

(N)SSHÖU O/J, (N)SSHÖU 3E, (N)SSHÖU 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 submerged 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 (U_o/U)
0.6/1kV

Test Voltage
3kV

Maximum Tensile Load
15N/mm²

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

Insulation
Rubber compound Type 3GI3

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

Control Conductors*
Class 5 flexible tinned copper

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

STANDARDS

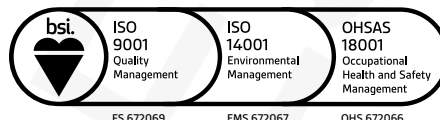
VDE 0250 Part 812, VDE 0295 (IEC 60228), IEC 60811-1, HD 22.16

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



UK LABORATORY TESTED

This product is subject to the Quality Assurance protocols of The Cable Lab[®], a UKAS accredited ISO 17025 cable testing laboratory. Testing includes vertical flame, conductor resistance, tensile & elongation, and dimensional consistency, verified to published standards and approved product drawings.



REGULATORY COMPLIANCE

This cable meets the requirements of the Low Voltage Directive 2014/35/EU and the RoHS Directive 2011/65/EU. RoHS compliance has been tested and confirmed by The Cable Lab[®] as meeting the requirements of the BSI RoHS Trusted Kitemark[™].



DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	CONDUCTOR DIAMETER mm	NOMINAL OVERALL DIAMETER mm	MAXIMUM TENSILE LOAD N	NOMINAL WEIGHT kg/km
A7JS10015	1	1.5	1.5	6.6	22.5	60
A7JS10025	1	2.5	1.9	7.3	37.5	75
A7JS10040	1	4	2.4	7.9	60	95
A7JS10060	1	6	2.9	8.5	90	120
A7JS1010	1	10	3.8	9.8	150	180
A7JS1016	1	16	4.8	10.8	240	245
A7JS1025	1	25	6.1	13.3	375	375
A7JS1035	1	35	7.2	14.5	525	480
A7JS1050	1	50	8.9	16.5	750	660
A7JS1070	1	70	10.6	18.6	1050	875
A7JS1095	1	95	12.5	21.1	1425	1150
A7JS1120	1	120	14.2	23.4	1800	1430
A7JS1150	1	150	15.9	25.6	2250	1750
A7JS1185	1	185	17.7	28.8	2775	2180
A7JS1240	1	240	20.1	31.7	3600	2770
A7JS1300	1	300	22.5	35	4500	3510
A7JS3015	3	1.5	1.5	12	67.5	190
A7JS3025	3	2.5	1.9	13.3	112.5	255
A7JS3040	3	4	2.4	15.9	180	375
A7JS3060	3	6	2.9	17.1	270	465
A7JS310	3	10	3.8	20.7	450	710
A7JS316	3	16	4.8	22.7	720	930
A7JS325	3	25	6.1	27.5	1125	1390
A7JS335	3	35	7.2	30.8	1575	1880
A7JS350	3	50	8.9	36.4	2250	2500
A7JS370	3	70	10.6	39.9	3150	3460
A7JS395	3	95	12.5	46.5	4275	4570
A7JS3120	3	120	14.2	49	5400	5220
A7JS3150	3	150	15.9	53.5	6750	6460
A7JS3185	3	185	17.7	59.8	8325	7980
A7JS4015	4	1.5	1.5	12.8	90	225
A7JS4025	4	2.5	1.9	15.5	150	350
A7JS4040	4	4	2.4	17	240	440
A7JS4060	4	6	2.9	18.4	360	550
A7JS410	4	10	3.8	22.4	600	860
A7JS416	4	16	4.8	25.7	960	1210
A7JS425	4	25	6.1	31.2	1500	1810
A7JS435	4	35	7.2	33.9	2100	2330
A7JS450	4	50	8.9	39.6	3000	3300
A7JS470	4	70	10.6	43.6	4200	4300
A7JS495	4	95	12.5	50.8	5700	5680
A7JS4120	4	120	14.2	56.6	6600	6820
A7JS4150	4	150	15.9	61.7	9000	8270
A7JS4185	4	185	17.7	68.5	11100	10350
A7JS5015	5	1	1.5	13.8	112.5	270
A7JS5025	5	2	1.9	16.8	150	410
A7JS5040	5	4	2.4	18.3	300	525

