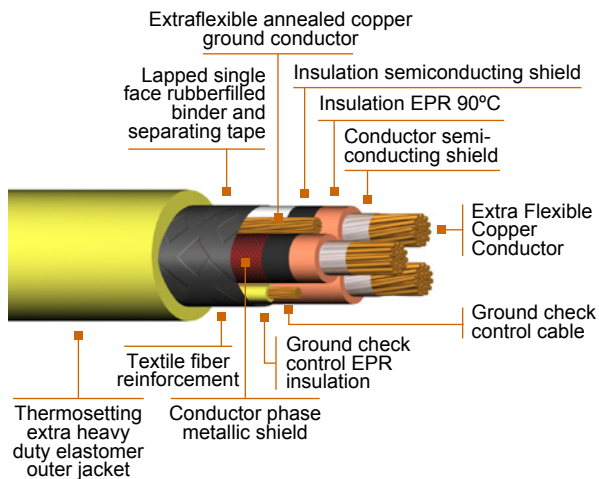


2 kV Up to 25 kV Mining Power Cable, EPR Insulation, Braided Metallic Shield, Thermosetting Rubber Extra Heavy Duty Jacket



## Detail Description or Construction

### Conductor

Extra- flexible copper conductor, according ASTM B3

### Conductor Shield

Semi-conducting tapes shield applied helically over the conductor

### Insulation

100% insulation level oil, ozone and water resistant Ethylene propylene rubber (EPR) 90°C normal temperature operation, 130°C emergency overload condition, 250°C short circuit condition

### Insulation shield

Up to 2kV polyester tape applied over the insulation; over 2kV semi-conducting tapes shield applied over the insulation

### Metallic shield

Tinned copper braid (60% minimum coverage) over each conductor

### Phases identification

By colored fibers Black, White and Red

### Ground wires

Two bare, rope-lay flexible stranded, copper conductors

### Ground check

One yellow insulated, rope-lay flexible stranded, copper conductor

### Core assembly

Three phase conductors, two bare ground and one ground check conductors are cabled together with a left hand lay, plus a binder tape applied over the assembly

### Reinforcement

An open reinforcement is applied over the core for mechanical strength

### Jacket

Extra heavy duty elastomer jacket highly resistant to cutting, tear, sunlight, ozone and flame. It has an excellent resistance to heat, moisture, water, oil and most chemicals commonly present at mining field operations. The standard jacket is black and meets or exceeds all the requirements of ICEA S75-381. Alternate jacket colors are available as request

2 kV Up to 25 kV Mining Power Cable, EPR Insulation, Braided Metallic Shield, Thermosetting Rubber Extra Heavy Duty Jacket

### Packaging

Non-returnable wooden drums

### Options

- Thermoplastic Polyurethane (TPU)
- Jacket (MSHA approved)
- Jacket colors
- Put-up length (300 m)

### Application

For heavy duty medium voltage service as power supply for mining equipment where maximum safety is required. Commonly used to feed heavy mobile mining equipment such as shovels, dredges, drilling rigs, other off-track equipment. Also suitable for medium voltage distribution as a flexible power supply cable in extra heavy duty operations.

SHD-GC cables are designated to operate on three phases AC circuit, where grounding conductors and ground check conductor are required. Ground check control cable allows monitor all the time ground circuit conductors to give maximum safety level.

### Standards / Testing Specifications

- SHD-GC meets or exceeds the requirements of ICEA S-75-381, ICEA S-68-516 and is MSHA approved using TPU jacket.

### Marking

SHD-GC.

### Installation

SHD-GC can be used in outdoors locations under very severe environmental conditions such as the one commonly present at mining places. Conductor design and raw materials used, allows the cable to be installed directly on rough mining fields, not requiring any previous preparation.

### Packing

Non Returnable wooden reel with 300 m standard lengths.



## SHD-GC

2 kV Up to 25 kV Mining Power Cable, EPR Insulation, Braided Metallic Shield, Thermosetting Rubber Extra Heavy Duty Jacket

CABLE TYPE SHD-GC 2 kV

Conductor Size	Nominal Area	No. Threads Minimum	Conductor Diameter	Insulation Thickness	Grounding Conductor Size	Control Conductor Size	Jacket Thickness	OD Nominal	Approx. Total Weight	Min. Bending Radius	Ampacity
AWG / MCM	mm <sup>2</sup>		mm	mm	AWG	AWG	mm	mm	kg / km	mm	A
6	13.3	49	5.49	1.78	10	8	3.94	32.8	1,799	197	93
4	21.2	49	6.82	1.78	8	8	3.94	35.5	2,220	214	122
3	26.7	49	7.77	1.78	7	8	4.32	38.4	2,633	230	140
2	33.6	133	8.68	1.78	6	8	4.32	40.4	2,968	242	159
1	42.4	133	9.83	2.03	5	8	4.83	44.7	3,640	268	184
1/0	53.5	133	10.98	2.03	4	8	4.83	47.2	4,189	283	211
2/0	67.4	133	12.68	2.03	3	8	5.21	50.8	4,694	305	243
3/0	85	259	13.89	2.03	2	8	5.21	54.1	5,817	325	279
4/0	107	259	15.79	2.03	1	8	5.59	58.7	6,983	352	321
250	127	259	16.84	2.41	1/0	8	5.59	63.8	8,280	383	355
350	177	259	20.24	2.41	2/0	8	5.97	71.5	10,689	429	435
500	253	259	23.92	2.41	4/0	8	6.73	81.0	14,483	485	536

