



(N)TSCGECEWÖU 8.7/15kV and 12/20kV ATB Cable (Ground Check Conductor)



Eland Product Group: A7HG

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. Special construction with additional ground check conductor. Suitable for indoor and outdoor applications.

CHARACTERISTICS

Voltage Rating U_o/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 +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

Earth Conductor

Individual copper braid

2 x copper earth conductors

1 x copper checking earth wiring conductor

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, EN 60228

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

THE CABLE LAB[®]

AN ISO/IEC 17025 AND IECEE 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 + GROUND CHECK CONDUCTOR)	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	Ground Check Conductor					
A7HG15KV025YW	8.7/15	3+2+1	25	25/2	10	6.8	53.9	59.3	1125	4490
A7HG15KV035YW	8.7/15	3+2+1	35	25/2	10	7.8	55.3	60.8	1575	4920
A7HG15KV050YW	8.7/15	3+2+1	50	25/2	10	9.4	58.5	64.2	2250	5700
A7HG15KV070YW	8.7/15	3+2+1	70	35/2	10	11.2	64.2	70.5	3150	7200
A7HG15KV095YW	8.7/15	3+2+1	95	50/2	10	12.7	67.9	74.4	4257	8480
A7HG20KV025YW	12/20	3+2+1	25	25/2	10	6.8	58.2	63.9	1125	5110
A7HG20KV035YW	12/20	3+2+1	35	25/2	10	7.8	59.8	65.7	1575	5580
A7HG20KV050YW	12/20	3+2+1	50	25/2	10	9.4	64.6	70.9	2250	6550
A7HG20KV070YW	12/20	3+2+1	70	35/2	10	11.2	68.3	74.8	3150	7800

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

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

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.