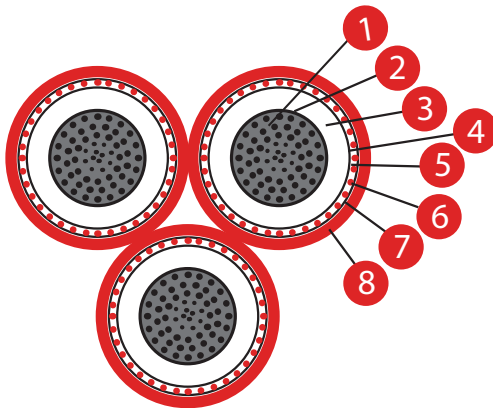


ENW 6.35/11 (12)kV Aluminium Cable

Medium voltage DNO aluminium power cable. Triple extruded single-core cable (dry curing), in triplex formation.

Standard Specification: BS EN 60228 / ES400C9(ENW)

Rated Voltage: U_o/U (Um) – 6,35 / 11 (12) kV • Temperature Rating: 0°C to +90°C



- 1 Round solid aluminium conductor, class 1, according to BS EN 60228
- 2 Semi-conducting compound conductor.
- 3 Tree-retardant crosslinked polyethylene (XLPE-TR) insulation.
- 4 Semi-conducting compound over insulation, fully bonded. Water blocking tape, helically applied over the insulation screen.
- 5 Metallic screen composed by copper wires helically applied.
- 6 Over the wires, an equalizing copper tape is applied in an open counter-helix.
- 7 Waterblocking tape, helically applied.
- 8 PE outer sheath, type DMP 5.

	95mm ²	185mm ²	300mm ²
Nominal diameter - tolerance ±2% (mm)	10,8	15,2	19,4
Minimum conductor screen thickness (mm)	0,3	0,3	0,3
Minimum / nominal insulation thickness (mm)	2,96 / 3,4	2,96 / 3,4	2,96 / 3,4
Nominal diameter over insulation - tolerance -2%; +3,5%(mm)	18,8	23,2	27,4
Minimum insulation screen thickness (mm)	0,3	0,3	0,3
Nominal metallic screen cross-section (mm ²)	35	35	35
Minimum / nominal outer sheath thickness (mm)	1,43 / 1,8	1,52 / 1,9	1,69 / 2,1
Approximated outer diameter of single cable- tolerance ±5% (mm)	27,0	31,5	36,0
Approximated outer diameter of triplex - tolerance ±5% (mm)	58,5	68,5	78,0
Approximated weight of triplex (kg/km)	2925	3925	5245
Maximum Dc conductor resistance, 20°C (Ω/km)	0,320	0,164	0,100
AC conductor resistance, 90°C (Ω/km)	0,411	0,211	0,130
Maximum DC metallic screen resistance, 20°C (Ω/km)	0,542	0,542	0,542
Inductance - in trefoil (mH/km)	0,37	0,34	0,31
Reactance @ 50Hz (Ω/km)	0,12	0,11	0,10
Capacitance (μF/km)	0,62	0,80	0,97
Zero sequence impedance R_0+jX_0 (Ω/km)	0,833+j0,059	0,678+j0,049	0,614+j0,043
Approximated outer diameter of single cable- tolerance ±5% (mm)	27,0	31,5	36,0
Rated current, normal operation, 3 cables installed in air in trefoil, ambient temp=15°C, depth of burial=0,6m from cover to top, thermal resistivity of soil=1,2K.m/W (A)	254	382	517
Rated current, normal operation, 3 cables installed directly buried in trefoil, soil temp=15°C, depth of burial=0,6 from cover to top, thermal resistivity of soil=1,2K.m/W (A)	247	355	461
Rated current, normal operation, 3 cables installed in air in trefoil, ambient temp=15°C, depth of burial=0,6m from cover to top, thermal resistivity of soil=0,9K.m/W (A)	270	389	506
Rated current, normal operation, 3 cables installed in a 150mm duct in trefoil, soil temp=15°C, depth of burial=0,6 from cover to top, thermal resistivity of soil=1,2K.m/W (A)	224	324	423
Rated current, normal operation, 3 cables installed in a 150mm duct in trefoil, soil temp=15°C, depth of burial=0,6 from cover to top, thermal resistivity of soil=0,6K.m/W (A)	238	345	452
Maximum short-circuit current, conductor, 90°C-250°C, during 1 second (kA)	9,0	17,5	28,3
Maximum short-circuit current, scree, 80°C-180°C, during 1 second (kA)	5	5	5
Minimum bending radius - during installation (mm)	702	822	936
Minimum bending radius - after installation (mm)	527	617	702
Maximum pulling effort - each conductor (daN)	285	555	900