



**PT SUCACO Tbk.**  
PT SUPREME CABLE MANUFACTURING & COMMERCE Tbk.



SUPREME CABLE

SUPREME CABLE

PRODUCT CATALOGUE

# MEDIUM VOLTAGE





## COMPANY BACKGROUND

Specializing in the cable business since 1970, PT SUPREME CABLE MANUFACTURING & COMMERCE Tbk. (PT SUCACO Tbk.) has grown steadily to become a largest and leading cable manufacturer, with international reputation for quality and reliability. Established in 1970, PT SUCACO Tbk. is a pioneer in the modern industry. With technical assistance from Furukawa Electric Co Ltd. Japan and International Executives Service Corp, USA, the company began commercial operations in 1972.

We produce and markets power cable up to 150 kV, optical and telecommunication cables, control cables, instrumentation cables, coaxial cables, aluminium bare over head conductors and enamelled wires under brand name of " SUPREME ". The Company is also involved through its affiliated companies, in various line of business. The company has a Quality Assurance Program and ISO 9001 certificate from SGS international certification body of quality management system, ISO 14001 for environment management system and ISO 18001 for safety management system. Today, PT SUCACO Tbk. has grown to become a reliable partner in infrastructures, buildings and various projects.



# Cables Construction

## **CABLE CONSTRUCTION**

Medium voltage "SUPREME" cables are designed based on IEC 60502-2, SNI, SPLN 43-5 or others international standards upon request.

- **CONDUCTOR**  
The conductor made from annealed copper wire, circular stranded compacted or round segmental compacted according to IEC 60228, BS 6360, AS 1125 or SPLN41-1.
- **CONDUCTOR SCREEN**  
The conductor screen made from extruded semi conductive compound.
- **INSULATION**  
The conductor screen are covered with an extruded layer of XLPE compound according to IEC 60502, AS 1429-1, BS 5464 or SPLN 41-9.
- **INSULATION SCREEN**  
The insulation screen made from extruded semiconductive compound in combination with the metallic screen. The metallic screen consist of a layer of either copper tape or copper wires with copper tape binder.

Conductor screen, insulaton and insulation screen are produced by triple extrusion with N<sub>2</sub> gas dry curing.

- **BEDDING/FILLER**  
The bedding and/or filler made from an layer of exruded PVC or non-hygroscopic material which compatible with the insulation and operating temperature of the cable.
- **METALLIC SHEATH**  
The metallic sheath made from lead alloy material with kinds of grade such as 1/2 C, E grade. The main function of lead sheath is to protect the cable from physical deterioration caused by chemical liquid such as sulfides , waste oil and to provide an impermeable water barrier.
- **INNER SHEATH**  
The inner sheath made from a layer of extruded PVC ST2 type to IEC 60502-2 or YM/2 type to SPLN 41-2 , type 9 to BS 7655 or other international standards.
- **ARMOURING**  
The armouring made from either welded continuously aluminium corrugated, galvanized round steel wire, double galvanized steel tape, round aluminium wire or double aluminium tape.



- **OUTER SHEATH**

The outer sheath made from a layer of extruded Polyethylene or PVC ST2 type to IEC 60502-2 or YM/2 type to SPLN 41-2 , type 9 to BS 7655 or other international standards.

## ■ **FACTORY ROUTINE FINAL INSPECTION**

Routine final inspection will be done for every length of product, such as :

- Visual
- Dimensions
- Conductor resistance
- AC break down voltage test
- Partial discharge test





CABLE TYPE	VOLTAGE (kV)	STANDARD	PAGE
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## 1 Core

<b>N2XSY/NA2XSY</b>	1.8/3(3.6)	IEC 60502-1	1
	3.6/6(7.2)	IEC 60502-2	2
	6/10(12)	IEC 60502-2	3
	8.7/15(17.5)	IEC 60502-2	4
	12/20(24)	IEC 60502-2/SPLN 43-5	5
	18/30(36)	IEC 60502-2	6
<b>N2XSRY/NA2XSRY</b>	1.8/3(3.6)	IEC 60502-1	7
	3.6/6(7.2)	IEC 60502-2	8
	6/10(12)	IEC 60502-2	9
	8.7/15(17.5)	IEC 60502-2	10
	12/20(24)	IEC 60502-2	11
	18/30(36)	IEC 60502-2	12
<b>N2XKY/NA2XKY N2XSKY/NA2XSKY</b>	1.8/3(3.6)	IEC 60502-1	13
	3.6/6(7.2)	IEC 60502-2	14
	6/10(12)	IEC 60502-2	15
	8.7/15(17.5)	IEC 60502-2	16
	12/20(24)	IEC 60502-2	17
	18/30(36)	IEC 60502-2	18

## 3 Cores

<b>N2XSY/NA2XSY N2XSEY/NA2XSEY</b>	1.8/3(3.6)	IEC 60502-1	19
	3.6/6(7.2)	IEC 60502-2	20
	6/10(12)	IEC 60502-2	21
	8.7/15(17.5)	IEC 60502-2	22
	12/20(24)	IEC 60502-2/SPLN 43-5	23
	18/30(36)	IEC 60502-2	24
<b>N2XBY/NA2XBY N2XSEYBY/NA2XSEYBY</b>	1.8/3(3.6)	IEC 60502-1	25
	3.6/6(7.2)	IEC 60502-2	26
	6/10(12)	IEC 60502-2	27
	8.7/15(17.5)	IEC 60502-2	28
	12/20(24)	IEC 60502-2/SPLN 43-5	29
	18/30(36)	IEC 60502-2	30
<b>N2XFGbY/NA2XFGbY N2XSEYFGbY/NA2XSEYFGbY</b>	1.8/3(3.6)	IEC 60502-1	31
	3.6/6(7.2)	IEC 60502-2	32
	6/10(12)	IEC 60502-2	33
	8.7/15(17.5)	IEC 60502-2	34
	12/20(24)	IEC 60502-2/SPLN 43-5	35
	18/30(36)	IEC 60502-2	36
<b>N2XKBY/NA2XKBY N2XSEKBY/NA2XSEKBY</b>	1.8/3(3.6)	IEC 60502-1	37
	3.6/6(7.2)	IEC 60502-2	38
	6/10(12)	IEC 60502-2	39
	8.7/15(17.5)	IEC 60502-2	40
	12/20(24)	IEC 60502-2	41
	18/30(36)	IEC 60502-2	42
<b>N2XSEALCAY/NA2XSEALCAY</b>	1.8/3(3.6)	IEC 60502-1	43
	3.6/6(7.2)	IEC 60502-2	44
	6/10(12)	IEC 60502-2	45
	8.7/15(17.5)	IEC 60502-2	46
	12/20(24)	IEC 60502-2	47
	18/30(36)	IEC 60502-2	48
<b>NF2XSY/NFA2XSY</b>	12/20(24)	IEC 60502-2/SPLN 43-5	49
<b>NFA2XSY-T</b>	12/20(24)	IEC 60502-2/SPLN 43-5	50
<b>INSTALLATION GUIDE &amp; DERATING FACTORS</b>			51-59

# Medium Voltage Power Cables

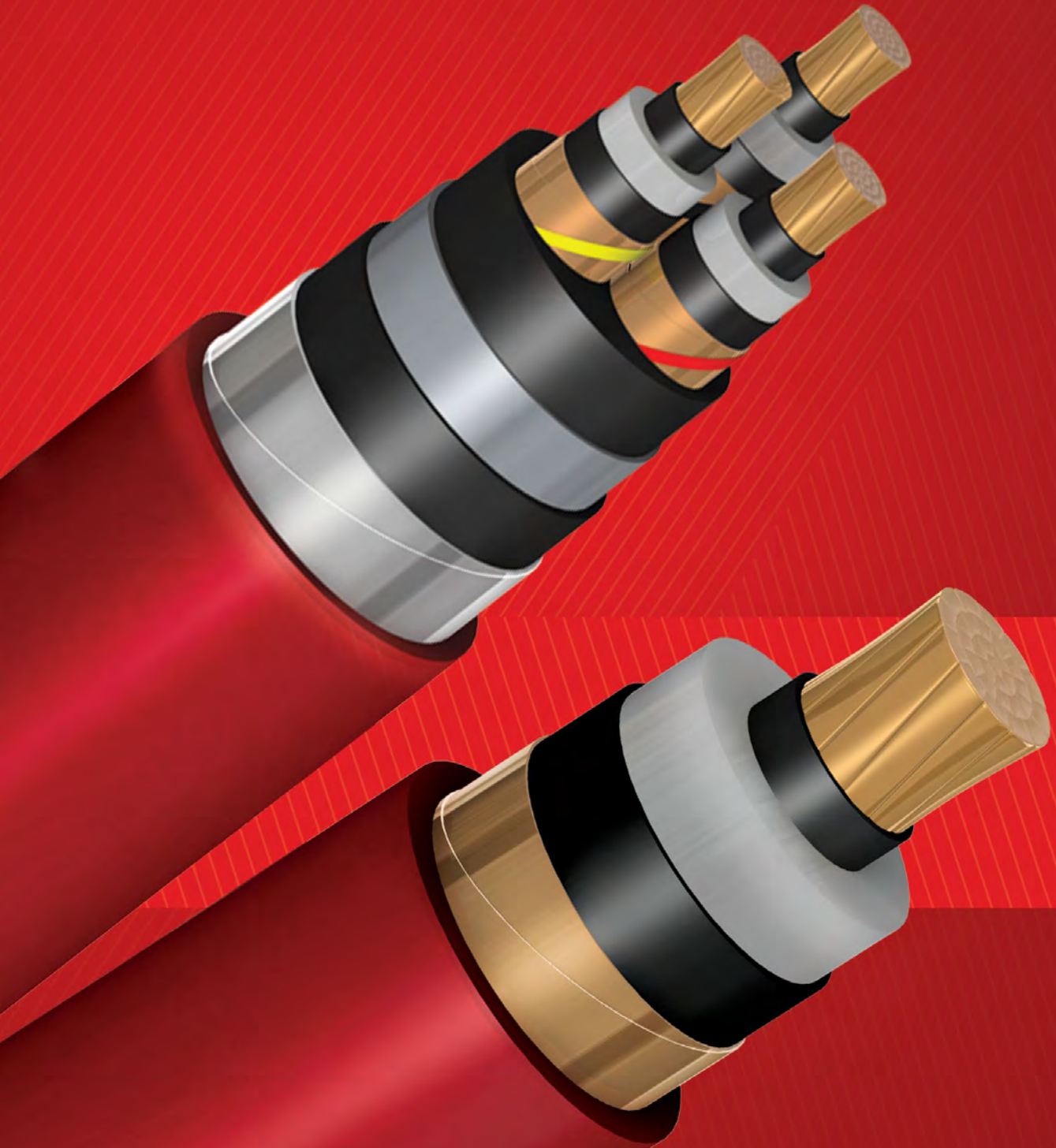
3 kV up to 30 kV



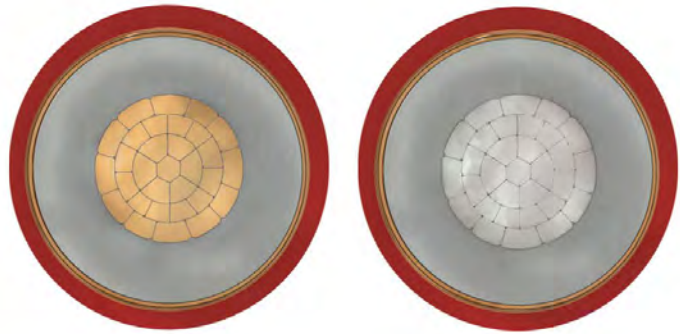
SUPREME CABLE

CABLE

SUPREME CABLE



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**N2XSY/NA2XSY**  
**1.8/3(3.6) kV**  
**IEC 60502-1**

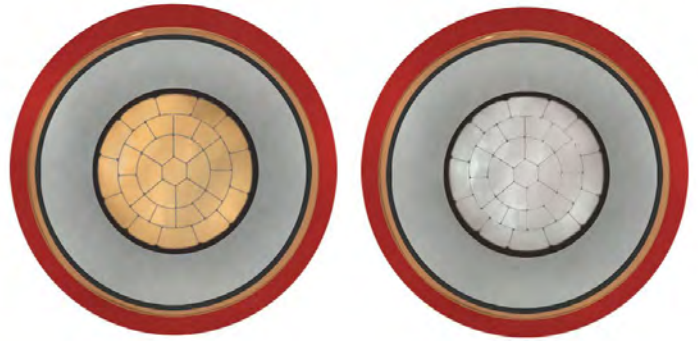
Copper/Aluminium conductor,  
XLPE insulated,  
Copper wire/ tape screened,  
PVC/PE sheathed cable

DIMENSIONAL AND ELECTRICAL DATA

1 CORE

Nominal cross-sectional area		mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400	500	630	800				
Conductor diameter (approx)		mm	6.05	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7	26.6	30.3	34.2				
Nominal insulation thickness		mm	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.4	2.6				
Insulation diameter (approx)		mm	10.3	11.3	12.5	14.1	15.9	17.3	18.5	20.5	22.9	25.1	27.9	31.2	35.3	39.6				
Nominal outer sheath thickness		mm	1.4	1.4	1.4	1.5	1.5	1.5	1.6	1.7	1.8	1.8	1.9	2.0	2.2	2.3				
Overall cable diameter (approx)		mm	13	14	15	17	19	21	22	24	27	29	32	35	39	44				
Cable net weight ( approx)		CU	400	500	600	800	1,100	1,300	1,600	2,000	2,500	3,100	3,900	5,000	6,400	8,200				
		AL	200	250	300	400	500	600	700	800	1,000	1,200	1,500	1,900	2,400	3,100				
Standard length per-reel		m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	500	500	500	500				
Minimum bending radius		mm	190	210	240	270	310	340	360	400	450	500	560	620	700	780				
Max. DC conductor resistance at 20 °C		CU	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	0.0366	0.0283	0.0221				
		AL	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	0.0605	0.0469	0.0367				
Min. insulation resistance at 20 °C		MΩ.Km	900	700	700	600	500	400	400	300	300	300	300	300	200	200				
Capacitance per phase		µF/Km	0.261	0.299	0.334	0.393	0.453	0.499	0.539	0.606	0.685	0.758	0.851	0.871	0.909	0.947				
Inductance per phase		o	0.345	0.327	0.313	0.3	0.287	0.280	0.274	0.267	0.260	0.253	0.248	0.245	0.243	0.239				
		o o o	0.529	0.512	0.498	0.485	0.471	0.465	0.459	0.452	0.445	0.438	0.433	0.430	0.428	0.424				
Max.short circuit current of conductor		CU	3.73	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79	72.16	90.83	115.23				
		AL	2.49	3.45	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14	47.60	59.90	75.96				
Maximum current carrying capacity at 30 °C		in air		o	A	CU	162	195	234	292	354	407	461	528	622	730	816	922	1,008	1,120
				AL		125	151	181	217	275	317	360	413	490	560	652	745	805	895	
		in ground		o o o		CU	191	231	277	345	418	481	538	613	717	812	902	1,007	1,089	1,210
				AL		147	178	215	268	327	377	425	486	574	653	742	839	871	968	
		in ground		o		CU	151	180	211	258	308	349	390	440	508	570	639	719	781	832
				AL		116	138	164	201	239	272	304	345	400	451	512	575	624	665	
		in ground		o o o		CU	172	204	239	291	344	388	424	474	541	602	650	775	820	873
				AL		132	157	186	227	270	305	337	378	435	488	538	616	656	698	
AC test voltage		kV/5 min	6.5																	

Note : This is only general information. For other specific requirement, please contact our marketing.



## N2XS<sub>Y</sub>/NA2XS<sub>Y</sub>

### 3.6/6(7.2) kV

#### IEC 60502-2

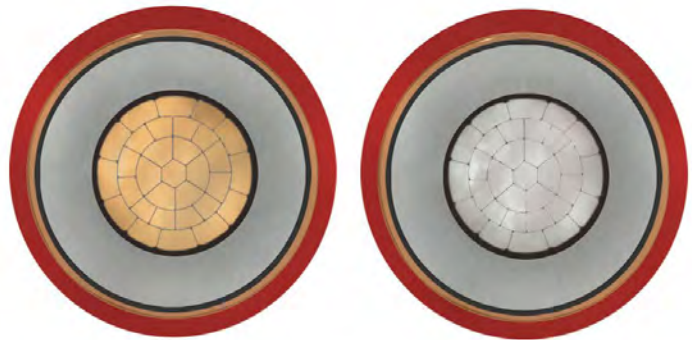
Copper/Aluminium conductor,  
XLPE insulated,  
Copper wire/ tape screened,  
PVC/PE sheathed cable

#### DIMENSIONAL AND ELECTRICAL DATA

1 CORE

Nominal cross-sectional area		mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400	500	630	800	
Conductor diameter (approx)		mm	6.05	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7	26.6	30.3	34.2	
Nominal insulation thickness		mm	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.8	3.0	3.2	3.2	3.2	
Insulation diameter (approx)		mm	12.5	13.5	14.7	16.3	18.1	19.5	20.7	22.7	24.8	27.9	31.9	36.0	39.7	43.2	
Nominal outer sheath thickness		mm	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	2.0	2.1	2.2	2.3	2.5	
Overall cable diameter (approx)		mm	18.9	19.9	21.1	22.7	24.3	25.7	27.1	29.1	31.4	34.6	38.9	44.0	47.9	52.7	
Cable net weight ( approx)		CU	656	779	929	1,175	1,440	1,711	2,049	2,454	3,078	3,775	4,737	6,046	7,564	9,242	
		AL	490	548	620	725	813	922	1,074	1,239	1,477	1,767	2,168	2,770	3,316	3,921	
Standard length per-reel		m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	500	500	500	500	
Minimum bending radius		mm	240	270	290	320	360	390	410	460	510	560	620	680	780	860	
Max. DC conductor resistance at 20 °C		CU	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	0.0366	0.0283	0.0221	
		AL	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	0.0605	0.0469	0.0367	
Min. insulation resistance at 20 °C		MΩ.Km	900	800	700	600	500	500	500	400	400	400	400	300	300	300	
Capacitance per phase		μF/Km	0.191	0.216	0.240	0.279	0.318	0.349	0.376	0.419	0.459	0.481	0.511	0.540	0.534	0.595	
Inductance per phase		o	0.409	0.391	0.372	0.353	0.333	0.323	0.316	0.306	0.295	0.289	0.283	0.278	0.279	0.272	
		o o o	0.594	0.575	0.556	0.538	0.518	0.508	0.501	0.491	0.480	0.474	0.468	0.463	0.464	0.457	
Max. short circuit current of conductor		CU	3.73	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79	72.16	90.83	115.23	
		AL	2.49	3.45	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14	47.60	59.90	75.96	
Max. short circuit current of screen			2.26	2.43	2.63	2.90	2.56	2.75	3.63	3.96	4.39	4.82	5.35	5.90	6.34	6.99	
Maximum current carrying capacity at 30 °C		in air	o	161	194	233	291	353	406	459	526	620	728	814	920	1,006	1,118
			o o	124	150	180	213	274	316	358	411	488	558	650	743	803	893
			o o o	190	230	276	344	417	480	536	611	715	810	900	1,005	1,087	1,209
			o o o o	146	177	214	267	326	376	423	484	572	651	740	837	870	967
		in ground	o	150	179	210	257	307	348	388	438	506	568	637	717	779	831
			o o	115	137	163	200	238	271	302	343	398	449	510	574	622	663
			o o o	171	203	238	290	343	387	422	472	539	601	648	774	818	871
			o o o o	131	156	185	226	269	304	335	376	434	486	536	614	654	697
AC test voltage		kV/5 min	12.5 (IEC) , 9 (SPLN)														

Note : This is only general information. For other specific requirement, please contact our marketing.



**N2XS<sub>Y</sub>/NA2XS<sub>Y</sub>**  
**6/10(12) kV**  
**IEC 60502-2**

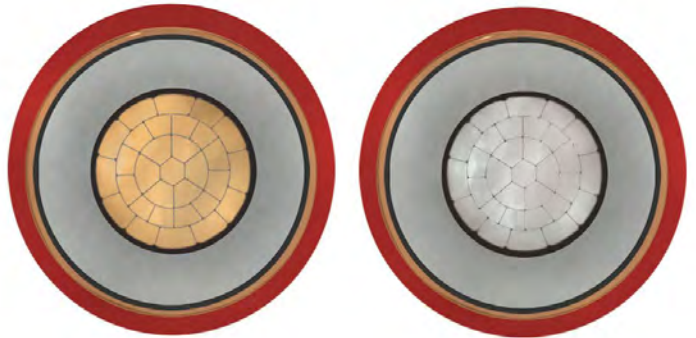
**Copper/Aluminium conductor,  
XLPE insulated,  
Copper wire/tape screened,  
PVC/PE sheathed cable**

**DIMENSIONAL AND ELECTRICAL DATA**

1 CORE

Nominal cross-sectional area		mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400	500	630	800	
Conductor diameter (approx)		mm	6.05	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7	26.6	30.3	34.2	
Nominal insulation thickness		mm	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	
Insulation diameter (approx)		mm	14.3	15.3	16.5	18.1	19.9	21.3	22.5	24.5	26.9	29.1	31.9	34.8	39.7	43.6	
Nominal outer sheath thickness		mm	1.6	1.6	1.7	1.7	1.8	1.8	1.9	1.9	2.0	2.1	2.2	2.3	2.4	2.5	
Overall cable diameter (approx)		mm	20	21	23	24	26	28	29	31	34	36	39	42	48	52	
Cable net weight ( approx)	CU	Kg/Km	700	800	1,000	1,200	1,500	1,700	2,100	2,500	3,100	3,700	4,600	5,700	7,300	9,100	
	AL	Kg/Km	500	600	700	800	900	1,000	1,200	1,300	1,600	1,800	2,200	2,600	3,300	3,900	
Standard length per-reel		m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	500	500	500	500	
Minimum bending radius		mm	260	280	310	340	380	410	430	470	520	570	630	690	780	860	
Max. DC conductor resistance at 20 °C	CU	Ω/Km	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	0.0366	0.0283	0.0221	
	AL	Ω/Km	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	0.0605	0.0469	0.0367	
Min. insulation resistance at 20 °C		MΩ.Km	1,100	1,000	900	800	700	600	600	500	500	400	400	300	300	300	
Capacitance per phase		µF/Km	0.161	0.181	0.200	0.230	0.261	0.286	0.306	0.341	0.382	0.420	0.467	0.517	0.534	0.572	
Inductance per phase	o	mH/Km	0.430	0.408	0.390	0.367	0.349	0.337	0.331	0.318	0.306	0.296	0.288	0.280	0.280	0.272	
	o o o																
Max.short circuit current of conductor	CU	kA/sec	3.73	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79	72.16	90.83	115.23	
	AL		2.49	3.45	4.89	6.81	9.19	11.58	14.43	17.26	22.98	28.67	38.14	47.60	59.90	75.96	
Max.short circuit current of screen			2.56	2.73	2.92	2.56	2.80	2.98	3.93	4.26	4.66	4.02	5.48	5.96	5.53	6.05	
Maximum current carrying capacity at 30 °C	in air	o	CU	162	195	234	292	354	407	460	527	621	729	815	921	1,007	1,119
		o o	AL	125	151	181	217	275	317	359	412	489	559	651	744	804	894
		o o o	CU	191	231	277	345	418	481	537	612	716	811	901	1,006	1,088	1,210
		o o o	AL	147	178	215	268	327	377	424	485	573	652	741	838	871	968
		o	CU	151	180	211	258	308	349	389	439	507	569	638	718	780	832
	in ground	o o	AL	116	138	164	201	239	272	303	344	399	450	511	574	623	664
		o o o	CU	172	204	239	2910	344	388	423	473	540	601	649	774	819	872
		o o o	AL	132	157	186	227	270	305	336	377	434	487	537	615	655	698
		AC test voltage		kV/5 min	21 (IEC) , 15 (SPLN)												

