

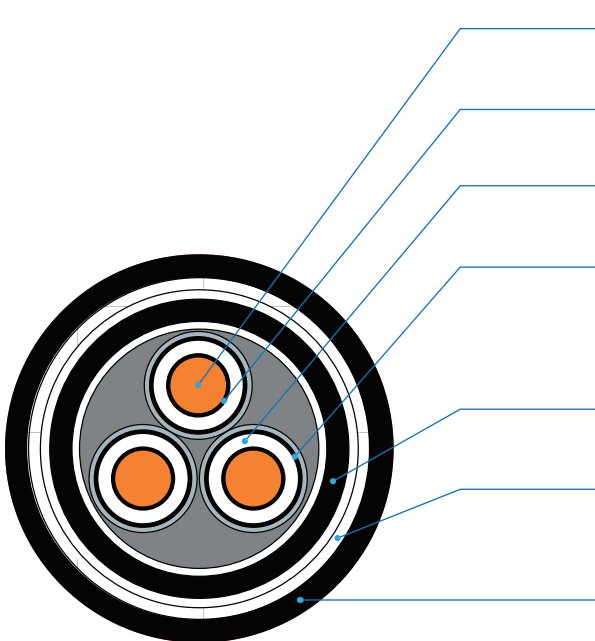
**Type P High Voltage Power Cable (5kV, 8kV, 15kV)**



CABLE DESIGNATION	
5kV	SEN, SENB, SENBS, TEN, TENB, TENBS
8kV	SEN, SENB, SENBS, TEN, TENB, TENBS
15kV	SEN, SENB, SENBS, TEN, TENB, TENBS

APPLICATION STANDARD	
Design guide	IEEE 1580(2010) UL 1309(2017)
Insulation material	IEEE 1580, Type E
Sheath material	IEEE 1580, Type N
Flame retardant	IEEE 1202 & IEC 60332-3 Category A
Cold bend / impact	CSA C22.2 NO. 2556 (-40°C/-40°C) (Formerly CSA C22.2 NO.0.3)

**CONSTRUCTION**



**Sectional view**

**Core identification**

- 1C : Off- White or Black
- 3C : Black, White, Red

<b>Conductor</b>	Flexible stranded tinned annealed copper wires as per IEEE 1580
<b>Conductor screen</b>	Semi-conducting layer (tape / compound)
<b>Insulation</b>	EPR (Type E) as per IEEE 1580 & UL 1072 & UL 1309
<b>Insulation screen</b>	<ul style="list-style-type: none"> <li>• Non-metallic part : Semi-conducting layer (tape / compound)</li> <li>• Metallic part : Braid of tinned annealed copper wire</li> <li>• A suitable separator tape(s) may be applied over the metallic part</li> </ul>
<b>Jacket</b>	Thermosetting Neoprene (Type N) as per IEEE 1580 & UL 1072 & UL 1309
<b>Aarmor</b>	<ul style="list-style-type: none"> <li>• Braid of commercial bronze wires</li> <li>• A suitable separator tape(s) may be applied under / over the armor</li> </ul>
<b>Sheath</b>	<ul style="list-style-type: none"> <li>• Thermosetting Neoprene (Type N) as per IEEE 1580 &amp; UL 1072 &amp; UL 1309</li> <li>• Outer sheath color : Black</li> </ul>

**Cabling**

- Three metallic braided conductors shall be cabled
- Flame retardant & non-hygroscopic fillers may be used
- Suitable tape(s) may be applied on the cabled core
- A Filler may be applied to obtain a circular Cable

**Type P High Voltage Power Cable (5kV, 8kV, 15kV)**

**5kV SEN(BS) / SHIELD 100% INSULATION LEVEL**

No. of Cores	Conductor Nominal Area	Thickness of Insulation	Thickness of Jacket	Thickness of Sheath	SEN		SENB		SENBS	
					Nom.Dia. Approx.	Weight Approx.	Nom.Dia. Approx.	Weight Approx.	Nom.Dia. Approx.	Weight Approx.
No.	AWG or kcmil	mm/inch	mm/inch	mm/inch	mm/inch	kg/km	mm/inch	kg/km	mm/inch	kg/km
1	8	2.28 / 0.090	1.52 / 0.060	1.52 / 0.060	15.8 / 0.622	390	17.3 / 0.683	550	20.8 / 0.819	710
	6	2.28 / 0.090	1.52 / 0.060	2.03 / 0.080	16.9 / 0.665	470	18.4 / 0.726	640	22.9 / 0.902	860
	4	2.28 / 0.090	1.52 / 0.060	2.03 / 0.080	19.0 / 0.748	620	20.5 / 0.809	810	25.0 / 0.984	1,060
	2	2.28 / 0.090	1.52 / 0.060	2.03 / 0.080	20.2 / 0.795	740	21.7 / 0.856	950	26.2 / 1.031	1,200
	1	2.28 / 0.090	2.03 / 0.080	2.03 / 0.080	22.8 / 0.898	960	24.3 / 0.958	1,190	28.8 / 1.134	1,470
	1/0	2.28 / 0.090	2.03 / 0.080	2.03 / 0.080	24.0 / 0.945	1,110	25.5 / 1.006	1,350	30.0 / 1.181	1,650
	2/0	2.28 / 0.090	2.03 / 0.080	2.03 / 0.080	25.2 / 0.992	1,300	26.7 / 1.053	1,550	31.2 / 1.228	1,860
	3/0	2.28 / 0.090	2.03 / 0.080	2.03 / 0.080	26.7 / 1.051	1,490	28.2 / 1.112	1,760	32.7 / 1.287	2,080
	4/0	2.28 / 0.090	2.03 / 0.080	2.03 / 0.080	28.4 / 1.118	1,760	29.9 / 1.179	2,050	34.4 / 1.354	2,390
	262	2.28 / 0.090	2.03 / 0.080	2.03 / 0.080	30.0 / 1.181	2,040	31.5 / 1.242	2,340	36.0 / 1.417	2,700
	313	2.28 / 0.090	2.03 / 0.080	2.03 / 0.080	31.7 / 1.248	2,340	33.2 / 1.309	2,660	37.7 / 1.484	3,040
	373	2.28 / 0.090	2.03 / 0.080	2.03 / 0.080	33.4 / 1.315	2,680	34.9 / 1.376	3,020	39.4 / 1.551	3,410
	444	2.28 / 0.090	2.03 / 0.080	2.03 / 0.080	35.3 / 1.390	3,100	36.8 / 1.450	3,450	41.3 / 1.626	3,860
	535	2.28 / 0.090	2.03 / 0.080	2.79 / 0.110	37.4 / 1.472	3,590	38.9 / 1.533	3,960	44.9 / 1.768	4,560
	646	2.28 / 0.090	2.03 / 0.080	2.79 / 0.110	39.6 / 1.559	4,150	41.1 / 1.620	4,550	47.1 / 1.854	5,170
777	2.28 / 0.090	2.03 / 0.080	2.79 / 0.110	41.8 / 1.646	4,860	43.3 / 1.706	5,280	49.3 / 1.941	5,930	
1111	2.28 / 0.090	2.79 / 0.110	2.79 / 0.110	48.5 / 1.909	6,760	50.0 / 1.970	7,250	56.0 / 2.205	7,990	

