

(N)SHTÖU-O/J 0.6/1kV Cable



Eland Product Group: A7M, A7K

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
3kV

Twist Limits: 50°/m
Travel Speed Up To: 100 m/min

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

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

DIN VDE 0250-814, IEC 60228, DIN VDE 0207/20, DIN VDE 0207/21, DIN VDE 0298-4, DIN VDE 0298-3
Flame propagation: PN-EN 60332-1-2, IEC 60332-1-2
Excellent tear, impact and abrasion resistance
Oil resistant: PN-EN 60811-404, IEC 60811-404
UV resistant: UL 2556, ISO 4892-2
Ozone resistant: PN-ISO 1431-1

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



SCIENCE
BASED
TARGETS

**BUSINESS
AMBITION FOR 1.5°C**



REGULATORY COMPLIANCE

This cable meets the requirements of the Low Voltage Directive 2014/35/EU, the RoHS Directive 2015/65/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	NOMINAL CONDUCTOR DIAMETER mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km	MAXIMUM TENSILE LOAD N
A7M3G0015YW	3G	1.5	1.5	11.9	205	135
A7M3G0025YW	3G	2.5	2.1	13.5	271	225
A7M3G0040YW	3G	4	2.7	16.9	418	360
A7M3G0060YW	3G	6	3	17.6	487	540
A7M3G010YW	3G	10	4.1	21.6	764	900
A7M3G016YW	3G	16	5.2	23.8	1014	1440
A7M3G025YW	3G	25	6.6	28.7	1501	2250
A7M3G035YW	3G	35	7.5	32.2	1975	3150
A7M3G050YW	3G	50	9.3	38.3	2774	4500
A7M3G070YW	3G	70	11.1	42.1	3568	6300
A7M3G095YW	3G	95	13	48.8	4746	8550
A7M3G120YW	3G	120	14.5	52.0	5730	10800
A7M3G150YW	3G	150	16.2	56.6	6991	13500
A7M3G185YW	3G	185	18.3	63.8	8572	16650
A7M3G240YW	3G	240	20.7	71.6	11227	21600
A7M4G0015YW	4G	1.5	1.5	12.7	238	180
A7M4G0025YW	4G	2.5	2.1	15.7	362	300
A7M4G0040YW	4G	4	2.7	18.1	495	480
A7M4G0060YW	4G	6	3	19.0	583	720
A7M4G010YW	4G	10	4.1	23.3	924	1200
A7M4G016YW	4G	16	5.2	27.0	1307	1920
A7M4G025YW	4G	25	6.6	32.6	1951	3000
A7M4G035YW	4G	35	7.5	34.9	2434	4200
A7M4G050YW	4G	50	9.3	41.5	3428	6000
A7M4G070YW	4G	70	11.1	45.8	4442	8400
A7M4G095YW	4G	95	13	53.1	5905	11400
A7M4G120YW	4G	120	14.5	58.6	7417	14400
A7M4G150YW	4G	150	16.2	63.6	9062	18000
A7M4G185YW	4G	185	18.3	71.5	11048	22200
A7M5G0015YW	5G	1.5	1.5	13.6	276	225
A7M5G0025YW	5G	2.5	2.1	16.8	420	375
A7M5G0040YW	5G	4	2.7	19.5	581	600
A7M5G0060YW	5G	6	3	21.3	728	900
A7M5G010YW	5G	10	4.1	25.2	1104	1500
A7M5G016YW	5G	16	5.2	29.0	1562	2400
A7M5G025YW	5G	25	6.6	35.3	2339	3750
A7M5G035YW	5G	35	7.5	39.3	3066	5250
A7M5G050YW	5G	50	9.3	45.2	4142	7500
A7M5G070YW	5G	70	11.1	51.7	5613	10500
A7K7G0015YW	7G	1.5	1.5	16.9	410	2315
A7K7G0025YW	7G	2.5	2.1	19.4	556	2525
A7K12G0015YW	12G	1.5	1.5	22.6	724	2540
A7K12G0025YW	12G	2.5	2.1	26.2	1002	2900
A7K18G0015YW	18G	1.5	1.5	24.9	893	2810
A7K18G0025YW	18G	2.5	2.1	30.1	1320	3350
A7K24G0015YW	24G	1.5	1.5	25.9	1028	3080

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ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL CONDUCTOR DIAMETER mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km	MAXIMUM TENSILE LOAD N
A7K24G0025YW	24G	2.5	2.5	31.3	1527	3800
A7K30G0015YW	30G	1.5	1.5	29.8	1333	3350
A7K30G0025YW	30G	2.5	2.1	36.3	2000	4250
A7K36G0015YW	36G	1.5	1.5	32.4	1547	3620
A7K36G0025YW	36G	2.5	2.1	39.4	2322	4700
A7K42G0015YW	42G	1.5	1.5	34.8	1795	3890
A7K42G0025YW	42G	2.5	2.1	42.0	2671	5150
A7K44G0015YW	44G	1.5	1.5	34.8	1817	3980
A7K44G0025YW	44G	2.5	2.1	42.0	2706	5300
A7K48G0015YW	48G	1.5	1.5	34.0	1680	4160
A7K48G0025YW	48G	2.5	2.1	39.9	2380	5600
A7K50G0015YW	50G	1.5	1.5	36.7	2032	4250
A7K50G0015YW	50G	2.5	2.1	44.4	3030	5750
A7K56G0015YW	56G	1.5	1.5	38.5	2090	4520
A7K56G0025YW	56G	2.5	2.5	47.1	3443	6200

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm ²	MAXIMUM CONDUCTOR DC RESISTANCE AT 20°C Ω/Km		TWIST LIMITS /m	TRAVEL SPEED UP TO m/min
	Plain Wires	Tinned Wires		
1.5	13.3	13.7	50	100
2.5	7.98	8.21	50	100
4	4.95	5.09	50	100
6	3.3	3.39	50	100
10	1.91	1.95	50	100
16	1.21	1.24	50	100
25	0.78	0.795	50	100
35	0.554	0.565	50	100
50	0.386	0.393	50	100
70	0.272	0.277	50	100
95	0.206	0.21	50	100
120	0.161	0.164	50	100
150	0.129	0.132	50	100
185	0.106	0.108	50	100

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



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	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

MINIMUM BENDING RADIUS

OUTER DIAMETER OF CABLE mm	FIXED INSTALLATION X Outer Diameter	ON DRUMS X Outer Diameter	ON DEFLECTION PULLEYS X Outer Diameter	MOVING FREELY X Outer Diameter
>8 ≤ 12	3	5	7.5	4
>12 ≤ 20	4	5	7.5	5
>20	4	5	7.5	5

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.