



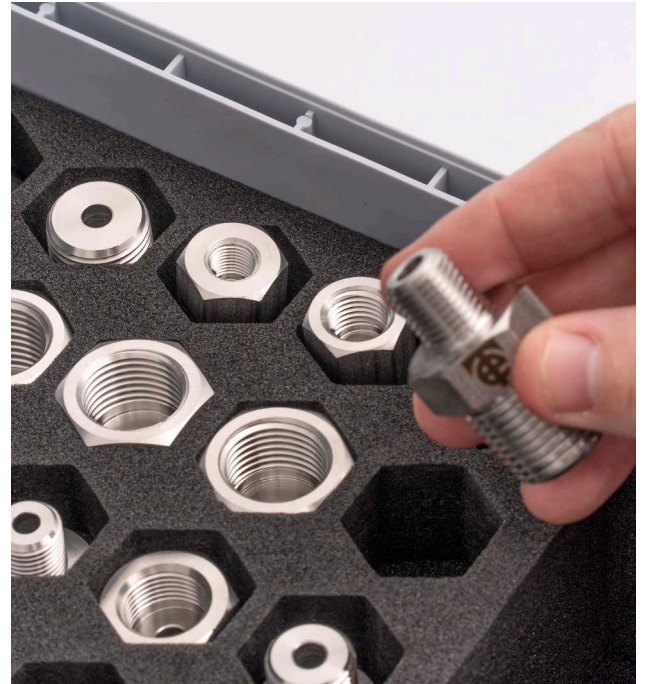
# Pressure Calibration Instruments



Laboratory and field calibration equipment  
for testing pressure instrumentation



## Pressure Calibration Instruments



## Pressure Calibration Instruments

Our pressure calibration instruments include calibrators, controllers, digital gauges and pumps. These products are used to calibrate devices such as transducers, transmitters, switches and indicators.

We have equipment for pneumatic and hydraulic testing applications, for absolute, gauge and differential pressure types.

We have laboratory solutions for manual and automatic pressure generation, high stability control and precision measurement. Portable pressure calibrators provide users with robust test tools for applications in the field.

Also available is a comprehensive range of pressure calibration accessories including manifolds, regulators, adaptor kits and more.



## 8030 Pressure Controller

Precision control and calibration for laboratory testing applications



### Automatic Pressure Calibration

The 8030 is an advanced pressure controller/calibrator suitable for wide workload calibration of pressure devices such as transmitters, sensors and gauges. The standard unit can be configured for multiple ranges from vacuum to 100 bar (1500 psi), integrating up to three high accuracy reference sensors for maximum workload coverage. Additionally a barometric reference option enables absolute pressure emulation. High range dual sensor versions up to 230 bar (3350 psi) are also available.

Due to its fully configurable design, the 8030 offers the maximum flexibility to end user requirements. Accuracy is 0.01 % FS for each internal sensor fitted, and control stability is 0.005 % FS of the active sensor range. This provides the necessary coverage for applications with outstanding accuracy, control and speed for testing applications.

With up to three sensors integrated into the instrument the user is always offered an optimal calibration solution over a very wide pressure range. The 8030 is suitable 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 8030 touch screen display or via EasyCal calibration software. A virtual control software is also included for manual control of the 8030 via PC or laptop.

### Supplied Accessories and Options

The 8030 is supplied with a benchtop 2 port manifold (model 7161) and contamination trap (model 7115) as standard. Options include the 7165 compact compressor pumps that can supply pressure up to 70 bar. Vacuum pumps, test stands, adaptor kits, fittings and hoses are also available to optimise user set ups and applications.