Note. For outer diameter, it is applied to ±5% manufacturing tolerance.

**5kV SEN(BS) / SHIELD 133% INSULATION LEVEL**

No. of Cores	Conductor Nominal Area	Thickness of Insulation	Thickness of Jacket	Thickness of Sheath	SEN		SENB		SENBS	
					Nom.Dia. Approx.	Weight Approx.	Nom.Dia. Approx.	Weight Approx.	Nom.Dia. Approx.	Weight Approx.
No.	AWG or kcmil	mm/inch	mm/inch	mm/inch	mm/inch	kg/km	mm/inch	kg/km	mm/inch	kg/km
1	8	2.92 / 0.115	1.52 / 0.060	2.03 / 0.080	17.1 / 0.673	440	18.6 / 0.732	620	23.1 / 0.909	840
	6	2.92 / 0.115	1.52 / 0.060	2.03 / 0.080	18.1 / 0.713	520	19.6 / 0.772	710	24.1 / 0.949	940
	4	2.92 / 0.115	1.52 / 0.060	2.03 / 0.080	20.2 / 0.795	680	21.7 / 0.854	880	26.2 / 1.031	1,140
	2	2.92 / 0.115	2.03 / 0.080	2.03 / 0.080	22.5 / 0.886	860	24.0 / 0.945	1,090	28.5 / 1.122	1,370
	1	2.92 / 0.115	2.03 / 0.080	2.03 / 0.080	24.0 / 0.945	1,030	25.5 / 1.004	1,270	30.0 / 1.181	1,570
	1/0	2.92 / 0.115	2.03 / 0.080	2.03 / 0.080	25.2 / 0.992	1,180	26.7 / 1.051	1,430	31.2 / 1.228	1,740
	2/0	2.92 / 0.115	2.03 / 0.080	2.03 / 0.080	26.4 / 1.039	1,370	27.9 / 1.098	1,630	32.4 / 1.276	1,950
	3/0	2.92 / 0.115	2.03 / 0.080	2.03 / 0.080	28.0 / 1.102	1,570	29.5 / 1.161	1,850	34.0 / 1.339	2,190
	4/0	2.92 / 0.115	2.03 / 0.080	2.03 / 0.080	29.7 / 1.169	1,850	31.2 / 1.228	2,150	35.7 / 1.406	2,500
	262	2.92 / 0.115	2.03 / 0.080	2.03 / 0.080	31.2 / 1.228	2,120	32.7 / 1.287	2,430	37.2 / 1.465	2,800
	313	2.92 / 0.115	2.03 / 0.080	2.03 / 0.080	32.9 / 1.295	2,430	34.4 / 1.354	2,760	38.9 / 1.531	3,150
	373	2.92 / 0.115	2.03 / 0.080	2.03 / 0.080	34.6 / 1.362	2,770	36.1 / 1.421	3,120	40.6 / 1.598	3,530
	444	2.92 / 0.115	2.03 / 0.080	2.79 / 0.110	36.5 / 1.437	3,190	38.0 / 1.496	3,560	44.0 / 1.732	4,140
	535	2.92 / 0.115	2.03 / 0.080	2.79 / 0.110	38.6 / 1.520	3,690	40.1 / 1.579	4,080	46.1 / 1.815	4,690
	646	2.92 / 0.115	2.03 / 0.080	2.79 / 0.110	40.8 / 1.606	4,260	42.3 / 1.665	4,670	48.3 / 1.902	5,310
777	2.92 / 0.115	2.79 / 0.110	2.79 / 0.110	44.5 / 1.752	5,120	46.0 / 1.811	5,570	52.0 / 2.047	6,270	
1111	2.92 / 0.115	2.79 / 0.110	2.79 / 0.110	49.7 / 1.957	6,890	51.2 / 2.016	7,380	57.2 / 2.252	8,150	

Note. For outer diameter, it is applied to ±5% manufacturing tolerance.

