

Laboratory	Alpha Test House, M-577, Guru Harkrishan Nagar, Paschim Vihar, New Delhi		
	Location 1: M-577, Guru Harkrishan Nagar, Paschim Vihar, New Delhi		
	Location 2: National Market Peeragarhi, New Delhi		
	Location 3: 487/25, Peeragarhi, New Delhi		
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S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
Location 3				
I. CABLE AND ACCESSORIES				
1.	PVC Insulated Cable Upto 1100 V	Wrapping Test for Aluminium Conductor	IS 694: 1990 IS 8130: 1984 IS 10810 (Part 3): 1984 IEC 60227: 2007	Qualitative
		Thickness of Insulation & Sheath	IS 694: 1990 IS 10810 (Part 6): 1984 IEC 60227: 2007	Upto 150 mm LC - 0.01 mm
		Loss of Mass Test of Insulation & Sheath	IS 694: 1990 IS 5831: 1984 IS 10810 (Part 10): 1984 IEC 60227: 2007	Ambient to 200 °C Upto 10 mg/cm ²
		Ageing in Air Oven of Insulation & Sheath TS Variation Elong Variation	IS 694: 1990 IS 5831: 1984 IS 10810 (Part 11): 1984 IEC 60227: 2007	Ambient to 200 °C Upto (±) 40 % Upto (±) 40 %
		Shrinkage Test of Insulation & Sheath	IS 694: 1990 IS 5831: 1984 IS 10810 (Part 12): 1984 IEC 60227: 2007	Ambient to 200°C 0 % to 10 %
		Heat Shock Test of Insulation & Sheath	IS 694: 1990 IS 5831: 1984 IS 10810 (Part 14): 1984 IEC 60227: 2007	Ambient to 200°C

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S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	PVC Insulated Cable Upto 1100 V	Hot Deformation Test of Insulation & Sheath	IS 694: 1990 IS 5831: 1984 IS 10810 (Part 15): 1984 IEC 60227: 2007	Ambient to 200 °C Upto 960 g, 0 % to 100%
		Insulation Resistance Constant	IS 694: 1990 IS 5831: 1984 IS 10810 (Part 43): 1984 IEC 60227: 2007	Upto 10 ⁵ MΩkm
		Volume Resistivity	IS 694: 1990 IS 10810 (Part 43): 1984 IEC 60227: 2007	Upto 10 ¹⁷ Ω-cm
		High Voltage Test	IS 694: 1990 IS 10810 (Part 45): 1984 IEC 60227: 2007	Upto 15 kV
		AC High Voltage Test (Water Immersion)	IS 694: 1990 IS 10810 (Part 45): 1984 IEC 60227: 2007	Upto 5 kV
		DC High Voltage Test (Water Immersion)	IS 694: 1990 IS 10810 (Part 45): 1984 IEC 60227: 2007	Upto 5 kVA
		Flammability Test	IS 694: 1990 IS 10810 (Part 53): 1984 IEC 60227: 2007	Upto 300 mm

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S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	PVC Insulated Cable Upto 1100 V	Cold Bend Test (Upto 12.5 mm Dia)	IS 694: 1990 IS 10810 (Part 20): 1984 IEC 60227: 2007	Qualitative
		Cold Impact Test (Above To 12.5 mm Dia)	IS 694: 1990 IS 10810 (Part 21): 1984 IEC 60227: 2007	Qualitative
		Additional Ageing Tests	IS 694: 1990 Clause 6.6	Qualitative
		Conductor Resistance	IS 694: 1990 IS 8130: 1984 IS 10810 (Part 5): 1984 IEC 60228: 2004	0.2 $\mu\Omega$ s to 11 $\mu\Omega$ s
		Annealing Tests for Copper Conductor	IS 694: 1990 IS 8130: 1984 IS 10810 (Part 1): 1984 IEC 60228: 2004	Upto 10 kN 0 % to 40%
		Breaking Load for Aluminium Conductor	IS 694: 1990 IS 8130: 1984 IS 10810 (Part 2): 1984 IEC 60228: 2004	Upto 10 kN
		Tensile Strength & Elongation at Break of Insulation & Sheath	IS 694: 1990 IS 5831: 1984 IS 10810 (Part 7): 1984	Upto 500 N

