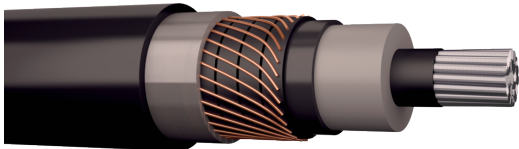


Power Cables 42 kV

AXLJ-TT TSLE 20,8/36(42) kV



Application

Single-core, distribution cable for outdoor use in 3-phase formation. Installation in pipes and ground/water. Both radial and longitudinal water blocked. Can be ploughed down.

Alternative Product Name

SE-N36XC7A5T5E-AR

Flame retardance

Flame retardant - Not applicable

Construction

Cable Shape	Round
Conductors	Stranded, round, compacted aluminium acc. to IEC 60228 class 2, longitudinally watertight
Conductor Insulation	XLPE, nom. thickness = 8,0 mm
Inner semi-conducting layer	Extruded
Outer semi-conducting layer	Bonded
Longitudinal water tightness	Semi conducting water blocking tape
Shield / Screen	Annealed copper wires in contact with aluminum tape
Radial water blocking	Aluminum-PE laminate, bonded to sheath
Outer Sheath	PE, black, resistant to weather an UV
Example of marking on sheath	AXLJ-TT TSLE 42kV 1x120 AFR/16 DRAKA "Date and time", metre marked

Temperature

Maximum operating Temperature	90 °C
Temperatures at installation [°C]	Lowest cable temperature during installation -20 °C, below 0 °C special precaution shall be taken. Fixed installed -35°C/ +35°C

Features

Additional Feature Information	50 Hz voltage value, which keeps the device for 1 min. period: 70 kV
Bending radius	In fixed installation: 10 x D When pulling-in: 15 x D When plowing down: 8 x D
Max Pulling force - pulling eye [N/mm ²]	Max. pulling force = 30 x S (N) S = cross-sectional area of conductor (mm ²)

Electrical

Max. short circuit temperature [°C]	(5s) 250 °C
Impulse voltage [kV]	200 kV

Conductors and screen area [mm ²]	Diameter over sheath [mm]	Cable weight [kg/km]	Standard delivery length [m]	Delivery Package
1x50/16	33,5	950	500	K14
1x70/16	35,0	1060	500	K16
1x95/16	37,0	1200	500	K16
1x120/16	38,5	1370	500	K16
1x150/25	40,0	1510	500	K16

Conductors and screen area [mm ²]	Diameter over sheath [mm]	Cable weight [kg/km]	Standard delivery length [m]	Delivery Package
1x185/25	41,5	1670	500	K18
1x240/25	44,0	1890	500	K18
1x300/25	46,5	2195	500	K20
1x400/35	50,0	2570	500	K20
1x500/35	53,0	2955	500	K22
1x630/50	57	3625	500	K22

Conductors and screen area [mm ²]	Conductor resistance Ω/km	Screen resistance* Ω/km	Inductance in trefoil/in flat* mH/km	Reactance in trefoil/in flat* Ω/km	Capacitance μF/km	Charging current/phase A/km	Earth fault current A/km
1x50/16	0,641	1,15	0,41/0,75	0,13/0,24	0,13	0,8	2,5
1x70/16	0,443	1,15	0,42/0,68	0,13/0,21	0,14	0,9	2,7
1x95/16	0,320	1,15	0,42/0,68	0,13/0,21	0,15	1,0	2,9
1x120/16	0,253	1,15	0,41/0,66	0,13/0,21	0,17	1,1	3,3
1x150/25	0,206	0,727	0,40/0,65	0,13/0,20	0,18	1,2	3,5
1x185/25	0,164	0,727	0,38/0,62	0,12/0,20	0,19	1,2	3,7
1x240/25	0,125	0,727	0,36/0,60	0,11/0,19	0,21	1,4	4,1
1x300/25	0,100	0,727	0,35/0,58	0,11/0,18	0,23	1,5	4,5
1x400/35	0,0778	0,524	0,34/0,56	0,11/0,18	0,26	1,7	5,1
1x500/35	0,0605	0,524	0,33/0,54	0,10/0,17	0,28	1,8	5,5
1x630/50	0,0469	0,387	0,31/0,52	0,10/0,16	0,33	2,2	6,5

* Cable distance, installation in flat formation = 70 mm. Note screen resistance is the sum of copper wires and aluminum tape.

Dielectric constant at 50 Hz, at 20°C 2,4, at 90°C 2,4. Factor of dielectric loss at 50 Hz, vid 20 ° C 0,2x10⁻³, vid 90 ° C 0,5x10⁻³.

Conductors and screen area [mm ²]	Current rating at core temp. 90°C in ground *A	Current rating at core temp. 65°C in air *A	Current rating at core temp. 90°C in air *A	Max. short circuit current on the conductor during 5s at initial temp. 65°C kA	Max. short circuit current on the conductor during 5s at initial temp. 90°C kA
1x50/16	155	160	195	5,2	4,7
1x70/16	200	190	235	7,1	6,6
1x95/16	235	230	280	9,6	8,9
1x120/16	265	265	325	12,4	11,3
1x150/25	300	300	370	15,6	14,2
1x185/25	330	345	425	19,2	17,5
1x240/25	385	400	490	25,0	22,7
1x300/25	435	460	575	31,2	28,3
1x400/35	510	555	680	41,6	37,8
1x500/35	570	635	765	52,0	47,2
1x630/50	635	720	880	65,6	59,5

* Trefoil with screen grounded in both end.

The ratings are based on the following conditions –maximum conductor temperature 90°C –ground temperature 15°C –air temperature 25°C –thermal resistivity of soil 1,0 °Km/W –depth of burial 0,65 m –frequency 50Hz

Lifetime 40 years. Warranty service term: 24 months, from date of delivery.