

SY Control Flexible Cable to BS6500

Technical Data

Conductor

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

Voltage Rating
300/500V

Insulation

PVC (Polyvinyl Chloride) Type T1 2 complying with BS EN 50363-3:2005

Operating Temperature
-15°C to +70°C

Bedding

PVC (Polyvinyl Chloride) TM2 as specified in
BS EN 50363-4-1:2005

Short Circuit Temperature
+160°C

Braiding

GSWB (Galvanised Steel Wire Braid)
Minimum coverage of braiding shall be 50%

Minimum Installation Radius
10 x overall diameter

Core Identification

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

Sheath

PVC (Polyvinyl Chloride) conforming to TM 2 as specified in BS EN 50363-4-1:2005

Note

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

Sheath Colour
Transparent



Dimensions

Part Number	No. of Cores x Nominal Cross Sectional Area # x mm ²	Nominal Overall Diameter mm	Nominal Weight kg/Km
SY Control Flexible Cable - 2 Cores			
773-001	2 x 0.75	7.2	79
773-002	2 x 1.00	7.6	91
773-003	2 x 1.50	8.4	112

Part Number	No. of Cores x Nominal Cross Sectional Area # x mm ²	Nominal Overall Diameter mm	Nominal Weight kg/Km
SY Control Flexible Cable - 3 Cores			
773-004	3 x 0.75	7.5	91
773-005	3 x 1.00	7.9	104
773-006	3 x 1.50	8.8	130
773-007	3 x 2.50	10.3	184
773-008	3 x 4.00	11.9	253
773-009	3 x 6.00	13.8	355
773-010	3 x 10.00	16.8	545
773-011	3 x 16.00	19.8	849
773-012	3 x 25.00	24.2	1298
773-013	3 x 35.00	26.3	1626
SY Control Flexible Cable - 4 Cores			
773-014	4 x 0.75	8.1	106
773-015	4 x 1.00	8.7	127
773-016	4 x 1.50	9.4	154
773-017	4 x 2.50	11.1	220
773-018	4 x 4.00	12.9	308
773-019	4 x 6.00	15.0	435
773-020	4 x 10.00	18.3	673
773-021	4 x 16.00	21.9	1004
773-022	4 x 25.00	26.4	1607
773-023	4 x 35.00	30.2	2054
773-024	4 x 50.00	34.3	2605
773-025	4 x 70.00	38.5	3453
773-026	4 x 95.00	43.0	4544
SY Control Flexible Cable - 5 Cores			
773-027	5 x 0.75	8.9	128
773-028	5 x 1.00	9.4	148
773-029	5 x 1.50	10.4	186
773-030	5 x 2.50	12.2	267
773-031	5 x 4.00	13.9	366
773-032	5 x 6.00	16.5	530
773-033	5 x 10.00	20.0	825
773-034	5 x 16.00	23.9	1217
773-035	5 x 25.00	28.8	1941
773-036	5 x 35.00	32.7	2559
SY Control Flexible Cable - 7 Cores			
773-037	7 x 0.75	9.5	152
773-038	7 x 1.00	10.4	187
773-039	7 x 1.50	11.7	242
773-040	7 x 2.50	13.5	340
SY Control Flexible Cable - 8 Cores			
773-041	8 x 0.75	10.5	181
773-042	8 x 1.00	10.8	203
773-043	8 x 1.50	12.4	302
SY Control Flexible Cable - 12 Cores			
773-044	12 x 0.75	13.0	273
773-045	12 x 1.00	13.2	303
773-046	12 x 1.50	15.1	398
773-047	12 x 2.50	17.6	571
SY Control Flexible Cable - 18 Cores			
773-048	18 x 0.75	15.0	370
773-049	18 x 1.00	15.9	437
773-050	18 x 1.50	17.6	553
773-051	18 x 2.50	20.6	803
SY Control Flexible Cable - 25 Cores			
773-052	25 x 0.75	17.6	504
773-053	25 x 1.00	18.4	586
773-054	25 x 1.50	20.6	753
773-055	25 x 2.50	24.2	1101

Conductors

Class 5 flexible Copper Conductors for Single Core and Multi-Core cables

1 Nominal Cross Sectional Area mm ²	2 Maximum Diameter of Wires in Conductor mm	3 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 Carrying Capacity	
	In Conduit Amps	In Air Amps
0.75	10	16
1.00	12	20
1.50	15	24
2.50	20	32
4.00	25	42
6.00	33	54
10.00	45	73
16.00	61	98
25.00	83	129
35.00	103	158
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