

## (N)SHTOU-O/J PUR 0.6/1kV Cable



Eland Product Group: A7N

### APPLICATION

Flexible cable designed for power and signalling mobile connections, under severe mechanical stresses (tensile strength and torsion), for heavy duty conditions, abrasion and crushing. The cable is typically used in cable winding reels for harbour cranes, container cranes, conveyors, handling machines and mining and tunnelling equipment. The halogen free polyurethane sheath grants more lightness by retaining the mechanical properties and abrasion resistance.

### CHARACTERISTICS

**Voltage Rating** U<sub>0</sub>/U  
0.6/1kV

**Test Voltage**  
4kV

**Maximum Torsional Stress:** ± 25°/m  
**Maximum Tensile Load:** 30N/mm<sup>2</sup>  
**Maximum Working Speed:** 180m/min

**Temperature Rating**  
Flexing: -40°C to 90°C  
Flexed: -50°C to 90°C

**Minimum Bending Radius**  
Fixed: 4 x overall diameter  
Flexing: 5 x overall diameter

### CONSTRUCTION

**Conductor**  
Class 5 Flexible Tinned Copper

**Insulation**  
Rubber compound

**Inner Sheath**  
Halogen free PUR (Polyurethane)

**Antitwisting Element**  
Polyester Braid

**Outer Sheath**  
Halogen free PUR (Polyurethane)

**Core Identification**  
3 Core: ● Green/Yellow ● Blue ● Brown  
4 Core: ● Green/Yellow ● Brown ● Black ● Grey  
5 Core: ● Green/Yellow ● Blue ● Brown ● Black ● Grey

**Note:**  
(N)SHTÖU-O is available without a Green/Yellow core

**Outer Sheath Colour**  
● Black

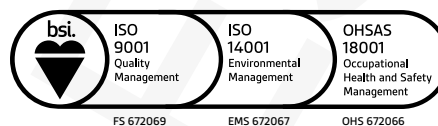
### STANDARDS

Based on VDE 0240 Part 814, VDE 0295, IEC 60228, VDE 0250, VDE 0293, VDE 0207, VDE 0298, IEC 60811-404, IEC 60811-403, IEC 60332-1-2 ISO 4892-2,  
Special Test: Reeling test



### UK LABORATORY TESTED

This product is subject to the Quality Assurance protocols of The Cable Lab<sup>®</sup>, a UKAS accredited ISO 17025 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 Low Voltage Directive 2014/35/EU and the RoHS Directive 2011/65/EU. RoHS compliance has been tested and confirmed by The Cable Lab<sup>®</sup> as meeting the requirements of the BSI RoHS Trusted Kitemark<sup>™</sup>.



## DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL DIAMETER OF CONDUCTOR mm	NOMINAL OVERALL DIAMETER mm	MAXIMUM TENSILE LOAD N	NOMINAL WEIGHT kg/km
A7N03025BK	3	25+16	6.9	27.3	2250	1390
A7N03035BK	3	35+16	7.8	29.8	3150	1740
A7N03050BK	3	50+25	9.3	35	4500	2470
A7N03070BK	3	70+35	11.1	38.9	6300	3290
A7N03095BK	3	95+50	12.7	43.2	8550	4090
A7N03120BK	3	120+70	14.5	47.1	10800	5220
A7N03150BK	3	150+70	16.7	53.7	13500	6460
A7N03185BK	3	185+95	17.6	57.3	16650	7720
A7N4G0015BK	4G	1.5	1.5	11.7	2180	170
A7N4G0025BK	4G	2.5	1.9	19.9	2300	220
A7N4G0040BK	4G	4	2.4	16.7	480	380
A7N4G0060BK	4G	6	2.9	18.2	720	490
A7N4G010BK	4G	10	3.8	21.5	1200	720
A7N4G016BK	4G	16	4.8	24	1920	990
A7N4G025BK	4G	25	6.9	30.7	3000	1610
A7N4G035BK	4G	35	7.8	33.7	4200	2090
A7N4G050BK	4G	50	9.3	38.2	6000	2830
A7N4G070BK	4G	70	11.1	43.6	8400	3720
A7N4G095BK	4G	95	12.7	47.5	11400	4770
A7N4G120BK	4G	120	14.5	52.7	14400	6040
A7N4G150BK	4G	150	16.7	59	18000	7520
A7N5G0015BK	5G	1.5	1.5	12.3	225	190
A7N5G0025BK	5G	2.5	1.9	13.7	2375	260
A7N5G0040BK	5G	4	2.4	18	600	460
A7N5G0060BK	5G	6	2.9	19.6	900	590
A7N5G010BK	5G	10	3.8	23.4	1500	870
A7N5G016BK	5G	16	4.8	36	2400	1200
A7N5G025BK	5G	25	6.9	33.4	3750	1970
A7N5G035BK	5G	35	7.8	36.5	5250	2560
A7N7G0015BK	7G	1.5	1.5	14.1	2315	260
A7N7G0025BK	7G	2.5	1.9	15.8	2525	360
A7N12G0015BK	12G	1.5	1.5	17.9	2540	450
A7N12G0025BK	12G	2.5	1.9	20.4	2900	590
A7N18G0015BK	18G	1.5	1.5	18.3	2810	480
A7N18G0025BK	18G	2.5	1.9	20.8	3350	660
A7N24G0015BK	24G	1.5	1.5	20.9	3080	630
A7N24G0025BK	24G	2.5	1.9	24	3800	910
A7N30G0015BK	30G	1.5	1.5	22.9	3350	770
A7N30G0025BK	30G	2.5	1.9	26.4	4250	1120
A7N36G0015BK	36G	1.5	1.5	23.3	3620	800
A7N36G0025BK	36G	2.5	1.9	26.8	4700	1170
A7N42G0015BK	42G	1.5	1.5	24.8	3890	910
A7N42G0025BK	42G	2.5	1.9	29.3	5150	1390

## CURRENT CARRYING CAPACITY

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	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
1.5	24	25	19	15	12	10	9	6	5
2.5	30	32	24	18	15	13	11	8	7
4	41	43	33	25	20	17	16	11	9
6	53	56	42	32	26	22	20	14	12
10	74	78	59	45	36	31	28	20	16
16	99	104	79	60	49	42	38	27	22
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

## 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.