SANS 1507-3 PVC-SWA-PVC Low Voltage Cable, Mains & Control - 1.5mm² to 16mm²

Description

SANS 1507-3 is a copper PVC sheathed low voltage power transmission cable with a rated voltage of 0.6/1kV meeting South African national standards. The SANS 1507-3 cable is armoured with PVC insulation and has a temperature range of -10°C to +70°C. To differentiate it from the SANS 1507-4 XLPE insulated 90°C cable it has a black PVC outer sheath with a blue stripe. They are commonly specified in wide range of industrial projects, in mining, petrochemical, and infrastructure environments. Due to the steel wire armour providing mechanical protection the cable is suitable for direct burial, burying in ducts and laying in racking and tray in internal and external installations.

Key Features

Voltage Rating
600/1000 Volts

Minimum Bending Radius
Fixed: 6 x overall diameter

Flame Retardancy
BS EN/IEC 60332-1-2

Temperature Limits
Temperature Range: -10°C to +70°C

Core Colours

2 core - Yellow, Red

3 core - Yellow, Red, Blue

4 core - Yellow, Red, Blue, Black

Sheath Colour

Black with Blue Stripe

Standards

- BS EN/IEC 60332-1-2
- SANS 1507-3

Construction

- **Conductor**: Stranded copper conductor
- **Insulation**: Polyvinyl Chloride (PVC)
- **Bedding**: Polyvinyl Chloride (PVC)
- **Armour**: Steel Wire Armour (SWA)
- **Outer Sheath**: Polyvinyl Chloride (PVC)
- **Sheath Colour**: Black with Blue stripe

QA Lab

Cleveland Cable Test & Training Lab
Our state-of-the-art cable testing facility ensures that every cable meets the highest standards of quality and compliance through continuous, rigorous testing. Where applicable, cables are independently tested and certified by BASEC to ensure full compliance.

CPR
Cleveland Cable Company is committed to compliance with the Construction Products Regulation (CPR). Where applicable, all cables manufactured after 1st July 2017 have been assessed in accordance with CPR requirements, with full supporting documentation available.

Our Sustainability Commitment

We are committed to the journey to Net Zero as a business partner, an employer and a community member.

By thinking and acting sustainably, we deliver excellent customer service while reducing carbon emissions in collaboration with our customers and suppliers.

ecovadis
Cleveland Cable Company has been independently assessed by EcoVadis, a globally recognised provider of business sustainability ratings. Our score places us among the top 35% of companies evaluated worldwide, reflecting our strong commitment to environmental, social, and ethical performance

SANS 1507-3 PVC-SWA-PVC Low Voltage Cable, Mains & Control - 1.5mm² to 16mm² - Dimensions

Reference	Conductor Size (mm2)	No Of Cores	Insulation Thickness (mm)	Overall Diameter(mm)	Weight(Kg/Km)
SANS15073PVC1KV2X1/5	1.5	2	0.8	12.5	310
SANS15073PVC1KV3X1/5	1.5	3	0.8	13.5	351
SANS15073PVC1KV4X1/5	1.5	4	0.8	14.0	395
SANS15073PVC1KV2X2/5	2.5	2	0.8	13.5	370
SANS15073PVC1KV3X2/5	2.5	3	0.8	14.5	410
SANS15073PVC1KV4X2/5	2.5	4	0.8	15.0	470
SANS15073PVC1KV2X4	4	2	1.0	15.5	478
SANS15073PVC1KV3X4	4	3	1.0	16.0	540
SANS15073PVC1KV4X4	4	4	1.0	18.0	710
SANS15073PVC1KV2X6	6	2	1.0	16.5	565
SANS15073PVC1KV3X6	6	2	1.0	18.5	750
SANS15073PVC1KV2X10	10	2	1.0	19.0	795
SANS15073PVC1KV3X10	10	2	1.0	20.0	920
SANS15073PVC1KV2X16	16	2	1.0	21.0	1000
SANS15073PVC1KV3X16	16	2	1.0	22.0	1185

Multicore armoured 70 °C thermoplastic insulated cables (COPPER CONDUCTORS) Reproduced from *BS7671:2018 Wiring Regulations*

TABLE 4D4A

CURRENT-CARRYING CAPACITY (amperes):

Ambient temperature: 30°C
Ground ambient temperature: 20°C
Conductor operating temperature: 70°C

Conductor cross- sectional area	Reference Method C (clipped direct)		Reference Method E (in free air or on a perforated cable tray etc, horizontal or vertical)		Reference Method D (direct in ground or in ducting in ground, in or around buildings)	
	1 two-core cable single-phase AC or DC	1 three- or four core cable, three- phase AC	1 two-core cable single-phase AC or DC	1 three- or four core cable, three-phase AC	1 two-core cable, single-phase AC or DC	1 three- or four- core cable, three-phase AC
1	2	3	4	5	6	7
mm^2	(A)	(A)	(A)	(A)	(A)	(A)
1.5	21	118	22	19	22	18
2.5	28	25	31	26	29	24
4	38	33	41	35	37	30
6	49	42	53	45	46	38
10	67	58	72	62	60	50
16	89	77	97	83	78	64
25	118	102	128	110	99	82
35	145	125	157	135	119	98
50	175	151	190	163	140	116
70	222	192	241	207	173	143
95	269	231	291	251	204	169
120	310	267	336	290	231	192
150	356	306	386	332	261	217
185	405	348	439	378	292	243
240	476	409	516	445	336	280
300	547	469	592	510	379	316
400	621	540	683	590		

TABLE 4D4B

VOLTAGE DROP (per ampere per metre):

Conductor operating temperature: 70°C

Conductor cross-sectional area	Two-core cable, DC	Two-core cable, single-phase AC			Three- or four-core cable, three-phase AC		
(mm2)	(mV/A/m)	(mV/A/m)			(mV/A/m)		
1.5	29	29			25		
2.5	18	18			15		
4	11	11			9.5		
6	7.3	7.3			6.4		
10	4.4	4.4			3.8		
16	2.8	2.8			2.4		
		r	X	z	r	X	z
25	1.75	1.75	0.170	1.75	1.50	0.145	1.50
35	1.25	1.25	0.165	1.25	1.10	0.145	1.10
50	0.93	0.93	0.165	0.94	0.80	0.140	0.81
70	0.63	0.63	0.160	0.65	0.55	0.140	0.57
95	0.46	0.47	0.155	0.50	0.41	0.135	0.43
120	0.36	0.38	0.155	0.41	0.33	0.135	0.35
150	0.29	0.30	0.155	0.34	0.26	0.130	0.29
185	0.23	0.25	0.150	0.29	0.21	0.130	0.25
240	0.180	0.190	0.150	0.24	0.165	0.130	0.21
300	0.145	0.155	0.145	0.21	0.135	0.130	0.185
400	0.105	0.115	0.145	0.185	0.100	0.125	0.160