

About us

The flag bearer Company of RAS GROUP, IMT CABLES PVT. LTD is one the Leading manufacturers of all types of elastomeric (Rubber) Cables, Welding Cables, Trailing & Composite Cables, Rubber Hoses etc.
Our products bear ISI mark of quality.
Additionally we are capable to manufacture cables as per client specifications & different international standard such as British Standard, ASTM, VDE, IEC DIN etc.



ABOUT OUR SILICONE CABLES

IMT cables are best known for Silicone insulated cables. Silicone cables are used in high temperature (upto 350° C) range and are heat resistant.

Silicone cables are very flexible in nature and are used wherever maximum flexibility is required. The soft nature of silicon insulation is duly protected by customized FIBRE GLASS BRAIDING with high class VARNISH Coating and/or any other Elastomer sheathing.

Silicone cables with/without FIBRE GLASS
BRAIDING widely used in Steel Plants/
Mining Industries /Textile Industries.
These cables are manufactured by IMT
Cables as per BIS 9968/Part-I are a
guarantee for quality product.



ABOUT OUR SILICONE CABLE RANGE

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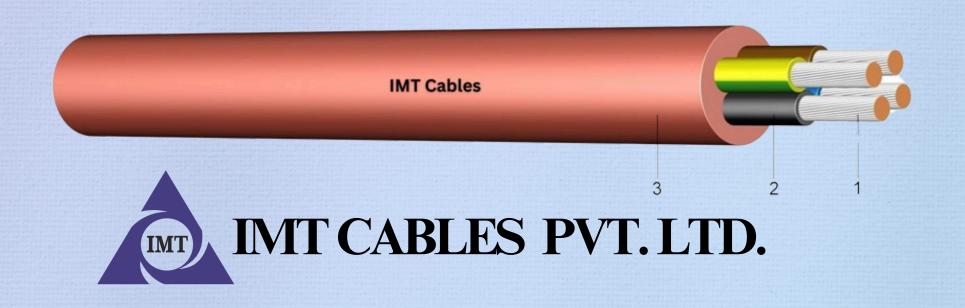
BP 28569 REV. 12

3.3 KV Grade, Polyurethane Varnished Polyester Yarn Braided Heat Resistant Silicone Rubber Insulated Single Core. Copper Cable to SPCN.No. BP28569 Rev.12.

6.6 KV Grade, Polyurethane Varnished Polyester Yarn Braided Heat Resistant Silicone Rubber Insulated Single Core. Copper Cable to SPCN.No. BP28569 Rev.12.

11 KV Grade, Polyurethane Varnished Polyester Yarn Braided Heat Resistant Silicone Rubber Insulated Single Core. Copper Cable to SPCN.No. Bp28569 Rev.12.

1.1 KV Grade Cable, Unarmoured, Is: 9968 Part-1 Latest, Annealed Tinned Copper, Silicone Rubber, Glass Yarn/Fibre Braided, Single/Multi Cores and Varnished.



TECHNICALS

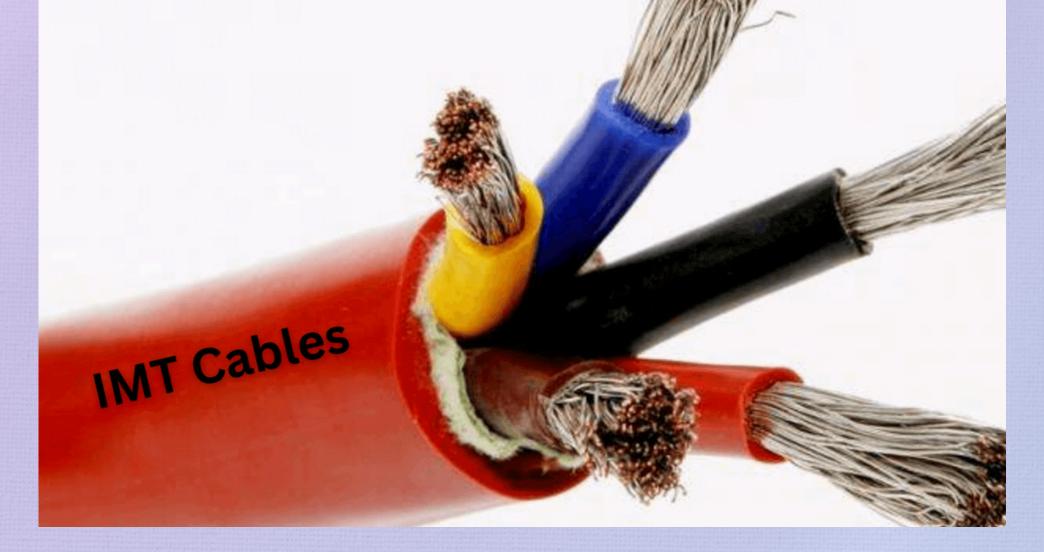
Cross Sectional	Nominal Thickness	Nominal Thickness of Sheath			Maximum Overall Diameter				Maximum Resistance of Conductor at 20° c		
Area of Insulation	Single Core	Twin Core	Three Core	Four Core	Single Core	Twin Core	Three Core	Four Core	Plain Wires ohm/Km	Tinned Wires ohm/Km	
mm²	mm	mm	mm	mm	mm	mm	mm	mm	mm	ohm/Km	ohm/Km
0.5	1.0	1.0	1.0	1.0	1.0	7.0	11.7	12.5	13.6	39.0	40.1
0.8	1.0	1.0	1.0	1.0	1.0	7.2	12.2	13.0	14.3	26.0	26.7
1.0	1.0	1.0	1.0	1.0	1.0	7.4	12.6	13.4	14.8	19.5	20
1.5	1.0	1.0	1.0	1.1	1.1	7.7	13.2	14.2	15.5	13.3	13.7
2.5	1.0	1.0	1.1	1.1	1.1	8.2	14.2	15.4	16.5	7.98	8.21
4.0	1.0	1.0	1.2	1.2	1.2	8.8	15.7	16.7	18.3	4.95	5.09

