



CBP-PRES2: Pressure CalBench Package

A pre-configured CalBench for pressure instrumentation calibration



About the Package

The CBP-PRES2 is a dedicated pressure calibration workstation with modules and extras that enable users to efficiently calibrate instrumentation like transmitters and gauges. It is an advanced system suitable for instrument workshops performing internal calibration and commissioning.

The CalBench features an 8030B auto-pneumatic controller module for calibration work from vacuum to 40 bar (600 psi). The line pressure and vacuum to this module is via the 7149 and 7165 electric pumps, meaning no need for an external supply. For higher range pneumatic work, a 100 bar (1500 psi) regulated module with digital gauge provides a practical calibration method with high accuracy reference. Line pressure to this module is typically via a compressed air or N2 cylinder. A custom regulator kit is included, for fitting to the cylinder at site, with all necessary connections to the CalBench.

Additional pressure calibration can be performed using high accuracy measurement modules for pneumatic and hydraulic applications. These are commonly utilised with the supplied benchtop pumps that feature dual outputs to connect both the module and UUT. Manifolds, test stand, adaptors and fittings are also provided.

The 8060+ module situates centrally in the console, providing source, simulation and measurement of process signals, HART communication and 24 V loop power. It features an integral multimeter, and a PC control centre with 12.1" touch screen display. Pressure control and readback applications are included. EasyCal software communicates with pressure modules, and can be used for automated calibration and test management.

Features

- CalBench for automated pressure calibration work
- Pneumatic controller module for vacuum to 40 bar (600 psi)
- Regulated 100 bar (1500 psi) module with digital gauge
- Multifunction process calibrator module with 6.5 digit multimeter
- Control centre module with 12.1" touch screen display
- Pressure measurement modules with control centre interface
- Self-sufficient with electric vacuum & pressure pumps to 45 bar
- Regulator kit for high pressure cylinder supplied
- Pneumatic & hydraulic benchtop pumps, adaptor kit, UUT stand
- Fixed and variable DC power supply modules
- Automated calibration with EasyCal software, peripherals supplied
- Under bench mobile unit & holder, perforated panel fittings, tool kit