**Note : This is only general information. For other specific requirement, please contact our marketing.**



## N2XSY/NA2XSY

### 8.7/15(17.5) kV

#### IEC 60502-2

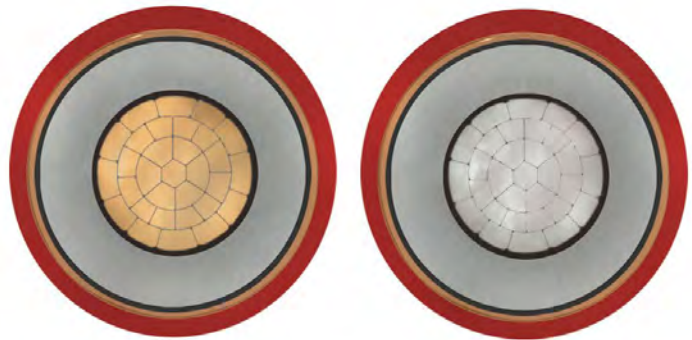
Copper/Aluminium conductor,  
XLPE insulated,  
Copper wire/tape screened,  
PVC/PE sheathed cable

#### DIMENSIONAL AND ELECTRICAL DATA

1 CORE

Nominal cross-sectional area		mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400	500	630	800	
Conductor diameter (approx)		mm	6.05	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7	26.6	30.3	34.2	
Nominal insulation thickness		mm	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Insulation diameter (approx)		mm	16.5	17.5	18.7	20.3	22.1	23.5	24.7	25.7	29.1	31.3	34.1	37.0	41.9	45.8	
Nominal outer sheath thickness		mm	1.7	1.7	1.7	1.8	1.8	1.9	1.9	2.0	2.1	2.1	2.3	2.3	2.5	2.6	
Overall cable diameter (approx)		mm	23	24	25	27	28	30	31	33	36	38	41	44	50	54	
Cable net weight ( approx)		CU	800	900	1,000	1,300	1,600	1,900	2,200	2,600	3,200	3,800	4,800	5,900	7,900	9,300	
		AL	600	700	800	900	1,000	1,100	1,300	1,500	1,700	1,900	2,400	2,800	3,500	4,200	
Standard length per-reel		m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	500	500	500	500	
Minimum bending radius		mm	290	310	330	360	400	430	460	500	550	590	650	710	810	880	
Max. DC conductor resistance at 20 °C		CU	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	0.0366	0.0283	0.0221	
		AL	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	0.0605	0.0469	0.0367	
Min. insulation resistance at 20 °C		MΩ.Km	1,300	1,200	1,100	1,000	900	800	700	700	600	600	500	500	400	400	
Capacitance per phase		μF/Km	0.138	0.154	0.170	0.193	0.218	0.238	0.254	0.281	0.314	0.344	0.382	0.421	0.428	0.476	
Inductance per phase		o	0.452	0.428	0.407	0.386	0.365	0.354	0.345	0.332	0.318	0.308	0.300	0.291	0.280	0.280	
		o o o	0.637	0.613	0.592	0.570	0.550	0.538	0.530	0.517	0.503	0.493	0.485	0.475	0.475	0.465	
Max. short circuit current of conductor		CU	3.73	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79	72.16	90.83	115.23	
		AL	2.49	3.45	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14	47.60	59.90	75.96	
Max. short circuit current of screen			2.92	2.48	2.63	2.85	3.09	3.28	4.29	4.62	4.02	4.31	5.85	6.33	5.82	6.34	
Maximum current carrying capacity at 30 °C		in air	o	162	199	238	296	358	412	466	532	627	715	819	927	1,009	1,121
			o o	125	155	184	229	278	320	363	415	493	563	652	746	806	896
			o o o	191	233	279	347	420	483	540	614	718	813	904	1,011	1,090	1,201
			o o o o	147	180	217	240	328	378	425	485	513	652	740	838	873	970
		in ground	o	151	181	214	262	312	353	394	445	513	577	647	720	782	834
			o o	116	139	166	203	242	276	307	348	404	455	517	576	625	666
			o o o	172	205	240	292	347	391	427	478	546	608	659	776	821	874
			o o o o	132	158	187	228	271	307	339	380	439	491	543	617	657	701
AC test voltage		kV/5 min	30.5 (IEC) , 22 (SPLN)														

**Note :** This is only general information. For other specific requirement, please contact our marketing.



**N2XSY/NA2XSY**  
**12/20(24) kV**  
**SPLN 43-5/IEC 60502-2**

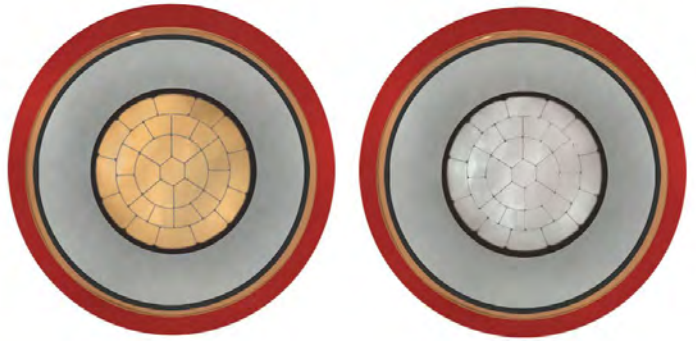
Copper/Aluminium conductor, XLPE insulated,  
with or without water sealing,  
Copper wire/tape screened,  
PVC/PE sheathed cable

**DIMENSIONAL AND ELECTRICAL DATA**

1 CORE

Nominal cross-sectional area	mm <sup>2</sup>	35	50	70	95	120	150	185	240	300	400	500	630	800			
Conductor diameter (approx)	mm	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7	26.6	30.3	34.2			
Nominal insulation thickness	mm	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5			
Insulation diameter (approx)	mm	19.7	20.9	22.5	24.3	25.7	26.9	28.9	31.3	33.5	36.3	39.2	44.1	48.0			
Nominal outer sheath thickness	mm	1.8	1.8	1.9	1.9	2.0	2.0	2.1	2.1	2.2	2.3	2.4	2.5	2.6			
Overall cable diameter (approx)	mm	26	27	29	31	32	34	36	38	40	44	47	53	58			
Cable net weight ( approx)	CU	1000	1,200	1,400	1,700	2,000	2,300	2,700	33	40	4,900	6,100	7,700	9,500			
	AL	800	900	1,000	1,100	1,300	1,400	1,600	1,800	2,100	2,500	3,000	3,700	4,400			
Standard length per-reel	m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	500	500	500	500			
Minimum bending radius	mm	330	350	390	420	450	480	520	570	610	670	730	830	920			
Max. DC conductor resistance at 20 °C	CU	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	0.0366	0.0283	0.0221			
	AL	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	0.0605	0.0469	0.0367			
Min. insulation resistance at 20 °C	MΩ.Km	1,400	1,300	1,100	1,000	900	900	800	700	700	600	600	500	400			
Capacitance per phase	µF/Km	0.136	0.149	0.169	0.190	0.206	0.220	0.243	0.270	0.294	0.326	0.358	0.370	0.410			
Inductance per phase	o o o o o o	mH/Km	0.447	0.426	0.403	0.382	0.368	0.359	0.345	0.330	0.320	0.310	0.301	0.299	0.294		
	0.632		0.611	0.588	0.566	0.553	0.544	0.530	0.515	0.505	0.495	0.486	0.483	0.479			
Max.short circuit current of conductor	CU	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79	72.16	90.83	115.23			
	AL	3.45	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14	47.60	59.90	75.96			
Max.short circuit current of screen		2.77	2.92	3.14	3.38	3.57	4.66	3.99	4.31	4.60	6.21	6.69	7.01	7.43			
Maximum current carrying capacity at 30 °C	in air	o o o o o o	A	CU	199	238	296	358	412	466	532	627	715	819	927	1,009	1,121
		AL		155	184	229	278	320	363	415	493	63	652	746	806	896	
		CU		233	279	347	420	488	540	614	718	813	904	1,011	1,090	1,212	
		AL		180	217	240	328	378	425	485	513	652	740	838	873	970	
	in ground	o o o o o o		CU	181	214	262	312	353	394	445	513	577	647	720	782	834
		AL		139	165	3	242	276	307	348	404	455	517	576	625	666	
		CU		205	240	292	347	391	427	478	546	608	659	776	821	874	
		AL		158	187	228	271	307	339	380	439	491	548	617	657	701	
AC test voltage		kV/5 min		42 (IEC) , 30 (SPLN)													

Note : This is only general information. For other specific requirement, please contact our marketing.



## N2XSY/NA2XSY

### 18/30(36) kV

#### IEC 60502-2

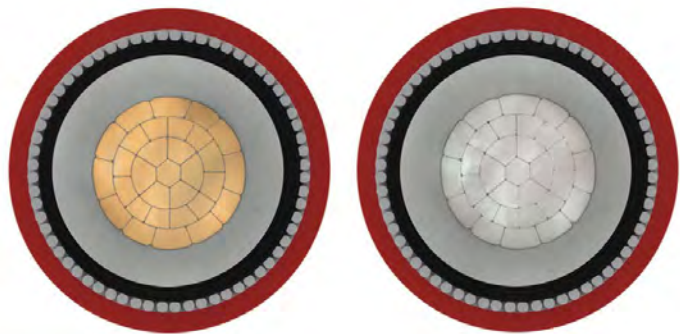
Copper/Aluminium conductor,  
XLPE insulated,  
Copper wire/tape screened,  
PVC/PE sheathed cable

#### DIMENSIONAL AND ELECTRICAL DATA

1 CORE

Nominal cross-sectional area	mm <sup>2</sup>	50	70	95	120	150	185	240	300	400	500	630	800		
Conductor diameter (approx)	mm	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7	26.6	30.3	34.2		
Nominal insulation thickness	mm	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0		
Insulation diameter (approx)	mm	25.9	27.5	29.3	30.7	31.9	33.9	36.3	38.5	41.3	44.2	49.1	53.0		
Nominal outer sheath thickness	mm	2.0	2.0	2.1	2.1	2.2	2.2	2.3	2.4	2.5	2.6	2.7	2.8		
Overall cable diameter (approx)	mm	32	34	36	37	39	41	43	46	49	52	58	62		
Cable net weight ( approx)	CU	1,400	1,700	2,000	2,300	2,600	3,100	3,700	4,400	5,300	6,400	8,200	10,000		
	AL	1,200	1,300	1,400	1,600	1,700	1,900	2,200	2,500	2,900	3,400	4,200	4,900		
Standard length per-reel	m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	500	500	500	500		
Minimum bending radius	mm	410	440	480	510	530	570	620	670	730	790	880	960		
Max. DC conductor resistance at 20 °C	CU	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	0.0366	0.0283	0.0221		
	AL	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	0.0605	0.0469	0.0367		
Min. insulation resistance at 20 oC	MΩ.Km	1,600	1,500	1,300	1,200	1,200	1,100	1,000	900	800	700	600	600		
Capacitance per phase	µF/Km	0.121	0.136	0.151	0.163	0.173	0.190	0.209	0.227	0.250	0.274	0.288	0.317		
Inductance per phase	o o o o o o	mH/Km	0.462	0.435	0.413	0.398	0.388	0.372	0.357	0.345	0.333	0.318	0.308		
			0.647	0.620	0.598	0.583	0.573	0.557	0.542	0.530	0.518	0.507	0.503		
Max.short circuit current of conductor	CU	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79	72.16	90.83	115.23		
	AL	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14	47.60	59.90	75.96		
Max.short circuit current of screen		3.59	3.81	4.04	4.23	4.39	4.66	4.97	5.26	5.64	6.02	6.78	7.29		
Maximum current carrying capacity at 30 °C	in air	o	CU	241	299	362	416	469	536	630	717	823	929	1,010	
		o o	AL	187	232	281	323	365	418	494	564	654	747	807	
		o o o	CU	279	348	421	483	540	615	718	812	904	1,011	1,091	
			AL	217	270	328	378	425	485	572	649	737	838	874	
		in ground	o	CU	217	265	316	358	398	449	519	584	648	721	783
			o o	AL	168	205	246	278	311	351	409	460	518	577	626
	o o o		CU	241	294	348	394	431	483	553	615	660	778	822	
			AL	188	228	273	309	341	384	443	495	544	618	658	
	AC test voltage	kV/5 min	63												

Note : This is only general information. For other specific requirement, please contact our marketing.



# N2XRY/NA2XRY

## 1.8/3(3.6) kV

### IEC 60502-1

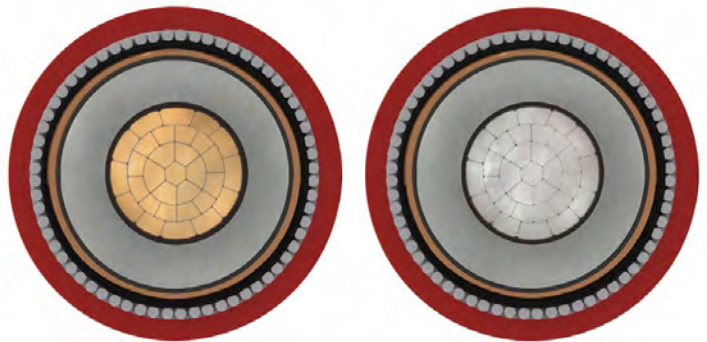
Copper/Aluminium conductor,  
XLPE insulated, Aluminium wire armoured,  
PVC/PE sheathed cable

DIMENSIONAL AND ELECTRICAL DATA

1 CORE

Nominal cross-sectional area		mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400	500	630	800	
Conductor diameter (approx)		mm	6.05	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7	26.6	30.3	34.2	
Nominal insulation thickness		mm	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.4	2.6	
Insulation diameter (approx)		mm	10.3	11.3	12.5	14.1	15.9	17.3	18.5	20.5	22.9	25.1	27.9	31.2	35.3	39.6	
Diameter of armour wire		mm	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.0	2.0	2.5	2.5	3.15	
Nominal outer sheath thickness		mm	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.6	
Overall cable diameter (approx)		mm	23	24	25	27	28	30	31	33	36	39	42	46	53	59	
Cable net weight ( approx)		CU	700	800	1,000	1,200	1,500	1,700	2,000	2,400	3,100	3,800	4,700	6,000	7,500	9,600	
		AL	500	600	700	800	900	1,000	1,100	1,300	1,500	1,900	2,200	2,700	3,500	4,500	
Standard length per-reel		m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	500	500	500	500	500	
Minimum bending radius		mm	260	280	300	340	380	400	420	46	520	570	630	710	780	880	
Max. DC conductor resistance at 20 °C		CU	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	0.0366	0.0283	0.0221	
		AL	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	0.0605	0.0469	0.0367	
Min. insulation resistance at 20 °C		MΩ.Km	900	700	700	600	500	400	400	400	300	300	300	300	200	200	
Capacitance per phase		µF/Km	0.261	0.299	0.334	0.393	0.453	0.499	0.539	0.606	0.685	0.758	0.851	0.871	0.909	0.947	
Inductance per phase		o	0.428	0.405	0.385	0.366	0.348	0.333	0.323	0.311	0.302	0.297	0.288	0.289	0.281	0.280	
		o o															
		o o o	0.613	0.59	0.570	0.551	0.533	0.518	0.508	0.495	0.487	0.582	0.573	0.474	0.465	0.465	
Max.short circuit current of conductor		CU	3.73	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79	72.16	90.83	115.23	
		AL	249	3.45	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14	47.60	59.90	75.96	
Maximum current carrying capacity at 30 °C		in air	o	160	193	231	289	350	403	456	523	616	723	808	913	998	1,109
			o o	123	149	179	215	272	314	356	409	485	554	645	737	797	886
			o o o	189	229	274	341	414	476	532	607	710	804	893	997	1,078	1,198
		in ground	o	145	176	213	265	324	373	421	481	568	646	734	830	862	958
			o o	149	178	209	255	305	345	386	435	503	64	632	712	773	824
			o o o	115	136	162	199	236	269	301	341	396	446	507	569	618	658
AC test voltage		kV/5 min											6.5				

Note : This is only general information. For other specific requirement, please contact our marketing.



## N2XSRY/NA2XSRY

### 3.6/6(7.2) kV

#### IEC 60502-2

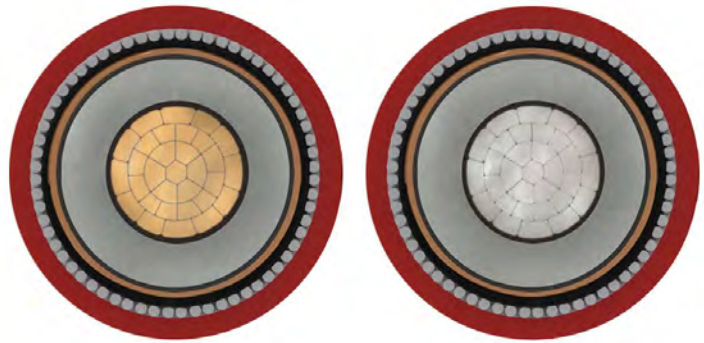
Copper/Aluminium conductor,  
XLPE insulated, Copper wire/tape screened,  
Aluminium wire armoured,  
PVC/PE sheathed cable

#### DIMENSIONAL AND ELECTRICAL DATA

1 CORE

Nominal cross-sectional area	mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400	500	630	800	
Conductor diameter (approx)	mm	6.05	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7	26.6	30.3	34.2	
Nominal insulation thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.8	3.0	3.2	3.2	3.2	
Insulation diameter (approx)	mm	12.5	13.5	14.7	16.3	18.1	19.5	20.7	22.7	24.8	27.9	31.9	36.0	39.7	43.2	
Diameter of armour wire	mm	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.0	2.0	2.0	2.5	2.5	3.15	3.15	
Nominal outer sheath thickness	mm	1.8	1.8	1.8	1.8	1.9	2.0	2.0	2.1	2.2	2.2	2.4	2.5	2.7	2.8	
Overall cable diameter (approx)	mm	25	26	27	29	30	32	33	36	39	42	47	50	58	63	
Cable net weight ( approx)	CU	1000	1100	1,300	1,600	1,900	2,200	2,500	3,000	3,700	4,400	5,600	6,800	8,900	10,700	
	AL	850	900	1,000	1,100	1,300	1,400	1,700	190	2,200	2,500	3,100	3,700	4,900	5,600	
Standard length per-reel	m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	500	500	500	500	
Minimum bending radius	mm	310	330	350	390	420	450	470	520	580	630	710	770	880	960	
Max. DC conductor resistance at 20 °C	CU	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	0.0366	0.0283	0.0221	
	AL	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	0.0605	0.0469	0.0367	
Min. insulation resistance at 20 °C	MΩ.Km	900	800	700	600	500	500	500	400	400	400	400	300	300	300	
Capacitance per phase	µF/Km	0.191	0.216	0.240	0.279	0.318	0.349	0.376	0.419	0.459	0.481	0.511	0.540	0.534	0.595	
Inductance per phase	mH/Km	o	0.472	0.448	0.426	0.404	0.377	0.367	0.356	0.347	0.336	0.328	0.326	0.315	0.318	0.308
		o o o	0.657	0.633	0.611	0.588	0.562	0.552	0.541	0.532	0.520	0.513	0.510	0.500	0.503	0.492
Max. short circuit current of conductor	CU	3.73	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79	72.16	90.83	115.23	
	AL	2.49	3.45	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14	47.60	59.90	75.96	
Max. short circuit current of screen		2.26	2.43	2.63	2.90	2.56	2.75	3.63	3.96	4.39	4.82	5.35	5.90	6.34	6.99	
Maximum current carrying capacity at 30 °C	in air	o	159	192	231	288	349	402	454	521	614	721	806	911	996	1,107
		o o	123	148	178	214	271	313	354	407	483	552	643	735	795	884
		o o o	188	228	273	340	413	475	530	605	708	802	891	995	1,076	1,197
		AL	145	175	218	264	323	372	419	479	566	644	732	828	861	957
	in ground	o	148	177	208	254	304	344	384	433	501	562	630	710	771	823
		o o	114	185	161	198	235	268	299	339	394	444	505	568	616	656
		AL	169	201	235	287	339	383	418	467	533	595	641	766	810	862
		o o o	130	154	183	224	266	301	331	372	429	481	530	608	647	699
AC test voltage	kV/5 min	12.5														

Note : This is only general information. For other specific requirement, please contact our marketing.



**N2XSRV/NA2XSRV**  
**6/10(12) kV**  
**IEC 60502-2**

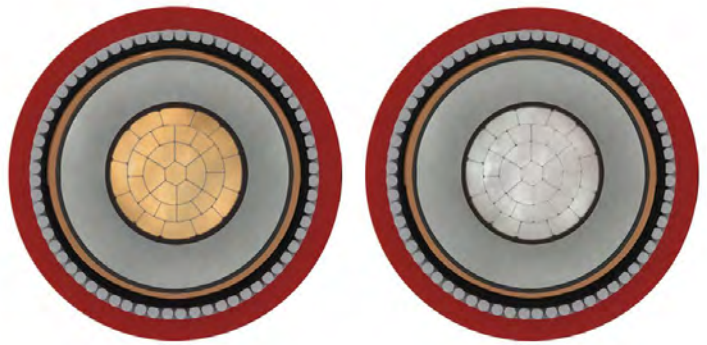
**Copper/Aluminium conductor,  
XLPE insulated, Copper wire/tape screened,  
Aluminium wire armoured,  
PVC/PE sheathed cable**

**DIMENSIONAL AND ELECTRICAL DATA**

**1 CORE**

Nominal cross-sectional area		mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400	500	630	800	
Conductor diameter (approx)		mm	6.05	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7	26.6	30.3	34.2	
Nominal insulation thickness		mm	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	
Insulation diameter (approx)		mm	14.3	15.3	16.5	18.1	19.9	21.3	22.5	24.5	26.9	29.1	31.9	34.8	39.7	43.6	
Diameter of armour wire		mm	1.6	1.6	1.6	1.6	1.6	1.6	2.0	2.0	2.0	2.5	2.5	2.5	3.15	3.15	
Nominal outer sheath thickness		mm	1.8	1.8	1.9	1.9	2.0	2.0	2.1	2.1	2.2	2.3	2.4	2.5	2.7	2.8	
Overall cable diameter (approx)		mm	27	28	29	30	32	34	36	38	41	44	47	50	58	62	
Cable net weight ( approx)		CU	1,100	1,200	1,400	1,700	2,000	2,300	2,700	3,200	3,800	4,600	5,600	6,800	8,900	10,800	
		AL	950	1,000	1,100	1,200	1,400	1,600	1,800	2,000	2,300	2,600	3,200	4,000	4,800	5,700	
Standard length per-reel		m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	500	500	500	500
Minimum bending radius		mm	330	350	370	400	440	470	500	540	600	650	710	770	880	960	
Max. DC conductor resistance at 20 °C		CU	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	0.0366	0.0283	0.0221	
		AL	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	0.0605	0.0469	0.0367	
Min. insulation resistance at 20 °C		MΩ.Km	1,100	1,000	900	800	700	600	600	500	500	400	400	400	300	300	
Capacitance per phase		µF/Km	0.161	0.181	0.200	0.230	0.261	0.286	0.306	0.341	0.382	0.420	0.467	0.517	0.534	0.572	
Inductance per phase		o	0.488	0.463	0.440	0.410	0.390	0.379	0.373	0.358	0.346	0.337	0.326	0.315	0.313	0.308	
		o o o	0.673	0.648	0.625	0.595	0.575	0.564	0.558	0.543	0.530	0.522	0.510	0.500	0.503	0.492	
Max.short circuit current of conductor		CU	3.73	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79	72.16	90.83	115.23	
		AL	2.49	3.45	4.89	6.81	9.19	11.58	14.43	17.26	22.98	28.67	38.14	47.60	59.90	75.96	
Max.short circuit current of screen			2.56	2.73	2.92	2.56	2.80	2.98	3.93	4.26	4.66	4.02	5.48	5.96	5.53	6.05	
Maximum current carrying capacity at 30 °C		in air	o	160	193	231	289	350	403	455	522	615	722	807	912	997	1,108
			o o	124	149	179	215	272	314	355	408	484	553	644	736	796	885
			o o o	189	229	274	341	414	476	531	606	709	803	892	996	1,077	1,198
			AL	145	176	213	265	324	373	420	480	567	645	733	830	862	958
		in ground	o	149	178	209	255	305	345	385	434	502	563	631	711	772	824
			o o	115	136	162	199	236	269	300	340	395	445	506	568	617	657
			CU	170	202	236	288	340	384	419	468	534	595	642	766	811	863
			AL	130	155	184	255	267	302	332	373	430	482	531	609	648	691
AC test voltage		kV/5 min	21														

