(N)SHTÖU-O/J 0.6/1kV Cable

Eland Product Group:A7M

APPLICATION

Flexible cable designed for power and signalling mobile connections under severe mechanical stresses (tensile strength and torsion) for heavy duty conditions. abrasion and crushing. The cable is typically used in cable winding reels for harbour cranes. container cranes, conveyors, handling machines and mining and tunnelling equipment.

CHARACTERISTICS

Voltage Rating Uo/U
0.6/1kV

Test Voltage
4kV

Maximum Torsional Stress: ± 25°/m
Maximum Working Speed: 180m/min

Temperature Rating
Flexing: -25°C to + 90°C
Fixed: -40°C to + 90°C

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

CONSTRUCTION

Conductor
Class 5 Flexible Tinned Copper

Insulation
Rubber compound

Inner Sheath
Rubber compound

Anti-Twisting Element
Polyester Braid

Outer Sheath
Rubber compound

Core Identification
3 Core: Green/Yellow Blue Brown
4 Core: Green/Yellow Brown Black Grey
5 Core: Green/Yellow Blue Brown Black Grey
7 Core and above: Black with White numerals + Green/Yellow

Note:
(N)SHTÖU-O & NSHTÖU-O are available without Green/Yellow core
(N)SHTÖU-O/J 7 core and above available with a Central Filler

Outer Sheath Colour
Black or Yellow

STANDARDS

VDE 0250 Part 814, VDE 0295, IEC 60228, VDE 0293, HD 308S2, VDE 0207 Part 20-21, IEC 60811,ISO 4892-2,

Flame Retardant according to IEC/EN 60332-1-2
Special Test: Reeling test

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.

UKAS ISO/IEC 170 5 Testing laboratory accreditation 8578
bsi. ISO 9001 Quality Management FS 672069
ISO 14001 Environmental Management EMS 672067
ISO 45001 Occupational Health and Safety Management OHS 672066

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™.

bsi. RoHS Trusted KITEMARK™ KM 634267
RoHS

(N)SHTÖU-O/J DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL DIAMETER OF CONDUCTOR mm	NOMINAL OVERALL DIAMETER mm	MAXIMUM TENSILE LOAD N	NOMINAL WEIGHT kg/km
A7M3G0015**	3G	1.5	1.5	14.3	135	270
A7M3G0025**	3G	2.5	1.9	15.8	225	330
A7M3G0040**	3G	4	2.4	17.5	360	420
A7M3G0060**	3G	6	2.9	18.8	540	520
A7M3G010**	3G	10	3.8	22.4	900	750
A7M3G016**	3G	16	4.8	24.5	1440	970
A7M3G025**	3G	25	6.9	30.1	2250	1450
A7M3G035**	3G	35	7.8	32.7	3150	1890
A7M3G050**	3G	50	9.3	37.8	4500	2600
A7M3G070**	3G	70	11.1	41.9	6300	3340
A7M3G095**	3G	95	12.7	47.8	8550	4380
A7M3G120**	3G	120	14.5	51.4	10800	5330
A7M3G150**	3G	150	16.7	56.9	13500	6700
A7M3G185**	3G	185	17.6	64.5	16650	8100
A7M3G240**	3G	240	20.6	69.0	21600	10850
A7M03035**	3 + 3G	35 + 16	7.8	32.6	3150	2100
A7M03050**	3 + 3G	50 + 25	9.3	37.8	4500	2800
A7M03070**	3 + 3G	70 + 35	11.1	41.9	6300	3790
A7M03095**	3 + 3G	95 + 50	12.7	47.8	8550	4710
A7M03120**	3 + 3G	120 + 70	14.5	51.4	10800	5840
A7M03150**	3 + 3G	150 + 70	16.7	56.9	13500	7080
A7M03185**	3 + 3G	185 + 95	17.6	64.5	16650	8940
A7M03240**	3 + 3G	240 + 120	20.6	69.0	21600	11320
A7M4G0015**	4G	1.5	1.5	15.1	180	300
A7M4G0025**	4G	2.5	1.9	17.2	300	400
A7M4G0040**	4G	4	2.4	18.7	480	500
A7M4G0060**	4G	6	2.9	20.1	720	620
A7M4G010**	4G	10	3.8	24.0	1200	890
A7M4G016**	4G	16	4.8	26.0	1920	1170
A7M4G025**	4G	25	6.9	33.2	3000	1900
A7M4G035**	4G	35	7.8	35.4	4200	2340
A7M4G050**	4G	50	9.3	41.5	6000	3250
A7M4G070**	4G	70	11.1	45.7	8400	4180
A7M4G095**	4G	95	12.7	52.1	11400	5500
A7M4G120**	4G	120	14.5	58.0	14400	6950
A7M4G150**	4G	150	16.7	64.6	18000	8570
A7M4G185**	4G	185	17.6	69.4	22200	10160
A7M5G0015**	5G	1.5	1.5	16.0	225	350
A7M5G0025**	5G	2.5	1.9	18.3	375	460
A7M5G0040**	5G	4	2.4	19.9	600	580
A7M5G0060**	5G	6	2.9	22.3	900	750
A7M5G010**	5G	10	3.8	25.8	1500	1060
A7M5G016**	5G	16	4.8	28.0	2400	1410
A7M5G025**	5G	25	6.9	36.0	3750	2290
A7M5G035**	5G	35	7.8	39.8	5250	2940
A7M5G050**	5G	50	9.3	45.0	7500	3940
A7M5G070**	5G	70	11.1	51.5	10500	5300

(N)SHTÖU-O/J DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL DIAMETER OF CONDUCTOR mm	NOMINAL OVERALL DIAMETER mm	MAXIMUM TENSILE LOAD N	NOMINAL WEIGHT kg/km
A7K7G0015**	7G	1.5	1.5	17.6	2315	390
A7K7G0025**	7G	2.5	1.9	19.7	2525	490
A7K12G0015**	12G	1.5	1.5	23.3	2540	690
A7K12G0025**	12G	2.5	1.9	26.2	2900	930
A7K18G0015**	18G	1.5	1.5	23.0	2810	720
A7K18G0025**	18G	2.5	1.9	25.9	3350	960
A7K24G0015**	24G	1.5	1.5	26.9	3080	1000
A7K24G0025**	24G	2.5	1.9	30.3	3800	1320
A7K30G0015**	30G	1.5	1.5	29.8	3350	1260
A7K30G0025**	30G	2.5	1.9	33.2	4250	1640
A7K36G0015**	36G	1.5	1.5	30.2	3620	1310
A7K36G0025**	36G	2.5	1.9	33.6	4700	1720
A7K44G0015**	44G	1.5	1.5	33.6	3980	1590
A7K44G0025**	44G	2.5	1.9	39	5300	2240
A7K48G0015**	48G	1.5	1.5	34.0	4160	1680
A7K48G0025**	48G	2.5	1.9	39.9	5600	2380
A7K56G0015**	56G	2.5	1.9	38.5	4520	2090
A7K56G0025**	56G	2.5	1.9	44.8	6200	2940

CURRENT CARRYING CAPACITY

NOMINAL CROSS SECTIONAL AREA mm²	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	42	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

DE-RATING FACTORS

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

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