The data listed above is approximate and subject to normal manufacturing tolerances



## SHD-GC

2 kV Up to 25 kV Mining Power Cable, EPR Insulation, Braided Metallic Shield, Thermosetting Rubber Extra Heavy Duty Jacket

CABLE TYPE SHD-GC 5 kV

Conductor Size	Nominal Area	No. Threads Minimum	Conductor Diameter	Insulation Thickness	Grounding Conductor Size	Control Conductor Size	Jacket Thickness	OD Nominal	Approx. Total Weight	Min. Bending Radius	Ampacity
AWG / MCM	mm <sup>2</sup>		mm	mm	AWG	AWG	mm	mm	kg / km	mm	A
6	13.3	49	5.49	2.79	10	8	4.70	39.6	2,327	238	93
4	21.2	49	6.82	2.79	8	8	4.70	42.7	2,815	256	122
3	26.7	49	7.77	2.79	7	8	5.21	45.2	3,237	271	140
2	33.6	133	8.68	2.79	6	8	5.21	47.5	3,631	285	159
1	42.4	133	9.83	2.79	5	8	5.21	49.5	4,101	297	184
1/0	53.5	133	10.98	2.79	4	8	5.59	52.8	4,767	317	211
2/0	67.4	133	12.68	2.79	3	8	5.59	55.9	5,514	335	243
3/0	85	259	13.89	2.79	2	8	5.97	59.9	6,490	359	279
4/0	107	259	15.79	2.79	1	8	5.97	63.5	7,556	381	321
250	127	259	16.84	3.05	1/0	8	6.35	68.3	8,850	410	355
350	177	259	20.24	3.05	2/0	8	6.73	74.9	11,120	449	435
500	253	259	23.92	3.05	4/0	8	7.11	84.1	14,886	505	536

The data listed above is approximate and subject to normal manufacturing tolerances



## SHD-GC

2 kV Up to 25 kV Mining Power Cable, EPR Insulation, Braided Metallic Shield, Thermosetting Rubber Extra Heavy Duty Jacket

CABLE TYPE SHD-GC 8 kV

Conductor Size	Nominal Area	No. Threads Minimum	Conductor Diameter	Insulation Thickness	Grounding Conductor Size	Control Conductor Size	Jacket Thickness	OD Nominal	Approx. Total Weight	Min. Bending Radius	Ampacity
AWG / MCM	mm <sup>2</sup>		mm	mm	AWG	AWG	mm	mm	kg / km	mm	A
4	21.2	49	6.82	3.81	8	8	5.21	49.3	3,397	394	122
3	26.7	49	7.77	3.81	7	8	5.21	51.3	3,786	410	140
2	33.6	133	8.68	3.81	6	8	5.59	53.8	4,223	430	159
1	42.4	133	9.83	3.81	5	8	5.59	56.1	4,745	449	184
1/0	53.5	133	10.98	3.81	4	8	5.59	58.9	5,373	471	211
2/0	67.4	133	12.68	3.81	3	8	5.97	62.5	6,211	500	243
3/0	85	259	13.89	3.81	2	8	6.35	66.5	7,218	532	279
4/0	107	259	15.79	3.81	1	8	6.35	69.9	8,276	559	321
250	127	259	16.84	3.81	1/0	8	6.35	73.4	9,396	587	355
350	177	259	20.24	3.81	2/0	8	7.11	81.3	11,913	650	435
500	253	259	23.92	3.81	4/0	8	7.49	90.4	15,686	723	536

The data listed above is approximate and subject to normal manufacturing tolerances



## SHD-GC

2 kV Up to 25 kV Mining Power Cable, EPR Insulation, Braided Metallic Shield, Thermosetting Rubber Extra Heavy Duty Jacket

CABLE TYPE SHD-GC 15 kV

Conductor Size	Nominal Area	No. Threads Minimum	Conductor Diameter	Insulation Thickness	Grounding Conductor Size	Control Conductor Size	Jacket Thickness	OD Nominal	Approx. Total Weight	Min. Bending Radius	Ampacity
AWG / MCM	mm <sup>2</sup>		mm	mm	AWG	AWG	mm	mm	kg / km	mm	A
2	33.6	133	8.68	5.33	6	8	5.97	61.2	5,210	490	164
1	42.4	133	9.83	5.33	5	8	5.97	64.0	5,849	512	187
1/0	53.5	133	10.98	5.33	4	8	6.35	67.1	6,580	537	215
2/0	67.4	133	12.68	5.33	3	8	6.35	69.3	7,272	554	246
3/0	85	259	13.89	5.33	2	8	6.73	73.7	8,420	590	283
4/0	107	259	15.79	5.33	1	8	6.73	77.5	9,616	620	325

The data listed above is approximate and subject to normal manufacturing tolerances