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S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
2.	PVC Insulated (Heavy Duty) Cables Upto 1100 V	Thermal Stability	IS 1554 (Part 1): 1988 IS 10810 (Part 60): 1984	60 min to 150 min
		Wrapping Test for Aluminium Conductor	IS 1554 (Part 1): 1988 IS 8130: 1984 IS 10810 (Part 3): 1984 IEC 60227: 2007	Qualitative
		Thickness of Insulation & Sheath	IS 1554 (Part 1): 1988 IS 10810 (Part 6): 1984	Upto 150 mm LC – 0.01 mm
		Breaking Load Aluminium Conductor	IS 1554 (Part 1): 1988 IS 8130: 1984 IS 10810 (Part 2): 1984 IEC 60228	Upto 10 kN
		Tensile Strength & Elongation at Break of Insulation & Sheath	IS 1554 (Part 1): 1988 IS 5831: 1984 IS 10810 (Part 7): 1984	Upto 500 N
		Wrapping Test for Aluminium Conductor	IS 1554 (Part 1): 1988 IS 8130: 1984 IS 10810 (Part 3): 1984	Qualitative
		Loss of Mass Test of Insulation and Sheath	IS 1554 (Part 1): 1988 IS 5831: 1984 IS 10810 (Part 10): 1984	Ambient to 200 °C Upto 10 mg/cm ²
		Ageing in Air Oven of Insulation & Sheath TS Variation Elong Variation	IS 1554 (Part 1): 198 IS 5831: 1984 IS 10810 (Part 11): 1984	Ambient to 200 °C Upto (±) 40% Upto (±) 40%

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S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	PVC Insulated (Heavy Duty) Cables Upto 1100 V	Shrinkage Test of Insulation & Sheath	IS 1554 (Part 1): 1988 IS 5831: 1984 IS 10810 (Part 12): 1984	Ambient to 200 °C 0 to 10 %
		Heat Shock Test of Insulation and Sheath	IS 1554 (Part 1): 1988 IS 5831: 1984 IS 10810 (Part 14): 1984	Ambient to 200 °C
		Hot Deformation Test of Insulation And Sheath	IS 1554 (Part1): 1988 IS 5831: 1984 IS 10810 (Part 15): 1984	Ambient to 200 °C Upto 960 g, 0 to 100 %
		Volume Resistivity	IS 1554 (Part 1): 1988 IS 10810 (Part 43): 1984	Upto 10 ¹⁷ Ω-cm
		Insulation Resistance Constant	IS 1554 (Part 1): 1988 IS 5831: 1984 IS 10810 (Part 43): 1984	Upto 10 ⁵ MΩkm
		High Voltage Test	IS 1554 (Part 1): 1988 IS 10810 (Part 45): 1984	Upto 15 kV
		Ac High Voltage Test (Water Immersion)	IS 1554 (Part 1): 1988 IS 10810 (Part 45): 1984	Upto 5 kV
		Dc High Voltage Test (Water Immersion)	IS 1554 (Part 1): 1988 IS 10810 (Part 45): 1984	Upto 5 kVA
		Flammability Test	IS 1554 (Part 1): 1988 IS 10810 (Part 53): 1984	Upto 300 mm

