

NSSHÖU O/J, NSSHÖU 3E, NSSHÖU 3E + ST 0.6/1kV Cable



Eland Product Group: A7JS

APPLICATION

Heavy duty tough rubber flexible cable with or without individually earth screened cores for dynamic or static applications in aggressive environments. Flame retardant, abrasion, cut, notch and tear resistant. Good resistance to oil and fats. Suitable for installation in dry, damp, wet and in hazardous environments. For power supplies where high levels of mechanical stress and abrasion are expected. Can be permanently submersed in fresh water, salt water, storm water, oily water and sewage contaminated water to a depth of 100 metres. Suitable for indoor and outdoor applications.

CHARACTERISTICS

Voltage Rating (Uo/U)
0.6/1kV

Test Voltage
3kV

Ambient Temperature
Fixed: -40°C to +80°C
Flexed: -25°C to +80°C

Maximum Short Circuit Temperature
+250°C

Minimum Bending Radius
Fixed: 4 x overall diameter
Flexed: 5 x overall diameter

Submersible
100m

CONSTRUCTION

Phase Conductor
Class 5 flexible tinned copper conductor

Insulation
Rubber compound Type 3GI3

Individual Core Screen*
Copper braid up to 10mm², copper wires from 16mm²

Control Conductors*
Class 5 flexible tinned copper conductor

Inner Sheath
Rubber compound Type GM1b

Outer Sheath
Rubber compound Type 5GM5

Sheath Colour
● Yellow

Note
*Available with control conductors and individual core screen upon request

CABLE THIRD-PARTY ACCREDITATION

VDE APPROVED - Cables are tested and approved by the VDE Testing & Certification Institute.

STANDARDS

VDE 0250 Part 812, VDE 0295, EN 60228

Flame Retardant according to IEC/EN 60332-1-2

THE CABLE LAB[®]

AN ISO/IEC 17025 AND IECCE CBTL ACCREDITED FACILITY

Our world-class testing facility assures the quality and compliance of this cable through a continuous and rigorous testing regime.



SUSTAINABILITY COMMITMENT

We are on a journey to Net Zero.

We've committed to near-term emissions reductions and a net-zero target with the Science Based Targets initiative and we're a signatory to the United Nations Global Compact Sustainable Development Goals.

Learn more about embodied carbon and our carbon emissions reduction actions, our comprehensive recycling services, and wider ESG activities for sustainable operations at: www.elandcables.com/company/about-us/esg-sustainability



REGULATORY COMPLIANCE

This cable meets the requirements of the Low Voltage Directive 2014/35/EU, the RoHS Directive 2015/85/EU and Reach Directive EC 1907/2006. RoHS compliance has been tested and confirmed by The Cable Lab[®].



DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	CONDUCTOR DIAMETER mm	MINIMUM OVERALL DIAMETER mm	MAXIMUM OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
A7JS10015	1	1.5	1.5	6.3	7	60
A7JS10025	1	2.5	1.9	7	7.7	75
A7JS10040	1	4	2.4	7.6	8.3	95
A7JS10060	1	6	2.9	8.2	8.9	120
A7JS1010	1	10	3.8	9.5	10.2	180
A7JS1016	1	16	4.8	10.5	11.2	245
A7JS1025	1	25	6.1	13	13.7	375
A7JS1035	1	35	7.2	14.1	14.8	480
A7JS1050	1	50	8.9	16.2	16.9	660
A7JS1070	1	70	10.6	18.3	19	875
A7JS1095	1	95	12.5	20.5	21.7	1150
A7JS1120	1	120	14.2	22.8	24	1430
A7JS1150	1	150	15.9	25	26.2	1750
A7JS1185	1	185	17.7	28.2	29.4	2180
A7JS1240	1	240	20.1	31.1	32.3	2770
A7JS1300	1	300	22.5	34.9	36.1	3510
A7JS3015	3	1.5	1.5	11.7	12.3	190
A7JS3025	3	2.5	1.9	13.1	13.7	255
A7JS3040	3	4	2.4	15.6	16.2	375
A7JS3060	3	6	2.9	16.8	17.4	465
A7JS310	3	10	3.8	20.2	21.3	710
A7JS316	3	16	4.8	22.3	23.4	930
A7JS325	3	25	6.1	26.9	28	1390
A7JS335	3	35	7.2	30.2	31.4	1880
A7JS350	3	50	8.9	35.8	37	2500
A7JS370	3	70	10.6	39.3	40.5	3460
A7JS395	3	95	12.5	45.7	47.4	4570
A7JS3120	3	120	14.2	48.2	49.9	5220
A7JS3150	3	150	15.9	52.6	54.4	6460
A7JS3185	3	185	17.7	58.7	61	7980
A7JS4015	4	1.5	1.5	12.5	13.1	225
A7JS4025	4	2.5	1.9	15.3	15.9	350
A7JS4040	4	4	2.4	16.7	17.3	440
A7JS4060	4	6	2.9	18.1	18.7	550
A7JS410	4	10	3.8	21.9	23	860
A7JS416	4	16	4.8	25.2	26.3	1210
A7JS425	4	25	6.1	30.6	31.8	1810
A7JS435	4	35	7.2	32.8	34	2330
A7JS450	4	50	8.9	39	40.2	3300
A7JS470	4	70	10.6	42.8	44.5	4300
A7JS495	4	95	12.5	49.9	51.7	5680
A7JS4120	4	120	14.2	55.6	57.4	6820
A7JS4150	4	150	15.9	60.6	62.9	8270
A7JS4185	4	185	17.7	67.4	69.7	10350
A7JS5015	5	1	1.5	13.4	14	270
A7JS5025	5	2	1.9	16.4	17	410
A7JS5040	5	4	2.4	18	18.6	525



ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	CONDUCTOR DIAMETER mm	MINIMUM OVERALL DIAMETER mm	MAXIMUM OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
A7JS5060	5	6	2.9	20.3	21.4	715
A7JS510	5	10	3.8	23.7	24.8	1040
A7JS516	5	16	4.8	27.3	28.4	1470
A7JS525	5	25	6.1	33.2	34.4	2220
A7JS7015	7	1.5	1.5	16.9	17.5	400
A7JS7025	7	2.5	1.9	19.2	19.8	560
A7JS1215	12	1.5	1.5	19.6	20.2	540
A7JS1225	12	2.5	1.9	22.3	23.4	790
A7JS1815	18	1.5	1.5	22.2	23.3	750
A7JS1825	18	2.5	1.9	26.5	27.6	1110
A7JS2415	24	1.5	1.5	23.7	25.1	900
A7JS2425	24	2.5	1.9	28.4	29.6	1350

Including Earth Cores

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²		CONDUCTOR DIAMETER mm	MINIMUM OVERALL DIAMETER mm	MAXIMUM OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
		Phase Conductor	Earth Conductor				
A7JS3E050	3 + 3	50	25/3E	8.9	36.3	37.5	2790
A7JS3E070	3 + 3	70	35/3E	10.6	39.7	41.4	3660
A7JS3E095	3 + 3	95	50/3E	12.5	46.3	48	4800
A7JS3E120	3 + 3	120	70/3E	14.2	48.5	50.3	5990
A7JS3E150	3 + 3	150	70/3E	15.9	54.3	56.1	7030
A7JS3E185	3 + 3	185	95/3E	17.7	61.7	64	9030
A7JS3E240	3 + 3	240	120/3E	20.1	66.5	68.8	11280