**Note : This is only general information. For other specific requirement, please contact our marketing.**



# N2XSRY/NA2XSRY

## 8.7/15(17.5) kV

### IEC 60502-2

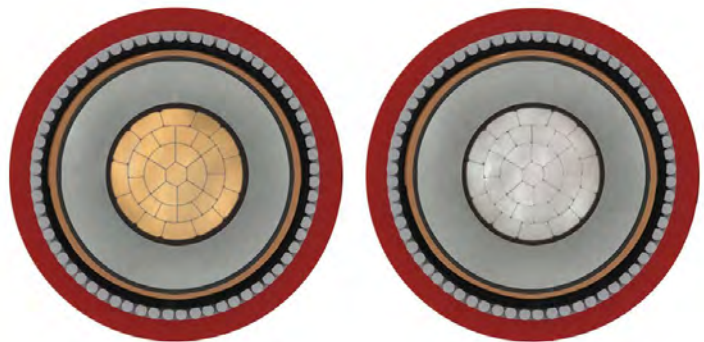
Copper/Aluminium conductor,  
XLPE insulated, Copper wire/tape screened,  
Aluminium wire armoured,  
PVC/PE sheathed cable

#### DIMENSIONAL AND ELECTRICAL DATA

1 CORE

Nominal cross-sectional area	mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400	500	630	800	
Conductor diameter (approx)	mm	6.05	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7	26.6	30.3	34.2	
Nominal insulation thickness	mm	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Insulation diameter (approx)	mm	16.5	17.5	18.7	20.3	22.1	23.5	24.7	25.7	29.1	31.3	34.1	37.0	41.9	45.8	
Diameter of armour wire	mm	1.6	1.6	1.6	1.6	2.0	2.0	2.0	2.0	2.5	2.5	2.5	3.15	3.15	3.15	
Nominal outer sheath thickness	mm	1.9	1.9	1.9	2.0	2.1	2.1	2.2	2.2	2.3	2.4	2.5	2.7	2.8	2.9	
Overall cable diameter (approx)	mm	29	30	31	33	36	37	39	41	44	47	50	54	61	65	
Cable net weight ( approx)	CU	1,300	1,400	1,500	1,800	2,200	2,500	2,900	3,400	4,100	4,900	5,900	7,300	9,100	11,100	
	AL	1,000	1,100	1,200	1,500	1,600	1,800	2,000	2,200	2,500	3,000	2,400	4,200	510	6,000	
Standard length per-reel	m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	500	500	500	500	
Minimum bending radius	mm	350	370	390	430	480	500	530	570	630	680	740	810	910	990	
Max. DC conductor resistance at 20 °C	CU	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	0.0366	0.0283	0.0221	
	AL	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	0.0605	0.0469	0.0367	
Min. insulation resistance at 20 °C	MΩ.Km	1,300	1,200	1,100	1,000	900	800	700	700	600	600	500	500	400	400	
Capacitance per phase	µF/Km	0.138	0.154	0.170	0.193	0.218	0.238	0.254	0.281	0.314	0.344	0.382	0.421	0.428	0.476	
Inductance per phase	o	0.502	0.477	0.453	0.429	0.413	0.396	0.389	0.373	0.360	0.351	0.338	0.330	0.329	0.317	
	o o															
Max. short circuit current of conductor	o o o	0.687	0.662	0.638	0.614	0.598	0.581	0.574	0.558	0.545	0.536	0.523	0.515	0.513	0.502	
	o o o o															
Max. short circuit current of screen	CU	3.73	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79	72.16	90.83	115.23	
	AL	2.49	3.45	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14	47.60	59.90	75.96	
Maximum current carrying capacity at 30 °C	in air	o	160	197	235	293	354	408	461	527	621	708	811	918	999	1,110
		o o														
		CU														
		o o o														
		AL														
	in ground	o	189	230	276	343	416	478	534	3608	711	805	895	1,001	1,079	1,200
		o o														
		CU														
		o o o														
		AL														
CU	149	179	212	259	309	349	390	440	508	571	640	713	774	826		
AL	115	137	164	201	239	273	304	344	400	450	512	570	619	659		
CU	170	203	237	289	343	387	423	473	540	602	652	768	813	865		
AL	130	156	185	226	268	304	335	376	434	486	537	611	650	694		
AC test voltage	kV/5 min	30.5														

Note : This is only general information. For other specific requirement, please contact our marketing.



**N2XSR/NA2XSR**  
**12/20(24) kV**  
**IEC 60502-2**

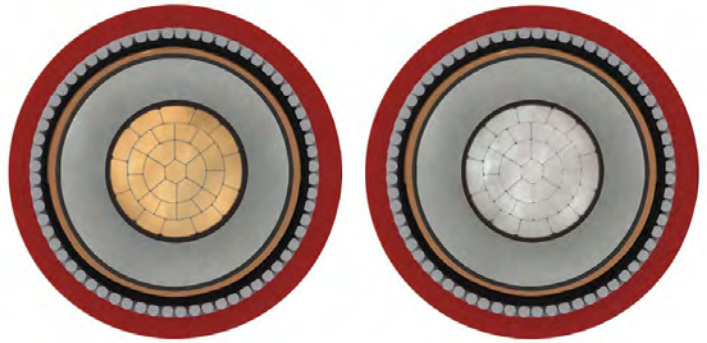
Copper/Aluminium conductor,  
XLPE insulated, Copper wire/tape screened,  
Aluminium wire armoured,  
PVC/PE sheathed cable

**DIMENSIONAL AND ELECTRICAL DATA**

1 CORE

Nominal cross-sectional area		mm <sup>2</sup>	35	50	70	95	120	150	185	240	300	400	500	630	800			
Conductor diameter (approx)		mm	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7	26.6	30.3	34.2			
Nominal insulation thickness		mm	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5			
Insulation diameter (approx)		mm	19.7	20.9	22.5	24.3	25.7	26.9	28.9	31.3	33.5	36.3	39.2	44.1	48.0			
Diameter of armour wire		mm	1.6	1.6	2.0	2.0	2.0	2.0	2.0	2.5	2.5	3.15	3.15	3.15	4.0			
Nominal outer sheath thickness		mm	2	2.0	2.1	2.1	2.2	2.2	2.3	2.4	2.5	2.6	2.7	2.8	3.0			
Overall cable diameter (approx)		mm	32	33	36	38	39	41	44	47	49	54	57	63	69			
Cable net weight ( approx)		CU	1,300	1,500	1,800	2,100	2,400	2,800	3,200	3,900	4,500	5,600	6,700	8,500	10,400			
		AL	1,200	1,400	1,600	1,700	1,900	2,100	2,400	2,700	3,200	3,700	4,500	5,200	5,900			
Standard length per-reel		m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	500	500	500	500			
Minimum bending radius		mm	380	400	430	470	500	530	570	620	670	730	790	880	970			
Max. DC conductor resistance at 20 °C		CU	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	0.0366	0.0283	0.0221			
		AL	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	0.0605	0.0469	0.0367			
Min. insulation resistance at 20 °C		MΩ.Km	1,400	1,300	1,100	1,000	900	900	800	700	700	600	600	500	400			
Capacitance per phase		µF/Km	0.136	0.149	0.169	0.190	0.206	0.220	0.243	0.270	0.294	0.326	0.358	0.370	0.410			
Inductance per phase		o o o o o o	mH/Km	0.490	0.466	0.447	0.424	0.407	0.399	0.387	0.373	0.359	0.353	0.341	0.335	0.329		
			0.675	0.651	0.632	0.609	0.592	0.584	0.572	0.558	0.544	0.538	0.526	0.520	0.514			
Max.short circuit current of conductor		CU	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79	72.16	90.83	115.23			
		AL	3.45	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14	47.60	59.90	75.96			
Max.short circuit current of screen			2.77	2.92	3.14	3.38	3.57	4.66	3.99	4.31	4.60	6.21	6.69	7.01	7.43			
Maximum current carrying capacity at 30 °C		in air		o	CU	197	235	293	354	408	461	527	621	708	811	918	999	1,110
				o o	AL	153	182	227	275	317	359	411	488	557	645	738	798	887
		in ground		o o o	CU	230	276	343	416	478	534	608	711	805	895	1,001	1,079	1,200
				AL	178	215	237	325	374	421	480	508	645	732	830	864	960	
		in ground		o	CU	179	212	259	309	349	390	440	508	571	640	713	774	826
				o o	AL	137	164	201	239	273	304	344	400	450	512	570	619	659
		in ground		o o o	CU	23	237	289	343	387	423	473	540	602	652	768	813	865
				AL	156	185	226	268	304	335	376	434	486	537	611	650	694	
AC test voltage			kV/5 min										42					

**Note : This is only general information. For other specific requirement, please contact our marketing.**



# N2XSRV/NA2XSRV

## 18/30(36) kV

### IEC 60502-2

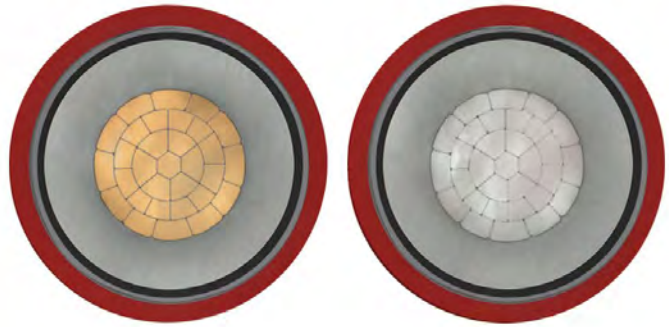
Copper/Aluminium conductor,  
XLPE insulated, Copper wire/tape screened,  
Aluminium wire armoured, PVC/PE sheathed cable

#### DIMENSIONAL AND ELECTRICAL DATA

1 CORE

Nominal cross-sectional area		mm <sup>2</sup>	50	70	95	120	150	185	240	300	400	500	630	800			
Conductor diameter (approx)		mm	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7	26.6	30.3	34.2			
Nominal insulation thickness		mm	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0			
Insulation diameter (approx)		mm	25.9	27.5	29.3	30.7	31.9	33.9	36.3	38.5	41.3	44.2	49.1	53.0			
Diameter of armour wire		mm	2.0	2.0	2.5	2.5	2.5	2.5	2.5	3.15	3.15	3.15	4.0	4.0			
Nominal outer sheath thickness		mm	2.2	2.3	2.4	2.4	2.5	2.5	2.6	2.7	2.8	2.9	3.1	3.2			
Overall cable diameter (approx)		mm	40	41	44	46	47	49	52	56	59	62	70	75			
Cable net weight ( approx)		CU	2,200	2,500	3,000	3,200	3,700	4,200	4,900	5,900	6,900	8,200	10,500	12,600			
		AL	1,900	2,100	2,300	2,600	2,800	3,000	3,600	4,000	4,500	5,100	6,500	7,400			
Standard length per-reel		m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	500	500	500	500			
Minimum bending radius		mm	480	510	560	590	610	650	710	770	830	890	1,000	1,090			
Max. DC conductor resistance at 20 °C		CU	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	0.0366	0.0283	0.0221			
		AL	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	0.0605	0.0469	0.0367			
Min. insulation resistance at 20 °C		MΩ.Km	1,600	1,500	1,300	1,200	1,200	1,100	1,000	900	800	700	600	600			
Capacitance per phase		µF/Km	0.121	0.136	0.151	0.163	0.173	0.190	0.209	0.227	0.250	0.274	0.288	0.317			
Inductance per phase		o o o o o o	mH/Km	0.504	0.473	0.453	0.440	0.427	0.409	0.393	0.386	0.371	0.358	0.356			
				0.689	0.658	0.638	0.625	0.611	0.594	0.578	0.571	0.556	0.543	0.541	0.530		
Max.short circuit current of conductor		CU	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79	72.16	90.83	115.23			
		AL	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14	47.60	59.90	75.96			
Max.short circuit current of screen			3.59	3.81	4.04	4.23	4.39	4.66	4.97	5.26	5.64	6.02	6.78	7.29			
Maximum current carrying capacity at 30 °C		in air	o	A	CU	238	296	358	412	464	530	624	710	815	920	1,000	1,111
			o o		AL	185	230	278	320	361	414	489	558	647	739	799	888
			o o o		CU	276	344	417	478	535	609	711	804	895	1,001	1,080	1,201
			o o o		AL	215	267	325	374	421	480	566	642	729	829	865	961
		in ground	o		CU	215	262	313	354	394	444	514	579	641	714	775	826
			o o		AL	166	203	243	275	308	347	405	455	513	571	620	660
			o o o		CU	238	291	344	390	427	478	547	609	653	770	814	866
			o o o		AL	186	226	270	306	337	380	438	490	538	612	651	695
AC test voltage		kV/5 min	63														

Note : This is only general information. For other specific requirement, please contact our marketing.



# N2XKY/NA2XKY

## 1.8/3(3.6) kV

### IEC 60502-1

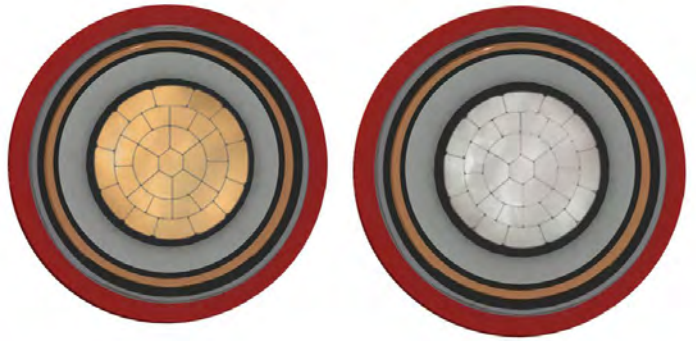
Copper/Aluminium conductor, XLPE insulated,  
Lead sheathed, PVC/PE sheathed cable

DIMENSIONAL AND ELECTRICAL DATA

1 CORE

Nominal cross-sectional area	mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400	500	630	800	
Conductor diameter (approx)	mm	6.05	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7	26.6	30.3	34.2	
Nominal insulation thickness	mm	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.4	2.6	
Insulation diameter (approx)	mm	10.3	11.3	12.5	14.1	15.9	17.3	18.5	20.5	22.9	25.1	27.9	31.2	35.3	39.6	
Nominal lead thickness	mm	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.7	1.8	1.9	2.0	
Nominal outer sheath thickness	mm	1.5	1.6	1.6	1.7	1.7	1.8	1.8	1.9	1.9	2.0	2.1	2.2	2.4	2.5	
Overall cable diameter (approx)	mm	21	23	24	26	27	29	30	33	35	37	41	44	51	56	
Cable net weight ( approx)	CU	1,300	1,400	1,600	1,900	2,300	2,700	3,000	3,500	4,200	5,100	6,200	7,600	9,500	11,700	
	AL	1,100	1,200	1,300	1,500	1,700	1,900	2,100	2,400	2,700	3,200	3,800	4,400	5,500	6,800	
Standard length per-reel	m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	500	500	500	500	500	500	
Minimum bending radius	mm	250	270	290	330	360	390	420	460	510	560	620	680	770	850	
Max. DC conductor resistance at 20 °C	CU	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	0.0366	0.0283	0.0221	
	AL	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	0.0605	0.0469	0.0367	
Min. insulation resistance at 20 °C	MΩ.Km	900	700	700	600	500	400	400	400	300	300	300	300	200	200	
Capacitance per phase	µF/Km	0.261	0.299	0.334	0.393	0.453	0.499	0.539	0.606	0.685	0.758	0.851	0.871	0.909	0.947	
Inductance per phase	mH/Km	o	0.413	0.394	0.375	0.355	0.337	0.327	0.319	0.309	0.297	0.289	0.282	0.278	0.273	0.268
		o o o	0.598	0.579	0.560	0.540	0.522	0.512	0.503	0.493	0.481	0.474	0.467	0.462	0.458	0.451
Max. short circuit current of conductor	CU	3.73	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79	72.16	90.83	115.23	
	AL	249	3.45	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14	47.60	59.90	75.96	
Maximum current carrying capacity at 30 °C	in air	o	160	199	231	289	350	403	456	523	616	723	808	913	1,109	
		o o	123	149	179	215	271	314	356	409	485	554	645	737	797	886
		o o o	189	229	274	341	414	476	532	607	710	804	893	997	1,078	1,198
		o o o o	145	176	213	265	324	373	421	481	568	646	734	830	862	958
	in ground	o	149	178	209	255	305	345	386	435	503	564	632	712	773	824
		o o	115	136	162	199	236	269	301	341	396	446	507	569	618	658
		o o o	170	201	236	288	340	384	420	469	535	592	643	767	812	864
		o o o o	130	155	184	225	267	302	333	374	430	483	532	610	649	696
AC test voltage	kV/5 min	6.5														

Note : This is only general information. For other specific requirement, please contact our marketing.



## N2XSKY/NA2XSKY

### 3.6/6(7.2) kV

#### IEC 60502-2

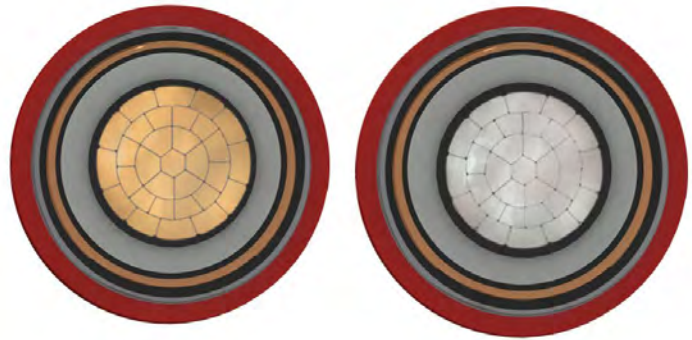
Copper/Aluminium conductor,  
XLPE insulated, Copper wire/tape screened,  
lead sheathed, PVC/PE sheathed cable

#### DIMENSIONAL AND ELECTRICAL DATA

1 CORE

		mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400	500	630	800		
Nominal cross-sectional area		mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400	500	630	800		
Conductor diameter (approx)		mm	6.05	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7	26.6	30.3	34.2		
Nominal insulation thickness		mm	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.8	3.0	3.2	3.2	3.2		
Insulation diameter (approx)		mm	12.5	13.5	14.7	16.3	18.1	19.5	20.7	22.7	24.8	27.9	31.9	36.0	39.7	43.2		
Nominal lead thickness		mm	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.7	1.8	1.9	2.0		
Nominal outer sheath thickness		mm	1.5	1.6	1.6	1.7	1.7	1.8	1.8	1.9	1.9	2.0	2.1	2.2	2.4	2.5		
Overall cable diameter (approx)		mm	24	25	26	28	30	31	33	35	38	41	44	48	54	59		
Cable net weight ( approx)		CU	1,800	2,000	2,200	2,600	2,900	3,300	3,800	4,300	5,200	6,100	7,300	8,900	11,100	13,300		
		AL	1,600	1,800	1,900	2,100	2,300	2,500	2,900	3,100	3,700	3,500	4,900	5,700	7,000	8,000		
Standard length per-reel		m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	500	500	500	500		
Minimum bending radius		mm	300	320	350	380	410	440	470	510	570	620	680	750	840	930		
Max. DC conductor resistance at 20 °C		CU	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	0.0366	0.0283	0.0221		
		AL	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	0.0605	0.0469	0.0367		
Min. insulation resistance at 20 oC		MΩ.Km	900	800	700	600	500	500	500	400	400	400	300	300	300			
Capacitance per phase		μF/Km	0.191	0.216	0.240	0.279	0.318	0.349	0.376	0.419	0.459	0.481	0.511	0.540	0.534	0.595		
Inductance per phase		o o o o o o	0.463	0.439	0.420	0.395	0.375	0.361	0.355	0.340	0.329	0.321	0.313	0.307	0.304	0.296		
		o o o o o o	0.647	0.624	0.605	0.580	0.560	0.546	0.539	0.525	0.514	0.506	0.498	0.492	0.489	0.481		
Max.short circuit current of conductor		CU	3.73	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79	72.16	90.83	115.23		
		AL	2.49	3.45	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14	47.60	59.90	75.96		
Max.short circuit current of screen			2.26	2.43	2.63	2.90	2.56	2.75	3.63	3.96	4.39	4.82	5.35	5.90	6.34	6.99		
Maximum current carrying capacity at 30 °C		in air	o o o	CU	159	192	231	288	349	402	454	521	614	721	806	911	996	1,107
			o o	AL	123	148	178	214	271	313	354	407	483	552	643	735	795	884
			o o o	CU	188	228	273	380	413	475	530	605	708	802	891	995	1,076	1,197
			o o o	AL	145	175	218	264	323	372	419	479	596	644	7323	828	861	957
		in ground	o o o	CU	148	177	208	254	304	344	384	433	501	562	630	710	771	823
			o o	AL	114	135	161	198	235	268	299	339	393	444	505	568	616	656
			o o o	CU	169	201	235	287	339	383	418	467	529	595	641	766	810	862
			o o o	AL	130	154	183	224	266	301	381	372	429	481	530	608	647	690
AC test voltage		kV/5 min	12.5															

Note : This is only general information. For other specific requirement, please contact our marketing.



## N2XSKY/NA2XSKY

### 6/10(12) kV

IEC 60502-2

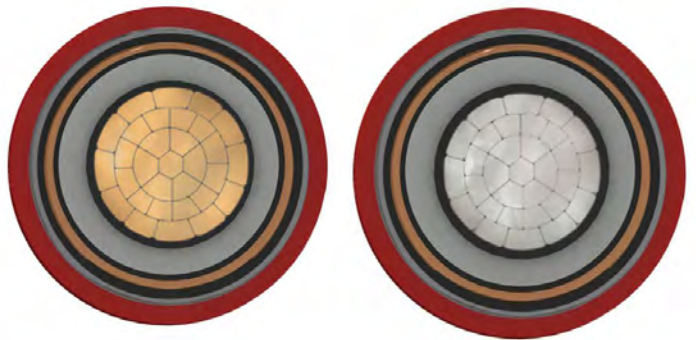
Copper/Aluminium conductor,  
XLPE insulated, Copper wire/tape screened,  
Lead sheathed, PVC/PE sheathed cable

DIMENSIONAL AND ELECTRICAL DATA

1 CORE

Nominal cross-sectional area		mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400	500	630	800	
Conductor diameter (approx)		mm	6.05	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7	26.6	30.3	34.2	
Nominal insulation thickness		mm	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	
Insulation diameter (approx)		mm	14.3	15.3	16.5	18.1	19.9	21.3	22.5	24.5	26.9	29.1	31.9	34.8	39.7	43.6	
Nominal lead thickness		mm	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.6	1.7	1.7	1.8	1.9	2.0	2.1	
Nominal outer sheath thickness		mm	1.7	1.7	1.8	1.8	1.9	1.9	2.0	2.0	2.1	2.2	2.3	2.5	2.6	2.7	
Overall cable diameter (approx)		mm	26	27	28	30	32	333	35	37	40	42	45	49	54	59	
Cable net weight ( approx)		CU	2,000	2,200	2,400	2,700	3,100	3,600	4,000	4,600	5,500	6,300	7,600	9,000	11,100	13,400	
		AL	1,800	2,000	2,100	2,300	2,500	2,800	3,100	3,300	3,900	4,900	5,200	5,900	6,900	8,100	
Standard length per-reel		m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	500	500	500	500	
Minimum bending radius		mm	320	340	360	400	430	460	490	530	580	630	690	750	850	930	
Max. DC conductor resistance at 20 °C		CU	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	0.0366	0.0283	0.0221	
		AL	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	0.0605	0.0469	0.0367	
Min. insulation resistance at 20 °C		MΩ.Km	1,100	1,000	900	800	700	600	600	500	500	400	400	400	300	300	
Capacitance per phase		µF/Km	0.161	0.181	0.200	0.230	0.261	0.286	0.306	0.341	0.382	0.420	0.467	0.517	0.534	0.572	
Inductance per phase		o	0.479	0.454	0.433	0.408	0.387	0.375	0.366	0.351	0.339	0.328	0.319	0.309	0.306	0.297	
		o o o	0.663	0.639	0.618	0.593	0.572	0.559	0.551	0.536	0.523	0.513	0.503	0.494	0.490	0.481	
Max.short circuit current of conductor		CU	3.73	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79	72.16	90.83	115.23	
		AL	2.49	3.45	4.89	6.81	9.19	11.58	14.43	17.26	22.98	28.67	38.14	47.60	59.90	75.96	
Max.short circuit current of screen			2.56	2.73	2.92	2.56	2.80	2.98	3.93	4.26	4.66	4.02	5.48	5.96	5.53	6.05	
Maximum current carrying capacity at 30 °C		in air	o	160	193	231	289	350	403	455	522	615	722	807	912	997	1,108
			o o	124	149	179	215	272	314	355	408	484	553	644	736	796	885
			o o o	189	229	274	341	414	476	531	606	709	803	892	996	1,077	1,198
			o o o o	145	176	213	265	324	373	420	480	567	645	733	830	862	958
		in ground	o	149	178	209	255	305	345	385	434	502	563	631	711	772	824
			o o	115	136	162	199	236	269	300	340	395	445	506	568	617	657
			o o o	170	202	236	288	340	384	419	468	543	595	642	766	811	863
			o o o o	130	155	184	225	267	302	332	373	430	482	531	609	648	691
AC test voltage		kV/5 min	21														

Note : This is only general information. For other specific requirement, please contact our marketing.



