



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 flexible use in conditions of light mechanical stress. Can be used outdoors when protected against direct sunlight, and in dry or moist conditions indoors. The braided screen offers mechanical protection and a level of electro-magnetic shielding. The galvanized coating helps protect against corrosion. For installations where fire, smoke emissions and toxic fumes create a potential risk to life and equipment.

CHARACTERISTICS

Voltage Rating (Uo/U)

300/500V

Temperature Rating

-15°C to +70°C

Minimum Bending Radius

10 x overall diameter

CONSTRUCTION

Conductor

Class 5 flexible copper conductor

Insulation

LSZH (Low Smoke Zero Halogen) Type Tl6

Bedding

LSZH (Low Smoke Zero Halogen) Type TM7

Braiding

GSWB (Galvanized Steel Wire Braid) minimum coverage of

braiding shall be 50%

Sheath

LSZH (Low Smoke Zero Halogen) Type TM7

Core Identification

2 core: Blue Brown

3 core: Blue Brown Green/Yellow

4 core: Brown Black Grey Green/Yellow

5 core: Blue Brown Black Grey Green/Yellow

Sheath Colour

Black

Note

SY Cables are not suitable for direct connection into the main service fuse.

STANDARDS

Flame Retardant according to IEC/EN 60332-1-2, IEC/EN 60332-3-24

Low Smoke Zero Halogen according to IEC/EN 61034-1

Determination of halogen acid gas content: IEC/EN 60574-1

Determination of acidity and conductivity: IEC/EN 60574-2

DIMENSIONS

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL THICKNESS OF INSULATION mm	NOMINAL THICKNESS OF BEDDING mm	NOMINAL DIAMETER OF GSWB mm	NOMINAL DIAMETER OF SHEATH mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
2	1.5	0.5	0.5	0.24	0.8	8	109
3	1	0.5	0.5	0.24	1	8	114
3	1.5	0.5	0.5	0.24	1	9	138
3	2.5	0.6	0.5	0.24	1	10	188
3	4	0.6	0.6	0.24	1	12	256
3	6	0.7	0.6	0.24	1.1	14	352
4	1.5	0.5	0.5	0.24	1	10	161
4	2.5	0.6	0.5	0.24	1	11	223
4	4	0.6	0.6	0.24	1	13	310
4	6	0.7	0.6	0.24	1.1	15	430
5	1.5	0.5	0.5	0.24	1	10	189
5	2.5	0.6	0.6	0.24	1	12	264
5	6	0.7	0.6	0.24	1.2	16	523
5	10	0.8	0.8	0.3	1.2	20	822
5	16	0.9	0.8	0.3	1.4	24	1217

CONDUCTORS

Class 2 Stranded 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 ohms/km
		Plain Wires
1	0.21	19.5
1.5	0.26	13.3
2.5	0.26	7.98
4	0.31	4.95
6	0.31	3.3
10	0.41	1.91
16	0.41	1.21

The above table is in accordance with BS EN 60228 (previously BS 6360)

ELECTRICAL CHARACTERISTICS

Current Carrying Capacity at 30°C

NOMINAL CROSS SECTIONAL AREA mm ²	CURRENT CARRYING CAPACITY Amps	
	In Conduit	In Air
1	12	20
1.5	15	24
2.5	20	32
4	25	42
6	33	54
10	45	73

16	61	98
----	----	----

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 THREE OR FOUR 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

DE-RATING FACTORS

NO. OF CORES	5	7	10	14	19	24	44	48
DE-RATING FACTOR	0.72	0.63	0.56	0.51	0.45	0.42	0.34	0.33