### Features

- Multi-range pneumatic pressure controller
- 3 sensor versions to 100 bar, dual sensor versions to 230 bar
- Gauge, compound, absolute, differential
- Control stability 0.005 % FS (of active sensor)
- Auto-ranging capabilities
- Accuracy 0.01 % FS (of active sensor)
- Barometric reference option
- Touch screen user interface
- Virtual control panel software included
- EasyCal software compatible
- Hydraulic versions available (8030-H)

### Applications

- Workload calibration of pressure transmitters and sensors
- Pneumatic calibration of gauges, indicators and calibrators
- Wide range automated pneumatic pressure sourcing



## 7165 Electric Compressor Pump

A range of compact pressure compressor pumps for supplementing calibration benches and pressure instruments. Primarily designed for use with the 8030 pressure controller, 7165 models can be used to create a fully automated pressure calibration system. This removes the requirement for nitrogen cylinders or bulky high pressure compressors.

- Compact pressure system for use with 8030 pressure controller
- Models for 17, 35, 50 or 70 bar
- Provides clean air to pressure controller, no need for external filters
- Accuracy 1 % FS
- Oil-less system
- Setting display for modifying the pressure output and maintenance
- Dimensions: L 280 x H 330 x W 210 mm
- Weight: 12 kg
- Supplied pre-configured when purchased with controller



## 7115 Contamination Trap

The 7115 is a contamination trap designed for use with pressure equipment, such as controllers, calibrators and pressure generators. It protects against impurities, liquids (water, oil etc.) and residues released by manifolds, gauges, transmitters and other pressure instrumentation under test.

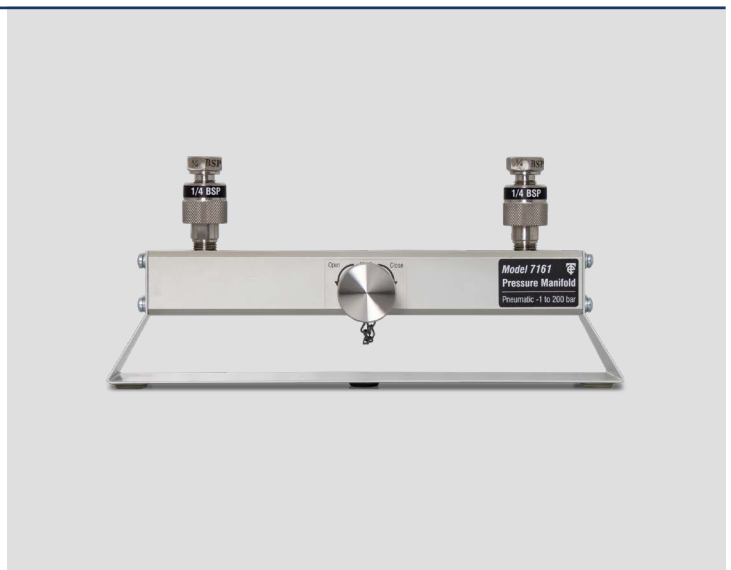
- Contamination trap to protect pressure calibrators and controllers
- Supplied as standard with 8030 pressure controllers
- Pressure range: -1 to 210 bar
- Pressure media: Pneumatic only, gas or air
- Material: Stainless steel, polycarbonate and nitrile rubber seals
- Connections: 2 x adaptors – minimesh type with hoses supplied
- Dimensions: W 120 x D 120 x H 120 mm
- Weight: 1 kg



## 7161 Pneumatic Manifold

The 7161 is a pneumatic manifold that provides two output ports with hand-tight connectors for pressure instrumentation under test. It is a compact solution used for pressure calibration from vacuum to 200 bar (3000 psi). Features include an anodized aluminium manifold block and a bleed valve to vent pressure when required.

- Dual port benchtop pressure manifold
- Suitable for vacuum to 200 bar (3000 psi) use
- Compact for benchtop or field work
- Hand-tight quick connectors
- Vent valve to bleed pressure when required
- Suitable for use with pumps and gauges
- Supplied with connection hose
- Ideal for use with CalBench modules
- Dimensions / Weight: W 275 x D 140 x H 130 mm / 1.7 kg
- Can be fitted to the 8100 instrumentation test stand
- Supplied as standard with 8030 controllers





## Portable Pressure Calibrators

Robust calibrators for field pressure testing applications



### 7010 Single Channel Pressure Calibrator

A robust portable pressure calibrator that is suitable for field and laboratory calibration work of both pressure and electrical process loop signals. It is a simple operation instrument ideal for calibrating and cross-checking pressure gauges, sensors, transmitters, transducers, indicators, switches, and many other devices.

