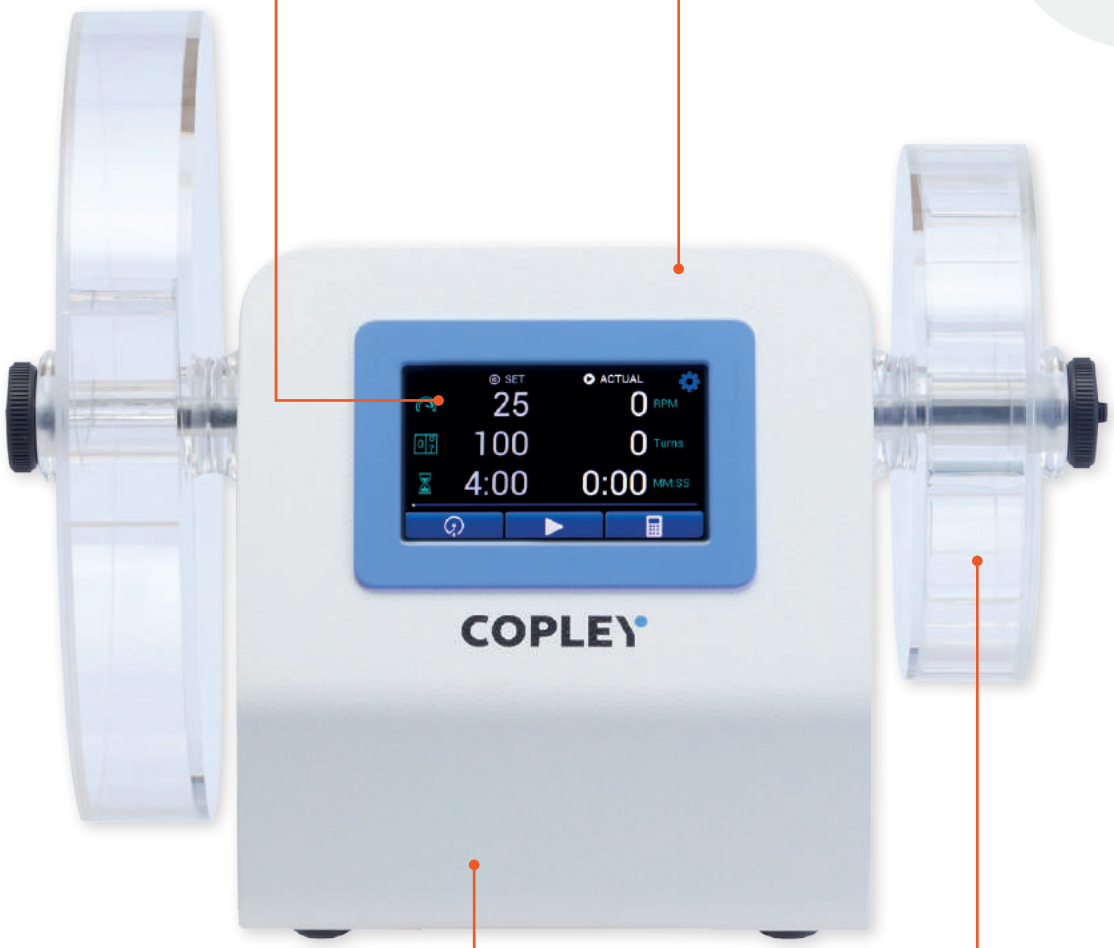
FRVi Series: Key Features

Intuitive touchscreen control with icon-based menu structure simplifies operation and clearly displays test parameters throughout run

