



JS Cable

Mining Cable

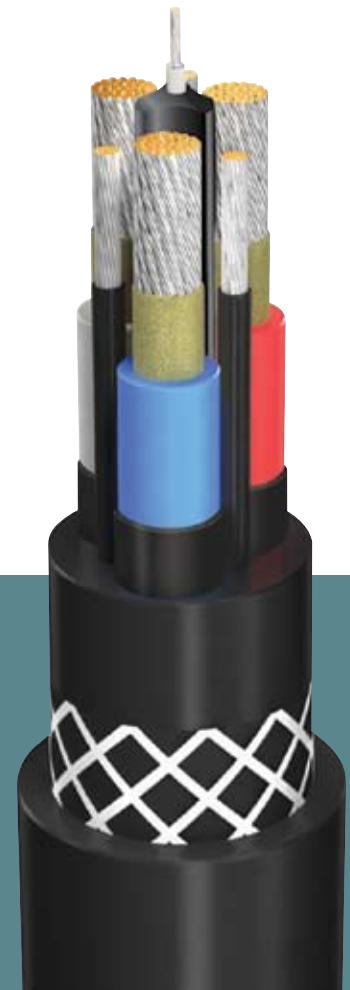
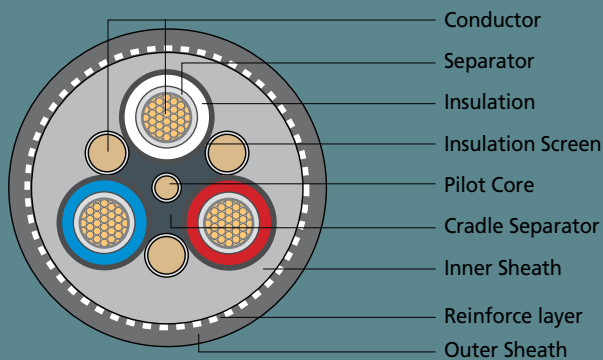
Rubber insulated electric flexible
cable for mining and general use

Mining Cable

Type 241

Application

Semiconductive screened three-core cable with interstitial earth conductors and a central pilot core-reeling and trailing-for underground coal mining



Conductor

Flexible tinned annealed copper
3 core, 3 earths plus central pilot
Conductor separator tape : 1.1/1.1kV-polyester
3.3/3.3kV and above-semiconductive screen

Insulation

Special compound based on EPR(R-EP-90)
Semiconductive elastomer screen

Earth

Three interstitial flexible earth
conductors covered with
semiconductive elastomer

Identification

Power : Red, White, Blue / Earth : Black(All)
Pilot core : Grey

Sheath

Special compound based on HD-85-PCP
or HD-90-CPE
Black(recommended colour)
Reinforcement between the sheaths

Reference standard

AS / NZS 1802

Pilot resistance

Single, in centre of cable Max. D.C. resistance
of $5.5 \Omega/100m$ for power cores to $35mm^2$,
and $3 \Omega/100m$ for power cores above $35mm^2$

Thermal properties

Maximum permissible operating
temperature of the conductor

Normal operation	90°C
Short-circuit operation (5s)	250°C

Type 241

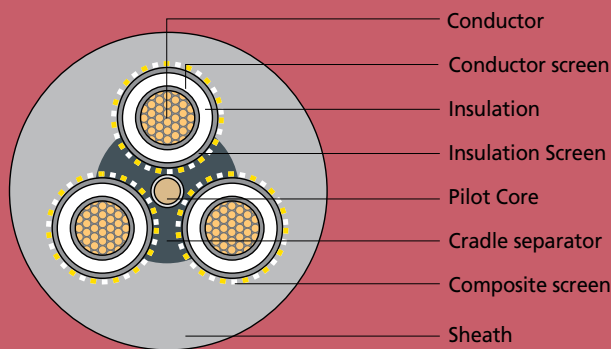
Power Conductor			Earth Conductor	Cable		
Nominal Area (mm ²)	Nominal Diameter (mm)	Insulation Thickness (mm)	Nominal Area (mm ²)	Sheath Thickness (mm)	Nominal Diameter (mm)	Net Weight (kg/100m)
Type 241.1 (1.1/1.1kV)						
6	3.5	1.5	1.0	3.8	30.6	110
10	4.4	1.5	1.5	3.8	32.5	130
16	5.7	1.6	3.0	3.9	36.0	170
25	7.4	1.6	4.5	4.2	40.2	230
35	8.7	1.6	6.0	4.4	43.4	280
50	10.0	1.7	8.0	4.9	47.7	350
70	12.3	1.8	12.5	5.3	53.8	470
95	13.9	2.0	12.5	5.8	59.2	580
120	16.1	2.1	13.8	6.3	65.3	720
150	17.8	2.3	17.0	6.7	70.6	870
185	19.6	2.5	22.0	7.3	76.6	1,040
240	22.8	2.8	27.2	8.0	86.2	1,330
300	25.8	3.0	34.6	8.7	94.5	1,650
Type 241.3 (3.3/3.3kV)						
16	5.7	3.0	3.0	5.0	44.6	250
25	7.4	3.0	4.5	5.3	48.9	315
35	8.7	3.0	6.0	5.6	52.3	370
50	10.0	3.0	8.0	6.0	55.9	450
70	12.3	3.0	12.5	6.4	61.6	580
95	13.9	3.0	15.9	6.8	65.9	670
120	16.1	3.0	20.1	7.2	71.4	820
150	17.8	3.0	27.2	7.6	75.9	985
185	19.6	3.0	32.1	8.0	80.6	1,150
240	22.8	3.0	39.5	8.6	88.7	1,400
300	25.8	3.0	50.8	9.1	95.0	1,690
Type 241.6 (6.6/6.6kV)						
16	5.7	5.0	3.0	6.1	55.4	370
25	7.4	5.0	4.5	6.4	59.7	440
35	8.7	5.0	6.0	6.7	63.1	505
50	10.0	5.0	8.0	7.1	66.7	590
70	12.3	5.0	12.5	7.4	72.3	730
95	13.9	5.0	15.9	7.9	76.7	845
120	16.1	5.0	20.1	8.3	82.2	1,005
150	17.8	5.0	27.2	8.6	86.5	1,170
185	19.6	5.0	32.1	9.0	91.2	1,360
240	22.8	5.0	39.5	9.6	99.3	1,620
300	25.8	5.0	50.8	10.2	106.0	1,930
Type 241.11 (11kV)						
25	7.4	7.6	4.5	7.8	73.7	645
35	8.7	7.6	6.0	8.1	77.1	720
50	10.0	7.6	8.0	8.5	80.7	820
70	12.3	7.6	12.5	8.9	86.5	970
95	13.9	7.6	15.9	9.3	90.7	1,090
120	16.1	7.6	20.1	9.7	96.3	1,275
150	17.8	7.6	27.2	10.0	100.5	1,455
185	19.6	7.6	32.1	10.4	105.2	1,650
240	22.8	7.6	39.5	11.0	113.3	1,940

