N2XSEBY/NA2XSEYBY

3.6/6(7.2) kV

SPLN 43-5/IEC 60502-2

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

DIMENSIONAL AND ELECTRICAL DATA — **3 CORES**

Nominal cross-sectional area		**mm²**	**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								2.6	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	Kg/Km	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	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	0.322	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	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	A	139	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)										

N2XSEBY/NA2XSEYBY

6/10(12) kV

SPLN 43-5/IEC 60502-2

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

DIMENSIONAL AND ELECTRICAL DATA — **3 CORES**

Nominal cross-sectional area		**mm^2**	**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										
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	Kg/Km	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	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	0.346	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		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	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)										

N2XSEBY/NA2XSEYBY

8.7/15(17.5) kV

SPLN 43-5 / IEC 60502-2

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

DIMENSIONAL AND ELECTRICAL DATA — **3 CORES**

Nominal cross-sectional area		mm^2	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										
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	Kg/Km	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	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	0.372	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		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	A	134	173	206	257	313	360	410	469	553	629	760
	AL		103	199	161	204	245	282	319	365	425	481	593
in ground	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)										

N2XSEBY/NA2XSEYBY

12/20(24) kV

SPLN 43-5/IEC 60502-2

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

DIMENSIONAL AND ELECTRICAL DATA — **3 CORES**

Nominal cross-sectional area		**mm^2**	**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									
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	A	173	206	257	313	360	410	469	553	629	760
	AL		139	161	199	242	280	318	365	425	481	593
Maximum current carrying capacity at 30 °C — 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)									

N2XSEBY/NA2XSEYBY

18/30(36) kV

IEC 60502-2

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

DIMENSIONAL AND ELECTRICAL DATA — **3 CORES**

Nominal cross-sectional area		**mm^2**	**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								
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	Kg/Km	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	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	A	207	258	314	361	411	470	554	630	766
	AL		162	205	246	283	320	365	426	482	594
Maximum current carrying capacity at 30 °C — 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								