

# Medium voltage cable

## NA2XS(F)2Y 3-times stranded



**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 lengthwise following mechanical damage.

### Construction and technical data:

<b>Standard:</b>	VDE 0276-620
<b>Conductor material:</b>	aluminium
<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>Longitudinally watertight:</b>	yes
<b>Colour of outer sheath:</b>	black
<b>Flame-retardant:</b>	none
<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.*

NA2XS(F)2Y 6/10 kV stranded

**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]	Al	Cu	G [kg]
012689	3X1X70/16	RMv	10.2	0.443	3.4	228	208	6.58	2.1	864	57.6	6300	618	554	2850
013923	3X1X95/16	RMv	12	0.32	3.4	278	248	8.93	2.1	1260	84	8550	828	546	3465
012050	3X1X150/25	RMv	15	0.206	3.4	364	315	14.1	2.1	1026	68.4	13500	1331	848	3377
012222	3X1X185/25	RMv	16.8	0.164	3.4	418	357	17.4	2.1	1107	73.8	16650	1630	848	3928
011787	3X1X240/25	RMv	19.2	0.125	3.4	494	413	22.6	2.1	1125	75	21600	2113	848	4370
015289	3X1X300/25	RMv	21.6	0.1	3.4	568	466	28.2	2.1	1200	80	27000	2610	848	5000
014773	3X1X400/35	RMv	24.6	0.0778	3.4	660	529	37.6	2.1	1290	86	36000	3480	1187	6240
015547	3X1X500/35	RMv	27.6	0.0605	3.4	767	602	47	2.1	1430	95.3	45000	4350	1182	7340

NA2XS(F)2Y 12/20 kV stranded

**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]	Al	Cu	G [kg]
013944	3X1X50/25	RMv	8.6	0.641	5.5	185	172	4.7	2.1	1305	87	4500	435	546	3307
012683	3X1X95/16	RMv	12	0.32	5.5	280	251	8.93	2.1	907.5	60.5	8550	838	553	3900
012809	3X1X120/16	RMv	13.5	0.253	5.5	323	285	11.3	2.1	1245	83	10800	1044	546	4500
011977	3X1X150/25	RMv	15	0.206	5.5	366	319	14.1	2.1	1125	75	13500	1305	848	3875
015751	3X1X150/50	RMv	15	0.206	5.5	366	319	14.1	2.1	1140	75.6	13500	1305	1696	4620
012684	3X1X185/25	RMv	16.8	0.164	5.5	420	361	17.4	2.1	1185	79	16650	1610	859	4300
012685	3X1X240/25	RMv	19.2	0.125	5.5	496	417	22.6	2.1	1237.5	82.5	21600	2088	848	6150
013270	3X1X240/35	RMv	19.2	0.125	5.5	496	417	22.6	2.1	1237.5	82.5	21600	2113	1196	6300
012686	3X1X300/25	RMv	21.6	0.1	5.5	569	471	28.2	2.1	1338	89.2	27000	2610	848	6900
012687	3X1X400/35	RMv	24.6	0.0778	5.5	660	535	37.6	2.1	1417.5	94.5	36000	3522	1196	8400
012688	3X1X500/35	RMv	27.6	0.0605	5.5	766	609	47	2.1	1515	101	45000	4402	1196	8400

NA2XS(F)2Y 18/30 kV stranded

**Nominal voltage U<sub>o</sub>:** 18 kV  
**Nominal voltage U:** 30 kV  
**Maximum permitted operating voltage in three-phase systems:** 36 kV  
**Test voltage:** 63 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]	Al	Cu	G [kg]
014211	3X1X120/16	RMv	13.5	0.253	8	325	289	11.3	2.1	1755	117	10800	1044	546	5513
014212	3X1X150/25	RMv	15	0.206	8	367	322	14.1	2.1	1800	120	13500	1305	849	6143
013243	3X1X185/25	RMv	16.8	0.164	8	421	364	17.4	2.1	1920	128	16650	1611	849	6650
014213	3X1X240/25	RMv	19.2	0.125	8	496	422	22.6	2.1	1980	132	21600	2088	849	7560
013962	3X1X300/25	RMv	21.6	0.1	8	568	476	28.6	2.1	2115	141	27000	2610	849	8505
013254	3X1X400/35	RMv	24.6	0.0778	8	659	541	37.6	2.1	1575	105	36000	3522	1196	8600

DI	diameter conductor
RI	Conductor resistance
Wi	Insulation wall thickness
Ibl	Ampacity in air (30 °C)
Ibe	Ampacity in ground (20 °C)
Ik	Short-circuit current (1 s)
Wm	Wall thickness of sheath
Rbv	Bending radius, fixed installation
Ø	outer diameter approx.
Fzv	Tensile strength (during installation)
Al	Aluminium weight (GER)
Cu	Copper weight (GER)
G	net weight per 1000