### YAMUNA DENJON Heat Shrinkable Medium Voltage Insulation Tape upto 36 kV

#### **Features:**

• Reduces bus bar clearance requirements

• Protects against accidental flashover

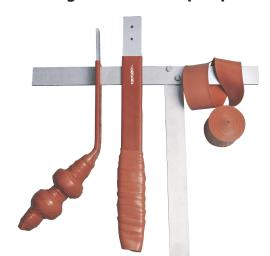
Continuous operation temperature: -40°C to 125°C

Halogen free

• Shrink Temperature: 120°C

Anti-track

Anti-Track adhesive coated Heat Shrink Tape specially designed for insulation & protecting medium voltage bus bar upto 36 kV.



### **Specifications:**

Heat Shrink Medium Voltage Bus Bar Tape (for Service upto 36 kV over bolted Bus Bar)

Code	Roll Width (min.) mm	Backing Thickness Recovered (Nom) mm	Roll Length mtr.
DHSIT - 1	25.0	1.0	5
DHSIT - 2	50.0	1.0	5

#### **Installation Instruction**

A 2/3 overlap is recommended One layer application required upto 17 kV Two layer application required upto 25 kV Three layer application required upto 36 kVa

Dimensions- Available in width of 25 mm & 50 mm

#### Clearance with Insulation (for Service upto 36 kV over bolted Bus Bar)

System Voltage	Bil kV	P to P mm	P to G mm
15 kV	95	64	74
17 kV	110	86	106
25 kV	125	114	152
36 kV	175	200	285

P to P
Phase to Phase orientation
Spacing based on metal to metal
Space based on insulation wall thickness per application range of

### Technical Data for Heat Shrink Medium Voltage Insulation Tape

Property	Requirements	Test Method
Physical		
Tensile Strength	8 N/mm² (min.)	ASTM D 412, ISO 37
Ultimate Elongation	200% (min.)	ASTM D 412, ISO 37
Volume Resistivity	$1 \times 10^{12} \Omega$ cm. (min.)	ASTM D 257
Low Temperature Flexibility (4 hrs at -20° C)	No cracking	ASTM D 2671
Heat Ageing (7 days at 175° C)		
Tensile Strength	7 N/mm² (min.)	ASTM D 2671
Elongation	100% (min.)	ASTM D 2671
Heat Shock	No cracking or flowing	ASTM D 2671
Electrical		
Dielectric Strength	10 kV/mm (min.)	ASTM D 149
Dielectric Constant	3-5	ASTM D 150
Tracking Resistance	Non-Tracking	ASTM D 2303
Corrosion	No corrosion	ASTM D 2671
Water Absorption	0.5% (max.)	ASTM D 570
Adhesive		
Adhesive Softening Point	100° C	ASTM D 28
Low Temperature Flexibility	-25 C	ESI 0913
Tracking Resistance	Non-Tracking	ASTM D 2303

# YAMUNA DENSONS EPR Insulating Tape



### **Features:**

- Good Physical & Electrical Properties
- Self Amalgamating
- Reduces bus bar clearance requirements
- Protection against accidental flashover
- Continuous operation temperature: -40°C to 130°C

### Technical Data for EPR Insulating Tape

Property	Requirements	Test Method	
Physical			
Electrical Strength	35 kV/mm (Min.)	ASTMD 149:64	
Water Absorption	0.5% (Max.)	ASTMD 570:63	
Ultimate Elongation	800%	ASTMD 412:75	
Volume Resistivity (20°C)	10 <sup>13</sup> ohm cm (Min.)	ASTMD 257:75	
Low Temperature Flexibility	No cracking after 4 hours at -20°C (Max.)		
Temperature Range	-40°C to 100°C continuous upto 130°C for limited		
	period during overload conditions	period during overload conditions	
Thickness	$0.75 \pm 0.05  \text{mm}$		
Length	10.0 Mtr.		
Width	19, 25 & 38 ± 1 mm	19, 25 & 38 ± 1 mm	
Colour	Black		

