Medium voltage cable N2XS2Y acc. to VDE 0276-620

VDE

Application: For installation in ground, in water, outdoors, indoors and in cable ducts for power stations, industry, and distribution networks. The high mechanical durability of the PE-sheath permits strong mechanical stress during installation or during operation.

stranded, class 2

90° maximum temperature at conductor: 90 °C

70° max. operating temperature, fixed: 70 °C

+70° temperature, moved/during installation: -20 - +70 °C

-20° min. installation temperature: -20°C

bending radius, fixed installation: 15 x DA

installation in free air without protection (cable UV-resistant)

cable for direct burial

Construction

conductor material: bare copper

conductor construction: stranded, class 2

insulation: XLPE DIX8

sheathing material: polyethylene DMP2

colour of outer sheath: black

partial discharge: 2 pC

	N2XS2Y 6/10 kV	N2XS2Y 12/20 kV	N2XS2Y 18/30 kV
nominal voltage Uo:	6 kV	12 kV	18 kV
nominal voltage U:	10 kV	20 kV	30 kV
maximum permitted operating voltage in 3-phase systems:	12 kV	24 kV	36 kV
test voltage:	21 kV	42 kV	63 kV

Medium voltage cable N2XS2Y acc. to VDE 0276-620

ELEKTRO KABEL

VDE

p/n	part name		D_l [mm]	R_l [Ω/km]	W_i [mm]	I_{bl} [A]	I_{be} [A]	I_k [kA]	R_{bv} [mm]	W_m [mm]	D_A [mm]	F_{zv} [N]	Cu [kg/km]	G [kg]
N2XS2Y 6/10 kV														
011352	N2XS2Y 1X35/16	RM	7,5	0,524	3,4	197	187	5	360	2,5	24	1750	518	900
011353	N2XS2Y 1X50/16	RMv	8,6	0,387	3,4	236	220	7,15	375	2,5	25	2500	662	950
011354	N2XS2Y 1X70/16	RMv	10,2	0,268	3,4	294	268	10	405	2,5	27	3500	854	1200
013132	N2XS2Y 1X70/50	RMv	10,2	0,268	3,4	294	268	10	420	2,5	27,5	3500	1232	1474
011355	N2XS2Y 1X95/16	RMv	12	0,193	3,4	358	320	13,6	420	2,5	28	4750	1094	1450
011356	N2XS2Y 1X120/16	RMv	13,5	0,153	3,4	413	363	17,2	450	2,5	30	6000	1334	1700
011357	N2XS2Y 1X150/16	RMv	15	0,124	3,4	468	405	21,4	465	2,5	31	7500	1622	1950
011358	N2XS2Y 1X150/25	RMv	15	0,124	3,4	470	409	21,4	465	2,5	31	7500	1723	2050
013133	N2XS2Y 1X150/50	RMv	15	0,124	3,4	470	409	21,4	465	2,5	31,8	7500	2000	2271
N2XS2Y 12/20 kV														
011366	N2XS2Y 1X35/16	RM	7,5	0,524	5,5	200	189	5	420	2,5	28	1750	518	970
011367	N2XS2Y 1X50/16	RMv	8,6	0,387	5,5	239	222	7,15	435	2,5	29	2500	662	1150
011368	N2XS2Y 1X70/16	RMv	10,2	0,268	5,5	297	271	10	465	2,5	31	3500	854	1350
011369	N2XS2Y 1X95/16	RMv	12	0,193	5,5	361	323	13,6	480	2,5	32	4750	1094	1650
011370	N2XS2Y 1X120/16	RMv	13,5	0,153	5,5	416	367	17,2	510	2,5	34	6000	1334	1900
011371	N2XS2Y 1X150/16	RMv	15	0,124	5,5	470	409	21,4	525	2,5	35	7500	1622	2150
