

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 fixed installations or for flexible use in conditions of light mechanical stress. Can be used outdoors when protected, and in dry or moist conditions indoors.



Standards

Generally to BS6500, VDE0250

Conductor

Class 5 flexible plain copper conductors to BS EN 60228:2005 (previously BS6360), VDE0295, IEC 60228

Insulation

PVC (Polyvinyl Chloride) Type YI2

Bedding

PVC (Polyvinyl Chloride) Type YM2

Braiding

GSWB (Galvanised Steel Wire Braid)

Sheath

PVC (Polyvinyl Chloride) Type YM2

Sheath Colour

Transparent

Voltage Rating

300/500V

Temperature Rating

Fixed: -35 to +70°C

Flexing: -15 to +70°C

Minimum Bending Radius

10 x overall diameter

Core Identification

Black with White numbers.
(3 Cores and above to include Green/Yellow)
Coloured cores available

Note

SY Cables are not suitable for direct connection to the public mains supply.

Dimensions

No. of cores x nominal cross sectional area # x mm ²	Nominal overall diameter mm	Nominal weight kg/Km	FCGCXT Gland
SY Control flexible cable – 2 cores			
2 x 0.75	7.5	73	20S
2 x 1.00	7.7	79	20S
2 x 1.50	8.5	96	20S
SY Control flexible cable – 3 cores			
3 x 0.50	6.3	85	16/20SS
3 x 0.75	7.8	82	20S
3 x 1.00	8.0	90	20S
3 x 1.50	8.5	117	20S
3 x 2.50	9.7	155	20S
3 x 4.00	11.4	216	20
3 x 6.00	13.1	307	25
3 x 10.00	16.3	483	25
3 x 16.00	19.6	760	32
SY Control flexible cable – 4 cores			
4 x 0.75	8.2	89	20S
4 x 1.00	8.5	106	20S
4 x 1.50	9.2	132	20S
4 x 2.50	10.7	191	20S
4 x 4.00	12.3	271	20
4 x 6.00	14.5	379	25
4 x 10.00	18.0	608	25
4 x 16.00	21.8	945	32
4 x 25.00	25.1	1349	32
4 x 35.00	29.6	1839	40
4 x 50.00	34.3	2605	50S
4 x 70.00	38.5	3453	50
SY Control flexible cable – 5 cores			
5 x 0.75	8.8	101	20S
5 x 1.00	9.1	119	20S
5 x 1.50	9.7	147	20S
5 x 2.50	11.5	224	20
5 x 4.00	13.8	330	25
5 x 6.00	16.4	474	25
5 x 10.00	19.5	734	32
5 x 16.00	23.4	1123	32
5 x 25.00	28.3	1670	40
5 x 35.00	32.0	2197	50S
SY Control flexible cable – 7 cores			
7 x 0.75	9.3	127	20S
7 x 1.00	9.7	145	20S
7 x 1.50	10.6	184	20S
7 x 2.50	12.6	285	20
SY Control flexible cable – 8 cores			
8 x 1.50	11.7	207	20

Dimensions – continued

No. of cores x nominal cross sectional area # x mm ²	Nominal overall diameter mm	Nominal weight kg/Km	FCGCXT Gland
SY Control flexible cable – 12 cores			
12 x 0.75	11.5	187	20
12 x 1.00	12.1	226	20
12 x 1.50	13.5	293	25
12 x 2.50	16.6	460	25
SY Control flexible cable – 18 cores			
18 x 0.50	11.6	255	20
18 x 0.75	13.3	258	25
18 x 1.00	13.8	311	25
18 x 1.50	16.3	433	25
18 x 2.50	19.3	654	32
SY Control flexible cable – 25 cores			
25 x 0.75	16.3	370	25
25 x 1.00	16.9	438	25
25 x 1.50	19.0	572	25
25 x 2.50	23.2	891	32

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 plain wires ohms/Km
0.75	0.21	26.0000
1.00	0.21	19.5000
1.50	0.26	13.3000
2.50	0.26	7.9800
4.00	0.31	4.9500
6.00	0.31	3.3000
10.00	0.41	1.9100
16.00	0.41	1.2100
25.00	0.41	0.7800
35.00	0.41	0.5540
50.00	0.41	0.3860
70.00	0.51	0.2720
95.00	0.51	0.2060

Table in accordance with BS EN 60228:2005 (previously BS6360)

Electrical characteristics

Current carrying capacity (amperes) at 30°C

Nominal cross sectional area mm ²	Current rating Amps
0.50	7
0.75	12
1.00	15
1.50	18
2.50	26
4.00	34
6.00	44
10.00	61
16.00	82
25.00	108
35.00	135
50.00	168
70.00	207
95.00	250

De-rating factors

Multi-conductor cables with cross sectional area up to 10mm²

No. of cores	De-rating factor
5	0.75
7	0.65
10	0.55
14	0.50
19	0.45
24	0.40
40	0.35
61	0.30