Individual Core Screen

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²		CONDUCTOR DIAMETER mm	MINIMUM OVERALL DIAMETER mm	MAXIMUM OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
		Phase Conductor	Earth Conductor				
A7JS3EST0025	3 + 3	2.5	2.5/3E	1.9	16.2	16.9	370
A7JS3EST0040	3 + 3	4	4/3E	2.4	17.7	18.4	490
A7JS3EST060	3 + 3	6	6/3E	2.9	18.9	19.6	590
A7JS3EST10	3 + 3	10	10/3E	3.8	22.4	23.5	890
A7JS3EST16	3 + 3	16	16/3E	4.8	26.6	27.7	1260
A7JS3EST25	3 + 3	25	16/3E	6.1	29.9	31.1	1700
A7JS3EST35	3 + 3	35	16/3E	7.2	33.9	35.1	2100
A7JS3EST50	3 + 3	50	25/3E	8.9	39.8	41.5	3060
A7JS3EST70	3 + 3	70	35/3E	10.6	43.4	45.1	3940
A7JS3EST95	3 + 3	95	50/3E	12.5	50	51.8	5240
A7JS3EST120	3 + 3	120	70/3E	14.2	54.1	55.9	6580
A7JS3EST150	3 + 3	150	70/3E	15.9	59.7	62	7590
A7JS3EST185	3 + 3	185	95/3E	17.7	66.1	68.4	9400

Individual Core Screen and Control Conductors

ELAND PART NO.	VOLTAGE kV	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²			CONDUCTOR DIAMETER mm	MINIMUM OVERALL DIAMETER mm	MAXIMUM OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
			Phase Conductor	Earth Conductor	Control Conductor				
A7JS33EST0025	0.6/1	3 + 3 + 3	2.5	2.5/3E	1.5ST	1.9	16.2	18.1	425
A7JS33EST0040	0.6/1	3 + 3 + 3	4	4/3E	1.5ST	2.4	17.7	19.6	540
A7JS33EST0060	0.6/1	3 + 3 + 3	6	6/3E	1.5ST	2.9	18.9	20.3	640
A7JS33EST010	0.6/1	3 + 3 + 3	10	10/3E	2.5ST	3.8	22.4	23.5	940
A7JS33EST016	0.6/1	3 + 3 + 3	16	16/3E	2.5ST	4.8	26.6	27.7	1310
A7JS33EST025	0.6/1	3 + 3 + 3	25	16/3E	2.5ST	6.1	29.9	31.1	1800
A7JS33EST035	0.6/1	3 + 3 + 3	35	16/3E	2.5ST	7.2	33.9	35.1	2230
A7JS33EST050	0.6/1	3 + 3 + 3	50	25/3E	2.5ST	8.9	39.8	41.5	3160
A7JS33EST070	0.6/1	3 + 3 + 3	70	35/3E	2.5ST	10.6	43.4	45.1	4210
A7JS33EST095	0.6/1	3 + 3 + 3	95	50/3E	2.5ST	12.5	50	51.8	5520
A7JS33EST120	0.6/1	3 + 3 + 3	120	70/3E	2.5ST	14.2	54.1	55.9	6730
A7JS33EST150	0.6/1	3 + 3 + 3	150	70/3E	2.5ST	15.9	59.7	62	7740
A7JS33EST185	0.6/1	3 + 3 + 3	185	95/3E	2.5ST	17.7	66.1	68.4	9700

ELECTRICAL CHARACTERISTICS

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	MAXIMUM TENSILE LOAD N
1	1.5	23
1	2.5	38
1	4	60
1	6	90
1	10	150
1	16	240
1	25	375
1	35	525
1	50	750
1	70	1050
1	95	1425
1	120	1800
1	150	2250
1	185	2775
1	240	3600
1	300	4500
3	1.5	68
3	2.5	113
3	4	180
3	6	270
3	10	450
3	16	720
3	25	1125
3	35	1575
3	50	2250
3	70	3150
3	95	4275
3	120	5400
3	150	6750



NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	MAXIMUM TENSILE LOAD N
3	185	8325
4	1.5	90
4	2.5	150
4	4	240
4	6	360
4	10	600
4	16	960
4	25	1500
4	35	2100
4	50	3000
4	70	4200
4	95	5700
4	120	7200
4	150	9000
4	185	11100
5	1	113
5	2	188
5	4	300
5	6	450
5	10	750
5	16	1200
5	25	1875
7	1.5	158
7	2.5	263
12	1.5	270
12	2.5	450
18	1.5	405
18	2.5	675
24	1.5	540
24	2.5	900

Including Earth Cores

NOMINAL CROSS SECTIONAL AREA mm ²		MAXIMUM TENSILE LOAD N
Phase Conductor	Earth Conductor	
50	25/3E	2250
70	35/3E	3150
95	50/3E	4275
120	70/3E	5400
150	70/3E	6750
185	95/3E	8325
240	120/3E	10800

