

Caledonian Cables Ltd

Motor Connecting Cables

www.caledonian-cables.co.uk
www.caledonian-cables.net

Addison





Company Profile

Caledonian, established in 1978, offers one of the most complete lines of fiber and copper cabling system solutions with over hundreds of different cabling system products. Our superior products provide leading edge within every cable series and for every application.

Among the national and international standards with which our cables could comply are: BS - British Standard; LPCB Fire Performance Standard, ISO Standard etc. Caledonian Cables offers a comprehensive stock of cables and cabling products through its nationwide network of resellers and distributors. Caledonian Cables has continually expanded its global presence in Europe and Asia.

Caledonian & Addison, produces a wide range of cables for communication, power and electronics in its primary plants in UK, Italy and Spain. To stay in front, we continually keep expanding our manufacturing capabilities in more low cost region such as Romania, Taiwan, Malaysia etc. This low-cost manufacturing facilities enable us provide a flexible, scalable global system that delivers superior operational performance and optimal results for our customers.

Our extensive global network of manufacturing facilities gives us significant scale and the flexibility to fulfill our customer requirements. This global presence provides design and consultancy solutions that are combined with core cable manufacturing, logistic services, and vertically integrated with our E-commerce technologies, to optimize customer operations by lowering costs and reducing time to market.

Caledonian & Addison has been respected for its high standards of quality, excellent service level, competitive pricing and a unique and innovative spirit. With our latest technologies, we are both inspired and well-positioned to meet the changing needs of our customers. We have the resources to diversify and to enhance our product lines and services. We understand the need for change and with our accurate planning, we are ready for the future and the promise of new marketing opportunities. Our tradition of growth through excellence is assured.

Our Design Centers work closely with customers to constantly improve its standard range of products and technologies and to develop customized, country and industry-specific solutions. Caledonian & Addison has established an extensive network of design, manufacturing, and logistics facilities in the world's major markets to serve the growing outsourcing needs of both multinational and regional customers.





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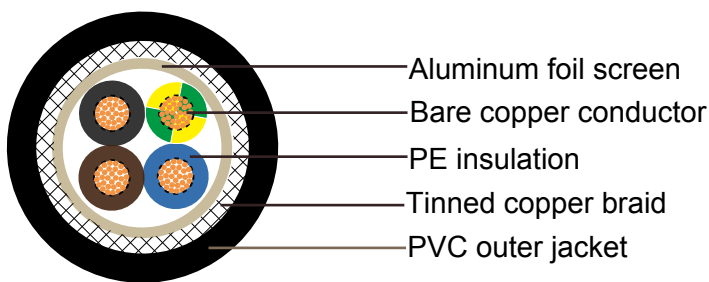
2YSLCY-JB/2YSLCYK-JB

Application

These cables are double shielded, large gauge size, PVC motor supply cables. Polyethylene insulation over very fine stranded copper provides a low-loss transfer of power, excellent low capacitance performance and superior flexibility when compared to conventional PVC cables. The applications include frequency converters, motor runs, connections with high electromagnetic interference. Found in the automotive, paper and food industry, environmental technology, packaging industry, machine tools and handling equipment. The overall foil and braid shield offer excellent protection against electromagnetic and electrical interferences. For medium mechanical stresses found indoors in dry, moist and wet areas. For 2YSLCYK-JB, the black UV-resistant jacket also allows for outdoor use and for direct burial applications.

Standard

VDE 0250 & 0281, EMC to EN 55011, EMC to VDE-0875 part-11, CE Low Voltage Directive 73/23/EEC and 93/68/EEC, ROHS compliant



2YSLCYK-JB



2YSLCYK-JB



Cable construction

- Stranded bare copper conductor according to DIN VDE 0295, IEC60228 cl. 5
 - Polyethylene(PE) insulation
 - Colours according to HD 308 S2(VDE 0293- 308)
 - Special aluminum foil screening
 - Tinned copper braiding, coverage approx. 80%
 - For 2YSLCY special transparent PVC sheath made of PVC compound YM2 acc. VDE 0207 -5, leadfree, flame retardant & self-extinguishing
 - For 2YSLCYK black PVC sheath made of cold-flexible PVC compound DMV5 acc. VDE 0276-603, leadfree, UV resistant, outdoor and direct burial use, flame retardant & self-extinguishing, IEC 60332.1 EEU directives cables conforms to EEC 79/29 directive (Low Voltage Directive)
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Technical Characteristics

- Working voltage: 600/1000 volts
 - Test voltage: 4000 volts
 - Minimum bending radius: 20 x Ø
 - Flexing temperature: -5° C to +70° C
 - Fixed installation temperature: - 40° C to +70° C
 - Flame retardant: IEC 60332.1
 - Insulation resistance: >20 GΩ x km
 - Coupling resistance max. 250 Ω/km
 - Radiation resistance up to 80 x10⁶ cJ/kg (up to 80 Mrad)
 - Mutual capacitance: core/core 70 to 250 nF/km,
core/braiding 110 to 410 nF/km
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2YSLCY-JB



Cable Parameter

| AWG | No. of Cores x Nominal Cross Sectional Area # x mm ² | Nominal Overall Diameter mm | Mutual capacitance core/core approx. nF/km | Mutual capacitance core/screen approx. nF/km | Copper Weight kg / km | Cable Weight kg / km |
|----------------------|--|--------------------------------------|--|--|-----------------------------|----------------------------|
| 16(30/30) | 4 G 1.5 | 11.6 | 70 | 110 | 95 | 230 |
| 14(50/30) | 4 G 2.5 | 13.1 | 80 | 130 | 150.0 | 300 |
| 12(56/28) | 4 G 4 | 14.6 | 90 | 150 | 235.0 | 485 |
| 10(84/28) | 4 G 6 | 16.0 | 110 | 170 | 320.0 | 630 |
| 8(80/26) | 4 G 10 | 19.5 | 120 | 190 | 533.0 | 860 |
| 6(128/26) | 4 G 16 | 22.0 | 130 | 220 | 789.0 | 1,290 |
| 4(200/26) | 4 G 25 | 26.2 | 145 | 230 | 1,236.0 | 1,860 |
| 2(280/26) | 4 G 35 | 29.4 | 150 | 260 | 1,662.0 | 2,610 |
| 1(400/26) | 4 G 50 | 37.5 | 175 | 290 | 2,345.0 | 2,950 |
| 2/0(356/24) | 4 G 70 | 40.0 | 180 | 300 | 3,196.0 | 3,950 |
| 3/0(485/24) | 4 G 95 | 46.4 | 195 | 320 | 4,316.0 | 5,300 |
| 4/0(614/24) | 4 G 120 | 53.1 | 215 | 340 | 5,435.0 | 6,600 |
| 300 MCM (765/24) | 4 G 150 | 57.2 | 230 | 360 | 6,394.0 | 7,043 |
| 350 MCM (944/24) | 4 G 185 | 61.1 | 240 | 380 | 7639 | 8384 |
| 500 MCM (1225/24) | 4 G 240 | 67.3 | 250 | 410 | 10013 | 11611 |