# YAMUNA DENSONS EPR Semi Conducting Tape



### **Features:**

- Semi-conducting
- Self fusing
- Resistance to ozone & UV
- Retain its conductivity when stretched

### Technical Data for EPR Semi-conducting Tape

Property	Requirements	Test Method
Physical		
Tensile Strength	1.3 MPa	ASTM D 4325
Elongation at Break	800%	ASTM D 4325
Volume Resistivity	<7 x 10 <sup>8</sup> ohm cm	ASTM D 4325
Heat Ageing (130°C) 168 hrs.	Pass	ASTM D 4325
Self Fusing	Pass	ASTM D 4325

### Packing

Item Code	Diameter (mm)	Colour
DC-72	19mm x 0.75mm x 4.5m	Black

# YAMUNA DENSONS Black Mastic Tape



### **Features:**

- Void Filling
- Water Proof
- Self Amalgamating
- Oil Resistance
- Butyl Rubber Sealant Tape

### **Specifications:**

### Black Mastic Tape

Code	Width	Thickness	Length
DMST400	$35 \pm 2  \text{mm}$	$3 \pm 0.3 \text{ mm}$	400 ± 5 mm

### Technical Data for Black Mastic Tape

Property	Requirements	Test Method	
Low Temperature Flexibility (4 hrs at -20 C)	No Cracking	ENATS 09 13	
Continuous Operating Temperature	No Splitting, Cracking, Dripping or	ENATS 09 13	
	Following at 100 C.		
Ultimate Elongation	100% (min.)	ASTM D 412	
Visual Examination	Free From Pin Holes, Cracks, Inclusions		
	& Other Visible Defects		
Volume Resistivity	1 x 10 <sup>12</sup> ohm cm. (min.)	ASTM D 257	
Colour	Black		
Water Absorption	0.5% (max)	ENATS 09 13	
Amalgamation	The tape becomes one mass after application. This can be tested on any size of metal mendel.		
	The mass (tape) after application can be easily cut longitudinally with a knife and will then be		
	checked for its amalgamation. It is observed that the tape does not crack after application, thu		
passing the amalgamation test.			

## YAMUNA DENSONS Red Mastic Tape



### **Features:**

- Void Filling
- Water Proof
- Self Amalgamating
- Oil Resistance
- Anti Track

### **Specifications:**

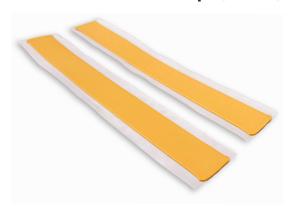
Red Mastic Tape

Code	Width	Thickness	Length
DRMT400	25 ± 2 mm	1.5 ± 0.3 mm	$300 \pm 5 \text{ mm}$

### Technical Data for Black Mastic Tape

Property	Requirements	Test Method		
Low Temperature Flexibility (4 hrs at -20 C)	No Cracking	ENATS 09 13		
Continuous Operating Temperature	No Splitting, Cracking, Dripping or	ENATS 09 13		
	Following at 100 C.			
Ultimate Elongation	100% (min.)	ASTM D 412		
Visual Examination	Free From Pin Holes, Cracks, Inclusions	Free From Pin Holes, Cracks, Inclusions		
	& Other Visible Defects			
Volume Resistivity	1 x 10 <sup>12</sup> ohm cm. (min.)	ASTM D 257		
Colour	Red			
Water Absorption	0.5% (max)	ENATS 09 13		
Amalgamation	The tape becomes one mass after application. This can be tested on any size of metal mendel.			
	The mass (tape) after application can be easily cut longitudinally with a knife and will then be			
	checked for its amalgamation. It is observed that the tape does not crack after application, thu			
	passing the amalgamation test.			

