

Features

- High accuracy 0.025% full scale (FS)
- Generates pneumatic pressures to 3000 psi (200 bar)
- Dual channel readout: pressure and electrical
- Self contained rechargeable gas cylinder
- RS232 interface and documenting versions
- Coarse/fine adjust selection

Fast and Convenient Solution for Pressure Calibration

For over twenty years, GE Druck has led the world in portable pressure calibrator technology and function. The DPI 320/325 Series of high pressure pneumatic calibrators are the latest additions to a comprehensive range of compact and rugged instruments. This range of portable calibrators is designed to make testing and calibration of high pressure instruments and systems both quick and simple. Two versions are available: the DPI 320, which is the standard model, and the DPI 325, which has full documenting capability. These self-contained portable calibrators from GE Druck provide unparalleled accuracy and control performance. A built-in gas cylinder provides source pressures up to 3000 psi (200 bar), a precision pressure regulator and fine volume adjuster ensures optimum control, and a digitally characterized sensor measures pressure to better than 0.025% of FS.

DPI 320/325 Series

Druck Portable High Pressure Pneumatic Calibrators

The DPI 320/325 Series are Druck products. Druck has joined other GE high-technology sensing businesses under a new name—GE Industrial, Sensing.



GE Sensing

Field and Workshop Operation

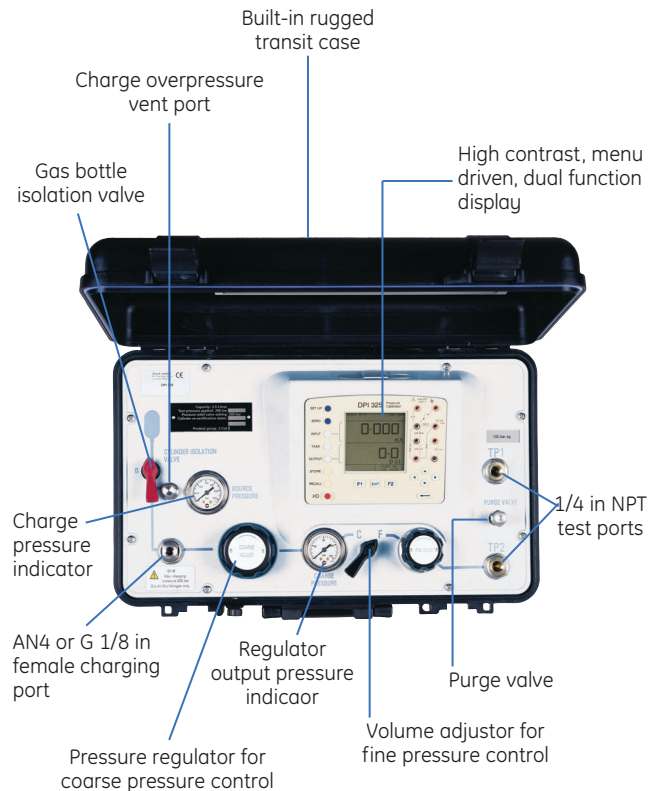
The DPI 320/325 Series pressure calibrators are designed for use in the workshop, in the plant or out in the field. The large capacity gas cylinder ensures maximum productivity between refills. In addition, the calibrators can be operated directly from an external pressure source connected to the charging port.

Dual Channel Display

The DPI 320/325 Series are dual channel instruments, able to display both the input and output values simultaneously. The calibrators are capable of providing current and voltage excitation to the unit under test (UUT), and can measure DC voltage, DC current and ambient temperature. Electrical terminations are made by industry standard 4 mm sockets, and the large backlit display provides a clear readout of the process parameters.

Application Specific Task Menu

A dedicated task key provides instant access to the task menu, permitting the calibrator to be configured for specific applications. For example, the P-I task configures the calibrator to source pressure and measure current at 24 VDC. Loop-power is also available to allow complete pressure transmitter calibration. Running the pressure switch task captures the open and closed switch values and calculates switch hysteresis. The contact resistance of the switch under test can also be monitored.



Reduce Process Downtime

The DPI 325 version enables calibration criteria to be easily entered via the keypad, allowing fast diagnosis of field instruments and automatic reporting of errors with a Pass or Fail status. When used in conjunction with Intecal for Industry (i4i) calibration management software, it will be possible to download test procedures from a PC to the DPI 325. The calibrator will prompt the technician during the calibration routine, and the results will be recorded electronically, reducing downtime and eliminating human errors.

DPI 320/325 Specifications

Pressure

The DPI 320 and 325 include a built-in pressure sensor and matched pressure regulator. The pressure range should be selected from the table below.

| Pressure Range | Accuracy* (% FS) | Maximum Overpressu | Type** |
|--------------------|------------------|--------------------|--------|
| 500 psi (35 bar) | 0.025% | 1000 psi (70 bar) | G or A |
| 1000 psi (70 bar) | 0.025% | 2000 psi (140 bar) | G or A |
| 1500 psi (100 bar) | 0.025% | 3000 psi (200 bar) | G or A |
| 2000 psi (135 bar) | 0.025% | 4000 psi (220 bar) | G or A |
| 3000 psi (200 bar) | 0.025% | 6000 psi (220 bar) | G or A |

*Combined non-linearity, hysteresis and repeatability

**G = Gage, A = Absolute (pressure reference)

Temperature Effects (averaged and w.r.t. 20°C ±0.004% of reading/°C)

Pressure Source

- Built-in Nitrogen/Air cylinder; maximum refill pressure 3000 psi (200 bar).
- Storage volume: 122 cubic inches (2 liters).
- Recommended media: Oxygen Free Nitrogen (OFN)
- Remote pressure sensors: Please consult factory for list.

