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# SPInduwedge H *HP (High Performance)*

Magnetically Conducting Slot Wedges  
Temperature Class H (180°C)

### Properties:

Spinduwedge is a rolled and pressed slot wedge made of a special epoxy-glass-prepreg which has good magnetic conductivity and high electrical resistance combined with excellent mechanical strength.

### Application:

Magnetic wedges are used for example as induction motor, wind generator and traction motor slot closure key.

Properties	Unit	Value	Sigma	Standard	Value after prolonged Heating** (14 days at 210°C)	Sigma
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### Composition

Glass cloth content	%	~10				
Epoxy Resin content	%	~20				
Iron Powder content	%	~70				

### Mechanical Properties

Flexural strength 23°C	MPa	230	±20	ISO 14125*	230	±10
Flexural strength 155°C	MPa	200	±10	ISO 14125*	200	±20
Flexural strength 180°C	MPa	170	±30	ISO 14125*	170	±15
Module of elasticity 23°C	MPa	18200	±500	ISO 14125*	18500	±900
Module of elasticity 155°C	MPa	13500	±300	ISO 14125*	16000	±500
Module of elasticity 180°C	MPa	9300	±700	ISO 14125*	11300	±800
Impact strength	KJ/m2	92	±10	ISO 179		

### Electrical Properties

Volume resistance	Ohm/cm	>105		DIN 53482		
Magnetic induction	at 1000A/cm / Tesla	0,32				
	at 2000A/cm / Tesla	0,61				
	at 3000A/cm / Tesla	0,87				

### Relative permeability

at 0,3 Tesla	3,4
at 0,5 Tesla	3,2
at 0,7 Tesla	2,9

### Thermal Properties

Temperature index	°C	180		IEC 216
Glass transition temperature	°C	184		IEC 1006

### Other Properties:

Density	g/cm3	3,5 ±0,2		DIN 53479
Thickness	mm			
Color		gray-black		

### Dimensions and Tolerances:

According to drawings, as agreed. Pressed to different shapes, with or without cooling channels.

\* Similar to ISO 178, which is applied to unfilled fiber-reinforced Materials.  
\*\*Due to post curing effects the material properties are increasing on prolonged Heating.

The given Information is based on Test results that have been done with the necessary care and according to actual standards. The user is responsible for correct use in specific applications. Results may vary and are only indicators.

