

CY PVC Control Flexible Cable



Eland Product Group: **A5C**

APPLICATION

Used as interconnecting cable for measuring, controlling or regulation in control equipment for assembly and production lines, conveyors and for computer units. Suitable for flexible use when temporarily moved, and in conditions of medium mechanical stress. Can be used outdoors when protected, and in dry or damp conditions indoors.

CY control cables are not suitable for fixed wiring applications requiring compliance with the regulations set out in BS7671.

CONSTRUCTION

Conductor

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

Insulation

PVC (Polyvinyl Chloride) Type T12 according to BS EN 50363

Binding Tape

PET (Polyester Tape)

Screen

TCWB (Tinned Copper Wire Braid)

Sheath

PVC (Polyvinyl Chloride) Type TM2 according to BS EN 50363

CABLE STANDARDS

BS EN/IEC 60332-1



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 (U₀/U)

300/500V

Temperature Rating

Fixed: -30°C to +80°C

Flexed: -5°C to +70°C

Minimum Bending Radius

Fixed: 6 x overall diameter

Flexed: 15 x overall diameter

Core Identification

● Black with ○ White numbers

(3 cores and above to include ● Green/Yellow)

Colour Coded Cores

3 core: ● Green/Yellow ● Brown ● Blue

4 core: ● Green/Yellow ● Brown ● Black ● Grey

5 core: ● Green/Yellow ● Brown ● Black ● Grey ● Blue

Sheath Colour

● Grey

DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km	CXT GLAND
A5C02005CY	2	0.5	5.7	35	20SS
A5C020075CY	2	0.75	6.1	45	20SS
A5C02010CY	2	1	6.3	57	20SS
A5C02015CY	2	1.5	7.3	69	20SS
A5C02025Y	2	2.5	8.7	107	20S
A5C03005CY	3	0.5	6	48	20SS
A5C030075CY	3	0.75	6.4	63	20SS
A5C03010CY	3	1	6.6	72	20SS
A5C03015CY	3	1.5	7.7	95	20S
A5C03025CY	3	2.5	9.2	140	20S
A5C04005CY	4	0.5	6.4	62	20SS
A5C040075CY	4	0.75	6.9	76	20SS
A5C04010CY	4	1	7.1	89	20S
A5C04015CY	4	1.5	8.4	118	20S
A5C04025CY	4	2.5	10	172	20S
A5C05005CY	5	0.5	6.9	73	20SS
A5C050075CY	5	0.75	7.5	89	20S
A5C05010CY	5	1	7.7	107	20S
A5C05015CY	5	1.5	9.1	141	20S
A5C05025CY	5	2.5	10.9	216	20S
A5C07005CY	7	0.5	7.5	89	20S
A5C070075CY	7	0.75	8.1	113	20S
A5C07010CY	7	1	8.4	139	20S
A5C07015CY	7	1.5	9.9	181	20S
A5C07025CY	7	2.5	11.9	283	20
A5C12005CY	12	0.5	9.6	141	20S
A5C120075CY	12	0.75	10.4	181	20S
A5C12010CY	12	1	10.8	230	20S
A5C12015CY	12	1.5	12.9	307	20
A5C180075CY	18	0.75	12.1	274	20
A5C18010CY	18	1	12.6	331	20

CONDUCTORS

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

NOMINAL CROSS SECTIONAL AREA mm ²	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C	
	Plain Wires ohms/km	
0.5	39	
0.75	26	
1	19.5	
1.5	13.3	
2.5	7.98	

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

ELECTRICAL CHARACTERISTICS

Current Carrying Capacity at 30°C

NOMINAL CROSS SECTIONAL AREA mm ²	CURRENT RATING Amps
0.5	9
0.75	12
1	15
1.5	18
2.5	26

The above table is a guide, extracted from DIN VDE 0298 Part 4 and DIN VDE 0100 Part 430

DE-RATING FACTORS

NO. OF CORES	5	7	10	14	19	24	44	48
DE-RATING FACTOR	0.72	0.63	0.56	0.51	0.45	0.42	0.34	0.33