# YAMUNA DENSONS Stress Control Mastic Tape (Yellow)



### **Features:**

- Void Filling
- Stress Relief
- Self Fusing
- Water Proof
- Self Amalgamating

### **Specifications:**

Stress Control Mastic Tape (Yellow)

Code	Width (mm)	Thickness (mm)	Length (mm)
DSCM120	20 ± 1	2 ± 0.2	120 ± 5
DSCM150	20 ± 1	2 ± 0.2	150 ± 5
DSCM180	20 ± 1	2 ± 0.2	180 ± 5
DSCM500	30 ± 1	2 ± 0.2	200 ± 5

#### Technical Data for Black Mastic Tape

Property	Requirements	Test Method
Low Temperature Flexibility (4 hrs at -20 C)	No Cracking	ENATS 09 13
Continuous Operating Temperature	No Splitting, Cracking, Dripping or	ENATS 09 13
	Following at 100 C.	
Ultimate Elongation	300% (min.)	ASTM D 412
Visual Examination	Free From Pin Holes, Cracks, Inclusions	
	& Other Visible Defects	
Volume Resistivity	1 x 10 <sup>9</sup> ohm cm. (min.)	ASTM D 257
Colour	Yellow	
Water Absorption	0.5% (max)	ENATS 09 13

## YAMUNA DENSONS Silicone Rubber Electrical Tape



### **Features:**

- High tracking resistance
- Resistance to solvents
- Resistance to Ozone, UV
- Withstand high / low temperature
- Self fusing rubber (-50°C to 250°C)

### Technical Data for Silicone Rubber Electrical Tape

Requirements	Test Method
6 MPa	ASTM D 4325
400%	ASTM D 4325
Pass	ASTM D 4325
Pass	ASTM D 4325
Pass	ASTM D 4325
	6 MPa 400% Pass Pass

### **Packing**

Item Code	Dimension	Colour
DC-73	19mm x 0.3mm x 15m	Grey
DC-73	19mm x 0.5mm x 15m	Grey
DC-73	25mm x 0.3mm x 15m	Grey
DC-73	25mm x 0.5mm x 15m	Grey
DC-73	25mm x 0.5mm x 11m	Grey

# (60)

# YAMUNA DENSONS Colour Coding Electrical PVC Tape



### **Features:**

- High elongation at break
- Resistance to chemical corrosion
- Phase identification / colour coding
- Pressure sensitive electrical tape
- Upto 600 Volts

### Technical Data for Colour Coding Electrical PVC Tape

Requirements	Test Method
30N/18mm	ASTM D 1000
100%	ASTM D 1000
3N/18mm	ASTM D 1000
3	ASTM D 4325
50kV/mm	ASTM D 4325
	30N/18mm 100% 3N/18mm 3

### Packing

Item Code	Dimension	Colour
DC-60	18mm x 0.10mm x 7m	Red
DC-60	18mm x 0.10mm x 7m	Yellow
DC-60	18mm x 0.10mm x 7m	Blue
DC-60	18mm x 0.10mm x 7m	Black
DC-60	18mm x 0.10mm x 7m	White

# YAMUNA **DENSONS** Fire Proofing Tape



### **Features:**

- Self fusing
- Fire retardant
- Easy installation
- Heat resistance

### Technical Data for Fire Proofing Tape

Property	Requirements	Test Method
rioperty	nequirements	iest Method
Physical		
Tensile Strength	6 MPa	GB/T2951.11
Elongation at Break	400%	GB/T2951.11
Flame Retardant	0.93	GA478-2004
Water Resistance	Pass	GA478-2004
Self Fusing	Pass	GA478-2004

### Packing

Item Code	Diameter (mm)	Colour
DC-70	50mm x 0.75mm x 6m	Black

# (62)

# YAMUNA DENJONJ Armour Cast Tape



### **Features:**

- Fast hardening
- Simple and Fast Installation
- High Tensile strength
- Resistance to water and corrosion

### Technical Data for Armour Cast Tape

Property	Requirements	Test Method
Physical		
Tensile Strength	>400N	ASTM D 1000
Time of Hardening	5-12 minutes	-
Corrosion Resistance	Pass	ASTM D 1373
Heat Ageing	Pass	ASTM D 1373

### Packing

Item Code	Diameter	Colour
DC-88	4 Inch(10.2cm) x 15 Ft(4.6m)	Black
DC-88	100mm x 3m	Black