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| Item # | Qty | Code | Basic Description | Basic Purpose |
|--------|-----|---------------------------|--|---|
| 1 | 1 | 7080-HD | CalBench Heavy Duty Version (W 2000 x D 850 x H 1568 mm) Framework bench style with worktop, perforated panel, primary console with 7082 mains power controller module. | Provides an ergonomic workspace for various calibration applications. Modules below to be fitted to the primary console for testing workload. |
| 2 | 1 | 7137 | Perfo Panel Option: 40 piece Tool Hook Kit | For holding various tools and accessories. |
| 3 | 1 | 7139 | Perfo Panel Option: Shelf (W 450 x D 250 x H 130 mm) | Suitable for storing equipment and tools. |
| 4 | 1 | 7157 | Articulating Keyboard Tray for CalBench | Situates the keyboard and mouse for the control centre module operations. Can be positioned under bench when not in use. |
| 5 | 1 | 7123 | Under Bench Holder | For storing the 7198 adaptors/fittings kit when not in use. |
| 6 | 1 | 8134 | Mobile 4 Drawer Unit, ESD, RAL 7035 light grey colour | Mobile storage that can situate under the CalBench. |
| 7 | 1 | 8060+ | Process Calibrator and Control Centre Module Advanced system package for precision source and measure capabilities. Integral process calibrator, 6.5 digit multimeter, PC and EasyCal software. Operation via 12.1" touch screen display. Built-in communication with pressure modules. | Source and measure process signals for electrical, frequency, temperature. Enables users to calibrate process instrumentation like transmitters. HART communication and integral 24 V DC supply. EasyCal software and accessories included for automation, administration and certificate generation. |
| 8 | 1 | CCPAD | Control Centre Numeric Keypad Module with jog dial | Ergonomic method of data entry to EasyCal software. |
| 9 | 1 | 8030B/G40b/G20b/CV4b/BARO | Automatic Pressure Calibrator Module with multiple ranges Sensor 1: 0 to 40 bar (600 psi), 0.01 % FS accuracy. Sensor 2: 0 to 20 bar (300 psi), 0.01 % FS accuracy. Sensor 3: Vacuum to 4 bar (60 psi), 0.01 % FS accuracy. Sensor 4: Barometric Reference. | For automated pressure calibration. 40 bar range for workload pneumatic testing of gauges, transmitters etc. Supplied with contamination trap. Ranges can be modified as per customer requirements. |
| 10 | 1 | RMTEG-G100b/0.02 | Digital Pressure Gauge Module with Regulator 0 to 100 bar (1500 psi), 0.02 % FS accuracy. | For high range pneumatic calibration work, with a line supply typically from a gas cylinder to enable regulator adjustment. |
| 11 | 1 | MTEG-G700b/0.02 | Digital Pressure Gauge Module 0 to 700 bar (10,000 psi), 0.02 % FS accuracy. | For accurate hydraulic pressure measurement to 700 bar. Pressure input to the module from the 7195 benchtop pump. |
| 12 | 1 | XTEG-G200b/0.02/M | Pressure Measurement Module with Control Centre Interface 0 to 200 bar (3000 psi), 0.02 % FS accuracy. | For mid/high range pneumatic calibration work. Used with 7194A pneumatic pump. |
| 13 | 1 | XTEG-CV20b/0.02/M | Pressure Measurement Module with Control Centre Interface Vacuum to 20 bar (300 psi), 0.02 % FS accuracy. | For reference pneumatic pressure calibration. Used with 7194A pump or T-piece method from 8030B module. |
| 14 | 1 | 7056 | Dual Adjustable Power Supply Module 2 x 30 V DC 3 A. | A variable DC supply to supplement various applications. |
| 15 | 1 | 7083 | Dual 24 V Fixed DC Power Supply Module | For powering loop instrumentation, transmitters and other equipment requiring 24 V DC. |
| 16 | 1 | 7149 | Electrical Vacuum Pump | Provides a vacuum to the 8030B controller module. |
| 17 | 1 | 7149-HCO | Housing and Connectivity Option for the 7149 vacuum pump | Compact housing for the 7149 pump, situated under bench. |
| 18 | 1 | 7161 | Benchtop Pneumatic Pressure Calibration Manifold Dual port for use from vacuum to 200 bar (3000 psi). | Provides a convenient UUT connection on the bench. Used with the RMTEG modules for calibration of pressure devices. |
| 19 | 1 | 7195 | Benchtop Hydraulic Pressure Calibration Pump Vacuum to 700 bar (10,000 psi). | Provides hydraulic pressure to 700 bar XTEG module. |
| 20 | 1 | 7194A | Benchtop Pneumatic High Pressure Calibration Pump Vacuum to 200 bar (3000 psi). | Pressure generation to 200 bar, suitable for use with pressure modules when compressed air source is not available. |
| 21 | 1 | 7198 | Pressure Calibration Accessories Kit A comprehensive selection of fittings, adaptors and hoses. | Provides all the required pressure connections and fittings for modules and pumps to UUTs. |
| 22 | 1 | 8100 | Benchtop Instrumentation Test Stand | For positioning UUTs on CalBench worktop. |
| 23 | 1 | 7165/G50b | Compact High Pressure Compressor | Provides a set line pressure of 45 bar (650 psi) to the 8030B pneumatic controller module. |
| 24 | 1 | XREG/210b-CUST | Pressure Regulator Kit | For fitting to a cylinder supplying line pressure to the CalBench. Connections, hoses and fittings supplied. |
| 25 | 1 | 8002 | CalBench Environmental Monitoring System | Measures and logs temperature, relative humidity and barometric pressure, with control centre interface. |
| 26 | 1 | CERTS | Traceable Calibration Certificates For all test modules and additional test equipment. | Certifies all calibration modules and additional test instruments have been tested in the TE factory to international standards. |