



Digital Pressure Calibrator

Model ConST273



With HART function, the ConST273 is a digital pressure Calibrator that combines precision and functionality in a compact, robust, and simply to use instrument.

Advanced silicon technology delivers 0.02%F.S accuracy ($20^{\circ}\text{C}\pm 5^{\circ}\text{C}$ compensated) over ranges to 400 bar, 0.1%F.S accuracy over ranges to 1000 bar, permits use in most environments without degradation of accuracy.

Applications:

- ✦ Burst Disc testing
- ✦ Safety relief valve resting
- ✦ Hydraulic torque wrench indication
- ✦ Pressure regulator testing
- ✦ Gauge calibration
- ✦ Pressure regulator adjustment
- ✦ Filter performance testing
- ✦ Hydraulic leak testing
- ✦ Pressure switch testing
- ✦ Wellhead monitoring

Features

- ◆ Strict speedup aging test, stress aging test and unique temperature compensation insures the long stability.
- ◆ Strict electric protection frame enhances the self-protection capability.
- ◆ Polymer Li-ion rechargeable battery insures this instrument's battery safety.
- ◆ CE compliance proves perfect EMC ability.
- ◆ Professional HART communication function makes HART transmitter to be collected, calibrated and maintained more easily.
- ◆ RS232 communications and baud rate makes ConST273 connect with computer easily.
- ◆ Big capacity of data save and the function of real time record
- ◆ The resolution can be switched 5 digits or 6 digits, that is suitable for high-accuracy sampling data analysis.
- ◆ Pressure peak value record, pressure leak hunting, set up the switch's trigger status.
- ◆ O'clock function helps count-down test.
- ◆ Shortcut single-key operation
- ◆ Standard electricity terminal insures the on-site test caliber can be interchanged
- ◆ Dual lines with 6 digits, big LCD screen with grey background and blue backlight

Options

- HART type or non-HART type
- Positive/ Negative (vacuum) or Absolute
- Compound pressure range
- Traceable certificate from BIM

Digital Pressure Calibrator

Accuracy: 0.02%FS (compensated temperature 20°C±5°C)

0.05%FS (compensated temperature 0°C~50°C)

0.1%FS (compensated temperature 0°C~50°C)

Pressure ranges

Pressure range	Type	Resolution (bar)	Accuracy (%FS)		Max. Pressure
-1~ 0 bar	G, A	0.0001	0.02	0.05	---
0~50 mbar	G	0.001mbar	--	0.05	60 mbar
0~100mbar	G	0.01 mbar	--	0.05	120mbar
0~160mbar	G	0.01 mbar	--	0.05	192mbar
0~250mbar	G	0.01 mbar	--	0.05	300mbar
0~400mbar	G, A	0.01 mbar	0.02	0.05	480mbar
0~600mbar	G, A	0.01 mbar	0.02	0.05	720mbar
0 ~ 1 bar	G, A	0.0001	0.02	0.05	1.2 bar
0 ~ 1.6bar	G, A	0.0001	0.02	0.05	1.9 bar
0 ~ 2.5bar	G, A	0.0001	0.02	0.05	3 bar
0 ~ 4 bar	G, A	0.0001	0.02	0.05	4.8 bar
0 ~ 6 bar	G, A	0.0001	0.02	0.05	7.2 bar
0 ~ 10 bar	G, A	0.001	0.02	0.05	12 bar
0 ~ 16 bar	G, A	0.001	0.02	0.05	19 bar
0 ~ 25 bar	G, A	0.001	0.02	0.05	30 bar
0 ~ 40 bar	SG, A	0.001	0.02	0.05	48 bar
0 ~ 60 bar	SG, A	0.001	0.02	0.05	72 bar
0~ 100 bar	SG, A	0.01	0.02	0.05	120 bar
0~ 160 bar	SG, A	0.01	0.02	0.05	192 bar
0~ 250 bar	SG, A	0.01	0.02	0.05	300 bar
0~ 400 bar	SG, A	0.01	0.02	0.05	480 bar
0~600 bar	SG, A	0.01	0.02	0.05	720 bar
0~1000bar	SG	0.1	--	0.05	1200bar
0~1600bar	SG	0.1	0.1	--	1920bar
0~2500bar	SG	0.1	0.1	--	3000bar

Remark: G: gauge pressure.

A: Absolute pressure

SG: sealed gauge pressure

Over pressure warning: 120%

Pressure units: Pa, kPa, Kg/cm², inH₂O, mmH₂O, PSI, mbar, bar, MPa (In order to avoid the readings to overflow or too low to read, only some of pressure units are selected.)

Specific Data Model ConST273

Measure speed: 3.5 readings per second

Media Compatibility

-1~ 2.5 bar: Clean dry non-corrosive gases.

4~ 2500 bar: media compatible with 316L SS.

Connections

Pressure: M20x1.5 male thread (or customized)

Electrical: standard Φ4mm terminal

Communication: RS-232 DB9 (environmentally sealed)

Power Supply

Inside Power: Rechargeable Li-ion polymer battery

Outside power: 10V AC adapter

Li-Battery life: 40 hours

Rechargeable time: 4 hours.

Ambient Environment

Compensated Temperature: -10°C to 50°C

Storage Temperature: -20°C to 75°C

Relative humidity: < 95%

Atmospheric pressure: 0.86~10.6 bar

Display

Description: Monochrome LCD with LED Backlight

Resolution: Dual lines, six digits per line.

Clock Format: 【Y/M/D H:M】 , 24 hour

I/V/T/Switch/24V measure

Current	±30.0000mA; ± (0.02%RD+0.003%FS)
Voltage	±30.0000V; ± (0.02%RD+0.003%FS)
Temperature	(-30-90)°C (for compensation reference)
Switch	Status OPEN/CLOSED, (1 to 12v)
DC24V	DC24V±0.5V max:50mA Protect: 120mA

Storage capacity : 30 files, 40 records per file

Re-calibration period: One year

European Standard: CE

Case Size: φ120mm×46mm, total 184mm high

Weight: 0.7kg