

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



Eland Product Group: A7HN

APPLICATION

Flexible cable for fixed energy distribution in mines and alongside material handling 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

Maximum Short Circuit Temperature

+250°C

Minimum Bending Radius

Fixed: 6 x overall diameter

CONSTRUCTION

Phase Conductor

Class 5 tinned copper conductor

Insulation

Rubber compound Type 3GI3

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

Rubber compound Type GM1b

Outer Sheath

Rubber compound Type 5GM3

Sheath Colour

● Red

STANDARDS

VDE 0250 Part 813, HD 22.16, VDE 0295 (IEC 60228)

Flame Retardant according to BS EN/IEC 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.



8578



FS 672069



EMS 672067



OHS 672066

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™.



KM 634267





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	NOMINAL WEIGHT kg/km
			Phase Conductor	Earth Conductor				
A7HN06KV1025RD	3.6/6	3+3	25	25/3E	6.8	43.9	45.6	2870
A7HN06KV1035RD	3.6/6	3+3	35	25/3E	7.8	45.4	47.1	3230
A7HN06KV1050RD	3.6/6	3+3	50	25/3E	9.4	48.5	50.3	3860
A7HN06KV1070RD	3.6/6	3+3	70	35/3E	11.2	54.1	55.9	5010
A7HN06KV1095RD	3.6/6	3+3	95	50/3E	12.7	58.4	60.2	6150
A7HN06KV1120RD	3.6/6	3+3	120	70/3E	14.4	62.5	64.8	7450
A7HN06KV1150RD	3.6/6	3+3	150	70/3E	16.3	68.9	71.3	8980
A7HN06KV1185RD	3.6/6	3+3	185	90/3E	17.6	71.9	74.3	10290
A7HN10KV1025RD	6/10	3+3	25	25/3E	6.8	43.9	46.2	2910
A7HN10KV1035RD	6/10	3+3	35	25/3E	7.8	45.4	47.7	3270
A7HN10KV1050RD	6/10	3+3	50	25/3E	9.4	48.5	50.9	3900
A7HN10KV1070RD	6/10	3+3	70	35/3E	11.2	54.1	56.5	5050
A7HN10KV1095RD	6/10	3+3	95	50/3E	12.7	58.4	60.8	6190
A7HN10KV1120RD	6/10	3+3	120	70/3E	14.4	62.5	65.5	7490
A7HN10KV1150RD	6/10	3+3	150	70/3E	16.3	68.9	72	9020
A7HN10KV1185RD	6/10	3+3	185	90/3E	17.6	71.9	75	10330

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm ²	MAXIMUM TENSILE LOAD N
25	1125
35	1575
50	2250
70	3150
95	4275
120	5400
150	6750
185	8325

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.