x3x2.5	49.4±3.0	3668

Halogen free flame retardant offshore communication and instrumentaion cable

Basic type： RU(i&c)/TU(i&c)

NEK TS 606 oil / mud resistant property：

RU(i&c) TU(i&c)	Minimun requirements oil resistant
RU(i&c) E TU(i&c) E	Enhanced oil resistant
RU(i&c) M TU(i&c) M	Mud resistant
RU(i&c) H TU(i&c) H	Hydraulic/gear oil resistant
RU(i&c) H-M TU(i&c) H-M	Hydraulic/gear oil resistant & mud resistant



Rated Voltage： 250V

Operating temperature： 90℃

Standards applied

NEK TS 606	– Design
IEC 60092-376	– Design
IEC 60228	– Conductor
IEC 60092-360	– Insulation & Sheath
IEC 60332-1	– Flame Retardant
IEC 60332-3-22	– Flame Retardant
IEC 60754	– Halogen Free
IEC 61034	– Low Smoke

Application

Fixed installation for communication, instrumentation,control and alarm systems in both EX–and safe area. For installation in areas exposed to MUD and drilling/cleaning fluids.

Construction

Item	Code	Material／Description
Conductor		Stranded tinned annealed copper (STC), Class 2 or Class 5
Insulation	R	EPR
	T	XLPE
Individual & Collective screen	(i&c)	Color coded cores twisted pairs / triples, each pairs / triples are screened by copper backed polyester tape with a tinned copper drain wire and wrapped with polyester tape. Pairs / triples are identified by printed numbers
		Pairs/triples are laid up and collectively screened by copper backed polyester tape with a tinned copper drain wire
Outer sheath	U	Halogen-free thermoset compound type SHF2 as per "NEK TS 606 oil / mud resistant property"
Outer sheath color		Grey

Halogen free flame retardant offshore communication and instrumentaion cable

RU(i&c) /E/M/H/H-M 250V

No. of pairs & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
2x2x0.75	12.2±1.5	146
3x2x0.75	12.9±1.5	186
4x2x0.75	14.1±1.5	229
5x2x0.75	15.6±1.5	279
7x2x0.75	17.3±1.5	366
10x2x0.75	22.0±2.0	515
12x2x0.75	23.0±2.0	601
14x2x0.75	24.1±2.0	680
16x2x0.75	25.7±2.0	772
19x2x0.75	27.1±2.0	889
24x2x0.75	32.1±2.5	1132
27x2x0.75	32.9±2.5	1243
37x2x0.75	37.2±2.5	1661
2x2x1.0	12.9±1.5	171
3x2x1.0	13.7±1.5	220
4x2x1.0	15.2±1.5	279
5x2x1.0	16.6±1.5	333
7x2x1.0	18.3±1.5	438
10x2x1.0	23.7±2.0	628
12x2x1.0	24.5±2.0	722
14x2x1.0	26.0±2.0	831
16x2x1.0	27.5±2.0	931
19x2x1.0	29.1±2.0	1087
24x2x1.0	34.5±2.5	1382
27x2x1.0	35.4±2.5	1521
37x2x1.0	39.9±2.5	2034
2x2x1.5	15.0±1.5	219
3x2x1.5	15.9±1.5	283
4x2x1.5	17.7±1.5	360
5x2x1.5	19.3±1.5	431
7x2x1.5	21.3±2.0	569
10x2x1.5	27.7±2.0	815
12x2x1.5	28.8±2.0	951
14x2x1.5	30.3±2.5	1080
16x2x1.5	32.2±2.5	1227
19x2x1.5	34.2±2.5	1432
24x2x1.5	40.6±3.0	1819
27x2x1.5	41.4±3.0	2000
37x2x1.5	46.9±3.0	2676
2x2x2.5	16.4±1.5	281
3x2x2.5	17.7±1.5	379
4x2x2.5	19.4±1.5	475
5x2x2.5	21.5±2.0	582
7x2x2.5	23.7±2.0	773
10x2x2.5	30.8±2.5	1105
12x2x2.5	32.1±2.5	1295
14x2x2.5	33.8±2.5	1476
16x2x2.5	35.9±2.5	1676
19x2x2.5	38.1±2.5	1961
24x2x2.5	45.3±3.0	2506
27x2x2.5	46.4±3.0	2765
37x2x2.5	52.5±3.5	3706

No. of triples & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
2x3x0.75	13.5±1.5	179
3x3x0.75	14.6±1.5	238
4x3x0.75	15.9±1.5	295
5x3x0.75	17.6±1.5	360
7x3x0.75	19.1±1.5	465
10x3x0.75	24.9±2.0	668
12x3x0.75	25.9±2.0	779
14x3x0.75	27.2±2.0	885
16x3x0.75	29.0±2.0	1005
19x3x0.75	30.6±2.5	1159
24x3x0.75	36.3±2.5	1475
27x3x0.75	37.2±2.5	1639
37x3x0.75	41.9±3.0	2172
2x3x1.0	14.5±1.5	217
3x3x1.0	15.4±1.5	282
4x3x1.0	16.8±1.5	351
5x3x1.0	18.6±1.5	429
7x3x1.0	20.6±2.0	568
10x3x1.0	26.6±2.0	813
12x3x1.0	27.6±2.0	937
14x3x1.0	29.1±2.0	1079
16x3x1.0	30.8±2.5	1212
19x3x1.0	32.8±2.5	1418
24x3x1.0	38.8±2.5	1800
27x3x1.0	39.8±2.5	2002
37x3x1.0	44.9±3.0	2660
2x3x1.5	16.6±1.5	274
3x3x1.5	17.9±1.5	369
4x3x1.5	19.7±1.5	461
5x3x1.5	21.7±2.0	564
7x3x1.5	24.0±2.0	750
10x3x1.5	31.3±2.5	1087
12x3x1.5	32.4±2.5	1256
14x3x1.5	34.3±2.5	1446
16x3x1.5	36.3±2.5	1624
19x3x1.5	38.5±2.5	1899
24x3x1.5	45.9±3.0	2430
27x3x1.5	46.9±3.0	2679
37x3x1.5	53.0±3.5	3587
2x3x2.5	18.4±1.5	367
3x3x2.5	19.6±1.5	490
4x3x2.5	21.7±2.0	630
5x3x2.5	24.0±2.0	772
7x3x2.5	26.5±2.0	1033
10x3x2.5	34.7±2.5	1493
12x3x2.5	35.9±2.5	1734
14x3x2.5	38.0±2.5	1999
16x3x2.5	40.4±3.0	2271
19x3x2.5	42.8±3.0	2660
24x3x2.5	51.0±3.5	3390
27x3x2.5	52.1±3.5	3748
37x3x2.5	59.0±3.5	5032

Halogen free flame retardant offshore communication and instrumentaion cable

TU(i&c) /E/M/H/H-M 250V

No. of pairs & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
2x2x0.75	11.2±1.5	126
3x2x0.75	12.1±1.5	165
4x2x0.75	13.2±1.5	202
5x2x0.75	14.7±1.5	247
7x2x0.75	15.9±1.5	315
10x2x0.75	20.6±2.0	453
12x2x0.75	21.2±2.0	517
14x2x0.75	22.4±2.0	586
16x2x0.75	23.7±2.0	665
19x2x0.75	25.1±2.0	765
24x2x0.75	29.7±2.0	976
27x2x0.75	30.4±2.5	1071
37x2x0.75	34.4±2.5	1431
2x2x1.0	12.2±1.5	155
3x2x1.0	12.9±1.5	198
4x2x1.0	14.1±1.5	244
5x2x1.0	15.6±1.5	298
7x2x1.0	17.3±1.5	392
10x2x1.0	22.0±2.0	550
12x2x1.0	23.0±2.0	642
14x2x1.0	24.1±2.0	728
16x2x1.0	25.7±2.0	827
19x2x1.0	27.1±2.0	953
24x2x1.0	32.1±2.5	1213
27x2x1.0	32.9±2.5	1334
37x2x1.0	37.2±2.5	1785
2x2x1.5	14.0±1.5	193
3x2x1.5	15.1±1.5	256
4x2x1.5	16.5±1.5	316
5x2x1.5	18.3±1.5	386
7x2x1.5	20.2±2.0	509
10x2x1.5	26.2±2.0	729
12x2x1.5	27.0±2.0	837
14x2x1.5	28.6±2.0	963
16x2x1.5	30.3±2.5	1079
19x2x1.5	32.1±2.5	1261
24x2x1.5	38.1±2.5	1601
27x2x1.5	38.9±2.5	1761
37x2x1.5	44.1±3.0	2356
2x2x2.5	15.7±1.5	259
3x2x2.5	16.7±1.5	341
4x2x2.5	18.5±1.5	434
5x2x2.5	20.5±2.0	531
7x2x2.5	22.5±2.0	695
10x2x2.5	29.3±2.0	1008
12x2x2.5	30.4±2.5	1166
14x2x2.5	32.1±2.5	1343
16x2x2.5	34.1±2.5	1524
19x2x2.5	36.1±2.5	1766
24x2x2.5	43.0±3.0	2259
27x2x2.5	43.9±3.0	2492
37x2x2.5	49.7±3.0	3340

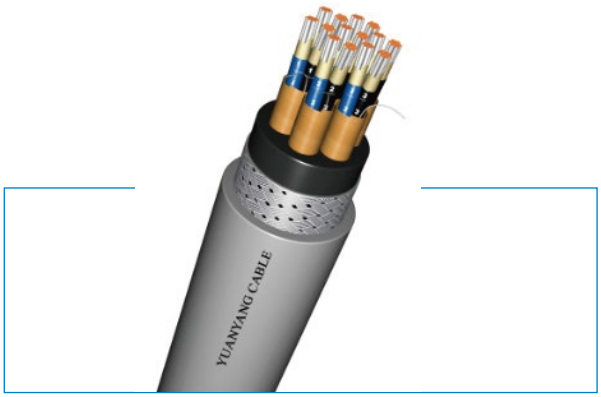
No. of triples & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
2x3x0.75	12.5±1.5	158
3x3x0.75	13.2±1.5	202
4x3x0.75	14.7±1.5	256
5x3x0.75	16.0±1.5	305
7x3x0.75	17.7±1.5	402
10x3x0.75	22.9±2.0	577
12x3x0.75	23.7±2.0	662
14x3x0.75	24.9±2.0	750
16x3x0.75	26.4±2.0	852
19x3x0.75	27.9±2.0	983
24x3x0.75	33.1±2.5	1252
27x3x0.75	33.8±2.5	1376
37x3x0.75	38.3±2.5	1843
2x3x1.0	13.5±1.5	189
3x3x1.0	14.6±1.5	252
4x3x1.0	15.9±1.5	312
5x3x1.0	17.6±1.5	381
7x3x1.0	19.1±1.5	493
10x3x1.0	24.9±2.0	707
12x3x1.0	25.9±2.0	827
14x3x1.0	27.2±2.0	940
16x3x1.0	29.0±2.0	1067
19x3x1.0	30.6±2.5	1233
24x3x1.0	36.3±2.5	1568
27x3x1.0	37.2±2.5	1743
37x3x1.0	41.9±3.0	2313
2x3x1.5	15.6±1.5	245
3x3x1.5	16.6±1.5	321
4x3x1.5	18.5±1.5	410
5x3x1.5	20.4±2.0	500
7x3x1.5	22.3±2.0	652
10x3x1.5	29.2±2.0	947
12x3x1.5	30.2±2.5	1093
14x3x1.5	31.9±2.5	1258
16x3x1.5	33.8±2.5	1414
19x3x1.5	35.9±2.5	1653
24x3x1.5	42.7±3.0	2117
27x3x1.5	43.7±3.0	2333
37x3x1.5	49.4±3.0	3122
2x3x2.5	17.6±1.5	336
3x3x2.5	18.7±1.5	447
4x3x2.5	20.8±2.0	573
5x3x2.5	23.0±2.0	702
7x3x2.5	25.2±2.0	926
10x3x2.5	32.9±2.5	1338
12x3x2.5	34.2±2.5	1570
14x3x2.5	36.1±2.5	1794
16x3x2.5	38.4±2.5	2038
19x3x2.5	40.7±3.0	2386
24x3x2.5	48.5±3.0	3044
27x3x2.5	49.5±3.0	3364
37x3x2.5	56.0±3.5	4515

Halogen free fire resistant offshore communication and instrumentaion cable

Basic type： S103 BFOU(i)

NEK TS 606 oil / mud resistant property：

BFOU(i)	Minimun requirements oil resistant
BFOU(i) E	Enhanced oil resistant
BFOU(i) M	Mud resistant
BFOU(i) H	Hydraulic/gear oil resistant
BFOU(i) H-M	Hydraulic/gear oil resistant & mud resistant



Rated Voltage ： 250V

Operating temperature ： 90℃

Standards applied

NEK TS 606	– Design
IEC 60092-376	– Design
IEC 60228	– Conductor
IEC 60092-360	– Insulation & Sheath
IEC 60332-1	– Flame Retardant
IEC 60332-3-22	– Flame Retardant
IEC 60331	– Fire resistant
IEC 60754	– Halogen Free
IEC 61034	– Low Smoke

Application

Fixed installation for communication, instrumentation,control and alarm systems in both EX–and safe area. For installation in areas exposed to MUD and drilling/cleaning fluids.