## N2XSKY/NA2XSKY

### 8.7/15(17.5) kV

#### IEC 60502-2

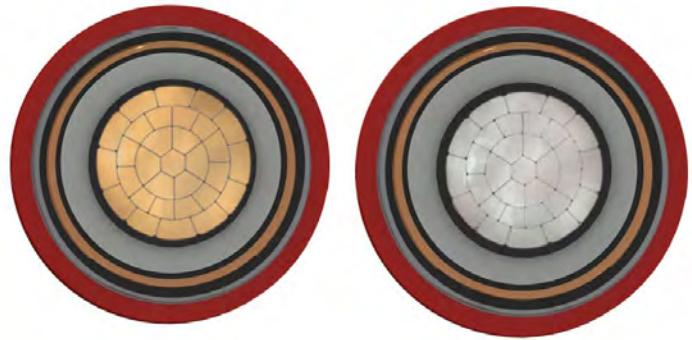
Copper/Aluminium conductor,  
XLPE insulated, Copper wire/tape screened,  
Lead sheathed, PVC/PE sheathed cable

#### DIMENSIONAL AND ELECTRICAL DATA

1 CORE

Nominal cross-sectional area	mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400	500	630	800	
Conductor diameter (approx)	mm	6.05	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7	26.6	30.3	34.2	
Nominal insulation thickness	mm	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Insulation diameter (approx)	mm	16.5	17.5	18.7	20.3	22.1	23.5	24.7	25.7	29.1	31.3	34.1	37.0	41.9	45.8	
Nominal lead thickness	mm	1.5	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.7	1.8	1.9	1.9	2.0	2.1	
Nominal outer sheath thickness	mm	1.8	1.8	1.8	1.9	1.9	2.0	2.1	2.1	2.2	2.3	2.4	2.5	2.6	2.7	
Overall cable diameter (approx)	mm	28	29	30	32	34	36	37	39	42	44	48	51	57	62	
Cable net weight ( approx)	CU	2,200	2,400	2,600	3,000	3,500	3,900	4,400	5,000	5,800	6,600	8,000	9,400	11,700	14,000	
	AL	2,100	2,200	2,300	2,500	2,900	3,100	3,500	3,800	4,300	5,300	5,400	6,300	7,500	8,700	
Standard length per-reel	m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	500	500	500	
Minimum bending radius	mm	340	360	390	420	460	490	520	560	610	650	720	780	870	960	
Max. DC conductor resistance at 20 °C	CU	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	0.0366	0.0283	0.0221	
	AL	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	0.0605	0.0469	0.0367	
Min. insulation resistance at 20 °C	MΩ.Km	1,300	1,200	1,100	1,000	900	800	700	700	600	600	500	500	400	400	
Capacitance per phase	μF/Km	0.138	0.154	0.170	0.193	0.218	0.238	0.254	0.281	0.314	0.344	0.382	0.421	0.428	0.476	
Inductance per phase	o	0.495	0.471	0.448	0.423	0.402	0.389	0.380	0.365	0.350	0.338	0.329	0.318	0.315	0.306	
	o o o	0.680	0.656	0.633	0.608	0.587	0.573	0.565	0.550	0.535	0.523	0.514	0.503	0.500	0.491	
Max.short circuit current of conductor	CU	3.73	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79	72.16	90.83	115.23	
	AL	2.49	3.45	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14	47.60	59.90	75.96	
Max.short circuit current of screen		2.92	2.48	2.63	2.85	3.09	3.28	4.29	4.62	4.02	4.31	5.85	6.33	5.82	6.34	
Maximum current carrying capacity at 30 °C	in air	o	160	197	235	293	354	408	461	527	621	708	811	918	999	1,110
		o o	124	153	182	227	275	317	359	411	488	557	645	738	798	887
		o o o	189	230	276	348	416	478	532	608	711	805	895	1,001	1,079	1200
		AL	145	178	215	237	325	374	421	480	508	645	732	830	864	960
	in ground	o	149	179	212	259	309	349	390	440	508	571	640	713	774	826
		o o	115	137	164	201	239	273	304	344	400	450	512	570	619	659
		AL	170	203	257	289	343	387	423	473	540	602	652	768	819	865
		o o o	130	156	185	226	268	304	335	376	434	486	537	611	650	694
AC test voltage	kV/5 min	30.5														

Note : This is only general information. For other specific requirement, please contact our marketing.



**N2XSKY/NA2XSKY**  
**12/20(24) kV**  
**IEC 60502-2**

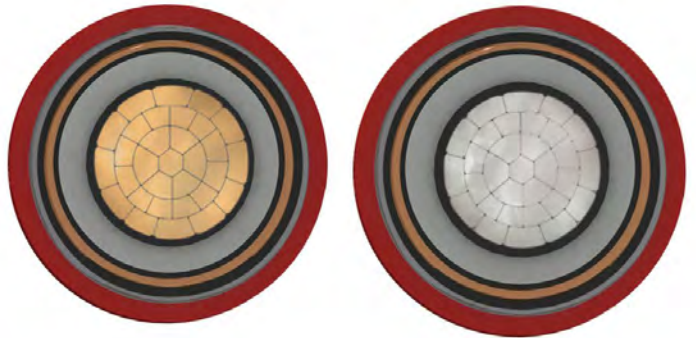
**Copper/Aluminium conductor,  
XLPE insulated, Copper wire/tape screened,  
lead sheathed, PVC/PE sheathed cable**

**DIMENSIONAL AND ELECTRICAL DATA**

1 CORE

Nominal cross-sectional area		mm <sup>2</sup>	35	50	70	95	120	150	185	240	300	400	500	630	800			
Conductor diameter (approx)		mm	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7	26.6	30.3	34.2			
Nominal insulation thickness		mm	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5			
Insulation diameter (approx)		mm	19.7	20.9	22.5	24.3	25.7	26.9	28.9	31.3	33.5	36.3	39.2	44.1	48.0			
Nominal lead thickness		mm	1.5	1.5	1.5	1.6	1.6	1.7	1.7	1.8	1.8	1.9	2.0	2.1	2.2			
Nominal outer sheath thickness		mm	1.9	1.9	2.0	2.0	2.1	2.1	2.2	2.3	2.3	2.5	2.6	2.7	2.8			
Overall cable diameter (approx)		mm	31	33	34	36	38	39	42	44	47	50	54	59	64			
Cable net weight ( approx)		CU	2600	3,000	3,300	3,800	4,300	4,700	5,400	6,100	7,100	8,400	9,900	12,300	14,700			
		AL	2400	2,800	2,900	3,000	3,500	3,800	4,200	4,400	4,500	5,900	6,800	8,100	9,300			
Standard length per-reel		m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	500	500	500	500			
Minimum bending radius		mm	380	410	440	480	510	530	580	630	680	740	800	900	980			
Max. DC conductor resistance at 20 °C		CU	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	0.0366	0.0283	0.0221			
		AL	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	0.0605	0.0469	0.0367			
Min. insulation resistance at 20 °C		MΩ.Km	1,400	1,300	1,100	1,000	900	900	800	700	700	600	600	500	400			
Capacitance per phase		μF/Km	0.136	0.149	0.169	0.190	0.206	0.220	0.243	0.270	0.294	0.326	0.358	0.370	0.410			
Inductance per phase		o o o o o o	mH/Km	0.485	0.464	0.438	0.416	0.403	0.387	0.377	0.361	0.350	0.339	0.328	0.323	0.314		
		0.670		0.649	0.623	0.600	0.587	0.572	0.562	0.545	0.535	0.524	0.513	0.508	0.498			
Max.short circuit current of conductor		CU	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79	72.16	90.83	115.23			
		AL	3.45	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14	47.60	59.90	75.96			
Max.short circuit current of screen			2.77	2.92	3.14	3.38	3.57	4.66	3.99	4.31	4.60	6.21	6.69	7.01	7.43			
Maximum current carrying capacity at 30 °C		in air	o	A	CU	197	235	293	354	408	461	527	621	708	811	918	999	1,110
			o o		AL	153	182	227	275	317	359	412	488	557	645	738	798	887
			o o o		CU	230	276	343	416	478	534	608	711	805	895	1,001	1,079	1,200
					AL	178	215	237	325	374	421	480	508	645	732	830	864	960
		in ground	o		CU	179	212	259	309	349	390	440	508	571	640	713	774	826
			o o		AL	137	164	201	239	273	304	343	400	450	512	570	619	659
			o o o		CU	203	237	289	343	387	423	473	540	602	652	768	813	865
					AL	156	185	226	268	304	335	376	434	486	537	611	650	694
AC test voltage		kv/5 min											42					

**Note : This is only general information. For other specific requirement, please contact our marketing.**



# N2XSKY/NA2XSKY

## 18/30(36) kV

### IEC 60502-2

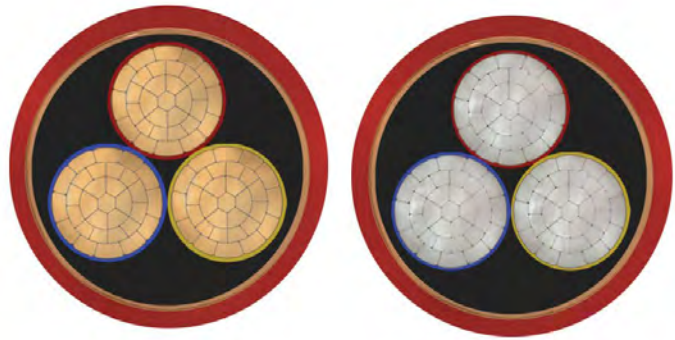
Copper/Aluminium conductor,  
XLPE insulated, Copper wire/tape screened,  
Lead sheathed, PVC/PE sheathed cable

**DIMENSIONAL AND ELECTRICAL DATA**

1 CORE

Nominal cross-sectional area		mm <sup>2</sup>	50	70	95	120	150	185	240	300	400	500	630	800	
Conductor diameter (approx)		mm	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7	26.6	30.3	34.2	
Nominal insulation thickness		mm	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	
Insulation diameter (approx)		mm	25.9	27.5	29.3	30.7	31.9	33.9	36.3	38.5	41.3	44.2	49.1	53.0	
Nominal lead thickness		mm	1.6	1.6	1.6	1.7	1.7	1.8	1.8	1.9	2.0	2.1	2.2	2.3	
Nominal outer sheath thickness		mm	2.0	2.0	2.1	2.2	2.2	2.3	2.3	2.4	2.5	2.6	2.7	2.9	
Overall cable diameter (approx)		mm	38	40	42	44	45	47	50	53	56	59	65	70	
Cable net weight ( approx)		CU	3,700	4,100	4,700	5,100	5,700	6,300	7,200	8,200	9,400	11,000	13,400	15,900	
		AL	3,400	3,600	4,100	4,200	4,700	5,100	5,600	6,000	6,900	7,600	8,200	10,500	
Standard length per-reel		m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	500	500	500	500	
Minimum bending radius		mm	470	500	540	570	600	640	690	740	790	860	950	1,040	
Max. DC conductor resistance at 20 °C		CU	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	0.0366	0.0283	0.0221	
		AL	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	0.0605	0.0469	0.0367	
Min. insulation resistance at 20 °C		MΩ.Km	1,600	1,500	1,300	1,200	1,200	1,100	1,000	900	800	700	600	600	
Capacitance per phase		µF/Km	0.121	0.136	0.151	0.163	0.173	0.190	0.209	0.227	0.250	0.274	0.288	0.317	
Inductance per phase		o	0.496	0.468	0.445	0.429	0.419	0.401	0.385	0.373	0.359	0.348	0.341	0.330	
		o o													
Max.short circuit current of conductor		CU	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79	72.16	90.83	115.23	
Max.short circuit current of screen		AL	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14	47.60	59.90	75.96	
Maximum current carrying capacity at 30 °C		in air	o	238	296	358	412	464	530	624	710	815	920	1,000	1,111
			o o												
			CU												
			AL												
		in ground	o o o	276	343	417	478	535	609	741	804	895	1,001	1,080	1,201
			o												
			CU												
			AL												
AC test voltage		o o o	238	291	344	390	427	478	547	609	653	770	814	866	
		o o													
		CU													
		AL													

**Note :** This is only general information. For other specific requirement, please contact our marketing.



**N2XSY/NA2XSY**  
**1.8/3(3.6) kV**  
**IEC 60502-1**

Copper/Aluminium conductor,  
XLPE insulated, Copper wire/tape screened,  
PVC/PE sheathed cable

**DIMENSIONAL AND ELECTRICAL DATA**

**3 CORES**

Nominal cross-sectional area	mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400		
Conductor diameter (approx)	mm	6.05	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7		
Nominal insulation thickness	mm	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		
Insulation diameter (approx)	mm	10.3	11.3	12.5	14.1	15.9	17.3	18.5	20.5	22.9	25.1	27.9		
Nominal outer sheath thickness	mm	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.7	2.8	3.1		
Overall cable diameter (approx)	mm	28	30	33	37	41	44	47	51	57	62	69		
Cable net weight ( approx)	CU	Kg/Km	1400	1800	2,200	3,000	3,900	4,800	5,700	7,000	8,900	11,000	14,000	
	AL	Kg/Km	950	1100	1,400	1,700	2,100	2,500	2,900	3,500	4,300	5,300	6,500	
Standard length per-reel	m	500	500	500	500	500	500	500	500	500	500	500		
Minimum bending radius	mm	260	280	310	350	400	430	460	510	570	620	700		
Max. DC conductor resistance at 20 °C	CU	Ω/Km	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	
	AL	Ω/Km	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	
Min. insulation resistance at 20 °C	MΩ.Km	900	700	700	600	500	400	400	400	300	300	300		
Capacitance per phase	µF/Km	0.261	0.299	0.334	0.393	0.453	0.499	0.539	0.606	0.685	0.758	0.851		
Inductance per phase	mH/km	0.295	0.282	0.272	0.259	0.250	0.244	0.240	0.234	0.229	0.225	0.221		
Max.short circuit current of conductor	CU	kA/sec	3.73	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79	
	AL	kA/sec	2.49	3.45	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14	
Maximum current carrying capacity at 30 °C	in air	CU	A	134	175	207	258	315	362	413	473	557	663	765
		AL	A	103	133	160	200	241	280	317	363	424	484	597
	in ground	CU	A	133	172	203	247	297	337	379	428	497	587	629
		AL	A	102	131	156	192	230	261	294	333	388	416	498
AC test voltage	kV/5 min	6.5												

**Note : This is only general information. For other specific requirement, please contact our marketing.**



## N2XSEY/NA2XSEY

### 3.6/6(7.2) kV

#### IEC 60502-2

Copper/Aluminium conductor,  
XLPE insulated,  
Copper tape screened,  
PVC/PE sheathed cable

#### DIMENSIONAL AND ELECTRICAL DATA

3 CORES

Nominal cross-sectional area	mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400	
Conductor diameter (approx)	mm	6.05	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7	
Nominal insulation thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.8	3.0	
Insulation diameter (approx)	mm	12.5	13.5	14.7	16.3	18.1	19.5	20.7	22.7	24.8	27.9	31.9	
Nominal outer sheath thickness	mm	1.5	1.6	1.6	1.7	1.7	1.8	1.8	1.9	1.9	2.0	2.1	
Overall cable diameter (approx)	mm	37	39	42	46	50	53	56	60	66	72	80	
Cable net weight ( approx)	CU	2,100	2,500	3,000	3,800	4,800	5,800	6,700	8,100	10,200	12,500	15,600	
	AL	1,600	1,800	2,100	2,500	3,000	3,500	3,900	4,600	5,600	6,700	8,200	
Standard length per-reel	m	500	500	500	500	500	500	500	500	500	500	350	
Minimum bending radius	mm	320	350	380	420	460	500	530	570	640	700	780	
Max. DC conductor resistance at 20 °C	CU	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	
	AL	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	
Min. insulation resistance at 20 °C	MΩ.Km	900	800	700	600	500	500	500	400	400	400	400	
Capacitance per phase	µF/Km	0.191	0.216	0.240	0.279	0.318	0.349	0.376	0.419	0.459	0.481	0.511	
Inductance per phase	mH/km	0.322	0.308	0.298	0.284	0.273	0.266	0.261	0.254	0.249	0.246	0.243	
Max.short circuit current of conductor	CU	3.73	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79	
	AL	2.49	3.45	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14	
Max.short circuit current of screen	kA/sec	1.90	2.05	2.21	2.44	2.69	2.89	3.05	3.33	3.70	4.06	4.51	
Maximum current carrying capacity at 30 °C	in air	CU	134	175	207	258	315	362	413	473	557	663	765
		AL	103	133	160	200	241	280	317	363	474	484	597
	in ground	CU	133	172	203	247	297	357	379	428	497	557	628
		AL	102	131	156	192	230	261	294	333	388	416	498
AC test voltage	kV/5 min	12.5 (IEC) , 9 (SPLN)											

**Note : This is only general information. For other specific requirement, please contact our marketing.**



**N2XSEY/NA2XSEY**  
**6/10(12) kV**  
**IEC 60502-2**

**Copper/Aluminium conductor,  
XLPE insulated,  
Copper tape screened,  
PVC/PE sheathed cable**

**DIMENSIONAL AND ELECTRICAL DATA**

**3 CORES**

Nominal cross-sectional area	mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400	
Conductor diameter (approx)	mm	6.05	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7	
Nominal insulation thickness	mm	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	
Insulation diameter (approx)	mm	14.3	15.3	16.5	18.1	19.9	21.3	22.5	24.5	26.9	29.1	31.9	
Nominal outer sheath thickness	mm	1.6	1.6	1.7	1.7	1.8	1.8	1.9	1.9	2.0	2.1	2.2	
Overall cable diameter (approx)	mm	41	43	46	50	54	57	60	64	70	75	81	
Cable net weight ( approx)	CU	2,400	2,800	3,400	4,200	5,300	6,200	7,200	8,600	10,700	13,100	15,900	
	AL	1,900	2,200	250	2,900	3,400	3,900	4,400	5,100	6,100	7,100	8,500	
Standard length per-reel	m	500	500	500	500	500	500	500	500	500	500	350	
Minimum bending radius	mm	350	380	410	450	490	530	560	600	670	720	790	
Max. DC conductor resistance at 20 °C	CU	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	
	AL	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	
Min. insulation resistance at 20 °C	MΩ.Km	1,100	1,000	900	800	700	600	600	500	500	400	400	
Capacitance per phase	µF/Km	0.161	0.181	0.200	0.230	0.261	0.286	0.306	0.341	0.382	0.420	0.467	
Inductance per phase	mH/km	0.346	0.331	0.319	0.303	0.291	0.283	0.277	0.269	0.260	0.254	0.248	
Max.short circuit current of conductor	CU	3.73	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79	
	AL	2.49	3.45	4.89	6.81	9.19	11.58	14.43	17.26	22.98	28.67	38.14	
Max.short circuit current of screen		2.15	2.61	2.77	3.00	3.25	3.44	3.61	3.89	4.23	4.53	4.92	
Maximum current carrying capacity at 30 °C	in air	CU	135	175	208	259	316	363	414	474	558	634	766
		AL	1.4	134	161	201	242	281	318	364	425	485	598
	in ground	CU	134	173	204	248	298	338	380	429	498	558	630
		AL	103	132	157	193	231	262	295	334	389	417	499
AC test voltage	kV/5 min	21 (IEC) , 15 (SPLN)											

**Note : This is only general information. For other specific requirement, please contact our marketing.**



## N2XSEY/NA2XSEY

### 8.7/15(17.5) kV

#### IEC 60502-2

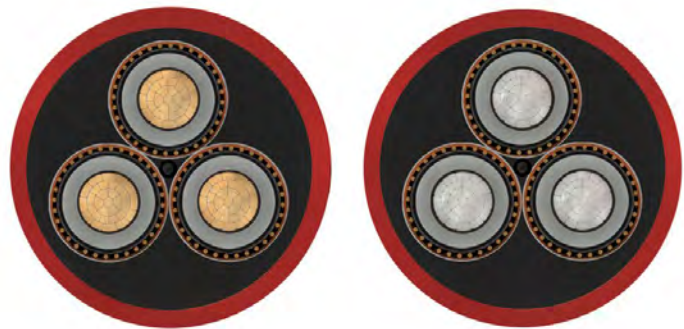
Copper/Aluminium conductor,  
XLPE insulated  
Copper tape screened,  
PVC/PE sheathed cable

#### DIMENSIONAL AND ELECTRICAL DATA

3 CORES

Nominal cross-sectional area	mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400	
Conductor diameter (approx)	mm	6.05	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7	
Nominal insulation thickness	mm	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Insulation diameter (approx)	mm	16.5	17.5	18.7	20.3	22.1	23.5	24.7	25.7	29.1	31.3	34.1	
Nominal outer sheath thickness	mm	1.7	1.7	1.7	1.8	1.8	1.9	1.9	2.0	2.1	2.1	2.3	
Overall cable diameter (approx)	mm	46	48	51	55	59	62	65	69	75	80	87	
Cable net weight ( approx)	CU	2,500	3,800	4,400	5,300	6,400	7,400	8,500	10,000	12,200	14,400	17,500	
	AL	2,400	2,600	3,000	3,400	4,000	4,500	5,000	5,800	6,800	7,900	9,300	
Standard length per-reel	m	500	500	500	500	500	500	500	500	350	350	350	
Minimum bending radius	mm	390	410	440	490	530	560	600	640	700	760	830	
Max. DC conductor resistance at 20 °C	CU	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	
	AL	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	
Min. insulation resistance at 20 °C	MΩ.Km	1,300	1,200	1,100	1,000	900	800	700	700	600	600	500	
Capacitance per phase	µF/Km	0.138	0.154	0.170	0.193	0.218	0.238	0.254	0.281	0.314	0.344	0.382	
Inductance per phase	mH/km	0.372	0.355	0.341	0.324	0.310	0.301	0.294	0.285	0.275	0.268	0.261	
Max.short circuit current of conductor	CU	3.73	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79	
	AL	2.49	3.45	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14	
Max.short circuit current of screen		2.46	2.61	2.77	3.00	3.25	3.44	3.61	3.89	4.23	4.53	4.92	
Maximum current carrying capacity at 30 °C	in air	CU	135	175	208	259	316	363	414	473	558	635	767
		AL	1.4	140	162	206	247	285	322	368	429	486	599
	in ground	CU	133	173	204	248	298	338	380	429	497	559	631
		AL	103	133	155	188	225	257	286	324	376	418	500
AC test voltage	kV/5 min	30.5 (IEC) , 22 (SPLN)											

Note : This is only general information. For other specific requirement, please contact our marketing.



