

CATHETER FRICTION PERFORMANCE TESTER



Catheter Friction Performance Tester

Catheter Friction Performance Tester – Model ToronMed™ CFPT03 is specialized in testing the fastness of hydrophilic coatings, surface sliding performance, lubricity, coating friction, and coefficients of friction of both intravascular and non-vascular catheters, guidewires, and similar devices. This includes urinary catheters, drainage tubes, tracheal intubation tubes, and balloon catheters.

By simulating clinical use conditions, this tester ensures catheter products achieve optimal safety, effectiveness, and patient comfort, while meeting internationally recognized testing standards.

APPLICATIONS

The Catheter Friction Performance Tester – Model ToronMed™ CFPT03 is ideal for:

- Testing hydrophilic coating durability and surface lubricity of intravascular catheters and guidewires.
- Evaluating sliding properties and friction performance of urinary, drainage, and balloon catheters.
- Supporting R&D, QC, and compliance testing for catheter manufacturers.
- Independent laboratory verification and certification testing.

FEATURES

- Cyclic Friction Testing – Supports multiple one-way up and down test modes.
- Multi-Parameter Testing – Static friction, kinetic friction, static coefficient, and kinetic coefficient of friction measured in one run.
- Automatic Clamping System – Adjustable and stable force application for consistent results.
- Temperature-Controlled Testing – Circulating water bath system for tests up to 80 °C.
- Human Tissue Simulation – Silicone pads provide a realistic testing environment.
- Clean Water Bath – One-key automatic water supply and drainage maintain test hygiene.
- High Precision – 0.5% FS testing accuracy with displacement precision up to 0.1 mm.
- Variable Speed Range – Infinitely adjustable up to 1000 mm/min.

Safety Features

- Over-travel and overload protection.
- Automatic position reset and power failure memory.
- Emergency stop with UL-certified Schneider components.
- Real-time monitoring of system performance.

Professional Software

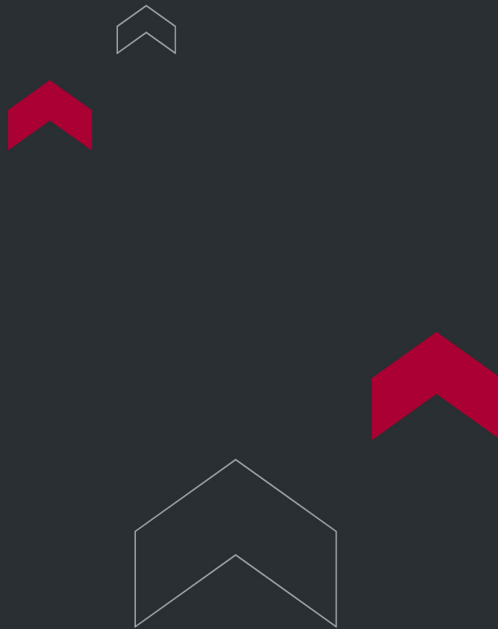
- Four-level user password protection.
- Full data traceability with audit trail and GMP compliance support (optional).
- Built-in standard test libraries aligned with international methods.

- Detailed reporting and historical data management.
- Lifetime free software upgrades.

TECHNICAL SPECIFICATIONS

Specification	Catheter Friction Performance Tester - Model ToronMed™ CFPT03
Friction Capacity Range	10N (standard); optional 5N, 30N, 50N
Test Accuracy	0.5% FS
Clamp Capacity	6N
Test Speed	0-1000 mm/min (adjustable)
Clamping Speed	Multi-level clamping and releasing
Maximum Stroke	400 mm
Number of Frictions	1-999
Temperature Control Range	Room temperature - 80 °C
Temperature Accuracy	±1 °C
Voltage	AC 220V 50Hz / 120V 60Hz
Dimensions	690 × 720 × 1435 mm
Net Weight	120 kg

Specification	Catheter Friction Performance Tester - Model ToronMed™ CFPT03
Standard Configuration	Instrument, water bath temperature control device, automatic clamping device, silicone catheter pads, professional fixture, software, and communication cable.
Optional Parts	Non-standard fixture (customized), automatic clamping force device.



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