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S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	PVC Insulated (Heavy Duty) Cables Upto 1100 V	Cold Bend Test (Up To 12.5 Mm Dia)	IS 1554 (Part 1): 1988 IS 10810 (Part 20): 1984	Qualitative
		Cold Impact Test (Above To 12.5 Mm Dia)	IS 1554 (Part 1): 1988 IS 10810 (Part 21): 1984	Qualitative
		Conductor Resistance	IS 1554 (Part 1): 1988 IS 8130: 1984 IS 10810 (Part 5): 1984	0.2 $\mu\Omega$ s to 11 $\mu\Omega$ s
		Annealing Tests For Copper Conductor	IS 1554 (Part 1): 1988 IS 8130: 1984 IS 10810 (Part 1): 1984 IEC 60228	Upto 10 kN 0 to 40 %
3.	Test For Armouring Wires and Strips	Dimension For Armouring Material	IS 3975: 1999 IS 10810 (Part 36): 1984	Upto 25 mm
		Tensile Strength & Elongation At Break	IS 3975: 1999 IS 10810 (Part 37): 1984	200 N /mm ² to 600 N /mm ² 4 % to 20 %
		Torsion Test On Galvanized Steel Wire For Armouring	IS 3975: 1999 IS 10810 (Part 38): 1984	0 to 200 count
		Winding Test On Galvanized Steel Strips For Armouring	IS 3975: 1999 IS 10810 (Part 39): 1984	Qualitative
		Resistivity & Conductance Test Of Armour (Wires/Strips)	IS 1554 (Part 1): 1988 IS 3975: 1999 IS 10810 (Part 42): 1984	Upto 19.99 k Ω

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4.	XLPE Insulated PVC Sheathed Cables Upto 1100 Volts	Thermal Stability	IS 7098 (Part 1): 1988 IS 10810 (Part 60): 1984	60 min to 150 min
		Wrapping Test For Aluminium Conductor	IS 7098 (Part 1): 1988 IS 8130: 1984 IS 10810 (Part 3): 1984, IEC 60227: 2007	Qualitative
		Thickness Of Insulation & Sheath	IS 7098 (Part 1): 1988 IS 10810 (Part 6): 1984	Upto 150 mm LC – 0.01 mm
		Tensile Strength For Aluminium Conductor	IS 7098 (Part 1): 1988 IS 8130: 1984 IS 10810 (Part 2): 1984 IEC 60228	Upto 10 kN
		Tensile Strength & Elongation At Break Of Insulation & Sheath	IS 7098 (Part 1): 1988 IS 5831: 1984 IS 10810 (Part 7): 1984	Upto 500 N
		Hot Set Test Xlpe Insulation Only	IS 7098 (Part 1): 1988 IS 10810 (Part 30): 1984	0 to 25 % 20 % to 150 %
		Wrapping Test for Aluminium Conductor	IS 7098 (Part 1): 1988 IS 8130: 1984 IS 10810 (Part 3): 1984	Qualitative
		Loss of Mass Test of Sheath	IS 7098 (Part 1): 1988 IS 5831: 1984 IS 10810 (Part 10): 1984	Ambient to 200 °C Upto 10 mg/cm ²

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	XLPE Insulated PVC Sheathed Cables Upto 1100 Volts	Ageing In Air Oven Of Insulation & Sheath	IS 7098 (Part 1): 1988 IS 5831: 1984	Ambient to 200 °C
		TS Variation	IS 10810 (Part 11): 1984	Upto 40 % Upto (±) 40 %
		Shrinkage Test Of Insulation & Sheath	IS 7098 (Part 1): 1988 IS 5831: 1984 IS 10810 (Part 12): 1984	Ambient to 200 °C 0 to 10%
		Heat Shock Test Of Sheath	IS 7098 (Part 1): 1988 IS 5831: 1984 IS 10810 (Part 14): 1984	Ambient to 200 °C
		Water Absorption (Gravimetric)	IS 7098 (Part 1): 1988 IS 10810 (Part 33): 1984	Upto 4 mg/cm ²
		Hot Deformation Test Of Sheath	IS 7098 (Part 1): 1988 IS 5831: 1984 IS 10810 (Part 15): 1984	Ambient to 200 °C Upto 960 g, 0 to 100%
		Volume Resistivity	IS 7098 (Part 1): 1988 IS 10810 (Part 43): 1984	Upto 10 ¹⁷ Ω –cm
		High Voltage Test	IS 7098 (Part 1): 1988 IS 10810 (Part 45): 1984	Upto 15 kV
		Flammability Test Of Insulation & Sheath	IS 7098 (Part 1): 1988 IS 10810 (Part 53): 1984	Upto 300 mm
	Cold Bend Test (Up To 12.5 Mm Dia)	IS 7098 (Part 1): 1988 IS 10810 (Part 20): 1984	Qualitative	