Construction

Item	Code	Material／Description
Conductor		Stranded tinned annealed copper (STC), Class 2 or Class 5
Insulation	B	Mica glass tape(MGT)+EPR
		Mica glass tape(MGT)+XLPE
Twisting and individual screen	(i)	Color coded cores twisted pairs / triples, each pairs / triples are screened by copper backed polyester tape with a tinned copper drain wire and wrapped with polyester tape Pairs / triples are identified by printed numbers.
Inner covering	F	Extruded Halogen-free compound
Braid armor	O	Tinned copper wire braid (TCWB)
Outer sheath	U	Halogen-free thermoset compound type SHF2 as per "NEK TS 606 oil / mud resistant property"
Outer sheath color		Grey

Halogen free fire resistant offshore communication and instrumentaion cable

S103 BFOU(i) /E/M/H/H-M 250V (EPR Insulation)

No. of pairs & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
1x2x0.75	12.1±1.5	178
2x2x0.75	18.2±1.5	353
3x2x0.75	19.1±1.5	413
4x2x0.75	20.9±2.0	493
5x2x0.75	22.5±2.0	565
7x2x0.75	24.4±2.0	694
10x2x0.75	30.6±2.5	959
12x2x0.75	31.7±2.5	1077
14x2x0.75	33.1±2.5	1190
16x2x0.75	35.4±2.5	1358
19x2x0.75	37.3±2.5	1541
24x2x0.75	43.5±3.0	1920
27x2x0.75	44.3±3.0	2068
37x2x0.75	50.0±3.0	2698
1x2x1.0	12.5±1.5	194
2x2x1.0	18.9±1.5	385
3x2x1.0	20.2±2.0	465
4x2x1.0	21.7±2.0	545
5x2x1.0	23.7±2.0	641
7x2x1.0	25.7±2.0	790
10x2x1.0	32.2±2.5	1094
12x2x1.0	33.2±2.5	1217
14x2x1.0	35.4±2.5	1401
16x2x1.0	37.3±2.5	1560
19x2x1.0	39.2±2.5	1757
24x2x1.0	46.3±3.0	2254
27x2x1.0	47.2±3.0	2432
37x2x1.0	52.8±3.5	3126
1x2x1.5	13.5±1.5	224
2x2x1.5	21.0±2.0	459
3x2x1.5	22.2±2.0	547
4x2x1.5	24.2±2.0	660
5x2x1.5	26.4±2.0	777
7x2x1.5	28.7±2.0	965
10x2x1.5	36.6±2.5	1373
12x2x1.5	37.9±2.5	1548
14x2x1.5	39.8±2.5	1739
16x2x1.5	41.9±3.0	1921
19x2x1.5	44.2±3.0	2189
24x2x1.5	52.3±3.5	2806
27x2x1.5	53.4±3.5	3034
37x2x1.5	60.3±3.5	3991
1x2x2.5	15.1±1.5	301
2x2x2.5	22.6±2.0	539
3x2x2.5	23.9±2.0	664
4x2x2.5	26.2±2.0	809
5x2x2.5	28.6±2.0	957
7x2x2.5	30.9±2.5	1189
10x2x2.5	39.9±2.5	1730
12x2x2.5	41.2±3.0	1944
14x2x2.5	43.4±3.0	2195
16x2x2.5	46.2±3.0	2494
19x2x2.5	48.8±3.0	2853
24x2x2.5	57.6±3.5	3641
27x2x2.5	58.8±3.5	3951
37x2x2.5	65.9±3.5	5147

No. of triples & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
1x3x0.75	12.6±1.5	201
2x3x0.75	20.1±2.0	423
3x3x0.75	21.1±2.0	500
4x3x0.75	23.0±2.0	600
5x3x0.75	24.9±2.0	693
7x3x0.75	27.0±2.0	859
10x3x0.75	34.6±2.5	1239
12x3x0.75	35.7±2.5	1378
14x3x0.75	37.5±2.5	1547
16x3x0.75	39.4±2.5	1704
19x3x0.75	41.6±3.0	1941
24x3x0.75	49.2±3.0	2490
27x3x0.75	50.1±3.5	2688
37x3x0.75	56.2±3.5	3458
1x3x1.0	13.0±1.5	220
2x3x1.0	20.8±2.0	461
3x3x1.0	21.9±2.0	553
4x3x1.0	24.0±2.0	669
5x3x1.0	26.1±2.0	786
7x3x1.0	28.2±2.0	968
10x3x1.0	36.2±2.5	1396
12x3x1.0	37.5±2.5	1578
14x3x1.0	39.2±2.5	1756
16x3x1.0	41.5±3.0	1961
19x3x1.0	43.8±3.0	2239
24x3x1.0	51.7±3.5	2866
27x3x1.0	52.7±3.5	3103
37x3x1.0	59.7±3.5	4090
1x3x1.5	14.9±1.5	297
2x3x1.5	23.2±2.0	557
3x3x1.5	24.4±2.0	673
4x3x1.5	26.8±2.0	820
5x3x1.5	29.2±2.0	968
7x3x1.5	31.8±2.5	1216
10x3x1.5	40.9±3.0	1749
12x3x1.5	42.2±3.0	1965
14x3x1.5	44.4±3.0	2216
16x3x1.5	47.3±3.0	2518
19x3x1.5	49.9±3.0	2877
24x3x1.5	59.0±3.5	3672
27x3x1.5	60.4±3.5	4012
37x3x1.5	67.9±3.5	5220
1x3x2.5	15.7±1.5	349
2x3x2.5	24.8±2.0	661
3x3x2.5	26.4±2.0	830
4x3x2.5	28.9±2.0	1018
5x3x2.5	31.5±2.5	1209
7x3x2.5	34.8±2.5	1572
10x3x2.5	44.2±3.0	2211
12x3x2.5	46.3±3.0	2567
14x3x2.5	48.7±3.0	2902
16x3x2.5	51.5±3.5	3249
19x3x2.5	54.3±3.5	3729
24x3x2.5	64.2±3.5	4750
27x3x2.5	65.6±3.5	5204
37x3x2.5	73.7±3.5	6815

Halogen free fire resistant offshore communication and instrumentaion cable

S103 BFOU(i) /E/M/H/H-M 250V (XLPE Insulation)

No. of pairs & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
1x2x0.75	11.2±1.5	156
2x2x0.75	17.0±1.5	311
3x2x0.75	18.0±1.5	369
4x2x0.75	19.3±1.5	428
5x2x0.75	21.0±2.0	499
7x2x0.75	22.6±2.0	598
10x2x0.75	28.1±2.0	822
12x2x0.75	29.1±2.0	921
14x2x0.75	30.5±2.5	1018
16x2x0.75	32.1±2.5	1131
19x2x0.75	34.3±2.5	1315
24x2x0.75	39.9±2.5	1638
27x2x0.75	40.8±3.0	1762
37x2x0.75	46.0±3.0	2293
1x2x1.0	11.9±1.5	176
2x2x1.0	17.9±1.5	349
3x2x1.0	18.7±1.5	408
4x2x1.0	20.4±2.0	487
5x2x1.0	21.9±2.0	559
7x2x1.0	23.8±2.0	688
10x2x1.0	29.8±2.0	952
12x2x1.0	30.7±2.5	1056
14x2x1.0	32.2±2.5	1184
16x2x1.0	34.5±2.5	1352
19x2x1.0	36.2±2.5	1519
24x2x1.0	42.1±3.0	1894
27x2x1.0	43.2±3.0	2063
37x2x1.0	48.8±3.0	2696
1x2x1.5	12.9±1.5	204
2x2x1.5	19.8±1.5	409
3x2x1.5	21.0±2.0	494
4x2x1.5	22.9±2.0	592
5x2x1.5	24.6±2.0	683
7x2x1.5	26.8±2.0	846
10x2x1.5	34.3±2.5	1219
12x2x1.5	35.4±2.5	1355
14x2x1.5	37.2±2.5	1521
16x2x1.5	39.1±2.5	1676
19x2x1.5	41.3±3.0	1909
24x2x1.5	48.8±3.0	2448
27x2x1.5	49.7±3.0	2641
37x2x1.5	55.6±3.5	3395
1x2x2.5	13.7±1.5	241
2x2x2.5	21.4±2.0	494
3x2x2.5	22.6±2.0	597
4x2x2.5	24.6±2.0	724
5x2x2.5	26.8±2.0	855
7x2x2.5	29.2±2.0	1073
10x2x2.5	37.5±2.5	1546
12x2x2.5	38.7±2.5	1734
14x2x2.5	40.7±3.0	1954
16x2x2.5	43.0±3.0	2183
19x2x2.5	45.3±3.0	2497
24x2x2.5	53.5±3.5	3171
27x2x2.5	54.7±3.5	3465
37x2x2.5	61.7±3.5	4546

No. of triples & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
1x3x0.75	11.9±1.5	179
2x3x0.75	18.5±1.5	367
3x3x0.75	19.4±1.5	430
4x3x0.75	21.1±2.0	513
5x3x0.75	23.0±2.0	601
7x3x0.75	24.8±2.0	728
10x3x0.75	31.3±2.5	1022
12x3x0.75	32.2±2.5	1135
14x3x0.75	34.3±2.5	1305
16x3x0.75	36.0±2.5	1434
19x3x0.75	38.0±2.5	1629
24x3x0.75	44.2±3.0	2031
27x3x0.75	45.3±3.0	2213
37x3x0.75	51.2±3.5	2889
1x3x1.0	12.3±1.5	197
2x3x1.0	19.2±1.5	403
3x3x1.0	20.5±2.0	489
4x3x1.0	22.2±2.0	578
5x3x1.0	24.0±2.0	678
7x3x1.0	26.1±2.0	841
10x3x1.0	32.9±2.5	1168
12x3x1.0	34.4±2.5	1351
14x3x1.0	36.0±2.5	1501
16x3x1.0	38.1±2.5	1675
19x3x1.0	40.1±3.0	1909
24x3x1.0	47.2±3.0	2425
27x3x1.0	48.4±3.0	2644
37x3x1.0	54.1±3.5	3405
1x3x1.5	13.4±1.5	233
2x3x1.5	21.6±2.0	490
3x3x1.5	23.0±2.0	599
4x3x1.5	25.0±2.0	714
5x3x1.5	27.1±2.0	841
7x3x1.5	29.6±2.0	1054
10x3x1.5	38.0±2.5	1516
12x3x1.5	39.1±2.5	1696
14x3x1.5	41.2±3.0	1911
16x3x1.5	43.5±3.0	2132
19x3x1.5	46.4±3.0	2480
24x3x1.5	54.3±3.5	3117
27x3x1.5	55.4±3.5	3379
37x3x1.5	62.7±3.5	4453
1x3x2.5	15.1±1.5	321
2x3x2.5	23.6±2.0	605
3x3x2.5	25.0±2.0	743
4x3x2.5	27.2±2.0	907
5x3x2.5	29.7±2.0	1078
7x3x2.5	32.4±2.5	1368
10x3x2.5	41.7±3.0	1967
12x3x2.5	43.2±3.0	2240
14x3x2.5	45.4±3.0	2533
16x3x2.5	48.5±3.0	2881
19x3x2.5	51.2±3.5	3303
24x3x2.5	60.4±3.5	4210
27x3x2.5	61.7±3.5	4582
37x3x2.5	69.3±3.5	5994

Halogen free fire resistant offshore communication and instrumentaion cable

Basic type： S104 BFOU(c)

NEK TS 606 oil / mud resistant property：

BFOU(c)	Minimun requirements oil resistant
BFOU(c) E	Enhanced oil resistant
BFOU(c) M	Mud resistant
BFOU(c) H	Hydraulic/gear oil resistant
BFOU(c) H-M	Hydraulic/gear oil resistant & mud resistant

Rated Voltage ： 250V

Operating temperature ： 90℃

Standards applied

NEK TS 606	– Design
IEC 60092-376	– Design
IEC 60228	– Conductor
IEC 60092-360	– Insulation & Sheath
IEC 60332-1	– Flame Retardant
IEC 60332-3-22	– Flame Retardant
IEC 60331	– Fire resistant
IEC 60754	– Halogen Free
IEC 61034	– Low Smoke

Application

Fixed installation for communication, instrumentation,control and alarm systems in both EX–and safe area. For installation in areas exposed to MUD and drilling/cleaning fluids.

