

(N)TSKCGEWÖU Cable



Eland Product Group: A7Z

APPLICATION

Flexible reeling cable with reduced weight and dimensions for high and extreme mechanical stresses, e.g. torsional stress, deflection into different planes and high reeling speed. Also usable for reeling application in underground and opencast mining.

CHARACTERISTICS

Voltage Rating U₀/U
 3.6/6kV, 6/10kV, 8.7/15kV, 12/20kV

Test Voltage
 3.6/6kV: 11kV | 6/10kV: 17kV | 8.7/15kV: 24kV | 12/20kV: 29kV

Maximum Torsional Stress: ± 25°/m
Maximum Tensile Load: 30N/mm²
Maximum Working Speed: 240m/min

Temperature Rating
 Maximum Short-Circuit temperature: 250°C
 Flexing: -30°C to + 90°C
 Fixed: -50°C to + 90°C

Minimum Bending Radius
 Fixed: 6x overall diameter
 Flexed: 10 x overall diameter

CONSTRUCTION

Phase Conductor
 Class 5 Flexible Tinned Copper

Insulation
 Rubber Compound (Phase Conductor only)

Semi-Conductive layers with semi-conductive insulation
 (Phase Conductor only)
 Semi-conductive tape over the conductor and inner and outer semi-conductive rubber layer on the insulation

Earth Conductor
 Class 5 Flexible Tinned Copper Conductor

Central Filler
 Semi-conductive compound

Fibre Optics
 50/125 Multimode, 62.5/125 Multimode, 9/125 Singlemode

Inner Sheath
 Rubber Compound

Anti-twist element
 Polyester braid

Outer Sheath
 Rubber Compound

Outer Sheath Colour
 ● Red

STANDARDS

Based on DIN VDE 0250 Part 813, VDE 0295 (IEC 60228), VDE 0207 Part 20 & Part 21, IEC 60811-404, IEC60811-403, IEC 60332-1-2, ISO 4892-2, Special Reeling Test

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	NOMINAL CROSS SECTIONAL AREA OF PHASE CONDUCTOR mm ²	NOMINAL CROSS SECTIONAL AREA OF EARTH CONDUCTOR mm ²	NOMINAL OVERALL DIAMETER mm	MAXIMUM TENSILE LOAD N	NOMINAL WEIGHT kg/km
A7Z06KV03025RD	3.6/6	3+ 3	25	25	21.8	1500	2380
A7Z06KV03035RD	3.6/6	3+ 3	35	25	43.8	2100	2920
A7Z06KV03050RD	3.6/6	3+ 3	50	25	46.9	3000	3520
A7Z06KV03070RD	3.6/6	3+ 3	70	35	50.7	4200	4430
A7Z06KV03095RD	3.6/6	3+ 3	95	50	56.7	5700	5580
A7Z06KV03120RD	3.6/6	3+ 3	120	70	60.5	7200	6770
A7Z06KV03150RD	3.6/6	3+ 3	150	70	67.2	9000	8260
A7Z10KV03025RD	6/10	3+ 3	25	25	39.8	1500	2380
A7Z10KV03035RD	6/10	3+ 3	35	25	43.8	2100	2920
A7Z10KV03050RD	6/10	3+ 3	50	25	46.9	3000	3520
A7Z10KV03070RD	6/10	3+ 3	70	35	50.7	4200	4430
A7Z10KV03095RD	6/10	3+ 3	95	50	56.7	5700	5640
A7Z10KV03120RD	6/10	3+ 3	120	70	60.5	7200	6830
A7Z10KV03150RD	6/10	3+ 3	150	70	67.2	9000	8320
A7Z15KV03025RD	8.7/15	3+ 3	25	25	45.6	1500	2860
A7Z15KV03035RD	8.7/15	3+ 3	35	25	47.0	2100	3210
A7Z15KV03050RD	8.7/15	3+ 3	50	25	50.3	3000	3830
A7Z15KV03070RD	8.7/15	3+ 3	70	35	55.9	4200	5000
A7Z15KV03095RD	8.7/15	3+ 3	95	50	59.3	5700	5870
A7Z15KV03120RD	8.7/15	3+ 3	120	70	65.0	7200	7370
A7Z15KV03150RD	8.7/15	3+ 3	150	70	69.7	9000	8590
A7Z20KV03025RD	12/20	3+ 3	25	25	47.3	1500	3080
A7Z20KV03035RD	12/20	3+ 3	35	25	49.7	2100	3460
A7Z20KV03050RD	12/20	3+ 3	50	20	54.6	3000	4310
A7Z20KV03070RD	12/20	3+ 3	70	35	58.4	4200	5310
A7Z20KV03095RD	12/20	3+ 3	95	50	62.0	5700	6180
A7Z20KV03120RD	12/20	3+ 3	120	70	67.6	7200	7730
A7Z20KV03150RD	12/20	3+ 3	150	70	72.2	9000	8970

CURRENT CARRYING CAPACITY

3.6/6kV and 6/10kV

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

Ambient temperature of 30°C

8.7/15kV and 12/20kV

NOMINAL CROSS SECTIONAL AREA mm ²	LAYING ON THE FLOOR Amps	REELED						
		1 Layer Amps	2 Layer Amps	3 Layer Amps	4 Layer Amps	5 Layer Amps	6 Layer Amps	7 Layer Amps
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	132	182	156	141	100	82
150	428	342	251	210	180	163	116	94

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.