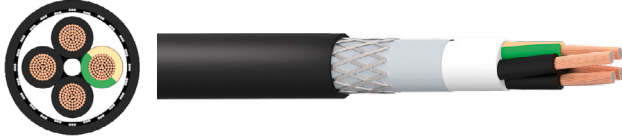




SY LSZH Control Flexible Cable



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.

CHARACTERISTICS

Voltage Rating (U_o/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 T16

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

ISO/IEC 17025 LABORATORY TESTED

This product is subject to the Quality Assurance protocols of The Cable Lab®, an ISO/IEC 17025 accredited cable testing laboratory. Testing includes vertical flame, conductor resistance, tensile & elongation, and dimensional consistency, verified to published standards and approved product drawings.



REGULATORY COMPLIANCE

This cable is compliant with European Regulation EN 50575, the Construction Products Regulation.



This cable meets the requirements of the Low Voltage Directive 2014/35/EU and the RoHS Directive 2011/65/EU. RoHS compliance has been tested and confirmed by The Cable Lab® as meeting the requirements of the BSI RoHS Trusted Kitemark™.



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 |