

The F-CAL kit comprises a reference pressure gauge, precision hand pump and the necessary connectors for use with both large and standard size Speedy® Moisture Testers.

The F-CAL Test Kit is most commonly used for leak testing complete Speedy Moisture Testers whilst simultaneously calibrating the fitted pressure gauge. Alternatively, pressure gauges can be removed from the Speedy Moisture Testers and connected to the pump for direct calibration.



F-CAL Test Kit Contents

- Reference pressure gauge c/w calibration certificate – Class 0.5
- Precision hand pump
- Speedy Moisture Tester cap with connector
- Pressure line c/w fittings
- Pressure gauge removal tool & fittings wrench
- Replacement Speedy Moisture Tester gaskets
- Rigid carry case



Important: Before you start

1. Before using the F-CAL kit to calibrate a Speedy Moisture Tester please read the Model SMP Pneumatic Hand Pump instruction manual
2. Before using the SMP pump to pressurize a Speedy Moisture Tester please ensure that pump is set to Pressure mode, not Vacuum mode. The F-CAL pressure gauge may suffer irreparable damage if the pump is set to Vacuum mode instead of Pressure mode.
3. Familiarise yourself with all the parts of the F-CAL kit, as listed on the data sheet.
4. Note that F-CAL Test Kit can be used with both Standard and Large size Speed Moisture Testers



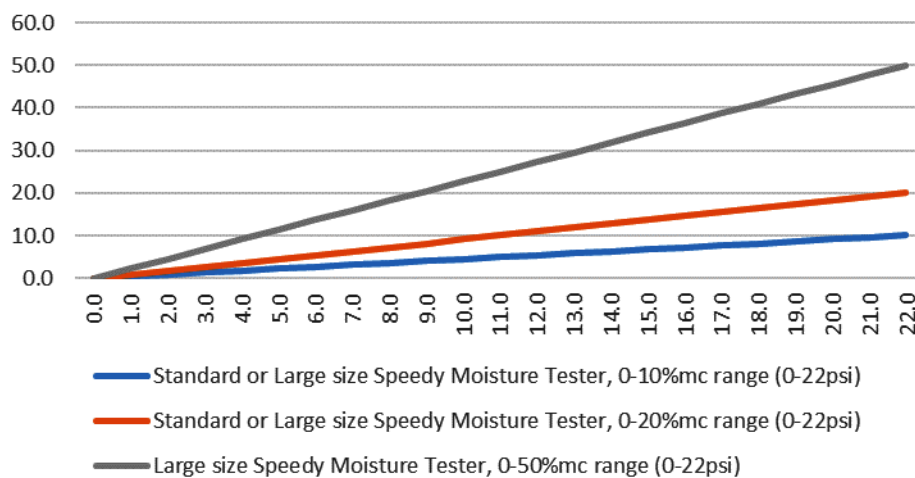
Speedy Moisture Tester Leak Testing and Calibrating Instructions

1. Ensure that the SMP pump is set to Pressure mode
2. Remove all material from the Speedy Moisture Tester chamber
3. Fit the modified F-CAL cap (with pressure hose) to the Speedy Moisture Tester and ensure all fittings and connections are leak-tight. Note: do not overtighten connections and fittings.
4. Hold the Speedy Moisture Tester and pump at eye level.
5. Pressurize the Speedy Moisture Tester with the hand pump to reference pressure points of your choosing in succession. Fine tune the pressure within the Speedy Moisture Tester if necessary by using pump's fine adjustment valve or pressure release valve as required.
6. Allow the pressure to settle at each of your chosen reference points for 1-2 minutes before taking and recording the SMP hand pump and the Speedy Moisture Tester pressure gauge values. Recording pump and Speedy Moisture tester gauge values on a standardised form is recommended; see example template.
7. Release pressure from the Speedy Moisture Tester slowly by using the pump's release valve. (never switch the pump to vacuum to release the pressure).



F-CAL Test Kit Conversion Table			
F-CAL Gauge, psi	Speedy Moisture Tester		
	Standard or Large Size 0-10%mc Range (0-22psi)	Standard or Large Size 0-20%mc Range (0-22psi)	Large Size 0-50%mc Range (0-22psi)
0.0	0.0	0.0	0.0
1.0	0.5	0.9	2.3
2.0	0.9	1.8	4.5
3.0	1.4	2.7	6.8
4.0	1.8	3.6	9.1
5.0	2.3	4.5	11.4
6.0	2.7	5.5	13.6
7.0	3.2	6.4	15.9
8.0	3.6	7.3	18.2
9.0	4.1	8.2	20.5
10.0	4.5	9.1	22.7
11.0	5.0	10.0	25.0
12.0	5.5	10.9	27.3
13.0	5.9	11.8	29.5
14.0	6.4	12.7	31.8
15.0	6.8	13.6	34.1
16.0	7.3	14.5	36.4
17.0	7.7	15.5	38.6
18.0	8.2	16.4	40.9
19.0	8.6	17.3	43.2
20.0	9.1	18.2	45.5
21.0	9.5	19.1	47.7
22.0	10.0	20.0	50.0
%mc:psi conversion factor	0.454545	0.909091	2.272727

Speedy Moisture Tester %mc to psi



Example of Speedy Moisture Tester Calibration Record Sheet

Protimeter F-CAL Test Kit Calibration Record Template for Speedy Moisture Testers			
F-CAL gauge serial no:		Type C/2 (0-10%mc) tolerance:	± 0.15 %mc
F-CAL gauge calibration date:		Type D/2 (0-20%mc) tolerance:	± 0.3 %mc
Speedy Moisture Tester model:		Type G/2 (0-50%mc) tolerance:	± 0.75 %mc
Speedy Moisture Tester ID:			
Speedy Moisture Tester calibration date:			
Calibrated by:			
Actual F-CAL pressure reading (psi)	Equivalent F-CAL %mc reading (refer to conversion chart)	Actual Speedy Moisture Tester reading (%mc)	Variance (± %mc)
Notes:			
Signed:			

U.S.A.
 Amphenol Thermometrics, Inc.
 967 Windfall Road
 St. Marys, Pennsylvania 15857
 T: +1 814-834-9140 | F: +1 814-781-7969

U.K.
 Amphenol Thermometrics (U.K.) Limited
 Crown Industrial Estate Priorswood Road
 Taunton, TA2 8QY, UK
 T: +44 1823 335 200