Construction

Item	Code	Material／Description
Conductor		Stranded tinned annealed copper (STC), Class 2 or Class 5
Insulation	B	Mica glass tape(MGT)+EPR
		Mica glass tape(MGT)+XLPE
Twisting and collective screen	(c)	Color coded cores twisted pairs / triples,pairs / triples are laid up and collectively screened by copper backed polyester tape with a tinned copper drain wire Pairs / triples are identified by printed numbers
Inner covering	F	Extruded Halogen-free compound
Braid armor	O	Tinned copper wire braid (TCWB)
Outer sheath	U	Halogen-free thermoset compound type SHF2 as per "NEK TS 606 oil / mud resistant property"
Outer sheath color		Grey

Halogen free fire resistant offshore communication and instrumentaion cable

S104 BFOU(c) /E/M/H/H-M 250V (EPR Insulation)

No. of pairs & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
1x2x0.75	12.1±1.5	178
2x2x0.75	16.6±1.5	313
3x2x0.75	17.7±1.5	366
4x2x0.75	18.9±1.5	419
5x2x0.75	20.5±2.0	484
7x2x0.75	22.0±2.0	574
10x2x0.75	27.4±2.0	784
12x2x0.75	28.2±2.0	859
14x2x0.75	29.6±2.0	957
16x2x0.75	31.3±2.5	1061
19x2x0.75	32.8±2.5	1180
24x2x0.75	38.5±2.5	1502
27x2x0.75	39.2±2.5	1607
37x2x0.75	43.9±3.0	2039
1x2x1.0	12.5±1.5	194
2x2x1.0	17.6±1.5	350
3x2x1.0	18.4±1.5	401
4x2x1.0	19.8±1.5	463
5x2x1.0	21.4±2.0	537
7x2x1.0	23.3±2.0	651
10x2x1.0	28.9±2.0	890
12x2x1.0	29.7±2.0	978
14x2x1.0	31.3±2.5	1092
16x2x1.0	32.9±2.5	1197
19x2x1.0	35.0±2.5	1386
24x2x1.0	40.8±3.0	1722
27x2x1.0	41.6±3.0	1848
37x2x1.0	46.9±3.0	2395
1x2x1.5	13.5±1.5	224
2x2x1.5	19.2±1.5	410
3x2x1.5	20.5±2.0	489
4x2x1.5	22.0±2.0	569
5x2x1.5	23.9±2.0	662
7x2x1.5	26.0±2.0	811
10x2x1.5	32.6±2.5	1116
12x2x1.5	33.6±2.5	1237
14x2x1.5	35.7±2.5	1417
16x2x1.5	37.6±2.5	1573
19x2x1.5	39.7±2.5	1783
24x2x1.5	46.7±3.0	2261
27x2x1.5	47.6±3.0	2433
37x2x1.5	53.2±3.5	3109
1x2x2.5	15.1±1.5	301
2x2x2.5	20.8±2.0	493
3x2x2.5	21.9±2.0	587
4x2x2.5	23.9±2.0	705
5x2x2.5	26.0±2.0	827
7x2x2.5	28.1±2.0	1015
10x2x2.5	35.9±2.5	1452
12x2x2.5	37.2±2.5	1640
14x2x2.5	38.9±2.5	1823
16x2x2.5	41.1±3.0	2032
19x2x2.5	43.4±3.0	2317
24x2x2.5	51.3±3.5	2960
27x2x2.5	52.2±3.5	3201
37x2x2.5	58.9±3.5	4182

No. of triples & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
1x3x0.75	12.6±1.5	201
2x3x0.75	18.3±1.5	378
3x3x0.75	19.2±1.5	440
4x3x0.75	20.9±2.0	522
5x3x0.75	22.5±2.0	597
7x3x0.75	24.3±2.0	729
10x3x0.75	30.5±2.5	1004
12x3x0.75	31.6±2.5	1126
14x3x0.75	33.0±2.5	1243
16x3x0.75	35.3±2.5	1415
19x3x0.75	37.1±2.5	1602
24x3x0.75	43.3±3.0	1995
27x3x0.75	44.1±3.0	2147
37x3x0.75	49.7±3.0	2792
1x3x1.0	13.0±1.5	220
2x3x1.0	19.1±1.5	415
3x3x1.0	20.3±2.0	496
4x3x1.0	21.8±2.0	580
5x3x1.0	23.7±2.0	677
7x3x1.0	25.8±2.0	834
10x3x1.0	32.2±2.5	1148
12x3x1.0	33.2±2.5	1275
14x3x1.0	35.4±2.5	1464
16x3x1.0	37.3±2.5	1628
19x3x1.0	39.1±2.5	1829
24x3x1.0	46.3±3.0	2344
27x3x1.0	47.1±3.0	2525
37x3x1.0	52.7±3.5	3238
1x3x1.5	14.9±1.5	297
2x3x1.5	21.2±2.0	503
3x3x1.5	22.4±2.0	600
4x3x1.5	24.4±2.0	722
5x3x1.5	26.6±2.0	849
7x3x1.5	28.9±2.0	1053
10x3x1.5	37.0±2.5	1509
12x3x1.5	38.1±2.5	1682
14x3x1.5	40.0±3.0	1889
16x3x1.5	42.1±3.0	2087
19x3x1.5	44.4±3.0	2379
24x3x1.5	52.5±3.5	3040
27x3x1.5	53.8±3.5	3314
37x3x1.5	60.6±3.5	4327
1x3x2.5	15.7±1.5	349
2x3x2.5	23.0±2.0	614
3x3x2.5	24.2±2.0	748
4x3x2.5	26.5±2.0	910
5x3x2.5	28.9±2.0	1077
7x3x2.5	31.5±2.5	1358
10x3x2.5	40.4±3.0	1942
12x3x2.5	41.6±3.0	2188
14x3x2.5	43.7±3.0	2469
16x3x2.5	46.6±3.0	2804
19x3x2.5	49.2±3.0	3211
24x3x2.5	58.0±3.5	4086
27x3x2.5	59.4±3.5	4469
37x3x2.5	66.5±3.5	5801

Halogen free fire resistant offshore communication and instrumentaion cable

S104 BFOU(c) /E/M/H/H-M 250V (XLPE Insulation)

No. of pairs & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
1x2x0.75	11.2±1.5	156
2x2x0.75	15.6±1.5	279
3x2x0.75	16.3±1.5	315
4x2x0.75	17.7±1.5	367
5x2x0.75	18.9±1.5	414
7x2x0.75	20.5±2.0	494
10x2x0.75	25.2±2.0	662
12x2x0.75	26.0±2.0	731
14x2x0.75	27.1±2.0	799
16x2x0.75	28.6±2.0	883
19x2x0.75	30.0±2.0	978
24x2x0.75	35.3±2.5	1249
27x2x0.75	35.9±2.5	1330
37x2x0.75	40.0±2.5	1676
1x2x1.0	11.9±1.5	176
2x2x1.0	16.3±1.5	307
3x2x1.0	17.3±1.5	356
4x2x1.0	18.5±1.5	409
5x2x1.0	20.1±2.0	472
7x2x1.0	21.5±2.0	557
10x2x1.0	26.7±2.0	760
12x2x1.0	27.5±2.0	832
14x2x1.0	28.9±2.0	927
16x2x1.0	30.3±2.5	1011
19x2x1.0	31.9±2.5	1141
24x2x1.0	37.5±2.5	1453
27x2x1.0	38.2±2.5	1551
37x2x1.0	42.6±3.0	1965
1x2x1.5	12.9±1.5	204
2x2x1.5	18.2±1.5	370
3x2x1.5	19.1±1.5	428
4x2x1.5	20.8±2.0	506
5x2x1.5	22.4±2.0	576
7x2x1.5	24.2±2.0	700
10x2x1.5	30.3±2.5	961
12x2x1.5	31.4±2.5	1074
14x2x1.5	32.9±2.5	1186
16x2x1.5	35.0±2.5	1347
19x2x1.5	37.0±2.5	1524
24x2x1.5	43.1±3.0	1893
27x2x1.5	43.9±3.0	2033
37x2x1.5	49.5±3.0	2636
1x2x2.5	13.7±1.5	241
2x2x2.5	19.6±1.5	441
3x2x2.5	20.8±2.0	532
4x2x2.5	22.5±2.0	626
5x2x2.5	24.4±2.0	734
7x2x2.5	26.5±2.0	906
10x2x2.5	33.3±2.5	1251
12x2x2.5	34.8±2.5	1441
14x2x2.5	36.5±2.5	1602
16x2x2.5	38.5±2.5	1782
19x2x2.5	40.6±3.0	2028
24x2x2.5	47.7±3.0	2572
27x2x2.5	48.9±3.0	2801
37x2x2.5	54.7±3.5	3603

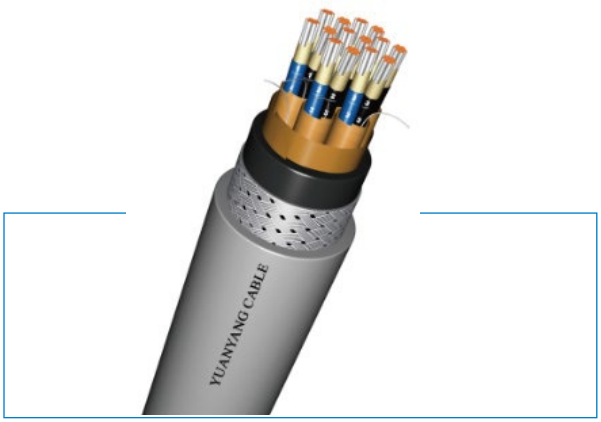
No. of triples & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
1x3x0.75	11.9±1.5	179
2x3x0.75	17.0±1.5	327
3x3x0.75	18.0±1.5	385
4x3x0.75	19.2±1.5	442
5x3x0.75	20.9±2.0	514
7x3x0.75	22.5±2.0	612
10x3x0.75	27.9±2.0	837
12x3x0.75	28.9±2.0	934
14x3x0.75	30.2±2.5	1027
16x3x0.75	31.9±2.5	1142
19x3x0.75	33.4±2.5	1274
24x3x0.75	39.3±2.5	1623
27x3x0.75	40.2±3.0	1759
37x3x0.75	44.8±3.0	2218
1x3x1.0	12.3±1.5	197
2x3x1.0	17.9±1.5	369
3x3x1.0	18.8±1.5	429
4x3x1.0	20.4±2.0	506
5x3x1.0	21.9±2.0	579
7x3x1.0	23.8±2.0	707
10x3x1.0	29.6±2.0	970
12x3x1.0	30.6±2.5	1074
14x3x1.0	32.1±2.5	1201
16x3x1.0	34.3±2.5	1366
19x3x1.0	36.0±2.5	1530
24x3x1.0	41.9±3.0	1905
27x3x1.0	43.0±3.0	2070
37x3x1.0	48.4±3.0	2689
1x3x1.5	13.4±1.5	233
2x3x1.5	20.1±2.0	451
3x3x1.5	21.1±2.0	532
4x3x1.5	23.0±2.0	635
5x3x1.5	24.8±2.0	730
7x3x1.5	26.9±2.0	902
10x3x1.5	34.4±2.5	1293
12x3x1.5	35.5±2.5	1436
14x3x1.5	37.2±2.5	1608
16x3x1.5	39.1±2.5	1771
19x3x1.5	41.3±3.0	2015
24x3x1.5	48.8±3.0	2577
27x3x1.5	49.7±3.0	2780
37x3x1.5	55.6±3.5	3571
1x3x2.5	15.1±1.5	321
2x3x2.5	21.6±2.0	549
3x3x2.5	23.0±2.0	673
4x3x2.5	24.9±2.0	803
5x3x2.5	27.1±2.0	949
7x3x2.5	29.5±2.0	1191
10x3x2.5	37.8±2.5	1704
12x3x2.5	38.9±2.5	1914
14x3x2.5	41.0±3.0	2160
16x3x2.5	43.3±3.0	2413
19x3x2.5	46.1±3.0	2804
24x3x2.5	53.9±3.5	3519
27x3x2.5	55.0±3.5	3825
37x3x2.5	62.2±3.5	5047

Halogen free fire resistant offshore communication and instrumentaion cable

Basic type ： BFOU(i&c)

NEK TS 606 oil / mud resistant property :

BFOU(i&c)	Minimun requirements oil resistant
BFOU(i&c) E	Enhanced oil resistant
BFOU(i&c) M	Mud resistant
BFOU(i&c) H	Hydraulic/gear oil resistant
BFOU(i&c) H-M	Hydraulic/gear oil resistant & mud resistant



Rated Voltage ： 250V

Operating temperature ： 90℃

Standards applied

NEK TS 606	– Design
IEC 60092-376	– Design
IEC 60228	– Conductor
IEC 60092-360	– Insulation & Sheath
IEC 60332-1	– Flame Retardant
IEC 60332-3-22	– Flame Retardant
IEC 60331	– Fire resistant
IEC 60754	– Halogen Free
IEC 61034	– Low Smoke

Application

Fixed installation for communication, instrumentation,control and alarm systems in both EX–and safe area. For installation in areas exposed to MUD and drilling/cleaning fluids.

Construction

Item	Code	Material／Description
Conductor		Stranded tinned annealed copper (STC), Class 2 or Class 5
Insulation	B	Mica glass tape(MGT)+EPR
		Mica glass tape(MGT)+XLPE
Individual & Collective screen	(i&c)	Color coded cores twisted pairs / triples, each pairs / triples are screened by copper backed polyester tape with a tinned copper drain wire and wrapped with polyester tape. Pairs / triples are identified by printed numbers
		Pairs/triples are laid up and collectively screened by copper backed polyester tape with a tinned copper drain wire
Inner covering	F	Extruded Halogen-free compound
Braid armor	O	Tinned copper wire braid (TCWB)
Outer sheath	U	Halogen-free thermoset compound type SHF2 as per "NEK TS 606 oil / mud resistant property"
Outer sheath color		Grey

Halogen free fire resistant offshore communication and instrumentaion cable

BFOU(i&c) /E/M/H/H-M 250V (EPR Insulation)

No. of pairs & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
2x2x0.75	18.4±1.5	378
3x2x0.75	19.3±1.5	439
4x2x0.75	21.1±2.0	522
5x2x0.75	22.9±2.0	606
7x2x0.75	24.6±2.0	727
10x2x0.75	30.8±2.5	1000
12x2x0.75	31.9±2.5	1120
14x2x0.75	33.3±2.5	1234
16x2x0.75	35.6±2.5	1405
19x2x0.75	37.5±2.5	1591
24x2x0.75	43.7±3.0	1978
27x2x0.75	44.5±3.0	2127
37x2x0.75	50.2±3.5	2764
2x2x1.0	19.1±1.5	413
3x2x1.0	20.4±2.0	494
4x2x1.0	21.9±2.0	577
5x2x1.0	23.9±2.0	675
7x2x1.0	25.9±2.0	827
10x2x1.0	32.4±2.5	1140
12x2x1.0	33.4±2.5	1264
14x2x1.0	35.6±2.5	1450
16x2x1.0	37.5±2.5	1612
19x2x1.0	39.4±2.5	1811
24x2x1.0	46.5±3.0	2317
27x2x1.0	47.4±3.0	2497
37x2x1.0	53.0±3.5	3198
2x2x1.5	21.2±2.0	489
3x2x1.5	22.4±2.0	580
4x2x1.5	24.4±2.0	695
5x2x1.5	26.6±2.0	815
7x2x1.5	28.9±2.0	1006
10x2x1.5	37.0±2.5	1441
12x2x1.5	38.1±2.5	1600
14x2x1.5	40.0±2.5	1794
16x2x1.5	42.1±3.0	1979
19x2x1.5	44.4±3.0	2250
24x2x1.5	52.5±3.5	2877
27x2x1.5	53.8±3.5	3131
37x2x1.5	60.5±3.5	4073
2x2x2.5	23.0±2.0	584
3x2x2.5	24.1±2.0	701
4x2x2.5	26.4±2.0	848
5x2x2.5	28.8±2.0	1000
7x2x2.5	31.3±2.5	1249
10x2x2.5	40.1±3.0	1788
12x2x2.5	41.4±3.0	2004
14x2x2.5	43.6±3.0	2257
16x2x2.5	46.4±3.0	2559
19x2x2.5	49.0±3.0	2922
24x2x2.5	57.8±3.5	3721
27x2x2.5	59.0±3.5	4033
37x2x2.5	66.1±3.5	5239

