



TORONTECH

SYRINGE SLIDING RESISTANCE TESTER



ISO 7886

Syringe Sliding Resistance Tester ToronMed-SSRT01 is a high-precision testing instrument designed to measure the sliding resistance of various syringes, including medical syringes, prefilled syringes, and insulin injection pens. This tester provides accurate and repeatable results, helping manufacturers and testing laboratories ensure syringe performance and compliance with ISO 7886 and other international standards.

With advanced control technology, user-friendly operation, and powerful data management capabilities, the ToronMed-SSRT01 Syringe Sliding Resistance Tester is ideal for medical device R&D, quality control, and regulatory compliance testing.

APPLICATIONS

Safety & Data Integrity

- Over-Range Protection – Automatic shutdown to protect sensors from damage.
- GMP-Compliant Software – Four-level user password protection, user management, permissions control, and audit trail functions.
- Power-Down Memory – Retains test data in case of power loss.

Test Principle

The syringe, filled with 50% of its nominal water volume, is connected to the tester. A push force is applied to the syringe handle, expelling water into a test tank with an identical water level. The instrument measures and records the initial force, mean force, and maximum force during the test.

Applications

- Primary: Single-use syringes, prefilled syringes, cartridges
- Extended: Insulin injection pens and other medical delivery devices

Applicable Standards

- ISO 7886 – Sterile hypodermic syringes for single use – General requirements

Why Choose Syringe Sliding Resistance Tester ToronMed-SSRT01?

The ToronMed-SSRT01 combines high measurement accuracy, advanced test control, and comprehensive data management to deliver reliable and repeatable syringe sliding resistance results. It is the ideal choice for medical device manufacturers and testing laboratories seeking precision, compliance, and efficiency.

FEATURES

Key Features

- 7" Full-Color Touchscreen – Intuitive interface with intelligent data processing functions.
- Advanced Displacement Control System – Ensures precise force application and accurate measurement.
- Real-Time Force Curve Display – Shows initial, average, and maximum force values throughout the test.

- Wide Speed Range – Adjustable from 0.05 to 500 mm/min for flexible testing needs.
- Standard-Compliant Fixtures – Designed for easy and secure clamping of syringes in accordance with testing standards.
- Specialized Water Tank – High-penetration, aging-resistant, and yellowing-resistant for long-term use.
- Automatic Test Judgement – Detects end of test and calculates results automatically.
- Data Storage & Connectivity – Stores up to 100,000 test records and includes RS232 interface for PC data transfer.

TECHNICAL SPECIFICATIONS

Parameter	Specification
Test Range	0 ~ 50 N
Test Stroke	0 ~ 300 mm
Accuracy	±0.5% FS
Test Time	0 – 99,999 s (adjustable)
Test Speed	0.05 – 600 mm/min
Speed Accuracy	±1% FS
Nominal Capacity	0 – 100 ml
Dimensions	460 × 400 × 770 mm
Net Weight	35 kg
Voltage	220V, 50Hz (110V is also available)



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