Mining Cable

Type 409

Application

Composite screened three-core cable with a central pilot core-reeling and trailing-For mining and general use (other than underground coal mining)



Conductor

Flexible tinned annealed copper
3 core, 3 earths plus central pilot
Conductor separator tape : 1.1/1.1kV-polyester
3.3/3.3kV and above-semiconductive screen

Insulation

Class 2 EPR, Special compound
based on R-EP-90
Insulation Tape : 1.1/1.1kV-proofed tape
3.3/3.3kV and above-semiconductive screen

Composite Screen

Seven tinned annealed copper wires
with polyester yarn

Identification

Power:Red, White, Blue
Pilot core : Grey

Sheath

Special compound based on HD-85-PCP
or HD-90-CPE
Black(recommended colour)
Option : Reinforcement between sheaths

Reference standard

AS / NZS 2802

Pilot resistance

Single, in centre of cable Max. D.C. resistance
of $3\Omega/100m$ for power cores to $35mm^2$,
and $2\Omega/100m$ for power cores above $35mm^2$

Thermal properties

Maximum permissible operating
temperature of the conductor

Normal operation	90°C
Short-circuit operation (5s)	250°C

Type 409

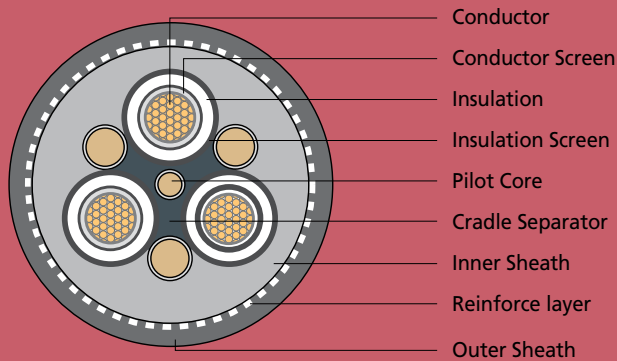
Power Conductor			Core Screen	Cable		
Nominal Area (mm ²)	Nominal Diameter (mm)	Insulation Thickness (mm)	Strand Size (No./mm)	Sheath Thickness (mm)	Nominal Diameter (mm)	Net Weight (kg/100m)
Type 409.1 (1.1/1.1kV)						
1.5	1.6	1.4	7/0.25	3.0	25.1	160
2.5	2.0	1.5	7/0.25	3.0	26.4	170
6	3.5	1.5	7/0.25	3.8	31.2	210
10	4.4	1.5	7/0.25	3.8	33.2	230
16	5.7	1.6	7/0.25	4.0	36.8	270
25	7.4	1.6	7/0.25	4.3	41.1	330
35	8.7	1.6	7/0.25	4.6	44.5	380
50	10.0	1.7	7/0.25	5.0	48.5	440
70	12.3	1.8	7/0.25	5.4	54.7	560
95	13.9	2.0	7/0.30	6.0	60.8	680
120	16.1	2.1	7/0.30	6.4	66.8	820
150	17.8	2.3	7/0.40	6.9	73.2	980
185	19.6	2.5	7/0.40	7.4	78.9	1,150
240	22.8	2.8	7/0.50	8.2	90.0	1,450
300	25.8	3.0	7/0.50	8.8	98.0	1,820
Type 409.3 (3.3/3.3kV)						
16	5.7	3.0	7/0.25	5.3	48.4	340
25	7.4	3.0	7/0.25	5.6	52.6	400
35	8.7	3.0	7/0.25	5.9	56.0	455
50	10.0	3.0	7/0.25	6.3	60.6	535
70	12.3	3.0	7/0.25	6.6	66.2	650
95	13.9	3.0	7/0.25	7.1	70.7	750
120	16.1	3.0	7/0.30	7.4	76.0	880
150	17.8	3.0	7/0.30	7.8	80.5	1,015
Type 409.6 (6.6/6.6kV)						
16	5.7	5.0	7/0.25	6.4	59.2	450
25	7.4	5.0	7/0.25	6.7	63.5	520
35	8.7	5.0	7/0.25	7.0	66.9	600
50	10.0	5.0	7/0.25	7.3	71.3	690
70	12.3	5.0	7/0.25	7.7	77.0	810
95	13.9	5.0	7/0.30	8.1	81.3	950
120	16.1	5.0	7/0.30	8.5	86.9	1,100
150	17.8	5.0	7/0.40	8.9	91.3	1,310
185	19.6	5.0	7/0.40	9.3	98.0	1,500
240	22.8	5.0	7/0.40	9.9	106.1	1,850
300	25.8	5.0	7/0.50	10.4	115.0	2,090
Type 409.11 (11/11kV)						
25	7.4	7.6	7/0.25	8.1	77.5	740
35	8.7	7.6	7/0.30	8.4	80.0	845
50	10.0	7.6	7/0.30	8.7	83.7	940
70	12.3	7.6	7/0.30	9.1	89.2	1,050
95	13.9	7.6	7/0.40	9.6	93.4	1,270
120	16.1	7.6	7/0.40	9.9	99.4	1,445
150	17.8	7.6	7/0.40	10.3	104.2	1,625
Type 409.22 (22/22kV)						
35	8.7	10.5	7/0.40	10.0	102.0	1,300
50	10.0	10.5	7/0.40	10.3	105.5	1,400
70	12.3	10.5	7/0.40	10.7	111.4	1,600

Mining Cable

Type 441

Application

Semiconductive screened three-core cable with interstitial earth conductors and a central pilot core-reeling and trailing-for mining and general use (other than underground coal mining)



Conductor

Flexible tinned annealed copper
3 core, 3 earths plus central pilot

Insulation

For Class 1 -EPR, Special compound based on XR-EP-90
For Class 2 -EPR, Special compound based on R-EP-90
Semiconductive elastomer screen

Earth

Three interstitial flexible earth conductors covered with semiconductive elastomer

Identification

Power : Red, White, Blue / Earth : Black(All)
Pilot core : Grey

Sheath

For Class 1 -Special compound based on XHD-85-PCP or XHD-90-CPE
For Class 2 -Special compound based on HD-85-PCP or HD-90-CPE
Black(recommended colour)
Option : Reinforcement between sheaths