No. of triples & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
2x3x0.75	20.3±2.0	450
3x3x0.75	21.3±2.0	529
4x3x0.75	23.2±2.0	631
5x3x0.75	25.1±2.0	727
7x3x0.75	27.2±2.0	896
10x3x0.75	34.8±2.5	1285
12x3x0.75	35.9±2.5	1425
14x3x0.75	37.8±2.5	1597
16x3x0.75	39.8±2.5	1775
19x3x0.75	41.8±3.0	1997
24x3x0.75	49.4±3.0	2555
27x3x0.75	50.3±3.5	2754
37x3x0.75	56.6±3.5	3558
2x3x1.0	21.0±2.0	492
3x3x1.0	22.2±2.0	585
4x3x1.0	24.2±2.0	703
5x3x1.0	26.3±2.0	824
7x3x1.0	28.6±2.0	1021
10x3x1.0	36.4±2.5	1446
12x3x1.0	37.8±2.5	1631
14x3x1.0	39.4±2.5	1810
16x3x1.0	41.7±3.0	2019
19x3x1.0	44.0±3.0	2300
24x3x1.0	51.9±3.5	2936
27x3x1.0	52.9±3.5	3175
37x3x1.0	59.9±3.5	4171
2x3x1.5	23.4±2.0	591
3x3x1.5	24.6±2.0	709
4x3x1.5	27.0±2.0	858
5x3x1.5	29.4±2.0	1010
7x3x1.5	32.0±2.5	1261
10x3x1.5	41.1±3.0	1806
12x3x1.5	42.6±3.0	2043
14x3x1.5	44.6±3.0	2277
16x3x1.5	47.5±3.0	2583
19x3x1.5	50.1±3.5	2946
24x3x1.5	59.4±3.5	3779
27x3x1.5	60.6±3.5	4094
37x3x1.5	68.1±3.5	5312
2x3x2.5	25.0±2.0	699
3x3x2.5	26.6±2.0	870
4x3x2.5	29.1±2.0	1061
5x3x2.5	31.7±2.5	1256
7x3x2.5	35.0±2.5	1622
10x3x2.5	44.4±3.0	2274
12x3x2.5	46.5±3.0	2632
14x3x2.5	48.9±3.0	2970
16x3x2.5	51.7±3.5	3321
19x3x2.5	54.5±3.5	3805
24x3x2.5	64.4±3.5	4839
27x3x2.5	65.8±3.5	5295
37x3x2.5	73.9±3.5	6916

Halogen free fire resistant offshore communication and instrumentaion cable

BFOU(i&c) /E/M/H/H-M 250V (XLPE Insulation)

No. of pairs & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
2x2x0.75	17.4±1.5	342
3x2x0.75	18.2±1.5	393
4x2x0.75	19.6±1.5	454
5x2x0.75	21.2±2.0	527
7x2x0.75	23.0±2.0	639
10x2x0.75	28.5±2.0	873
12x2x0.75	29.3±2.0	960
14x2x0.75	30.7±2.5	1059
16x2x0.75	32.3±2.5	1175
19x2x0.75	34.5±2.5	1361
24x2x0.75	40.1±3.0	1691
27x2x0.75	41.0±3.0	1816
37x2x0.75	46.2±3.0	2353
2x2x1.0	18.1±1.5	376
3x2x1.0	18.9±1.5	435
4x2x1.0	20.6±2.0	517
5x2x1.0	22.2±2.0	591
7x2x1.0	24.0±2.0	722
10x2x1.0	30.1±2.5	994
12x2x1.0	30.9±2.5	1099
14x2x1.0	32.4±2.5	1230
16x2x1.0	34.7±2.5	1400
19x2x1.0	36.4±2.5	1569
24x2x1.0	42.5±3.0	1972
27x2x1.0	43.4±3.0	2122
37x2x1.0	49.0±3.0	2763
2x2x1.5	20.2±2.0	448
3x2x1.5	21.2±2.0	525
4x2x1.5	23.1±2.0	626
5x2x1.5	24.9±2.0	718
7x2x1.5	27.0±2.0	884
10x2x1.5	34.5±2.5	1267
12x2x1.5	35.6±2.5	1404
14x2x1.5	37.4±2.5	1573
16x2x1.5	39.3±2.5	1730
19x2x1.5	41.5±3.0	1966
24x2x1.5	49.0±3.0	2514
27x2x1.5	49.9±3.0	2709
37x2x1.5	55.8±3.5	3471
2x2x2.5	21.6±2.0	528
3x2x2.5	23.0±2.0	642
4x2x2.5	24.9±2.0	762
5x2x2.5	27.0±2.0	895
7x2x2.5	29.4±2.0	1117
10x2x2.5	37.8±2.5	1600
12x2x2.5	38.9±2.5	1790
14x2x2.5	40.9±3.0	2012
16x2x2.5	43.2±3.0	2244
19x2x2.5	46.0±3.0	2604
24x2x2.5	53.9±3.5	3270
27x2x2.5	54.9±3.5	3542
37x2x2.5	61.9±3.5	4632

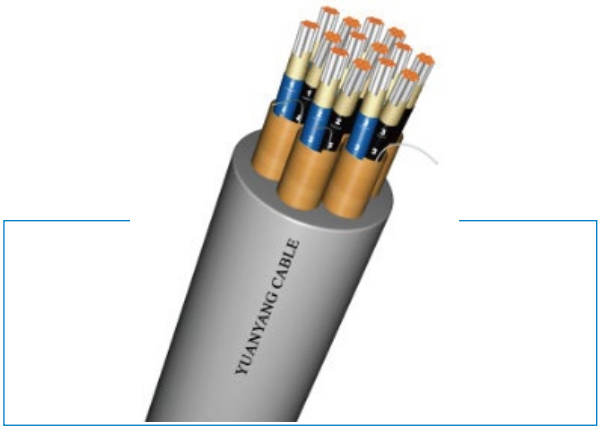
No. of triples & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
2x3x0.75	18.7±1.5	392
3x3x0.75	19.7±1.5	457
4x3x0.75	21.3±2.0	541
5x3x0.75	23.2±2.0	632
7x3x0.75	25.0±2.0	761
10x3x0.75	31.5±2.5	1064
12x3x0.75	32.4±2.5	1178
14x3x0.75	34.5±2.5	1350
16x3x0.75	36.2±2.5	1482
19x3x0.75	38.2±2.5	1680
24x3x0.75	44.4±3.0	2090
27x3x0.75	46.0±3.0	2316
37x3x0.75	51.4±3.5	2957
2x3x1.0	19.4±1.5	431
3x3x1.0	20.7±2.0	519
4x3x1.0	22.4±2.0	610
5x3x1.0	24.2±2.0	712
7x3x1.0	26.3±2.0	879
10x3x1.0	33.1±2.5	1215
12x3x1.0	34.6±2.5	1399
14x3x1.0	36.2±2.5	1551
16x3x1.0	38.3±2.5	1728
19x3x1.0	40.4±3.0	1964
24x3x1.0	47.4±3.0	2490
27x3x1.0	48.6±3.0	2710
37x3x1.0	54.3±3.5	3479
2x3x1.5	21.8±2.0	522
3x3x1.5	23.2±2.0	633
4x3x1.5	25.2±2.0	750
5x3x1.5	27.4±2.0	880
7x3x1.5	29.8±2.0	1096
10x3x1.5	38.2±2.5	1569
12x3x1.5	39.3±2.5	1751
14x3x1.5	41.4±3.0	1968
16x3x1.5	43.7±3.0	2192
19x3x1.5	46.6±3.0	2543
24x3x1.5	54.5±3.5	3191
27x3x1.5	55.6±3.5	3454
37x3x1.5	62.9±3.5	4538
2x3x2.5	23.8±2.0	641
3x3x2.5	25.2±2.0	781
4x3x2.5	27.5±2.0	948
5x3x2.5	30.0±2.0	1122
7x3x2.5	32.7±2.5	1415
10x3x2.5	41.9±3.0	2026
12x3x2.5	43.4±3.0	2301
14x3x2.5	46.1±3.0	2640
16x3x2.5	48.7±3.0	2949
19x3x2.5	51.4±3.5	3375
24x3x2.5	60.6±3.5	4294
27x3x2.5	61.9±3.5	4668
37x3x2.5	69.5±3.5	6089

Halogen free fire resistant offshore communication and instrumentaion cable

Basic type ： S107 BU(i)

NEK TS 606 oil / mud resistant property：

BU(i)	Minimun requirements oil resistant
BU(i) E	Enhanced oil resistant
BU(i) M	Mud resistant
BU(i) H	Hydraulic/gear oil resistant
BU(i) H-M	Hydraulic/gear oil resistant & mud resistant



Rated Voltage ： 250V

Operating temperature ： 90℃

Standards applied

NEK TS 606	– Design
IEC 60092-376	– Design
IEC 60228	– Conductor
IEC 60092-360	– Insulation & Sheath
IEC 60332-1	– Flame Retardant
IEC 60332-3-22	– Flame Retardant
IEC 60331	– Fire resistant
IEC 60754	– Halogen Free
IEC 61034	– Low Smoke

Application

Fixed installation for communication, instrumentation,control and alarm systems in both EX–and safe area. For installation in areas exposed to MUD and drilling/cleaning fluids.

Construction

Item	Code	Material／Description
Conductor		Stranded tinned annealed copper (STC), Class 2 or Class 5
Insulation	B	Mica glass tape(MGT)+EPR
		Mica glass tape(MGT)+XLPE
Twisting and individual screen	(i)	Color coded cores twisted pairs / triples, each pairs / triples are screened by copper backed polyester tape with a tinned copper drain wire and wrapped with polyester tape Pairs / triples are identified by printed numbers.
Outer sheath	U	Halogen-free thermoset compound type SHF2 as per "NEK TS 606 oil / mud resistant property"
Outer sheath color		Grey

Halogen free fire resistant offshore communication and instrumentaion cable

S107 BU(i) /E/M/H/H-M 250V (EPR Insulation)

No. of pairs & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
1x2x0.75	8.5±1.0	77
2x2x0.75	14.1±1.5	156
3x2x0.75	15.3±1.5	210
4x2x0.75	16.8±1.5	262
5x2x0.75	18.6±1.5	322
7x2x0.75	20.6±2.0	428
10x2x0.75	26.7±2.0	619
12x2x0.75	27.7±2.0	712
14x2x0.75	29.2±2.0	821
16x2x0.75	30.9±2.5	920
19x2x0.75	32.9±2.5	1077
24x2x0.75	39.0±2.5	1375
27x2x0.75	40.0±2.5	1529
37x2x0.75	45.3±3.0	2046
1x2x1.0	9.2±1.0	92
2x2x1.0	15.1±1.5	185
3x2x1.0	16.1±1.5	243
4x2x1.0	17.9±1.5	312
5x2x1.0	19.7±1.5	375
7x2x1.0	21.6±2.0	500
10x2x1.0	28.2±2.0	722
12x2x1.0	29.3±2.0	846
14x2x1.0	30.9±2.5	963
16x2x1.0	32.9±2.5	1096
19x2x1.0	34.9±2.5	1284
24x2x1.0	41.4±3.0	1635
27x2x1.0	42.5±3.0	1819
37x2x1.0	48.2±3.0	2436
1x2x1.5	10.2±1.5	112
2x2x1.5	17.0±1.5	226
3x2x1.5	18.3±1.5	308
4x2x1.5	20.4±2.0	397
5x2x1.5	22.4±2.0	477
7x2x1.5	24.6±2.0	637
10x2x1.5	32.3±2.5	933
12x2x1.5	33.4±2.5	1077
14x2x1.5	35.4±2.5	1242
16x2x1.5	37.6±2.5	1413
19x2x1.5	39.9±2.5	1652
24x2x1.5	47.4±3.0	2101
27x2x1.5	48.7±3.0	2336
37x2x1.5	55.0±3.5	3125
1x2x2.5	11.0±1.5	142
2x2x2.5	18.7±1.5	295
3x2x2.5	20.1±2.0	405
4x2x2.5	22.2±2.0	512
5x2x2.5	24.5±2.0	631
7x2x2.5	27.0±2.0	845
10x2x2.5	35.5±2.5	1232
12x2x2.5	36.9±2.5	1446
14x2x2.5	38.9±2.5	1651
16x2x2.5	41.3±3.0	1876
19x2x2.5	43.9±3.0	2199
24x2x2.5	52.3±3.5	2816
27x2x2.5	53.5±3.5	3108
37x2x2.5	60.6±3.5	4197

