# NA2XS(FL)2Y

Medium Voltage Cables


## DESCRIPTION

The NA2XS(FL)2Y cable is a longitudinally watertight medium-voltage cable with an aluminium conductor, XLPE insulation, and a combined Al/PE sheath. It has been specifically developed for power supply networks that demand high mechanical strength and reliable protection against water ingress.

## TECHNICAL DATA

| | | | |
|---|---|---|---|
| **CPR class** | Fca | **Flame retardant** | no |
| **Maximal operating conductor temperature (°C)** | +90 °C | **Maximal short-circuit temperature (°C)** | +250 °C |
| **Minimal storage temperature (°C)** | -35 °C | **Minimal temperature for laying (°C)** | -20 °C |
| **Operating temperature range (°C)** | -35-+90 °C | **Shape of conductor** | RM |

## CROSS-SECTION DATA — 6/10 kV

| | | | |
|---|---|---|---|
| **Voltage** | 6/10 kV | **Test voltage** | 21 kV |
| **Operating temperature range** | -35-+90 °C | **Conductor temperature (max.)** | +90 °C |
| **Short-circuit temperature (max.)** | +250 °C | **Minimum laying temperature** | -20 °C |
| **Minimum storage temperature** | -35 °C | **CPR class** | Fca |
| **Flame retardant** | no | | |

| Cores & CS | Cond. | Shape | Cap [uF/km] | Di [mm] | Rl [Ohm/km] | Wi [mm] | Ibl [A] | Ibe [A] | Ik [kA] | Wm [mm] | Rbv [mm] | Ø [mm] | G [kg/km] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1x35/16 | Al | RM | 0.22 | 15.3 | 0.868 | 3.4 | 160 | 145 | 3.3 | 2.1 | 500 | 25 | 643 |
| 1x50/16 | Al | RM | 0.25 | 16.4 | 0.641 | 3.4 | 183 | 171 | 4.7 | 2.1 | 520 | 26 | 712 |
| 1x70/16 | Al | RM | 0.28 | 17.9 | 0.443 | 3.4 | 228 | 208 | 6.6 | 2.1 | 405 | 27 | 796 |
| 1x95/16 | Al | RM | 0.31 | 19.4 | 0.32 | 3.4 | 278 | 248 | 9 | 2.1 | 580 | 29 | 902 |
| 1x120/16 | Al | RM | 0.34 | 20.9 | 0.253 | 3.4 | 321 | 283 | 11.3 | 2.1 | 600 | 30 | 1009 |
| 1x150/25 | Al | RM | 0.36 | 22.3 | 0.206 | 3.4 | 364 | 315 | 14.2 | 2.1 | 640 | 32 | 1193 |
| 1x185/25 | Al | RM | 0.4 | 23.9 | 0.164 | 3.4 | 418 | 357 | 17.5 | 2.1 | 660 | 33 | 1341 |
| 1x240/25 | Al | RM | 0.44 | 26.2 | 0.125 | 3.4 | 494 | 413 | 22.7 | 2.1 | 720 | 36 | 1546 |
| 1x300/25 | Al | RM | 0.48 | 28.3 | 0.1 | 3.4 | 568 | 466 | 28.4 | 2.1 | 760 | 38 | 1797 |
| 1x400/35 | Al | RM | 0.54 | 31.4 | 0.0778 | 3.4 | 660 | 529 | 37.8 | 2.1 | 820 | 41 | 2222 |
| 1x500/35 | Al | RM | 0.61 | 34.6 | 0.0605 | 3.4 | 767 | 602 | 47.3 | 2.1 | 880 | 44 | 2599 |
| 1x630/35 | Al | RM | 0.67 | 38 | 0.0469 | 3.4 | 861 | 690 | 59.6 | 2.1 | 940 | 47 | 3062 |
| 1x800/35 | Al | RM | 0.76 | 42.3 | 0.0367 | 3.4 | 976 | 764 | 75.6 | 2.4 | 1040 | 52 | 3686 |
| 1x1000/35 | Al | RM | 0.84 | 46.2 | 0.0291 | 3.4 | 1187 | 852 | 94 | 2.4 | 1120 | 56 | 4372 |

## CROSS-SECTION DATA — 12/20 kV

| | | | |
|---|---|---|---|
| **Voltage** | 12/20 kV | **Test voltage** | 42 kV |
| **Operating temperature range** | -35-+90 °C | **Conductor temperature (max.)** | +90 °C |
| **Short-circuit temperature (max.)** | +250 °C | **Minimum laying temperature** | -20 °C |
| **Minimum storage temperature** | -35 °C | **CPR class** | Fca |
| **Flame retardant** | no | | |