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S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	XLPE Insulated PVC Sheathed Cables Upto 1100 Volts	Cold Impact Test (Above To 12.5 Mm Dia)	IS 7098 (Part 1): 1988 IS 10810 (Part 21): 1984	Qualitative
		Conductor Resistance	IS 7098 (Part 1): 1988 IS 8130: 1984 IS 10810 (Part 5): 1984	0.2 $\mu\Omega$ s to 11 $\mu\Omega$ s
		Annealing Tests For Copper Conductor	IS 7098 (Part 1): 1988 IS 8130: 1984 IS 10810 (Part 1): 1984	Upto 10 kN 0 to 40 %
5.	PVC Conduit	Insulation Resistance In Conduit	IS 9537 (Part 3): 1983	Upto 10 ⁵ m Ω Upto 500 m Ω
		Dimensions In Conduit	IS 9537 (Part 3): 1983	20 mm to 100 mm
		Resistance To Heat Test	IS 9537 (Part 3): 1983	2 mm to 10 mm
		Resistance To Burning	IS 9537 (Part 3): 1983	Upto 60 s
		Electrical Strength	IS 9537 (Part 3): 1983	Upto 5 kV
6.	Frlsh (Fire Retardant Low Smoke, Zero Halogen Test)	Oxygen Index Test	IS 10810 (Part 58): 1984	10 % to 40 %
		Temperature Index	IS 10810 (Part 64): 1984	200 °C to 500 °C
		Flame Retardance Test on Single Cable	IS 10810 (Part 61): 1984	Qualitative
		Halogen Acid Gas Evolution	IS 10810 (Part 59): 1984	10 % to 30 %

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S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
7.	Elastomer Insulated Cable And Elastomer Sheathed Cable Upto 1100 V	Ageing In Air Bomb	IS 9968 (Part 1): 1988 IS 10810 (Part 56): 1984	20 % to 50 %
		Ageing In Oxygen Bomb	IS 9968 (Part 1): 1988 IS 10810 (Part 16): 1984	20 % to 50 %
		Oil Resistance	IS 9968 (Part 1): 1988 IS 10810 (Part 31/ 7): 1984	10 % to 50 %
		Water Absorption (Electrical)	IS 9968 (Part 1): 1988 IS10810 (Part 28): 1984	% Increase in Capacitance 1 to 14 days – 25 % 7 to 14 days – 8 %
8.	Rubber Insulated Cables	Thickness Of Insulation & Sheath	IS 9968 (Part 1): 1988 IS 10810 (Part 6): 1984	0 to 150 mm LC – 0.01 mm
		Tensile Strength & Elongation At Break Of Insulation & Sheath	IS 9968 (Part 1): 1988 IS 10810 (Part 7): 1984	Upto 500 N
		Hot Set Test	IS 9968 (Part 1): 1988 IS 10810 (Part 30): 1984	0 to 25% 20 % to 150%
		Ageing In Air Oven Of Insulation & Sheath TS Variation Elong variation	IS 9968 (Part 1): 1988 IS 10810 (Part 11): 1984	Ambient to 200 °C Upto (±) 40% Upto (±) 40%
		Insulation Resistance Constant	IS 9968 (Part 1): 1988 IS 10810 (Part 43): 1984	Upto 10 ⁵ MΩkm