011372	N2XS2Y 1X150/25	RMv	15	0,124	5,5	470	409	21,4	525	2,5	35	7500	1723	2250
011373	N2XS2Y 1X185/16	RMv	16,8	0,0991	5,5	538	461	26,5	555	2,5	37	9250	1958	2550
011374	N2XS2Y 1X185/25	RMv	16,8	0,0991	5,5	538	461	26,5	555	2,5	37	9250	2059	2600
011375	N2XS2Y 1X240/16	RMv	19,2	0,0754	5,5	634	532	34,3	600	2,5	40	12000	2486	3100
011376	N2XS2Y 1X240/25	RMv	19,2	0,0754	5,5	634	532	34,3	600	2,5	40	12000	2587	3200
011377	N2XS2Y 1X300/25	RMv	21,6	0,0601	5,5	724	599	42,9	630	2,5	42	15000	3163	3800
013215	N2XS2Y 1X300/35	RMv	21,6	0,0601	5,5	724	599	42,9	630	2,5	42	15000	3274	3850
011378	N2XS2Y 1X400/35	RMv	24,6	0,047	5,5	829	671	57,2	675	2,5	45	20000	4234	4750
011379	N2XS2Y 1X500/35	RMv	27,6	0,0366	5,5	953	754	71,5	720	2,5	48	25000	5194	5800
013154	N2XS2Y 1X630/35	RMv	32,5	0,0283	5,5	1120	840	90,1	795	2,5	53	32500	6442	7090
N2XS2Y 18/30 kV														
011380	N2XS2Y 1X50/16	RMv	8,6	0,387	8	241	225	7,15	510	2,5	34	2500	662	1350
011383	N2XS2Y 1X70/16	RMv	10,2	0,268	8	299	274	10	540	2,5	36	3500	854	1600
011384	N2XS2Y 1X95/16	RMv	12	0,193	8	363	327	13,6	555	2,5	37	4750	1094	1900
011385	N2XS2Y 1X120/16	RMv	13,5	0,153	8	418	371	11,3	585	2,5	39	6000	1334	2150
011386	N2XS2Y 1X150/25	RMv	15	0,124	8	472	414	21,4	600	2,5	40	7500	1723	2550
011995	N2XS2Y 1X150/50	RMv	15	0,124	8	472	414	21,4	630	2,5	42	7500	1969	2750
011387	N2XS2Y 1X185/25	RMv	16,8	0,0991	8	539	466	26,5	630	2,5	42	9250	2059	2900
011388	N2XS2Y 1X240/25	RMv	19,2	0,0754	8	635	539	34,3	660	2,5	44	12000	2587	3500
011777	N2XS2Y 1X240/70	RMv	19,2	0,0754	8	635	539	34,3	675	2,5	45	12000	3084	4200
011389	N2XS2Y 1X300/25	RMv	21,6	0,0601	8	725	606	42,9	705	2,5	47	15000	3163	4150
013686	N2XS2Y 1X300/35	RMv	21,6	0,0601	8	725	606	42,9	705	2,5	47	15000	3274	4300
013135	N2XS2Y 1X300/50	RMv	2,6	0,0601	8	725	606	42,9	705	2,5	46,8	15000	3440	4276
011390	N2XS2Y 1X400/35	RMv	24,6	0,047	8	831	680	57,2	750	2,5	50	20000	4234	5100
011391	N2XS2Y 1X500/35	RMv	27,6	0,0366	8	953	765	71,5	795	2,5	53	25000	5194	6200
013037	N2XS2Y 1X630/35	RMv	32,5	0,0283	8	1094	820	90,1	870	2,5	58	31500	6442	7403

The current rating in air Ibl refers to an ambient temperature of 30 °C, a load factor of 1,0 and threefold bunching. The current rating in ground Ibe refers to ground temperature of 20 °C, a load factor of 0,7 and threefold bunching.

Dl: diameter of conductor
Rl: conductor resistance
Wi: thickness of insulation
Ibl: ampacity (in air)
Ibe: ampacity (in ground)
Ik: short circuit current (1 s)
Rbv: bending radius, fixed installation
Wm: thickness of outer sheath
DA: outer diameter
Fzv: tensile strength (during installation)
Cu: copper
G: weight