No. of triples & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
1x3x0.75	9.3±1.0	98
2x3x0.75	16.0±1.5	202
3x3x0.75	17.3±1.5	274
4x3x0.75	18.9±1.5	343
5x3x0.75	21.0±2.0	422
7x3x0.75	23.2±2.0	562
10x3x0.75	30.2±2.5	811
12x3x0.75	31.4±2.5	950
14x3x0.75	33.1±2.5	1080
16x3x0.75	35.2±2.5	1228
19x3x0.75	37.3±2.5	1437
24x3x0.75	44.3±3.0	1830
27x3x0.75	45.4±3.0	2034
37x3x0.75	51.5±3.5	2722
1x3x1.0	9.7±1.0	113
2x3x1.0	16.7±1.5	231
3x3x1.0	18.1±1.5	317
4x3x1.0	20.2±2.0	408
5x3x1.0	22.0±2.0	491
7x3x1.0	24.3±2.0	657
10x3x1.0	31.9±2.5	961
12x3x1.0	33.1±2.5	1112
14x3x1.0	34.9±2.5	1283
16x3x1.0	37.2±2.5	1459
19x3x1.0	39.3±2.5	1690
24x3x1.0	46.8±3.0	2170
27x3x1.0	47.8±3.0	2392
37x3x1.0	54.4±3.5	3234
1x3x1.5	10.8±1.5	141
2x3x1.5	19.1±1.5	298
3x3x1.5	20.6±2.0	408
4x3x1.5	23.0±2.0	526
5x3x1.5	25.2±2.0	634
7x3x1.5	27.8±2.0	849
10x3x1.5	36.4±2.5	1238
12x3x1.5	38.0±2.5	1453
14x3x1.5	40.1±3.0	1676
16x3x1.5	42.6±3.0	1903
19x3x1.5	45.0±3.0	2207
24x3x1.5	53.9±3.5	2851
27x3x1.5	55.1±3.5	3144
37x3x1.5	62.6±3.5	4240
1x3x2.5	11.9±1.5	187
2x3x2.5	20.9±2.0	391
3x3x2.5	22.4±2.0	531
4x3x2.5	24.9±2.0	687
5x3x2.5	27.5±2.0	847
7x3x2.5	30.4±2.5	1141
10x3x2.5	39.9±2.5	1673
12x3x2.5	41.4±3.0	1948
14x3x2.5	43.8±3.0	2249
16x3x2.5	46.6±3.0	2557
19x3x2.5	49.4±3.0	2997
24x3x2.5	58.9±3.5	3826
27x3x2.5	60.3±3.5	4258
37x3x2.5	68.4±3.5	5748

Halogen free fire resistant offshore communication and instrumentaion cable

S107 BU(i) /E/M/H/H-M 250V (XLPE Insulation)

No. of pairs & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
1x2x0.75	7.9±1.0	66
2x2x0.75	13.1±1.5	134
3x2x0.75	13.9±1.5	174
4x2x0.75	15.5±1.5	223
5x2x0.75	17.0±1.5	266
7x2x0.75	18.7±1.5	354
10x2x0.75	24.2±2.0	513
12x2x0.75	25.1±2.0	588
14x2x0.75	26.6±2.0	680
16x2x0.75	28.1±2.0	761
19x2x0.75	29.8±2.0	891
24x2x0.75	35.5±2.5	1140
27x2x0.75	36.3±2.5	1252
37x2x0.75	41.1±3.0	1678
1x2x1.0	8.3±1.0	76
2x2x1.0	13.8±1.5	155
3x2x1.0	14.9±1.5	210
4x2x1.0	16.3±1.5	262
5x2x1.0	18.1±1.5	323
7x2x1.0	19.8±1.5	421
10x2x1.0	26.0±2.0	622
12x2x1.0	26.8±2.0	715
14x2x1.0	28.2±2.0	812
16x2x1.0	30.1±2.5	926
19x2x1.0	31.9±2.5	1084
24x2x1.0	37.9±2.5	1383
27x2x1.0	38.7±2.5	1522
37x2x1.0	43.9±3.0	2042
1x2x1.5	9.6±1.0	99
2x2x1.5	15.9±1.5	199
3x2x1.5	17.0±1.5	262
4x2x1.5	18.8±1.5	337
5x2x1.5	20.8±2.0	414
7x2x1.5	23.0±2.0	551
10x2x1.5	29.8±2.0	795
12x2x1.5	30.9±2.5	917
14x2x1.5	32.8±2.5	1059
16x2x1.5	34.8±2.5	1204
19x2x1.5	37.0±2.5	1409
24x2x1.5	43.9±3.0	1793
27x2x1.5	44.8±3.0	1973
37x2x1.5	51.0±3.5	2667
1x2x2.5	10.4±1.5	127
2x2x2.5	17.6±1.5	265
3x2x2.5	18.7±1.5	353
4x2x2.5	20.8±2.0	456
5x2x2.5	23.0±2.0	561
7x2x2.5	25.2±2.0	739
10x2x2.5	33.1±2.5	1080
12x2x2.5	34.4±2.5	1267
14x2x2.5	36.2±2.5	1446
16x2x2.5	38.5±2.5	1644
19x2x2.5	40.9±3.0	1927
24x2x2.5	48.8±3.0	2472
27x2x2.5	49.8±3.0	2727
37x2x2.5	56.6±3.5	3685

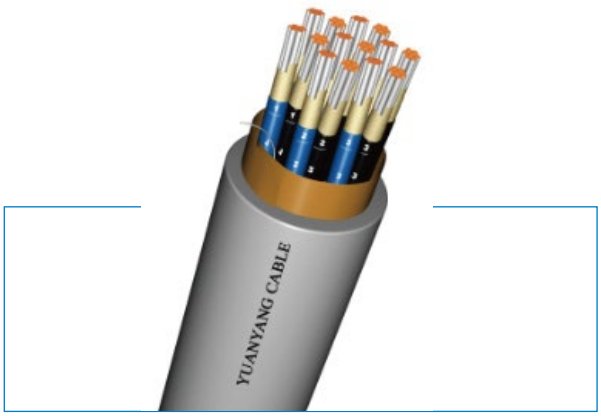
No. of triples & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
1x3x0.75	8.3±1.0	80
2x3x0.75	14.7±1.5	151
3x3x0.75	15.6±1.5	190
4x3x0.75	17.3±1.5	239
5x3x0.75	18.9±1.5	283
7x3x0.75	20.9±2.0	369
10x3x0.75	27.2±2.0	530
12x3x0.75	28.2±2.0	604
14x3x0.75	29.8±2.0	693
16x3x0.75	31.7±2.5	774
19x3x0.75	33.5±2.5	901
24x3x0.75	39.9±2.5	1149
27x3x0.75	40.9±3.0	1257
37x3x0.75	46.3±3.0	1673
1x3x1.0	8.9±1.0	97
2x3x1.0	15.4±1.5	175
3x3x1.0	16.4±1.5	230
4x3x1.0	18.3±1.5	282
5x3x1.0	20.2±2.0	343
7x3x1.0	22.0±2.0	440
10x3x1.0	29.0±2.0	642
12x3x1.0	30.0±2.0	735
14x3x1.0	31.7±2.5	831
16x3x1.0	33.6±2.5	942
19x3x1.0	35.7±2.5	1098
24x3x1.0	42.5±3.0	1397
27x3x1.0	43.5±3.0	1532
37x3x1.0	49.2±3.0	2041
1x3x1.5	10.1±1.5	122
2x3x1.5	17.8±1.5	231
3x3x1.5	18.9±1.5	306
4x3x1.5	21.1±2.0	378
5x3x1.5	23.3±2.0	461
7x3x1.5	25.8±2.0	606
10x3x1.5	33.5±2.5	868
12x3x1.5	34.8±2.5	997
14x3x1.5	36.9±2.5	1146
16x3x1.5	39.0±2.5	1299
19x3x1.5	41.5±3.0	1515
24x3x1.5	49.4±3.0	1923
27x3x1.5	50.5±3.5	2113
37x3x1.5	57.4±3.5	2842
1x3x2.5	11.0±1.5	162
2x3x2.5	19.6±1.5	316
3x3x2.5	21.1±2.0	417
4x3x2.5	23.4±2.0	532
5x3x2.5	25.9±2.0	651
7x3x2.5	28.6±2.0	865
10x3x2.5	37.4±2.5	1235
12x3x2.5	38.7±2.5	1445
14x3x2.5	41.0±3.0	1648
16x3x2.5	43.6±3.0	1870
19x3x2.5	46.3±3.0	2188
24x3x2.5	55.1±3.5	2793
27x3x2.5	56.6±3.5	3082
37x3x2.5	64.0±3.5	4153

Halogen free fire resistant offshore communication and instrumentaion cable

Basic type：S108 BU(c)

NEK TS 606 oil / mud resistant property：

BU(c)	Minimun requirements oil resistant
BU(c) E	Enhanced oil resistant
BU(c) M	Mud resistant
BU(c) H	Hydraulic/gear oil resistant
BU(c) H-M	Hydraulic/gear oil resistant & mud resistant



Rated Voltage ：250V

Operating temperature ：90℃

Standards applied

NEK TS 606	– Design
IEC 60092-376	– Design
IEC 60228	– Conductor
IEC 60092-360	– Insulation & Sheath
IEC 60332-1	– Flame Retardant
IEC 60332-3-22	– Flame Retardant
IEC 60331	– Fire resistant
IEC 60754	– Halogen Free
IEC 61034	– Low Smoke

Application

Fixed installation for communication, instrumentation,control and alarm systems in both EX–and safe area. For installation in areas exposed to MUD and drilling/cleaning fluids.

Construction

Item	Code	Material／Description
Conductor		Stranded tinned annealed copper (STC), Class 2 or Class 5
Insulation	B	Mica glass tape(MGT)+EPR
		Mica glass tape(MGT)+XLPE
Twisting and collective screen	(c)	Color coded cores twisted pairs / triples,pairs / triples are laid up and collectively screened by copper backed polyester tape with a tinned copper drain wire Pairs / triples are identified by printed numbers
Outer sheath	U	Halogen-free thermoset compound type SHF2 as per "NEK TS 606 oil / mud resistant property"
Outer sheath color		Grey

Halogen free fire resistant offshore communication and instrumentaion cable

S108 BU(c) /E/M/H/H-M 250V (EPR Insulation)

No. of pairs & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
1x2x0.75	8.5±1.0	77
2x2x0.75	12.8±1.5	140
3x2x0.75	13.6±1.5	175
4x2x0.75	15.1±1.5	219
5x2x0.75	16.4±1.5	258
7x2x0.75	18.2±1.5	336
10x2x0.75	23.5±2.0	483
12x2x0.75	24.3±2.0	549
14x2x0.75	25.8±2.0	629
16x2x0.75	27.2±2.0	701
19x2x0.75	28.9±2.0	815
24x2x0.75	34.2±2.5	1039
27x2x0.75	34.9±2.5	1134
37x2x0.75	39.4±2.5	1489
1x2x1.0	9.2±1.0	92
2x2x1.0	13.5±1.5	160
3x2x1.0	14.6±1.5	207
4x2x1.0	15.9±1.5	253
5x2x1.0	17.6±1.5	307
7x2x1.0	19.2±1.5	391
10x2x1.0	24.9±2.0	560
12x2x1.0	25.9±2.0	649
14x2x1.0	27.2±2.0	733
16x2x1.0	29.0±2.0	831
19x2x1.0	30.6±2.5	952
24x2x1.0	36.3±2.5	1213
27x2x1.0	37.3±2.5	1345
37x2x1.0	42.0±3.0	1767
1x2x1.5	10.2±1.5	112
2x2x1.5	15.4±1.5	206
3x2x1.5	16.4±1.5	263
4x2x1.5	18.2±1.5	332
5x2x1.5	20.1±2.0	403
7x2x1.5	21.9±2.0	517
10x2x1.5	28.7±2.0	754
12x2x1.5	29.7±2.0	862
14x2x1.5	31.4±2.5	989
16x2x1.5	33.2±2.5	1105
19x2x1.5	35.3±2.5	1288
24x2x1.5	41.8±3.0	1636
27x2x1.5	43.0±3.0	1814
37x2x1.5	48.6±3.0	2413
1x2x2.5	11.0±1.5	142
2x2x2.5	16.7±1.5	263
3x2x2.5	18.1±1.5	351
4x2x2.5	20.1±2.0	446
5x2x2.5	21.9±2.0	533
7x2x2.5	24.2±2.0	705
10x2x2.5	31.6±2.5	1022
12x2x2.5	32.8±2.5	1177
14x2x2.5	34.6±2.5	1353
16x2x2.5	36.6±2.5	1518
19x2x2.5	38.9±2.5	1773
24x2x2.5	46.4±3.0	2270
27x2x2.5	47.3±3.0	2498
37x2x2.5	53.8±3.5	3361

