



Time Electronics

7090

Pneumatic Calibration Pump

Vacuum -950mbar to pressure 40bar

User Manual



1. Introduction

The 7090 pneumatic calibration hand pump is designed for ease of use to provide a source of both pressure and vacuum for checking the calibration of gauges, pressure switches, transmitters and recorders. The large comfortable handles with grips moulded into the design make it easy to control the pump whilst pumping up to pressure. The dual o-rings on all pistons ensure leak free operation.

Specification

Output Range:	-0.95 to 40 bar (-13.78 to +600 psi).
Media:	Air and compatible gases only.
Gauge Port:	¼" BSP with ¼" NPT adaptor fitted.
Process (UUT) Port:	1/8" BSP with 1/8" NPT adaptor and plug fitted.
Materials:	Stainless steel fittings, anodized aluminium housing, plastic/rubber handles, nitrile o-rings.
Weight:	0.91kg.

Contents

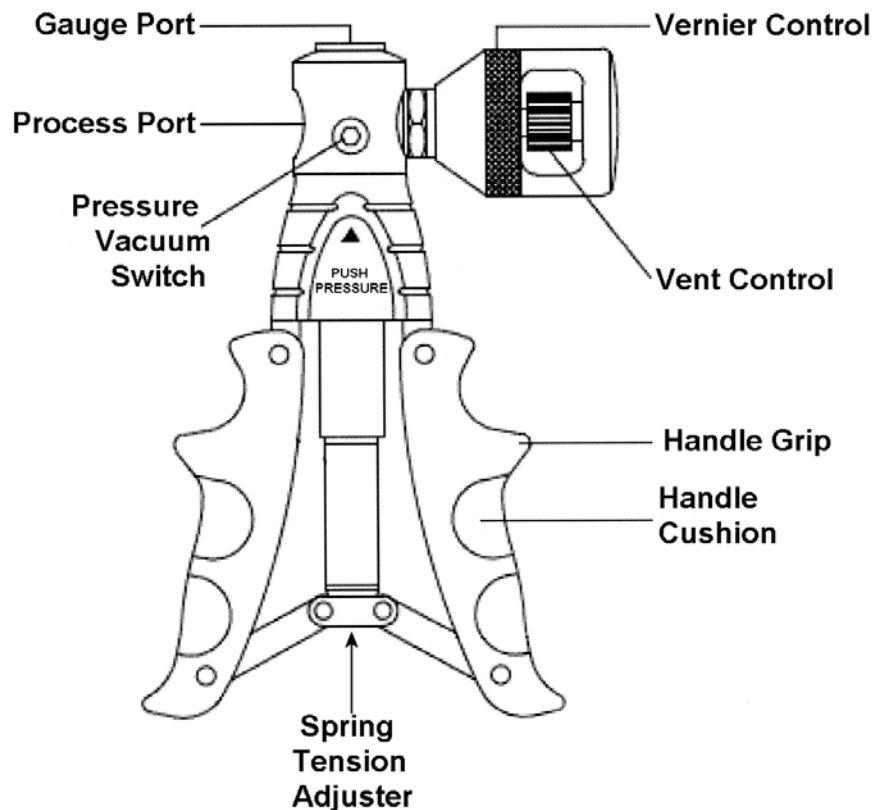
- 7090 hand pump
- 1 meter of 6/4mm hose
- Selection of 5 fittings
- Carry case
- Manual

2. Operational Notes

- 1 Ensure all units under test are disconnected from process pressures before connecting the pump.
- 2 Do not exceed the maximum pressure rating; this is 41 bar (600 psi).
- 3 The 7090 is supplied with ¼" and 1/8" BSP ports. For use with NPT fittings the supplied adaptors must be fitted.
- 4 Use only bonded washers to seal the male adaptors/fittings. Screw down hand tight, and then fully tighten with a spanner. Do not over-tighten, this could strip thread. PTFE tape or thread sealant may be used with female adaptors.
- 5 The 7090 uses a Schrader valve to vent. This means that the vent valve is fully open or closed several turns from the end of travel. Over tightening does not increase the effectiveness of the seal.
- 6 Do not use with liquids.

All Time Electronics' instruments are subject to continuous development and improvement and in consequence may incorporate minor detail changes from the information contained herein.

3. Operation



1. Connect the calibrator via a suitable adaptor and hose to the gauge port.
2. Connect the UUT to the process port via a suitable adaptor and hose.
3. Select the desired pressure/vacuum function using the slide switch (for example, if pressure generation is required, using a suitable tool, push the slide pin in on the side of the pump housing marked **PRESSURE**).
4. Close the vent knob by rotating it away from the pump housing (see note 5 in operational notes).
5. For high pressure operation, back out the vernier control until the ring on the vernier shaft is visible. Pump to pressurize. Screw in the vernier control towards the pump body, the control will become stiff to turn, this is normal, the pressure will rise and easily achieve maximum pressure (do not exceed 40bar or 600 psi).
6. To achieve maximum pressure, the bottom of the pump handles should be about 19mm (3/4") apart at the closest point when squeezed together. This is adjusted by the spring tension adjuster.
7. To release pressure slowly, turn the vent control towards the pump body. To increase or decrease the pressure slightly, use the vernier control.

4. Guarantee & Servicing

Guarantee Period

This unit is guaranteed against defects in materials and workmanship for a period of one year from its delivery to the customer.

During this period we will, subject to the instrument not being damaged due to maltreatment or overload, repair or replace it free of charge apart from shipping costs.

For repair under guarantee, the instrument serial number must always be quoted, together with details of the fault. The purchaser of the instrument must prepay all shipping charges. This guarantee is void if servicing or repair has been attempted by an unauthorized person or agent.

Service and Calibration

Routine servicing and recalibration of your instrument is an essential part in the life of any calibration instrument. This will ensure that your instrument is performing to its specifications. All repairs are made using high grade and often specialised components to ensure on-going accuracy and performance. Our quality control (ISO9001) ensures the work is undertaken to the highest standards.

When an instrument is returned for repair any product enhancements, updates (hardware and software) will be done automatically.

Returning Instruments

It is preferable to contact Time Electronics or their authorized agent to discuss any special paperwork (customer declarations etc) and shipping requirements. Always include information about the service required and your company details including a contact name, address, phone number and email address. Remember to include the name of the person you spoke to about the return.

When returning instruments, please ensure that they have been adequately packed, preferably in the original packing supplied. **We will not accept responsibility for units returned damaged.**

Send the instrument, shipping charges paid to:-

Time Electronics Ltd

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