Reference standard

AS / NZS 2802

Pilot resistance

Single, in centre of cable Max. D.C. resistance of $3\Omega/100m$ for power cores to $35mm^2$, and $2\Omega/100m$ for power cores above $35mm^2$

Thermal properties

Maximum permissible operating temperature of the conductor

Normal operation	90°C
Short-circuit operation (5s)	250°C

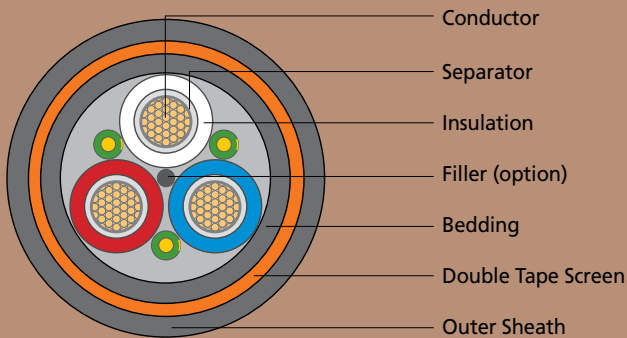
Type 441

Power Conductor			Earth Conductor	Cable		
Nominal Area (mm ²)	Nominal Diameter (mm)	Insulation Thickness (mm)	Nominal Area (mm ²)	Sheath Thickness (mm)	Nominal Diameter (mm)	Net Weight (kg/100m)
Type 441.1 (1.1/1.1kV) - Class 2						
6	3.5	1.5	2.1	3.8	29.5	115
10	4.4	1.5	3.4	3.8	32.2	140
16	5.7	1.6	5.3	3.9	35.0	185
25	7.4	1.6	5.3	4.2	38.9	235
35	8.7	1.6	5.3	4.4	42.3	285
50	10.0	1.7	8.0	4.9	47.4	365
70	12.3	1.8	12.5	5.3	52.8	485
95	13.9	2.0	15.9	5.8	57.5	585
120	16.1	2.1	20.1	6.3	63.5	725
150	17.8	2.3	27.2	6.7	69.1	885
185	19.6	2.5	32.1	7.3	76.2	1,070
240	22.8	2.8	39.5	8.0	84.6	1,340
300	25.8	3.0	50.8	8.7	93.0	1,655
Type 441.3 (3.3/3.3kV) - Class 1						
16	5.7	2.2	5.3	4.6	41.4	220
25	7.4	2.2	5.3	4.9	45.6	280
35	8.7	2.2	5.3	5.2	49.0	330
50	10.0	2.4	8.0	5.7	53.7	405
70	12.3	2.4	12.5	6.0	59.3	525
95	13.9	2.4	15.9	6.3	63.3	620
120	16.1	2.4	20.1	6.5	68.4	750
150	17.8	2.4	27.2	6.6	72.3	900
Type 441.6 (6.6/6.6kV) - Class 1						
16	5.7	3.0	5.3	5.0	45.6	255
25	7.4	3.0	5.3	5.3	49.9	320
35	8.7	3.0	5.3	5.6	53.3	365
50	10.0	3.0	8.0	6.0	56.9	440
70	12.3	3.0	12.5	6.3	62.4	560
95	13.9	3.0	15.9	6.4	66.1	660
120	16.1	3.0	20.1	6.6	71.2	800
150	17.8	3.0	27.2	6.7	75.1	940
Type 441.11 (11/11kV) - Class 1						
25	7.4	5.0	5.3	6.3	60.5	440
35	8.7	5.0	5.3	6.4	63.5	490
50	10.0	5.0	8.0	6.5	66.5	560
70	12.3	5.0	12.5	6.6	71.7	680
95	13.9	5.0	15.9	6.8	75.5	780
120	16.1	5.0	20.1	6.9	80.4	930
150	17.8	5.0	27.2	7.0	84.3	1,080
Type 441.22 (22/22kV) - Class 1						
35	8.7	7.6	5.3	6.9	76.4	690
50	10.0	7.6	8.0	7.0	80.2	780
70	12.3	7.6	12.5	7.1	84.8	910

M-EMC VSD/EMC Cable, 0.6/1kV

Application

Electric cable for AC variable speed drive Applications



Conductor

Flexible tinned annealed copper 3 cores & 3 earths per AS/NZS 1125

Insulation & Earths

Special compound based on XLPE (X-90)

Identification

Power : Red, White, Blue
Earths : Green/ Yellow

Bedding

Special compound based on 5V-90 or V-90-HT

Screen

Plain annealed copper double tape with 100% coverage

Sheath

Special compound based on V-90 or V-90-HT (color : option)

Reference standard

AS/NZS 5000.1

Electrical properties

Rated voltage	0.6/1 kV
AC test voltage	2.5kV/5min

Thermal properties

Maximum permissible operating temperature of the conductor	
Normal operation	-25 ~ 90°C
Short-circuit operation (5s)	160°C

Chemical properties

For indoor and outdoor applications
Ozone resistant, UV and moisture
Oil resistant
Flame retardant according to IEC 60332-1

M-EMC 0.6/1kV

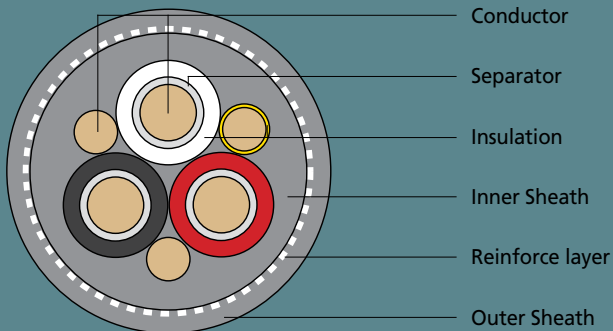
No. of Cores	Conductors			Bedding Thickness (mm)	Sheath Thickness (mm)	Nominal Diameter		Net Weight (Kg / km)	Ratings to AS/NZS 3008.1.1 Amps		
	Power Nominal area (SQMM)	Earth Nominal area (C x SQMM)	Insulation Thickness (mm)			(Min) (mm)	(Max) (mm)		In air	Dir. Buried	In duct
	3	10	3 x 1.5			0.7	1.0	1.8	17.5	19.1	660
3	16	3 x 2.5	0.7	1.0	1.8	21.7	23.5	890	83	110	83
3	25	3 x 4	0.9	1.0	1.8	25.6	27.4	1,280	110	145	110
3	35	3 x 6	0.9	1.0	1.8	28.3	30.3	1,650	135	170	135
3	50	3 x 10	1.0	1.2	1.8	32.9	35.1	2,270	170	205	160
3	70	3 x 10	1.1	1.2	1.8	37.9	39.3	2,920	215	250	200
3	95	3 x 16	1.1	1.4	1.9	42.5	44.1	3,950	265	300	240
3	120	3 x 16	1.2	1.4	2.0	47.0	48.6	4,720	305	345	275
3	150	3 x 25	1.4	1.6	2.2	52.6	54.4	6,010	350	385	310
3	185	3 x 25	1.6	1.6	2.4	58.4	60.2	7,250	405	435	355
3	240	3 x 35	1.7	1.8	2.6	65.1	66.9	9,300	480	500	420
3	300	3 x 50	1.8	1.8	2.8	71.7	73.9	11,670	550	570	475

