

## AC/DC Powered Digital Pressure Gauge

DPG101



### INSTRUCTION SHEET

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### Introduction

DPG101 is an electronic digital pressure gauge used to monitor hydraulic fluids. It monitors the pressure via the resistance measured on an isolation membrane. The output signal is amplified by a high-precision, low-temperature drift amplifier. The signal is then fed into a high accuracy A/D converter for the microprocessor to process and then show on the LED display.

This flexible, simple to operate digital pressure gauge is safe, reliable, and easy to debug. The DPG101 is widely used in hydro-power, water, petroleum, chemical, mechanical, hydraulic, and other industries.

### Features

- High resolution, 4-digit LED display
- 100mm standard gauge dial
- Stainless steel structure
- Parameter correction function (adjust instrument zero and error value)

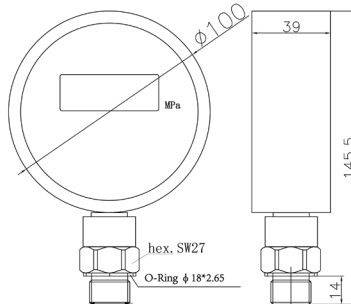
### Specifications

Note, if the fluid being measured exceeds 80°C, select the high temperature accessory.

- **Measuring Range**  
-0.1~0~100MPa
- **Accuracy Range**  
±0.25% for gauge pressure >5psi  
±0.5% FS for all others including absolute, compound gauge, and Vacuum ranges
- **Overload Pressure**  
150%~200%
- **Pressure Type**  
G/A
- **Stability**  
≤0.1% FS per year
- **Power Supply**  
220VAC
- **Display**  
4 digits

- **Screen Size**  
0.56" LED
- **IP Rating**  
IP65
- **Relative Humidity**  
≤90%
- **Operating Temp**  
-30°C ~ 80°C
- **Fluid Temp**  
-40°C ~ 150°C
- **Thread Size**  
1/4 NPT Male
- **Thread Material**  
SS316

### Dimensions



### Mechanical Installation

Install directly on the hydraulic pipe line. Other size connectors can be ordered. In high vibration / shock environments, pressure pipe joints can be mechanically decoupled through the use of hoses.

NOTE: Vertical installation is required when the measuring range is less than 100kPA.

### Electrical Installation

- 4-20mA wiring  
1 (red): power+  
2 (Blue): power-

Notes to prevent Interference

- Keep connection as short as possible
- Use shielded wire
- Avoid direct access to the wiring of the user's device or devices causing interference.
- When using mini hoses, ground the shell separately



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**WARNING:** These products are not designed for use in, and should not be used for, human applications.

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If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

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1. Purchase Order number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

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1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, and
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