**Type P High Voltage Power Cable (5kV, 8kV, 15kV)**

**5kV TEN(BS) / SHIELD 100% INSULATION LEVEL**

No. of Cores	Conductor Nominal Area	Thickness of Insulation	Thickness of Jacket	Thickness of Sheath	TEN		TENB		TENBS	
					Nom.Dia. Approx.	Weight Approx.	Nom.Dia. Approx.	Weight Approx.	Nom.Dia. Approx.	Weight Approx.
No.	AWG or kcmil	mm/inch	mm/inch	mm/inch	mm/inch	kg/km	mm/inch	kg/km	mm/inch	kg/km
3	8	2.28 / 0.090	2.03 / 0.080	2.03 / 0.080	31.2 / 1.228	1,440	32.7 / 1.287	1,750	37.2 / 1.465	2,120
	6	2.28 / 0.090	2.03 / 0.080	2.03 / 0.080	33.6 / 1.323	1,730	35.1 / 1.382	2,070	39.6 / 1.559	2,470
	4	2.28 / 0.090	2.03 / 0.080	2.79 / 0.110	38.1 / 1.500	2,290	39.6 / 1.559	2,680	45.6 / 1.795	3,280
	2	2.28 / 0.090	2.03 / 0.080	2.79 / 0.110	40.7 / 1.602	2,740	42.2 / 1.661	3,150	48.2 / 1.898	3,790
	1	2.28 / 0.090	2.79 / 0.110	2.79 / 0.110	45.4 / 1.787	3,470	46.9 / 1.846	3,930	52.9 / 2.083	4,640
	1/0	2.28 / 0.090	2.79 / 0.110	2.79 / 0.110	48.0 / 1.890	4,010	49.5 / 1.949	4,490	55.5 / 2.185	5,240
	2/0	2.28 / 0.090	2.79 / 0.110	2.79 / 0.110	50.6 / 1.992	4,660	52.1 / 2.051	5,170	58.1 / 2.287	5,950
	3/0	2.28 / 0.090	2.79 / 0.110	2.79 / 0.110	53.8 / 2.118	5,370	55.3 / 2.177	5,910	61.3 / 2.413	6,730
	4/0	2.28 / 0.090	2.79 / 0.110	2.79 / 0.110	57.5 / 2.264	6,350	59.0 / 2.323	6,920	65.0 / 2.559	7,800
	262	2.28 / 0.090	2.79 / 0.110	2.79 / 0.110	61.0 / 2.402	7,320	62.5 / 2.461	7,920	68.5 / 2.697	8,850
	313	2.28 / 0.090	2.79 / 0.110	3.56 / 0.140	64.6 / 2.543	8,400	66.1 / 2.602	9,040	73.6 / 2.898	10,280
	373	2.28 / 0.090	2.79 / 0.110	3.56 / 0.140	68.3 / 2.689	9,600	69.8 / 2.748	10,280	77.3 / 3.043	11,590
	444	2.28 / 0.090	3.56 / 0.140	3.56 / 0.140	73.9 / 2.909	11,330	75.4 / 2.969	12,060	82.9 / 3.264	13,470
	535	2.28 / 0.090	3.56 / 0.140	3.56 / 0.140	78.4 / 3.087	13,080	79.9 / 3.146	13,860	87.4 / 3.441	15,340
	646	2.28 / 0.090	3.56 / 0.140	3.56 / 0.140	83.1 / 3.272	15,070	84.6 / 3.331	15,900	92.1 / 3.626	17,470
777	2.28 / 0.090	3.56 / 0.140	3.56 / 0.140	87.9 / 3.461	17,530	89.4 / 3.520	18,400	96.9 / 3.815	20,050	
1111	2.28 / 0.090	3.56 / 0.140	3.56 / 0.140	99.1 / 3.902	23,560	100.6 / 3.961	24,550	108.1 / 4.256	26,400	

Note. For outer diameter, it is applied to ±5% manufacturing tolerance.

**5kVTEN(BS) / SHIELD 133% INSULATION LEVEL**

No. of Cores	Conductor Nominal Area	Thickness of Insulation	Thickness of Jacket	Thickness of Sheath	TEN		TENB		TENBS	
					Nom.Dia. Approx.	Weight Approx.	Nom.Dia. Approx.	Weight Approx.	Nom.Dia. Approx.	Weight Approx.
No.	AWG or kcmil	mm/inch	mm/inch	mm/inch	mm/inch	kg/km	mm/inch	kg/km	mm/inch	kg/km
3	8	2.92 / 0.115	2.03 / 0.080	2.03 / 0.080	34.0 / 1.339	1,650	35.5 / 1.398	2,000	40.0 / 1.575	2,400
	6	2.92 / 0.115	2.03 / 0.080	2.03 / 0.080	36.2 / 1.425	1,950	37.7 / 1.484	2,320	42.2 / 1.661	2,740
	4	2.92 / 0.115	2.03 / 0.080	2.79 / 0.110	40.7 / 1.602	2,540	42.2 / 1.661	2,950	48.2 / 1.898	3,590
	2	2.92 / 0.115	2.79 / 0.110	2.79 / 0.110	44.8 / 1.764	3,160	46.3 / 1.823	3,610	52.3 / 2.059	4,310
	1	2.92 / 0.115	2.79 / 0.110	2.79 / 0.110	48.0 / 1.890	3,760	49.5 / 1.949	4,240	55.5 / 2.185	4,990
	1/0	2.92 / 0.115	2.79 / 0.110	2.79 / 0.110	50.6 / 1.992	4,310	52.1 / 2.051	4,820	58.1 / 2.287	5,600
	2/0	2.92 / 0.115	2.79 / 0.110	2.79 / 0.110	53.2 / 2.094	4,980	54.7 / 2.154	5,510	60.7 / 2.390	6,330
	3/0	2.92 / 0.115	2.79 / 0.110	2.79 / 0.110	56.6 / 2.228	5,720	58.1 / 2.287	6,280	64.1 / 2.524	7,150
	4/0	2.92 / 0.115	2.79 / 0.110	2.79 / 0.110	60.3 / 2.374	6,720	61.8 / 2.433	7,320	67.8 / 2.669	8,240
	262	2.92 / 0.115	2.79 / 0.110	3.56 / 0.140	63.5 / 2.500	7,680	65.0 / 2.559	8,310	72.5 / 2.854	9,530
	313	2.92 / 0.115	2.79 / 0.110	3.56 / 0.140	67.2 / 2.646	8,800	68.7 / 2.705	9,460	76.2 / 3.000	10,750
	373	2.92 / 0.115	3.56 / 0.140	3.56 / 0.140	72.4 / 2.850	10,280	73.9 / 2.909	11,000	81.4 / 3.205	12,380
	444	2.92 / 0.115	3.56 / 0.140	3.56 / 0.140	76.5 / 3.012	11,780	78.0 / 3.071	12,540	85.5 / 3.366	13,990
	535	2.92 / 0.115	3.56 / 0.140	3.56 / 0.140	81.0 / 3.189	13,550	82.5 / 3.248	14,360	90.0 / 3.543	15,890
	646	2.92 / 0.115	3.56 / 0.140	3.56 / 0.140	85.7 / 3.374	15,570	87.2 / 3.433	16,430	94.7 / 3.728	18,040
777	2.92 / 0.115	3.56 / 0.140	3.56 / 0.140	90.5 / 3.563	18,060	92.0 / 3.622	18,950	99.5 / 3.917	20,650	