Mining Cable

Type G-GC, 2,000 Volts

Application

Power conductors cable with ground check conductor and ground conductors-Reeling and trailing-For mining



Conductor

Flexible tinned annealed copper per ASTM B 172

Insulation

90°C Ethylene-propylene rubber (EPR)

Ground-check-conductor

Flexible tinned annealed copper per ASTM B 172 with yellow polypropylene insulation

Ground conductor

Flexible tinned annealed copper per ASTM B 172

Jacket

Reinforced extra-heavy-duty Chlorinated polyethylene (CPE)

Reference standard

ICEA S-75-381 & CSA C 22.2 #96

Electrical properties

Rated voltage 2,000 Volts

Thermal properties

Maximum permissible operating temperature of the conductor

Normal operation	90°C
Short-circuit operation (5s)	250°C

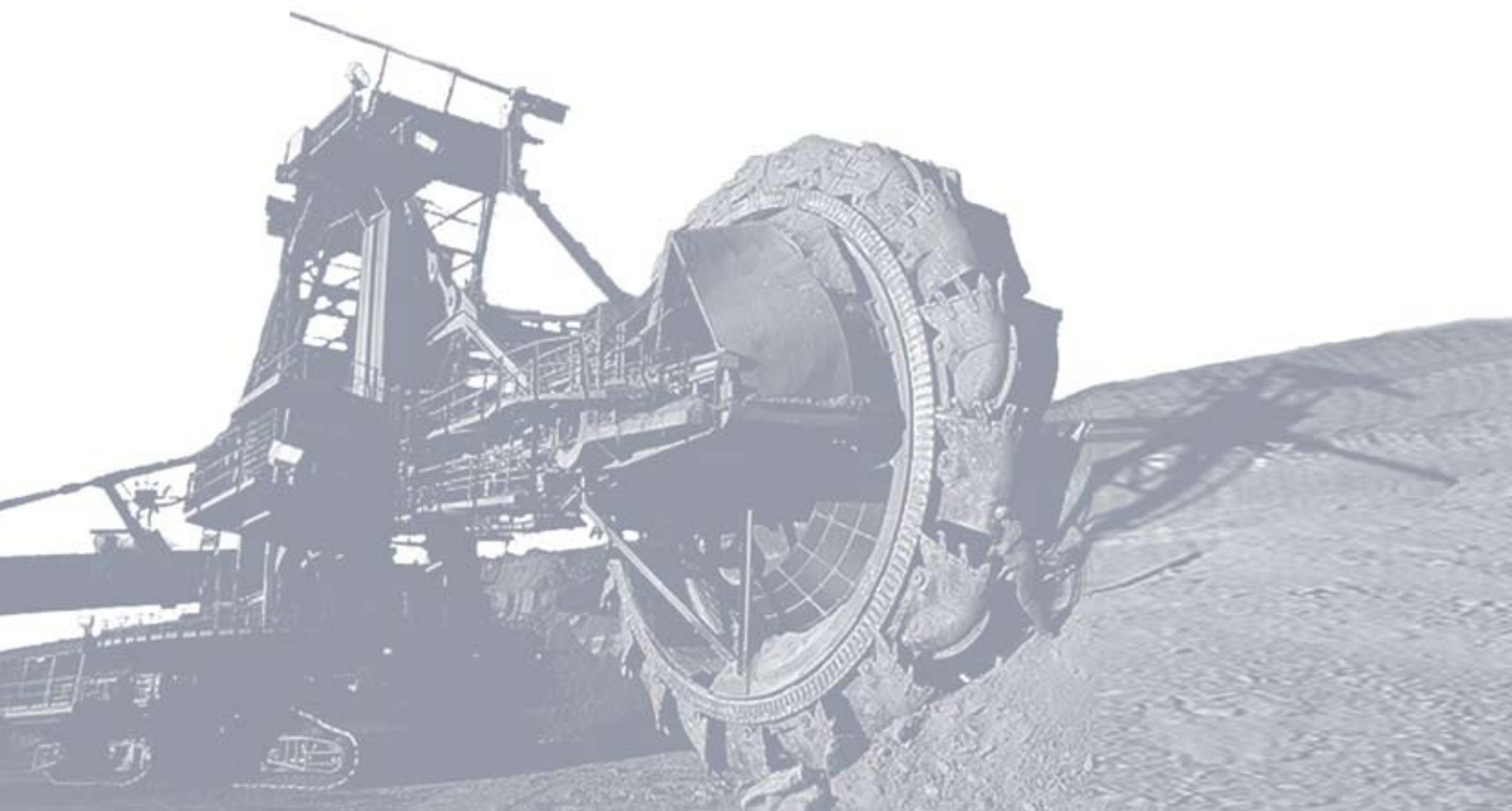
Chemical properties

For indoor and outdoor applications
Ozone resistant, UV and moisture resistant
Oil resistant
Flame retardant according to IEC 60332-1

Type G-GC, 2,000 Volts

Conductor Size (AWG / MCM)	Power Conductor		Grounding Conductor Size (AWG)	Ground Check Conductor Size (AWG)	Jacket Thickness		Nominal Diameter		Net Weight		Ampacity (A)
	No. of wires	Insulation Thickness (inch) (mm)			(inch)	(mm)	(inch)	(mm)	(lbs / 1000ft)	(kg / km)	
8	133	0.060 1.52	10	10	0.125 3.18	0.97 24.6	630 970	59			
6	259	0.060 1.52	10	10	0.140 3.56	1.05 26.6	750 1,170	79			
4	259	0.060 1.52	8	10	0.155 3.94	1.19 30.2	1,080 1,680	104			
3	259	0.060 1.52	8	10	0.155 3.94	1.25 31.7	1,250 1,940	120			
2	259	0.060 1.52	7	10	0.155 3.94	1.34 34.0	1,490 2,310	138			
1	259	0.080 2.03	6	8	0.170 4.32	1.51 38.3	1,900 2,950	161			
1/0	266	0.080 2.03	5	8	0.170 4.32	1.65 41.9	2,300 3,570	186			
2/0	342	0.080 2.03	4	8	0.190 4.83	1.75 44.4	2,740 4,250	215			
3/0	418	0.080 2.03	3	8	0.190 4.83	1.89 48.0	3,300 5,120	249			
4/0	532	0.080 2.03	2	8	0.205 5.21	2.04 51.8	4,000 6,200	287			
250	627	0.095 2.41	2	6	0.220 5.59	2.39 60.7	4,980 7,720	320			
350	888	0.095 2.41	1/0	6	0.235 5.97	2.68 68.0	6,650 10,310	394			
500	1,221	0.095 2.41	2/0	6	0.250 6.35	3.03 76.9	8,900 13,800	487			

※Other sizes or configurations are available on specific request.

