



## The Falex Pin & Vee Block Test Machine



The Falex Pin & Vee Block Test Machine is a laboratory tool for evaluating wear, friction and extreme pressure properties of materials and lubricants. The equipment rotates a ¼ inch diameter test pin against two ½ inch diameter vee blocks. A four line contact is established as load is applied through a mechanical gage by a ratchet wheel and an eccentric arm.

### Standard Test Methods

ASTM D2670 – D2625 – D3233 - D5620 - FTM-791-3807.1 - FTM-791-3812.1

461-C-84-01 - 461-C-84-02 - 461-C-84-03 - FMC-BJ1-1 - IP 241

## Digital Configurations and Options

The Falex Pin & Vee Block Test Machine with SoftWEAR (000-001-301) consists of the Machine, Ratchet Wheel, Load Cell, Torque Cell, Thermocouple and Data Acquisition Module.

A Laptop or tower PC Kit for Falex SoftWEAR (301-001-001) is available as an option.

The Pin & Vee Block Test Machine with SoftWEAR and Control (000-001-303) already includes a PC and comes with an Auto-Wear Measurement Module (100-200-017). The Auto-Loading Module for SoftWEAR and Control (000-200-029) is an option.

The Pin & Vee Block Test Machine with SoftWEAR and Control above is also available with Elevated Environment Chamber (225 psig max).

*The chart overleaf gives a clear overview of the configurations as described above.*

## Analog Configuration Upgrade

If you currently use the analog configuration of the Falex Pin & Vee Test Machine, you can upgrade it to a completely digital system by purchasing option a. and b. as described below. The investment can also be spread in time over the two steps, first a. then b..

**a.** You acquire the **Falex SoftWEAR with Digital Load for Pin & Vee Block (301-001-001)** which includes the Data Acquisition Module, Thermocouple and Torque Cell. This will allow you to acquire and store friction and temperature signals at user-selected predetermined time intervals. Data are presented in real time graphic and stored in an Excel compatible format.

**b.** You also acquire the **Digital Load Assembly for Falex SoftWEAR (000-201-301)** which includes Load Cell and Ratchet Wheel. This will allow you to also display Load in Direct Load (150 to 3.000 Lb) or Reference Load (200 to 4.500 Lb) scales and the coefficient of friction to be calculated and displayed.



# Falex Tribology Product Datasheet

Quality  
Knowledge  
Partner Solutions

Pin & Vee Block Test Machine Characteristics	
Contact	Line (V Block), Area (C Block)
Motion	Sliding
Speeds	290 +/- 10 rpm (60-3600 rpm)
Loads	0 to 3000 Lb. Direct load
Temperatures	Ambient to 150°C
Environments	Liquid, semi-liquid, dry, pressurized test chamber

Pin & Vee Block Test Machine Elements			
Elements	With SoftWEAR	With SoftWEAR & Control	
		Standard	Elevated Environment Chamber
	000-001-301	000-001-303	000-001-304
Machine	✓	✓	✓
Ratchet Wheel	✓	✓	✓
Load Cell	✓	✓	✓
Torque Cell	✓	✓	✓
Thermocouple	✓	✓	✓
Data Acquisition Module	✓	✓	✓
PC Kit	Option	Not Applicable	Not Applicable
SoftWear and Control PC	Not Applicable	✓	✓
Auto Wear Measurement	X	✓	✓
Auto Loading for SoftWear and Control	X	Option	Option
Elevated Environment Chamber	X	X	✓