Note. For outer diameter, it is applied to ±5% manufacturing tolerance.

# Type P High Voltage Power Cable (5kV, 8kV, 15kV)

## 8kV SEN(BS) / SHIELD 100% INSULATION LEVEL

No. of Cores	Conductor Nominal Area	Thickness of Insulation	Thickness of Jacket	Thickness of Sheath	SEN		SENB		SENBS	
					Nom.Dia. Approx.	Weight Approx.	Nom.Dia. Approx.	Weight Approx.	Nom.Dia. Approx.	Weight Approx.
No.	AWG or kcmil	mm/inch	mm/inch	mm/inch	mm/inch	kg/km	mm/inch	kg/km	mm/inch	kg/km
1	6	2.92 / 0.115	1.52 / 0.060	2.03 / 0.080	18.3 / 0.720	530	19.8 / 0.780	720	24.5 / 0.965	960
	4	2.92 / 0.115	1.52 / 0.060	2.03 / 0.080	20.4 / 0.803	690	21.9 / 0.862	890	26.7 / 1.051	1,170
	2	2.92 / 0.115	2.03 / 0.080	2.03 / 0.080	22.7 / 0.894	870	24.2 / 0.953	1,100	29.0 / 1.142	1,400
	1	2.92 / 0.115	2.03 / 0.080	2.03 / 0.080	24.2 / 0.953	1,040	25.7 / 1.012	1,280	30.6 / 1.205	1,610
	1/0	2.92 / 0.115	2.03 / 0.080	2.03 / 0.080	25.4 / 1.000	1,190	26.9 / 1.059	1,450	31.8 / 1.252	1,790
	2/0	2.92 / 0.115	2.03 / 0.080	2.03 / 0.080	26.6 / 1.047	1,380	28.1 / 1.106	1,650	33.0 / 1.299	2,000
	3/0	2.92 / 0.115	2.03 / 0.080	2.03 / 0.080	28.2 / 1.110	1,580	29.7 / 1.169	1,870	34.6 / 1.362	2,240
	4/0	2.92 / 0.115	2.03 / 0.080	2.03 / 0.080	29.9 / 1.177	1,860	31.4 / 1.236	2,160	36.4 / 1.433	2,560
	262	2.92 / 0.115	2.03 / 0.080	2.03 / 0.080	31.4 / 1.236	2,130	32.9 / 1.295	2,450	37.9 / 1.492	2,870
	313	2.92 / 0.115	2.03 / 0.080	2.03 / 0.080	33.1 / 1.303	2,440	34.6 / 1.362	2,780	39.6 / 1.559	3,210
	373	2.92 / 0.115	2.03 / 0.080	2.03 / 0.080	34.8 / 1.370	2,790	36.3 / 1.429	3,140	41.4 / 1.630	3,600
	444	2.92 / 0.115	2.03 / 0.080	2.79 / 0.110	36.7 / 1.445	3,210	38.2 / 1.504	3,580	44.9 / 1.768	4,230
	535	2.92 / 0.115	2.03 / 0.080	2.79 / 0.110	38.8 / 1.528	3,700	40.3 / 1.587	4,090	47.0 / 1.850	4,790
	646	2.92 / 0.115	2.03 / 0.080	2.79 / 0.110	41.0 / 1.614	4,280	42.5 / 1.673	4,690	49.2 / 1.937	5,410
777	2.92 / 0.115	2.79 / 0.110	2.79 / 0.110	44.7 / 1.760	5,140	46.2 / 1.819	5,590	53.0 / 2.087	6,390	
1111	2.92 / 0.115	2.79 / 0.110	2.79 / 0.110	49.9 / 1.965	6,910	51.4 / 2.024	7,410	58.3 / 2.295	8,300	

Note. For outer diameter, it is applied to ±5% manufacturing tolerance.

