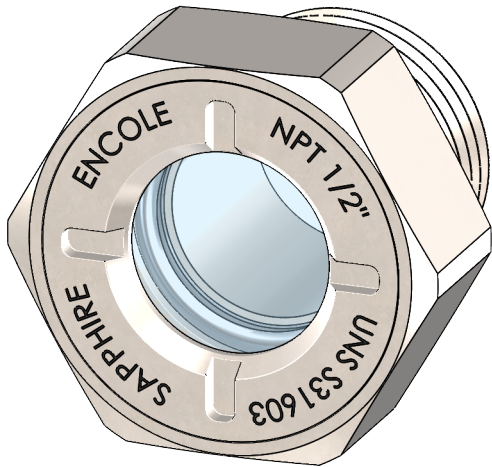


Encole Part Number: 102342
Sight Glass, NPT 1/2", 316L, C-Axis Sapphire, C-Seal



Specifically designed for applications where process temperatures reach 410°C in oxidizing environments, this sight window is a robust optical access port for use with high pressure and temperature vessels. Typically use cases include Raman, NIR spectrometry into reactor pressure chambers.

This sight glass is an ideal choice for visual inspection, imaging systems, machine vision, power laser beam pass-throughs.

The 316L housing has a finish of 32 RMS providing smooth surfaces reducing residues or particle contaminants. Sapphire window is sealed into the housing with a metal seal, forming a single-piece part. This sight glass has a long working life under severe temperature swings. Lifetime is unaffected by thermal or pressure cycling. There is no outgassing of materials over the part lifetime.

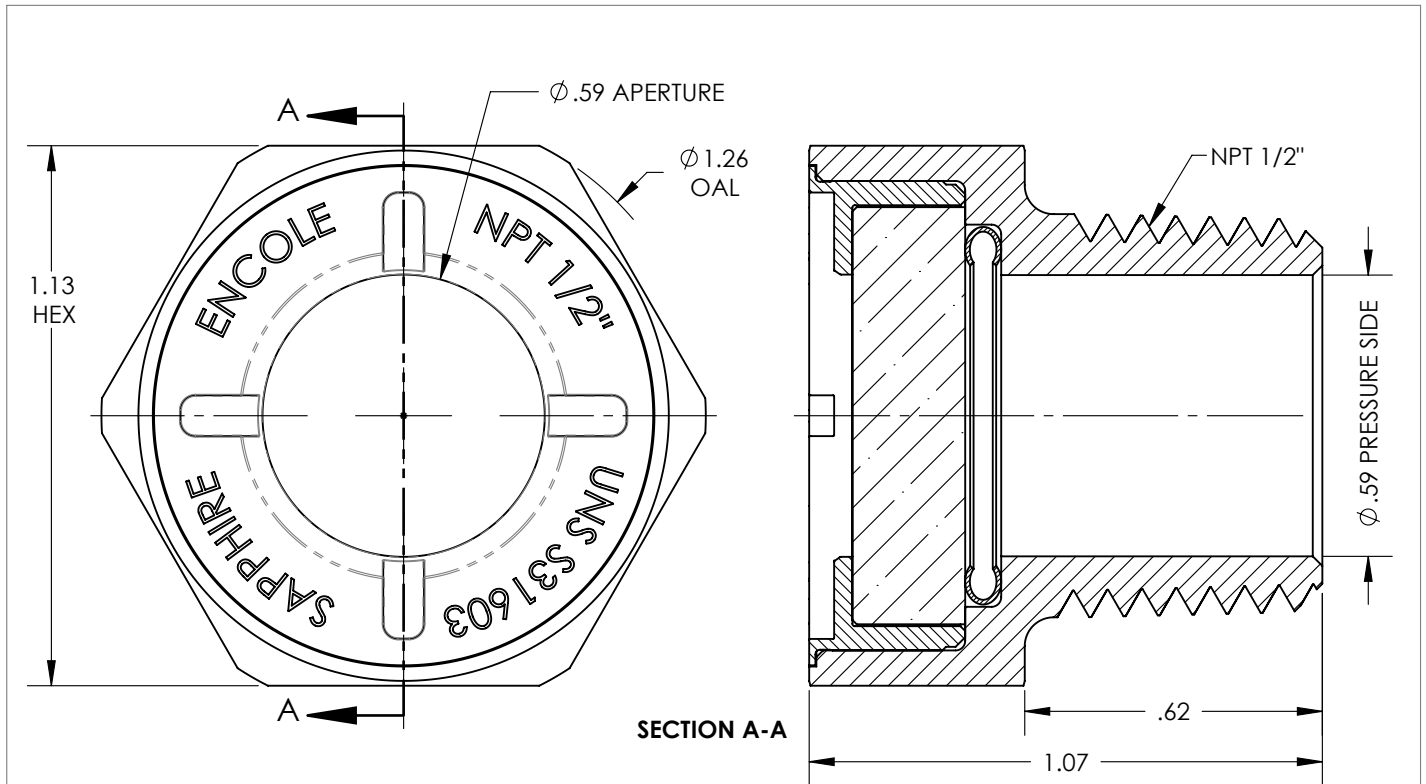
The housing has male NPT threads conforming to ASME B1.20.1. Use traditional installation methods with NPT high-temp thread sealant.

Technical Data:

- Operating Temperature: -60° to +410° C
- Pressure: 425 bar internal, 49 bar external
- Transmitted Wavelength: 180-5500nm; >50%
- Index of Refraction $n_d @ 532\mu\text{m}$: 1.7717

Material and Testing Compliance:

- Housing material: Stainless steel 316L, UNS S31603.
- Window: C-Axis Sapphire, Kyropoulos Method, Flats: 50-25 S-D.
- Internal Seal: INCONEL® Alloy 718, Silver (Ag)-plated Seal is rated to 1,909 bar (27,700 psi) pressure.
- Pressure tested per Pressure Equipment Directive 97/23/EG 02/98, Module H. Factor of Safety, FOS = 1.5



<p>MANUFACTURER:</p>	<p>UNLESS OTHERWISE SPECIFIED:</p>	<p>PART NUMBER: 102342</p>
<p>Encole LLC 373 River Oaks Cir. San Jose, CA 95134 USA www.encole.com</p>	<ul style="list-style-type: none"> • GD&T PER: ASME Y14.5-2018 • ALL DIMENSIONS ARE IN INCHES • TOLERANCES: .X ± .03 .XX ± .01 .XXX ± .005 • FILLETS & EDGES: .005-.02 • ANGLES: ±1/2° <p>THIRD ANGLE PROJECTION</p>	<p>DESCRIPTION: Sight Glass, NPT 1/2", 316L, C-Axis Sapphire, C-Seal</p> <p>WEIGHT: 0.13 lb</p> <p>Information in this Data Sheet complies with Encole Certificate of Conformance No. CC-.</p>