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	CONDUCTOR DIAMETER mm	NOMINAL OVERALL DIAMETER mm	MAXIMUM TENSILE LOAD N	NOMINAL WEIGHT kg/km
A7JS5060	5	6	2.9	20.9	450	715
A7JS510	5	10	3.8	24.3	7500	1040
A7JS516	5	16	4.8	27.9	1200	1470
A7JS525	5	25	6.1	33.9	1875	2220
A7JS7015	7	1.5	1.5	17.2	157.5	400
A7JS7025	7	2.5	1.9	19.5	262.5	560
A7JS1215	12	1.5	1.5	19.9	270	540
A7JS1225	12	2.5	1.9	22.8	450	790
A7JS1815	18	1.5	1.5	22.7	405	750
A7JS1825	18	2.5	1.9	27	675	1110
A7JS2415	24	1.5	1.5	24.5	540	900
A7JS2425	24	2.5	1.9	29.1	900	1350

Including Earth Cores

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²		CONDUCTOR DIAMETER mm	NOMINAL OVERALL DIAMETER mm	MAXIMUM TENSILE LOAD N	NOMINAL WEIGHT kg/km
		Phase Conductor	Earth Conductor				
A7JS3E050	3 + 3	50	25/3E	8.9	36.9	2250	2790
A7JS3E070	3 + 3	70	35/3E	10.6	40.4	3150	3660
A7JS3E095	3 + 3	95	50/3E	12.5	47.2	4275	4800
A7JS3E120	3 + 3	120	70/3E	14.2	49.4	5400	5990
A7JS3E150	3 + 3	150	70/3E	15.9	55.2	6750	7030
A7JS3E185	3 + 3	185	95/3E	17.7	62.9	8325	9030
A7JS3E240	3 + 3	240	120/3E	20.1	67.8	10800	11280

Individual Core Screen

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²		CONDUCTOR DIAMETER mm	NOMINAL OVERALL DIAMETER mm	MAXIMUM TENSILE LOAD N	NOMINAL WEIGHT kg/km
		Phase Conductor	Earth Conductor				
A7JS3EST0025	3 + 3	2.5	2.5/3E	1.9	16.6	113	370
A7JS3EST0040	3 + 3	4	4/3E	2.4	18	180	490
A7JS3EST060	3 + 3	6	6/3E	2.9	19.4	270	590
A7JS3EST10	3 + 3	10	10/3E	3.8	22.9	450	890
A7JS3EST16	3 + 3	16	16/3E	4.8	27.2	720	1260
A7JS3EST25	3 + 3	25	16/3E	6.1	30.5	1125	1700
A7JS3EST35	3 + 3	35	16/3E	7.2	34.5	1575	2100
A7JS3EST50	3 + 3	50	25/3E	8.9	40.7	2250	3060
A7JS3EST70	3 + 3	70	35/3E	10.6	44.5	3150	3940
A7JS3EST95	3 + 3	95	50/3E	12.5	50.9	4275	5240
A7JS3EST120	3 + 3	120	70/3E	14.2	55	5400	6580
A7JS3EST150	3 + 3	150	70/3E	15.9	60.9	6750	7590
A7JS3EST185	3 + 3	185	95/3E	17.7	67.3	8325	9400

Individual Core Screen and Control Conductors

ELAND PART NO.	VOLTAGE kV	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²			CONDUCTOR DIAMETER mm	NOMINAL OVERALL DIAMETER mm	MAXIMUM TENSILE LOAD N	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	17.1	113	425
A7JS33EST0040	0.6/1	3 + 3 + 3	4	4/3E	1.5ST	2.4	18.7	180	540
A7JS33EST0060	0.6/1	3 + 3 + 3	6	6/3E	1.5ST	2.9	19.6	270	640
A7JS33EST010	0.6/1	3 + 3 + 3	10	10/3E	2.5ST	3.8	22.9	450	940
A7JS33EST016	0.6/1	3 + 3 + 3	16	16/3E	2.5ST	4.8	27.1	720	1310
A7JS33EST025	0.6/1	3 + 3 + 3	25	16/3E	2.5ST	6.1	30.5	1125	1800
A7JS33EST035	0.6/1	3 + 3 + 3	35	16/3E	2.5ST	7.2	34.4	1575	2230
A7JS33EST050	0.6/1	3 + 3 + 3	50	25/3E	2.5ST	8.9	40.4	2250	3160
A7JS33EST070	0.6/1	3 + 3 + 3	70	35/3E	2.5ST	10.6	44.3	3150	4210
A7JS33EST095	0.6/1	3 + 3 + 3	95	50/3E	2.5ST	12.5	50.9	4275	5520
A7JS33EST120	0.6/1	3 + 3 + 3	120	70/3E	2.5ST	14.2	55.2	5400	6730
A7JS33EST150	0.6/1	3 + 3 + 3	150	70/3E	2.5ST	15.9	60.9	6750	7740
A7JS33EST185	0.6/1	3 + 3 + 3	185	95/3E	2.5ST	17.7	67.5	8325	9700

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
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.