## 8kV SEN(BS) / SHIELD 133% INSULATION LEVEL

No. of Cores	Conductor Nominal Area	Thickness of Insulation	Thickness of Jacket	Thickness of Sheath	SEN		SENB		SENBS	
					Nom.Dia. Approx.	Weight Approx.	Nom.Dia. Approx.	Weight Approx.	Nom.Dia. Approx.	Weight Approx.
No.	AWG or kcmil	mm/inch	mm/inch	mm/inch	mm/inch	kg/km	mm/inch	kg/km	mm/inch	kg/km
1	6	3.56 / 0.140	1.52 / 0.060	2.03 / 0.080	19.6 / 0.772	590	21.1 / 0.831	790	25.9 / 1.020	1,050
	4	3.56 / 0.140	2.03 / 0.080	2.03 / 0.080	22.8 / 0.898	810	24.3 / 0.957	1,040	29.1 / 1.146	1,340
	2	3.56 / 0.140	2.03 / 0.080	2.03 / 0.080	24.0 / 0.945	940	25.5 / 1.004	1,180	30.4 / 1.197	1,510
	1	3.56 / 0.140	2.03 / 0.080	2.03 / 0.080	25.5 / 1.004	1,110	27.0 / 1.063	1,370	31.9 / 1.256	1,710
	1/0	3.56 / 0.140	2.03 / 0.080	2.03 / 0.080	26.7 / 1.051	1,260	28.2 / 1.110	1,530	33.1 / 1.303	1,890
	2/0	3.56 / 0.140	2.03 / 0.080	2.03 / 0.080	27.9 / 1.098	1,460	29.4 / 1.157	1,740	34.3 / 1.350	2,110
	3/0	3.56 / 0.140	2.03 / 0.080	2.03 / 0.080	29.5 / 1.161	1,660	31.0 / 1.220	1,960	36.0 / 1.417	2,360
	4/0	3.56 / 0.140	2.03 / 0.080	2.03 / 0.080	31.2 / 1.228	1,940	32.7 / 1.287	2,260	37.7 / 1.484	2,680
	262	3.56 / 0.140	2.03 / 0.080	2.03 / 0.080	32.7 / 1.287	2,220	34.2 / 1.346	2,550	39.2 / 1.543	2,980
	313	3.56 / 0.140	2.03 / 0.080	2.03 / 0.080	34.4 / 1.354	2,540	35.9 / 1.413	2,880	41.0 / 1.614	3,350
	373	3.56 / 0.140	2.03 / 0.080	2.03 / 0.080	36.1 / 1.421	2,880	37.6 / 1.480	3,250	42.7 / 1.681	3,730
	444	3.56 / 0.140	2.03 / 0.080	2.79 / 0.110	38.0 / 1.496	3,310	39.5 / 1.555	3,690	46.2 / 1.819	4,370
	535	3.56 / 0.140	2.03 / 0.080	2.79 / 0.110	40.1 / 1.579	3,810	41.6 / 1.638	4,210	48.3 / 1.902	4,930
	646	3.56 / 0.140	2.03 / 0.080	2.79 / 0.110	42.3 / 1.665	4,390	43.8 / 1.724	4,810	50.6 / 1.992	5,570
777	3.56 / 0.140	2.79 / 0.110	2.79 / 0.110	46.0 / 1.811	5,270	47.5 / 1.870	5,730	54.3 / 2.138	6,550	
1111	3.56 / 0.140	2.79 / 0.110	2.79 / 0.110	51.2 / 2.016	7,040	52.7 / 2.075	7,560	59.6 / 2.346	8,470	

Note. For outer diameter, it is applied to ±5% manufacturing tolerance.

**Type P High Voltage Power Cable (5kV, 8kV, 15kV)**

**8kV TEN(BS) / SHIELD 100% INSULATION LEVEL**

No. of Cores	Conductor Nominal Area	Thickness of Insulation	Thickness of Jacket	Thickness of Sheath	TEN		TENB		TENBS	
					Nom.Dia. Approx.	Weight Approx.	Nom.Dia. Approx.	Weight Approx.	Nom.Dia. Approx.	Weight Approx.
No.	AWG or kcmil	mm/inch	mm/inch	mm/inch	mm/inch	kg/km	mm/inch	kg/km	mm/inch	kg/km
3	6	2.92 / 0.115	2.03 / 0.080	2.79 / 0.110	36.6 / 1.441	1,990	38.1 / 1.500	2,350	44.8 / 1.764	3,010
	4	2.92 / 0.115	2.03 / 0.080	2.79 / 0.110	41.1 / 1.618	2,580	42.6 / 1.677	2,990	49.3 / 1.941	3,720
	2	2.92 / 0.115	2.79 / 0.110	2.79 / 0.110	45.2 / 1.780	3,200	46.7 / 1.839	3,650	53.5 / 2.106	4,460
	1	2.92 / 0.115	2.79 / 0.110	2.79 / 0.110	48.5 / 1.909	3,820	50.0 / 1.969	4,300	56.9 / 2.240	5,180
	1/0	2.92 / 0.115	2.79 / 0.110	2.79 / 0.110	51.0 / 2.008	4,360	52.5 / 2.067	4,870	59.4 / 2.339	5,780
	2/0	2.92 / 0.115	2.79 / 0.110	2.79 / 0.110	53.6 / 2.110	5,030	55.1 / 2.169	5,560	62.1 / 2.445	6,530
	3/0	2.92 / 0.115	2.79 / 0.110	2.79 / 0.110	57.1 / 2.248	5,780	58.6 / 2.307	6,350	65.7 / 2.587	7,400
	4/0	2.92 / 0.115	2.79 / 0.110	2.79 / 0.110	60.7 / 2.390	6,770	62.2 / 2.449	7,380	69.3 / 2.728	8,480
	262	2.92 / 0.115	2.79 / 0.110	3.56 / 0.140	64.0 / 2.520	7,750	65.5 / 2.579	8,390	74.3 / 2.925	9,840
	313	2.92 / 0.115	2.79 / 0.110	3.56 / 0.140	67.6 / 2.661	8,860	69.1 / 2.720	9,530	77.9 / 3.067	11,060
	373	2.92 / 0.115	3.56 / 0.140	3.56 / 0.140	72.8 / 2.866	10,340	74.3 / 2.925	11,070	83.3 / 3.280	12,740
	444	2.92 / 0.115	3.56 / 0.140	3.56 / 0.140	76.9 / 3.028	11,850	78.4 / 3.087	12,610	87.4 / 3.441	14,380
	535	2.92 / 0.115	3.56 / 0.140	3.56 / 0.140	81.4 / 3.205	13,620	82.9 / 3.264	14,430	92.0 / 3.622	16,320
	646	2.92 / 0.115	3.56 / 0.140	3.56 / 0.140	86.2 / 3.394	15,670	87.7 / 3.453	16,530	96.9 / 3.815	18,540
777	2.92 / 0.115	3.56 / 0.140	3.56 / 0.140	90.9 / 3.579	18,130	92.4 / 3.638	19,040	101.7 / 4.004	21,180	