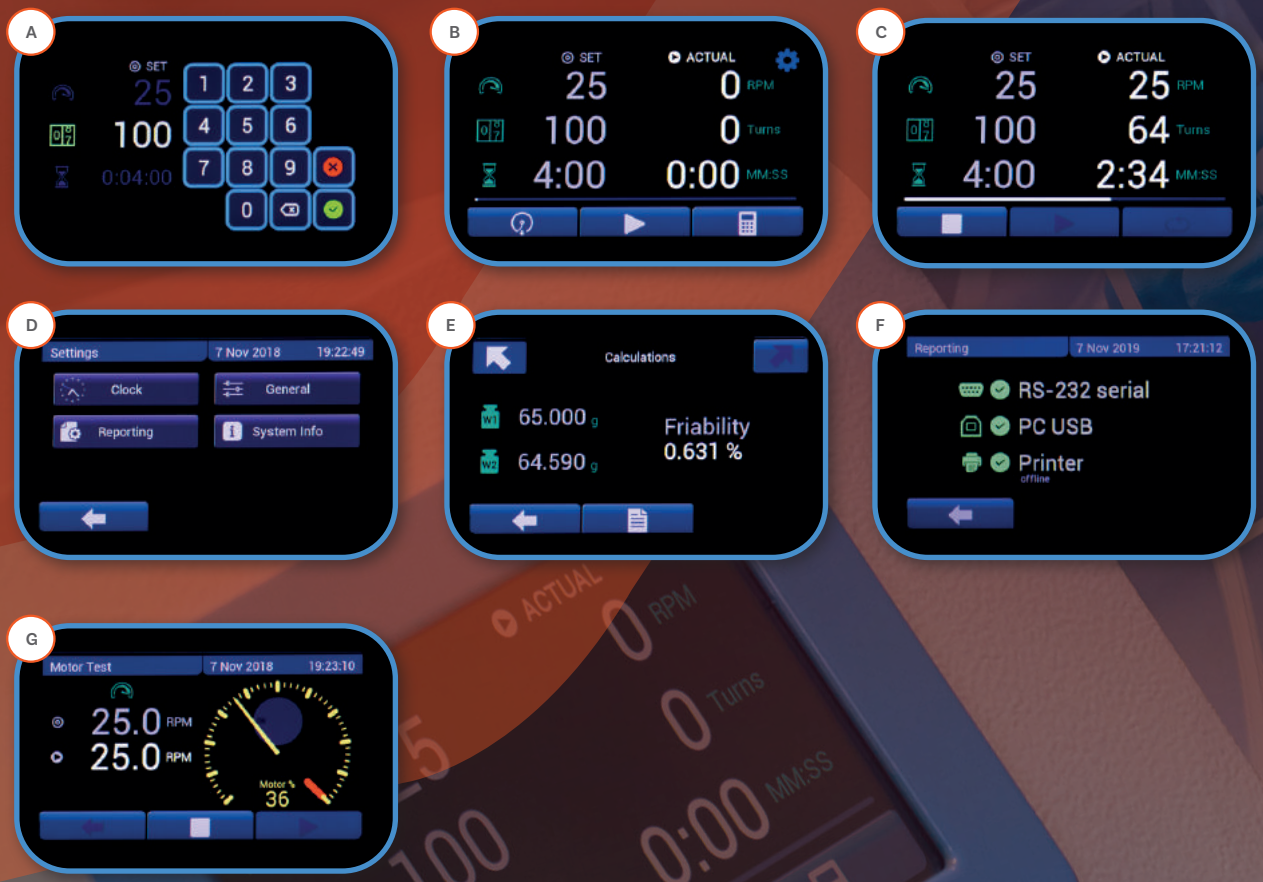
Robust metal case with advanced corrosion protective coating



Small unit footprint saves previous benchtop space

Compatible with friability and/or abrasion drum(s)

FRVi Series: Touchscreen User Interface



Key Features:

- **Intuitive menu structure** enables users to locate features quickly and easily
- **Easy-set** user-configurable **test parameters**:
  Speed (revolutions per minute)
  Total revolutions
  Test duration (HH:MM:SS)
- Status of **'Actual' v 'Set'** test **parameters clearly displayed** throughout testing
- **Test progress bar** provides clear and constant indication on run status
- Resistive touchscreen interface can be **operated with gloves on**
- Hygienic **wipe-clean** screen
- High productivity - **easy system set-up and operation** minimises training burden
- **Calculation** of Friability Ratio

A Setting a test parameter

B Set v Actual test parameters (before test run)

C Set v Actual test parameters (during test run, with test progress bar

D Settings menu

E Friability calculation screen

F Report output settings menu

G Motor speed (RPM) verification

Built-in 10° switching leg for testing larger tablet and capsule types

Reporting

Extensive data output options are available as standard, including direct reporting to a printer or PC.

