

FIRE EXTINGUISHER ELECTRICAL INSULATION TESTER



Fire Extinguisher Electrical Insulation Tester — ToronFT™ FE-EI

ToronFT™ FE-EI Fire Extinguisher Electrical Insulation Tester is a dedicated instrument for evaluating the indication accuracy of pressure gauges and indicators installed on fire extinguishers of various capacities, excluding carbon dioxide type.

The system compares the reading of the fire extinguisher's own pressure indicator against a certified reference standard pressure gauge across multiple defined inspection points throughout the indicator's operating range. This apparatus ensures that pressure indicators provide accurate readings, which is critical for end-user safety and reliable fire extinguisher serviceability assessment.

APPLICATIONS

Fire Extinguisher Electrical Insulation Tester — ToronFT™ FE-EI Applications

The ToronFT™ FE-EI is used for:

- Pressure indicator indication error testing of portable dry powder, water, and clean agent fire extinguishers
- Factory quality control inspection of pressure gauges installed on fire extinguishers
- In-service maintenance inspection of fire extinguisher pressure indicators
- Third-party inspection and certification testing
- Regulatory compliance verification for fire extinguisher service providers



FEATURES

Fire Extinguisher Electrical Insulation Tester — ToronFT™ FE-EI Key Features

- Dual-range pressure inspection: 0–4 MPa and 0–8 MPa to accommodate a wide variety of fire extinguisher types
- Four defined inspection points: zero position, working pressure, upper and lower working pressure limits
- Standardized test protocol: pressurize to maximum, hold 1 minute, then decompress and read at each point
- Standard pressure gauge accuracy: $\geq 0.25\%$ for reliable reference comparison
- Standard gauge maximum range limited to $\leq 2/3$ of the indicator under test for adequate resolution
- Applicable to all portable fire extinguishers except CO₂ type
- Compact and standalone design suitable for workshop and field use

THEORY & METHOD

Theory and Method

The apparatus evaluates pressure indicator accuracy by applying controlled hydraulic pressure to a fire extinguisher through a calibrated pressure source. A certified standard pressure gauge (accuracy $\geq 0.25\%$) is used as the reference. The defined inspection points are the zero position, working pressure, and the upper and lower limits of the working pressure range. During pressurization, pressure is steadily increased from zero to the maximum inspection point and held for 1 minute.

During the decompression phase, pressure is smoothly reduced, and each inspection point is read and recorded. The reading of the fire extinguisher's installed indicator is compared against the standard gauge reading at each inspection point. The standard pressure gauge's maximum range must not exceed two-thirds of the maximum range of the indicator being tested,

ensuring appropriate resolution and accuracy of comparison. Dual inspection ranges cover 0–4 MPa and 0–8 MPa.

TECHNICAL SPECIFICATIONS

Fire Extinguisher Electrical Insulation Tester — ToronFT™ FE-EI Technical Specifications

Parameter	Specification
Model	ToronFT™ FE-EI
Pressure Inspection Value Range	0–4 MPa and 0–8 MPa (two levels)
Inspection Points	Zero, working pressure, upper working limit, lower working limit
Test Protocol	Pressurize to max, hold 1 min, decompress, read at each point
Standard Gauge Accuracy	≥ 0.25%
Standard Gauge Max Range	≤ 2/3 of indicator under test maximum range
Applicable Extinguisher Types	All portable types except CO ₂



Torontech Inc.

251 Consumers Road, Suite 1200
Toronto, Ontario, M2J 4R3, Canada 

Phone: +1 416 368 2721 | Fax: +1 416 981 7652
Email: info@torontech.com

Torontech, LLC

601 Brickell Key Drive, Suite 700
Miami, FL 33131, USA 

Toll-Free: 1-866-383-7919
Email: sales@torontech.com

Torontech ME FZE

Meydan Grandstand, 6th Floor,
Meydan Road, Nad Al Sheba,
Dubai-261440, UAE 

Phone: +971 488 19252
Email: me@torontech.com