Note. For outer diameter, it is applied to ±5% manufacturing tolerance.

**8kV TEN(BS) / SHIELD 133% INSULATION LEVEL**

No. of Cores	Conductor Nominal Area	Thickness of Insulation	Thickness of Jacket	Thickness of Sheath	TEN		TENB		TENBS	
					Nom.Dia. Approx.	Weight Approx.	Nom.Dia. Approx.	Weight Approx.	Nom.Dia. Approx.	Weight Approx.
No.	AWG or kcmil	mm/inch	mm/inch	mm/inch	mm/inch	kg/km	mm/inch	kg/km	mm/inch	kg/km
3	6	3.56 / 0.140	2.03 / 0.080	2.79 / 0.110	39.4 / 1.551	2,230	40.9 / 1.610	2,630	47.6 / 1.874	3,330
	4	3.56 / 0.140	2.79 / 0.110	2.79 / 0.110	45.4 / 1.787	3,010	46.9 / 1.846	3,470	53.7 / 2.114	4,280
	2	3.56 / 0.140	2.79 / 0.110	2.79 / 0.110	48.0 / 1.890	3,500	49.5 / 1.949	3,980	56.4 / 2.220	4,840
	1	3.56 / 0.140	2.79 / 0.110	2.79 / 0.110	51.3 / 2.020	4,140	52.8 / 2.079	4,650	59.8 / 2.354	5,580
	1/0	3.56 / 0.140	2.79 / 0.110	2.79 / 0.110	53.8 / 2.118	4,690	55.3 / 2.177	5,230	62.3 / 2.453	6,200
	2/0	3.56 / 0.140	2.79 / 0.110	2.79 / 0.110	56.4 / 2.220	5,370	57.9 / 2.280	5,940	65.0 / 2.559	6,970
	3/0	3.56 / 0.140	2.79 / 0.110	2.79 / 0.110	59.9 / 2.358	6,150	61.4 / 2.417	6,740	68.5 / 2.697	7,840
	4/0	3.56 / 0.140	2.79 / 0.110	3.56 / 0.140	63.5 / 2.500	7,160	65.0 / 2.559	7,790	73.8 / 2.906	9,240
	262	3.56 / 0.140	2.79 / 0.110	3.56 / 0.140	66.8 / 2.630	8,160	68.3 / 2.689	8,820	77.1 / 3.035	10,340
	313	3.56 / 0.140	3.56 / 0.140	3.56 / 0.140	71.9 / 2.831	9,540	73.4 / 2.890	10,250	82.3 / 3.240	11,890
	373	3.56 / 0.140	3.56 / 0.140	3.56 / 0.140	75.6 / 2.976	10,800	77.1 / 3.035	11,550	86.1 / 3.390	13,290
	444	3.56 / 0.140	3.56 / 0.140	3.56 / 0.140	79.7 / 3.138	12,330	81.2 / 3.197	13,120	90.3 / 3.555	14,970
	535	3.56 / 0.140	3.56 / 0.140	3.56 / 0.140	84.2 / 3.315	14,130	85.7 / 3.374	14,970	94.9 / 3.736	16,940
	646	3.56 / 0.140	3.56 / 0.140	3.56 / 0.140	89.0 / 3.504	16,210	90.5 / 3.563	17,090	99.8 / 3.929	19,190
777	3.56 / 0.140	3.56 / 0.140	3.56 / 0.140	93.7 / 3.689	18,700	95.2 / 3.748	19,630	104.6 / 4.118	21,850	

Note. For outer diameter, it is applied to ±5% manufacturing tolerance.