**N2XSEY/NA2XSEY**  
**12/20(24) kV**  
**SPLN 43-5/IEC 60502-2**

Copper/Aluminium conductor,  
XLPE insulated, with or without water sealing,  
Copper wire screened,  
PVC/PE sheathed cable

**DIMENSIONAL AND ELECTRICAL DATA**

**3 CORES**

Nominal cross-sectional area		mm <sup>2</sup>	35	50	70	95	120	150	185	240	300	400
Conductor diameter (approx)	mm		7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7
Nominal insulation thickness	mm		5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Insulation diameter (approx)	mm		19.7	20.9	22.5	24.3	25.7	26.9	28.9	31.3	33.5	36.3
Nominal outer sheath thickness	mm		1.8	1.8	1.9	1.9	2.0	2.0	2.1	2.1	2.2	2.3
Overall cable diameter (approx)	mm		53	56	60	64	67	70	75	80	85	91
Cable net weight ( approx)	CU	Kg/Km	4,100	4,700	5,600	6,800	7,800	8,900	10,400	12,500	15,000	18,400
	AL		3,400	3,800	4,300	4,900	5,500	6,100	6,900	7,800	9,200	10,800
Standard length per-reel	m		500	500	500	500	350	350	350	350	350	300
Minimum bending radius	mm		450	480	520	570	600	630	690	740	790	860
Max. DC conductor resistance at 20 °C	CU	Ω/Km	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
	AL		0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778
Min. insulation resistance at 20 °C	MΩ.Km		1,400	1,300	1,100	1,000	900	900	800	700	700	600
Capacitance per phase	µF/Km		0.136	0.149	0.169	0.190	0.206	0.220	0.243	0.270	0.294	0.326
Inductance per phase	mH/km		0.393	0.374	0.353	0.335	0.323	0.315	0.303	0.292	0.28	0.274
Max.short circuit current of conductor	CU	kA/sec	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79
	AL		3.45	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14
Max.short circuit current of screen			2.77	2.92	3.14	3.38	3.57	4.66	3.99	4.31	4.60	6.21
Maximum current carrying capacity at 30 °C	in air	CU	175	208	259	316	364	414	474	558	635	767
		AL	140	163	201	244	283	321	368	429	486	599
	in ground	CU	173	204	248	298	338	380	429	497	559	631
		AL	133	155	193	230	263	295	334	389	44	500
AC test voltage		kV/5 min	42 (IEC) , 30 (SPLN)									

**Note : This is only general information. For other specific requirement, please contact our marketing.**



## N2XSEY/NA2XSEY

### 18/30(36) kV

#### IEC 60502-2

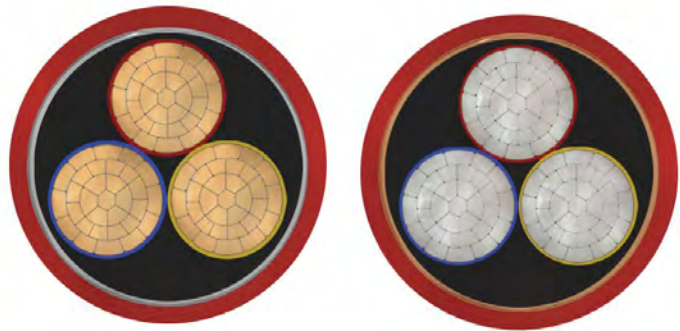
Copper/Aluminium conductor,  
XLPE insulated, Copper tape screened,  
PVC/PE sheathed cable

#### DIMENSIONAL AND ELECTRICAL DATA

3 CORES

Nominal cross-sectional area		mm <sup>2</sup>	50	70	95	120	150	185	240	300	400
Conductor diameter (approx)		mm	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7
Nominal insulation thickness		mm	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Insulation diameter (approx)		mm	25.9	27.5	29.3	30.7	31.9	33.9	36.3	38.5	41.3
Nominal outer sheath thickness		mm	2.0	2.0	2.1	2.1	2.2	2.2	2.3	2.4	2.5
Overall cable diameter (approx)		mm	68	71	75	79	81	86	91	97	103
Cable net weight ( approx)	CU	Kg/Km	5,800	6,800	8,000	9,000	10,100	11,800	14,000	16,500	19,700
	AL		4,900	5,500	6,100	6,700	7,300	8,300	9,400	10,700	12,300
Standard length per-reel		m	500	500	500	350	350	350	300	300	300
Minimum bending radius		mm	570	610	660	700	730	780	850	900	970
Max. DC conductor resistance at 20 °C	CU	Ω/Km	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
	AL		0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778
Min. insulation resistance at 20 °C		MΩ.Km	1,600	1,500	1,300	1,200	1,200	1,100	1,000	900	800
Capacitance per phase		µF/Km	0.121	0.136	0.151	0.163	0.173	0.190	0.209	0.227	0.250
Inductance per phase		mH/km	0.402	0.381	0.363	0.352	0.343	0.330	0.317	0.308	0.297
Max.short circuit current of conductor	CU	kA/sec	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79
	AL		4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14
Max.short circuit current of screen			3.77	4.00	4.25	4.45	4.62	4.9	559	5.54	5.93
Maximum current carrying capacity at 30 °C	in air	CU	209	260	317	364	415	475	599	636	768
		AL	164	207	248	286	323	368	480	487	600
	in ground	CU	205	249	299	339	381	430	498	560	632
		AL	156	189	226	258	287	325	377	419	501
AC test voltage		kV/5 min	63								

Note : This is only general information. For other specific requirement, please contact our marketing.



**N2XBV/NA2XBV**  
**1.8/3(3.6) kV**  
**IEC 60502-1**

**Copper/Aluminium conductor,  
 XLPE insulated, Galvanized double  
 steel tape armoured,  
 PVC/PE sheathed cable**

**DIMENSIONAL AND ELECTRICAL DATA**

**3 CORES**

Nominal cross-sectional area	mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400	
Conductor diameter (approx)	mm	6.05	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7	
Nominal insulation thickness	mm	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Insulation diameter (approx)	mm	10.3	11.3	12.5	14.1	15.9	17.3	18.5	20.5	22.9	25.1	27.9	
Nominal tape armour thickness	mm	0.2	0.2	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Nominal outer sheath thickness	mm	1.8	1.9	2.0	2.2	2.3	2.4	2.5	2.6	2.8	3.0	3.2	
Overall cable diameter (approx)	mm	29	32	34	39	44	47	50	55	60	66	72	
Cable net weight ( approx)	CU	1,600	2,000	2,500	3,700	4,700	5,600	6,600	8,000	10,100	12,400	15,300	
	AL	1,200	1,400	1,600	2,400	2,900	3,400	3,900	4,500	5,500	6,600	8,000	
Standard length per-reel	m	500	500	500	500	500	500	500	500	500	500	500	
Minimum bending radius	mm	260	290	320	370	420	450	480	540	590	650	720	
Max. DC conductor resistance at 20 °C	CU	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	
	AL	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	
Min. insulation resistance at 20 °C	MΩ.Km	900	700	700	600	500	400	400	400	300	300	300	
Capacitance per phase	µF/Km	0.261	0.299	0.334	0.393	0.453	0.499	0.539	0.606	0.685	0.758	0.851	
Inductance per phase	mH/km	0.295	0.282	0.272	0.259	0.250	0.244	0.240	0.234	0.229	0.225	0.221	
Max.short circuit current of conductor	CU	3.73	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79	
	AL	2.49	3.45	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14	
Maximum current carrying capacity at 30 °C	in air	CU	133	172	205	256	312	359	409	468	552	627	758
		AL	102	132	159	198	239	277	314	360	420	479	591
	in ground	CU	132	170	201	245	294	334	375	424	492	5552	623
		AL	101	130	155	190	228	259	291	330	384	412	493
AC test voltage	kV/5 min	6.5											

**Note : This is only general information. For other specific requirement, please contact our marketing.**



## N2XSEBY/NA2XSEBY

### 3.6/6(7.2) kV

#### IEC 60502-2

Copper/Aluminium conductor, XLPE insulated,  
Copper tape screened,  
Galvanized double steel tape armoured,  
PVC/PE sheathed cable

#### DIMENSIONAL AND ELECTRICAL DATA

3 CORES

Nominal cross-sectional area		mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400		
Conductor diameter (approx)		mm	6.05	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7		
Nominal insulation thickness		mm	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.8	3.0		
Insulation diameter (approx)		mm	12.5	13.5	14.7	16.3	18.1	19.5	20.7	22.7	24.8	27.9	31.9		
Nominal tape armour thickness		mm	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.8		
Nominal outer sheath thickness		mm	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.1	3.3	3.6		
Overall cable diameter (approx)		mm	39	42	45	49	53	53	59	64	70	76	85		
Cable net weight ( approx)		CU	2,800	3,200	3,800	4,700	5,800	6,800	7,900	9,400	11,700	14,100	18,300		
		AL	2,300	2,600	2,900	3,400	4,000	4,600	5,100	5,900	7,000	8,300	10,900		
Standard length per-reel		m	500	500	500	500	500	500	500	500	350	350	350		
Minimum bending radius		mm	340	370	400	440	490	520	550	600	670	730	820		
Max. DC conductor resistance at 20 °C		CU	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470		
		AL	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778		
Min. insulation resistance at 20 °C		MΩ.Km	900	800	700	600	500	500	500	400	400	400	400		
Capacitance per phase		μF/Km	0.191	0.216	0.240	0.279	0.318	0.349	0.376	0.419	0.459	0.481	0.511		
Inductance per phase		mH/km	0.322	0.308	0.298	0.284	0.273	0.266	0.261	0.254	0.249	0.246	0.243		
Max.short circuit current of conductor		CU	3.73	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79		
		AL	2.49	3.45	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14		
Max.short circuit current of screen			1.90	2.05	2.21	2.44	2.69	2.89	3.05	3.33	3.70	4.06	4.51		
Maximum current carrying capacity at 30 °C		in air		CU	139	172	205	256	312	359	409	468	552	627	758
		in ground		AL	102	132	159	198	239	277	314	360	420	479	591
		in air		CU	132	170	201	245	294	334	375	424	492	552	623
		in ground		AL	101	130	155	190	228	259	291	330	384	412	493
AC test voltage		kV/5 min		12.5 (IEC) , 9 (SPLN)											

**Note :** This is only general information. For other specific requirement, please contact our marketing.



**N2XSEBY/NA2XSEBY**  
**6/10(12) kV**  
**IEC 60502-2**

**Copper/Aluminium conductor,  
XLPE insulated,  
Copper tape screened,  
Galvanized double steel tape armoured,  
PVC/PE sheathed cable**

**DIMENSIONAL AND ELECTRICAL DATA**

**3 CORES**

Nominal cross-sectional area	mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400	
Conductor diameter (approx)	mm	6.05	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7	
Nominal insulation thickness	mm	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	
Insulation diameter (approx)	mm	14.3	15.3	16.5	18.1	19.9	21.3	22.5	24.5	26.9	29.1	31.9	
Nominal tape armour thickness	mm	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.8	
Nominal outer sheath thickness	mm	2.3	2.4	2.5	2.6	2.8	2.9	3.0	3.1	3.3	3.4	3.7	
Overall cable diameter (approx)	mm	44	46	49	53	57	61	64	68	74	79	87	
Cable net weight ( approx)	CU	3,200	3,700	4,300	5,200	6,400	7,400	8,500	10,000	12,300	14,600	18,700	
	AL	2,700	3,000	3,400	3,900	4,600	5,200	5,700	6,500	7,600	8,800	11,300	
Standard length per-reel	m	500	500	500	500	500	500	500	500	350	350	350	
Minimum bending radius	mm	380	400	430	470	520	560	590	630	700	750	830	
Max. DC conductor resistance at 20 °C	CU	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	
	AL	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	
Min. insulation resistance at 20 °C	MΩ.Km	1,100	1,000	900	800	700	600	500	500	500	400	400	
Capacitance per phase	µF/Km	0.161	0.181	0.200	0.230	0.261	0.286	0.306	0.341	0.382	0.420	0.467	
Inductance per phase	mH/km	0.346	0.331	0.319	0.303	0.291	0.283	0.277	0.269	0.260	0.254	0.248	
Max. short circuit current of conductor	CU	3.73	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79	
	AL	2.49	3.45	4.89	6.81	9.19	11.58	14.43	17.26	22.98	28.67	38.14	
Max. short circuit current of screen		2.15	2.61	2.77	3.00	3.25	3.44	3.61	3.89	4.23	4.53	4.92	
Maximum current carrying capacity at 30 °C	in air	CU	134	173	206	257	313	360	410	469	553	628	789
		AL	103	133	160	199	240	278	315	321	421	480	592
	in ground	CU	133	171	202	246	295	335	376	425	493	553	624
		AL	102	131	156	191	229	260	292	331	385	413	494
AC test voltage	kV/5 min	21 (IEC) , 15 (SPLN)											

**Note : This is only general information. For other specific requirement, please contact our marketing.**



## N2XSEBY/NA2XSEBY

### 8.7/15(17.5) kV

#### IEC 60502-2

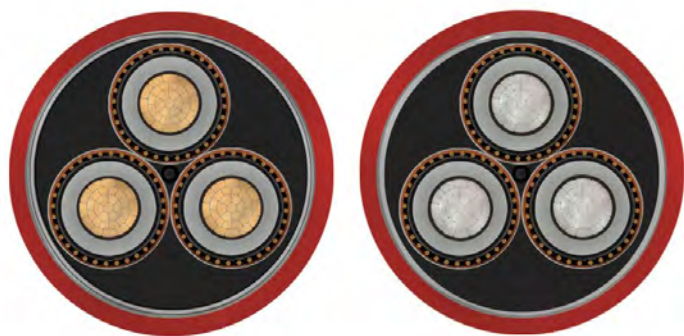
Copper/Aluminium conductor, XLPE insulated,  
Copper tape screened,  
Galvanized double steel tape armoured,  
PVC/PE sheathed cable

#### DIMENSIONAL AND ELECTRICAL DATA

3 CORES

Nominal cross-sectional area		mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400		
Conductor diameter (approx)		mm	6.05	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7		
Nominal insulation thickness		mm	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		
Insulation diameter (approx)		mm	16.5	17.5	18.7	20.3	22.1	23.5	24.7	25.7	29.1	31.3	34.1		
Nominal tape armour thickness		mm	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.8	0.8		
Nominal outer sheath thickness		mm	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.3	3.4	3.6	3.9		
Overall cable diameter (approx)		mm	49	51	54	58	62	66	69	74	79	86	93		
Cable net weight ( approx)		CU	3,800	4,300	4,900	5,900	7,100	8,100	9,200	10,900	13,100	16,400	19,700		
		AL	3,300	3,600	4,000	4,600	5,300	5,900	6,400	7,400	8,500	10,600	12,300		
Standard length per-reel		m	500	500	500	500	500	500	350	350	350	350	350		
Minimum bending radius		mm	410	440	470	510	550	590	630	680	780	800	880		
Max. DC conductor resistance at 20 °C		CU	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470		
		AL	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778		
Min. insulation resistance at 20 °C		MΩ.Km	1,300	1,200	1,100	1,000	900	800	700	700	600	600	500		
Capacitance per phase		µF/Km	0.138	0.154	0.170	0.193	0.218	0.238	0.254	0.281	0.314	0.344	0.382		
Inductance per phase		mH/km	0.372	0.355	0.341	0.324	0.310	0.301	0.294	0.285	0.275	0.268	0.261		
Max.short circuit current of conductor		CU	3.73	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79		
		AL	2.49	3.45	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14		
Max.short circuit current of screen			2.46	2.61	2.77	3.00	3.25	3.44	3.61	3.89	4.23	4.53	4.92		
Maximum current carrying capacity at 30 °C		in air		CU	134	173	206	257	313	360	410	469	553	629	760
		in ground		AL	103	199	161	204	245	282	319	365	425	481	593
				CU	132	171	202	246	295	335	376	425	492	554	625
				AL	102	132	154	186	223	255	283	321	372	414	495
AC test voltage		kV/5 min		30.5 (IEC) , 22 (SPLN)											

Note : This is only general information. For other specific requirement, please contact our marketing.



**N2XSEBY/NA2XSEYBY**  
**12/20(24) kV**  
**SPLN 43-5/IEC 60502-2**

Copper/Aluminium conductor, XLPE insulated,  
with or without water sealing,  
Copper wire screened,  
Galvanized double steel tape armoured,  
PVC/PE sheathed cable

**DIMENSIONAL AND ELECTRICAL DATA**

**3 CORES**

Nominal cross-sectional area		mm <sup>2</sup>	35	50	70	95	120	150	185	240	300	400
Conductor diameter (approx)		mm	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7
Nominal insulation thickness		mm	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Insulation diameter (approx)		mm	19.7	20.9	22.5	24.3	25.7	26.9	28.9	31.3	33.5	36.3
Nominal tape armour thickness		mm	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.8	0.8	0.8
Nominal outer sheath thickness		mm	2.7	2.9	3.0	3.1	3.2	3.3	3.4	3.6	3.8	4.0
Overall cable diameter (approx)		mm	57	60	64	68	71	74	79	86	91	98
Cable net weight ( approx)	CU	Kg/Km	4,900	5,600	6,600	7,800	8,900	10,100	11,700	14,900	17,400	20,800
	AL		4,200	4,700	5,300	6,000	6,600	7,200	8,200	10,200	11,600	13,400
Standard length per-reel		m	500	500	500	500	350	350	350	300	300	300
Minimum bending radius		mm	480	510	550	600	630	660	720	790	840	910
Max. DC conductor resistance at 20 °C	CU	Ω/Km	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
	AL		0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778
Min. insulation resistance at 20 °C		MΩ.Km	1,400	1,300	1,100	1,000	900	900	800	700	700	600
Capacitance per phase		µF/Km	0.136	0.149	0.169	0.190	0.206	0.220	0.243	0.270	0.294	0.326
Inductance per phase		mH/km	0.377	0.362	0.344	0.328	0.318	0.310	0.300	0.289	0.281	0.273
Max.short circuit current of conductor	CU	kA/sec	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79
	AL		3.45	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14
Max.short circuit current of screen			2.77	2.92	3.14	3.38	3.57	4.66	3.99	4.31	4.60	6.21
Maximum current carrying capacity at 30 °C	in air	CU	173	206	257	313	360	410	469	553	629	760
		AL	139	161	199	242	280	318	365	425	481	593
	in ground	CU	171	202	246	295	335	376	425	492	554	625
		AL	132	154	191	228	260	292	331	385	437	495
AC test voltage		kV/5 min	42 (IEC) , 30(SPLN)									

**Note : This is only general information. For other specific requirement, please contact our marketing.**



## N2XSEBY/NA2XSEBY

### 18/30(36) kV

#### IEC 60502-2

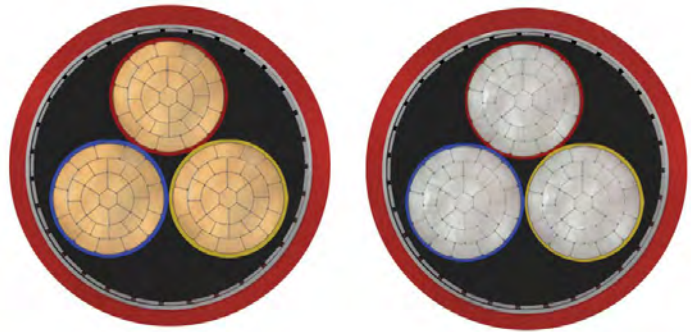
Copper/Aluminium conductor,  
XLPE insulated, Copper tape screened,  
Galvanized double steel tape armoured,  
PVC/PE sheathed cable

#### DIMENSIONAL AND ELECTRICAL DATA

3 CORES

Nominal cross-sectional area	mm <sup>2</sup>	50	70	95	120	150	185	240	300	400	
Conductor diameter (approx)	mm	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7	
Nominal insulation thickness	mm	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	
Insulation diameter (approx)	mm	25.9	27.5	29.3	30.7	31.9	33.9	36.3	38.5	41.3	
Nominal tape armour thickness	mm	0.5	0.5	0.5	0.8	0.8	0.8	0.8	0.8	0.8	
Nominal outer sheath thickness	mm	3.2	3.3	3.5	3.6	3.7	3.9	4.0	4.2	4.4	
Overall cable diameter (approx)	mm	72	75	80	84	87	92	98	103	110	
Cable net weight ( approx)	CU	7,300	8,400	9,700	11,700	12,900	14,800	17,300	20,000	23,500	
	AL	6,400	7,100	7,900	9,400	10,100	11,300	12,600	14,100	16,000	
Standard length per-reel	m	500	500	500	350	350	350	300	300	300	
Minimum bending radius	mm	600	640	690	730	760	810	880	930	1,000	
Max. DC conductor resistance at 20 °C	CU	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	
	AL	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	
Min. insulation resistance at 20 °C	MΩ.Km	1,600	1,500	1,300	1,200	1,200	1,100	1,000	900	800	
Capacitance per phase	µF/Km	0.121	0.136	0.151	0.163	0.173	0.190	0.209	0.227	0.250	
Inductance per phase	mH/km	0.402	0.381	0.363	0.352	0.343	0.330	0.317	0.308	0.297	
Max.short circuit current of conductor	CU	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79	
	AL	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14	
Max.short circuit current of screen		3.77	4.00	4.25	4.45	4.62	4.9	5.59	5.54	5.93	
Maximum current carrying capacity at 30 °C	in air	CU	207	258	314	361	411	470	554	630	766
		AL	162	205	246	283	320	365	426	482	594
	in ground	CU	203	247	296	336	377	426	483	555	626
		AL	155	187	224	256	284	322	373	415	496
AC test voltage	kV/5 min									63	

Note : This is only general information. For other specific requirement, please contact our marketing.



**N2XFGbY/NA2XFGbY**  
**1.8/3(3.6) kV**  
**IEC 60502-1**

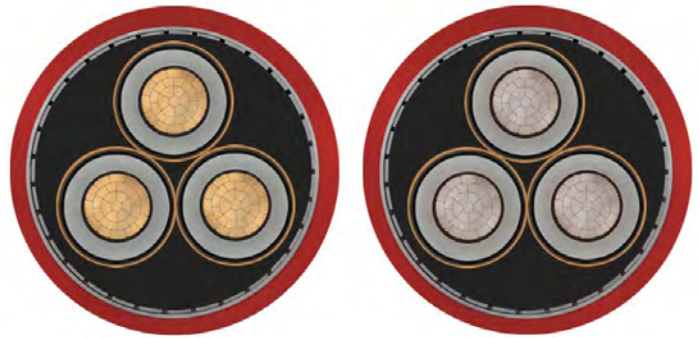
Copper/Aluminium conductor,  
XLPE insulated,  
Galvanized flat steel wire armoured,  
PVC/PE sheathed cable

**DIMENSIONAL AND ELECTRICAL DATA**

**3 CORES**

Nominal cross-sectional area		mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400		
Conductor diameter (approx)		mm	6.05	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7		
Nominal insulation thickness		mm	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		
Insulation diameter (approx)		mm	10.3	11.3	12.5	14.1	15.9	17.3	18.5	20.5	22.9	25.1	27.9		
Nominal flat wire armour thickness		mm	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8		
Nominal outer sheath thickness		mm	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.8	3.0	3.2		
Overall cable diameter (approx)		mm	31	33	36	40	44	47	50	55	60	66	73		
Cable net weight ( approx)		CU	2,000	2,500	2,900	3,800	4,800	5,800	6,800	8,200	10,300	12,500	15,600		
		AL	1,600	1,800	2,100	2,500	3,000	3,500	4,000	4,700	5,700	6,800	8,200		
Standard length per-reel		m	500	500	500	500	500	500	500	500	500	500	500		
Minimum bending radius		mm	280	300	330	370	420	450	480	540	590	650	730		
Max. DC conductor resistance		CU	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470		
at 20 °C		AL	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778		
Min. insulation resistance at 20 °C		MΩ.Km	900	800	700	600	500	500	500	400	400	400	400		
Capacitance per phase		µF/Km	0.261	0.299	0.334	0.393	0.453	0.499	0.539	0.606	0.685	0.758	0.851		
Inductance per phase		mH/km	0.295	0.282	0.272	0.259	0.250	0.244	0.240	0.234	0.229	0.225	0.221		
Max.short circuit current of conductor		CU	3.73	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79		
		AL	2.49	3.45	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14		
Maximum current carrying capacity at 30 °C		in air		CU	133	172	205	256	312	359	409	468	552	627	758
		in ground		AL	102	132	159	198	239	277	314	360	420	479	591
		in air		CU	132	170	201	245	294	334	375	424	492	552	623
		in ground		AL	101	130	155	190	228	259	291	330	384	412	493
AC test voltage		kV/5 min		6.5											

**Note : This is only general information. For other specific requirement, please contact our marketing.**



**N2XSEFGbY/  
NA2XSEFGbY**  
**3.6/6(7.2) kV**  
**IEC 60502-2**

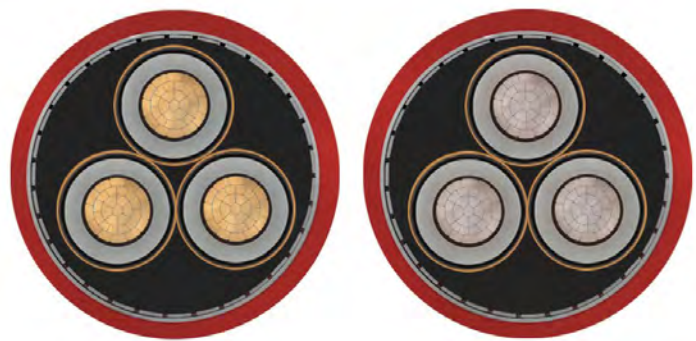
Copper/Aluminium conductor, XLPE insulated,  
Copper tape screened,  
Galvanized flat steel wire armoured,  
PVC/PE sheathed cable

