

# EPOXY RESIN HIGH TEMPERATURE INSULATORS

## Epoxy resin High Temperature insulators

Raw material		
Tensile strength	65 N/mm <sup>2</sup>	ISO R 527
Flexural strength	130 N/mm <sup>2</sup>	ISO R 178
E-modulus	12000 N/mm <sup>2</sup>	ISO 178
Impact strength	10 kJ/m <sup>2</sup>	ISO 179
Notch impact strength	3 kJ/m <sup>2</sup>	ISO 179
Volume resistivity	(10) <sup>15</sup> Ohm*cm	IEC 60093
Surface resistivity	(10) <sup>15</sup> Ohm	IEC 60093
Temperature time limit RTI		
2.000 h	200°C	IEC 216
20.000 h	180°C	IEC 216
100.000 h	168°C	UL 746 B
Glass percentage	10 %	C-Norm
Class of flammability	V0	UL 94
Water absorption (100°C/30min)	0,06%	ISO 62
Coeff. of linear thermal expansion	25 1/(K*10 <sup>-6</sup> )	DIN 53752 (20 - 80°C)
Thermal conductivity (25°C)	0,70 W/m*K	DIN 52612
Tracking resistance	CTI >600	IEC 60112
Dielectric strength	22 kV/mm	IEC 60243 - 1
Density	1.9 g/cm <sup>3</sup>	DIN 53479
Color	black	RAL 9004



The European Union directive 2002/95/EC concerning the restriction of certain Hazardous Substances (RoHS) allows copper alloys such as brass to contain up to 4% lead. The brass inserts in the insulators referenced are manufactured containing less than 4% lead and therefore meets the European Union "RoHS" directive.



BE35

BE40

BE50

BE60

Epoxy insulator for high temperatures.  
Isolateurs époxy pour hautes températures  
Epoxy isolatoren voor hoge temperaturen

High temperature epoxy insulators are suitable to be used for extreme conditions :  
For high mechanical stresses  
For high vibrations  
For high temperatures up to +200°C  
For heavy pollution (increased creepage)

Isolateurs epoxy haute températures, idéale pour des applications extremes :  
Grandes résistances mécanique  
Résistances aux vibrations  
Pour de haute tempéartures +200°C  
Pour des zones pollués (ligne de fuite accrue.)

Hoge tempertuur epoxy isolatoren, aanbevolen voor extreme toepassingen :  
Grote mechanische weerstand  
Bestand tegen vibraties  
Voor hoge temperaturen tot +200°C  
Voor vervuilde omgevingen (grote kruipafstand)



Operating temperature Températures fonctionnel Gebruikstemperatuur	min. -40°C max. +180°C - 20.000 h - IEC 216 peak +200°C - 2.000 h - IEC 216
Coparative tracking Index (CTI) acc to IEC 60112	600 V
Fire/smoke behaviour Comportement au feu	
UL 94	VO
NF F 16-101 & 16-102	F1-I2 grid 4 Pas d'inflammation à 850°C (no ignition at 850°C)

(1)	Rated insulation Voltage Ui in function of Pollution degree and Overvoltage (Check IEC 60077-1) Tension assignées d'isolement Ui en fonction des degrés de pollution et des surtensions (voir IEC 60077-1)
(2)	Rated Power Frequency Withstand Voltage, dry (50 Hz, 1 min) Tension de tenue assignée à fréquence industrielle, à sec (50 Hz, 1 min) Toegekende overspanning bij industriële frekwentie, droog (50 Hz, 1 min)
H	Height Hauteur Hoogte
Cr	Creepage Ligne de fuite Kruipweg
ML	Maximum load according to test condition required by EN 61373
N1	Flexural strength
N2	Torsion rupture torque
N3	Maximum tensile strength
N4	Compressive
TT	Max tightening torque on threads

Inserts standard : Nickel electroplated brass  
Other option : Zinceletrated steel

Ref.	Type	Insert material	1 kV	2 kV	H mm	Ø mm	Cr. mm	ML N	N1 N	N2 Nm	N3 N	N4 N	TT Nm	Weight gr
BE35-M8	3121111013	Nickel brass		16	35	50	85	300	3600	40 Nm	7000	40000	18	110
BE35-M10	3121111033	Nickel brass											39	
BE40-M8	3121084013	Nickel brass											18	140
BE40-M10	3121084033	Nickel brass		12	40	52	110	300	4000	≥ 80	10000	-	32	
BE40-M12	3121084063	Nickel brass											55	
BE50-M8	3121062013	Nickel brass											18	170
BE50-M10	3121062033	Nickel brass		14	50	52	120	350	5000	≥ 80	11000	70000	32	
BE50-M12	3121062053	Nickel brass											55	
BE60-M8		Nickel brass											18	320
BE60-M10		Nickel brass		20	60	56	130	550	7000	≥ 140	18000	-	32	
BE60-M12		Nickel brass											55	