

Caledonian Cables Ltd

Motor Connecting Cables

www.caledonian-cables.co.uk
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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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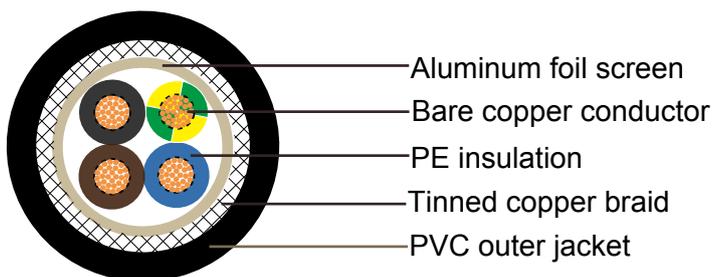
2YSLCY-JB/2YSLCYK-JB

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
-



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



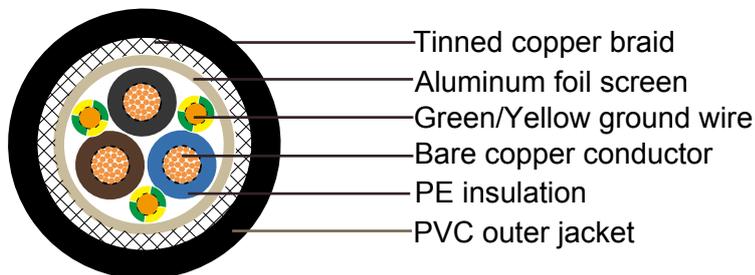
2YSLCY-JB+3/2YSLCYK-JB+3

Application

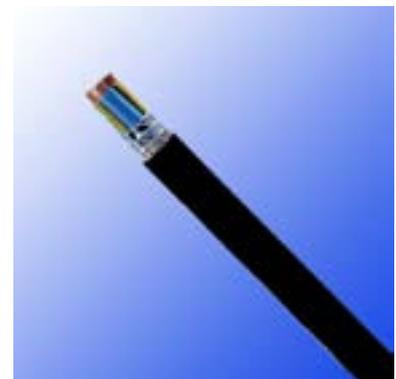
These cables are double shielded, large gauge size, PVC motor supply cables. Polyethylene insulation over very fine stranded copper provides a low-loss transfer of power, excellent low capacitance performance and superior flexibility when compared to conventional PVC cables. The applications include 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. This version substitutes the common single green/yellow ground wire for three symmetrical green/yellow ground wires for improved EMC characteristics. For medium mechanical stresses found indoors in dry, moist and wet areas. For 2YSLCYK-JB+3, the black UV-resistant jacket 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+3



2YSLCYK-JB+3

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)
 - Three symmetrical green/yellow ground wires
 - Special aluminum foil screening
 - Tinned copper braiding, coverage approx. 80%
 - For 2YSLCY-JB+3 orange PVC sheath made of PVC compound YM2 acc. VDE 0207 -5, leadfree, flame retardant & self-extinguishing
 - For 2YSLCYK-JB+3 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
-



2YSLCY-JB+3



Cable Parameter

Conductor AWG	Ground Wire AWG	No. of Cores x Nominal Cross-Section mm ²	Nominal Overall Diameter mm	Mutual capacitance core/core approx. nF/km	Mutual capacitance core/screen approx. nF/km	Copper weight kg/km	Approx. cable weight kg/km
16(30/30)	24	3x1.5+3G0.25	10.2	70	110	91	212
14(50/30)	22	3x2.5+3G0.5	11.9	80	130	152	276
12(56/28)	20	3x4+3G0.75	13.7	90	150	224	446
10(84/28)	18	3x6+3G1	15.3	110	170	298	582
8(80/26)	16	3x10+3G1.5	19.2	120	190	491	794
6(128/26)	14	3x16+3G2.5	22.3	130	220	723	1188
4(200/26)	12	3x25+3G4	27.3	145	230	1138	1713
2(280/26)	10	3x35+3G6	29.4	150	260	1535	2402
1(400/26)	8	3x50+3G10	35	175	290	2208	2718
2/0 (356/24)	8	3x70+3G10	40.6	180	300	2871	3636
3/0 (485/24)	6	3x95+3G16	44	195	320	3953	4978
4/0 (614/24)	6	3x120+3G16	49.5	215	340	4836	6175
300 MCM (765/24)	4	3x150+3G25	55.2	230	360	5421	6579
350 MCM (944/24)	2	3x185+3G35	58.2	240	380	7041	8518
500 MCM (1225/24)	1	3x240+3G50	66	250	410	9148	11611



9YSLCY-JB

Application

These cables are double shielded, large gauge size PVC motor supply cable. Polypropylene 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.



Standard

UL AWM 2570 or 20886, VW-1; CSA AWM I/II A/B, FT-1; UL/CSA rated 1kV 80 Deg C.; VDE 0250, VDE 0207, VDE 0276; EMC to EN 55011; EMC to VDE-0875 part-11; CE Low Voltage Directive 73/23/EEC and 93/68/EEC, ROHS compliant

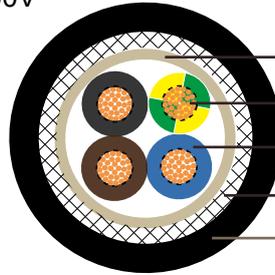
Cable construction

- Stranded bare copper conductor according to DIN VDE 0295, IEC60228 cl. 5
- Polypropylene (PP) insulation
- Colours according to HD 308 S2(VDE 0293- 308)
- Special aluminum foil screening
- Tinned copper braiding, coverage approx. 85%
- Transparent PVC sheath made of PVC compound YM2 acc. VDE 0207 -5, leadfree, flame retardant & self-extinguishing



