

Data Sheet: XLF Series Inspection Window

Why Infrared Windows?

- Risk Control: Opening an enclosure to perform periodic infrared scans increases risk of triggering an arc flash incident. Using inspection windows eliminates that high-risk task.
- Safety: Closed-panel IR, visual and ultrasound inspections are safer for personnel, plant assets and downstream processes.
- Standards Compliance: NFPA 70E and CSA Z462 prioritize "higher order controls" (like inspection windows) that proactively remove or reduce risk, over defaulting to PPE to protect against activities that are a known risk.
- Efficiency: Inspect more points in less time with fewer people. The closed-panel process is up to 95% more efficient than opening enclosures.
 Saving man-hours saves money.
- ROI: IR Inspection Windows typically pay for themselves within 1½ to three inspection cycles.
- Better Data: Inspect under high-load, more frequently, without background "noise" (from differential temperatures).
- Inspect the "Uninspectable:" How does your facility inspect equipment that is labeled "Dangerous" or is protected by switched interlocks? IR windows provide safe access for infrared scans of otherwise uninspectable assets. Don't let critical assets go uninspected.

IR Transmission & Accuracy:

- 57% Transmission: Exiscan™ IR windows feature advanced polymer optics capable of delivering accurate Delta T data.
- Stable: Optic is non-reactive with industrial environments, so transmission is stable for decades, for trendable data points.
- Better Data: Accuracy and longevity are two key benefits of Exiscan's[™] polymer optics over traditional crystals.

Monitor Electrical Equipment:

- Includes IR Window, Visual Inspection Window and Ultrasound Port
- Inspect breakers, fuses, disconnect blades, cable terminations, bus joints



Features & Options:

- Structural Integrity: Exiscan IR windows are overengineered for your protection. They are designed and manufactured to be stronger than the enclosures they are mounted to.
 - Rugged construction
 - Reinforced optics and mount
 - Impact resistant, load resistant, flame resistant
 - Stainless steel hardware
- Base & Cover: Machined from ½" aluminum bar stock, anodized and powder coated. (Stainless steel available.)
- Mount: 12 to 24 stainless steel locking screws reinforced with stainless steel plate.
- Ease of Use: XLF cover is easily opened or secured via spring release captive cover screws.
- Installation: Easy installation using skill saw, nibbler, cut-off wheel, plasma cutter, etc

Specifications:

XLF Series Inspection Windows

Dimensions:

	Aperture	IR Optic	Viewing Optic		
Measurement	<u>Length</u>	<u>Height</u>	<u>Height</u>	<u>Footprint</u>	Thickness
XLF-AS-05-###	5 in (127 mm)	3.75 in (95 mm)	2.5 in (64 mm)	6.25 x 9.25 in (159 x 235 mm)	0.9 in (23 mm)
XLF-AS-10-###	10 in (254 mm)	3.75 in (95 mm)	2.5 in (64 mm)	12.25 x 9.25 in (311 x 235 mm)	0.9 in (23 mm)
XLF-AS-15-###	15 in (381 mm)	3.75 in (95 mm)	2.5 in (64 mm)	17.25 x 9.25 in (438 x 235 mm)	0.9 in (23 mm)
XLF-AS-20-###	20 in (508 mm)	3.75 in (95 mm)	2.5 in (64 mm)	22.25 x 9.25 in (565 x 235 mm)	0.9 in (23 mm)

Materials & Finish:

Aluminum: ½" bar stock, machined, anodized, powder coated (stainless steel available) Body

Finger Guard Stainless steel, powder coated IR Optic Proprietary transmissive polymer

Viewing Optic Polycarbonate: ¼", UV stabilized, oil resistant, incl. Scratch-Off™ protective layers

Stainless steel, passivated and powder coated Cover

Cover Screws Stainless steel knurled grip around Phillips head screw, captive and sprung

Mounting Hardware Stainless steel screws treated with thread-locking patch

Reinforcement Plate Stainless steel Gaskets (base & cover) Silicone, closed cell

Compatibility & Operation:

IR Transmission Compatible with all brands of mid-wave and longwave IR cameras (3µm to 13.5µm)

Unaffected by vibration, moisture, humidity, broad spectrum of acids/alkalis Environmental

Operating Temperature -40°F (-40°C) to 300°F (150°C) Temperature

Standards / Testing /Certifications:

UL 50V, 50, 508 (incl. 746C, 90V, etc.) CSA cUL: C22.2 (nos. 14-10; 13-14; 94.1.15; 94.2.15) **IEEE** C37.20.2 (Sections B.3.6): (impact and load resistance) NEMA / Type Type 3R - (full-cover, outdoor); Type 1 (partial-cover, indoor) NFPA 70E

Inspection windows are a higher order control, compliant

with NFPA 70E, CSA Z462 and OSHA mandates

#E341947



Other:

Unconditional Lifetime Warranty for materials and workmanship when used for intended purpose Warranty

Patents

Grounding Automatically grounds when mounted to a grounded door/panel

Saw-cut, nibbler, plasma cutter / also available pre-installed on replacement panels/doors Installation

Origin **Proudly Made in the USA**

Part Numbering:

XLF --Construction Size **Cover Hardware** Configuration **Options**

Construction:

AS = Aluminum Base with Stainless Steel Cover

SS = Stainless Steel Base and Cover

Size / IR Optic Aperture Dimensions:

5" x 3.75" 05 = 10 = 10" x 3.75" 15" x 3.75" 20 = 20" x 3.75"

Cover Hardware:

Knurled Cover Screws

Knurled Screws with Locking Mechanism

Cover Configuration (1st position):

F# = Full Door (covers all optics / ports) Type 3R P# = Partial Door (viewing window exposed) Type 1

Cover Configuration (2nd position):

#D = Opens Downward #U = Opens Upward

#R = Opens Right (mounted vertically)

#L = Opens Left (mounted vertically)

Example: XLF-AS-15-KFD = 15" Multi-Inspection Window, aluminum base, stainless steel cover with knurled cover screws on a full cover, opening downward