Reported parameters

- **Speed (revolutions per minute)**
  Set
  Average
  Maximum
  Minimum
- **Number of revolutions**
  Set
  Actual
- **Friability calculations**
  Start weight (g)
  End weight (g)
  Friability (%)

RS 232

USB A

USB B

Compliance & Maintenance

✓ Certificate of compliance to Ph. Eur./USP provided as standard

✓ Comprehensive IQ/OQ/PQ documentation packages and toolkits available

Choose your Friability System

FRV 100i

Cat Number
1431

Pharmacopoeial Compliance
Ph. Eur. 2.9.7 USP <1216>

Tablet Types
Uncoated tablets

Test Station Capacity
1 drum

Unit Dimensions (w x d x h)
316 x 343 x 325 mm

FRV 200i

Cat Number
1432

Pharmacopoeial Compliance
Ph. Eur. 2.9.7 USP <1216>

Tablet Types
Uncoated tablets

Test Station Capacity
Up to 2 drums

Unit Dimensions (w x d x h)
407 x 343 x 325 mm

Friabimat SA-400

Cat Number
1450

Pharmacopoeial Compliance
Ph. Eur. 2.9.41.-2 (Method B)

Tablet Types
Hard tablets, Granules

Test Station Capacity
1 oscillating container

Unit Dimensions (w x d x h)
440 x 300 x 220 mm

FRVi Series: Friability Calculator

The integrated friability calculator removes the need for manual tablet weight loss calculations, reducing the risk of analyst calculation error and improving data accuracy.

Simply inputting start and end weight allows for automatic calculation of percentage (%) friability.

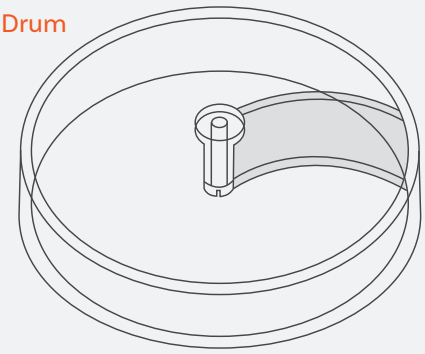
Friability results together with the test report are easily output to PC and printer.

FRVi Series: Friability & Abrasion Drums

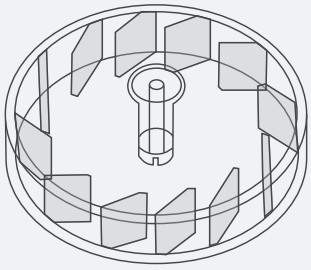
Fitted with an aperture for convenient sample loading and unloading, the FRVi Series drums automatically revolve to face the operator for easy sample loading. Upon test completion, simply tapping the 'empty drum' icon on the touchscreen empties the drum contents into the waiting collection tray(s), ready for weighing.

With a choice of either USP Friability and/or Abrasion drums, the versatile FRVi Series allows direct comparisons between the two parameters under identical test conditions.

Schematic of Friability Drum



Schematic of Abrasion Drum



Note:
All drums are interchangeable and can be fitted to any side of the unit

FRVi Series: Technical Specifications

Pharmacopoeial Compliance	Ph. Eur. 2.9.7 USP <1216>
User Interface	Resistive touchscreen
Test Duration Parameters	Time or Revolutions of the Drum(s)
Drum Rotational Speed Range	10 - 60 rpm (± 1 rpm)
Rotational Limit	Up to 60,000 rotations
Test Run Time	Up to 99 hours, 59 minutes, 59 seconds
Data Output	RS 232 USB A (for connection with a USB printer) USB B (for connection with a PC)
Alarm	End of testing (audible)

FRVi Series & Accessories

Cat. No.	Description
1431	Friability Tester FRV 100i (Variable Speed - 1 Drum)
1432	Friability Tester FRV 200i (Variable Speed - 2 Drums)
1407	Abrasion Drum (Optional extra)
1408	Friability Drum (Spare)

Cat. No.	Description
1405	Extra for Numbering & Certification (per drum)
1406	IQ/OQ/PQ Documentation Pack
1410	Qualification Tools
1412	Re-calibration of Qualification Tools