Technical Characteristics

- Working voltage: IEC 600/1000V / UL & CSA 1000V
- Test voltage: 4000 volts
- Minimum bending radius: 15 x Ø
- Flexing temperature: -5° C to +80° C
- Fixed installation temperature: - 40° C to +80° C
- Flame retardant: IEC 60332.1 VW-1
- Insulation resistance: >20 GΩ x km



- Aluminum foil screen
- Bare copper conductor
- PP insulation
- Tinned copper braid
- PVC outer jacket

9YSLCY-JB

Cable Parameter

AWG	No. of Cores x Nominal Cross Sectional Area # x mm ²	Nominal Overall Diameter mm	Copper Weight kg / km	Cable Weight kg / km
16(30/30)	4 G 1.5	10.5	87	230
14(50/30)	4 G 2.5	11.8	133	300
12(56/28)	4 G 4	13.3	213	485
10(84/28)	4 G 6	14.9	298	630
8(80/26)	4 G 10	17.7	460	860
6(128/26)	4 G 16	21.5	707	1290
4(200/26)	4 G 25	26.3	1100	1860
2(280/26)	4 G 35	29.7	1542	2610
1(400/26)	4 G 50	34.1	2206	2950
2/0(356/24)	4 G 95	40.9	3002	3950
3/0(485/24)	4 G 95	45.4	4004	5300
4/0(614/24)	4 G 120	49.8	5108	6600
300 MCM (765/24)	4 G 150	56.1	6225	7043
350 MCM (944/24)	4 G 185	61.4	7568	8384
500 MCM (1225/24)	4 G 240	67.9	9940	12150



9YSLCYK-JB+3

Application

These cables are double shielded, large gauge size PVC motor supply cable. Polypropylene 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. The black UV-resistant jacket allows for outdoor use and for direct burial applications.

Standard

UL AWM 2570 or 20886, VW-1; CSA AWM I/II A/B, FT-1; UL/CSA rated 1kV 80 Deg C.; VDE 0250, VDE 0207, VDE 0276; EMC to EN 55011; EMC to VDE-0875 part-11; CE Low Voltage Directive 73/23/EEC and 93/68/EEC, ROHS compliant

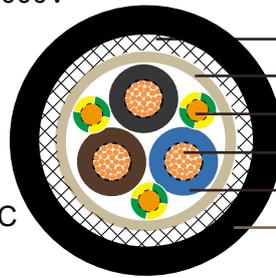
Cable construction

- Stranded bare copper conductor according to DIN VDE 0295, IEC60228 cl. 5
- Polypropylene (PP) insulation
- Colours according to HD 308 S2(VDE 0293- 308)
- Special aluminum foil screening
- Three symmetrical green/yellow ground wires
- Tinned copper braiding, coverage approx. 85%
- 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)



Technical Characteristics

- Working voltage: IEC 600/1000V / UL & CSA 1000V
- Test voltage: 4000 volts
- Minimum bending radius: 15 x Ø
- Flexing temperature: -5° C to +80° C
- Fixed installation temperature: - 40° C to +80° C
- Flame retardant: IEC 60332.1 VW-1
- Insulation resistance: >20 GΩ x km



- Tinned copper braid
- Aluminum foil screen
- Green/Yellow ground wire
- Bare copper conductor
- PP insulation
- PVC outer jacket

9YSLCYK-JB+3

Cable Parameter

Conductor AWG	Ground Wire AWG	No. of Cores x Nominal Cross-Section mm ²	Nominal Overall Diameter mm	Copper Weight kg / km	Cable Weight kg / km
16(30/30)	24	3 X 1.5 + 3 G 0.25	11.4	88	140
14(50/30)	22	3 X 2.5 + 3 G 0.5	12.9	130	220
12(56/28)	20	3 X 4 + 3 G 0.75	13.6	224	323
10(84/28)	18	3 X 6 + 3 G 1.0	15.2	276	420
8(80/26)	16	3 X 10 + 3 G 1.5	17.4	511	615
6(128/26)	14	3 X 16 + 3 G 2.5	20	751	819
4(200/26)	12	3 X 25 + 3 G 4	24.3	1204	1325
2(280/26)	10	3 X 35 + 3 G 6	27.5	1535	1718
1(400/26)	8	3 X 50 + 3 G 10	31.1	2156	2399
2/0(356/24)	8	3 X 70 + 3 G 10	37.1	2980	3056
3/0(485/24)	6	3 X 95 + 3 G 16	40	3953	4162
4/0(614/24)	6	3 X 120 + 3 G 16	42.6	4836	5074
300 MCM (765/24)	4	3 X 150 + 3 G 25	50	5412	6128
350 MCM (944/24)	2	3 X 185 + 3 G 35	55.6	7077	7820



Insulation Colour Code

Colour coded to VDE 0293-308(HD 308 S2)

2 cores - Brown + Blue

3 cores (G) - Green-Yellow + Brown + Blue

3 cores - Brown + Black + Grey

4 cores (G) - Green-Yellow + Brown + Black + Grey

4 cores - Blue + Brown + Black + Grey

5 cores (G) - Green-Yellow + Blue + Brown + Black + Grey

5 cores - Blue + Brown + Black + Grey + Black

Single core - Black, Blue, Green/Yellow, Red, Yellow, White, Violet, Brown, Grey, Orange, Pink

	With ground wire	Without ground wire
2 cores	-	 + 
3 cores	 +  + 	 +  + 
4 cores	 +  +  + 	 +  +  + 
5 cores	 +  +  +  + 	 +  +  +  + 
≥6 cores	 + black numbered	black numbered



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