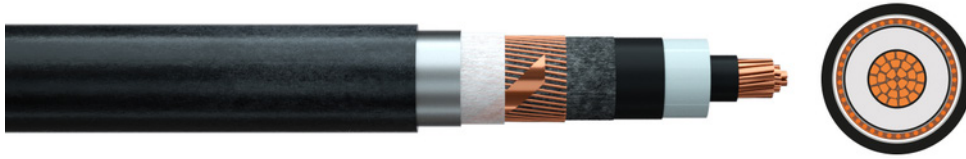


# Medium voltage cable

## N2XS(FL)2Y



**Application:** For installation in the ground, in water, outdoors, indoors and in cable ducts for power stations, industrial applications and distribution networks. The high mechanical durability of the PE-sheath permits strong mechanical stress during installation or operation. This cable is also suitable for unfavourable operating conditions, specifically where there is a need to avoid water penetration both crosswise and lengthwise following mechanical damage.

### Construction and technical data:

<b>Standard:</b>	VDE 0276-620
<b>Conductor material:</b>	copper, bare
<b>Conductor construction:</b>	Class 2 = stranded
<b>Insulation:</b>	XLPE DIX8
<b>Electrical field control:</b>	inner and outer semiconducting layer (triple extrusion)
<b>Screen:</b>	Copper wires + counter helix
<b>Sheathing material:</b>	polyethylene DMP2
<b>bonded sheath:</b>	yes
<b>Transversely watertight:</b>	yes
<b>Longitudinally watertight:</b>	yes
<b>Colour of outer sheath:</b>	black
<b>UV-resistant:</b>	yes
<b>For outdoor use:</b>	yes
<b>Max. temperature at conductor, °C:</b>	90 °C
<b>Permitted outer cable temperature, fixed, °C:</b>	70 °C
<b>Permitted outer cable temperature, moved, °C:</b>	-20 - +70 °C
<b>Bending radius, fixed installation:</b>	15 x Ø
<b>Meter mark:</b>	yes
<b>Partial discharge:</b>	2 pC



*The products and information presented here are for technical calculation only. They are subject to technical progress and in no way represent the ability of shipment. Outer diameters are approximately.*

**N2XS(FL)2Y 6/10 kV**

**Nominal voltage U<sub>o</sub>:** 6 kV  
**Nominal voltage U:** 10 kV  
**Maximum permitted operating voltage in three-phase systems:** 12 kV  
**Test voltage:** 21 kV

part no.	part name		DI [mm]	RI [Ohm/km]	Wi [mm]	l <sub>bl</sub> [A]	l <sub>be</sub> [A]	Ik [kA]	Wm [mm]	Rbv [mm]	Ø [mm]	Fzv [N]	Cu	G [kg]
013784	1X35/16	RM	7.5	0.524	3.4	197	187	5	2.1	405	27	1750	518	861
014065	1X50/16	RMv	8.6	0.387	3.4	236	220	7.15	2.1	420	28	2500	662	1150
013521	1X70/16	RMv	10.2	0.268	3.4	294	268	13.6	2.1	435	29	3500	854	1300
012467	1X95/16	RMv	12	0.193	3.4	358	320	13.6	2.1	450	30	4750	1094	1450
012459	1X120/16	RMv	13.5	0.153	3.4	413	363	17.2	2.1	480	32	6000	1334	1900
015257	1X150/16	RMv	15	0.124	3.4	468	405	21.4	2.1	482	32.1	7500	1723	1934
012639	1X150/25	RMv	15	0.124	3.4	468	405	21.4	2.1	495	33	7500	1723	1997
012582	1X185/25	RMv	16.8	0.0991	3.4	535	456	26.5	2.1	525	35	9250	2059	2463
011825	1X240/25	RMv	19.2	0.0754	3.4	631	526	34.3	2.1	555	37	12000	2587	3050
012001	1X300/25	RMv	21.6	0.0601	3.4	722	591	42.9	2.1	585	39	15000	3163	3720
014137	1X400/35	RMv	24.6	0.047	3.4	827	662	57.2	2.1	630	42	20000	4234	4500
012613	1X500/35	RMv	27.6	0.0366	3.4	949	744	71.5	2.1	675	45	25000	5194	5878
012654	1X630/35	RMv	32.5	0.0283	3.4	1070	805	90.1	2.1	720	48	31500	6442	7014

