

AL01 & BAK50 PORT GAUGE GLASSES

These materials have been specially selected for the manufacture of port gauge glasses intended for high temperature applications

Note: AL01 material has a slightly higher transformation temperature thus allowing higher operating pressures/temperatures

TYPICAL PROPERTIES

Alkali-free Aluminosilicate Glass AL01

Thermal expansion (20-300° C) α	= 4.7×10^{-6} K
Transformation Temperature Tg	= 715° C
Strain Point Tc	= 688° C
Softening Temperature Mg	> 910° C
Thermal Shock Δ	= 300° C
Bending Strength Mpa	= 200-210
Hydrolytic Resistance (DIN ISO 719)	Class 1
Acid Resistance (DIN 12116)	Class 3
Alkali Resistance (DIN ISO 695)	Class 3
Application Data:	
Saturated steam and alkaline solutions with significant glass attack must use mica protection	
Maximum temperature	400° C (752° F)
Maximum pressure	22752 kPa (3300 psig)
Applications with no significant glass attack @ 36° C	34474 kPa (5000 PSIG)

Barium Crown Aluminosilicate BAK50

Thermal expansion (20-300° C) α	= 4.6×10^{-6} K
Transformation Temperature Tg	= 629° C
Strain Point Tc	= N/A
Softening Temperature Td	= 820° C
Thermal Shock Δ	= 265° C (DIN ISO 718)
Bending Strength Mpa	= N/A
Hydrolytic Resistance (DIN ISO 719)	Class 1
Acid Resistance (DIN 12116)	Class 3
Alkali Resistance (DIN ISO 695)	Class 3
Application Data:	
Saturated steam and alkaline solutions with significant glass attack must use mica protection	
Maximum temperature	375° C (707° F)
Maximum pressure	20684 kPa (3000 PSIG)
Applications with no significant glass attack @ 36° C	34474 kPa (5000 PSIG)