SY LSZH
Control Cable

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.

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

Characteristics

Voltage Rating (Uo/U)
300/500V

Temperature Rating
-15ºC to +70°C

Minimum Bending Radius
10 x overall diameter

Construction

Conductor
Class 5 flexible copper conductor

Insulation
LSZH (Low Smoke Zero Halogen) Type TI6

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

Sheath Colour
Black

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Dimensions

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	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 mm²	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 mm²	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

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.