



# (N)TSCGECEWÖU - 3.6/6kV and 6/10kV Submersible Cable



Eland Product Group: A7HS

## APPLICATION

Flexible supply cable for use in permanent immersion in salty and brackish water up to 300 metres under high mechanical stresses. For applications such as pumps, dredgers and floating docks. It is suitable for trailing operations of opencast mining equipment. Suitable for indoor and outdoor applications.

## CHARACTERISTICS

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

3.6/6kV  
6/10kV

### Test Voltage

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

### Ambient Temperature

Fixed: -40°C to +80°C;  
Flexed: -25°C to +60°C

### Maximum Permissible Water Temperature

+40°C

### Minimum Bending Radius

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

### Submersible

300mtr

## 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

EPR rubber compound with water proofing

### Outer Sheath

CM rubber compound water proofing

### Sheath Colour

● Black

## STANDARDS

VDE 0250 Part 813, HD 22.16, VDE 0295, EN 60228

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

## THE CABLE LAB<sup>®</sup>

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](http://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 RoHS Directive 2015/65/EU and Reach Directive EC 1907/2006. RoHS compliance has been tested and confirmed by The Cable Lab<sup>®</sup>.





## DIMENSIONS

ELAND PART NO.	VOLTAGE kV	NO. OF CORES (PHASE + EARTH)	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					
A7HS06KV1025BK	3.6/6	3+3	25	25/3E	6.8	43.4	45.1	1125	2830
A7HS06KV1035BK	3.6/6	3+3	35	25/3E	7.8	45	46.7	1575	3180
A7HS06KV1050BK	3.6/6	3+3	50	25/3E	9.4	48.1	49.8	2250	3830
A7HS06KV1070BK	3.6/6	3+3	70	35/3E	11.2	53.7	55.5	3150	4960
A7HS06KV1095BK	3.6/6	3+3	95	50/3E	12.7	58.4	60.2	4257	6170
A7HS06KV1120BK	3.6/6	3+3	120	70/3E	14.4	62.9	65.2	5400	7540
A7HS06KV1150BK	3.6/6	3+3	150	70/3E	16.3	69.3	71.7	6750	9050
A7HS06KV1185BK	3.6/6	3+3	185	95/3E	17.6	72.1	74.5	8325	10350
A7HS10KV1025BK	6/10	3+3	25	25/3E	6.8	43.4	45.7	1125	2870
A7HS10KV1035BK	6/10	3+3	35	25/3E	7.8	45	47.3	1575	3220
A7HS10KV1050BK	6/10	3+3	50	25/3E	9.4	48.1	50.4	2250	3870
A7HS10KV1070BK	6/10	3+3	70	35/3E	11.2	53.7	56.1	3150	5000
A7HS10KV1090BK	6/10	3+3	95	50/3E	12.7	58.4	60.8	4257	6210
A7HS10KV1120BK	6/10	3+3	120	70/3E	14.4	62.9	65.9	5400	7580
A7HS10KV1150BK	6/10	3+3	150	70/3E	16.3	69.3	72.4	6750	9090
A7HS10KV1185BK	6/10	3+3	185	95/3E	17.6	72.1	75.2	8325	10390

## 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
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

Ambient temperature of 30°C



## VOLTAGE DROP

NOMINAL GROSS SECTIONAL AREA mm <sup>2</sup>	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
185	0.25	0.27	0.27	0.24

## 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.