

SY Control Cable



Application

Steel wire braided flexible connecting cables for instrumentation and control equipment, for tooling machinery production lines, and in flexible applications for free movement without tensile load. Suitable for use in dry, moist and wet rooms. The galvanised steel wire braid serves as protection against mechanical traverse loads and acts as a magnetic screen against interference. These cables are not used for outdoor or underground installation.

Standards

VDE 0207-363-3, VDE 0482-332-1-2, VDE 819-102 (TM54)

Flame Retardant according to IEC/EN 60332-1-2

Characteristics

Voltage Rating
300/500V

Temperature Rating
Fixed: -40°C to +80°C
Flexed: -5°C to +70°C

Minimum Bending Radius
Fixed: 4 x overall diameter
Flexed: 12.5 x overall diameter



Construction

Conductor
Class 5 flexible plain copper

Insulation
PVC (Polyvinyl Chloride)

Inner Sheath
PVC (Polyvinyl Chloride)

Armour
GSWB (Galvanised Steel Wire Braid)

Sheath
PVC (Polyvinyl Chloride)

Sheath Colour
Transparent



Dimensions

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL THICKNESS OF INSULATION mm	NOMINAL OUTER SHEATH THICKNESS mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
2	0.75	0.40	0.8	7.2	79.3
2	1	0.40	0.8	7.6	91
2	1.5	0.40	0.8	8.2	110
2	2.5	0.50	0.8	9.4	147
3	0.75	0.40	0.8	7.5	91.3
3	1	0.40	0.8	7.9	104
3	1.5	0.40	0.8	8.6	129
3	2.5	0.50	0.9	10.1	185
3	4	0.60	1	12	269
3	6	0.65	1.1	13.5	354
3	10	0.75	1.3	16.9	579
3	16	0.75	1.5	19	785
3	25	0.90	1.8	23.5	1211
3	35	0.95	2	26.7	1642
4	0.75	0.40	0.8	8	107
4	1	0.40	0.8	8.5	124
4	1.5	0.40	0.8	9.2	151
4	2.5	0.50	0.9	11.1	230
4	4	0.60	1.1	13.2	332
4	6	0.65	1.2	14.8	442
4	10	0.75	1.5	18.8	735
4	16	0.75	1.6	20.9	988
4	25	0.90	2	26	1536
4	35	0.95	2.2	30	2098
4	50	1.25	2.6	35.3	2968
4	70	1.25	3	40.5	3822
4	95	1.60	3.6	49.4	5369
5	0.75	0.40	0.8	8.5	120
5	1	0.40	0.8	9.1	140
5	1.5	0.40	0.9	10.1	182
5	2.5	0.50	1	12.1	266
5	4	0.60	1.1	14.2	382
5	6	0.65	1.3	16.5	525
5	10	0.75	1.6	20.6	873
5	16	0.75	1.8	23.4	1207
5	25	0.90	2.2	29	1875
5	35	0.95	2.4	32.9	2577
7	0.75	0.40	0.8	9.1	147
7	1	0.40	0.9	9.9	181
7	1.5	0.40	0.9	11	226
7	2.5	0.50	1.1	13.2	338
12	0.75	0.40	1	10.9	237
12	1	0.40	1	12.7	280
12	1.5	0.40	1.10	14.2	365
12	2.5	0.40	1.20	17.5	572

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL THICKNESS OF INSULATION mm	NOMINAL OUTER SHEATH THICKNESS mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
18	0.75	0.40	1.10	13.7	322
18	1	0.40	1.20	14.9	396
18	1.5	0.40	1.30	16.8	521
18	2.5	0.40	1.30	20.4	809
25	0.75	0.40	1.30	16	438
25	1	0.40	1.40	17.6	544
25	1.5	0.40	1.50	19.6	708

Electrical Characteristics

NOMINAL CROSS SECTIONAL AREA mm ²	CURRENT CARRYING CAPACITIES 30°C CONTINUOUS LOADING A	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km
0.75	12	26
1	15	19.5
1.5	18	13.3
2.5	26	7.98
4	34	4.95
6	44	3.3
10	61	1.91
16	82	1.21
25	108	0.78
35	135	0.554
50	168	0.386
70	207	0.272
95	223	0.206

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.