

## (N)SHÖU O/J - 0.6/1kV Cable



Eland Product Group: A71

### APPLICATION

Flexible cable, rubber sheathed, suitable for mining applications alongside conveyor belts, for energy supply to equipment in movement, industrial apparatus and submersed pumps. It's resistant to abrasion, oils and flame retardant. Suitable for indoor and outdoor applications.

### CHARACTERISTICS

**Voltage Rating** U<sub>o</sub>/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

### CONSTRUCTION

**Phase Conductor**  
Class 5 flexible copper

**Insulation**  
Rubber compound

**Inner Sheath**  
Rubber compound

**Outer Sheath**  
Heavy duty rubber compound

**Sheath Colour**  
● Black

### STANDARDS

VDE 0250 Part 812, VDE 0295, EN 60228

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

### ISO/IEC 17025 LABORATORY TESTED

This product is subject to the Quality Assurance protocols of The Cable Lab®, an ISO/IEC 17025 accredited 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 <sup>2</sup>	CONDUCTOR DIAMETER mm	MINIMUM OVERALL DIAMETER mm	MAXIMUM OVERALL DIAMETER mm	MAXIMUM TENSILE LOAD N	NOMINAL WEIGHT kg/km
A7I03015	3	1.5	1.5	9.7	10.3	68	141
A7I03025	3	2.5	1.9	11.1	11.7	113	200
A7I03040	3	4	2.4	13.2	13.8	180	297
A7I03060	3	6	2.9	14.4	15	270	381
A7I0310	3	10	3.8	17.4	18.5	450	590
A7I0316	3	16	4.8	19.5	20.6	720	797
A7I0325	3	25	6.1	23.7	24.8	1125	1206
A7I0335	3	35	7.2	26.6	27.7	1575	1649
A7I0350	3	50	8.9	31.8	33	2250	2195
A7I0370	3	70	10.6	35.3	36.5	3150	3124
A7I0395	3	95	12.3	40.9	42.6	4275	4100
A7I03120	3	120	13.8	43.4	45.1	5400	4723
A7I03150	3	150	15.5	47.8	49.5	6750	5916
A7I03185	3	185	17	53.1	55.4	8325	7271
A7I04015	4	1.5	1.5	10.5	11.1	90	173
A7I04025	4	2.5	1.9	12.9	13.5	150	274
A7I04040	4	4	2.4	14.3	14.9	240	356
A7I04060	4	6	2.9	15.7	16.3	360	459
A7I0410	4	10	3.8	19.1	20.2	600	729
A7I0416	4	16	4.8	22	23.1	960	1038
A7I0425	4	25	6.1	27	28.1	1500	1576
A7I0435	4	35	7.2	29.2	30.4	2100	2078
A7I0450	4	50	8.9	35	36.2	3000	2967
A7I0470	4	70	10.6	38.8	40.5	4200	3931
A7I0495	4	95	12.3	45.1	46.8	5700	5165
A7I04120	4	120	13.8	50	51.8	7200	6152
A7I04150	4	150	15.5	55	57.3	9000	7537
A7I04185	4	185	17	61	63.3	11100	9420
A7I05015	5	1.5	1.5	11.4	12	113	214
A7I05025	5	2.5	1.9	14	14.6	188	328
A7I05040	5	4	2.4	15.6	16.2	300	434
A7I05060	5	6	2.9	17.5	18.6	450	594
A7I0510	5	10	3.8	20.9	22	750	898
A7I0516	5	16	4.8	24.1	25.2	1200	1283
A7I0525	5	25	6.1	29.6	30.8	1875	1965
A7I07015	7	1.5	1.5	14.5	15.1	158	313
A7I07025	7	2.5	1.9	16.8	17.4	263	461
A7I12015	12	1.5	1.5	16.8	17.4	270	422
A7I12025	12	2.5	1.9	19.5	20.6	450	653
A7I18015	18	1.5	1.5	19.4	20.5	405	613
A7I18025	18	2.5	1.9	23.3	24.4	675	922
A7I24015	24	1.5	1.5	20.9	22	540	752
A7I24025	24	2.5	1.9	25.2	26.3	900	1147



ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>		CONDUCTOR DIAMETER mm	MINIMUM OVERALL DIAMETER mm	MAXIMUM OVERALL DIAMETER mm	MAXIMUM TENSILE LOAD N	NOMINAL WEIGHT kg/km
		Phase Conductor	Earth Conductor					
A7I1050	3 + 3	50	25/3E	8.9	32.3	33.5	2250	2481
A7I1070	3 + 3	70	35/3E	10.6	35.7	37.4	3150	3319
A7I1095	3 + 3	95	50/3E	12.3	41.5	43.2	4275	4324
A7I1120	3 + 3	120	70/3E	13.8	45	46.7	5400	5476
A7I1150	3 + 3	150	70/3E	15.5	49.5	51.3	6750	6468
A7I1185	3 + 3	185	95/3E	17	54.9	57.2	8325	8298
A7I1240	3 + 3	240	120/3E	19.5	60.9	63.2	10800	10473

## CURRENT CARRYING CAPACITY

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	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

Ambient temperature of 30°C



## VOLTAGE DROP

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	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	4.20
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.