No. of triples & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
1x3x0.75	9.3±1.0	98
2x3x0.75	14.5±1.5	186
3x3x0.75	15.4±1.5	236
4x3x0.75	16.8±1.5	291
5x3x0.75	18.6±1.5	354
7x3x0.75	20.5±2.0	464
10x3x0.75	26.6±2.0	666
12x3x0.75	27.6±2.0	762
14x3x0.75	29.1±2.0	876
16x3x0.75	30.8±2.5	979
19x3x0.75	32.7±2.5	1141
24x3x0.75	38.8±2.5	1452
27x3x0.75	39.8±2.5	1611
37x3x0.75	44.8±3.0	2124
1x3x1.0	9.7±1.0	113
2x3x1.0	15.3±1.5	213
3x3x1.0	16.2±1.5	273
4x3x1.0	18.0±1.5	345
5x3x1.0	19.7±1.5	412
7x3x1.0	21.7±2.0	542
10x3x1.0	28.2±2.0	777
12x3x1.0	29.3±2.0	905
14x3x1.0	30.9±2.5	1026
16x3x1.0	32.9±2.5	1164
19x3x1.0	34.8±2.5	1357
24x3x1.0	41.4±3.0	1725
27x3x1.0	42.2±3.0	1894
37x3x1.0	47.8±3.0	2528
1x3x1.5	10.8±1.5	141
2x3x1.5	17.4±1.5	276
3x3x1.5	18.5±1.5	359
4x3x1.5	20.6±2.0	456
5x3x1.5	22.6±2.0	547
7x3x1.5	24.9±2.0	723
10x3x1.5	32.6±2.5	1050
12x3x1.5	33.6±2.5	1208
14x3x1.5	35.6±2.5	1390
16x3x1.5	37.9±2.5	1577
19x3x1.5	40.1±3.0	1839
24x3x1.5	47.6±3.0	2333
27x3x1.5	48.9±3.0	2590
37x3x1.5	55.3±3.5	3456
1x3x2.5	11.9±1.5	187
2x3x2.5	18.9±1.5	358
3x3x2.5	20.4±2.0	484
4x3x2.5	22.5±2.0	609
5x3x2.5	24.9±2.0	746
7x3x2.5	27.5±2.0	995
10x3x2.5	35.9±2.5	1438
12x3x2.5	37.3±2.5	1684
14x3x2.5	39.2±2.5	1921
16x3x2.5	41.7±3.0	2180
19x3x2.5	44.3±3.0	2551
24x3x2.5	52.7±3.5	3254
27x3x2.5	54.1±3.5	3618
37x3x2.5	61.2±3.5	4843

Halogen free fire resistant offshore communication and instrumentaion cable

S108 BU(c) /E/M/H/H-M 250V (XLPE Insulation)

No. of pairs & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
1x2x0.75	7.9±1.0	66
2x2x0.75	11.8±1.5	119
3x2x0.75	12.5±1.5	146
4x2x0.75	13.6±1.5	176
5x2x0.75	15.1±1.5	214
7x2x0.75	16.4±1.5	268
10x2x0.75	21.3±2.0	387
12x2x0.75	21.9±2.0	437
14x2x0.75	23.3±2.0	501
16x2x0.75	24.5±2.0	556
19x2x0.75	26.1±2.0	647
24x2x0.75	30.8±2.5	813
27x2x0.75	31.6±2.5	900
37x2x0.75	35.6±2.5	1176
1x2x1.0	8.3±1.0	76
2x2x1.0	12.5±1.5	138
3x2x1.0	13.2±1.5	171
4x2x1.0	14.7±1.5	214
5x2x1.0	16.0±1.5	251
7x2x1.0	17.7±1.5	326
10x2x1.0	22.9±2.0	467
12x2x1.0	23.6±2.0	530
14x2x1.0	24.9±2.0	596
16x2x1.0	26.4±2.0	676
19x2x1.0	27.9±2.0	773
24x2x1.0	33.1±2.5	986
27x2x1.0	33.7±2.5	1076
37x2x1.0	38.2±2.5	1431
1x2x1.5	9.6±1.0	99
2x2x1.5	14.1±1.5	172
3x2x1.5	15.3±1.5	225
4x2x1.5	16.7±1.5	276
5x2x1.5	18.5±1.5	335
7x2x1.5	20.4±2.0	437
10x2x1.5	26.4±2.0	626
12x2x1.5	27.4±2.0	713
14x2x1.5	29.0±2.0	819
16x2x1.5	30.6±2.5	913
19x2x1.5	32.6±2.5	1064
24x2x1.5	38.6±2.5	1354
27x2x1.5	39.4±2.5	1482
37x2x1.5	44.6±3.0	1971
1x2x2.5	10.4±1.5	127
2x2x2.5	15.7±1.5	233
3x2x2.5	16.7±1.5	302
4x2x2.5	18.6±1.5	384
5x2x2.5	20.6±2.0	468
7x2x2.5	22.5±2.0	605
10x2x2.5	29.4±2.0	880
12x2x2.5	30.4±2.5	1011
14x2x2.5	32.2±2.5	1163
16x2x2.5	34.2±2.5	1319
19x2x2.5	36.1±2.5	1521
24x2x2.5	43.1±3.0	1951
27x2x2.5	44.0±3.0	2145
37x2x2.5	49.8±3.0	2865

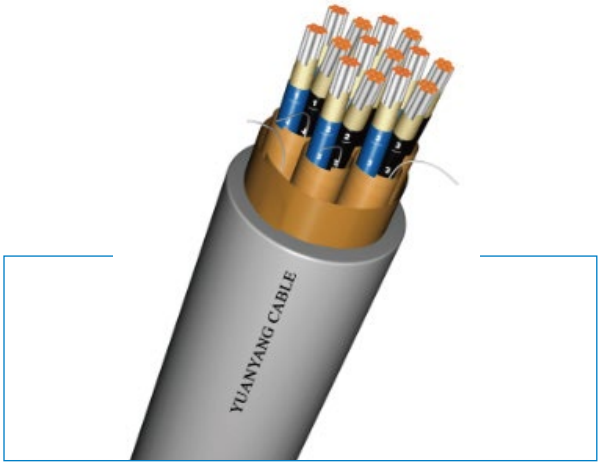
No. of triples & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
1x3x0.75	8.3±1.0	80
2x3x0.75	13.1±1.5	151
3x3x0.75	13.9±1.5	190
4x3x0.75	15.4±1.5	239
5x3x0.75	16.8±1.5	283
7x3x0.75	18.6±1.5	369
10x3x0.75	24.0±2.0	530
12x3x0.75	24.9±2.0	604
14x3x0.75	26.3±2.0	693
16x3x0.75	27.9±2.0	774
19x3x0.75	29.5±2.0	901
24x3x0.75	35.0±2.5	1149
27x3x0.75	35.8±2.5	1257
37x3x0.75	40.6±3.0	1673
1x3x1.0	8.9±1.0	97
2x3x1.0	13.8±1.5	175
3x3x1.0	15.0±1.5	230
4x3x1.0	16.3±1.5	282
5x3x1.0	18.1±1.5	343
7x3x1.0	19.8±1.5	440
10x3x1.0	25.8±2.0	642
12x3x1.0	26.7±2.0	735
14x3x1.0	28.1±2.0	831
16x3x1.0	29.8±2.0	942
19x3x1.0	31.7±2.5	1098
24x3x1.0	37.6±2.5	1397
27x3x1.0	38.5±2.5	1532
37x3x1.0	43.5±3.0	2041
1x3x1.5	10.1±1.5	122
2x3x1.5	16.0±1.5	231
3x3x1.5	17.3±1.5	306
4x3x1.5	18.9±1.5	378
5x3x1.5	20.9±2.0	461
7x3x1.5	23.1±2.0	606
10x3x1.5	30.0±2.0	868
12x3x1.5	31.0±2.5	997
14x3x1.5	32.8±2.5	1146
16x3x1.5	34.8±2.5	1299
19x3x1.5	37.0±2.5	1515
24x3x1.5	43.9±3.0	1923
27x3x1.5	44.8±3.0	2113
37x3x1.5	51.0±3.5	2842
1x3x2.5	11.0±1.5	162
2x3x2.5	17.8±1.5	316
3x3x2.5	18.9±1.5	417
4x3x2.5	21.0±2.0	532
5x3x2.5	23.3±2.0	651
7x3x2.5	25.7±2.0	865
10x3x2.5	33.3±2.5	1235
12x3x2.5	34.6±2.5	1445
14x3x2.5	36.5±2.5	1648
16x3x2.5	38.8±2.5	1870
19x3x2.5	41.2±3.0	2188
24x3x2.5	49.0±3.0	2793
27x3x2.5	50.1±3.5	3082
37x3x2.5	56.9±3.5	4153

Halogen free fire resistant offshore communication and instrumentaion cable

Basic type ： BU(i&c)

NEK TS 606 oil / mud resistant property :

BU(i&c)	Minimun requirements oil resistant
BU(i&c) E	Enhanced oil resistant
BU(i&c) M	Mud resistant
BU(i&c) H	Hydraulic/gear oil resistant
BU(i&c) H-M	Hydraulic/gear oil resistant & mud resistant



Rated Voltage ： 250V

Operating temperature ： 90℃

Standards applied

NEK TS 606	– Design
IEC 60092-376	– Design
IEC 60228	– Conductor
IEC 60092-360	– Insulation & Sheath
IEC 60332-1	– Flame Retardant
IEC 60332-3-22	– Flame Retardant
IEC 60331	– Fire resistant
IEC 60754	– Halogen Free
IEC 61034	– Low Smoke

Application

Fixed installation for communication, instrumentation,control and alarm systems in both EX–and safe area. For installation in areas exposed to MUD and drilling/cleaning fluids.

Construction

Item	Code	Material／Description
Conductor		Stranded tinned annealed copper (STC), Class 2 or Class 5
Insulation	B	Mica glass tape(MGT)+EPR
		Mica glass tape(MGT)+XLPE
Individual & Collective screen	(i&c)	Color coded cores twisted pairs / triples, each pairs / triples are screened by copper backed polyester tape with a tinned copper drain wire and wrapped with polyester tape. Pairs / triples are identified by printed numbers
		Pairs/triples are laid up and collectively screened by copper backed polyester tape with a tinned copper drain wire
Outer sheath	U	Halogen-free thermoset compound type SHF2 as per "NEK TS 606 oil / mud resistant property"
Outer sheath color		Grey

Halogen free fire resistant offshore communication and instrumentaion cable

BU(i&c) /E/M/H/H-M 250V (EPR Insulation)

No. of pairs & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
2x2x0.75	14.6±1.5	184
3x2x0.75	15.5±1.5	234
4x2x0.75	17.3±1.5	296
5x2x0.75	18.8±1.5	350
7x2x0.75	20.8±2.0	459
10x2x0.75	26.9±2.0	658
12x2x0.75	27.9±2.0	752
14x2x0.75	29.4±2.0	863
16x2x0.75	31.3±2.5	978
19x2x0.75	33.1±2.5	1124
24x2x0.75	39.2±2.5	1430
27x2x0.75	40.2±3.0	1586
37x2x0.75	45.6±3.0	2109
2x2x1.0	15.3±1.5	210
3x2x1.0	16.3±1.5	270
4x2x1.0	18.1±1.5	341
5x2x1.0	20.1±2.0	416
7x2x1.0	21.8±2.0	534
10x2x1.0	28.6±2.0	778
12x2x1.0	29.5±2.0	891
14x2x1.0	31.3±2.5	1024
16x2x1.0	33.1±2.5	1145
19x2x1.0	35.2±2.5	1335
24x2x1.0	41.6±3.0	1695
27x2x1.0	42.7±3.0	1881
37x2x1.0	48.4±3.0	2505
2x2x1.5	17.4±1.5	262
3x2x1.5	18.5±1.5	338
4x2x1.5	20.6±2.0	429
5x2x1.5	22.6±2.0	513
7x2x1.5	24.9±2.0	675
10x2x1.5	32.6±2.5	982
12x2x1.5	33.6±2.5	1127
14x2x1.5	35.6±2.5	1295
16x2x1.5	37.9±2.5	1468
19x2x1.5	40.1±3.0	1711
24x2x1.5	47.6±3.0	2170
27x2x1.5	48.9±3.0	2406
37x2x1.5	55.2±3.5	3204
2x2x2.5	18.9±1.5	328
3x2x2.5	20.3±2.0	439
4x2x2.5	22.4±2.0	549
5x2x2.5	24.8±2.0	671
7x2x2.5	27.2±2.0	889
10x2x2.5	35.7±2.5	1287
12x2x2.5	37.1±2.5	1503
14x2x2.5	39.1±2.5	1710
16x2x2.5	41.5±3.0	1939
19x2x2.5	44.1±3.0	2265
24x2x2.5	52.5±3.5	2893
27x2x2.5	53.9±3.5	3211
37x2x2.5	60.8±3.5	4285

No. of triples & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
2x3x0.75	16.2±1.5	227
3x3x0.75	17.5±1.5	300
4x3x0.75	19.1±1.5	371
5x3x0.75	21.2±2.0	453
7x3x0.75	23.4±2.0	596
10x3x0.75	30.4±2.5	854
12x3x0.75	31.6±2.5	995
14x3x0.75	33.3±2.5	1127
16x3x0.75	35.4±2.5	1278
19x3x0.75	37.5±2.5	1490
24x3x0.75	44.5±3.0	1892
27x3x0.75	45.7±3.0	2098
37x3x0.75	51.7±3.5	2794
2x3x1.0	17.0±1.5	259
3x3x1.0	18.3±1.5	346
4x3x1.0	20.4±2.0	440
5x3x1.0	22.3±2.0	526
7x3x1.0	24.5±2.0	695
10x3x1.0	32.1±2.5	1009
12x3x1.0	33.3±2.5	1161
14x3x1.0	35.2±2.5	1335
16x3x1.0	37.4±2.5	1514
19x3x1.0	39.7±2.5	1766
24x3x1.0	47.0±3.0	2238
27x3x1.0	48.3±3.0	2483
37x3x1.0	54.6±3.5	3312
2x3x1.5	19.3±1.5	329
3x3x1.5	20.8±2.0	440
4x3x1.5	23.2±2.0	561
5x3x1.5	25.4±2.0	673
7x3x1.5	28.0±2.0	892
10x3x1.5	36.6±2.5	1292
12x3x1.5	38.2±2.5	1509
14x3x1.5	40.4±3.0	1734
16x3x1.5	42.8±3.0	1965
19x3x1.5	45.4±3.0	2292
24x3x1.5	54.1±3.5	2927
27x3x1.5	55.3±3.5	3223
37x3x1.5	62.8±3.5	4329
2x3x2.5	21.1±2.0	426
3x3x2.5	22.6±2.0	568
4x3x2.5	25.1±2.0	728
5x3x2.5	27.7±2.0	891
7x3x2.5	30.6±2.5	1189
10x3x2.5	40.1±3.0	1734
12x3x2.5	41.6±3.0	2010
14x3x2.5	44.0±3.0	2314
16x3x2.5	46.8±3.0	2626
19x3x2.5	49.6±3.0	3070
24x3x2.5	59.1±3.5	3911
27x3x2.5	60.5±3.5	4346
37x3x2.5	68.6±3.5	5846