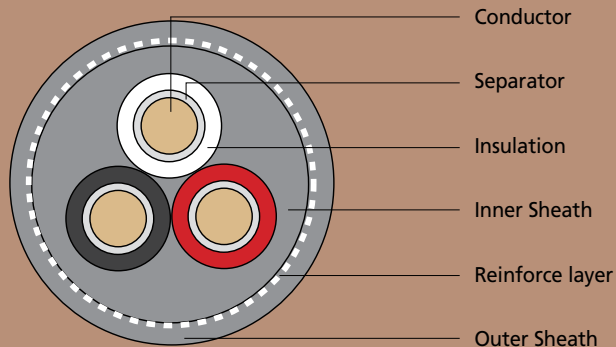


Mining Cable

Type W, 2,000 Volts

Application

Power conductors cable-Reeling and trailing-For underground mining



Conductor

Flexible tinned annealed copper per ASTM B 172

Insulation

90°C Ethylene-propylene rubber (EPR)

Jacket

Reinforced extra-heavy-duty Chlorinated Polyethylene (CPE)

Reference standard

ICEA S-75-381 & CSA C 22.2 #96

Electrical properties

Rated voltage 2,000 Volts

Thermal properties

Maximum permissible operating temperature of the conductor

Normal operation 90°C

Short-circuit operation (5s) 250°C

Chemical properties

For indoor and outdoor applications

Ozone resistant, UV and moisture resistant

Oil resistant

Flame retardant according to IEC 60332-1

Type W, 2,000 Volts (Three Conductors)

Conductor Size (AWG / MCM)	Power Conductor		Jacket Thickness		Nominal Diameter		Net Weight		Ampacity (A)
	No. of wires	Insulation Thickness (inch) (mm)	(inch)	(mm)	(inch)	(mm)	(lbs / 1000ft)	(kg / km)	
8	133	0.060 1.52	0.125	3.18	0.91	23.1	530	820	59
6	133	0.060 1.52	0.140	3.56	1.01	25.6	680	1,060	79
4	259	0.060 1.52	0.155	3.94	1.17	29.7	980	1,520	104
3	259	0.060 1.52	0.155	3.94	1.24	31.5	1,130	1,760	120
2	259	0.060 1.52	0.155	3.94	1.34	34.0	1,380	2,140	138
1	259	0.080 2.03	0.170	4.32	1.51	38.3	1,720	2,680	161
1/0	266	0.080 2.03	0.170	4.32	1.65	41.9	2,090	3,250	186
2/0	342	0.080 2.03	0.190	4.83	1.75	44.4	2,450	3,810	215
3/0	418	0.080 2.03	0.190	4.83	1.89	48.0	2,920	4,550	249
4/0	532	0.080 2.03	0.205	5.21	2.04	51.8	3,560	5,540	287
250	627	0.095 2.41	0.220	5.59	2.39	60.7	4,570	7,120	320
350	888	0.095 2.41	0.235	5.97	2.68	68.0	6,070	9,470	394

Type W, 2,000 Volts (Four Conductors)

Conductor Size (AWG / MCM)	Power Conductor		Jacket Thickness		Nominal Diameter		Net Weight		Ampacity (A)
	No. of wires	Insulation Thickness (inch) (mm)	(inch)	(mm)	(inch)	(mm)	(lbs / 1000ft)	(kg / km)	
8	133	0.060 1.52	0.125	3.18	0.99	25.1	630	980	54
6	133	0.060 1.52	0.140	3.56	1.10	27.9	820	1,270	72
4	259	0.060 1.52	0.155	3.94	1.27	32.2	1,180	1,830	93
3	259	0.060 1.52	0.155	3.94	1.34	34.0	1,350	2,100	106
2	259	0.060 1.52	0.170	4.32	1.48	37.5	1,680	2,620	122
1	259	0.080 2.03	0.190	4.83	1.68	42.6	2,160	3,360	143
1/0	266	0.080 2.03	0.190	4.83	1.79	45.4	2,520	3,920	165
2/0	342	0.080 2.03	0.205	5.21	1.93	49.0	3,080	4,800	192
3/0	418	0.080 2.03	0.205	5.21	2.07	52.5	3,630	5,660	221
4/0	532	0.080 2.03	0.220	5.59	2.26	57.4	4,650	7,290	255

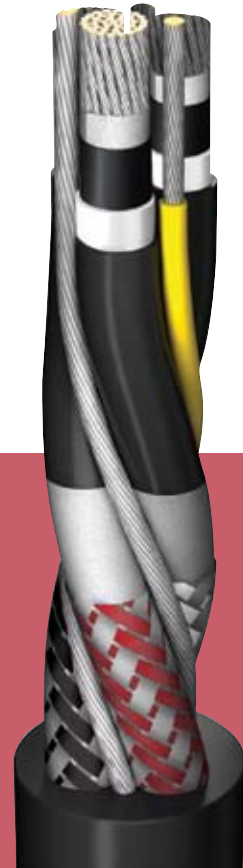
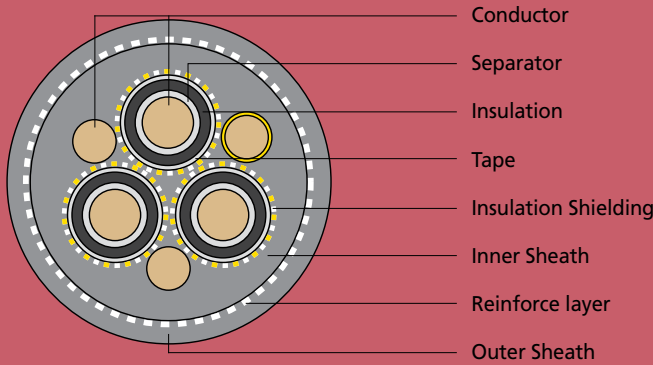


Mining Cable

Type SHD-GC, 2,000 Volts

Application

Individual shielded power conductors cable with ground check conductor and ground conductors-Reeling and trailing-For mining



