



Description

The 8030B-H is a complete system for automatic hydraulic pressure calibration on the Time Electronics CalBench. It consists of a module that provides the user control interface, and a hydraulic pressure generation system that integrates under the rear of the CalBench. The output of the generation unit is connected to a manifold positioned on the CalBench benchtop, with a precision sensor providing 0.01 % FS accuracy. Control stability is 0.005 % of full scale.

The 8030B-H can be configured for ranges including 0 to 400 bar (5000 psi), 0 to 600 bar (8700 psi), 0 to 700 bar (10,000 psi), and 0 to 1000 bar (15,000 psi). It can be supplied in a dedicated hydraulic CalBench or as part of a multifunction system that can include modules for electrical, temperature or pneumatic calibration work.

Applications

The 8030B-H is suitable for wide workload calibration of pressure devices such as transmitters, sensors and gauges. It acts as a high performance pressure standard in process plants, factories and calibration labs. Routine testing of pressure instrumentation is made quick and simple, whether using the 8030B-H touch screen display or via EasyCal calibration software.

Functionality

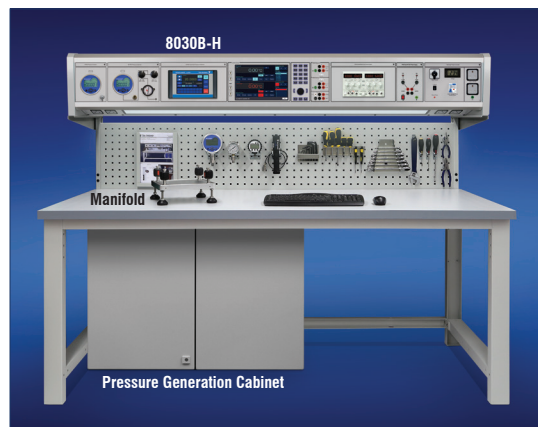
The 8030B-H module features a colour touch-screen interface with user-friendly menus designed for simple operation, enabling users to quickly learn and master the operation of the module. Manually specifying pressure set points is made simple with clearly defined controls on the display.

EasyCal Software

The 8030B-H can be controlled via Time Electronics EasyCal software to automate the calibration process. This provides increased speed of calibration and consistency of results. Produce traceable calibration certificates and test reports for quality standards with additional uncertainty information for ISO 17025 conformance.

Features

- 400 bar, 600 bar, 700 bar and 1000 bar versions
- Configured based on end user requirement
- Controller module in CalBench
- Integral hydraulic pressure generation
- Control stability 0.005 % FS
- Accuracy 0.01 % FS, Precision 0.005% FS
- Touch screen user interface
- EasyCal software compatible





Technical Specifications

Pressure ranges	0 to 400 bar (0 to 5,000 psi) 0 to 600 bar (0 to 8700 psi) 0 to 700 bar (0 to 10,000 psi) 0 to 1000 bar (0 to 15,000 psi) Custom ranges upon request.
Pressure type	Gauge.
Accuracy	< 0.01 % FS.
Precision	< 0.005 % FS.
Barometric reference option	Enables user to switch from gauge to absolute pressure. Measuring range: 800 to 1,200 mbar absolute. Accuracy: 0.01 % RDG.
Pressure units	23 selectable and 2 programmable.
Control stability	< 0.005 % FS.
Control time	< 30 s.
Control range	10 bar to full scale / 150 psi to full scale.
Manifold options	7161H: Quad port benchtop manifold (\leq 700 bar) supplied with connection kit. 8161H: CalBench Integrated Hydraulic Manifold (\leq 1000 bar). Includes high pressure piping, with manifold built into the CalBench worktop. 3 ports as standard.
Pressure media	Water as standard, oil optional.
Overpressure protection	140 %.
Module display	7 " TFT colour touch-screen (4 wire resistive).
Resolution	up to 6 digits (user selectable).
Response time	approx. 10 ms.
Warm-up time	approx. 10 minutes.
Communication interface	RS-232 (connected inside the CalBench to control centre module if ordered).
Power supply	100 to 230 V AC, 50/60 Hz (as per CalBench supplied).
Required supply pressure	\geq 10 bar pneumatic to drive hydraulic generation system (under CalBench).
Test port pressure	Maximum 105 % FS.
Operating temperature	10 to 40 °C (50 to 104 °F).
Storage temperature	0 to 70 °C (32 to 158 °F).
Air humidity	0 to 95 % (relative humidity without moisture condensation).
Compensated temp range	15 to +35 °C (+59 to +95 °F).
Dimensions/ Weights	Module Width : 295 mm (primary console fitting only) Hydraulic Generation System: W 1000 x H 750 x D 280 mm / 45 kg - cabinet built into rear under section of CalBench.

Ordering Information

8030B-H **Automatic Hydraulic Pressure Calibrator Module**

The configuration of the 8030B-H is specified upon consultation with Time Electronics, based on the pressure range coverage required.

ECFLA EasyCal Calibration Software (full user licence, accompanying calibrator discounted price)

7161H Quad port hydraulic manifold (for use up to 700 bar)

Calibration certificates Traceable calibration certificate (Factory) and Accredited calibration certificate (ISO 17025)

Due to continuous development Time Electronics reserves the right to change specifications without prior notice.