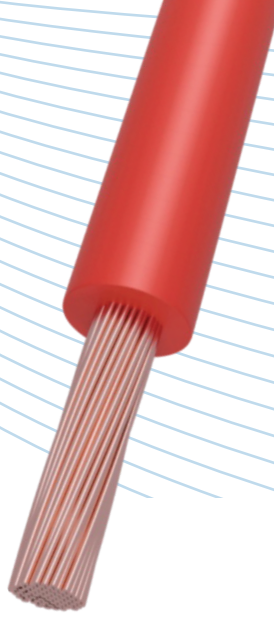




# PANEL FLEX CABLE



## Cable description

Panel flex cables are specialized cables designed for use in control panels, switchgear, and electrical enclosures where flexibility, durability, and consistent power delivery are essential. These cables are ideal for applications involving frequent opening and closing panels, as they provide reliable conductivity with minimal wear on the conductors or insulation. Panel flex cables are essential for modern electrical installations, combining flexibility with strong protective properties to ensure safety and reliability in control and power distribution setups.

## Technical Data

<b>Conductor Material:</b>	Copper (Class 5 Flexible stranded, according to SABS 1411)
<b>Insulation Material:</b>	Core insulation PVC to SANS 1411 Pt2 Type D4 = 90°C or Type D5 = 105°C
<b>Specifications:</b>	SABS SANS 1574
 <b>Voltage Rating:</b> 300/500V & 600/1000V	 <b>Temperature Range:</b> -15°C to 70°C / -40°C to 105°C (Special)
<b>Test Voltage:</b>	H05V2-K = 2000V
<b>Test:</b>	IEC 60332-1-2
<b>Core Identification</b>	Blue, Red, Black, Violet, Grey, White, Pink, Green/Yellow, Brown, Orange, Purple, Yellow

Part Number	Nominal Size mm <sup>2</sup>		Voltage	Conductor Resistance @ 20°C Maximum	Current Rating (A)	Volt Drop (mV / A/m)	Approx. Overall Diameter (mm)
				(Ω/km)		1Φ 220V	
<b>1 CORE</b>							
SF.02 (SPECIAL)	0.20mm <sup>2</sup>	7/0.205mm <sup>2</sup>	300 /500 V	92 mΩ/km			1.70
SF.04 (SPECIAL)	0.40mm <sup>2</sup>	12/0.205mm <sup>2</sup>	300 /500 V	48 mΩ/km			1.95
SF.05	0.50mm <sup>2</sup>	15/0.205mm <sup>2</sup>	600 /1000 V	39 mΩ/km	11 A	93.3	2.60
SF.075	0.75mm <sup>2</sup>	22/0.205mm <sup>2</sup>	600 /1000 V	26 mΩ/km	14 A	62.2	2.80
SF1.00	1.00mm <sup>2</sup>	28/0.205mm <sup>2</sup>	600 /1000 V	19.5 mΩ/km	16 A	46.7	3.00
SF1.50	1.50mm <sup>2</sup>	42/0.205mm <sup>2</sup>	600 /1000 V	13.3 mΩ/km	20 A	31.8	3.30
SF2.50	2.50mm <sup>2</sup>	68/0.205mm <sup>2</sup>	600 /1000 V	7.98 mΩ/km	26 A	19.1	3.70
SF4.00	4.00mm <sup>2</sup>	110/0.205mm <sup>2</sup>	600 /1000 V	4.96 mΩ/km	35 A	11.8	4.80
SF6.00	6.00mm <sup>2</sup>	175/0.205mm <sup>2</sup>	600 /1000 V	3.30 mΩ/km	43 A	7.9	5.30
SF10.0	10.0mm <sup>2</sup>	294/0.205mm <sup>2</sup>	600 /1000 V	1.91 mΩ/km	58 A	4.6	9.10
SF16.0	16.0mm <sup>2</sup>	462/0.205mm <sup>2</sup>	600 /1000 V	1.21 mΩ/km	75 A	2.9	10.00
SF25.0	25.0mm <sup>2</sup>	721/0.205mm <sup>2</sup>	600 /1000 V	0.78 mΩ/km	100 A	1.9	12.70

## Applications

- Control panels and switchgear in industrial setting.
- Electrical enclosures in manufacturing facilities.
- Internal wiring of machinery and equipment
- HVAC systems and power distribution units
- Distribution boards and instrumentation systems

## Key Features

- High Flexibility:** Constructed with fine-stranded copper conductors, panel flex cables offer excellent flexibility, making them easy to route and install in confined spaces within control panels or enclosures.
- Insulation:** Typically insulated with PVC or other flexible compounds, these cables provide solid electrical insulation to prevent short circuits and withstand everyday handling.
- Flame Retardant and Low Smoke Emission:** Designed to meet fire safety standards, panel flex cables are often flame-retardant and emit low smoke and toxic gases when exposed to high temperatures.
- Oil and Chemical Resistance:** Many panel flex cables are resistant to oils, grease, and chemicals, allowing them to perform well in industrial settings where such exposure is expected.
- Temperature Tolerance:** Rated to endure a wide range of temperatures, panel flex cables can perform reliably in both standard and more demanding environmental conditions.