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	Rubber Insulated Cables	High Voltage Test	IS 9968 (Part 1): 1988 IS 10810 (Part 45): 1984	Upto 15 kV
		Flammability Test	IS 9968 (Part 1): 1988 IS 10810 (Part 53): 1984	Upto 300 mm Dia
		Conductor Resistance	IS 9968 (Part 1): 1988 IS 8130: 1984 IS 10810 (Part 5): 1984	0.2 $\mu\Omega$ s to 11 $\mu\Omega$ s
		Annealing Tests For Copper Conductor	IS 9968 (Part 1): 1988 IS 8130: 1984 IS 10810 (Part 1): 1984	Upto 10 kN 0 to 40 %
9.	Aluminium Conductor And Over Head Purpose, Aluminium Strand Conductor, Galvanized Steel Reinforced Aluminium Alloy Strand Conductor.	Dimension Of Messenger Wire	IS 398 (Part 1 to 4)	Upto 300 mm
		Breaking Load	IS 398 (Part 1 to 4)	Upto 2.5 kN
10.	Aerial Bunched Cables- for Working Voltages Upto and Including 1100 Volts (XLPE)	Tensile Strength & Elongation At Break Of Insulation	IS 14255: 1995 IS 10810 (Part 6): 1984	Upto 500 N Upto 250 kg
		Hot Set Test XLPE Insulation Only	IS 14255: 1995 IS 10810 (Part 30): 1984	0 to 25 % 20 % to 150 %

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	Aerial Bunched Cables- For Working Voltages Upto And Including 1100 Volts (XLPE)	Ageing In Air Oven of Insulation	IS 14255: 1995 IS 10810 (Part 11): 1984	Ambient to 200 °C Upto (±) 40 % Upto (±) 40 %
		TS Variation		
		Elong variation		
		Shrinkage Test Of Insulation	IS 14255: 1995 IS 10810 (Part 12): 1984	Ambient to 200 °C 0 +to 10%
		Volume Resistivity	IS 14255: 1995 IS 10810 (Part 43): 1984	Upto 10 ¹⁷ Ω-cm
		Thickness Of Insulation	IS 14255: 1995 IS 10810 (Part 6): 1984	Upto150 mm LC – 0.01 mm
		Wrapping Test For Aluminium Conductor	IS 14255: 1995 IS 8130: 1984 IS 10810 (Part 3): 1984	Qualitative
		Conductor Resistance	IS 14255: 1995 IS 8130: 1984 IS 10810 (Part 5): 1984	0.2 μΩs to 11 μΩs
		Water Absorption (Gravimetric)	IS 14255: 1995 IS 10810 (Part 33): 1984	Upto 4 mg/cm ²
		Breaking Load For Aluminium Conductor	IS 14255: 1995 IS 8130: 1984 IS 10810 (Part 2): 1984	Upto 10 kN
	High Voltage Test	IS 14255: 1995 IS 10810 (Part 45): 1984	Upto 15 kV	

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11.	PE Insulation Aerial Bunched Cables for Working Voltage Upto & Including 1100 V	Vicat Softening Point	IS 14255: 1995 IS 10810 (Part 22): 1984	50 °C to 140 °C
		Melt Flow Index	IS 14255: 1995 IS 10810 (Part 33): 1984	(3 g to 10g)/10 min
12.	Winding Wires for Submersible Motors	Thickness Of Insulation	IS 8783 (Part 4/Sec-1): 1995 IS 10810 (Part 6): 1984	Upto 150 mm LC – 0.01 mm
		Tensile Strength & Elongation At Break Of Insulation & Sheath	IS 8783 (Part 2): 1995 IS 10810 (Part 7): 1984	Upto 500 N
		Hot Set Test Xlpe Insulation Only	IS 8783 (Part 2): 1995 IS 10810 (Part 30): 1984	0 to 25 % 20 % to 150 %
		Ageing In Air Oven of Insulation & Sheath	IS 8783 (Part 2): 1995 IS 10810 (Part 11): 1984	Ambient to 200 °C
		TS Variation Elong variation		Upto (±) 40 % Upto (±) 40 %
		Shrinkage Test Of Insulation & Sheath	IS 8783 (Part 2): 1995 IS 10810 (Part 12): 1984	Ambient to 200 °C 0 to 10 %
		Heat Shock Test	IS 8783 (Part 2): 1995 IS 10810 (Part 14): 1984	Ambient to 200 °C
	Hot Deformation Test Of Sheath	IS 8783 (Part 2): 1995 IS 10810 (Part 15): 1984	Ambient to 200 °C Upto 960 g, 0 to 100 %	

