

# VPFR Series

### The World's Only Impact-Resistant Infrared Window

Industrial-grade **VPFR Series** (Viewing Pane Fixed Reinforced) infrared (IR) windows enable thermographers to survey critical electrical applications efficiently and safer than ever.

NFPA standards recommend IR inspection under fully energized conditions. However, PPE requirements, panel cover removal, and reinstallation are time consuming and costly. Use of the **VPFR Series** IR windows nearly eliminates the risks associated with IR electrical inspection by providing companies with a non-invasive, closed-panel inspection methodology.

Thermographers using IR windows are never exposed to energized conductors or circuit parts and are not engaged in risk increasing behaviors. Therefore, elevated levels of PPE for invasive surveys are not required, minimizing survey time while maximizing safety.



### Protected by Our Unconditional Lifetime Warranty

#### Specifications

| Materials                |  |
|--------------------------|--|
| Window Housing and Cover | UL 94 5VA Nylon (switchgear-grade plastic); -40°C (-40°F) to 273°C (523°F) |
| Optic                    | UL 746 compliant, IR transmissive polymer; -40°C (-40°F) to 325°C (617°F)  |
| Reinforcing Grill        | Aluminum coated with UL 94 5VA Nylon; -40°C (-40°F) to 273°C (523°F)       |
| Gaskets                  | UL 94 5VA TPE; -40°C (-40°F) to 273°C (523°F)                              |
| Hardware                 | 316 stainless steel  |

| Other                     |                                       |
|---------------------------|---------------------------------------|
| Useful Temperature Rating | -40°C (-40°F) to 200°C (392°F)        |
| Water and Dust Ingress    | IP65 / NEMA 4: closed and when in use |

#### Dimensions

| Model    | Body Diameter     | Window Diameter  | Assembly Thickness |
|----------|-------------------|------------------|--------------------|
| VPFR-50  | 9.1 cm (3.6 in)   | 5.1 cm (2.0 in)  | 2.6 cm (1.0 in)    |
| VPFR-75  | 12.1 cm (4.8 in)  | 7.6 cm (3.0 in)  | 2.6 cm (1.0 in)    |
| VPFR-100 | 15.1 cm (5.95 in) | 10.2 cm (4.0 in) | 2.6 cm (1.0 in)    |

#### VPFR Series Features:

- The world's only industrial-grade IR window series
- Fixed And Stable Transmission (FAST)
- Unconditionally guaranteed against transmission loss for accurate qualitative and quantitative analysis
- Durable, fully impact-resistant
- Patented reinforced grill exceeds high voltage switchgear viewing pane standards
- Manufactured from non-conductive UL 94 plastics insulated to 30kV/mm
- Fitting templates and instructions included

#### Certifications:

- Recognized by UL in the USA & Canada to the following standards:
  - UL 50V
  - UL 50E
  - UL 746C: Impact and Flammability
  - UL1558: Impact and Load Resistance
  - UL 508A; ANSI UL 508A
- IEEE C37 20.2.a.3.6: Impact and Load
- IP65 / NEMA 4
- Lloyds of London Type Approval
- American Bureau of Shipping (ABS)

#### Local Contact Information