Conductor

Flexible tinned annealed copper per ASTM B 172

Insulation

90°C Ethylene-propylene rubber (EPR)

Insulation shielding

Tinned copper and textile braid shield

Ground-check-conductor

Flexible tinned annealed copper per ASTM B 172 with yellow polypropylene insulation

Ground conductor

Flexible tinned annealed copper per ASTM B 172

Jacket

Reinforced extra-heavy-duty Chlorinated Polyethylene (CPE)

Reference standard

ICEA S-75-381 & CSA C 22.2 #96

Electrical properties

Rated voltage 2,000 Volts

Thermal properties

Maximum permissible operating temperature of the conductor

Normal operation	90°C
Short-circuit operation (5s)	250°C

Chemical properties

For indoor and outdoor applications
Ozone resistant, UV and moisture resistant
Oil resistant
Flame retardant according to IEC 60332-1

Type SHD-GC, 2,000 Volts

Conductor Size (AWG / MCM)	Power Conductor		Grounding Conductor Size (AWG)	Ground check Conductor Size (AWG)	Jacket Thickness		Nominal Diameter		Net Weight		Ampacity (A)	
	No. of wires	Insulation Thickness			(inch)	(mm)	(inch)	(mm)	(lbs / 1000ft)	(kg / km)		
6	133	0.070	1.78	10	10	0.155	3.94	1.29	32.7	1,160	1,800	93
4	259	0.070	1.78	8	10	0.155	3.94	1.40	35.5	1,490	2,310	122
3	259	0.070	1.78	7	10	0.170	4.32	1.51	38.3	1,700	2,640	140
2	259	0.070	1.78	6	10	0.170	4.32	1.59	40.3	2,000	3,100	159
1	259	0.080	2.03	5	8	0.190	4.83	1.76	44.7	2,400	3,720	184
1/0	266	0.080	2.03	4	8	0.190	4.83	1.86	47.2	2,780	4,310	211
2/0	342	0.080	2.03	3	8	0.205	5.21	2.00	50.8	3,270	5,070	243
3/0	418	0.080	2.03	2	8	0.205	5.21	2.13	54.1	3,900	6,050	279
4/0	532	0.080	2.03	1	8	0.220	5.59	2.31	58.6	4,750	7,370	321
250	627	0.095	2.41	1/0	6	0.220	5.59	2.51	63.7	5,490	8,510	355
300	741	0.095	2.41	1/0	6	0.235	5.97	2.68	68.0	6,400	9,920	398
350	888	0.095	2.41	2/0	6	0.235	5.97	2.81	71.3	7,300	11,320	435
500	1,221	0.095	2.41	4/0	6	0.265	6.73	3.19	81.0	9,850	15,270	536

※ Other sizes or configurations are available on specific request.

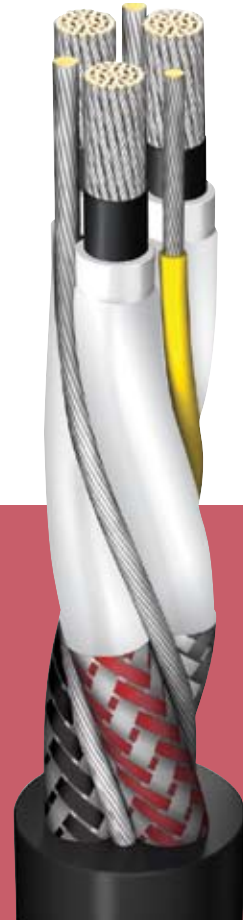
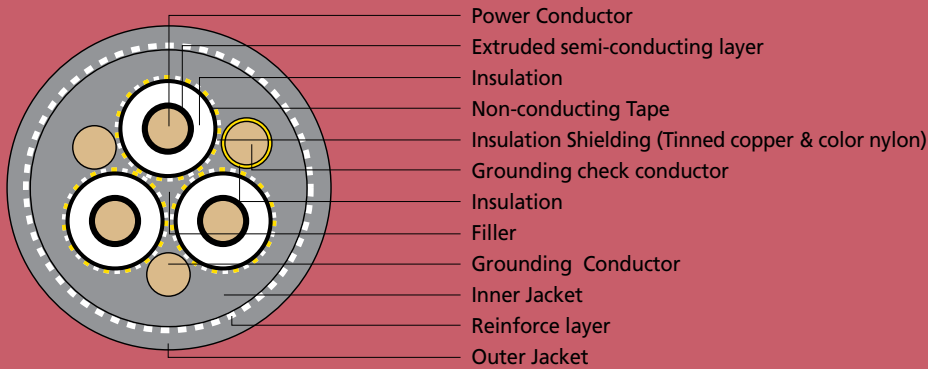


Mining Cable

Type SHD-GC, 5,000 Volts

Application

Individual shielded power conductors cable with ground check conductor and ground conductors-Reeling and trailing-For mining



Conductor

Flexible tinned annealed copper per ASTM B 172

Conducting layer

Semi-conductive compound

Insulation

90°C Ethylene-propylene rubber (EPR)

Conductor tape

Non-conducting Tape

Insulation shielding

Tinned copper and textile braid shield

Ground-check-conductor

Flexible tinned annealed copper per ASTM B 172 with yellow polypropylene insulation

Ground conductor

Flexible tinned annealed copper per ASTM B 172

Jacket

Reinforced extra-heavy-duty Chlorinated Polyethylene (CPE)