Cross Sectional Area	Nominal		Nomina	Maximum Resistance Of Conductor At 20° c				
	Thickness of Insulation	Single Core	Twin Core	Three Core	Four Core	Five Core	Plain Wires ohm/Km	Tinned Wires ohm/Km
mm²	mm	mm	mm	mm	mm	mm	ohm/Km	ohm/Km
6	1.00	1.6	2.00	2.1	2.5	2.5	3.3	3.39
10	1.2	1.8	2.4	2.5	2.7	2.9	1.91	1.95
16	1.2	1.9	2.5	2.7	2.9	3.2	1.2	1.24
25	1.4	2.00	3.2	3.6	3.4		0.78	0.795
35	1.4	2.2	3.3	3.4	3.5		0.554	0.565
50	1.6	2.4	3.5	3.6	3.7		0.386	0.393
70	1.6	2.6	3.6	3.7	3.9		0.272	0.277
95	1.8	2.8	3.8	4.00	4.1		0.206	0.21
120	1.8	3.00	4.00	4.1	4.3		0.161	0.164
150	2	3.2	4.2	4.3	4.5		0.129	0.132
185	2.2	3.4	4.3	4.5	4.8		0.106	0.108
240	2.4	3.5	4.6	4.8	5.1		0.0801	0.0817
300	2.6	3.5	4.9	5.1	5.4		0.0641	0.0654
400	2.8	3.8	5.2	5.4	5.8		0.0486	0.0495
500	3.00	4.00		-			0.0384	0.0391
630	3.00	4.1					0.0287	0.0292

Comparison of Insulation & Sheath Compounds For Different Working Temperature

Material	Maximum Rated Operating Temperature of Conductor in Deg. C	minimum Ambient Temperature in Deg. C	Maximum Conductor Temperature During Short Circuit in Deg. C	
Natural Rubber	60	-55	200	
Ethylene Propylene Rubber (EPR)	90	-50	250	
Polychloroprene	90	-40	250	
Nitrile Rubber PVC Blend (NBR-PVC)	90	-30	250	
Chlorosulphonated Polyethylene	90	-35	250	
Silicon Rubber	150	-55	350	





Short Circuit Current Rating Of Flexible With Copper Conductors (Kilo Amps)

Nominal Area of Conductor	Silicone/ CSP Cables	Silicone/ G.F. Braided & Lacquered Cables		
1.5	0.251	0.22		
2.5	0.418	0.367		
4	0.668	0.587		
6	1	0.881		
10	1.67	1.47		
13	2.67	2.35		
25	4.18	3.67		
35	5.82	5.14		
50	8.36	7.34		
70	11.7	10.27		
95	15.87	13.94		
120	20.05	17.61		
150	25.07	22.02		
182	30.91	27.15		
240	40.1	35.22		
300	50.13	44.03		
400	66.84	58.71		
500	83.55	72.39		
630	105.27	92.47		



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Silicone cables are versatile and widely used in various applications due to their unique properties and we are best known for Silicone insulated cables with our wide range of Silicone Cables. Here are some common uses of Our Silicone Cables:

- 1. High-Temperature Environments: Silicone cables can withstand high temperatures (often up to 350°C or more), making them suitable for applications like ovens, furnaces, and industrial machinery.
- 2. Automotive Applications: They are used in automotive wiring systems where they need to endure high temperatures and resist chemicals and oils. For example, they can be found in ignition systems and sensor connections.
- 3. Medical Equipment: In medical devices, silicone cables are valued for their flexibility, biocompatibility, and ability to withstand sterilization processes. For example, Electrocardiogram (ECG) Machines, Infusion Pumps etc.
- 4. Consumer Electronics: Silicone cables are used in gadgets and appliances where flexibility and durability are required, such as in wearable technology and high-performance audio equipment.
- 5. Renewable Energy: In solar power systems and other renewable energy applications, silicone cables are used due to their durability and resistance to environmental factors. For example solar panels, wind turbines
- 6. Marine and Underwater: Their resistance to moisture, UV light, and saltwater makes them suitable for marine and underwater applications.
- 7. Flexible Connectors: Silicone cables are often used in applications requiring flexible and durable connectors, such as robotics and automation systems.
- 8. High-Flex Applications: They are used in situations where cables are subject to frequent movement or bending, like in machinery or robotics.





- **www.imtcables.com**
- minfo@imtcables.com
- 39810109233
- **9**9312408952