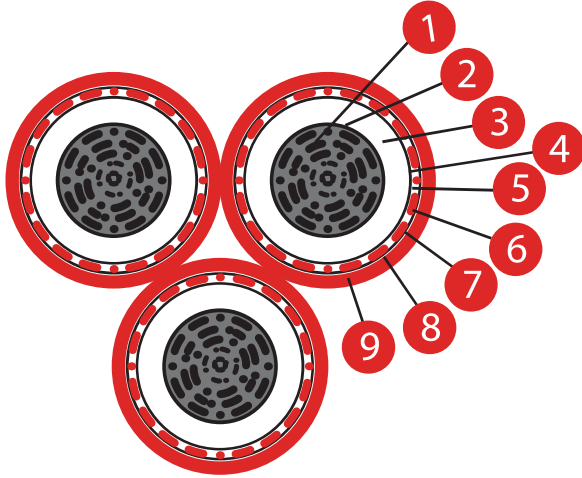


3x1 CORE TRIPLEX ALUMINIUM CONDUCTORS

Standard Specification: IEC 60228 IEC 60502-2
Rated Voltage: Uo/U (Um) – 6,35 / 11 (12) kV

DNO aluminium power cable approved to UK Power Networks (UKPN) specification. Manufactured by G81 suppliers for connections from existing grid to new sub-main developments.



- 1 Circular solid aluminium conductor, class 1, according to BS EN 60228
- 2 Semi-conducting compound conductor screen
- 3 Cross-linked polyethylene (XLPE) insulation
- 4 Semi-conducting compound insulation screen, fully bonded

- 5 Semi conductive waterblocking tape, helically applied
- 6 Aluminium wires helically applied
- 7 Aluminium tape applied in an open counter helix
- 8 Waterblocking tape, helically applied
- 9 Polyethylene oversheath

CONDUCTOR	
Nominal area of core (mm ²)	300
No. of cores ; shape (No.)	3 ; round
Diameter of conductor (mm)	19,4
CONDUCTOR SCREEN	
Material	Semi-conducting compound
Minimum/Nominal thickness (mm)	0,5
INSULATION	
Material	XLPE
Nominal thickness (mm)	3,4
Diameter over insulation (mm)	27,8
INSULATION SCREEN	
Material	Semi-conducting compound, fully bonded
Minimum/Nominal thickness (mm)	0,5
METALLIC SHIELD	
Material	Aluminium wires
OUTER SHEATH	
Material	PE type ST7
Minimum thickness (mm)	1,48
CABLE	
Approximated outer diameter of cable (mm)	38
Approximated outer diameter of the triplex (D) (mm)	83
Approximated weight of triplex cable (kg/km)	5370

ELECTRICAL CHARACTERISTICS	
Maximum DC conductor resistance, 20°C (Ω/km)	0,100
Maximum AC conductor resistance, 90°C (Ω/km)	0,130
Inductance (Ω/km)	0,28
Capacitance (μF/km)	0,50
Zero sequence impedance (Ω/km)	0,36 + j0,08
Current carrying capacity (A): - Directly buried; 15°C; 1,2K.m/W; 0,9m deep - In air; 25°C	451 595
Max. adm. short-circuit current, conductor, 1sec. (kA) Ti = 90°C Tf = 250°C	28,3
Max. adm. short-circuit current, metallic shield, 1sec. (kA) Ti = 80°C Tf = 250°C	13,1
MECHANICAL CHARACTERISTICS	
Minimum bending radius of cable, installation (mm)	895
Minimum bending radius of cable, permanent (mm)	810