**DIMENSIONAL AND ELECTRICAL DATA**

**3 CORES**

Nominal cross-sectional area		mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400
Conductor diameter (approx)		mm	6.05	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7
Nominal insulation thickness		mm	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.8	3.0
Insulation diameter (approx)		mm	12.5	13.5	14.7	16.3	18.1	19.5	20.7	22.7	24.8	27.9	31.9
Nominal flat wire armour thickness		mm	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Nominal outer sheath thickness		mm	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.1	3.3	3.6
Overall cable diameter (approx)		mm	40	42	45	49	53	56	59	64	70	76	84
Cable net weight ( approx)	CU	Kg/Km	2900	3300	3,900	4,900	6,000	7,000	8,100	9,600	11,900	14,300	17,700
	AL		2400	2700	3,000	3,600	4,200	4,700	5,200	6,100	72,000	8,600	10,300
Standard length per-reel		m	500	500	500	500	500	500	500	500	350	350	350
Minimum bending radius		mm	350	370	400	440	490	520	550	600	670	730	810
Max. DC conductor resistance at 20 °C	CU	Ω/Km	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
	AL		1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778
Min. insulation resistance at 20 °C		MΩ.Km	900	800	700	600	500	500	500	400	400	400	400
Capacitance per phase		µF/Km	0.191	0.216	0.240	0.279	0.318	0.349	0.376	0.419	0.459	0.481	0.511
Inductance per phase		mH/km	0.358	0.339	0.325	0.307	0.293	0.284	0.277	0.268	0.261	0.258	0.253
Max.short circuit current of conductor	CU	kA/sec	3.73	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79
	AL		2.49	3.45	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14
Max.short circuit current of screen			1.90	2.05	2.21	2.44	2.69	2.89	3.05	3.33	3.70	4.06	4.51
Maximum current carrying capacity at 30 °C	in air	CU	133	172	205	256	312	359	409	468	552	627	758
		AL	102	132	159	198	239	277	314	360	420	479	591
	in ground	CU	132	170	201	245	294	334	375	424	492	552	623
		AL	101	130	155	190	228	259	291	330	384	412	493
AC test voltage		kV/5 min	12.5 (IEC) , 9 (SPLN)										

**Note : This is only general information. For other specific requirement, please contact our marketing.**



**N2XSEFGbY/  
NA2XSEFGbY**  
**6/10(12) kV**  
**IEC 60502-2**

Copper/Aluminium conductor, XLPE insulated,  
Copper tape screened, Galvanized flat  
steel wire armoured,  
PVC/PE sheathed cable

**DIMENSIONAL AND ELECTRICAL DATA**

**3 CORES**

Nominal cross-sectional area	mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400		
Conductor diameter (approx)	mm	6.05	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7		
Nominal insulation thickness	mm	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4		
Insulation diameter (approx)	mm	14.3	15.3	16.5	18.1	19.9	21.3	22.5	24.5	26.9	29.1	31.9		
Nominal flat wire armour thickness	mm	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8		
Nominal outer sheath thickness	mm	2.3	2.4	2.5	2.6	2.7	2.9	3.0	3.1	3.3	3.4	3.6		
Overall cable diameter (approx)	mm	44	46	49	53	57	61	64	68	74	79	86		
Cable net weight ( approx)	CU	Kg/Km	3,300	3,800	4,400	5,400	6,500	7,600	8,700	40,200	12,500	14,900	18,000	
	AL	Kg/Km	2,800	3,100	3,500	4,100	4,700	5,300	5,900	6,800	7,900	9,100	10,600	
Standard length per-reel	m	500	500	500	500	500	500	500	500	350	350	350		
Minimum bending radius	mm	380	400	430	470	520	560	590	630	700	750	820		
Max. DC conductor resistance at 20 °C	CU	Ω/Km	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	
	AL	Ω/Km	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	
Min. insulation resistance at 20 °C		MΩ.Km	1,100	1,000	900	800	700	600	600	500	500	400	400	
Capacitance per phase		µF/Km	0.161	0.181	0.200	0.230	0.261	0.286	0.306	0.341	0.382	0.420	0.467	
Inductance per phase		mH/km	0.382	0.362	0.346	0.326	0.310	0.300	0.293	0.283	0.273	0.265	0.258	
Max.short circuit current of conductor	CU	kA/sec	3.73	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79	
	AL	kA/sec	2.49	3.45	4.89	6.81	9.19	11.58	14.43	17.26	22.98	28.67	38.14	
Max.short circuit current of screen			2.15	2.61	2.77	3.00	3.25	3.44	3.61	3.89	4.23	4.53	4.92	
Maximum current carrying capacity at 30 °C	in air	CU	A	134	173	206	257	313	360	410	469	553	628	759
		AL	A	103	133	160	199	240	278	315	361	421	480	592
	in ground	CU	A	133	171	202	246	295	335	376	425	493	553	624
		AL	A	102	131	156	191	229	260	292	331	385	413	494
AC test voltage		kV/5 min	21 (IEC) , 15 (SPLN)											

**Note : This is only general information. For other specific requirement, please contact our marketing.**



**N2XSEFGbY/  
NA2XSEFGbY**  
**8.7/15(17.5) kV**  
**IEC 60502-2**

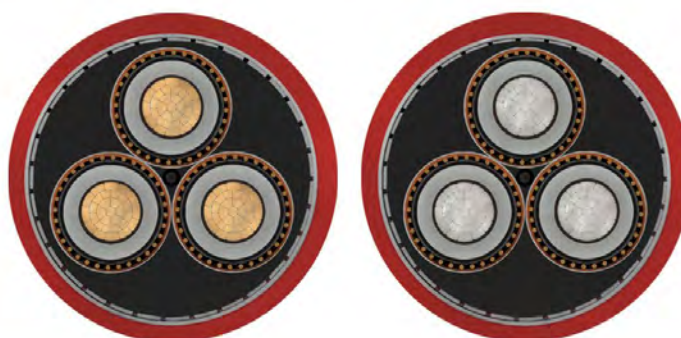
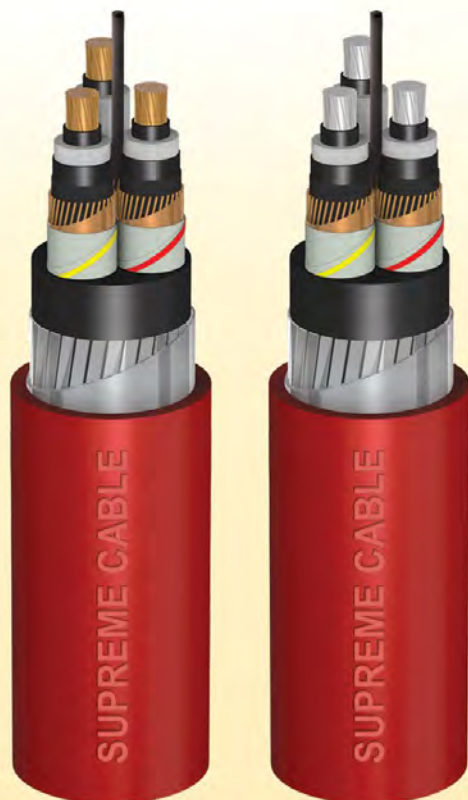
Copper/Aluminium conductor,  
XLPE insulated,  
Copper tape screened,  
Galvanized flat steel wire armoured,  
PVC/PE sheathed cable

**DIMENSIONAL AND ELECTRICAL DATA**

3 CORES

Nominal cross-sectional area		mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400		
Conductor diameter (approx)		mm	6.05	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7		
Nominal insulation thickness		mm	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		
Insulation diameter (approx)		mm	16.5	17.5	18.7	20.3	22.1	23.5	24.7	25.7	29.1	31.3	34.1		
Nominal flat wire armour thickness		mm	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8		
Nominal outer sheath thickness		mm	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.3	3.4	3.6	3.8		
Overall cable diameter (approx)		mm	49	52	55	58	63	66	69	74	79	85	91		
Cable net weight ( approx)		CU	3,900	4,400	5,100	6,000	4,300	8,300	9,400	11,100	13,400	15,800	19,000		
		AL	3,400	3,800	4,200	4,700	5,400	6,100	6,600	7,600	8,700	10,000	11,600		
Standard length per-reel		m	500	500	500	500	500	500	350	350	350	350	350		
Minimum bending radius		mm	410	440	470	510	560	590	530	680	730	790	860		
Max. DC conductor resistance at 20 °C		CU	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470		
		AL	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778		
Min. insulation resistance at 20 °C		MΩ.Km	1,300	1,200	1,100	1,000	900	800	700	700	600	600	500		
Capacitance per phase		µF/Km	0.138	0.154	0.170	0.193	0.218	0.238	0.254	0.281	0.314	0.344	0.382		
Inductance per phase		mH/km	0.408	0.386	0.369	0.347	0.330	0.319	0.310	0.299	0.288	0.279	0.271		
Max.short circuit current of conductor		CU	3.73	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79		
		AL	2.49	3.45	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14		
Max.short circuit current of screen			2.46	2.61	2.77	3.00	3.25	3.44	3.61	3.89	4.23	4.53	4.92		
Maximum current carrying capacity at 30 °C		in air		CU	134	173	206	257	313	360	410	469	553	629	
				AL	103	139	161	204	245	282	319	365	425	481	593
		in ground		CU	132	171	202	246	295	335	376	4256	492	554	625
				AL	102	132	154	186	223	255	283	321	372	414	495
AC test voltage		kV/5 min		30.5 (IEC) , 22 (SPLN)											

**Note : This is only general information. For other specific requirement, please contact our marketing.**



**N2XSEFGbY/  
NA2XSEYFGbY**  
**12/20(24) kV**  
**SPLN 43-5/IEC 60502-2**

**Copper/Aluminium conductor,  
XLPE insulated,  
with or without water sealing,  
Copper wire screened,  
Galvanized flat steel wire armoured,  
PVC/PE sheathed cable**

**DIMENSIONAL AND ELECTRICAL DATA**

**3 CORES**

Nominal cross-sectional area		mm <sup>2</sup>	35	50	70	95	120	150	185	240	300	400
Conductor diameter (approx)	mm		7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7
			5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Nominal insulation thickness		mm										
Insulation diameter (approx)		mm	19.7	20.9	22.5	24.3	25.7	26.9	28.9	31.3	33.5	36.3
Nominal flat wire armour thickness		mm	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Nominal outer sheath thickness		mm	2.7	2.8	2.9	3.1	3.2	3.3	3.4	3.6	3.7	4.0
Overall cable diameter (approx)		mm	57	60	64	68	71	74	79	85	90	97
Cable net weight ( approx)	CU	Kg/Km	5,000	5,700	6,800	8,000	9,100	10,300	11,900	14,300	16,700	20,100
	AL		4,400	4,800	5,400	6,200	6,800	7,500	8,400	9,600	10,900	12,700
Standard length per-reel		m	500	500	500	500	350	350	350	300	300	300
Minimum bending radius		mm	480	510	550	600	630	660	720	780	830	910
Max. DC conductor resistance at 20 °C	CU	Ω/Km	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
	AL		0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778
Min. insulation resistance at 20 °C		MΩ.Km	1,400	1,300	1,100	1,000	900	900	800	700	700	600
Capacitance per phase		µF/Km	0.136	0.149	0.169	0.190	0.206	0.220	0.243	0.270	0.294	0.326
Inductance per phase		mH/km	0.408	0.389	0.367	0.348	0.335	0.327	0.314	0.302	0.292	0.282
Max. short circuit current of conductor	CU	kA/sec	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79
	AL		3.45	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14
Max. short circuit current of screen			2.77	2.92	3.14	3.38	3.57	4.66	3.99	4.31	4.60	6.21
Maximum current carrying capacity at 30 °C	in air	CU	173	206	257	313	360	410	469	553	629	760
		AL	139	161	199	242	280	318	365	425	481	593
	in ground	CU	171	202	246	295	335	376	425	492	554	625
		AL	132	154	191	228	260	292	331	385	437	495
AC test voltage		kV/5 min	42 (IEC) , 30(SPLN)									

**Note : This is only general information. For other specific requirement, please contact our marketing.**



**N2XSEFGbY/  
NA2XSEFGbY**  
**18/30(36) kV**  
**IEC 60502-2**

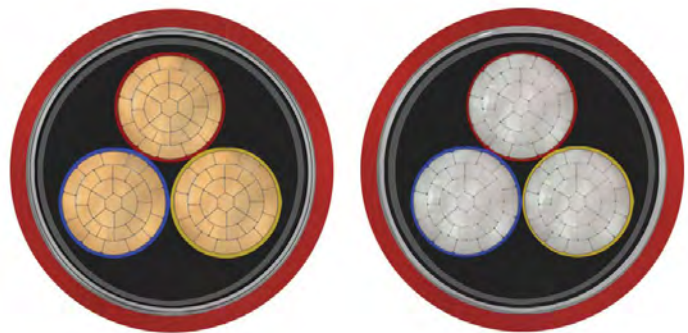
Copper/Aluminium conductor,  
XLPE insulated,  
Copper tape screened,  
Galvanized flat steel wire armoured,  
PVC/PE sheathed cable

**DIMENSIONAL AND ELECTRICAL DATA**

**3 CORES**

Nominal cross-sectional area		mm <sup>2</sup>	50	70	95	120	150	185	240	300	400
Conductor diameter (approx)		mm	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7
Nominal insulation thickness		mm	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Insulation diameter (approx)		mm	25.9	27.5	29.3	30.7	31.9	33.9	36.3	38.5	41.3
Nominal flat wire armour thickness		mm	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Nominal outer sheath thickness		mm	3.2	3.3	3.5	3.6	3.7	3.8	4.0	4.1	4.4
Overall cable diameter (approx)		mm	72	76	80	83	86	91	97	102	109
Cable net weight ( approx)	CU	Kg/Km	7,500	8,600	10,000	11,200	12,400	14,100	16,600	19,200	22,700
	AL		6,600	7,300	8,100	8,900	9,500	10,600	11,900	13,400	15,300
Standard length per-reel		m	500	500	500	350	350	350	300	300	300
Minimum bending radius		mm	600	640	690	720	750	810	870	920	1,000
Max. DC conductor resistance at 20 °C	CU	Ω/Km	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
	AL		0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778
Min. insulation resistance at 20 °C		MΩ.Km	1,600	1,500	1,300	1,200	1,200	1,100	1,000	900	800
Capacitance per phase		µF/Km	0.121	0.136	0.151	0.163	0.173	0.190	0.209	0.227	0.250
Inductance per phase		mH/km	0.429	0.404	0.383	0.369	0.359	0.344	0.330	0.319	0.307
Max.short circuit current of conductor	CU	kA/sec	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79
	AL		4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14
Max.short circuit current of screen			3.77	4.00	4.25	4.45	4.62	4.9	5.59	5.54	5.93
Maximum current carrying capacity at 30 °C	in air	CU	207	258	314	361	411	470	554	630	766
		AL	162	205	246	283	320	365	426	482	594
	in ground	CU	203	247	296	336	377	426	488	555	626
		AL	155	187	224	256	284	322	373	415	496
AC test voltage		kV/5 min	63								

**Note : This is only general information. For other specific requirement, please contact our marketing.**



**N2XKBY/NA2XKBY**  
**1.8/3(3.6) kV**  
**IEC 60502-1**

Copper/Aluminium conductor, XLPE insulated,  
Lead sheathed, Galvanized double steel  
tape armoured, PVC/PE sheathed cable

**DIMENSIONAL AND ELECTRICAL DATA**

3 CORES

Nominal cross-sectional area	mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400		
Conductor diameter (approx)	mm	6.05	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7		
Nominal insulation thickness	mm	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		
Insulation diameter (approx)	mm	10.3	11.3	12.5	14.1	15.9	17.3	18.5	20.5	22.9	25.1	27.9		
Nominal lead thickness	mm	1.5	1.5	1.6	1.6	1.7	1.8	1.9	2.0	2.2	2.3	2.5		
Nominal tape armour thickness	mm	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.8		
Nominal outer sheath thickness	mm	2.0	2.2	2.3	2.4	2.5	2.6	2.8	2.9	3.1	3.3	3.6		
Overall cable diameter (approx)	mm	35	39	42	46	50	54	58	63	69	75	84		
Cable net weight ( approx)	CU	Kg/Km	3,400	4,400	5,100	6,200	7,700	9,000	10,500	12,400	15,500	18,400	23,500	
	AL	Kg/Km	2,900	3,700	4,300	4,900	5,900	6,700	7,700	8,900	10,700	12,600	15,100	
Standard length per-reel	m	500	500	500	500	500	500	500	500	500	500	500		
Minimum bending radius	mm	310	350	380	420	460	500	540	600	660	720	810		
Max. DC conductor resistance at 20 °C	CU	Ω/Km	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	
	AL	Ω/Km	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	
Min. insulation resistance at 20 °C	MΩ.Km	900	700	700	600	500	400	400	400	300	300	300		
Capacitance per phase	µF/Km	0.261	0.299	0.334	0.393	0.453	0.499	0.539	0.606	0.685	0.758	0.851		
Inductance per phase	mH/km	0.295	0.282	0.296	0.281	0.269	0.262	0.257	0.249	0.243	0.238	0.232		
Max. short circuit current of conductor	CU	kA/sec	3.73	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79	
	AL	kA/sec	2.49	3.45	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14	
Maximum current carrying capacity at 30 °C	in air	CU	A	131	169	202	252	307	353	403	461	544	617	746
		AL	A	100	130	156	195	235	273	309	355	414	475	582
	in ground	CU	A	130	167	198	241	289	329	369	417	484	544	613
		AL	A	99	128	153	187	224	255	286	325	378	406	485
AC test voltage	kV/5 min	6.5												

Note : This is only general information. For other specific requirement, please contact our marketing.



**N2XSEKBY/  
NA2XSEKBY**  
**3.6/6(7.2) kV**  
**IEC 60502-2**

Copper/Aluminium conductor,  
XLPE insulated, Copper tape screened,  
Lead sheathed, Galvanized double  
steel tape armoured, PVC/PE sheathed cable

**DIMENSIONAL AND ELECTRICAL DATA**

3 CORES

		mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400
Nominal cross-sectional area		mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400
Conductor diameter (approx)	mm		6.05	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7
			2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.8	3.0
Nominal insulation thickness		mm	12.5	13.5	14.7	16.3	18.1	19.5	20.7	22.7	24.8	27.9	31.9
Insulation diameter (approx)		mm	1.7	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.5	2.6	2.9
Nominal lead thickness		mm	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.8	0.8
Nominal tape armour thickness		mm	2.4	2.5	2.6	2.7	2.9	3.0	3.1	3.2	3.5	3.7	4.0
Nominal outer sheath thickness		mm	46	49	52	56	61	65	68	73	80	88	97
Overall cable diameter (approx)		mm	5,500	6,100	7,100	8,500	10,100	11,600	13,100	15,300	18,700	23,000	28,200
Cable net weight ( approx)	CU	Kg/Km	5,000	5,400	6,200	7,200	8,200	9,200	10,300	11,700	13,900	17,100	20,700
	AL	Kg/Km	500	500	500	500	500	500	500	500	330	300	300
Standard length per-reel		m	390	420	450	490	550	590	620	670	740	820	910
Minimum bending radius		mm	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
Max. DC conductor resistance at 20 °C	CU	Ω/Km	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778
	AL	Ω/Km	900	800	700	600	500	500	500	400	400	400	400
Min. insulation resistance at 20 °C		MΩ.Km	0.191	0.216	0.240	0.279	0.318	0.349	0.376	0.419	0.459	0.481	0.511
Capacitance per phase		μF/Km	0.322	0.308	0.298	0.284	0.273	0.266	0.261	0.254	0.249	0.246	0.243
Inductance per phase		mH/km	3.73	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79
Max.short circuit current of conductor	CU	kA/sec	2.49	3.45	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14
	AL	kA/sec	1.90	2.05	2.21	2.44	2.69	2.89	3.05	3.33	3.70	4.06	4.51
Maximum current carrying capacity at 30 °C	in air	CU	131	169	207	252	307	353	403	461	544	617	746
		AL	100	130	156	195	235	273	309	354	414	472	582
	in ground	CU	130	167	198	241	289	329	369	417	484	544	613
		AL	99	128	152	187	224	255	286	325	378	406	485
AC test voltage		kV/5 min	12.5										

**Note : This is only general information. For other specific requirement, please contact our marketing.**



**N2XSEKBY/  
NA2XSEKBY**  
**6/10(12) kV**  
**IEC 60502-2**

**Copper wire/Aluminium conductor,  
XLPE insulated, Copper tape screened,  
Lead sheathed, Galvanized double steel  
tape armoured, PVC/PE sheathed cable**

**DIMENSIONAL AND ELECTRICAL DATA**

**3 CORES**

Nominal cross-sectional area		mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400
Conductor diameter (approx)	mm		6.05	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7
	mm		3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Nominal insulation thickness		mm	14.3	15.3	16.5	18.1	19.9	21.3	22.5	24.5	26.9	29.1	31.9
Insulation diameter (approx)		mm	1.8	1.9	1.9	2.0	2.1	2.2	2.3	2.4	2.6	2.7	2.9
Nominal lead thickness		mm	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.8	0.8	0.8
Nominal tape armour thickness		mm	2.6	2.6	2.8	2.9	3.0	3.1	3.3	3.4	3.6	3.8	4.1
Nominal outer sheath thickness		mm	51	53	57	61	65	69	73	78	85	91	99
Overall cable diameter (approx)		mm											
Cable net weight ( approx)	CU	Kg/Km	6,400	7,200	8,100	9,400	11,200	12,800	14,300	16,600	2,080	24,100	28,800
	AL	Kg/Km	5,900	6,500	7,200	8,100	9,300	10,400	11,500	13,100	16,100	18,300	21,300
Standard length per-reel		m	500	500	500	500	500	500	500	500	330	300	300
Minimum bending radius		mm	430	450	490	530	580	620	660	710	780	840	920
Max. DC conductor resistance at 20 °C	CU	Ω/Km	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
	AL	Ω/Km	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778
Min. insulation resistance at 20 °C		MΩ.Km	1,100	1,000	900	800	700	600	600	500	500	400	400
Capacitance per phase		µF/Km	0.161	0.181	0.200	0.230	0.261	0.286	0.306	0.341	0.382	0.420	0.467
Inductance per phase		mH/km	0.346	0.331	0.319	0.303	0.291	0.283	0.277	0.269	0.260	0.254	0.248
Max.short circuit current of conductor	CU	kA/sec	3.73	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79
	AL	kA/sec	2.49	3.45	4.89	6.81	9.19	11.58	14.43	17.26	22.98	28.67	38.14
Max.short circuit current of screen			2.15	2.61	2.77	3.00	3.25	3.44	3.61	3.89	4.23	4.53	4.92
Maximum current carrying capacity at 30 °C	in air	CU	132	170	203	253	308	354	404	462	545	618	747
		AL	101	131	157	196	236	274	310	355	414	473	583
	in ground	CU	131	168	199	242	290	330	370	418	485	545	614
		AL	100	129	154	188	225	256	287	326	379	407	486
AC test voltage		kV/5 min	21										

**Note : This is only general information. For other specific requirement, please contact our marketing.**



**N2XSEKBY/  
NA2XSEKBY**  
**8.7/15(17.5) kV**  
**IEC 60502-2**

Copper/Aluminium conductor,  
XLPE insulated,  
Copper tape screened, Lead sheathed,  
Galvanized double steel tape armoured,  
PVC/PE sheathed cable

