



Guardian Ali-Sheild NXS/LSZH Cable BS8436 300/500V

Plain annealed stranded copper conductor to BS6360/XLPE insulation to BS6889 / aluminium screen tube, applies longitudinally. CPC tinned annealed stranded copper to BS6360. LSZH sheath to BS EN 50267-2-1:1999 and BS EN 61034:2005, UV stable.

Applications:	Power circuits, lighting, air-conditioning, call systems, data networks, signage supplies, computerised checkouts.
Voltage Rating:	300/500v
Temperature range:	-10 to +90°C
Temperature rating:	Maximum conductor temperature 90°C
Min. bending radius:	6 x overall diameter
Flame retardant:	BSEN 60332-1, IEC 60332-1
Smoke emission:	BSEN 61034, IEC 61034-2
Acid gas emission	BSEN 50267-1-2, IEC60754-1
Walls and partitions	BS8436
Core colours:	2 core: brown and blue 3 core: brown, black and grey 4 core: brown, grey, blue and black
Sheath colour:	White (black also available)



BATT part No.	No. of cores	Size sq.mm	Conductor No. strands/mm	CPC No. of stands/mm	Nominal insulation thickness mm	Nominal cable diameter mm	Approx weight of cable kg/1000m
12022	2	1.5	7 / .53	7 / .53	0.7	9.6	105
12023	2	2.5	7 / .67	7 / .67	0.8	10.7	137
12024	2	4.0	7 / .85	7 / .85	0.8	11.0	209
12038	2	6.0	7 / 1.04	7 / 1.04	0.8	13.2	260
12025	3	1.35	7 / .53	7 / .53	0.7	10.2	140
12026	3	2.5	7 / .67	7 / .67	0.8	11.0	184
12027	3	4.0	7 / .85	7 / .85	0.8	13.2	267
12040	3	6.0	7 / 1.04	7 / 1.04	0.8	14.2	330
12028	4	1.5	7 / .53	7 / .53	0.7	11.0	160
12029	4	2.5	7 / .67	7 / .67	0.8	13.2	258
12030	4	4.0	7 / .85	7 / .85	0.8	13.8	320
-	4	6.0	7 / 1.04	7 / 1.04	0.8	-	-

Area sq.mm	Max DC resistance ohms/km at 20°C	Nominal AC resistance ohms/km at 90°C at 50Hz	Inductive reactance ohms/km at 50Hz	Max continuous conductor operating temperature °C	Short circuit rating in kA for 1 second
1.5	12.1	15.3	0.100	90	0.21
2.5	7.41	9.43	0.097	90	0.35
4.0	4.61	5.86	0.092	90	0.57
6.0	3.08	3.93	0.088	90	0.85

ERA Technology Results

Earthing capabilities of the screen under nail penetration test conditions: The results have shown the screen on Guardian can withstand a fault current of over 200A, which is the fault current required to operate a 40A Type B circuit breaker instantaneously.

Impact resistance tests: Guardian passed these conditions and eventually reached the level of a 1.0kg weight dropped from a height of 0.8m, at ambient temperatures thus exceeding the requirements of fire performance cables.