

1. Overview

The DR3710 digital pressure gauge uses high-precision pressure-sensitive components, and the processing circuit integrates a 24bit AD processing chip and an industrial-grade MCU, which provide an accurate, reliable, and economic solution for a wide range of pressure applications for real-time monitoring or measurement calibration.

The operating instructions contain important information and safe operating requirements.

The digital pressure gauge must be used within its scope of application and comply with relevant accident prevention regulations and general safety regulations.

Before using the pressure gauge, the operator must carefully read and understand the operating instructions.

The manufacturer shall not be liable for any damage caused by the use of products that do not conform to the intended use, the non-compliance with the operating instructions, the assignment of unqualified technicians or the repair of digital pressure gauges by unauthorized persons.

Standard: JB / T 7392-2006 DIGITAL PRESSURE GAUGE.

Sign Description:



Warning!

Indicates a potential hazard, if not avoided, could result in serious loss or injury.



Caution!

Indicates a potential hazard, if not avoided, could result in minor injury, property damage, or environmental hazards.



Information!

Useful tips, suggestions and information are provided for efficient and fault free operations.

2. Technical Parameter

Measuring range: -0.1~100MPa Overpressure: 2XFS

Accuracy: Pressure: $\pm 0.1\%FS$, $\pm 0.2\%FS$, $\pm 0.4\%FS$

Temperature: $\pm 2^\circ C$

Display: LCD with backlight

Resolution: -19999~19999

Menu functions: zero clearing, maximum / minimum value display, unit switching, ambient temperature display, pressure progress bar display, battery indicator.

Compensation temperature: $0\sim 50^\circ C$

Ambient temperature: $-10\sim 60^\circ C$

Medium temperature: $-20\sim 80^\circ C$

Storage temperature: $-20\sim 60^\circ C$

Power supply: two 1.5 batteries (3 V)

Current consumption: $< 1.9ma$ (backlight is not turned on)

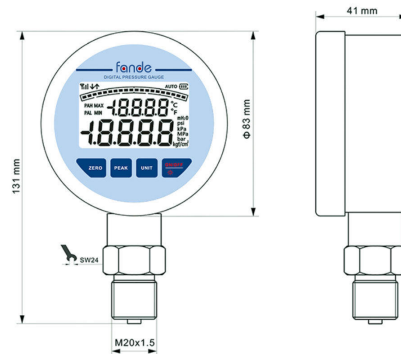
Shell material: stainless steel 304 (shell / pressure joint)

Pressure diaphragm material: stainless steel 316L

Seal ring material: VITON

Enclosure protection: IP65

3. Outline



4. Function and Operation

4.1 Zero Clearing



Long press: use the current pressure as the measurement zero point.



Information!

- ▶ The clearing range is within 5% of the full scale;
- ▶ When there is a deviation in the display zero point, use the zero clearing function;
- ▶ It is recommended to use the Zero clearing function before each use.

4.2 Peak View, Clear



Short press: switch between Maximum value and Minimum value;
Long press: clears the maximum or minimum value.

4.3 Unit Switching (psi kPa MPa bar kgf/cm2)



Short press: cycle between pressure units.



Information!

After unit switching, the measured value will display the current equivalent pressure.

4.4 ON/OFF



Short press: turn on backlight, long press: turn on / off.

5. Installation

Please select a proper sealing method before installing the digital pressure gauge.

Ensure that the measuring medium is suitable for the instrument material.



Caution!

- ▶ Do not touch the sensitive element diaphragm in any way.
- ▶ Do not install the instrument by rotating the instrument housing.

6. Transportation, Packaging and Storage

6.1 Transportation

Check whether the pressure gauge is damaged. If it is damaged, report to the dealer immediately.

6.2 Packaging

Do not remove the packaging before installation.

6.3 Storage

Allowed conditions of storage place:

■ Storage temperature: $-20\sim +60^\circ C$

■ Humidity: $< 85\%$ relative humidity (non condensing)

Avoid the following:

Direct sunlight or near hot objects;

Mechanical vibration, mechanical impact;

Smoke, steam, dust and corrosive gases;

Potential explosive and flammable environment.



Warning!

Before storing the digital pressure gauge, Remove all remaining media. Some media are harmful to health, such as corrosive, toxic, harmful, radioactive, etc.

7. Maintenance and Repair

7.1 Maintenance



Caution!

Turn off the power supply of the pressure gauge before replacing the battery.

Battery replacement can be carried out by the customer.

Battery model: 2X AAA alkaline batteries (3V)



Information!

The battery life of the instrument is related to the battery capacity and working mode of the instrument. Refer to Article 2 of this manual.

The digital pressure gauge is maintenance free in normal operation. Repairs can only be carried out by the manufacturer.

7.2 Recalibration

The instrument can be calibrated. If you need to calibrate, please contact your dealer.

7.3 Fault Code and Handling Method

Er-H : If it exceeds the upper range, please check whether the measuring range of the pressure gauge is appropriate;

Er-S : If the pressure sensitive element fails, return it to the manufacturer for maintenance;

Er-D : Data loss, return to the manufacturer or customer for calibration;

Er-Z : If Zero clearing fails, please refer to Article 4.1 of this manual.

8. Disassembly, Repair and Disposal



Warning!

The residual medium in the digital pressure gauge will cause danger to people, environment and equipment, and take adequate precautionary measures.

8.1 Disassembly

Disconnect the test and calibration only after the system has no pressure.

8.2 Repair



Warning!

When the digital pressure gauge returns to the factory:

The product must be free of any harmful substances (acid, alkali, solution, etc.).

When returning to the digital pressure gauge, Use the original packaging materials or select the appropriate packaging materials.

8.3 Disposal

Improper treatment will cause environmental pollution.

Dispose of instrument components and packaging materials in an environmentally compatible manner, in accordance with national waste disposal regulations.