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	Winding Wires for Submersible Motors	Volume Resistivity	IS 8783 (Part 2): 1995 IS 10810 (Part 43): 1984	Upto $10^{17} \Omega\text{-cm}$
		Conductor Resistance	IS 8783 (Part 1): 1995 IS 8130: 1984 IS 10810 (Part 5): 1984	0.2 $\mu\Omega$ s to 11 $\mu\Omega$ s
		Annealing Tests For Copper Conductor	IS 8783 (Part 1): 1995 IS 8130: 1984 IS 10810 (Part 1): 1984 IEC 60228	Upto 10 kN 0 to 40 %
		High Voltage Test	IS 8783 (Part 4/Sec-1): 1995 IS 10810 (Part 45): 1984	Upto 15 kV
13.	Shot Firing Cables (for Use Other than in Shafts)	Thickness Of Insulation & Sheath	IS 5950: 1984 IS 10810 (Part 6): 1984	Upto 150 mm LC – 0.01 mm
		Loss Of Mass Test of Insulation & Sheath	IS 5950: 1984 IS 5831: 1984 IS 10810 (Part 10): 1984	Ambient to 200 °C Upto 10 mg/cm ²
		Ageing In Air Oven of Insulation & Sheath TS Variation Elong variation	IS 5950: 1984 IS 5831: 1984 IS 10810 (Part 11): 1984	Ambient to 200 °C Upto (\pm) 40 % Upto (\pm) 40 %
		Shrinkage Test Of Insulation & Sheath	IS 5950: 1984 IS 5831: 1984 IS 10810 (Part 12): 1984	Ambient to 200 °C 0 to 10 %

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	Shot Firing Cables (for Use Other than in Shafts)	Heat Shock Test Of Insulation & Sheath	IS 5950: 1984 IS 5831: 1984 IS 10810 (Part 14): 1984	Ambient to 200 °C
		Hot Deformation Test Of Insulation & Sheath	IS 5950: 1984 IS 5831: 1984 IS 10810 (Part 15): 1984	Ambient to 200 °C Upto 960 g, 0 % to 100%
		Insulation Resistance Constant	IS 5950: 1984 IS 5831: 1984 IS 10810 (Part 43): 1984	Upto 10 ⁵ MΩkm
		Volume Resistivity	IS 5950: 1984 IS 10810 (Part 43): 1984	Upto 10 ¹⁷ Ω / m ³
		High Voltage Test	IS 5950: 1984 IS 10810 (Part 45): 1984	Upto 15 kV
		Flammability Test	IS 5950: 1984 IS 10810 (Part 53): 1984	Upto 300 mm
		Conductor Resistance	IS 5950: 1984 IS 8130: 1984 IS 10810 (Part 5): 1984	0.2 μΩs to 11 μΩs
		Annealing Tests For Copper Conductor	IS 5950: 1984 IS 8130: 1984 IS 10810 (Part 1): 1984	Upto 10 kN 0 % to 40 %
		Tensile Strength & Elongation At Break Of Insulation & Sheath	IS 5950: 1984 IS 5831: 1984 IS 10810 (Part 7): 1984	Upto 500 N

