

# Mobile Substation Power Cable • Type SH Single Conductor • 5000 to 35000 Volts • 90°C

**Conductor**

Flexible tin-coated soft annealed bunch stranded copper meeting ASTM B-33

**Conductor Shield**

Combination semi-conducting tape and/or extruded semiconductive thermosetting material

**Insulation**

Heat, moisture and ozone resisting 90°C Ethylene-Propylene rubber (EPR) meeting ICEA S-75-381/NEMA WC58

**Insulation Shield**

Tin-coated copper braid applied over a semiconductive tape (5-15kV). Extruded semi-conductive thermosetting material (25-35kV)

**Jacket**

CPE meeting ICEA S-75-381/NEMA WC58. Consult factory for availability of other jacket materials.

**Identification**

Cable shall be surface printed showing manufacturer, size, voltage rating, type and temperature rating



**Application**

These single conductor portable power cables are extremely flexible and specifically designed for use on mobile substation equipment. The Type SH cable is often necessary for supplying power while replacing damaged utility poles or during routine maintenance of substations.

**Features**

- Extremely flexible stranding for ease of bending
- The conductor shield is bonded to the insulation – providing easy, clean stripping
- Jacket is heat, oil, flame and chemical resistant
- Continuous conductor temperature 90°C
- Jackets available in voltage colors, yellow (5 & 8kV), orange (15kV), red (25 & 35kV). Consult factory for availability of other colors.

**Ratings & Approvals**

- ASTM B-33: Standard Specification for Tinned Soft or Annealed Copper Wire for Electrical Purposes
- ICEA S-75-381/NEMA WC-58: Portable and Power Feeder Cables for Use in Mines and Similar Applications
- UL 1072 Medium Voltage Cable MV-105 (pending)

*CSA approval available by special order*



## 5kV Single Conductor Portable Power Cable – Type SH

Part No. 37-550-	Size AWG/kcmil	Minimum Wires per Conductor	Nominal Insulation Thickness in.	Nominal Jacket Thickness in.	Nominal Outside Diameter in.	Approx. Weight lbs. per 1,000 ft.	Ampacity 90°C
002	2	259	.110	.125	0.975	674	190
004	1/0	266	.110	.140	1.058	825	260
005	2/0	323	.110	.140	1.170	1039	300
007	4/0	532	.110	.155	1.300	1393	400
008	250	627	.120	.155	1.330	1477	445
022	350	888	.120	.170	1.484	1926	550
010	500	1221	.120	.190	1.700	2662	695



## 15kV Single Conductor Portable Power Cable – Type SH

Part No. 37-550-	Size AWG/kcmil	Minimum Wires per Conductor	Nominal Insulation Thickness in.	Nominal Jacket Thickness in.	Nominal Outside Diameter in.	Approx. Weight lbs. per 1,000 ft.	Ampacity 90°C
016	2	259	.210	.155	1.203	881	195
017	1/0	266	.210	.155	1.320	1147	260
018	2/0	323	.210	.155	1.350	1226	300
020	4/0	532	.210	.170	1.497	1594	400
021	250	627	.210	.170	1.547	1758	445
009	350	888	.210	.190	1.765	2364	550
024	500	1221	.210	.190	1.900	2937	685

## 25kV Single Conductor Portable Power Cable – Type SH

Part No. 37-550-	Size AWG/kcmil	Minimum Wires per Conductor	Nominal Insulation Thickness in.	Nominal Jacket Thickness in.	Nominal Outside Diameter in.	Approx. Weight lbs. per 1,000 ft.	Ampacity 90°C
030	1/0	266	.295	.170	1.500	1350	260
031	2/0	323	.295	.170	1.555	1507	300
033	4/0	532	.295	.190	1.713	1909	395
034	250	627	.295	.190	1.763	2085	440
035	350	888	.295	.190	1.886	2517	545
037	500	1221	.295	.205	2.048	3168	680

## 35kV Single Conductor Portable Power Cable – Type SH

Part No. 37-550-	Size AWG/kcmil	Minimum Wires per Conductor	Nominal Insulation Thickness in.	Nominal Jacket Thickness in.	Nominal Outside Diameter in.	Approx. Weight lbs. per 1,000 ft.	Ampacity 90°C
050	1/0	266	.380	.170	1.175	1632	260
051	2/0	342	.380	.205	1.840	1898	300
053	4/0	532	.380	.205	1.915	2235	395
054	250	627	.380	.205	1.975	2509	440
055	350	888	.380	.205	2.100	2901	545
057	500	1221	.380	.205	2.280	3396	680

- Cable diameters and weights are subject to +/- 5% manufacturing tolerance
- Ampacity is calculated with a 90°C conductor temperature and 40°C ambient air, per 2008 NEC, Table 310.69