

PROPERTIES OF *ionotec* BETA"-ALUMINAS

Property	Na-beta"	K-beta"
Phase content, % beta"	90-95	85-90
Porosity, %	1-2	2-3
Maximum pore size (μm)	5	8
Maximum grain size (μm)	20	20
Bending strength (MPa)	250–300	250-300
Strength Weibull factor	8-13	8-13
Fracture toughness ($\text{MPa m}^{1/2}$)	2-3	
Ionic conductivity (ohm cm^{-1})		
25°C	0.002	0.0005
200°C	0.092	0.021
300°C	0.24	0.053
400°C	0.38	0.10
Thermal expansion coefficient		
0–500°C ($\times 10^{-6}$)	7.2	7.45
500–1000°C	8.6	8.5

ionotec manufactures a range of tubular shapes of standard dimensions given below. Flat discs and rectangular plates can be manufactured in any size in the range 10-70 mm across and 0.5-3.0 mm thickness. Ag-, Pb-, Sr- and Ba-conductive versions are also available.

Part Number	Length (mm)	Internal diameter (mm)	Minimum thickness (mm)	Maximum thickness (mm)
A1	70	6.5	0.5	1.5
A2	105	13	0.5	1.5
H1	40	20	1	2
B1	100	28	1	2
B2	220	29	1	2
C2	220	52	2	2

For further details please contact:

Ionotec Ltd

14 Berkeley Court

Manor Park

Runcorn

Cheshire WA7 1TQ

England

Telephone: +44(0)-1928-579668

Fax: +44(0)-1928-579627

e-mail: info@ionotec.com

Web: www.ionotec.com