



TORONTECH

CATHETER FRICTION PERFORMANCE TESTER



Catheter Friction Performance Tester | T-CAMDI 021-2019, YY/T 1898-2024, YY/T 1536-2017

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.

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.

Standards

The Catheter Friction Performance Tester – Model ToronMed™ CFPT03 is designed to comply with the following internationally recognized standards:

- T-CAMDI 021-2019 – Single-use hydrophilic coated guidewire – Testing method for coating durability.YY/T 1898-2024 – Intravascular catheters and guidewires – Test method for evaluating the fastness of hydrophilic coatings.
- YY/T 1536-2017 – Catheters other than intravascular catheters – Standard test method for evaluating surface sliding performance.
- These standards provide guidelines to ensure catheters and guidewires are tested for coating adhesion, lubricity, and friction resistance under clinically relevant conditions.

Torontech is a trusted global provider of advanced medical device testing solutions. With the Catheter Friction Performance Tester – Model ToronMed™ CFPT03, manufacturers and laboratories gain a precise, repeatable, and standards-compliant testing solution that ensures catheter coatings and devices meet the highest standards of quality, safety, and performance.

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.

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

Specification	Catheter Friction Performance Tester - Model ToronMed™ CFPT03
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
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.



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