



(N)TSCGECEWÖU - 8.7/15kV and 12/20kV 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 used in applications such as pumps, dredges and floating docks. It is suitable for trailing operations of opencast mining equipment. Suitable for indoor and outdoor applications.

CHARACTERISTICS

Voltage Rating U_0/U

8.7/15kV
12/20kV

Test Voltage

8.7/15kV: 24kV
12/20kV: 29kV

Ambient Temperature

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

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					
A7HS15KV1025BK	8.7/15	3+3	25	25/3E	6.8	49.4	51.2	1125	3430
A7HS15KV1035BK	8.7/15	3+3	35	25/3E	7.8	50.9	52.7	1575	3800
A7HS15KV1050BK	8.7/15	3+3	50	25/3E	9.4	55.8	57.6	2250	4700
A7HS15KV1070BK	8.7/15	3+3	70	35/3E	11.2	59.6	61.4	3150	5670
A7HS15KV1095BK	8.7/15	3+3	95	50/3E	12.7	63.3	65.6	4257	6830
A7HS15KV1120BK	8.7/15	3+3	120	70/3E	14.4	69.8	72.2	5400	8520
A7HS20KV1025BK	12/20	3+3	25	25/3E	6.8	55.9	57.7	1125	4160
A7HS20KV1035BK	12/20	3+3	35	25/3E	7.8	57.3	59.1	1575	4560
A7HS20KV1050BK	12/20	3+3	50	25/3E	9.4	60.5	62.3	2250	5300
A7HS20KV1070BK	12/20	3+3	70	35/3E	11.2	66.1	67.9	3150	6580
A7HS20KV1095BK	12/20	3+3	95	50/3E	12.7	69.8	72.2	4257	7740

CURRENT CARRYING CAPACITY

NOMINAL CROSS SECTIONAL AREA mm ²	LAYING ON THE FLOOR Amps	REELED Amps						
		1 Layer	2 Layer	3 Layer	4 Layer	5 Layer	6 Layer	7 Layer
25	139	111	85	68	58	53	38	31
35	172	138	105	84	72	65	46	38
50	216	173	132	106	91	82	58	48
70	265	212	162	130	111	101	72	58
95	319	255	195	156	134	121	86	70
120	371	297	226	182	156	141	100	82

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

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.