

Douglass

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TEMPERED BOROSILICATE SIGHT GLASS

Manufactured from 3.3 borosilicate glass, these scopes are used in various applications where good chemical resistance and a low coefficient of thermal expansion are required. Poor chemical resistance can cause the glass to react and release unwanted substances in the process, such as arsenic which forms when non-borosilicate glass reacts with water.

Special scope dimensions are available upon request, where the minimum diameter is 2/5" and the maximum diameter is 13.78". Thickness can be manufactured from a minimum of 1/8" and a maximum of 1 3/8".



TECHNICAL INFORMATION

Physical properties	Testing method	Obtained value
Thermic dilatation coefficient	ISO 7991	3.3 X 10 ⁻⁶
Density at 25°C	SN 7005 13	2.23 g/cm ³
Refractive index (λ = 587.6 nm) nd		1.472
Maximum annealing temperature	ISO 7884-8	1040°F
Short-term maximum temperature	ISO 7884-7	932°F
Thermal shock resistance	ISO 7884	-45.67°F
Young's modulus		63.150 MPa
Poisson constant		0.2
Thermal conductivity	20°C - 100°C λ	(1.2)(w*m-1)(K-1)
Photoelastic constant	DIN 52314	(4.00 x 10 ⁻⁶)(mm ² /N)
Specific electrical resistance 108 Ωcm	DIN 52326	482°F
Dimensional tolerance diameter	DIN 7080	PASS
Chemical properties	Testing method	Obtained value
Hydrolytic resistance	ISO 719	HGB 1
Acid resistance	ISO 1776	CLASS S1
Alkaline resistance	ISO 695	CLASS 2
Chemical composition	SiO ₂	Minimum content 80%
Chemical composition	B ₂ O ₃	Minimum content 13%
Chemical composition	NaO ₂ + K ₂ O	Minimum content 4.5%

OUR WARRANTY

100% Satisfaction Guarantee

Warranty period

Douglass warrants merchandise against defective workmanship and materials that become apparent within a period of 12 months from the date of receipt of invoice by the purchaser (hereinafter referred to as the warranty period). All liabilities under the warranty provisions shall expire when the warranty period has expired.

Please feel free to contact us if you have any questions or comments.

We would love to hear from you!