Halogen free fire resistant offshore communication and instrumentaion cable

BU(i&c) /E/M/H/H-M 250V (XLPE Insulation)

No. of pairs & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
2x2x0.75	13.3±1.5	155
3x2x0.75	14.1±1.5	195
4x2x0.75	15.7±1.5	247
5x2x0.75	17.4±1.5	300
7x2x0.75	18.9±1.5	382
10x2x0.75	24.4±2.0	548
12x2x0.75	25.3±2.0	625
14x2x0.75	26.8±2.0	719
16x2x0.75	28.5±2.0	814
19x2x0.75	30.1±2.5	934
24x2x0.75	35.7±2.5	1190
27x2x0.75	36.5±2.5	1304
37x2x0.75	41.3±3.0	1736
2x2x1.0	14.0±1.5	179
3x2x1.0	15.1±1.5	235
4x2x1.0	16.5±1.5	289
5x2x1.0	18.3±1.5	353
7x2x1.0	20.2±2.0	462
10x2x1.0	26.2±2.0	662
12x2x1.0	27.0±2.0	756
14x2x1.0	28.6±2.0	868
16x2x1.0	30.3±2.5	971
19x2x1.0	32.1±2.5	1132
24x2x1.0	38.1±2.5	1439
27x2x1.0	38.9±2.5	1579
37x2x1.0	44.1±3.0	2106
2x2x1.5	16.1±1.5	226
3x2x1.5	17.4±1.5	298
4x2x1.5	19.0±1.5	368
5x2x1.5	21.0±2.0	447
7x2x1.5	23.2±2.0	587
10x2x1.5	30.1±2.5	840
12x2x1.5	31.3±2.5	978
14x2x1.5	33.0±2.5	1108
16x2x1.5	35.0±2.5	1256
19x2x1.5	37.2±2.5	1463
24x2x1.5	44.1±3.0	1857
27x2x1.5	45.0±3.0	2038
37x2x1.5	51.2±3.5	2740
2x2x2.5	17.8±1.5	295
3x2x2.5	18.9±1.5	385
4x2x2.5	21.0±2.0	491
5x2x2.5	23.2±2.0	598
7x2x2.5	25.4±2.0	780
10x2x2.5	33.3±2.5	1131
12x2x2.5	34.6±2.5	1321
14x2x2.5	36.4±2.5	1501
16x2x2.5	38.7±2.5	1703
19x2x2.5	41.1±3.0	1989
24x2x2.5	49.0±3.0	2544
27x2x2.5	50.0±3.0	2801
37x2x2.5	56.8±3.5	3767

No. of triples & Cross section	Overall diameter	Approx. weight
mm^2	mm	kg/km
2x3x0.75	14.9±1.5	194
3x3x0.75	15.8±1.5	248
4x3x0.75	17.5±1.5	313
5x3x0.75	19.1±1.5	372
7x3x0.75	21.1±2.0	489
10x3x0.75	27.5±2.0	702
12x3x0.75	28.6±2.0	817
14x3x0.75	30.1±2.5	924
16x3x0.75	31.9±2.5	1047
19x3x0.75	33.7±2.5	1205
24x3x0.75	40.1±3.0	1551
27x3x0.75	41.1±3.0	1701
37x3x0.75	46.5±3.0	2266
2x3x1.0	15.6±1.5	225
3x3x1.0	16.6±1.5	290
4x3x1.0	18.5±1.5	369
5x3x1.0	20.4±2.0	449
7x3x1.0	22.3±2.0	581
10x3x1.0	29.2±2.0	846
12x3x1.0	30.2±2.5	971
14x3x1.0	31.9±2.5	1117
16x3x1.0	33.8±2.5	1251
19x3x1.0	35.9±2.5	1461
24x3x1.0	42.7±3.0	1874
27x3x1.0	43.7±3.0	2059
37x3x1.0	49.4±3.0	2747
2x3x1.5	18.0±1.5	287
3x3x1.5	19.1±1.5	373
4x3x1.5	21.3±2.0	476
5x3x1.5	23.5±2.0	580
7x3x1.5	26.0±2.0	766
10x3x1.5	33.7±2.5	1094
12x3x1.5	35.0±2.5	1276
14x3x1.5	37.1±2.5	1467
16x3x1.5	39.2±2.5	1644
19x3x1.5	41.7±3.0	1920
24x3x1.5	49.6±3.0	2456
27x3x1.5	51.0±3.5	2726
37x3x1.5	57.6±3.5	3633
2x3x2.5	19.8±1.5	373
3x3x2.5	21.3±2.0	506
4x3x2.5	23.6±2.0	646
5x3x2.5	26.1±2.0	791
7x3x2.5	28.8±2.0	1052
10x3x2.5	37.6±2.5	1519
12x3x2.5	38.9±2.5	1757
14x3x2.5	41.2±3.0	2024
16x3x2.5	43.8±3.0	2296
19x3x2.5	46.5±3.0	2684
24x3x2.5	55.3±3.5	3423
27x3x2.5	56.8±3.5	3803
37x3x2.5	64.2±3.5	5086

Technical Information

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Conductor Resistance

Resistance comunication formula

$$R = \rho \frac{L}{A}$$

R: Resistance in ohm per phase, Ω
ρ:Specific resistance, Ω.mm^2/m
A:Conductor area, mm^2
L:Conductor length, m

Resistance as a Function of Temperature

$$R=R_{20}[1+\alpha(t-20)]$$

R_{20}:Resistance at 20℃, Ω/Km
t:Conductor temperature, ℃
α: 0.00393 for copper

Conductor D.C. Resistance of Tinned Annealed Stranded Copper at 20℃

Power cable

Conductor area	Max. resistance at 20℃		Conductor area	Max. resistance at 20℃	
	Class 2	Class 5		Class 2	Class 5
mm^2		ohm/km	mm^2		ohm/km
1	18.2	20.0	35	0.529	0.565
1.5	12.2	13.7	50	0.391	0.393
2.5	7.56	8.21	70	0.270	0.277
4	4.70	5.09	95	0.195	0.210
6	3.11	3.39	120	0.154	0.164
10	1.84	1.95	150	0.126	0.132
16	1.16	1.24	185	0.100	0.108
25	0.734	0.795	240	0.0762	0.0817
35	0.529	0.565	300	0.0607	0.0654
25	0.734	0.795			

Communication and instrumentaion cable

Conductor area	Max. resistance at 20℃		Conductor area	Max. resistance at 20℃	
	Class 2	Class 5		Class 2	Class 5
mm^2		ohm/km	mm^2		ohm/km
0.5	41.6	42.5	1.5	12.9	14.5
0.75	26.3	28.3	2.5	8.02	8.71
1	19.2	21.2			

Current rating of Cable

Current rating of EPR and XLPE insulated power cable in continuous service at maximum rated temperature of 90℃ in accordace with IEC 60092-352(2005) Annex B.4. with ambient temp. 45℃

Nomina sectional area mm^2	Single core								
	Ambient temperature								
	40℃			45℃			50℃		
	Continuous rating	Short time rating		Continuous rating	Short time rating		Continuous rating	Short time rating	
		0.5h	1h		0.5h	1h		0.5h	1h
1.5	24	26	26	23	24	24	22	23	23
2.5	32	33	33	30	32	32	28	30	30
4	42	44	44	40	42	42	38	40	40
6	55	58	58	52	55	55	49	52	52
10	76	80	80	72	76	76	68	72	72
16	101	107	107	96	102	102	90	96	96
25	133	143	141	127	136	134	119	128	126
35	165	177	175	157	169	166	148	159	156
50	206	224	218	196	213	208	184	200	195
70	254	281	270	242	267	257	227	251	242
95	308	349	328	293	332	313	275	312	294
120	356	410	381	339	390	363	319	367	341
150	408	481	441	389	459	420	366	431	394
185	466	564	508	444	537	484	417	505	454
240	548	689	606	522	656	577	491	617	543
300	631	825	711	601	786	678	565	739	637

Nomina sectional area mm^2	Double core								
	Ambient temperature								
	40℃			45℃			50℃		
	Continuous rating	Short time rating		Continuous rating	Short time rating		Continuous rating	Short time rating	
		0.5h	1h		0.5h	1h		0.5h	1h
1.5	21	22	22	20	21	21	19	20	20
2.5	27	29	29	26	28	28	24	26	26
4	36	38	38	34	37	36	32	34	34
6	46	50	49	44	48	47	41	45	44
10	64	70	68	61	67	65	57	63	61
16	86	96	92	82	92	87	77	86	82
25	113	132	122	108	125	116	102	118	109
35	140	167	151	133	159	144	125	149	135
50	175	219	193	167	208	184	157	196	173
70	216	283	244	206	270	232	194	253	218
95	261	363	305	249	346	290	234	325	273
120	302	437	361	288	416	344	271	391	323
150	348	523	426	331	498	406	311	469	382
185	396	626	503	377	596	479	354	560	450
240									
300									

Current rating of Cable

Nomina sectional area mm^2	Three core								
	Ambient temperature								
	40°C			45°C			50°C		
	Continuous rating	Short time rating		Continuous rating	Short time rating		Continuous rating	Short time rating	
		0.5h	1h		0.5h	1h		0.5h	1h
1.5	17	18	18	16	17	17	15	16	16
2.5	22	24	23	21	23	22	20	21	21
4	29	32	31	28	30	30	26	28	28
6	38	41	40	36	39	38	34	37	36
10	53	58	56	50	55	53	47	52	50
16	70	80	75	67	76	72	63	71	67
25	93	111	101	89	105	96	84	99	90
35	116	141	126	110	134	120	103	126	113
50	144	185	161	137	176	153	129	165	144
70	177	239	203	169	227	193	159	214	182
95	215	308	256	205	293	243	193	276	229
120	249	371	303	237	353	289	223	332	272
150	286	445	359	272	424	342	256	398	321
185	327	535	425	311	509	405	292	479	381
240									
300									

The tabled current ratings must be adjusted for ambient air temperatures other than 45℃ by multplying the rating factors in the following table.

Ambient temp. ℃	35	40	45	50	55	60	65	70	75	80
Rating factors	1.10	1.05	1.00	0.94	0.88	0.82	0.74	0.67	0.58	0.47

For cables with more than 4 cores, the current ratings are given by the following formular:

$$I = \frac{I_1}{\sqrt[3]{N}}$$

I_1=Current rating for single core

N=Number of cores

No. of cores	1.0mm^2	1.5mm^2	2.5mm^2	No. of cores	1.0mm^2	1.5mm^2	2.5mm^2
	A	A	A		A	A	A
5	11	13	18	16	7	9	12
7	9	12	16	19	7	9	11
10	8	11	14	24	6	8	10
12	8	10	13	27	6	8	10
14	7	10	12	33	6	7	9

Short Circuit Current Ratings

1) The following short current ratings are for cables normally operating at a maximum conductor temperature of 90℃ .

2) As a basis of the calculation, the theoretical temperature that arises in the conductor during a short circuit is 250℃ in accordance with IEC 60724.

3) EPR & XLPE insulation are capable of withstanding of short term temperature up to 250℃ .

4) The short circuit current rating for copper conductors given in the table are values for 1 sec. and for other duration the current may be calculated by the following formular;

$$I_t = \frac{I_1}{\sqrt{t}}$$

I_t: Short circuit current for t second (A)
I_1: Short circuit current for 1 second (A)
t: Short circuit duration (second)

5) The duration of the short circuit based on these assumptions should be between 0.2 sec. and 5 sec.

Conductor area	Short circuit current for 1 sec.	Conductor area	Short circuit current for 1 sec.
mm^2	A	mm^2	A
1	140	70	1002
1.5	210	95	1359
2.5	350	120	1717
4	570	150	2146
6	860	185	2647
10	143	240	3434
16	229	300	4293
25	358		
35	501		
50	715		

Inductance & Reactance

Reactance Calculation

1) The reactance of a cable operating in an A.C. system depends on many factors, including, in particular, the axial spacing between conductors and the proximity and magnetic properties of adjacent steelwork. The former is known for multicore cable, but may.

2)Reactance of cables in certain dispositions removed from steelwork are shown. The values specified in cable construction details are for cables with circular conductors. The value for a sector-shaped conductor should be taken as 90% of the calculated value.