**Type P High Voltage Power Cable (5kV, 8kV, 15kV)**

**15kV SEN(BS) / SHIELD 100% INSULATION LEVEL**

No. of Cores	Conductor Nominal Area	Thickness of Insulation	Thickness of Jacket	Thickness of Sheath	SEN		SENB		SENB S	
					Nom.Dia. Approx.	Weight Approx.	Nom.Dia. Approx.	Weight Approx.	Nom.Dia. Approx.	Weight Approx.
No.	AWG or kcmil	mm/inch	mm/inch	mm/inch	mm/inch	kg/km	mm/inch	kg/km	mm/inch	kg/km
1	2	4.44 / 0.175	2.03 / 0.080	2.03 / 0.080	26.2 / 1.031	1,060	27.7 / 1.091	1,320	32.6 / 1.283	1,670
	1	4.44 / 0.175	2.03 / 0.080	2.03 / 0.080	27.7 / 1.091	1,240	29.2 / 1.150	1,520	34.1 / 1.343	1,880
	1/0	4.44 / 0.175	2.03 / 0.080	2.03 / 0.080	28.9 / 1.138	1,400	30.4 / 1.197	1,690	35.4 / 1.394	2,080
	2/0	4.44 / 0.175	2.03 / 0.080	2.03 / 0.080	30.1 / 1.185	1,590	31.6 / 1.244	1,900	36.6 / 1.441	2,300
	3/0	4.44 / 0.175	2.03 / 0.080	2.03 / 0.080	31.6 / 1.244	1,800	33.1 / 1.303	2,120	38.1 / 1.500	2,540
	4/0	4.44 / 0.175	2.03 / 0.080	2.03 / 0.080	33.3 / 1.311	2,090	34.8 / 1.370	2,430	39.8 / 1.567	2,870
	262	4.44 / 0.175	2.03 / 0.080	2.03 / 0.080	34.9 / 1.374	2,380	36.4 / 1.433	2,730	41.5 / 1.634	3,200
	313	4.44 / 0.175	2.03 / 0.080	2.79 / 0.110	36.6 / 1.441	2,700	38.1 / 1.500	3,070	44.8 / 1.764	3,730
	373	4.44 / 0.175	2.03 / 0.080	2.79 / 0.110	38.3 / 1.508	3,060	39.8 / 1.567	3,440	46.5 / 1.831	4,120
	444	4.44 / 0.175	2.03 / 0.080	2.79 / 0.110	40.2 / 1.583	3,490	41.7 / 1.642	3,890	48.4 / 1.906	4,610
	535	4.44 / 0.175	2.03 / 0.080	2.79 / 0.110	42.3 / 1.665	4,000	43.8 / 1.724	4,420	50.6 / 1.992	5,180
	646	4.44 / 0.175	2.79 / 0.110	2.79 / 0.110	46.0 / 1.811	4,750	47.5 / 1.870	5,210	54.3 / 2.138	6,030
	777	4.44 / 0.175	2.79 / 0.110	2.79 / 0.110	48.2 / 1.898	5,480	49.7 / 1.957	5,960	56.6 / 2.228	6,830
1111	4.44 / 0.175	2.79 / 0.110	2.79 / 0.110	53.4 / 2.102	7,280	54.9 / 2.161	7,810	61.9 / 2.437	8,780	

Note. For outer diameter, it is applied to ±5% manufacturing tolerance.

**15kV SEN(BS) / SHIELD 133% INSULATION LEVEL**

No. of Cores	Conductor Nominal Area	Thickness of Insulation	Thickness of Jacket	Thickness of Sheath	SEN		SENB		SENB S	
					Nom.Dia. Approx.	Weight Approx.	Nom.Dia. Approx.	Weight Approx.	Nom.Dia. Approx.	Weight Approx.
No.	AWG or kcmil	mm/inch	mm/inch	mm/inch	mm/inch	kg/km	mm/inch	kg/km	mm/inch	kg/km
1	2	5.46 / 0.215	2.03 / 0.080	2.03 / 0.080	28.0 / 1.102	1,170	29.5 / 1.161	1,450	34.0 / 1.339	1,790
	1	5.46 / 0.215	2.03 / 0.080	2.03 / 0.080	29.5 / 1.161	1,350	31.0 / 1.220	1,650	35.5 / 1.398	2,000
	1/0	5.46 / 0.215	2.03 / 0.080	2.03 / 0.080	30.7 / 1.209	1,520	32.2 / 1.268	1,830	36.7 / 1.445	2,190
	2/0	5.46 / 0.215	2.03 / 0.080	2.03 / 0.080	31.9 / 1.256	1,720	33.4 / 1.315	2,040	37.9 / 1.492	2,420
	3/0	5.46 / 0.215	2.03 / 0.080	2.03 / 0.080	33.5 / 1.319	1,940	35.0 / 1.378	2,270	39.5 / 1.555	2,670
	4/0	5.46 / 0.215	2.03 / 0.080	2.03 / 0.080	35.2 / 1.386	2,230	36.7 / 1.445	2,590	41.2 / 1.622	3,000
	262	5.46 / 0.215	2.03 / 0.080	2.79 / 0.110	36.7 / 1.445	2,520	38.2 / 1.504	2,890	44.2 / 1.740	3,470
	313	5.46 / 0.215	2.03 / 0.080	2.79 / 0.110	38.4 / 1.512	2,850	39.9 / 1.571	3,230	45.9 / 1.807	3,840
	373	5.46 / 0.215	2.03 / 0.080	2.79 / 0.110	40.1 / 1.579	3,210	41.6 / 1.638	3,610	47.6 / 1.874	4,240
	444	5.46 / 0.215	2.03 / 0.080	2.79 / 0.110	42.0 / 1.654	3,650	43.5 / 1.713	4,070	49.5 / 1.949	4,730
	535	5.46 / 0.215	2.79 / 0.110	2.79 / 0.110	45.6 / 1.795	4,330	47.1 / 1.854	4,780	53.1 / 2.091	5,490
	646	5.46 / 0.215	2.79 / 0.110	2.79 / 0.110	47.8 / 1.882	4,930	49.3 / 1.941	5,410	55.3 / 2.177	6,150
	777	5.46 / 0.215	2.79 / 0.110	2.79 / 0.110	50.0 / 1.969	5,670	51.5 / 2.028	6,170	57.5 / 2.264	6,940
1111	5.46 / 0.215	2.79 / 0.110	2.79 / 0.110	55.2 / 2.173	7,490	56.7 / 2.232	8,040	62.7 / 2.469	8,890	

Note. For outer diameter, it is applied to ±5% manufacturing tolerance.

