

(N)TSCGECEWÖU 8.7/15kV and 12/20kV 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 U₀/U

8.7/15kV
12/20kV

Test Voltage

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

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 (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	MAXIMUM TENSILE LOAD N	NOMINAL WEIGHT kg/km
			Phase Conductor	Earth Conductor					
A7HA15KV1025YW	8.7/15	3+3	25	25/3E	6.8	46.9	48.6	1125	3180
A7HA15KV1035YW	8.7/15	3+3	35	25/3E	7.8	48.3	50	1575	3570
A7HA15KV1050YW	8.7/15	3+3	50	25/3E	9.4	53.3	55.1	2250	4420
A7HA15KV1070YW	8.7/15	3+3	70	35/3E	11.2	57.1	58.9	3150	5410
A7HA15KV1095YW	8.7/15	3+3	95	50/3E	12.7	60.8	63.1	4257	6500
A7HA15KV1120YW	8.7/15	3+3	120	70/3E	14.4	67.2	69.5	5400	8150
A7HA20KV1025YW	12/20	3+3	25	25/3E	6.8	49.4	51.2	1125	3450
A7HA20KV1035YW	12/20	3+3	35	25/3E	7.8	50.9	52.7	1575	3820
A7HA20KV1050YW	12/20	3+3	50	25/3E	9.4	55.8	57.6	2250	4720
A7HA20KV1070YW	12/20	3+3	70	35/3E	11.2	59.6	61.4	3150	5690
A7HA20KV1095YW	12/20	3+3	95	50/3E	12.7	63.3	65.6	4257	6860

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.