**Individual Core Screen**

NOMINAL CROSS SECTIONAL AREA mm ²		MAXIMUM TENSILE LOAD N
Phase Conductor	Earth Conductor	
2.5	2.5/3E	113
4	4/3E	180
6	6/3E	270
10	10/3E	450
16	16/3E	720
25	16/3E	1125
35	16/3E	1575
50	25/3E	2250
70	35/3E	3150
95	50/3E	4275
120	70/3E	5400
150	70/3E	6750
185	95/3E	8325

Individual Core Screen and Control Conductors

NOMINAL CROSS SECTIONAL AREA mm ²			MAXIMUM TENSILE LOAD N
Phase Conductor	Earth Conductor	Control Conductor	
2.5	2.5/3E	1.5ST	113
4	4/3E	1.5ST	180
6	6/3E	1.5ST	270
10	10/3E	2.5ST	450
16	16/3E	2.5ST	720
25	16/3E	2.5ST	1125
35	16/3E	2.5ST	1575
50	25/3E	2.5ST	2250
70	35/3E	2.5ST	3150
95	50/3E	2.5ST	4275
120	70/3E	2.5ST	5400
150	70/3E	2.5ST	6750
185	95/3E	2.5ST	8325

CURRENT CARRYING CAPACITY

NOMINAL CROSS SECTIONAL AREA mm ²	LAYING ON THE FLOOR Amps	FREE IN AIR Amps	REELED Amps						
			1 Layer	2 Layer	3 Layer	4 Layer	5 Layer	6 Layer	7 Layer
1.5	24	25	19	15	12	10	9	6	5
2.5	30	32	24	18	15	13	11	8	7
4	41	43	33	25	20	17	16	11	9
6	53	56	42	32	26	22	20	14	12
10	74	78	59	45	36	31	28	20	16
16	99	104	79	60	49	42	38	27	22
25	131	138	105	80	64	55	50	35	29
35	162	170	130	99	79	68	62	44	36
50	202	212	162	123	99	85	77	55	44
70	250	263	200	153	123	105	95	68	55

CURRENT CARRYING CAPACITY

NOMINAL CROSS SECTIONAL AREA mm ²	LAYING ON THE FLOOR Amps	FREE IN AIR Amps	REELED Amps						
			1 Layer	2 Layer	3 Layer	4 Layer	5 Layer	6 Layer	7 Layer
95	301	316	241	184	147	126	114	81	66
120	352	370	282	215	172	148	134	95	77
150	404	424	323	246	198	170	154	109	89
185	461	484	369	281	226	194	175	124	101
240	528	554	422	322	259	222	201	143	116
300	608	638	486	371	298	255	231	164	134

Ambient temperature of 30°C

VOLTAGE DROP

NOMINAL CROSS SECTIONAL AREA mm ²	POWER FACTOR			
	0.7	0.8	0.9	1
1.5	20.65	23.56	26.47	29.32
2.5	12.43	14.17	15.91	17.59
4	7.75	8.82	9.89	10.92
6	5.19	5.9	6.6	7.27
10	3.04	3.44	3.84	4.2
16	1.96	2.21	2.45	2.66
25	1.29	1.45	1.6	1.71
35	0.95	1.06	1.16	1.23
50	0.69	0.77	0.83	0.87
70	0.51	0.56	0.6	0.61
95	0.41	0.45	0.47	0.47
120	0.34	0.36	0.38	0.36
150	0.29	0.31	0.32	0.29
185	0.25	0.27	0.27	0.24
240	0.21	0.22	0.21	0.18

DE-RATING FACTORS

NO. OF OPERATING CORES	5		7		10		14		19		24	
DE-RATING FACTOR	0.75		0.65		0.55		0.50		0.45		0.40	

AMBIENT TEMPERATURE	10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C	65°C	70°C	75°C	80°C
DE-RATING FACTOR	1.15	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82	0.76	0.71	0.65	0.58	0.50	0.41

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.