



# N2XS(FL)2Y

Medium Voltage Cables



## DESCRIPTION

For demanding power distribution networks the N2XS(FL)2Y meets the standards DIN VDE 0276-620, HD 620 S2 and IEC 60502. It is ideally suited for installation indoors, in cable ducts, outdoors, in soil, in water, and on cable trays - especially in utility grids, industrial plants, and switching stations, where high demands on mechanical strength and water resistance apply.

**Technical construction** The cable design is based on a multi-stranded copper conductor (Class 2), an XLPE insulation with an extruded, tightly bonded outer conductive layer, and a longitudinally watertight, conductive tape. The shielding consists of copper wires with counter helix, complemented by an additional longitudinally watertight tape. The outer protection is achieved with a black PE sheath laminated with an aluminum tape - serving as an effective water barrier.

**Properties and benefits** The N2XS(FL)2Y is suitable for underground installation, designed for outdoor use, and withstands operating temperatures up to +90 °C and short-circuit loads up to +250 °C. It is free from silicone and cadmium and contains no substances that interfere with paint wetting. Thanks to its partial discharge-free design and the Al/PE layer, it is ideally suited for humid environments with high safety requirements.

## TECHNICAL DATA

<b>CPR class</b>	Fca	<b>Flame retardant</b>	no
<b>Maximal operating conductor temperature (°C)</b>	+90 °C	<b>Maximal short-circuit temperature (°C)</b>	+250 °C
<b>Minimal storage temperature (°C)</b>	-35 °C	<b>Minimal temperature for laying (°C)</b>	-20 °C
<b>Shape of conductor</b>	RM		



**CROSS-SECTION DATA — 6/10 kV**

Cores & CS	LF	LD mm	ID mm	DI mm	MWD mm	AD mm	BR	G kg	RI Ohm	BK	SBL 30	SBE 20
1x50/16	RM	8.2	3.4	16.3	2.1	26	520	1010	0.387	7.1	238	220
1x70/16	RM	9.8	3.4	17.9	2.1	28	560	1238	0.268	10	294	268
1x95/16	RM	11.3	3.4	19.4	2.1	29	580	1495	0.193	13.6	358	320
1x120/16	RM	12.8	3.4	20.9	2.1	31	620	1773	0.153	17.1	413	363
1x150/25	RM	14.2	3.4	22.3	2.1	32	640	2119	0.124	21.4	468	405
1x185/25	RM	15.8	3.4	23.9	2.1	34	680	2483	0.099	26.4	535	456
1x240/25	RM	18.3	3.4	26.4	2.1	36	720	3073	0.075	34.3	631	526
1x300/25	RM	20.7	3.4	28.8	2.1	39	780	3737	0.06	42.9	722	591
1x400/35	RM	23.3	3.4	31.4	2.1	42	840	4697	0.047	57.2	827	662
1x500/35	RM	26.5	3.4	34.6	2.1	44	880	5729	0.037	71.4	949	744

**CROSS-SECTION DATA — 12/20 kV**

Cores & CS	LF	LD mm	ID mm	DI mm	MWD mm	AD mm	BR	G kg	RI Ohm	BK	SBL 30	SBE 20
1x50/16	RM	8.2	5.5	20.5	2.1	30	600	1166	0.387	7.1	239	222
1x70/16	RM	9.8	5.5	22.1	2.1	32	640	1409	0.268	10	297	271
1x95/16	RM	11.3	5.5	23.6	2.1	33	660	1675	0.193	13.6	361	323
1x120/16	RM	12.8	5.5	25.1	2.1	35	700	1968	0.153	17.1	416	367
1x150/25	RM	14.2	5.5	26.5	2.1	36	720	2320	0.124	21.4	470	409
1x185/25	RM	15.8	5.5	28.1	2.1	38	760	2697	0.099	26.4	538	461
1x240/25	RM	18.3	5.5	30.6	2.1	40	800	3303	0.075	34.3	634	532
1x300/25	RM	20.7	5.5	33	2.1	43	860	3978	0.06	42.9	724	599
1x400/35	RM	23.3	5.5	35.6	2.1	45	900	4925	0.047	57.2	829	671
1x500/35	RM	26.5	5.5	38.8	2.1	49	980	6006	0.037	71.4	953	754

**CROSS-SECTION DATA — 18/30 kV**

Cores & CS	LF	LD mm	ID mm	DI mm	MWD mm	AD mm	BR	G kg	RI Ohm	BK	SBL 30	SBE 20
1x50/16	RM	8.2	8	25.5	2.1	35	700	1405	0.387	7.1	241	225
1x70/16	RM	9.8	8	27.1	2.1	37	740	1646	0.268	10	299	274
1x95/16	RM	11.3	8	28.6	2.1	38	760	1926	0.193	13.6	363	327
1x120/16	RM	12.8	8	30.1	2.1	40	800	2227	0.153	17.1	418	371
1x150/25	RM	14.2	8	31.5	2.1	41	820	2590	0.124	21.4	472	414
1x185/25	RM	15.8	8	33.1	2.1	43	860	2975	0.099	26.4	539	466
1x240/25	RM	18.3	8	35.6	2.1	45	900	3594	0.075	34.3	635	539



1x300/25	RM	20.7	8	38	2.1	48	960	4300	0.06	42.9	725	606
1x400/35	RM	23.3	8	40.6	2.1	51	1020	5290	0.047	57.2	831	680
1x500/35	RM	26.5	8	43.8	2.4	54	1080	6403	0.037	71.4	953	765