

SCHOTT Duran® - Tubed Borosilicate Lab Glass

Glass Fabrication



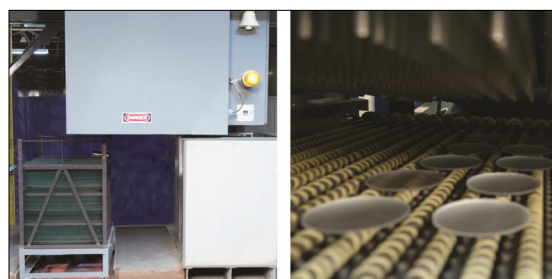
Coating Deposition



CNC Machining



Strengthening - Chemical & Heat



Screen Printing of Graphics



Abrisa Technologies, a member of HEF Photonics, is a globally recognized technology glass fabrication and optical thin film coating company with expertise in high volume manufacturing and engineering capabilities, delivering Total Solutions that provide excellent performance, fitness-for-use and economies of scale.

Our US based, state-of-the-art ISO 9001:2015 and ITAR registered facilities include Abrisa Industrial Glass in Santa Paula, CA and ZC&R Coatings for Optics in Torrance CA. These two divisions produce solutions from cut-to-order coated glass components to custom complex and ready-to-install fabricated, strengthened, optically coated, electronically enabled and branded sub-assemblies.

Our Total Solutions serve a variety of markets including Micro-Electronics, Defense and Avionics, Display, Industrial Automation, Optical Sensors, Imaging, Photonics, Medical & Dental, Life Science and more.



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Your Total Solution Partner

SCHOTT Duran® - Tubed Borosilicate Lab Glass

SCHOTT Duran® is general-purpose borosilicate glass tubing. Duran® has identical chemical and thermal properties as Schott's Borofloat® 33, as it is made from the same material. Duran's high resistance to chemicals and heat makes it ideal for laboratory glassware.

Features:

- Excellent Thermal Properties
- Highly Resistant to Chemicals
- Very Good Transmission Properties

Applications:

- Lab Glassware
- Pipelines
- Chemical Industry
- Flameproof Tubes
- Flowmeters

Dimensions:

- Smallest
 - 3mm (0.118") Outer Diameter
 - 0.7mm (0.028") Wall Thickness
 - 17mm (0.669") Length
- Largest
 - 325mm (12,795") Outer Diameter
 - 10mm (0.394) Wall Thickness
 - 150mm (5.91") Length

Thermal Expansion:

- 0 - 300°C (32 - 572°F): $3.25 \times 10^{-6}/K$

Electrical Properties: Log 10 Volume Resistivity

- (250°C, 482°F): 8.0
- (350°C, 932°F): 6.5

Mechanical Properties:

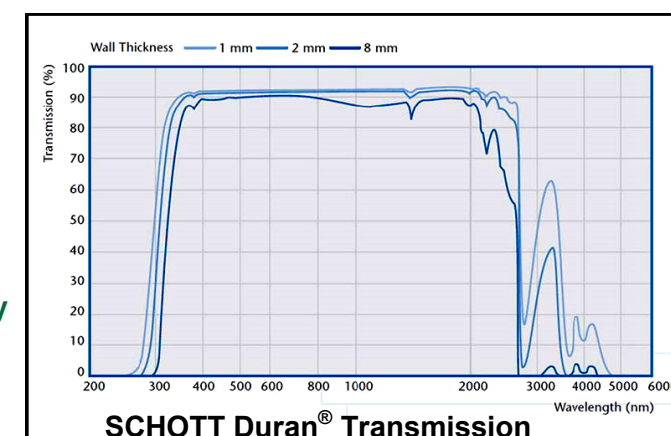
Density (25°C) ρ	2.2 g/cm ³	137.3 lb/ft ³
Young's Modulus E	64 kN/mm ²	9.28 Mpsi
Poisson's Ratio μ	0.2	0.2
Knoop Hardness	480	480
Bending strength σ	24MPa	3.63×10^3 psi

Optical Properties: (Index of Refraction @)

453.8 nm	1.4802
479.9nm	1.4768
546.1nm	1.4731
589.3nm	1.4713
643.8nm	1.4695
656.3nm	1.4692

Viscosity:

Working Point (10 ⁴ poises)	1260°C	2300°F
Softening Point (10 ^{7.6} poises)	825°C	1517°F
Annealing Point (10 ¹³ poises)	560°C	1040°F
Strain Point (10 ^{14.5} poises)	518°C	964°F



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