**DIMENSIONAL AND ELECTRICAL DATA**

3 CORES

Nominal cross-sectional area		mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400
Conductor diameter (approx)	mm		6.05	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7
	mm		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Nominal insulation thickness		mm	16.5	17.5	18.7	20.3	22.1	23.5	24.7	25.7	29.1	31.3	34.1
Insulation diameter (approx)		mm	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.9	3.1
Nominal lead thickness		mm	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.8	0.8	0.8	0.8
Nominal tape armour thickness		mm	2.7	2.8	3.0	3.1	3.2	3.3	3.5	3.6	3.8	4.0	4.3
Nominal outer sheath thickness		mm	57	59	63	67	72	75	79	85	91	97	104
Cable net weight ( approx)	CU	Kg/Km	7500	8300	9,500	11,000	12,800	14,500	16,200	19,400	22,700	26,400	31,200
	AL	Kg/Km	7000	7600	8,600	9,700	11,000	12,100	13,300	15,800	17,900	20,500	23,700
Standard length per-reel		m	500	500	500	500	500	500	350	350	330	300	300
Minimum bending radius		mm	470	500	530	580	630	660	700	760	820	880	960
Max. DC conductor resistance at 20 °C	CU	Ω/Km	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
	AL	Ω/Km	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778
Min. insulation resistance at 20 °C		MΩ.Km	1,300	1,200	1,100	1,000	900	800	700	700	600	600	500
Capacitance per phase		µF/Km	0.138	0.154	0.170	0.193	0.218	0.238	0.254	0.281	0.314	0.344	0.382
Inductance per phase		mH/km	0.372	0.355	0.341	0.324	0.310	0.301	0.294	0.285	0.275	0.268	0.261
Max. short circuit current of conductor	CU	kA/sec	3.73	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79
	AL	kA/sec	2.49	3.45	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14
Max. short circuit current of screen			2.46	2.61	2.77	3.00	3.25	3.44	3.61	3.89	4.23	4.53	4.92
Maximum current carrying capacity at 30 °C	in air	CU	132	170	203	253	308	354	404	462	545	619	748
		AL	101	137	158	201	241	278	314	359	418	474	584
	in ground	CU	130	168	199	242	290	330	370	418	484	546	615
		AL	100	130	151	183	219	251	279	316	366	408	487
AC test voltage		kV/5 min	30.5										

**Note : This is only general information. For other specific requirement, please contact our marketing.**



**N2XSEKBY/  
NA2XSEKBY**  
**12/20(24) kV**  
**IEC 60502-2**

**Copper/Aluminium conductor,  
XLPE insulated, Copper tape screened,  
Lead sheathed, Galvanized double steel  
tape armoured, PVC/PE sheathed cable**

**DIMENSIONAL AND ELECTRICAL DATA**

**3 CORES**

Nominal cross-sectional area		mm <sup>2</sup>	35	50	70	95	120	150	185	240	300	400
Conductor diameter (approx)		mm	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7
		mm	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Nominal insulation thickness		mm	19.7	20.9	22.5	24.3	25.7	26.9	28.9	31.3	33.5	36.3
Insulation diameter (approx)		mm	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.9	3.0	3.2
Nominal lead thickness		mm	0.5	0.5	0.5	0.5	0.5	0.8	0.8	0.8	0.8	0.8
Nominal tape armour thickness		mm	3.0	3.1	3.2	3.4	3.5	3.7	3.8	4.0	4.2	4.4
Nominal outer sheath thickness		mm	65	68	72	77	81	86	91	97	102	110
Cable net weight ( approx)	CU	Kg/Km	9,700	10,800	12,400	14,300	16,000	18,600	21,200	24,900	28,200	33,300
	AL	Kg/Km	9,000	9,900	11,100	12,400	13,700	15,900	17,600	20,000	22,300	25,800
Standard length per-reel		m	500	500	500	500	350	350	350	250	250	250
Minimum bending radius		mm	540	570	610	670	710	750	810	870	920	1,000
Max. DC conductor resistance at 20 °C	CU	Ω/Km	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
	AL	Ω/Km	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778
Min. insulation resistance at 20 °C		MΩ.Km	1,400	1,300	1,100	1,000	900	900	800	700	700	600
Capacitance per phase		µF/Km	0.136	0.149	0.169	0.190	0.206	0.220	0.243	0.270	0.294	0.326
Inductance per phase		mH/km	0.377	0.362	0.344	0.328	0.318	0.310	0.300	0.289	0.281	0.273
Max. short circuit current of conductor	CU	kA/sec	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79
	AL	kA/sec	3.45	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14
Max. short circuit current of screen			2.77	2.92	3.14	3.38	3.57	4.66	3.99	4.31	4.60	6.21
Maximum current carrying capacity at 30 °C	in air	CU	170	203	253	308	354	404	462	545	619	748
		AL	137	158	196	238	276	313	359	418	474	584
	in ground	CU	168	199	242	290	330	370	418	484	545	615
		AL	130	152	188	224	256	287	326	379	430	487
AC test voltage		kV/5 min	42									

**Note : This is only general information. For other specific requirement, please contact our marketing.**



**N2XSEKBY/  
NA2XSEKBY**  
**18/30(36) kV**  
**IEC 60502-2**

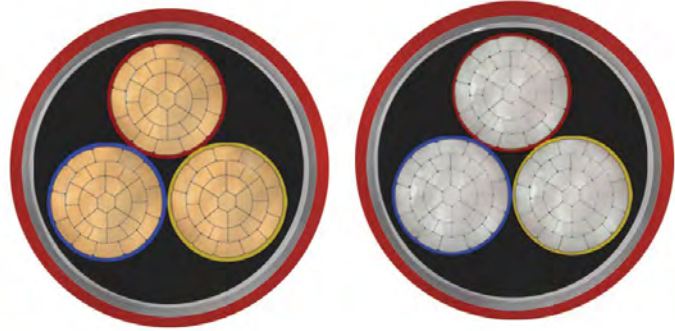
Copper/Aluminium conductor, XLPE insulated,  
Copper tape screened, Lead sheathed,  
Galvanized double steel tape armoured,  
PVC/PE sheathed cable

**DIMENSIONAL AND ELECTRICAL DATA**

**3 CORES**

Nominal cross-sectional area		mm <sup>2</sup>	50	70	95	120	150	185	240	300	400
Conductor diameter (approx)		mm	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7
Nominal insulation thickness		mm	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Insulation diameter (approx)		mm	25.9	27.5	29.3	30.7	31.9	33.9	36.3	38.5	41.3
Nominal lead thickness		mm	2.6	2.7	2.8	2.9	2.9	3.1	3.2	3.3	3.5
Nominal tape armour thickness		mm	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Nominal outer sheath thickness		mm	3.6	3.7	3.9	4.0	4.1	4.2	4.4	4.6	4.9
Overall cable diameter (approx)		mm	83	87	92	96	99	104	110	116	123
Cable net weight ( approx)	CU	Kg/Km	15,600	17,400	19,600	21,600	23,100	26,100	29,800	35,600	38,900
	AL		14,700	16,000	17,700	19,200	20,200	22,500	25,000	27,700	31,300
Standard length per-reel		m	500	500	500	350	350	350	250	250	250
Minimum bending radius		mm	680	730	780	820	850	900	970	1,030	1,100
Max. DC conductor resistance at 20 °C	CU	Ω/Km	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
	AL		0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778
Min. insulation resistance at 20 °C		MΩ.Km	1,600	1,500	1,300	1,200	1,200	1,100	1,000	900	800
Capacitance per phase		μF/Km	0.121	0.136	0.151	0.163	0.173	0.190	0.209	0.227	0.250
Inductance per phase		mH/km	0.402	0.381	0.363	0.352	0.343	0.330	0.317	0.308	0.297
Max.short circuit current of conductor	CU	kA/sec	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79
	AL		4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14
Max.short circuit current of screen			3.77	4.00	4.25	4.45	4.62	4.9	5.59	5.54	5.93
Maximum current carrying capacity at 30 °C	in air	CU	204	254	309	355	405	463	546	620	754
		AL	159	202	242	279	315	359	419	475	585
	in ground	CU	200	243	291	331	371	419	485	546	616
		AL	152	184	220	252	280	317	367	409	488
AC test voltage		kV/5 min	63								

**Note : This is only general information. For other specific requirement, please contact our marketing.**



**N2XALCAY/  
NA2XALCAY**  
**1.8/3(3.6) kV**  
**IEC 60502-1**

**Copper/Aluminium conductor, XLPE insulated,  
Aluminium corrugated tape armoured,  
PVC/PE sheathed cable**

**DIMENSIONAL AND ELECTRICAL DATA**

**3 CORES**

Nominal cross-sectional area	mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400	
Conductor diameter (approx)	mm	6.05	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7	
Nominal insulation thickness	mm	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Insulation diameter (approx)	mm	10.3	11.3	12.5	14.1	15.9	17.3	18.5	20.5	22.9	25.1	27.9	
Nominal corrugated thickness	mm	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6	
Nominal outer sheath thickness	mm	2.2	2.3	2.4	2.5	2.7	2.9	2.9	3.1	3.3	3.5	3.8	
Overall cable diameter (approx)	mm	34	36	39	44	48	52	56	61	67	73	80	
Cable net weight ( approx)	CU	2000	2400	2,900	3,700	4,700	5,600	680	8,300	10,400	12,600	15,900	
	AL	1500	1700	2,000	2,400	2,900	3,400	4,000	4,800	5,700	6,800	8,500	
Standard length per-reel	m	500	500	500	500	500	500	500	500	350	350	350	
Minimum bending radius	mm	300	320	350	400	450	490	530	580	640	700	780	
Max. DC conductor resistance at 20 °C	CU	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	
	AL	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	
Min. insulation resistance at 20 °C	MΩ.Km	900	700	700	600	500	400	400	400	300	300	300	
Capacitance per phase	µF/Km	0.261	0.299	0.334	0.393	0.453	0.499	0.539	0.606	0.685	0.758	0.851	
Inductance per phase	mH/km	0.295	0.282	0.272	0.259	0.250	0.244	0.240	0.234	0.229	0.225	0.221	
Max. short circuit current of conductor	CU	3.73	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79	
	AL	2.49	3.45	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14	
Maximum current carrying capacity at 30 °C	in air	CU	131	170	203	253	309	355	405	463	546	621	750
		AL	101	130	157	196	236	274	311	356	416	474	585
	in ground	CU	130	168	199	242	291	330	371	420	487	546	617
		AL	100	129	153	188	226	256	288	327	380	408	488
AC test voltage	kV/5 min	6.5											

**Note : This is only general information. For other specific requirement, please contact our marketing.**



## N2XSEALCAY/ NA2XSEALCAY

**3.6/6(7.2) kV**  
IEC 60502-2

Copper/Aluminium conductor, XLPE insulated,  
Copper tape screened,  
Aluminium corrugated tape armoured,  
PVC/PE sheathed cable

### DIMENSIONAL AND ELECTRICAL DATA

3 CORES

Nominal cross-sectional area		mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400
Conductor diameter (approx)	mm		6.05	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7
			2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.8
Nominal insulation thickness	mm		12.5	13.5	14.7	16.3	18.1	19.5	20.7	22.7	24.8	27.9	31.9
			0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6
Nominal corrugated thickness	mm		2.3	2.4	2.5	2.7	2.8	2.9	3.0	3.2	3.4	3.7	3.9
			44	47	49	55	58	62	65	71	77	85	93
Overall cable diameter (approx)	mm		2,800	3,300	3,800	4,900	6,000	7,000	8,100	9,600	11,900	14,700	18,100
			2,300	2,600	2,900	3,200	4,200	4,800	5,300	6,100	7,300	8,900	10,700
Cable net weight ( approx)	CU	Kg/Km	2,800	3,300	3,800	4,900	6,000	7,000	8,100	9,600	11,900	14,700	18,100
	AL		2,300	2,600	2,900	3,200	4,200	4,800	5,300	6,100	7,300	8,900	10,700
Standard length per-reel		m	500	500	500	500	500	500	500	500	330	300	300
Minimum bending radius		mm	380	410	430	490	520	560	600	660	720	790	880
Max. DC conductor resistance at 20 °C	CU	Ω/Km	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
	AL		1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778
Min. insulation resistance at 20 °C		MΩ.Km	900	800	700	600	500	500	500	400	400	400	400
Capacitance per phase		µF/Km	0.191	0.216	0.240	0.279	0.318	0.349	0.376	0.419	0.459	0.481	0.511
Inductance per phase		mH/km	0.334	0.317	0.304	0.288	0.276	0.268	0.263	0.255	0.249	0.246	0.243
Max.short circuit current of conductor	CU	kA/sec	3.73	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79
	AL		2.49	3.45	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14
Max.short circuit current of screen			1.90	2.05	2.21	2.44	2.69	2.89	3.05	3.33	3.70	4.06	4.51
Maximum current carrying capacity at 30 °C	in air	CU	131	170	203	253	309	355	405	463	546	621	750
		AL	101	130	157	196	236	274	311	356	416	474	585
	in ground	CU	130	168	199	242	291	330	371	420	487	546	617
		AL	100	129	153	188	226	256	288	327	380	408	488
AC test voltage		kV/5 min										12.5	

**Note :** This is only general information. For other specific requirement, please contact our marketing.



**N2XSEALCAY/  
NA2XSEALCAY**  
**6/10(12) kV**  
**IEC 60502-2**

**Copper/Aluminium conductor, XLPE insulated,  
Copper tape screened,  
Aluminium corrugated tape armoured,  
PVC/PE sheathed cable**

**DIMENSIONAL AND ELECTRICAL DATA**

**3 CORES**

Nominal cross-sectional area	mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400	
Conductor diameter (approx)	mm	6.05	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7	
Nominal insulation thickness	mm	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	
Insulation diameter (approx)	mm	14.3	15.3	16.5	18.1	19.9	21.3	22.5	24.5	26.9	29.1	31.9	
Nominal corrugated thickness	mm	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	6.0	0.6	
Nominal outer sheath thickness	mm	2.5	2.6	2.7	2.8	3.0	3.1	3.2	3.4	3.6	3.8	4.0	
Overall cable diameter (approx)	mm	48	51	55	58	63	67	70	75	82	88	94	
Cable net weight ( approx)	CU	Kg/Km	3,200	3,700	4,500	5,400	6,600	7,600	8,700	10,300	12,800	15,200	18,400
	AL		2,700	3,000	3,600	4,100	4,800	5,300	5,900	6,700	8,200	9,400	11,000
Standard length per-reel	m	500	500	500	500	500	500	500	500	330	300	300	
Minimum bending radius	mm	410	440	470	510	560	600	630	690	760	820	880	
Max. DC conductor resistance at 20 °C	CU	Ω/Km	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
	AL		1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778
Min. insulation resistance at 20 °C	MΩ.Km	1,100	1,000	900	800	700	600	600	500	500	400	400	
Capacitance per phase	µF/Km	0.161	0.181	0.200	0.230	0.261	0.286	0.306	0.341	0.382	0.420	0.467	
Inductance per phase	mH/km	0.361	0.342	0.327	0.309	0.295	0.286	0.279	0.270	0.261	0.255	0.248	
Max.short circuit current of conductor	CU	kA/sec	3.73	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79
	AL		2.49	3.45	4.89	6.81	9.19	11.58	14.43	17.26	22.98	28.67	38.14
Max.short circuit current of screen			2.15	2.61	2.77	3.00	3.25	3.44	3.61	3.89	4.23	4.53	4.92
Maximum current carrying capacity at 30 °C	in air	CU	132	171	204	254	310	356	406	464	547	622	751
		AL	102	132	158	197	238	275	312	357	417	475	586
	in ground	CU	131	169	202	243	292	331	372	421	488	547	618
		AL	101	130	154	189	227	257	289	328	381	409	489
AC test voltage	kV/5 min	21											

**Note : This is only general information. For other specific requirement, please contact our marketing.**



**N2XSEALCAY/  
NA2XSEALCAY**  
**8.7/15(17.5) kV**  
**IEC 60502-2**

Copper/Aluminium conductor, XLPE insulated,  
Copper tape screened,  
Aluminium corrugated tape armoured,  
PVC/PE sheathed cable

**DIMENSIONAL AND ELECTRICAL DATA**

3 CORES

Nominal cross-sectional area		mm <sup>2</sup>	25	35	50	70	95	120	150	185	240	300	400
Conductor diameter (approx)		mm	6.05	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7
Nominal insulation thickness		mm	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Insulation diameter (approx)		mm	16.5	17.5	18.7	20.3	22.1	23.5	24.7	25.7	29.1	31.3	34.1
Nominal corrugated thickness		mm	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6
Nominal outer sheath thickness		mm	2.7	2.8	2.9	3.0	3.1	3.3	3.4	3.6	3.8	4.0	4.2
Overall cable diameter (approx)		mm	55	57	60	64	68	73	76	81	88	93	99
Cable net weight ( approx)	CU	Kg/Km	3,900	4,400	5,100	6,100	7,200	8,400	9,500	11,400	14,700	16,200	19,400
	AL		3,500	3,800	4,200	4,800	5,400	6,100	6,700	7,900	9,000	12,000	13,900
Standard length per-reel		m	500	500	500	500	500	500	350	350	330	300	300
Minimum bending radius		mm	460	480	510	550	600	650	680	730	800	850	920
Max. DC conductor resistance at 20 °C	CU	Ω/Km	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
	AL		1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778
Min. insulation resistance at 20 °C		MΩ.Km	1,300	1,200	1,100	1,000	900	800	700	700	600	600	500
Capacitance per phase		μF/Km	0.138	0.154	0.170	0.193	0.218	0.238	0.254	0.281	0.314	0.344	0.382
Inductance per phase		mH/km	0.389	0.369	0.352	0.332	0.316	0.305	0.298	0.287	0.277	0.269	0.261
Max.short circuit current of conductor	CU	kA/sec	3.73	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79
	AL		2.49	3.45	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14
Max.short circuit current of screen			2.46	2.61	2.77	3.00	3.25	3.44	3.61	3.89	4.23	4.53	4.92
Maximum current carrying capacity at 30 °C	in air	CU	132	171	204	254	310	356	406	464	547	623	752
		AL	102	137	159	202	242	279	316	361	421	476	587
	in ground	CU	131	168	200	243	292	331	372	421	487	548	619
		AL	101	131	152	184	221	252	280	318	388	410	490
AC test voltage		kV/5 min	30.5										

Note : This is only general information. For other specific requirement, please contact our marketing.



**N2XSEALCAY/  
NA2XSEALCAY**  
**12/20(24) kV**  
**IEC 60502-2**

**Copper/Aluminium conductor, XLPE insulated,  
Copper tape screened,  
Aluminium corrugated tape armoured,  
PVC/PE sheathed cable**

**DIMENSIONAL AND ELECTRICAL DATA**

**3 CORES**

Nominal cross-sectional area		mm <sup>2</sup>	35	50	70	95	120	150	185	240	300	400
Conductor diameter (approx)		mm	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7
		mm	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Nominal insulation thickness		mm	19.7	20.9	22.5	24.3	25.7	26.9	28.9	31.3	33.5	36.3
Insulation diameter (approx)		mm	19.7	20.9	22.5	24.3	25.7	26.9	28.9	31.3	33.5	36.3
Nominal corrugated thickness		mm	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6
Nominal outer sheath thickness		mm	3.0	3.1	3.2	3.3	3.5	3.6	3.8	4.0	4.2	4.2
Overall cable diameter (approx)		mm	63	66	70	74	79	82	88	93	99	99
Cable net weight ( approx)	CU	Kg/Km	5,100	5,800	6,800	8,000	9,400	10,600	12,300	14,700	17,100	20,100
	AL		4,400	4,900	5,500	6,200	6,800	7,800	8,700	9,900	11,300	12,800
Standard length per-reel		m	500	500	500	500	350	350	350	250	250	250
Minimum bending radius		mm	530	560	600	640	690	720	780	840	900	920
Max. DC conductor resistance at 20 °C	CU	Ω/Km	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
	AL		0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778
Min. insulation resistance at 20 °C		MΩ.Km	1,400	1,300	1,100	1,000	900	900	800	700	700	600
Capacitance per phase		µF/Km	0.136	0.149	0.169	0.190	0.206	0.220	0.243	0.270	0.294	0.326
Inductance per phase		mH/km	0.393	0.374	0.353	0.335	0.323	0.315	0.303	0.292	0.283	0.274
Max.short circuit current of conductor	CU	kA/sec	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79
	AL		3.45	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14
Max.short circuit current of screen			2.77	2.92	3.14	3.38	3.57	4.66	3.99	4.31	4.60	6.21
Maximum current carrying capacity at 30 °C	in air	CU	171	204	254	310	356	406	464	547	623	752
		AL	137	159	197	239	277	315	361	421	476	587
	in ground	CU	169	200	243	292	331	372	421	487	548	619
		AL	131	152	189	226	257	289	328	381	432	490
AC test voltage		kV/5 min	42									

**Note : This is only general information. For other specific requirement, please contact our marketing.**



## N2XSEALCAY/ NA2XSEALCAY

### 18/30(36) kV

#### IEC 60502-2

Copper/Aluminium conductor,  
XLPE insulated, Copper tape screened,  
Aluminium corrugated tape armoured,  
PVC/PE sheathed cable

#### DIMENSIONAL AND ELECTRICAL DATA

3 CORES

Nominal cross-sectional area		mm <sup>2</sup>	50	70	95	120	150	185	240	300	400		
Conductor diameter (approx)		mm	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9	23.7		
Nominal insulation thickness		mm	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0		
Insulation diameter (approx)		mm	25.9	27.5	29.3	30.7	31.9	33.9	36.3	38.5	41.3		
Nominal corrugated thickness		mm	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6		
Nominal outer sheath thickness		mm	3.5	3.6	3.8	3.9	4.0	4.2	4.2	4.2	4.2		
Overall cable diameter (approx)		mm	80	83	89	92	94	99	99	99	99		
Cable net weight ( approx)		CU	7,800	8,900	10,300	11,500	12,700	14,400	16,700	19,000	22,100		
		AL	6,900	7,600	8,400	9,200	9,800	10,900	12,000	13,200	14,700		
Standard length per-reel		m	500	500	500	350	350	350	250	250	250		
Minimum bending radius		mm	660	700	760	790	810	870	880	900	920		
Max. DC conductor resistance at 20 °C		CU	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470		
		AL	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778		
Min. insulation resistance at 20 °C		MΩ.Km	1,600	1,500	1,300	1,200	1,200	1,100	1,000	900	800		
Capacitance per phase		µF/Km	0.121	0.136	0.151	0.163	0.173	0.190	0.209	0.227	0.250		
Inductance per phase		mH/km	0.417	0.393	0.372	0.359	0.349	0.335	0.321	0.311	0.300		
Max.short circuit current of conductor		CU	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41	57.79		
		AL	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67	38.14		
Max.short circuit current of screen			3.77	4.00	4.25	4.45	4.62	4.9	5.59	5.54	5.93		
Maximum current carrying capacity at 30 °C		in air		CU	205	255	311	357	407	465	548	624	758
				AL	160	203	243	280	317	361	422	477	588
		in ground		CU	201	244	293	332	373	422	488	549	620
				AL	153	185	272	253	281	319	369	411	491
AC test voltage		kV/5 min	63										

Note : This is only general information. For other specific requirement, please contact our marketing.