**Type P High Voltage Power Cable (5kV, 8kV, 15kV)**

**15kV TEN(BS) / SHIELD 100% INSULATION LEVEL**

No. of Cores	Conductor Nominal Area	Thickness of Insulation	Thickness of Jacket	Thickness of Sheath	TEN		TENB		TENBS	
					Nom.Dia. Approx.	Weight Approx.	Nom.Dia. Approx.	Weight Approx.	Nom.Dia. Approx.	Weight Approx.
No.	AWG or kcmil	mm/inch	mm/inch	mm/inch	mm/inch	kg/km	mm/inch	kg/km	mm/inch	kg/km
3	2	4.44 / 0.175	2.79 / 0.110	2.79 / 0.110	52.8 / 2.079	4,050	54.3 / 2.138	4,570	61.3 / 2.413	5,530
	1	4.44 / 0.175	2.79 / 0.110	2.79 / 0.110	56.0 / 2.205	4,700	57.5 / 2.264	5,260	64.5 / 2.539	6,270
	1/0	4.44 / 0.175	2.79 / 0.110	2.79 / 0.110	58.6 / 2.307	5,300	60.1 / 2.366	5,880	67.2 / 2.646	6,950
	2/0	4.44 / 0.175	2.79 / 0.110	2.79 / 0.110	61.2 / 2.409	6,000	62.7 / 2.469	6,610	69.8 / 2.748	7,730
	3/0	4.44 / 0.175	2.79 / 0.110	3.56 / 0.140	64.4 / 2.535	6,780	65.9 / 2.594	7,430	74.7 / 2.941	8,890
	4/0	4.44 / 0.175	2.79 / 0.110	3.56 / 0.140	68.1 / 2.681	7,850	69.6 / 2.740	8,520	78.5 / 3.091	10,080
	262	4.44 / 0.175	3.56 / 0.140	3.56 / 0.140	73.0 / 2.874	9,130	74.5 / 2.933	9,860	83.5 / 3.287	11,540
	313	4.44 / 0.175	3.56 / 0.140	3.56 / 0.140	76.7 / 3.020	10,320	78.2 / 3.079	11,080	87.2 / 3.433	12,850
	373	4.44 / 0.175	3.56 / 0.140	3.56 / 0.140	80.3 / 3.161	11,600	81.8 / 3.220	12,400	90.9 / 3.579	14,260
	444	4.44 / 0.175	3.56 / 0.140	3.56 / 0.140	84.4 / 3.323	13,170	85.9 / 3.382	14,010	95.1 / 3.744	15,980
	535	4.44 / 0.175	3.56 / 0.140	3.56 / 0.140	89.0 / 3.504	15,040	90.5 / 3.563	15,920	99.8 / 3.929	18,020
	646	4.44 / 0.175	3.56 / 0.140	3.56 / 0.140	93.7 / 3.689	17,140	95.2 / 3.748	18,070	104.6 / 4.118	20,290

Note. For outer diameter, it is applied to ±5% manufacturing tolerance.

**15kV TEN(BS) / SHIELD 133% INSULATION LEVEL**

No. of Cores	Conductor Nominal Area	Thickness of Insulation	Thickness of Jacket	Thickness of Sheath	TEN		TENB		TENBS	
					Nom.Dia. Approx.	Weight Approx.	Nom.Dia. Approx.	Weight Approx.	Nom.Dia. Approx.	Weight Approx.
No.	AWG or kcmil	mm/inch	mm/inch	mm/inch	mm/inch	kg/km	mm/inch	kg/km	mm/inch	kg/km
3	2	5.46 / 0.215	2.79 / 0.110	2.79 / 0.110	57.1 / 2.248	4,590	58.6 / 2.307	5,160	65.7 / 2.587	6,200
	1	5.46 / 0.215	2.79 / 0.110	2.79 / 0.110	60.3 / 2.374	5,270	61.8 / 2.433	5,870	68.9 / 2.713	6,970
	1/0	5.46 / 0.215	2.79 / 0.110	3.56 / 0.140	62.9 / 2.476	5,890	64.4 / 2.535	6,520	73.2 / 2.882	7,950
	2/0	5.46 / 0.215	2.79 / 0.110	3.56 / 0.140	65.5 / 2.579	6,620	67.0 / 2.638	7,270	75.8 / 2.984	8,760
	3/0	5.46 / 0.215	2.79 / 0.110	3.56 / 0.140	68.9 / 2.713	7,440	70.4 / 2.772	8,130	79.3 / 3.122	9,710
	4/0	5.46 / 0.215	3.56 / 0.140	3.56 / 0.140	74.1 / 2.917	8,800	75.6 / 2.976	9,540	84.6 / 3.331	11,240
	262	5.46 / 0.215	3.56 / 0.140	3.56 / 0.140	77.3 / 3.043	9,860	78.8 / 3.102	10,620	87.8 / 3.457	12,400
	313	5.46 / 0.215	3.56 / 0.140	3.56 / 0.140	81.0 / 3.189	11,080	82.5 / 3.248	11,890	91.6 / 3.606	13,760
	373	5.46 / 0.215	3.56 / 0.140	3.56 / 0.140	84.6 / 3.331	12,400	86.1 / 3.390	13,240	95.3 / 3.752	15,210
	444	5.46 / 0.215	3.56 / 0.140	3.56 / 0.140	88.7 / 3.492	14,000	90.2 / 3.551	14,890	99.5 / 3.917	16,970
	535	5.46 / 0.215	3.56 / 0.140	3.56 / 0.140	93.3 / 3.673	15,910	94.8 / 3.732	16,840	104.2 / 4.102	19,050
	646	5.46 / 0.215	3.56 / 0.140	3.56 / 0.140	98.0 / 3.858	18,050	99.5 / 3.917	19,030	109.0 / 4.291	21,370

Note. For outer diameter, it is applied to ±5% manufacturing tolerance.