



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:** Typical IR Window installations will 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:

- Inspect breakers, fuses, disconnect blades, cable terminations, bus joints
- For use on switchgear, transformers, MCCs, capacitor banks, combiner boxes, inverters, etc



Features & Options:

- **Structural Integrity:** Exiscan IR windows are over-engineered 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:

Measurement	Aperture Length	IR Optic Height	Viewing Optic Height	Footprint	Thickness
XLF-AS-04-###	4 in (102 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:

Body	Aluminum: 1/2" bar stock, machined, anodized, powder coated (stainless steel available)
Finger Guard	Stainless steel, powder coated
IR Optic	Proprietary transmissive polymer
Viewing Optic	Polycarbonate: 1/4", UV stabilized, oil resistant, incl. Scratch-Off™ protective layers
Cover	Stainless steel, passivated and powder coated
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)
Environmental	Unaffected by vibration, moisture, humidity, broad spectrum of acids/alkalis
Temperature	Operating Temperature -40°F (-40°C) to 300°F (150°C)

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



Other:

Warranty	<i>Unconditional Lifetime Warranty</i> for materials and workmanship when used for intended purpose
Patents	Pending
Grounding	Automatically grounds when mounted to a grounded door/panel
Installation	Saw-cut, nibbler, plasma cutter / also available pre-installed on replacement panels/doors
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:

- 04 = 4" x 3.75"
- 10 = 10" x 3.75"
- 15 = 15" x 3.75"
- 20 = 20" x 3.75"

Cover Hardware:

- K = Knurled Cover Screws
- L = 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