Reference standard

ICEA S-75-381 & CSA C 22.2 #96

Electrical properties

Rated voltage 5,000 Volts

Thermal properties

Maximum permissible operating temperature of the conductor

Normal operation 90°C

Short-circuit operation (5s) 250°C

Chemical properties

For indoor and outdoor applications

Ozone resistant, UV and moisture resistant

Oil resistant

Flame retardant according to IEC 60332-1

Type SHD-GC, 5,000 Volts

Power Conductor			Grounding Conductor Size (AWG)	Ground Check Conductor Size (AWG)	Jacket Thickness		Nominal Diameter		Net Weight		Test Voltage		Ampacity 40°C Ambient Temp
Conductor Size (AWG / MCM)	Insulation Thickness (inch) (mm)				(inch)	(mm)	(inch)	(mm)	(lbs / 1000ft)	(kg / km)	kV(AC)	kV(DC)	
6	0.11	2.79	8	10	0.185	4.70	1.56	39.6	1,190	1,770	13.0	-	93
4	0.11	2.79	8	8	0.185	4.70	1.68	42.7	1,510	2,250	13.0	-	122
3	0.11	2.79	8	6	0.205	5.21	1.78	45.2	1,800	2,680	13.0	-	140
2	0.11	2.79	8	6	0.205	5.21	1.87	47.5	1,980	2,950	13.0	-	159
1	0.11	2.79	8	5	0.205	5.21	1.95	49.5	2,285	3,405	13.0	-	184
1/0	0.11	2.79	8	4	0.220	5.59	2.08	52.8	2,730	4,065	13.0	-	211
2/0	0.11	2.79	8	3	0.220	5.59	2.20	55.9	3,215	4,790	13.0	-	243
3/0	0.11	2.79	8	2	0.235	5.97	2.36	59.9	3,755	5,595	13.0	-	279
4/0	0.11	2.79	8	1	0.235	5.97	2.50	63.5	4,455	6,635	13.0	-	321
250	0.12	3.05	8	1/0	0.250	6.35	2.69	68.3	5,265	7,840	13.0	-	355
300	0.12	3.05	8	1/0	0.250	6.35	2.81	71.4	5,980	8,910	13.0	-	398
350	0.12	3.05	8	2/0	0.265	6.73	2.95	74.9	6,850	10,205	13.0	-	435
500	0.12	3.05	8	3/0	0.280	7.11	3.31	84.1	8,775	13,075	13.0	-	536

※Other sizes or configurations are available on specific request.

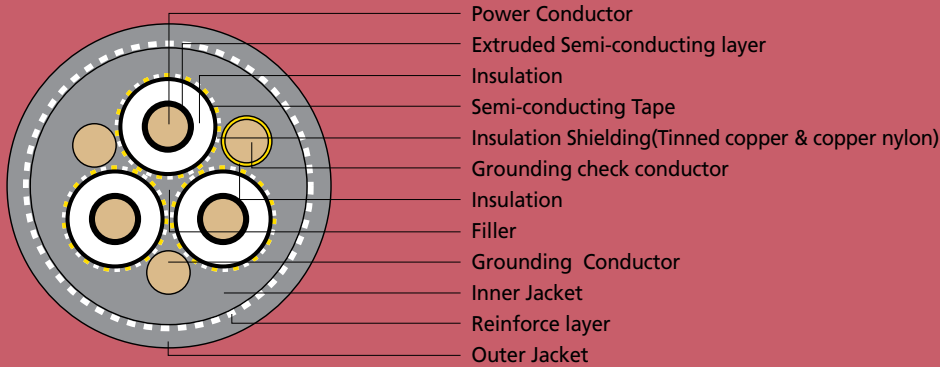


Mining Cable

Type SHD-GC, 8,000 Volts

Application

Individual shielded power conductors cable with ground check conductor and ground conductors-Reeling and trailing-For mining



Conductor

Flexible tinned annealed copper per ASTM B 172

Conducting layer

Semi-conductive compound

Insulation

90°C Ethylene-propylene rubber (EPR)

Conductor tape

Semi-conductive tape

Insulation shielding

Tinned copper and textile braid shield

Ground-check-conductor

Flexible tinned annealed copper per ASTM B 172 with yellow polypropylene insulation

Ground conductor

Flexible tinned annealed copper per ASTM B 172

Jacket

Reinforced extra-heavy-duty Chlorinated Polyethylene (CPE)

Reference standard

ICEA S-75-381 & CSA C 22.2 #96

Electrical properties

Rated voltage 8,000 Volts

Thermal properties

Maximum permissible operating temperature of the conductor

Normal operation 90°C

Short-circuit operation (5s) 250°C

Chemical properties

For indoor and outdoor applications

Ozone resistant, UV and moisture resistant

Oil resistant

Flame retardant according to IEC 60332-1

Type SHD-GC, 8,000 Volts

Conductor Size (AWG / MCM)	Power Conductor Insulation Thickness		Grounding Conductor Size (AWG)	Ground Check Conductor Size (AWG)	Jacket Thickness		Nominal Diameter		Net Weight		Test Voltage		Ampacity 40°C Ambient Temp
	(inch)	(mm)			(inch)	(mm)	(inch)	(mm)	(lbs / 1000ft)	(kg / km)	kV(AC)	kV(DC)	
4	0.15	3.81	8	8	0.205	5.21	1.94	49.3	2,180	3,250	18.0	45.0	122
2	0.15	3.81	6	8	0.220	5.59	2.12	53.8	2,830	4,220	18.0	45.0	159
1	0.15	3.81	5	8	0.220	5.59	2.21	56.1	3,350	4,995	18.0	45.0	184
1/0	0.15	3.81	4	8	0.220	5.59	2.32	58.9	3,550	5,350	18.0	45.0	211
2/0	0.15	3.81	3	8	0.235	5.97	2.46	62.5	4,190	6,250	18.0	45.0	243
3/0	0.15	3.81	2	8	0.250	6.35	2.62	66.5	5,075	7,565	18.0	45.0	279
4/0	0.15	3.81	1	8	0.250	6.35	2.75	69.9	5,660	8,440	18.0	45.0	321
250	0.15	3.81	1/0	8	0.250	6.35	2.89	73.4	6,740	10,045	18.0	45.0	355
300	0.15	3.81	1/0	8	0.265	6.73	3.04	77.2	7,550	11,250	18.0	45.0	398
350	0.15	3.81	2/0	8	0.280	7.11	3.20	81.3	8,460	12,610	18.0	45.0	435
500	0.15	3.81	3/0	8	0.295	7.49	3.56	90.4	10,700	15,950	18.0	45.0	536

※Other sizes or configurations are available on specific request.

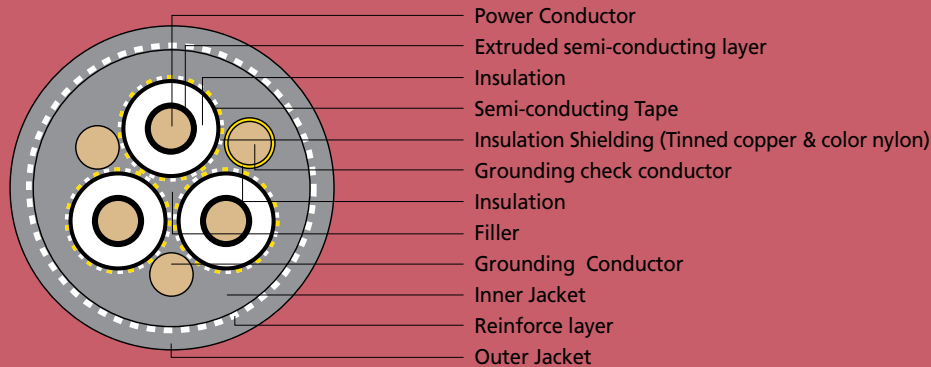


Mining Cable

Type SHD-GC, 15,000 Volts

Application

Individual shielded power conductors cable with ground check conductor and ground conductors-Reeling and trailing-For mining



