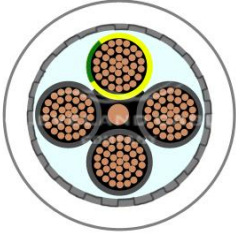


TYPE SY PVC CONTROL CABLE



APPLICATION

SY cables are used as an interconnecting cable between fixed and mobile equipment in conveyors, assembly lines, production lines and machine tool manufacture where the galvanised steel wire braid armour gives excellent mechanical protection.

CABLE STANDARDS

GENERALLY TO BS EN 50525-2-11
VDE 0250

CONSTRUCTION

Conductor: Plain Annealed Stranded Copper Conductors

Insulation: PVC

Bedding: PVC

Armouring: Galvanised Steel Wire Braid Armour

Sheath: Transparent PVC

Sheath Colour: N/A

CHARACTERISTICS

Voltage Rating: 300/500 volts

Temperature Limits:
Static: -20°C to +80°C
Flexing: -5°C to +70°C

Minimum Bending Radius:
As per cable manufacturer datasheet

Core Identification:

2 core - ■ Black with □ white numbers

3 core and above - ■ Black with □ white numbers plus ■ G/Y

Also available with coloured cores as follows:

3 core - ■ Blue ■ Brown ■ G/Y

4 core - ■ Brown ■ Black ■ Grey ■ G/Y

5 core - ■ Blue ■ Brown ■ Black ■ Grey ■ Green/Yellow

Should not be installed at temperatures below -5°C

TYPE SY PVC CONTROL CABLE - DIMENSIONS

CCC CODE	CONDUCTOR SIZE (MM ²)	STRANDING (MM)	NO. OF CORES	WEIGHT (Kg/Km)	OUTSIDE DIAMETER (MM)	GLAND SIZE (MM)
SY2X/75	0.75	24/0.20	2	78	7.10	20/16
SY3X/75	0.75	24/0.20	3	91	7.60	20/16
SY4X/75	0.75	24/0.20	4	104	8.30	20/16
SY5X/75	0.75	24/0.20	5	121	8.90	20/16
SY7X/75	0.75	24/0.20	7	135	9.50	20/16
SY12X/75	0.75	24/0.20	12	214	11.90	20S
SY18X/75	0.75	24/0.20	18	293	13.20	20S
SY25X/75	0.75	24/0.20	25	418	13.70	20S
SY34X/75	0.75	24/0.20	34	610	19.00	20
SY2X1	1	32/0.20	2	85	7.70	20/16
SY3X1	1	32/0.20	3	95	8.20	20/16
SY4X1	1	32/0.20	4	120	9.00	20/16
SY5X1	1	32/0.20	5	123	9.20	20/16
SY7X1	1	32/0.20	7	171	10.10	20/16
SY12X1	1	32/0.20	12	276	12.90	20S
SY18X1	1	32/0.20	18	382	15.00	20
SY25X1	1	32/0.20	25	437	17.90	20
SY34X1	1	32/0.20	34	556	20.00	20
SY50X1	1	32/0.20	50	955	23.70	25
SY2X1/5	1.5	30/0.25	2	100	8.20	20/16
SY3X1/5	1.5	30/0.25	3	143	8.60	20/16
SY4X1/5	1.5	30/0.25	4	170	9.30	20/16
SY5X1/5	1.5	30/0.25	5	173	10/0.00	20/16
SY7X1/5	1.5	30/0.25	7	198	10.70	20/16
SY12X1/5	1.5	30/0.25	12	341	13.80	20S
SY18X1/5	1.5	30/0.25	18	490	16.40	20
SY25X1/5	1.5	30/0.25	25	606	19.20	20
SY34X1/5	1.5	30/0.25	34	835	21.60	25
SY50X1/5	1.5	30/0.25	50	1046	23.80	25
SY2X2/5	2.5	50/0.25	2	177	9.80	20/16
SY3X2/5	2.5	50/0.25	3	190	9.90	20/16
SY4X2/5	2.5	50/0.25	4	240	10.80	20/16
SY5X2/5	2.5	50/0.25	5	247	11.50	20S
SY7X2/5	2.5	50/0.25	7	327	13.00	20S
SY12X2/5	2.5	50/0.25	12	502	16.90	20
SY18X2/5	2.5	50/0.25	18	740	19.80	20
SY25X2/5	2.5	50/0.25	25	1065	23.20	25
SY34X2/5	2.5	50/0.25	34	1126	24.30	25
SY3X4	4	56/0.30	3	323	12.2	20S
SY4X4	4	56/0.30	4	354	13.4	20S
SY5X4	4	56/0.30	5	392	15	20
SY7X4	4	56/0.30	7	486	16	20
SY3X6	6	84/0.30	3	343	13.4	20S
SY4X6	6	84/0.30	4	458	14.6	20S
SY5X6	6	84/0.30	5	572	16.7	20
SY7X6	6	84/0.30	7	640	18	20
SY3X10	10	80/0.40	3	563	17.3	20
SY4X10	10	80/0.40	4	776	19.1	20
SY5X10	10	80/0.40	5	855	21	25
SY3X16	16	126/0.40	3	813	20.5	25

SY4X16	16	126/0.40	4	900	22.4	25
SY5X16	16	126/0.40	5	1258	25.2	25
SY4X25	25	196/0.40	4	1597	28.2	32
SY5X25	25	196/0.40	5	2007	31.2	40
SY4X35	35	276/0.40	4	2046	31.3	40
SY5X35	35	276/0.40	5	2524	34.3	40
SY4X50	50	396/0.40	4	2888	37	40
SY4X70	70	356/0.50	4	4015	41.2	50S
SY4X95	95	485/0.50	4	5176	47.8	50

SY PVC CONTROL CABLE – CONDUCTOR RESISTANCE

NOMINAL CROSS SECTIONAL AREA (MM ²)	MAXIMUM DIAMETER OF WIRES IN CONDUCTOR MM	MAXIMUM RESISTANCE CONDUCTOR AT 20 ⁰ C
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

SY PVC CONTROL CABLE – CURRENT CAPACITY

NOMINAL CROSS SECTIONAL AREA (MM ²)	CURRENT CARRY CAPACITY AT 30 ⁰ C IN AIR AMPS	CURRENT CARRY CAPACITY AT 30 ⁰ C IN CONDUIT (AMPS)
0.75	16	9
1	20	12
1.5	24	15
2.5	32	18
4	42	26
6	54	34
10	73	44
16	98	61

SY PVC CONTROL CABLE – VOLTAGE DROP

NOMINAL CROSS SECTIONAL AREA (MM ²)	TWO CORE CABLE DC mV/A/m	SINGLE PHASE TWO CORE CABLE AC mV/A/m	THREE PHASE 3 OR 4 CORE CABLE AC mV/A/m
1	44	44	38
1.5	29	29	25
2.5	18	18	15
4	11	11	9.5
6	7.3	7.3	6.4
10	4.4	4.4	3.8
16	2.8	2.8	2.4