

(N)SHTÖU-V Low Voltage Reeling Cable



Eland Product Group: A7N

APPLICATION

This -V type of cable has been specially developed for vertical reeling applications. Used as reeling cable for winding operation with tensile stress and/or torsional stress, and for connection and control cable in lifting devices, hoisting plants and transporting machines for heavy mechanical load, and as drum and drag cable in dry, damp or wet rooms and in wet industrial conditions.

CHARACTERISTICS

Voltage Rating (U₀/U)
0.6/1kV

Temperature Rating
Fixed: -40°C to +80°C
Flexed: -25°C to +80°C

Minimum Bending Radius
Fixed: 4x overall diameter
Flexed: 5x overall diameter

Maximum Tensile Load
20 N/mm²

Travel Speed
In festoon: up to 180m/min horizontal / 120m/min main gantry

CONSTRUCTION

Conductor
Class 5 tinned copper conductor

Separator
Tape

Insulation
HEPR (Hard Ethylene Propylene Rubber)

Inner Sheath
Rubber compound

Braiding
Anti-torsion textile braid embedded in sheath

Sheath
Rubber compound

Core Identification
Coloured cores according to VDE 0293-308 including earth conductor ● green-yellow

Sheath Colour
● Black or ● Yellow

STANDARDS

DIN VDE 0250-814, DIN VDE 0250-1, DIN VDE 0298-3, DIN VDE 0472-501/502/503/508, DIN VDE 0472-401/402/602/303/615, DIN VDE 0472-803/804, HD/EN/IEC 60811-2-1, DIN VDE 0473-811-2-1, 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.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL OVERALL DIAMETER mm		NOMINAL WEIGHT kg/km
			Minimum	Maximum	
A7NV04010	4	10	21.7	27.8	1020
A7NV04016	4	16	25.4	32.3	1380
A7NV04025	4	25	29.6	39.8	1980
A7NV04035	4	35	32.6	43.6	2620
A7NV04050	4	50	40.8	51.0	3610
A7NV04070	4	70	46.5	58.6	5300
A7NV04095	4	95	52.7	66.2	7010
A7NV060025	6	2.5	18.6	21.3	590
A7NV070015	7	1.5	16.9	19.2	430
A7NV070040	7	4	21.4	23.5	820
A7NV120015	12	1.5	23.0	25.4	810
A7NV120025	12	2.5	25.5	28.8	1050
A7NV120040	12	4	29.8	33.0	1550
A7NV180015	18	1.5	23.1	25.6	870
A7NV180025	18	2.5	25.7	29.2	1130
A7NV180040	18	4	30.0	33.2	1680
A7NV200060	20	6	39.0	42.5	2800
A7NV240015	24	1.5	26.5	29.2	1100
A7NV240025	24	2.5	29.8	33.2	1560
A7NV300025	30	2.5	34.0	37.2	2000
A7NV300015	30	1.5	29.6	33.1	1420
A7NV360025	36	2.5	34.2	37.4	2070
A7NV360015	36	1.5	29.8	34.0	1460
A7NV420025	42	2.5	35.0	38.0	2160
A7NV440025	44	2.5	36.1	39.0	2300
A7NV450025	45	2.5	39.0	41.0	2400
A7NV490010	49	1	27.0	30.0	1300
A7NV560025	56	2.5	42.1	45.2	3040



CONDUCTORS

Class 5 Flexible Copper Conductors for Single Core and Multi-Core Cables

NOMINAL CROSS SECTIONAL AREA mm ²	MAXIMUM DIAMETER OF WIRES IN CONDUCTOR mm	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km
		Metal-Coated Wires
1.5	0.26	13.7
2.5	0.26	8.21
4	0.31	5.09
6	0.31	3.39
10	0.41	1.95
16	0.41	1.24
25	0.41	0.795
35	0.41	0.565
50	0.41	0.393
70	0.51	0.277
95	0.51	0.21
120	0.51	0.164
150	0.51	0.132

The above table is in accordance with EN 60228

ELECTRICAL CHARACTERISTICS

Current Carrying Capacity and Mass Supportable

NOMINAL CROSS SECTIONAL AREA mm ²	CURRENT CARRYING CAPACITY Amps				
	In Air	In Conduit	Reeled		
			1 Layer	2 Layer	3 Layer
1.5	25	24	19	15	12
2.5	32	30	24	18	15
4	43	41	33	25	20
6	56	53	42	32	26
10	78	74	59	45	36
16	104	99	79	60	49
25	138	131	105	80	64
35	170	162	130	99	79
50	212	202	162	123	99
70	263	250	200	153	123
95	316	301	241	184	147
120	370	352	282	215	172
150	424	404	323	246	198

For ambient temperature of 30°C

DE-RATING FACTORS

AIR TEMPERATURE	30°C	35°C	40°C	45°C	50°C	55°C	60°C	65°C
DE-RATING FACTOR	1	0.96	0.91	0.87	0.82	0.76	0.71	0.65

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.