**NFA2XS-Y-T**  
**12/20(24) kV**  
**SPLN 43-5/IEC 60502-2**  
**Aerial twisted cable**

Aluminium conductor, XLPE insulated,  
Copper/wire tape screened,  
PVC sheathed with stranded galvanized  
round steel wire insulated messenger

**DIMENSIONAL AND ELECTRICAL DATA**

Nominal cross-sectional area	mm <sup>2</sup>	3x35+50	3x50+50	3x70+50	3x95+50	3x120+50	3x150+50	3x185+50	3x240+50	3x300+50
Conductor diameter (approx)	mm	7.0	8.2	9.8	11.5	12.9	14.1	16.1	18.0	20.6
Nominal insulation thickness	mm	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Insulation diameter (approx)	mm	19.6	20.8	22.4	24.1	25.5	26.7	28.7	30.8	33.2
Nominal outer sheath thickness	mm	1.8	1.8	1.9	1.9	2.0	2.0	2.1	2.1	2.2
Overall cable diameter (approx)	mm	56	58	62	66	70	73	77	83	88
Cable net weight ( approx)	Kg/Km	2800	3,100	3,500	3,900	4,300	4,800	5,200	6,000	6,800
Standard length per-reel	m	500	500	500	500	350	350	350	350	350
Minimum bending radius	mm	470	500	540	580	620	650	700	760	820
Max. DC conductor resistance at 20 °C	Ω/Km	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100
Min. insulation resistance at 20 °C	MΩ.Km	1400	1,300	1,100	1,000	900	900	800	700	700
Capacitance per phase	µF/Km	0.106	0.116	0.128	0.141	0.152	0.160	0.175	0.189	0.206
Inductance per phase	mH/km	0.418	0.400	0.382	0.365	0.354	0.346	0.333	0.323	0.312
Max. short circuit current of conductor	kA/sec	3.45	4.89	6.81	9.19	11.58	14.43	17.76	22.98	28.67
Max. short circuit current of screen	kA/sec	2.77	2.92	3.14	3.38	3.57	4.66	3.99	4.31	4.6
Maximum current carrying capacity at 30 °C in AIR	A	142	165	204	247	287	326	373	435	481
AC test voltage	kV/5 min	42 (IEC) , 30 (SPLN)								

**Note : This is only general information. For other specific requirement, please contact our marketing.**



**NF2XSY/NFA2XSY**  
**12/20(24) kV**  
**SPLN 43-5/IEC 60502-2**

Underground twisted cable  
Copper/Aluminium conductor, XLPE insulated,  
with or without water sealing,  
Copper wire/tape screened, PVC sheathed cable

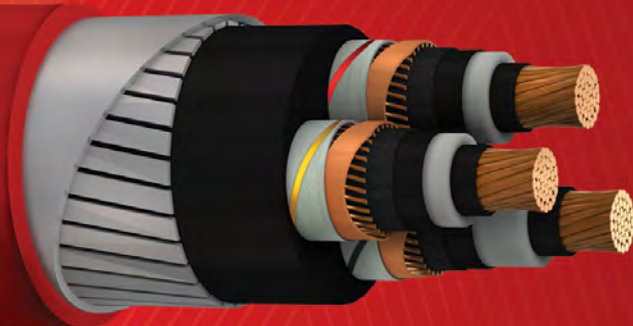
**DIMENSIONAL AND ELECTRICAL DATA**

3 CORES

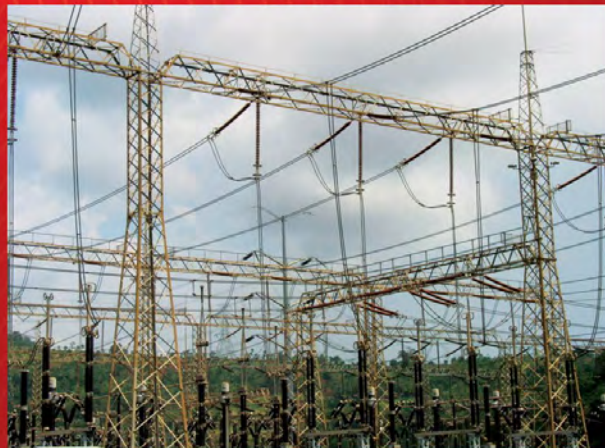
Nominal cross-sectional area		mm <sup>2</sup>	35	50	70	95	120	150	185	240	300
Conductor diameter (approx)		mm	7.1	8.25	9.9	11.7	13.1	14.3	16.3	18.2	20.9
		mm	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Nominal insulation thickness		mm	19.7	20.9	22.5	24.3	25.7	26.9	28.9	31.3	33.5
Insulation diameter (approx)		mm	1.8	1.9	1.9	1.9	2.0	2.0	2.1	2.1	2.2
Nominal outer sheath thickness		mm	56	58	62	66	70	73	77	83	88
Overall cable diameter (approx)		mm	3,000	3,500	4,300	5,200	6,100	7,100	8,200	10,100	12,100
		kg/Km	2,400	2,600	3,000	3,400	3,800	4,300	4,800	5,500	6,300
Cable net weight ( approx)	CU		500	500	500	500	350	350	350	350	350
	AL		470	500	540	580	620	660	700	760	820
Standard length per-reel		m	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601
Minimum bending radius		mm	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100
Max. DC conductor resistance at 20 °C	CU	Ω/Km	1400	1,300	1,100	1,000	900	800	700	700	700
Min. insulation resistance at 20 °C	AL	MΩ.Km	0.107	0.117	0.130	0.144	0.154	0.162	0.178	0.196	0.210
Capacitance per phase		µF/Km	0.416	0.399	0.380	0.362	0.351	0.343	0.331	0.318	0.309
Inductance per phase		mH/km	5.18	7.36	10.26	13.88	17.49	21.81	26.86	34.78	43.41
Max.short circuit current of Conductor	CU	kA/sec	3.45	4.39	6.81	9.19	11.58	14.43	17.76	22.98	28.67
	AL		2.77	2.92	3.14	3.38	3.57	4.66	3.99	4.31	4.6
Max.short circuit current of screen			175	207	252	302	343	386	435	504	567
Maximum current carrying capacity at 30 °C	in ground	A	135	157	196	233	267	299	339	395	447
AC test voltage		kV/5 min	42 (IEC) , 30 (SPLN)								

**Note : This is only general information. For other specific requirement, please contact our marketing.**

**SUPREME CABLE**



# Installation Guide &



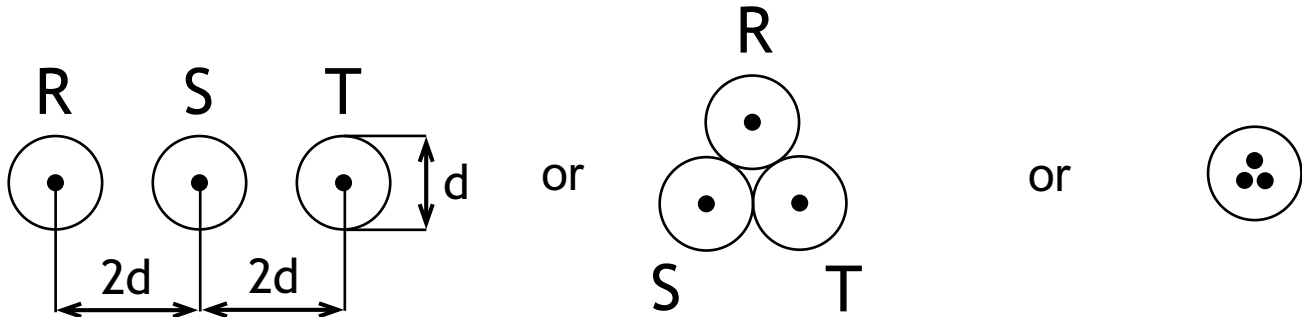
# Derating Factors



## Conditions for current carrying capacity

The tabulated current ratings are designed by the conditions as below :

- One circuit of three phase load.



- Load factor = 1.0
- Maximum operating conductor temperature :  
70° C ( PVC insulation ) and 90° C ( XLPE insulation )  
No other heat sources installed near the group of cables.

- Cable laying :

**in air** :

- Ambient temperature : 30° C
- The cable have to protected against heat radiation of the sun as well as sufficiently large and ventilated rooms whose temperature is not perceptibly increased by the heat dissipating from the loaded cable.

**in ground** :

- Soil temperature : 30° C
- Depth of laying : 70 cm
- Specific thermal resistivity of soil : 100° C.m/watt

**NOTE :**

If the actual installed conditions are different from the above mentioned condition, the tabulated current ratings should be multiplied by the appropriate derating factors as shown in tables on the next pages.

# DERATING FACTORS

## A. Grouping in the ground.

1 Variation in ground temperature.

	Ground temperatures (°C)						
	20	25	30	35	40	45	50
XLPE insulation	1.08	1.04	1.00	0.96	0.91	0.87	0.82
PVC insulation	1.12	1.07	1.00	0.94	0.87	0.79	0.71

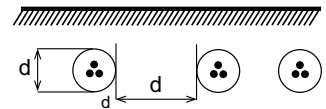
2 Variation in thermal resistivity of soil.

	Thermal resistivity of soil (°C.cm/watt)			
	70	100	150	250
XLPE insulation	1.12	1.0	0.87	0.78
PVC insulation	1.11	1.0	0.82	0.70

3 Variation in depth of laying.

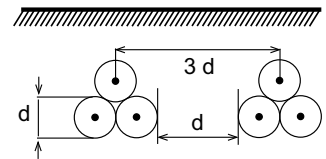
	Depth of laying (cm)					
	50	70	100	120	160	200
XLPE insulation	1.02	1.00	0.98	0.97	0.95	0.94
PVC insulation	1.01	1.00	0.99	0.98	0.97	0.96

4 **GROUPING** of multicore cables.



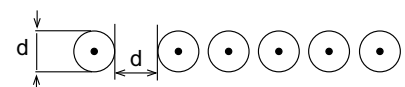
	Number Of grouping							
	1	2	3	4	5	6	8	10
XLPE insulation	1.00	0.86	0.76	0.71	0.67	0.64	0.60	0.57
PVC insulation	1.00	0.85	0.75	0.68	0.64	0.60	0.56	0.53

5 **GROUPING** of single core cables (Trefoil formation)



	Number Of grouping							
	1	2	3	4	5	6	8	10
XLPE insulation	1.00	0.89	0.82	0.78	0.75	0.73	0.70	0.68
PVC insulation	1.00	0.90	0.82	0.79	0.76	0.74	0.71	0.69

6 **GROUPING** of single core cables (Flat formation)



	Number Of grouping							
	1	2	3	4	5	6	8	10
XLPE insulation	1.00	0.87	0.77	0.73	0.70	0.68	0.65	0.63
PVC insulation	1.00	0.87	0.78	0.74	0.70	0.68	0.65	0.63

## B. Grouping in air.

### 1 Variation in air temperature.

	Air temperatures (°C)							
	20	25	30	35	40	45	50	55
XLPE insulation	1.08	1.04	1.00	0.96	0.91	0.87	0.82	0.76
PVC insulation	1.12	1.07	1.00	0.93	0.87	0.79	0.71	0.61

### 2 Single core cables in three phase system.

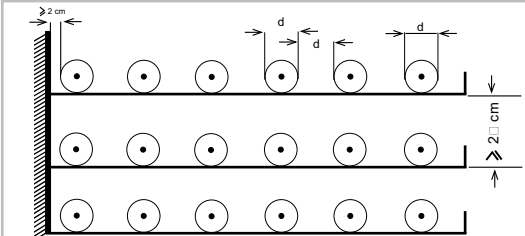
#### 2.1 Flat formation.

Minimum distance from the wall is 2.0 cm. Clearance between systems = Cable diameter	Number of cables		
	2	3	

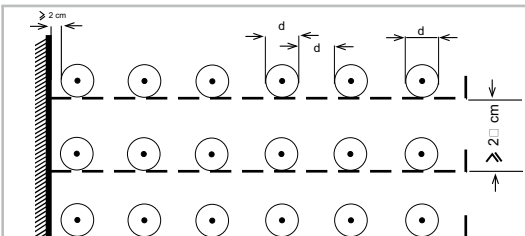
#### 2.1.1 Laid on the ground in flat formation.

	Derating factor		
		0.92	0.89

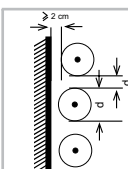
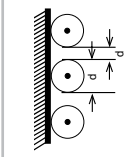
#### 2.1.2 Laid in 2 rows on the ground in flat formation.

	Number of troughs	Derating factor		
			1	0.92
	2	0.87	0.84	0.83
	3	0.84	0.82	0.81
	6	0.82	0.80	0.79

#### 2.1.3 Laid on the racks in flat formation.

	Number of racks	Derating factor		
			1	1.00
	2	0.97	0.94	0.93
	3	0.96	0.93	0.92
	6	0.94	0.91	0.90

#### 2.1.4 Arranged on structures or on the wall.

		Derating factor		
		0.94	0.91	0.89
	Touching the wall.	0.89	0.86	0.84

## B. Grouping in air (continued)

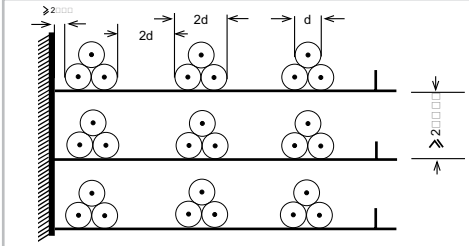
### 2.2 Trefoil formation.

Minimum distance from the wall is 2.0 cm. Clearance between systems = 2 x Cable diameter (2 d)	Number of system		
	1	2	3

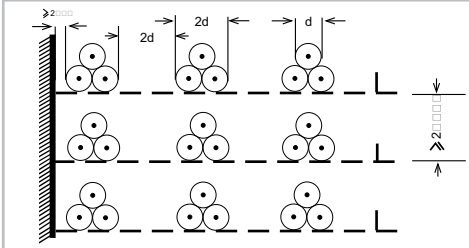
#### 2.2.1 Laid on the ground in trefoil formation.

	Derating factor		
	0.95	0.90	0.88

#### 2.2.2 Laid on troughs (air circulation is restricted)

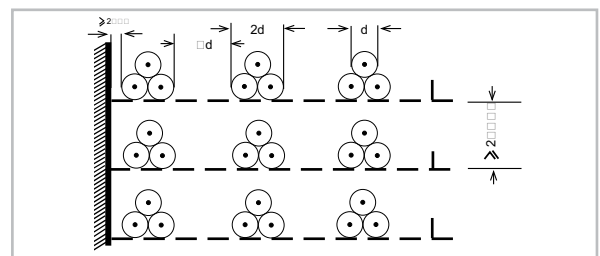
	Number of troughs	Derating factor		
		1	0.95	0.90
	2	0.90	8.85	0.83
	3	0.88	0.83	0.81
	6	0.86	0.81	0.79

#### 2.2.3 Laid on the racks in trefoil formation.

	Number of racks	Derating factor		
		1	1.00	0.98
	2	1.00	0.95	0.93
	3	1.00	0.94	0.92
	6	1.00	0.93	0.90

#### 2.2.4 Arrangement for which a reduction of the current rating is not necessary (for any number of systems)

- Minimum distance from the wall is 2.0 cm.
- Clearance between cables = 4 x cable diameter (4d).



## B. Grouping in air (continued).

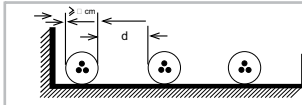
### 3 Multicore cables in three phase system and single core cables in DC system.

#### 3.1 Minimum distance from the wall is 2.0 cm.

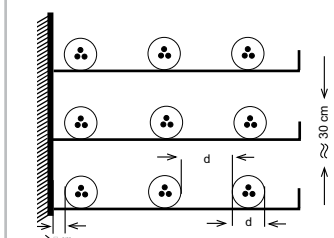
Clearance between cables = Cable diameter (d)

Number of system				
1	2	3	6	9

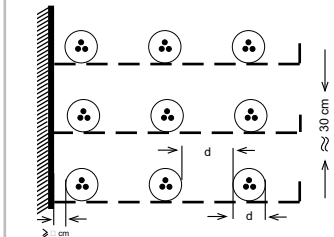
#### 3.1.1 Laid on the ground in flat formation.

	Derating factor				
	0.95	0.90	0.88	0.85	0.84

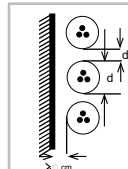
#### 3.1.2 Laid on troughs (air circulation is restricted)

	Number of troughs	Derating factor				
	1	0.95	0.90	0.88	0.85	0.84
2	0.90	0.85	0.83	0.81	0.80	
3	0.88	0.83	0.81	0.79	0.78	
6	0.86	0.81	0.79	0.77	0.76	

#### 3.1.3 Laid on the racks in flat formation.

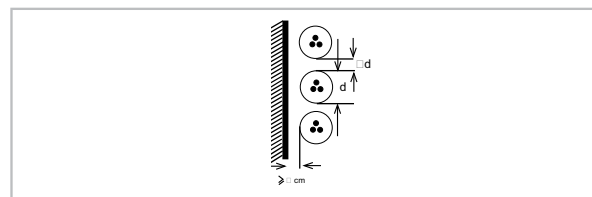
	Number of troughs	Derating factor				
	1	1.00	0.98	0.96	0.93	0.92
2	1.00	0.95	0.93	0.90	0.89	
3	1.00	0.94	0.92	0.89	0.88	
6	1.00	0.93	0.90	0.87	0.86	

#### 3.1.4 Arranged on structures or on the wall.

	Derating factor				
	1.00	0.93	0.90	0.87	0.86

#### 3.1.5 Arrangement for which a reduction of the current rating is not necessary (for any number of cables)

- Minimum distance from the wall is 2.0 cm.
- Clearance between cables = 2 x cable diameter (2d).

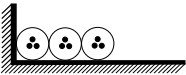


## B. Grouping in air (continued).

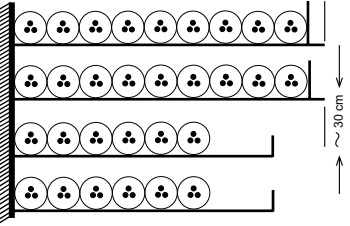
### 3.2 Cables touching throughout and in contact with the wall.

Number of system				
1	2	3	6	9

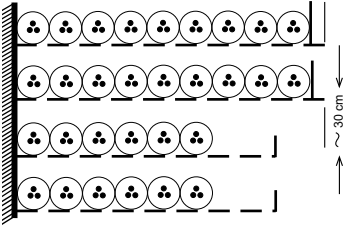
#### 3.2.1 Laid on the ground in flat formation.

	Derating factor				
	0.90	0.84	0.80	0.75	0.73


#### 3.2.2 Laid on troughs (air circulation is restricted)

	Number of troughs	Derating factor				
		1	0.95	0.84	0.80	0.75
2	0.95	0.80	0.76	0.71	0.69	
3	0.95	0.78	0.74	0.70	0.68	
6	0.95	0.76	0.72	0.68	0.66	

#### 3.2.3 Laid on the racks in flat formation.

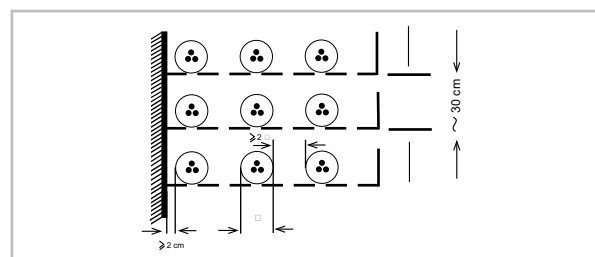
	Number of troughs	Derating factor				
		1	0.95	0.84	0.80	0.75
2	0.95	0.80	0.76	0.71	0.69	
3	0.95	0.78	0.74	0.70	0.68	
6	0.95	0.76	0.72	0.68	0.66	

#### 3.2.4 Arranged on structures or on the wall.

	Derating factor				
	0.95	0.78	0.73	0.68	0.66

#### 3.2.5 Arrangement for which a reduction of the current rating is not necessary (for any number of cables)

- Minimum distance from the wall is 2.0 cm.
- Clearance between cables = 2 x cable diameter (2d).



## CONVERSION TABLE

Nominal cross sectional area			Wire gauge				Nominal cross sectional area			Wire gauge			
mm <sup>2</sup>	Inc <sup>2</sup>	Circular Mils (CM)	Equivalent Metric CSA	AWG	BWG	SWG	mm <sup>2</sup>	Inc <sup>2</sup>	Circular Mils (CM)	Equivalent Metric CSA	AWG	BWG	SWG
	0.0005	644	0.325	22	-	-		0.0290	36,874	18.68	-	-	6
	0.0006	487	0.397	-	22	22		0.0324	41,217	20.88	-	6	-
	0.0006	821	0.416	21	-	-		0.0326	41,750	21.15	4	-	-
0.50	0.0008	987	-	-	-	-		0.0353	44,948	22.77	-	-	5
	0.0008	1,021	0.517	20	-	-		0.0380	48,402	24.52	-	5	-
	0.0008	1,025	0.519	-	21	21	25	0.0388	49,350	-	-	-	-
	0.0009	1,198	0.607	-	20	-		0.0413	52,627	26.66	3	-	-
	0.0010	1,289	0.653	19	-	-		0.0423	53,831	27.27	-	-	4
	0.0010	1,297	0.657	-	-	20		0.0445	56,654	28.70	-	4	-
	0.0013	1,601	0.811	-	-	19		0.0499	63,523	32.18	-	-	3
0.75	0.0012	1,481	-	-	-	-		0.0521	66,386	33.63	2	-	-
	0.0013	1,625	0.823	18	-	-		0.0527	67,096	33.99	-	3	-
	0.0014	1,765	0.894	-	19	-	35	0.0543	69,090	-	-	-	-
1.0	0.0016	1,974	-	-	-	-		0.0598	76,196	28.60	-	-	2
	0.0016	2,053	1.040	17	-	-		0.0633	80,677	40.87	-	2	-
	0.0016	2,304	1.167	-	-	18		0.0657	83,717	42.41	1	-	-
	0.0019	2,402	1.217	-	18	-		0.0707	90,014	45.60	-	1	1
	0.0020	2,584	1.309	16	-	-	50	0.0775	98,700	-	-	-	-
1.5	0.0023	2,961	-	-	-	-		0.0824	404,997	53.19	-	-	1/0
	0.0025	3,137	1.589	-	-	17		0.0829	105,589	53.49	1/0	-	-
	0.0026	3,257	1.650	15	-	-		0.0908	115,637	58.58	-	1/0	-
	0.0026	3,366	1.705	-	17	-		0.0951	121,125	61.36	-	-	2/0
	0.0032	4,096	2.075	-	-	16		0.1045	133,087	67.42	2/0	-	-
	0.0032	4,108	2.081	14	-	-	70	0.1085	138,180	-	-	-	-
	0.0033	4,226	2.141	-	16	-		0.1087	138,417	70.12	-	-	3/0
2.5	0.0039	4,935	-	-	-	-		0.1134	144,438	73.17	-	2/0	-
	0.0040	5,180	2.624	13	-	-		0.1257	160,032	81.07	-	-	4/0
	0.0040	5,186	2.627	-	15	15		0.1318	167,849	85.03	3/0	-	-
	0.0050	6,402	3.243	-	-	14		0.1419	180,660	91.52	-	3/0	-
	0.0051	6,532	3.309	12	-	-		0.1466	186,661	94.56	-	-	5/0
	0.0054	6,891	3.491	-	14	-	95	0.1473	187,530	-	-	-	-
4	0.0062	7,896	-	-	-	-		0.1616	206,086	104.40	-	4/0	-
	0.0065	8,236	4.172	11	-	-		0.1691	211,613	107.20	4/0	-	-
	0.0066	8,466	4.269	-	-	13		0.1860	215,363	109.10	-	-	6/0
	0.0071	9,072	4.573	-	13	-	120	0.1860	236,880	-	-	-	-
	0.0082	10,387	5.262	10	-	-		0.1963	249,987	126.64	-	-	-
	0.0085	10,819	5.481	-	-	12		0.1964	250,106	126.70	-	5/0	7/0
	0.0093	11,883	6.020	-	12	-		0.2091	266,332	134.92	5/0	-	-
6	0.0093	11,844	-	-	-	-	150	0.2325	296,100	-	-	-	-
	0.0103	13,092	6.632	9	-	-		0.2356	300,048	152.00	-	-	-
	0.0106	13,459	6.816	-	-	11		0.2642	336,488	170.46	6/0	-	-
	0.0113	14,404	7.297	-	11	-	185	0.2868	365,190	-	-	-	-
	0.0129	16,388	8.302	-	-	10		0.3142	400,150	202.71	-	-	-
	0.0130	16,518	8.368	8	-	-	240	0.3720	473,760	-	-	-	-
	0.0141	17,959	9.098	-	10	-		0.3927	500,113	253.35	-	-	-
10	0.0155	19,740	-	-	-	-	300	0.4650	592,200	-	-	-	-
	0.0163	20,766	10.520	-	-	9		0.4712	600,096	304.00	-	-	-
	0.0164	20,826	10.550	7	-	-		0.5498	700,198	354.71	-	-	-
	0.0172	21,911	11.100	-	9	-	400	0.6200	789,600	-	-	-	-
	0.0201	25,603	12.970	-	-	8		0.6283	800,161	405.35	-	-	-
	0.0206	26,254	13.300	6	-	-	500	0.7750	987,000	-	-	-	-
	0.0214	27,241	13.800	-	8	-		0.7854	1,000,246	506.71	-	-	-
	0.0243	30,992	15.700	-	-	7	625	0.9688	1,233,750	-	-	-	-
16	0.0248	31,584	-	-	-	-	630	0.9765	1,243,620	-	-	-	-
	0.0255	32,413	16.420	-	7	-	800	1.2400	1,597,200	-	-	-	-
	0.0260	33,104	16.770	5	-	-	1,000	1.5500	1,974,000	-	-	-	-

Note : • AWG = American Wire Gauge      • BWG = Birmingham Wire Gauge      • SWG = British Standard Wire Gauge







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