Conductor

Flexible tinned annealed copper per ASTM B 172

Conducting layer

Semi-conductive compound

Insulation

90°C Ethylene-propylene rubber (EPR)

Conductor tape

Semi-conductive tape

Insulation shielding

Tinned copper and textile braid shield

Ground-check-conductor

Flexible tinned annealed copper per ASTM B 172 with yellow polypropylene insulation

Ground conductor

Flexible tinned annealed copper per ASTM B 172

Jacket

Reinforced extra-heavy-duty Chlorinated Polyethylene (CPE)

Reference standard

ICEA S-75-381 & CSA C 22.2 #96

Electrical properties

Rated voltage 15,000 Volts

Thermal properties

Maximum permissible operating temperature of the conductor

Normal operation 90°C

Short-circuit operation (5s) 250°C

Chemical properties

For indoor and outdoor applications

Ozone resistant, UV and moisture resistant

Oil resistant

Flame retardant according to IEC 60332-1

Type SHD-GC, 15,000 Volts

Conductor Size (AWG / MCM)	Power Conductor Insulation Thickness		Grounding Conductor Size (AWG)	Ground Check Conductor Size (AWG)	Jacket Thickness		Nominal Diameter		Net Weight		Test Voltage		Ampacity 40°C Ambient Temp
	(inch)	(mm)			(inch)	(mm)	(inch)	(mm)	(lbs / 1000ft)	(kg / km)	kV(AC)	kV(DC)	
2	0.21	5.33	6	8	0.235	5.97	2.41	61.2	2,805	4,175	27.0	70.0	159
1	0.21	5.33	5	8	0.235	5.97	2.52	64.0	3,135	4,665	27.0	70.0	184
1/0	0.21	5.33	4	8	0.250	6.35	2.64	67.1	3,605	5,370	27.0	70.0	211
2/0	0.21	5.33	3	8	0.255	6.48	2.73	69.3	4,150	6,180	27.0	70.0	243
3/0	0.21	5.33	2	8	0.265	6.73	2.90	73.7	4,720	7,030	27.0	70.0	279
4/0	0.21	5.33	1	8	0.265	6.73	3.05	77.5	5,460	8,135	27.0	70.0	321
250	0.21	5.33	1/0	8	0.265	6.73	3.10	78.7	6,155	9,170	27.0	70.0	355
300	0.21	5.33	1/0	8	0.265	6.73	3.35	85.1	6,880	10,250	27.0	70.0	398
350	0.21	5.33	2/0	8	0.280	7.11	3.40	86.4	7,830	11,660	27.0	70.0	435
500	0.21	5.33	3/0	8	0.280	7.11	3.65	92.7	9,740	14,510	27.0	70.0	536

※Other sizes or configurations are available on specific request.

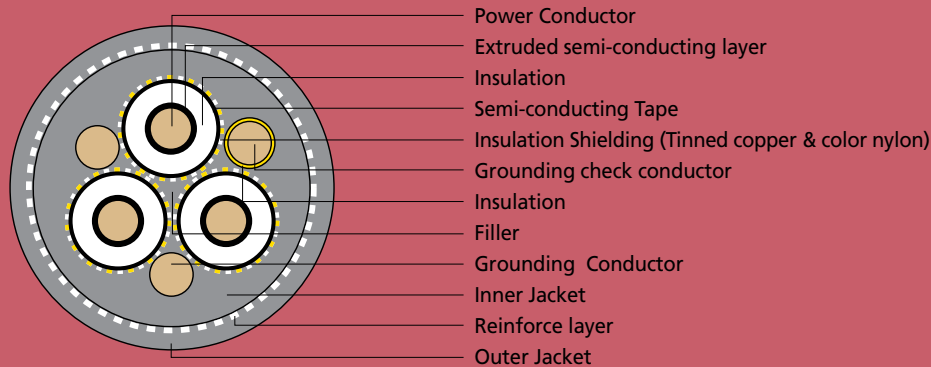


Mining Cable

Type SHD-GC, 25,000 Volts

Application

Individual shielded power conductors cable with ground check conductor and ground conductors-Reeling and trailing-For mining



Conductor

Flexible tinned annealed copper per ASTM B 172

Conducting layer

Semi-conductive compound

Insulation

90°C Ethylene-propylene rubber (EPR)

Conductor tape

Semi-conductive tape

Insulation shielding

Tinned copper and textile braid shield

Ground-check-conductor

Flexible tinned annealed copper per ASTM B 172 with yellow polypropylene insulation

Ground conductor

Flexible tinned annealed copper per ASTM B 172

Jacket

Reinforced extra-heavy-duty Chlorinated Polyethylene (CPE)

Reference standard

ICEA S-75-381 & CSA C 22.2 #96

Electrical properties

Rated voltage 25,000 Volts

Thermal properties

Maximum permissible operating temperature of the conductor

Normal operation 90°C

Short-circuit operation (5s) 250°C

Chemical properties

For indoor and outdoor applications

Ozone resistant, UV and moisture resistant

Oil resistant

Flame retardant according to IEC 60332-1

Type SHD-GC, 25,000 Volts

Power Conductor			Grounding Conductor Size (AWG)	Ground Check Conductor Size (AWG)	Jacket Thickness		Nominal Diameter		Net Weight		Test Voltage		Ampacity 40°C Ambient Temp
Conductor Size (AWG / MCM)	Insulation Thickness (inch) (mm)				(inch)	(mm)	(inch)	(mm)	(lbs / 1000ft)	(kg / km)	kV(AC)	kV(DC)	
1	0.295	7.49	5	8	0.265	6.73	2.95	74.9	3,860	5,745	38.0	100.0	184
1/0	0.295	7.49	6	8	0.265	6.73	3.05	77.5	4,280	6,370	38.0	100.0	211
2/0	0.295	7.49	3	8	0.280	7.11	3.20	81.3	4,920	7,330	38.0	100.0	243
3/0	0.295	7.49	2	8	0.280	7.11	3.33	84.6	5,450	8,115	38.0	100.0	279
4/0	0.295	7.49	1	8	0.295	7.49	3.50	88.9	6,320	9,410	38.0	100.0	321
250	0.295	7.49	1/0	8	0.295	7.49	3.54	89.9	7,000	10,430	38.0	100.0	355
300	0.295	7.49	1/0	8	0.295	7.49	3.75	95.3	7,795	11,615	38.0	100.0	398
350	0.295	7.49	2/0	8	0.295	7.49	3.85	97.8	8,635	12,865	38.0	100.0	435

※Other sizes or configurations are available on specific request.





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