# **DMD** Insulation Material



DMD is a stable, triplex insulation material composed of one central layer of polyester film bonded between two outer layers of non-woven polyester fleece impregnated with a high temperature resistant varnish. An ideal material for slot and phase insulation of electric motors and generators but also suitable for interlayer insulation for transformers and otherelectrical applications.

The structure provides a combination of good electrical, mechanical and thermal properties and very good adhesive properties by impregnation.

### **Typical applications**

Electrical insulation primarily for slot, wedge and phase insulation of electric motors and generators, but also suitable for interlayer insulation of transformers and other electrical applications. Especially suitable for applications where objects are impregnated.

#### **Properties**

- Approved for insulation Class F (155°C).
- Very good electrical properties.
- Very good mechanical properties.
- Very good adhesion to and uptake of the impregnating varnish.
- Very good durability.
- Suitable for punching and cutting.

#### Composition

DMD is composed of one central layer of polyester film bonded between two outer layers of non-woven polyester fleece impregnated with a high temperature resistant varnish. The structure provides a combination of good electrical, mechanical and thermal properties and very good adhesion to and uptake of the impregnating varnish.



#### Colour

Usually white.

#### Dimensions

- DMD is manufactured in thicknesses 90–460 μm.
- Standard trimmed widths 455 mm, and 900–914 mm (depending on the item).
- Can be slit to desired widths up to max 1260 mm.
- Can be punched or cut to desired form or shape. In the case of die-cutting a die tool is required (tools available at low costs).

#### Packaging

- Standard packaging width 455–490 mm in rolls of ca 6 kg.
- Standard packaging width 900–914 mm.
- Other slit-to-width dimensions on MOQ (minimum order quantity) in kg on request.
- Punched and die-cut items: volume MOQ (minimum order quantity) by agreement (with die tool or cut).

## Article list DMD

Item Number/ Grade		Dimensions		Weight/roll	Weight g/m <sup>2</sup>	Lenght/roll
	Thickness (mm)/tol	Width (mm)	Internal (mm)	ca (kg)	(nom.)	ca (m)
125464	0.16 +/-15%	450	76	6	150	89
107038	0.21 +/-15%	450	76	6	230	58
125466	0.24 +/-15%	450	76	6	270	49
125467	0.31 +/-15%	455	76	6	360	36
125468	0.36 +/-15%	455	76	6	435	30
125469	0.46 +/-15%	455	76	6	570	23

## **Technical data**

DMD properties Standard									Unit
Thickness		90	160	210	240	310	360	460	μm
Mechanical properties									
Thickness tolerance	IEC-626-2	15	15	15	15	15	15	15	+/-%
Thickness polyester film		23	50	100	125	190	250	350	μm
Thickness polyester fleece (ca)		30	50	50	50	30	50	50	μm
Name/thickness (Grade)			2/2/2	2/4/2	2/5/2	2/7/2	2/10/2	2/14/2	D/M/D
Weight/m <sup>2</sup>	IEC-626-2	100	150	230	270	360	435	570	g/m² (+/-12%)
Tensile Strenght MD/XD	IEC-626-2	55/35	90/70	100/90	100/90	110/100	110/100	100/90	N/mm <sup>2</sup> (min)
Elongation MD/XD	IEC-626-2	20/60	25/60	25/75	25/75	25/75	30/80	30/80	%
Thermal properties									
Electrical insulation class		F/155	F/155	F/155	F/155	F/155	F/155	F/155	klass/°C
Electrical properties									
Dielectric strength	IEC-626-2	4	7	10	11	16	20	24	kV (min)

How to contact BEVI

Contact details for all countries are continually updated on our website. Please visit www.bevi.com to access the information direct. BEVI AB (Headquarters) Blomstermåla, Sweden Tel. +46 499 271 00 info@bevi.se

