

# Pirani Vacuum Gauge GP-G Series



GP-1G/GP-1GRY



GP-2ARY



GP-2A



GP-1000G

This series is a Pirani vacuum gauge using the heat conduction of a gas. A platinum wire is used and the units will not break even at atmospheric pressure. The gauges have a wide range of applications and can easily measure pressures in the low vacuum range. In addition, Various types of interlocks and pumping sequence control are available with the set point.

### Features

- Interoperable sensor heads.
- Precision measurement over a broad range.
- Easy handling.
- The GP-1GRY and GP-2ARY provide 2 set points and the GP-1000G provides 3 set points.
- An internal temperature compensation circuit is included to minimize the affect of changes in the surrounding temperature on display values. (GP-1000G)
- Digital output (BCD) as standard equipment. (GP-1000G)
- Linearized recorder output. (GP-1000G)

### Applications

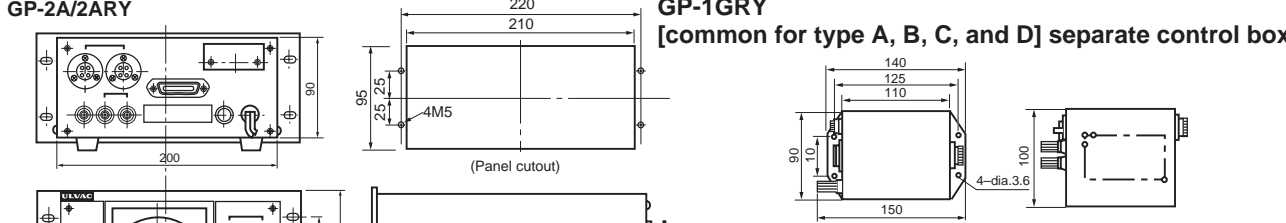
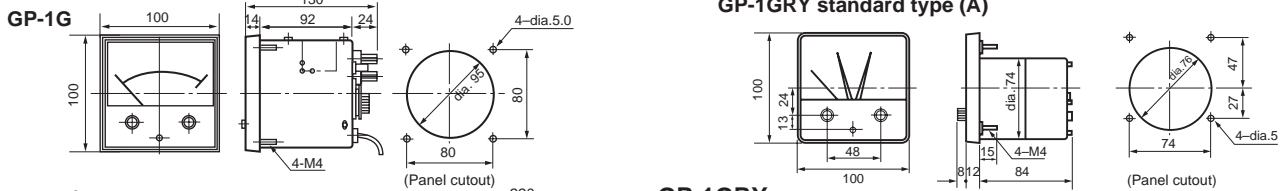
- Pressure measurement in roughing pumping systems
- Pressure monitoring in various vacuum pumping systems
- Interlocks, sequencing, and other control system related functions for practical vacuum equipment
- Process control of various vacuum equipment

Specifications

| Model                          | GP-1G   | GP-1GRY   | GP-2A  | GP-2ARY   | GP-1000G  |  |
|--------------------------------|---|-----------|--|-----------|---|--|
| Item                           |   |           |  |           |   |  |
| Pressure measurement range Pa  |   |           | 4 x 10 <sup>-1</sup> -2.7 x 10 <sup>3</sup>  |           |   |  |
| Measurement range              | 1   |           | level; H, L, and S (manual range switching)<br>H: 40-3 x 10 <sup>3</sup> Pa<br>L: 0.4-40 Pa<br>S: 0.4-3 x 10 <sup>3</sup> Pa |           | 1   |  |
| Measurement locations          | 1   |           | 2  |           | 1   |  |
| Measurement location switching | None  |           | Manual   |           | None  |  |
| Measurement accuracy           | ±3% of full scale (linear scale conversion)                       |           |  |           |   |  |
| Pressure indication            | Analog indication   |           |  |           | Digital indication  |  |
| Recorder output                | DC 0-10 mV  |           | DC0-10 V   |           | DC 0-10 V linear output (10 <sup>3</sup> Pa f.s.)<br>DC 0-10 V linear output (10 <sup>2</sup> Pa f.s.)<br>Quasi-log output (1 V for each range) |  |
| Digital output                 | None  |           |  |           | RS232C/BCD  |  |
| Set points                     | None  | 2 points  | None   | 2 points  | 3 points  |  |
| Use temperature °C             | 10-40   |           |  |           |   |  |
| Power                          | AC85-264 V  |           |  |           |   |  |
| Controller weight kg           | 1   | 1.7       | 3.3  | 3.5       | 10 VA   |  |
| Standard accessories           | Sensor head   | WP-01 x 1 |  | WP-01 x 2 |   |  |
|                                | Sensor head cable   | 5 m x 1   |  | 5 m x 2   |   |  |
|                                | Operation manual  | 1         |  |           |   |  |
|                                | Input/output connector  | 1         |  |           |   |  |
|                                | Detection unit  | 1         |  |           |   |  |
|                                | Power cable   | 1         |  |           |   |  |
| Options                        | Various types of gauge heads including WP-02, 03, 04, 05, and WPB |           |  |           | WP-02, 03, WPB and others   |  |
|                                | Sensor head cables: 2, 10, 15, 20, 25, 30, 50, and 100 m          |           |  |           |   |  |

External Dimension Diagram

(unit: mm)



(Note) 1. Type B, C, and D are available in addition to the type A control size for the GP-1GRY series shown above. Check these sizes when necessary.  
2. A separate type with a control case is also available for the GP-1G.