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S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
14.	Welding Cable	Ageing In Air Bomb	IS 9857: 1990 IS 10810 (Part 56): 1984	20 % to 50 %
		Thickness Of Insulation	IS 9857: 1990 IS 10810 (Part 6): 1984	Upto 150 mm LC – 0.01 mm
		Tensile Strength & Elongation At Break Of Insulation	IS 9857: 1990 IS 5831: 1984 IS 10810 (Part 7): 1984	Upto 500 N
		Hot Set Test	IS 9857: 1990 IS 10810 (Part 30): 1984	0 to 25 % 20 % to 150 %
		Ageing In Air Oven Of Insulation TS Variation Elong variation	IS 9857: 1990 IS 5831: 1984 IS 10810 (Part 11): 1984	Ambient to 200 °C Upto (±) 40 % Upto (±) 40 %
		High Voltage Test	IS 9857: 1990 IS 10810 (Part 45): 1984	Upto 15 kV
		Flammability Test	IS 9857: 1990 IS 10810 (Part 53): 1984	Upto 300 mm dia
		Conductor Resistance	IS 9857: 1990 IS 8130: 1984 IS 10810 (Part 5): 1984	0.2 μΩs to 11 μΩs
		Annealing Tests For Copper Conductor	IS 9857: 1990 IS 8130: 1984 IS 10810 (Part 1): 1984 IEC 60228	Upto 10 kN 0 to 40 %

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S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
15.	Cables for Motor Vehicles	Thickness of Insulation & Sheath	IS 2465: 1984 IS 10810 (Part 6): 1984	Upto 150 mm LC – 0.01 mm
		Loss of Mass Test of Insulation & Sheath	IS 2465: 1984 IS 5831: 1984 IS 10810 (Part 10): 1984	Ambient to 200 °C Upto 10 mg/cm ²
		Ageing In Air Oven of Insulation & Sheath	IS 2465: 1984 IS 5831: 1984	Ambient to 200 °C Upto (±) 40 %
		TS Variation	IS 10810 (Part 11): 1984	Upto (±) 40 %
		Elong variation		
		Shrinkage Test of Insulation & Sheath	IS 2465: 1984 IS 5831: 1984 IS 10810 (Part 12): 1984	Ambient to 200 °C 0 to 10 %
		Heat Shock Test of Insulation & Sheath	IS 2465: 1984 IS 5831: 1984 IS 10810 (Part 14): 1984	Ambient to 200 °C
		Hot Deformation Test of Insulation & Sheath	IS 2465: 1984 IS 5831: 1984 IS 10810 (Part 15): 1984	Amb to 200 °C Upto 960 g. 0 to 100 %
	High Voltage Test	IS 2465: 1984 IS 10810 (Part 45): 1984	Upto 15 kV	
	Ac High Voltage Test (Water Immersion)	IS 2465: 1984 IS 10810 (Part 45): 1984	Upto 5 kV	

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S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Cables for Motor Vehicles	Flammability Test Of Insulation & Sheath	IS 2465: 1984 IS 10810 (Part 53): 1984	Upto 300 mm
		Conductor Resistance	IS 2465: 1984 IS 8130: 1984 IS 10810 (Part 5): 1984	0.2 μΩs to 11 μΩs
		Annealing Tests For Copper Conductor	IS 2465: 1984 IS 8130: 1984 IS 10810 (Part 1): 1984 IEC 60228	Upto 10 kN 0 to 40 %
		Tensile Strength & Elongation At Break Of Insulation & Sheath	IS 2465: 1984 IS 5831: 1984 IS 10810 (Part 7): 1984	Upto 500 N
		Effect of Lubricating Oil/Brake Fluid /Diesel/Petrol	IS 2465: 1984	Qualitative
16.	Fitting For Rigid Non-Metallic Conduits	Dimension	IS 3419: 1988	Upto 100 mm
		Heat Resistance	IS 3419: 1988	Upto 10 mm
		Electrical Strength	IS 3419: 1988	Upto 10 kV

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