

(N)TSCGECEWÖU 3.6/6kV and 6/10kV ATB Cable



Eland Product Group: A7HA

APPLICATION

Flexible cable for the energy supply to heavy mobile equipment such as drag lines, shovels, dredges and drills under extreme mechanical stresses and abrasion during trailing operation in opencast mines. Suitable for indoor and outdoor applications.

CHARACTERISTICS

Voltage Rating U_o/U

3.6/6kV
6/10kV

Test Voltage

3.6/6kV: 11kV
6/10kV: 17kV

Ambient Temperature

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

Maximum Short Circuit Temperature

+250°C

Minimum Bending Radius

Fixed: 6 x overall diameter
Flexed: 10 x overall diameter

CONSTRUCTION

Phase Conductor

Class 5 tinned copper conductor

Insulation

Rubber compound

Semi-Conductive Layers

Semi-conductive tape over the conductor and inner and outer semi-conductive rubber layer on the insulation

Protective Earth Conductor

Individual copper wire braid

Central Filler

Rubber compound on a textile polyester support

Inner Sheath

Abrasion resistant rubber compound

Anti-Torsion Braid

Polyester braid between the inner and outer sheath

Outer Sheath

Abrasion resistant rubber compound

Sheath Colour

● Yellow

STANDARDS

VDE 0250 Part 813, 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 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.	VOLTAGE kV	NO. OF CORES (PHASE + EARTH)	NOMINAL CROSS SECTIONAL AREA mm ²		CONDUCTOR DIAMETER mm	MINIMUM OVERALL DIAMETER mm	MAXIMUM OVERALL DIAMETER mm	MAXIMUM TENSILE LOAD N	NOMINAL WEIGHT kg/km
			Phase Conductor	Earth Conductor					
A7HA06KV1025YW	3.6/6	3+3	25	25/3E	6.8	43.4	45.1	1125	2850
A7HA06KV1035YW	3.6/6	3+3	35	25/3E	7.8	45	46.7	1575	3200
A7HA06KV1050YW	3.6/6	3+3	50	25/3E	9.4	48.1	49.8	2250	3850
A7HA06KV1070YW	3.6/6	3+3	70	35/3E	11.2	53.7	55.5	3150	4980
A7HA06KV1095YW	3.6/6	3+3	95	50/3E	12.7	58.4	60.2	4275	6200
A7HA06KV1120YW	3.6/6	3+3	120	70/3E	14.4	62.9	65.2	5400	7580
A7HA06KV1150YW	3.6/6	3+3	150	70/3E	16.3	69.3	71.7	6750	9090
A7HA10KV1025YW	6/10	3+3	25	25/3E	6.8	43.4	45.7	1125	2890
A7HA10KV1035YW	6/10	3+3	35	25/3E	7.8	45	47.3	1575	3240
A7HA10KV1050YW	6/10	3+3	50	25/3E	9.4	48.1	50.4	2250	3890
A7HA10KV1070YW	6/10	3+3	70	35/3E	11.2	53.7	56.1	3150	5020
A7HA10KV1095YW	6/10	3+3	95	50/3E	12.7	58.4	60.8	4275	6240
A7HA10KV1120YW	6/10	3+3	120	70/3E	14.4	62.9	65.9	5400	7620
A7HA10KV1150YW	6/10	3+3	150	70/3E	16.3	69.3	72.4	6750	9130

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
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

Ambient temperature of 30°C

VOLTAGE DROP

NOMINAL CROSS SECTIONAL AREA mm ²	POWER FACTOR			
	0.7	0.8	0.9	1
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

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

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.