Electrical

In addition to pressure, the dual display can simultaneously monitor mA, V, switch continuity and ambient temperature. Also, 10 VDC and 24 VDC power supplies are available for the device under test.

| Input | Range | Accuracy | Resolution | Remarks |
|-------------|----------------------------------|----------------------------|----------------|-----------------------|
| Voltage* | ±50 VDC. | 0.05% reading 0.004% FS | 100 maximum | Autoranging >10 Ω |
| Current* | ±55 mA | 0.05% Reading 0.004% FS | 0.001 mA | 10 Ω, 50 V maximum |
| Temperature | 15°F to 105°F (-10°C to 40°C) | ±2°F (±0.1°C) | 0.1°F (0.1°C) | Case ambient |
| Switch | Open/Closed | | | 5 mA whetting |

| Output | Range | Accuracy | Resolution | Remarks |
|----------|------------|---------------|-----------------------|-----------------------|
| Voltage | 10 VDC. | 0.1% | 100 microV maximum | Maximum load 10 mA |
| Voltage | 24 VDC | 5% | 0.001 mA | Maximum load 26 mA |
| Current* | 0 to 24 mA | 0.05% Reading | 0.001 mA | |

*Temperature coefficient 0.004% reading/°F (0.0075% reading/°C) w.r.t. 20°C

Features

Pressure Units

25 scale units plus one user defined

mA Source

Auto 10-sec. step cycle and programmable ramp (60 seconds end-to-end)

Process Functions

Filter, maximum/minimum, tare, flow, and % span

Power Management

Auto power off, auto backlight off, battery status indicator

Display

2.36 in x 2.36 in (60 mm x 60 mm) graphic LCD with backlight, +/-99999 readout, two readings per second

Data Storage

92 kbytes memory

Environmental

Temperature

- Operating range: 15°F to 120°F (-10°C to 50°C)
- Calibrated: 15° to 105°F (-10°C to 40°C)

Humidity

0 to 90%, non-condensing

Sealing

Type 12/IP54 in operation (IP65 when closed)

Conformity

EN 61010, EN 61326 Class A, CE marked

Physical

- Weight: 28 lb (12.8 kg)
- Approximate size (w x l x d): 16.9 in x 10 in x 6.5 in (429 mm x 254 mm x 165 mm)

Power supply

Battery powered 6 x 1.5 V NiCad cells—20 hours nominal use at 68°F (20°C). The unit will operate from an AC power supply, 85 to 265 V, 45 to 400 Hz, and allow the battery pack to recharge. A low battery condition is indicated on the display.

DPI 320/325 Specifications

The fully documenting DPI 325 also provides the following additional features:

- Calibration mode, showing on-line error analysis indicating pass/fail status. Storage of as-found and as-left results.
- Graphical analysis of results, showing pass/fail tolerance. Two-way PC interface for transferring test procedures and results.
- Compatible with Intecal for Industry (i4i) calibration management software.

Confirm availability with your GE representative.

Options

Remote Pressure Sensors

The calibrators have a second pressure channel which can be configured with up to 10 remote sensors (one at a time). The sensors are supplied with an electrical connector and 1/4 in NPT female or G 1/4 female pressure ports. A mating cable is required.

Mating Cable for Remote Sensor

A six foot mating cable for connecting remote sensors to the calibrator. At least one should be ordered when ordering a remote pressure sensor.

Intecal for Industry Calibration Management Software

For a fully-functional free copy of Intecal for Industry, please visit ge-intecal.com.

The complimentary version is limited to a data base with 25 tags.

Carrying Case

A backpack style carrying case with padded shoulder straps and adjustable chest band, providing a stable and comfortable carrying system for the DPI 320 Series. Also features a large pocket designed to carry the DPI 320 Series accessories and options.

Accessories

The DPI 320/325 Series is supplied with a battery charger, test leads, RS232 cable, user manual, pressure test certificate, calibration certificate and accessory bag as standard.

The Nitrogen cylinder will be supplied empty, for filling on site.

Calibration Standards

Instruments manufactured by GE Druck are calibrated against precision calibration equipment traceable to International Standards, including NIST.

Ordering Information

Please state the following (where applicable):

1. DPI 320 or DPI 325 type number.
2. Internal pressure range required.
3. Options, (if required) including range for remote sensor.

Remote pressure sensor and cable should be ordered as separate line items.



©2005 GE All rights reserved.
920-207A

All specifications are subject to change for product improvement without notice. GE® is a registered trademark of General Electric Co. Other company or product names mentioned in this document may be trademarks or registered trademarks of their respective companies, which are not affiliated with GE.

www.gesensing.com