- Vacuum to 600 bar versions available
- Accuracy 0.04 % of full scale
- Pneumatic or hydraulic
- 4 selectable pressure units plus mA
- Loop current measure
- 24/36 V loop power
- Over-pressure alarm
- RS-232 serial interface
- EasyCal software compatible
- Mains or battery powered



### 7015 Dual Channel Pressure Calibrator

A portable calibrator with two internal sensors to enable coverage of a wide pressure range with excellent accuracy and efficiency. Suitable for field calibration of pressure and process instrumentation including transmitters, gauges, indicators, switches.

- Vacuum to 600 bar versions available
- Accuracy 0.04 % of full scale
- Pneumatic or hydraulic
- Dual channel – 4 and 5 engineering units
- Loop current measure
- 24/36 V loop power
- Over-pressure alarm
- RS-232 serial interface
- EasyCal software compatible
- Mains or battery powered



### 7016 Regulated Pressure Calibrator

The 7016 is a fully integrated pressure test and calibration system. It provides both regulated pressure and source/measure of electrical process loop signals. The instrument is available as a positive pressure or vacuum regulated calibrator.

- Vacuum, 0.2, 2, 5, or 10 bar versions available
- Accuracy 0.04 % of full scale
- Pneumatic
- 4 selectable pressure units plus mA
- Loop current measure
- 24/36 V loop power
- Over-pressure alarm
- RS-232 serial interface
- EasyCal software compatible
- Mains or battery powered



## 7018 Differential Pressure Calibrator

A robust portable calibrator for field testing pressure instrumentation such as differential pressure sensors and transmitters. The instrument is designed for very stable measurement of differential pressures between two quick release connector ports (Hi and Lo for DP input).

- 0.2, 2, 5 and 10 bar versions available
- Accuracy 0.04 % of full scale
- Pneumatic
- Calibrate DP sensors, transmitters, gauges
- Loop current measure
- 24/36 V loop power
- Over-pressure alarm
- RS-232 serial interface
- EasyCal software compatible
- Mains or battery powered



## 7040 Digital Pressure/Current Calibrator

A compact portable pressure calibrator suitable for workshop, laboratory and field use. With the capability to measure process loop current and pressure, it enables users to calibrate pressure and process instrumentation.

- Vacuum to 20 bar versions available
- Accuracy 0.04 % of full scale
- Pneumatic
- Up to 9 selectable engineering units
- Loop current measure
- Min/Max logging & leak rate functions
- 4.5 digit display
- RS-232 serial interface
- EasyCal software compatible
- Battery powered (9 V PP3, 50 hours use)



## 7078 Auto-Ranging Digital Pressure Gauge

A high performance durable digital pressure gauge that has the ability to auto-range and maintain a 0.1 % of reading accuracy from vacuum to 200 bar. The 7078 eliminates the need for multiple gauges to span many different ranges, solving the problem of over ranging errors. It provides a convenient wide range pressure measurement solution for field calibration and testing, commonly utilised with a hand pump.

- Vacuum to 200 bar (3000 psi)
- Accuracy 0.1 % of reading
- 9 engineering units
- High accuracy silicone piezo resistive sensors
- Reads both gauge and absolute pressure
- Easy to read backlit display
- Robust with protective rubber housing
- Ideal for use with calibration pumps





## Calibration Hand Pumps

Portable pressure pumps for field calibration and testing work



### 7090 Pneumatic Calibration Pump

A pneumatic pressure calibration hand pump that combines performance with rugged design. It is designed for arduous use in the field or as a pressure and vacuum source in test facilities. The 7090 is ideal for checking the calibration of gauges, pressure switches, transmitters, recorders and other pressure equipment. It covers a range from vacuum to 40 bar (600 psi).

