2491X / H05V-K / H07V-K BS EN 50525-2-31 Flexible Cable



Eland Product Group: **A3X**

APPLICATION

Designed for use in the switch control, relay and instrumentation panels of power switchgear and for purposes such as internal connectors in rectifier equipment, motor starters and controllers.

CONSTRUCTION

Conductor
Class 5 flexible copper conductor according to BS EN 60228 (previously BS 6360)

Insulation
PVC (Polyvinyl Chloride) Type TI1 according to BS EN 50363

CABLE STANDARDS

BS EN 50525-2-31 (previously BS 6004, Cenelec HD21.3), BS EN/IEC 60332-1-2

The electrical and dimensional properties of this product are measured by the Technical and Quality Assurance department at the Eland Cables laboratory. Cable performance in respect of conductor resistance, construction quality (workmanship), dimensional consistency, and other parameters are verified to published standards and approved product drawings. Conformance to RoHS (Restriction of the use of Hazardous Substances) is determined and confirmed.

CHARACTERISTICS

Voltage Rating (Uo/U)
H05V-K: 300/500V
H07V-K: 450/750V

Temperature Rating
Fixed: -30°C to +70°C
Flexed: -5°C to +70°C

Minimum Bending Radius
Fixed: 6 x overall diameter
Flexed: 12 x overall diameter

Sheath Colour
Red ● Black ● Blue ● Orange ● Yellow ○ White
Green/Yellow ● Grey ● Brown ● Violet ● Pink

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DIMENSIONS

H05V-K

ELAND PART NO.	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
A3X*00050	0.5	2.2	9
A3X*00075	0.75	2.4	11
A3X*0010	1	2.5	14

H07V-K

ELAND PART NO.	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
A3X*0015	1.5	2.9	20
A3X*0025	2.5	3.6	31
A3X*0040	4	4.1	46
A3X*0060	6	4.7	75
A3X*010	10	6.1	125
A3X*016	16	7.3	199
A3X*025	25	9	299
A3X*035	35	10.2	421
A3X*050	50	12.1	539
A3X*070	70	13.8	730
A3X*095	95	16.3	973

*Eland Part No. shown above designate the sheath colour (*). For each colour substitute * for a colour code as listed below. e.g. A3XRD0015 = 1.5mm² Red

Colour Codes

COLOUR	Black	Blue	Grey	Green/ Yellow	Orange	Red	Pink	Yellow	Violet	Brown	White
CODE	BK	BL	GR	GY	OR	RD	PK	YW	VI	BR	WH

CONDUCTORS

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

NOMINAL CROSS SECTIONAL AREA mm²	MAXIMUM DIAMETER OF WIRES IN CONDUCTOR mm	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C	
		Plain Wires ohms/km	Metal-Coated Wires ohms/km
0.5	0.21	39	40.1
0.75	0.21	26	26.7
1	0.21	19.5	20
1.5	0.26	13.3	13.7
2.5	0.26	7.98	8.21
4	0.31	4.95	5.09
6	0.31	3.3	3.39
10	0.41	1.91	1.95
16	0.41	1.21	1.24
25	0.41	0.78	0.795
35	0.41	0.554	0.565
50	0.41	0.386	0.393
70	0.51	0.272	0.277
95	0.51	0.206	0.21

The above table is in accordance with BS EN 60228 (previously BS 6360)

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ELECTRICAL CHARACTERISTICS

Current Carrying Capacity

NOMINAL CROSS SECTIONAL AREA mm²	IN A THERMAL INSULATED WALL		ON A WALL		IN FREE AIR
	2 Core Amps	3 Core Amps	2 Core Amps	3 Core Amps	1 Core Amps
0.5	-	-	-	-	-
0.75	-	-	-	-	15
1	-	-	-	-	19
1.5	14.5	13.5	17.5	15.5	24
2.5	19.5	18	24	21	32
4	26	24	32	28	42
6	34	31	41	36	54
10	46	42	57	50	73
16	61	56	76	68	98
25	80	73	101	89	129
35	99	89	125	110	158
50	119	108	151	134	198
70	151	136	192	171	245
95	182	164	232	207	292

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
DE-RATING FACTOR	1.22	1.17	1.12	1.06	1.00	0.94	0.87	0.79	0.71	0.61	0.50

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.

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