



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



Eland Product Group: A7HR

APPLICATION

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

CHARACTERISTICS

Voltage Rating U₀/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

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

Earth Conductor

Class 5 tinned copper conductor

Central Filler

Semi-conductive compound on a textile polyester support

Inner Sheath

EPR rubber compound 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

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.



REGULATORY COMPLIANCE

This cable meets the requirements of 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™.





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					
A7HR06KV1025BK	3.6/6	3+3	25	25/3	6.8	39.9	41.6	1500	2580
A7HR06KV1035BK	3.6/6	3+3	35	25/3	7.8	42.9	44.6	2100	3080
A7HR06KV1050BK	3.6/6	3+3	50	25/3	9.4	46	47.7	3000	3710
A7HR06KV1070BK	3.6/6	3+3	70	35/3	11.2	49.8	51.6	4200	4670
A7HR06KV1095BK	3.6/6	3+3	95	50/3	12.7	55.8	57.6	5700	5880
A7HR06KV1120BK	3.6/6	3+3	120	70/3	14.4	59.6	61.4	7200	7140
A7HR06KV1150BK	3.6/6	3+3	150	70/3	16.3	66	68.3	9000	8690
A7HR06KV1185BK	3.6/6	3+3	185	95/3	17.6	67.9	70.2	11100	9890
A7HR10KV1025BK	6/10	3+3	25	25/3	6.8	39.9	42.2	1500	2620
A7HR10KV1035BK	6/10	3+3	35	25/3	7.8	42.9	45.2	2100	3120
A7HR10KV1050BK	6/10	3+3	50	25/3	9.4	46	48.3	3000	3750
A7HR10KV1070BK	6/10	3+3	70	35/3	11.2	49.8	52.2	4200	4710
A7HR10KV1095BK	6/10	3+3	95	50/3	12.7	55.8	58.2	5700	5920
A7HR10KV1120BK	6/10	3+3	120	70/3	14.4	59.6	62.1	7200	7180
A7HR10KV1150BK	6/10	3+3	150	70/3	16.3	66	69	9000	8730
A7HR10KV1185BK	6/10	3+3	185	95/3	17.6	67.9	70.9	11100	9930

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
185	461	484	369	281	226	194	175	124	101

Ambient temperature of 30°C



VOLTAGE DROP

NOMINAL GROSS 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
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.