



• Application

SANS 1507-3 PVC insulated steel wire armoured power cables are designed for direct burial in free-draining soil conditions, suitable for fixed indoor and outdoor installations. Widely used in transmitting and distributing power for AC 50Hz power lines with a rated voltage of 0.6/1kV. The cables offer stable structures and are adaptable for various systems like three-phase four-wire or five-wire setups.

• Performance

Electrical Performance: Rated U_0/U : 0.6/1kV, ensuring reliable power transmission within specified voltage ranges.

Chemical Performance: Exhibits resistance to chemicals, UV rays, and oils, ensuring durability and reliability in diverse environments.

Mechanical Performance: Minimum bending radius of 15 times the overall diameter ensures flexibility and ease of installation.

Terminal Performance:

Maximum Service Temperature: 70°C

Maximum Short-Circuit Temperature: 160°C (max. 5s)

Minimum Service Temperature: -5°C

Fire Performance:

Flame Retardant: Complies with IEC/EN 60332-1-2 standard for enhanced fire safety.

Reduced Emission of Halogens Chlorine: <15%

• Construction

Conductor: Plain circular, compacted, or shaped stranded copper conductor for efficient conductivity.

Insulation: PVC (Polyvinyl Chloride), rated at 70°C, ensures excellent electrical insulation.

Bedding: PVC (Polyvinyl Chloride), rated at 70°C, provides additional protection and insulation.

Armoring: SWA (Galvanized Round Steel Wire) offers robust mechanical protection against external forces.

Sheath: PVC (Polyvinyl Chloride) or PE (Polyethylene) sheath ensures overall protection and durability.

Core Identification:

Single core: Black

Two cores: Red, Yellow

Three cores: Red, Yellow, Blue

Four cores: Red, Yellow, Blue, Black

Five cores: Red, Yellow, Blue, Black, Green

Sheath Colour: Black with a blue stripe for easy identification.

• Specification

-SANS 1507-3 Standard: PVC insulated cables with steel wire armoring (SWA) for voltages up to and including 1kV

• Eastful Cable Lab



We have CNAS Accredited Facility to assure conformity assessment services with a focus on quality, expertise, and customer satisfaction.

CNAS has international mutual recognition among IAF, ILAC, APLAC and PAC.

• Accreditation

We meet the requirements of ISO9001, ISO14001, ISO45001 and ISO50001 and our cables have certificate of CCC, RoHS, CASC, UL, cUL, TÜV Rheinland and CCS.



• National Green Factory



Our facility has been awarded of National Green Factory by Ministry of Industry and Information Technology of China. We are committed to the development of high-end, intelligent and green manufacturing industry.

*The overall energy consumption level of green factories is better than the energy efficiency benchmark level.

● Technical Parameters

No. of Cores	Nominal Cross Sectional Area	Physical Performance Parameters			Nominal Weight
		Nominal Thickness of Insulation	Nominal Dia. Under Armour	Overall	
-	mm ²	mm	mm	mm	kg/km
2	1.5	0.8	9.75	12.6	313
2	2.5	0.8	10.59	13.6	370
2	4	1	12.41	15.4	478
2	6	1	13.55	16.6	564
2	10	1	15.56	18.8	794
2	16	1	17.46	20.7	1001
2	25	1.2	22.03	25.4	1546
2	35	1.2	24.03	27.4	1852
2	50	1.4	24.92	28.3	1863
2	70	1.4	27.67	31.3	2377
2	95	1.6	31.60	35.6	3080
2	120	1.6	35.04	39.0	3869
2	150	1.8	37.88	42.3	4610
2	185	2	41.32	46.1	5506
2	240	2.2	48.12	52.9	7289
3	1.5	0.8	10.26	13.3	351
3	2.5	0.8	11.17	14.2	411
3	4	1	13.13	16.1	539
3	6	1	15.05	18.3	743
3	10	1	16.48	19.7	919
3	16	1	18.53	21.7	1181
3	25	1.2	23.35	26.8	1820
3	35	1.2	25.51	29.1	2229
3	50	1.4	27.10	30.7	2485
3	70	1.4	30.40	34.4	3226
3	95	1.6	35.48	39.9	4477
3	120	1.6	38.58	43.0	5314
3	150	1.8	42.68	47.5	6444
3	185	2	47.56	52.4	8051
3	240	2.2	52.76	58.0	10114

● Technical Parameters

Physical Performance Parameters					
No. of Cores	Nominal Cross Sectional Area	Nominal Thickness of Insulation	Nominal Dia.		Nominal Weight
			Under Armour	Overall	
-	mm ²	mm	mm	mm	kg/km
4	1.5	0.8	11.09	14.1	395
4	2.5	0.8	12.11	15.1	468
4	4	1	15.00	18.0	709
4	6	1	16.38	19.6	857
4	10	1	17.98	21.2	1075
4	16	1	21.74	25.1	1599
4	25	1.2	25.50	29.1	2172
4	35	1.2	27.92	31.5	2666
4	50	1.4	30.60	34.6	3167
4	70	1.4	35.58	40.0	4388
4	95	1.6	40.08	44.9	5711
4	120	1.6	45.06	49.9	7217
4	150	1.8	49.36	54.2	8595
4	185	2	53.86	59.1	10337
4	240	2.2	59.96	65.6	12999

Electrical Characteristics							
Nominal Cross Sectional Area	Maximum Conductor D.C. Resistance at 20 °C	Current Carrying Capacity					
		2 Cores		3 Cores		4 Cores	
		Free Air	in Ground	Free Air	in Ground	Free Air	in Ground
mm ²	Ω/km	A	A	A	A	A	A
1.5	12.1	22	22	19	18	19	18
2.5	7.41	31	29	26	24	26	24
4	4.61	41	37	35	30	35	30
6	3.08	53	46	45	38	45	38
10	1.83	72	60	62	50	62	50
16	1.15	97	78	83	64	83	64
25	0.727	128	99	110	82	110	82
35	0.524	157	119	135	98	135	98
50	0.387	190	140	163	116	163	116
70	0.268	241	173	207	143	207	143
95	0.193	291	204	251	169	251	169
120	0.153	336	231	290	192	290	192
150	0.124	386	261	332	217	332	217
185	0.0991	439	292	378	243	378	243
240	0.0754	516	336	445	280	445	280