- Pressure to 40 bar (600 psi)
- Vacuum to 950 mbar
- Oversized check valve for smooth operation
- Non-oil based lubricant on all moving parts
- Contoured cushioned handles
- Protective caging for vent valve
- Hoses, fittings, and carry case included
- Dimensions: H 200 x W 125 mm / Weight: 0.91 kg
- Optional digital pressure gauges



### 7095 Hydraulic Calibration Pump

The 7095 is a hydraulic calibration hand pump commonly used for field testing applications. It is designed for ease of use with a fully adjustable stroke control providing quick priming, easy pumping and a fast pressure generation up to 700 bar (10,000 psi).

- Hydraulic pressure to 700 bar (10,000 psi)
- Priming feature for fast air purge
- Oversized check valve – smooth operation
- Triple filtration (prevents failure caused by dirt)
- Non-oil based lubricant on all moving parts
- Contoured cushioned handles
- Built-in pressure relief valve
- Hoses, fittings, and carry case included
- Dimensions: H 240 x W 125 mm / Weight: 1.4 kg
- Optional digital pressure gauges



### 7117 and 7118 Portable Pressure Pumps

Pocket sized pumps that provide a simple and compact solution to field pressure generation. Each pump combines a smooth and controlled operation with rugged design, making them the ideal tool for site pressure testing work.

- 7118: Pneumatic Pressure: 0 to 7 bar (100 psi)
- 7117: Vacuum: 0 to 950 mbar (28 "Hg)
- Non-oil based lubricant used on all moving parts
- Dual o-rings on all pistons ensure no leakage
- Recessed vent valve to guard against accidental damage
- Dimensions: H 220 x W 40 mm / Weight: 0.70 kg
- Digital pressure gauges available



## 7198 Pressure Calibration Accessories Kit

A comprehensive set of pressure accessories to accompany pumps, gauges, and calibrators. The 7198 kit includes adaptors, fittings, connectors, and hoses to provide a quick solution to pressure component requirement in both the field and laboratory.

- Adaptors for metric, BSP parallel, taper threads, and NPT (male & female)
- Coupling connectors allow any two adaptors to be connected together
- 1/4 BSP hose fittings for pushfit 4mm and 6mm external diameter hose
- Nylon hose set with quick release connectors for low pressure connections
- Additional 4 mm and 6 mm nylon hoses to build up custom lengths
- Minimesh 1620 test point adaptors and micro bore hose for high pressure
- 10" adjustable spanner and PTFE tape included
- Available as BSP version (7198) or NPT version (7198-NPT)
- Case with partitioned top section for hoses and extras



## 8100 Instrumentation Test Stand

A multi-purpose test stand for use with process instrumentation in the workshop or lab. It is a compact workstation that provides users with quick and customisable setups for common testing applications and service work. These include practical mounting of various pressure transmitters, gauges, temperature transmitters, RTDs & thermocouples.

- Multi-purpose test stand for process instrumentation
- Configurable solution with track base on rubber mat
- 2 transmitter fixing poles for U-bolt connections
- Vertical and horizontal pole positioning, height adjustable
- Pressure manifold with hand-tight quick connection
- Quick-vice with sliding jaw and one handed lever arm
- Upright support with clamp mechanism
- Easy to configure as per user requirements
- Clamping section can be used for direct mounting of UUTs
- Selection of tools supplied



## XREG Pressure Regulator Kit

A piston sensed pressure single stage reducing regulator for use in providing a stable pressure to precision pressure control devices. Suitable controlling pressures up to 210 bar (3045 psi), the regulator covers the range needed for the majority of line pressure requirements in calibration applications.

- Suitable for use with compressed air or nitrogen cylinders
- Used for regulation up to 210 bar (3045 psi)
- Smooth pressure adjustment with bronze bearing
- Inlet and outlet gauges supplied, 250 bar (3500 psi)
- Pressure media: Pneumatic only, air or inert gas
- Materials: Anodized Aluminum, Stainless Steel
- Seal Materials: Buna-N, Delrin, Teflon
- Operating Temp: Min: 60 °C / 140 °F. Max: -18 °C / 0 °F
- W 140 x H 150 x D 150 mm (including gauges & fitting)
- Weight: 1.1 kg



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