



CBP-PRES1: Pressure CalBench Package

A pre-configured CalBench for the calibration of pressure instrumentation



About the Package

The CBP-PRES1 CalBench is a package that provides users with the capabilities to perform rapid calibration of pressure instrumentation. It is an ideal solution for instrument workshops that require a high performance workstation as the platform for calibration of plant devices and instruments.

The bench features two 8030B auto-pneumatic controller modules for calibration work to 200 bar (3000 psi). The low range controller covers pressure to 20 bar (300 psi) with a vacuum to 2 bar (30 psi) sub-range. The line pressure and vacuum to this module is via electric pumps, meaning no requirement for an external supply. The high pressure controller has 2 ranges to 200 bar (3000 psi). 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. Both controllers have barometric reference sensors that enable switching from gauge to absolute pressure.

Additional pressure modules include differential and gauge measurement modules for pneumatic and hydraulic testing applications. They can be used with the supplied benchtop pumps. 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 modules for vacuum to 200 bar (3000 psi)
- Multifunction process calibrator module with 6.5 digit multimeter
- Control centre module with 12.1" touch screen display
- Gauge and DP measurement modules with control centre interface
- Self-sufficient with electric vacuum & pressure pumps to 24 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 drawer 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	7123	Under Bench Holder	For storing the 7198 adaptors/fittings kit when not in use.
5	1	7132	5 Drawer Unit (W 525 x D 550 x H 600 mm)	For storage of equipment, tools, documents etc.
6	3	7134	Slotted Divider Kit for drawers inside 7132	Partitions the drawer units for parts and components.
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/G20b/CV2b/ BARO	Automatic Pressure Calibrator Module with multiple ranges Sensor 1: 0 to 20 bar (300 psi), 0.01 % FS accuracy. Sensor 2: Vacuum to 2 bar (30 psi), 0.01 % FS accuracy. Sensor 3: Barometric Reference.	For automated pressure calibration. 20 bar range for workload pneumatic testing of gauges, transmitters etc. Ranges can be modified as per customer requirements.
10	1	8030B/G200b/G100b/ BARO	Automatic Pressure Calibrator Module with multiple ranges Sensor 1: 0 to 200 bar (3000 psi), 0.01 % FS accuracy. Sensor 2: 0 to 100 bar (1500 psi), 0.01 % FS accuracy. Sensor 3: Barometric Reference.	For automated high pressure calibration. 200 bar range for workload pneumatic testing of gauges, transmitters etc. Ranges can be modified as per customer requirements.
11	1	XTEG-G700b/0.02/M	Pressure Measurement Module with Control Centre Interface 0 to 700 bar (10,000 psi), 0.02 % FS accuracy.	For hydraulic calibration with accompanying pump.
12	1	XTEG-G100b/0.02/M	Pressure Measurement Module with Control Centre Interface 0 to 100 bar (1500 psi), 0.02 % FS accuracy.	For mid/high range pneumatic calibration work. Used with 7194A pump or T-piece method from 8030B modules.
13	1	XTEG-CV2b/0.02/M	Pressure Measurement Module with Control Centre Interface Vacuum to 2 bar (30 psi), 0.02 % FS accuracy.	For low range pressure calibration. Used with 7191 pump or T-piece method from 8030B modules.
14	1	XTEG-DP700mb/0.02/M	Differential Pressure Measurement Module, Control Centre Interface 0 to ± 700 mbar (10 psi), 0.02 % FS accuracy.	For differential pressure calibration of transmitters etc. Used with 7191 pneumatic pump for fine control input.
15	1	XTEG-DP200mb/0.05/M	Differential Pressure Measurement Module, Control Centre Interface 0 to ± 200 mbar (3 psi), 0.05 % FS accuracy.	For low range differential pressure calibration of transmitters etc. Used with 7191 pneumatic pump for fine control input.
16	1	7056	Dual Adjustable Power Supply Module 2 x 30 V DC 3 A.	A variable DC supply to supplement various applications.
17	1	7087	Quad DC Power Supply Module 6 V (20 A), 12 V (10 A), 24 V (6 A), 48 V (3 A).	Provides a DC power supply to various loop instrumentation under test.
18	1	7149	Electrical Vacuum Pump	Provides a vacuum to the 8030B controller module.
19	1	7149-HCO	Housing and Connectivity Option for the 7149 vacuum pump	Compact housing for the 7149 pump, situated under bench.
20	1	7195	Benchtop Hydraulic Pressure Calibration Pump Vacuum to 700 bar (10,000 psi).	Provides hydraulic pressure to 700 bar XTEG module.
21	1	7194A	Benchtop Pneumatic High Pressure Calibration Pump Vacuum to 200 bar.	Pressure generation to 200 bar, suitable for use with pressure modules when compressed air source is not available.
22	1	7191	Pneumatic Benchtop Pump Vacuum to 4 bar (60 psi).	Enables precise, fine control input of low pressure for pneumatic work. Suitable for use with XTEG DP measurement modules.
23	1	7161P	Quad Port Benchtop Pneumatic Pressure Calibration Manifold For input pressures from vacuum to 200 bar.	For use with the 8030B pressure controller modules, enabling multiple pressure UUTs to be set up and tested.
24	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.
25	1	8100	Instrumentation Test Stand	For positioning of UUTs like transmitters & gauges on benchtop.
26	1	7165/G35b	Compact High Pressure Compressor	Provides a set line pressure of 24 bar (350 psi) to the 8030B pneumatic controller module.
27	1	XREG/210b-CUST	Pressure Regulator Kit for Compressed Air or N2 Cylinder	For fitting to a cylinder supplying line pressure to the CalBench. Connections, hoses and fittings supplied.
28	1	TL09	Mobile Extension Bench	Connects to CalBench tabletop to extend the workspace and provide additional storage.
29	1	8002	CalBench Environmental Monitoring System	Measures and logs temperature, relative humidity and barometric pressure, with control centre interface.
30	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.