



## APPLICATION

SY cables are used to control and regulate conveyors, instruments, assembly lines, production lines and similar process automation equipment. It can also regulate the air conditioning system. Process automation is the automatic control of a stage in an industrial process, such as the manufacture of a product.

## 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)

Core Identification

Black with White number

From 3 cores: Black with White number + Green/Yellow

Colour-coded cores available upon request

Sheath Colour

Transparent

## STANDARDS

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

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

## Construction Parameters

	NOMINAL CROSS	NOMINAL	NOMINAL OUTER	NOMINAL	NOMINAL WEIGHT
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NO. OF CORES	SECTIONAL AREA mm <sup>2</sup>	THICKNESS OF INSULATION mm	SHEATH THICKNESS mm	OVERALL DIAMETER mm	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
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 <sup>2</sup>	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