

Technical Properties for Type-K Pultruded Profiles

Type-K is the material quality name for unidirectional pultruded high glass and filler content profile used for electrical insulation applications.

	Value	Unit	Method
Mechanical			
Tensile strength	>500	MPa	ISO 527-4
Tensile modulus	>35	GPa	ISO 527-4
Flexural strength	>700	MPa	ISO 178
Flexural modulus	>35	GPa	ISO 178
Compressive strength	>200	MPa	ISO 604
Impact strength, <i>Charpy notched</i>	>300	kJ/m ²	ISO 179-1

Mechanical values determined at standard test conditions 48h / 23°C / 50% .

Physical

Density	2,0	g/cm ³	
Glass fiber content	50 - 60	wt%	
Water absorption, 24h	<0,05	%	ISO 62

Thermal

Flammability class	NA	Class	UL 94
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Electrical

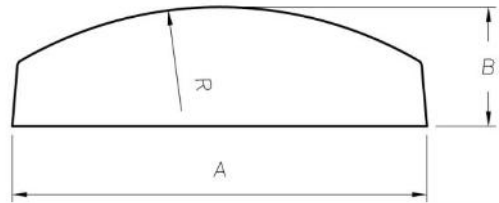
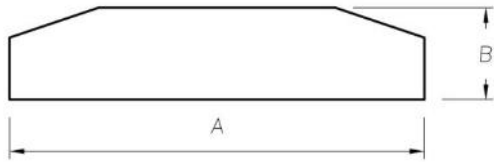
Surface resistivity	10 ¹⁰⁻¹⁴	Ω	IEC 60093
Volume resistivity	10 ¹⁰⁻¹⁵	Ω · cm	IEC 60093
Comparative Tracking Index	>CTI 500	-	IEC 60112
Electric strength in oil ⊥	>13	kV/mm	IEC 60243-1
Breakdown voltage in oil //	> 90	kV	IEC 60243-1

Composition

Resin	Orthophthalic polyester
Reinforcement	E - glass direct roving
Color	Light green. Possibility to use coloring pigments.

** The values are based on another material quality whereby similar material composition has been used. Actual values of **Type-K** have not been separately tested.*

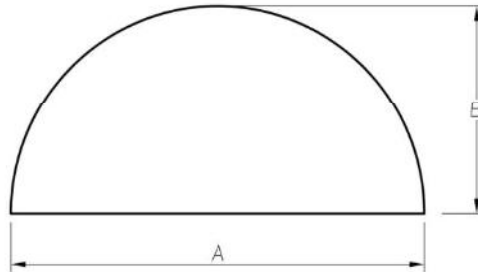
Slot Wedges – Trapezoid Profiles



A, mm	B, mm
5	2
5,75	2
6	2
7	2,5
7	2
8	3
9	2,5
10	3
11	3
16	3

A, mm	B, mm	R, mm
4,5	2	2,5
5	2	5
5,5	2	3,5
5,5	2	3,5
6	2	6
6	2	6
6	2,5	4
6,5	2	5
6,5	2	6,5
7	2	7
7,5	2	6,5
8	2,2	8
8	2,2	8
9	2,3	9
10	2,5	10
11	2,5	13
12	2,5	15
12	2,5	15

Slot Wedges – Half Round Profiles



A, mm	B, mm	A, mm	B, mm	A, mm	B, mm	A, mm	B, mm
3	2	5	4	7	4	10	2
3	1,5	5	5	7	5	10	2,5
3	3	5,5	2	8	2	10	3
3,5	2	6	2,5	8	2,5	10	4
4	2	6	3	8	3	10	5
4	3	6	4	8	4	11	2,5
4	4	6	5	8	5	12	4
4,5	2,5	6,5	2	9	2	12	6
5	2	7	2	9	2,5	14	7
5	2,5	7	2,5	9	3		
5	3	7	3	9	4,5		
5	3,5	7	3,5	9	5		