| Cores & CS | Cond. | Shape | Cap [uF/km] | Di [mm] | Rl [Ohm/km] | Wi [mm] | Ibl [A] | Ibe [A] | Ik [kA] | Wm [mm] | Rbv [mm] | Ø [mm] | G [kg/km] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1x50/16 | Al | RM | 0.17 | 20.6 | 0.641 | 5.5 | 185 | 172 | 4.7 | 2.1 | 600 | 30 | 876 |
| 1x70/16 | Al | RM | 0.19 | 22.1 | 0.443 | 5.5 | 231 | 210 | 6.6 | 2.1 | 640 | 32 | 982 |
| 1x95/16 | Al | RM | 0.21 | 23.6 | 0.32 | 5.5 | 280 | 251 | 9 | 2.1 | 660 | 33 | 1101 |
| 1x120/16 | Al | RM | 0.23 | 25.1 | 0.253 | 5.5 | 323 | 285 | 11.3 | 2.1 | 700 | 35 | 1217 |
| 1x150/25 | Al | RM | 0.25 | 26.5 | 0.206 | 5.5 | 366 | 319 | 14.2 | 2.1 | 720 | 36 | 1412 |
| 1x185/25 | Al | RM | 0.27 | 28.1 | 0.164 | 5.5 | 420 | 361 | 17.5 | 2.1 | 760 | 38 | 1568 |
| 1x240/25 | Al | RM | 0.3 | 30.4 | 0.125 | 5.5 | 496 | 417 | 22.7 | 2.1 | 800 | 40 | 1792 |
| 1x300/25 | Al | RM | 0.32 | 32.5 | 0.1 | 5.5 | 569 | 471 | 28.4 | 2.1 | 840 | 42 | 2020 |
| 1x400/35 | Al | RM | 0.36 | 35.6 | 0.078 | 5.5 | 660 | 535 | 37.8 | 2.1 | 900 | 45 | 2493 |
| 1x500/35 | Al | RM | 0.4 | 38.8 | 0.061 | 5.5 | 766 | 609 | 47.3 | 2.1 | 980 | 49 | 2903 |
| 1x500/50 | Al | RM | 0.4 | 38.8 | 0.061 | 5.5 | 766 | 609 | 47.3 | 2.1 | 980 | 49 | 3059 |
| 1x630/35 | Al | RM | 0.44 | 42.2 | 0.047 | 5.5 | 866 | 705 | 59.6 | 2.4 | 780 | 52 | 3383 |
| 1x800/35 | Al | RM | 0.49 | 46.5 | 0.037 | 5.5 | 984 | 767 | 75.6 | 2.4 | 840 | 56 | 3858 |
| 1x1000/35 | Al | RM | 0.55 | 50.4 | 0.0291 | 5.5 | 1187 | 863 | 94 | 2.4 | 1220 | 61 | 4824 |

## CROSS-SECTION DATA — 18/30 kV

| | | | |
|---|---|---|---|
| **Voltage** | 18/30 kV | **Test voltage** | 63 kV |
| **Operating temperature range** | -35-+90 °C | **Conductor temperature (max.)** | +90 °C |
| **Short-circuit temperature (max.)** | +250 °C | **Minimum laying temperature** | -20 °C |
| **Minimum storage temperature** | -35 °C | **CPR class** | Fca |
| **Flame retardant** | no | | |

| Cores & CS | Cond. | Shape | Cap [uF/km] | Di [mm] | Rl [Ohm/km] | Wi [mm] | Ibl [A] | Ibe [A] | Ik [kA] | Wm [mm] | Rbv [mm] | Ø [mm] | G [kg/km] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1x50/16 | Al | RM | 0.13 | 25.6 | 0.641 | 8 | 187 | 174 | 4.7 | 2.1 | 700 | 35 | 1100 |
| 1x70/16 | Al | RM | 0.15 | 27.1 | 0.443 | 8 | 232 | 213 | 6.6 | 2.1 | 740 | 37 | 1213 |
| 1x95/16 | Al | RM | 0.16 | 28.6 | 0.32 | 8 | 282 | 254 | 9 | 2.1 | 760 | 38 | 1339 |
| 1x120/16 | Al | RM | 0.17 | 30.1 | 0.253 | 8 | 325 | 289 | 11.3 | 2.1 | 800 | 40 | 1463 |
| 1x150/25 | Al | RM | 0.19 | 31.5 | 0.206 | 8 | 367 | 322 | 14.2 | 2.1 | 820 | 41 | 1660 |
| 1x185/25 | Al | RM | 0.2 | 33.1 | 0.164 | 8 | 421 | 364 | 17.5 | 2.1 | 860 | 43 | 1837 |
| 1x240/25 | Al | RM | 0.22 | 35.4 | 0.125 | 8 | 496 | 422 | 22.7 | 2.1 | 900 | 45 | 2049 |
| 1x300/25 | Al | RM | 0.24 | 37.5 | 0.1 | 8 | 568 | 476 | 28.4 | 2.1 | 940 | 47 | 2336 |
| 1x400/35 | Al | RM | 0.27 | 40.6 | 0.0778 | 8 | 659 | 541 | 37.8 | 2.1 | 1000 | 50 | 2842 |
| 1x500/35 | Al | RM | 0.29 | 43.8 | 0.0605 | 8 | 764 | 616 | 47.3 | 2.4 | 1080 | 54 | 3269 |
| 1x630/35 | Al | RM | 0.32 | 47.2 | 0.0469 | 8 | 866 | 692 | 59.6 | 2.4 | 1120 | 56 | 3590 |
| 1x800/35 | Al | RM | 0.36 | 51.5 | 0.0367 | 8 | 984 | 770 | 75.6 | 2.4 | 1200 | 60 | 4284 |
| 1x1000/35 | Al | RM | 0.39 | 55.4 | 0.0291 | 8 | 1196 | 878 | 94 | 2.4 | 1340 | 67 | 5327 |