3) Inductance for 2-, 3-, and 4- core cables is given by the formular:

$$L = 0.2 \times [1n(\frac{2a}{d}) + 0.25] \times 10^{-6}$$

L: Inductance in H/m and phase
a: Axial space between conductors in mm
d: Conductor diameter in mm

Reactance for 2-, 3-, and 4- core cables is given by the formular:

$$X = 2 \times f \times \pi \times L \times l$$

X: Reactance in Ω per phase
f: Frequency in Hz
L: Inductance in H/m and phase
I: Conductor length in meter

Impedance Calculation

Impedance for 2-, 3-and 4-core cables is given by the formular:

$$Z = \sqrt{(R^2 + X^2)}$$

Z: Impetance in Ω per phase
R: Resistance at operating temperature in Ω per phase
X: Reactance on Ω per phase

Inductance & Reactance

Inductance and Reactance of Power Cable

1) EPR insulated cable

a)P101 RFOU ,P111 RU series 0.6/1KV

Nom. Section area	Single core cable			Multi core cable		
	Inductance	Reactance		Inductance	Reactance	
		60Hz	50Hz		60Hz	50Hz
mm^2	mH/km	Ω/km	Ω/km	mH/km	Ω/km	Ω/km
1	0.624	0.235	0.196	0.393	0.148	0.123
1.5	0.547	0.206	0.172	0.369	0.139	0.116
2.5	0.499	0.188	0.157	0.337	0.127	0.106
4	0.459	0.173	0.144	0.321	0.121	0.101
6	0.427	0.161	0.134	0.297	0.112	0.093
10	0.401	0.151	0.126	0.281	0.106	0.088
16	0.369	0.139	0.116	0.263	0.099	0.083
25	0.358	0.135	0.113	0.260	0.098	0.082
35	0.342	0.129	0.108	0.249	0.094	0.078
50	0.332	0.125	0.104	0.249	0.094	0.078
70	0.313	0.118	0.098	0.239	0.090	0.075
95	0.305	0.115	0.096	0.236	0.089	0.074
120	0.297	0.112	0.093	0.231	0.087	0.073
150	0.289	0.109	0.091	0.231	0.087	0.073
185	0.287	0.108	0.090	0.231	0.087	0.073
240	0.284	0.107	0.089	0.231	0.087	0.073
300	0.279	0.105	0.088	0.228	0.086	0.072

b) P105 BFOU ,P110 BU series 0.6/1KV

Nom. Section area	Single core cable			Multi core cable		
	Inductance	Reactance		Inductance	Reactance	
		60Hz	50Hz		60Hz	50Hz
mm^2	mH/km	Ω/km	Ω/km	mH/km	Ω/km	Ω/km
1	0.634	0.239	0.199	0.403	0.152	0.127
1.5	0.557	0.210	0.175	0.377	0.142	0.118
2.5	0.515	0.194	0.162	0.342	0.129	0.108
4	0.478	0.180	0.150	0.321	0.121	0.101
6	0.449	0.169	0.141	0.300	0.113	0.094
10	0.422	0.159	0.133	0.281	0.106	0.088
16	0.398	0.150	0.125	0.263	0.099	0.083
25	0.377	0.142	0.118	0.260	0.098	0.082
35	0.361	0.136	0.113	0.255	0.096	0.080
50	0.345	0.130	0.108	0.249	0.094	0.078
70	0.326	0.123	0.103	0.244	0.092	0.077
95	0.316	0.119	0.099	0.242	0.091	0.076
120	0.311	0.117	0.098	0.236	0.089	0.074
150	0.305	0.115	0.096	0.234	0.088	0.073
185	0.295	0.111	0.093	0.234	0.088	0.073
240	0.289	0.109	0.091	0.231	0.087	0.073
300	0.284	0.107	0.089	0.228	0.086	0.072

Note: Reactance for 1-core cables given at Three-foil formation

Inductance & Reactance

2) XLPE insulated cable

a) P101 TFOU ,P111 TU Type Cable, 0.6/1KV

Nom. Section area	Single core cable			Multi core cable		
	Inductance	Reactance		Inductance	Reactance	
		60Hz	50Hz		60Hz	50Hz
mm^2	mH/km	Ω/km	Ω/km	mH/km	Ω/km	Ω/km
1	0.575	0.217	0.181	0.353	0.133	0.111
1.5	0.532	0.201	0.167	0.327	0.123	0.103
2.5	0.494	0.186	0.155	0.304	0.114	0.095
4	0.457	0.172	0.143	0.284	0.107	0.089
6	0.431	0.162	0.135	0.270	0.102	0.085
10	0.399	0.150	0.125	0.254	0.096	0.080
16	0.375	0.141	0.118	0.243	0.091	0.076
25	0.362	0.136	0.114	0.244	0.092	0.077
35	0.344	0.130	0.108	0.236	0.089	0.074
50	0.331	0.125	0.104	0.233	0.088	0.073
70	0.324	0.122	0.102	0.231	0.087	0.072
95	0.315	0.119	0.099	0.225	0.085	0.071
120	0.310	0.117	0.097	0.224	0.084	0.070
150	0.306	0.115	0.096	0.226	0.085	0.071
185	0.305	0.115	0.096	0.227	0.085	0.071
240	0.300	0.113	0.094	0.224	0.084	0.070
300	0.297	0.112	0.093	0.223	0.084	0.070

b)P105 BFOU ,P110 BU Type Cable, 0.6/1KV

Nom. Section area	Single core cable			Multi core cable		
	Inductance	Reactance		Inductance	Reactance	
		60Hz	50Hz		60Hz	50Hz
mm^2	mH/km	Ω/km	Ω/km	mH/km	Ω/km	Ω/km
1	0.590	0.222	0.185	0.396	0.149	0.124
1.5	0.549	0.207	0.172	0.366	0.138	0.115
2.5	0.508	0.192	0.160	0.338	0.127	0.106
4	0.470	0.177	0.148	0.314	0.118	0.099
6	0.443	0.167	0.139	0.296	0.112	0.093
10	0.406	0.153	0.128	0.277	0.104	0.087
16	0.385	0.145	0.121	0.262	0.099	0.082
25	0.369	0.139	0.116	0.260	0.098	0.082
35	0.351	0.132	0.110	0.250	0.094	0.078
50	0.338	0.127	0.106	0.245	0.092	0.077
70	0.328	0.124	0.103	0.241	0.091	0.076
95	0.318	0.120	0.100	0.234	0.088	0.073
120	0.314	0.118	0.099	0.232	0.087	0.073
150	0.309	0.116	0.097	0.233	0.088	0.073
185	0.309	0.116	0.097	0.233	0.088	0.073
240	0.304	0.115	0.096	0.230	0.087	0.072
300	0.299	0.113	0.094	0.228	0.086	0.071

Note: Reactance for 1-core cables given at Three-foil formation

Inductance & Reactance

Reactance of MV Power Cable

a) P102 RFOU/TFOU series 3.6/6(7.2)KV

Nom. Section area	Single core cable		Three core cable	
	Reactance		Reactance	
	60Hz	50Hz	60Hz	50Hz
10	0.192	0.160	0.164	0.137
16	0.184	0.153	0.158	0.132
25	0.178	0.148	0.150	0.125
35	0.172	0.143	0.142	0.118
50	0.164	0.137	0.131	0.109
70	0.160	0.133	0.126	0.105
95	0.147	0.122	0.120	0.100
120	0.138	0.115	0.116	0.097
150	0.135	0.112	0.111	0.092
185	0.131	0.109	0.108	0.090
240	0.127	0.106	–	–
300	0.123	0.102	–	–

b) P103 RFOU/TFOU series 6/10(12)KV

Nom. Section area	Single core cable		Three core cable	
	Reactance		Reactance	
	60Hz	50Hz	60Hz	50Hz
16	0.185	0.154	0.158	0.132
25	0.179	0.149	0.153	0.127
35	0.173	0.144	0.143	0.119
50	0.166	0.138	0.133	0.111
70	0.162	0.135	0.128	0.107
95	0.148	0.123	0.122	0.102
120	0.142	0.118	0.117	0.097
150	0.138	0.115	0.114	0.095
185	0.135	0.112	0.111	0.092
240	0.128	0.107	–	–
300	0.125	0.104	–	–

Inductance & Reactance

c) P104 RFOU/TFOU series 8.7/15(17.5)KV

Nom. Section area	Single core cable		Three core cable	
	Reactance		Reactance	
	60Hz	50Hz	60Hz	50Hz
25	0.183	0.152	0.158	0.132
35	0.176	0.147	0.151	0.126
50	0.175	0.146	0.139	0.116
70	0.170	0.142	0.132	0.110
95	0.144	0.120	0.121	0.101
120	0.141	0.117	0.118	0.098
150	0.138	0.115	0.115	0.096
185	0.129	0.107	0.110	0.092
240	0.132	0.110	–	–
300	0.128	0.107	–	–

d) P112 RFOU/TFOU series 12/20(24)KV

Nom. Section area	Single core cable		Three core cable	
	Reactance		Reactance	
	60Hz	50Hz	60Hz	50Hz
35	0.182	0.152	0.154	0.128
50	0.172	0.143	0.146	0.122
70	0.167	0.139	0.136	0.113
95	0.152	0.127	0.132	0.110
120	0.149	0.124	0.126	0.105
150	0.143	0.119	0.122	0.102
185	0.139	0.116	0.118	0.098
240	0.135	0.112	–	–
300	0.130	0.108	–	–

Note: Reactance for 1-core cables given at Three-foil formation

Electrical characteristics for communication and instrumentation cables

Electrical characteristics		Conductor Size mm^2			
		0.75	1.0	1.5	2.5
Mutual capacitance nF/km	Individual screen	90	100	110	120
	Collective screen	80	90	100	100
Inductance mH/km		0.69	0.65	0.64	0.60

Calculation of Voltage Drop

With regard to the voltage drop, please calculate as the following fomulars:

1) Two wire D.C. circuit

$$V_{drop} = 2 \times I \times L \times R_{d.c.}$$

I: Load current (Amp)
L:Length of cable (km)
R:D.C. conductor resistance at Max. rated temp. (Ω/km)

2) A.C. circuit

a. Single-phase voltage drop

$$V_{drop} = 2 \times I \times L \times \left(R \times \cos\phi + X \times \sin\phi \right)$$

b.Three-phase voltage drop

$$V_{drop} = \sqrt{3} \times I \times L \times \left(R \times \cos\phi + X \times \sin\phi \right)$$

I: Load current (Amp)
L:Length of cable (km)
R:A.C. conductor resistance at Max. rated temp. (Ω/km)
X:Reactance of the cable (Ω/km)
Φ:Power factor angle by which the current lags(or leads) the voltage.

Installation Recommentation

1) Minimum Bending Radius

The min. recommended installation bending radius shall be in accordance with IEC 60092-352 as following:

Bending radii for cables rated up to 1.8/3kV

Cable construction		Overall dia. of cable (D)	Min. radius of bend
Insulation	Covering		
Thermoplastic or thermosetting with circular copper conductors	Unarmored or unbraided	⩽ 25mm	4Da
		> 25mm	6D
	Metal braid screened or armored	Any	6D
	Metal wire armored, metal tape armored or metal-shaped	Any	6D
	Composite polyester/metal tape screened units or collective tape screen	Any	8D
6D for defined circuit integrity			

Bending radii for cables rated at 3.6/6(7.2)kV and above

Cable Construction	Overall diameter of cable (D)	Min. internal radius of bend
Single-core Cable	Any	12D
Three-core Cable	Any	9D

2) Pulling tension

The cable pulling tension during installation can be estimated through the following formula:

For armored cable

P=50N x (P=50N x total cross section area of conductors)

For unarmored cable

P=25N x (P=25N x total cross section area of conductors)

Additional tention will be supplied from the braid and the insulation and sheathing material.

3) Minimum installation temperature and operation temperature

Unless otherwise specified, the minimum recommended installation temperature of low smoke halogen free cables shall not be lower than -20℃, and lowest operation temperature of that shall not be lower than -40℃.

Core Identification

1、Medium voltage power cables

No. of cores	Color code		
1	Black		
3	white tape	Black	Red tape
Earthing wire	Yellow/Green		

2、Low voltage power cable

a) Color identification

No. of cores	Color code				
					Earthing wire
1	Black	-	-	-	-
2	Blue	Brown	-	-	-
2+E	Blue	Brown	-	-	Yellow/Green
3	-	Brown	Black	Grey	-
3+E	-	Brown	Black	Grey	Yellow/Green
4	Blue	Brown	Black	Grey	-
4+E	Blue	Brown	Black	Grey	Yellow/Green
5 and above5	White marked with black numbers				-

b) Marked with numbers

White marked with black numbers
Earthing wire : Yellow/Green

3. Instrumentation and communication cable

Unit element	Color code		
Pair unit	Black	Light blue	
Triple unit	Black	Light blue	Brown

Color identification of outer sheath

1. Cables up to and including 250V shall have a Grey sheath.

2. Cables for 0.6/1kV shall have a BLACK sheath.

3. Cables for voltages higher than 0.6/1kV shall have a RED sheath.

Note: Colors above is in general which can be adjusted complying with your requirements.

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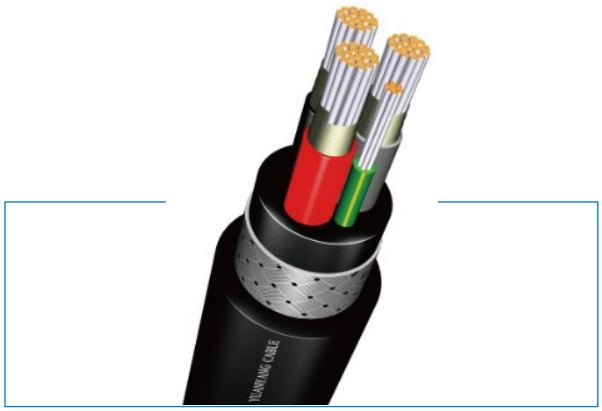
Comparision of Flame retardance and fire resistance



Cable Type	Flame Retardant Cable	Fire resistant Cable
Main Purpose	Non—Flame Propagation	Circuit Integrity
Test Method	IEC 60332—1 IEC 60332—3—22	IEC 60331

Authorized Export Agent

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