**N2XS(FL)2Y 12/20 kV**

**Nominal voltage U<sub>o</sub>:** 12 kV  
**Nominal voltage U:** 20 kV  
**Maximum permitted operating voltage in three-phase systems:** 24 kV  
**Test voltage:** 42 kV

part no.	part name		DI [mm]	RI [Ohm/km]	Wi [mm]	l <sub>bl</sub> [A]	l <sub>be</sub> [A]	Ik [kA]	Wm [mm]	Rbv [mm]	Ø [mm]	Fzv [N]	Cu	G [kg]
013641	1X35/16	RM	7.5	0.524	5.5	200	189	5	2.1	480	32	1750	518	1050
013117	1X50/16	RMv	8.6	0.387	5.5	239	222	7.15	2.1	495	33	2500	662	1170
013118	1X70/16	RMv	10.2	0.268	5.5	297	271	10	2.1	510	34	3500	854	1470
011786	1X95/16	RMv	12	0.193	5.5	361	323	13.6	2.1	525	35	4750	1094	1900
013119	1X120/16	RMv	13.5	0.153	5.5	416	367	17.2	2.1	555	37	6000	1334	2260
013033	1X150/25	RMv	15	0.124	5.5	468	405	21.4	2.1	570	38	7500	1723	2318
014210	1X185/25	RMv	16.8	0.0991	5.5	538	461	26.5	2.1	600	40	9250	2059	3045
013030	1X240/25	RMv	19.2	0.0754	5.5	631	526	34.3	2.1	645	43	12000	2587	3700
011750	1X300/25	RMv	21.6	0.0601	5.5	724	599	42.9	2.1	675	45	15000	3163	3940
013561	1X400/35	RMv	24.6	0.047	5.5	827	662	71.5	2.1	720	48	20000	4234	4850
012228	1X500/35	RMv	27.6	0.0366	5.5	953	754	71.5	2.1	765	51	25000	5194	5948
013974	1X630/35	RMv	32.5	0.0283	5.5	1074	815	90.1	2.1	810	54	31500	6442	7400
015645	1X1000/35	RMv		0.0176	5.5	1400	1318	143	2.1	930	62	50000	9994	11000

**N2XS(FL)2Y 18/30 kV****Nominal voltage U<sub>o</sub>:** 18 kV**Nominal voltage U:** 30 kV**Maximum permitted operating voltage in** 36 kV**three-phase systems:****Test voltage:** 63 kV

part no.	part name		DI [mm]	RI [Ohm/km]	Wi [mm]	I <sub>bl</sub> [A]	I <sub>be</sub> [A]	I <sub>k</sub> [kA]	W <sub>m</sub> [mm]	R <sub>bv</sub> [mm]	Ø [mm]	F <sub>zv</sub> [N]	Cu	G [kg]
013663	1X95/16	RMv	12	0.193	8	363	327	13.6	2.1	570	38	4750	1094	1900
013640	1X150/25	RMv	15	0.124	8	472	414	21.4	2.1	630	42	7500	1723	2650
013664	1X240/25	RMv	19.2	0.0754	8	635	539	34.3	2.1	675	45	12000	2587	3500
012779	1X300/25	RMv	21.6	0.0601	8	725	606	42.9	2.1	705	47	15000	3163	4151
013227	1X400/35	RMv	24.6	0.047	8	831	680	57.2	2.1	630	42	20000	4234	5045
015231	1X500/35	RMv	27.6	0.0366	8	953	765	71.5	2.1	825	55	25000	5194	5500

DI	diameter conductor
RI	Conductor resistance
Wi	Insulation wall thickness
I <sub>bl</sub>	Ampacity in air (30 °C)
I <sub>be</sub>	Ampacity in ground (20 °C)
I <sub>k</sub>	Short-circuit current (1 s)
W <sub>m</sub>	Wall thickness of sheath
R <sub>bv</sub>	Bending radius, fixed installation
Ø	outer diameter approx.
F <sub>zv</sub>	Tensile strength (during installation)
Cu	Copper weight (GER)
G	net weight per 1000