

INTRODUCTION

Thank you for choosing an HK Instruments DPG/PS series filter alert. In many situations filter monitoring requires an alarm signal and a local display. Our filter alerts are the right solution for these situations. The DPG/PS filter alerts combine differential pressure switches with gauges into one practical product offering.

APPLICATIONS

The filter alerts are a solution for systems requiring visual indication of pressure on site and a switching point signal. The filter alerts are ideal for general-purpose work in air-conditioning and ventilation, especially in monitoring of air filters for contamination.

WARNING

- READ THESE INSTRUCTIONS CAREFULLY BEFORE ATTEMPTING TO INSTALL, OPERATE OR SERVICE THIS DEVICE.
- Failure to observe safety information and comply with instructions can result in PERSONAL INJURY, DEATH AND/OR PROPERTY DAMAGE.
- To avoid electrical shock or damage to equipment, disconnect power before installing or servicing and use only wiring with insulation rated for full device operating voltage.
- To avoid potential fire and/or explosion do not use in potentially flammable or explosive atmospheres.
- Retain these instructions for future reference.
- This product, when installed, will be part of an engineered system whose specifications and performance characteristics are not designed or controlled by HK Instruments. Review applications and national and local codes to assure that the installation will be functional and safe. Use only experienced and knowledgeable technicians to install this device.

SPECIFICATIONS

Performance

Accuracy of gauge (FS 20 °C):
±2 %

Switching difference:

DPG200/PS200: 20 Pa
DPG300/PS300: 20 Pa
DPG500/PS500: 20 Pa
DPG600/PS600: 30 Pa
DPG1,5K/PS1500: 80 Pa

Accuracy of switching point (Low limit typ.):

DPG200/PS200: 20 Pa ±5 Pa
DPG300/PS300: 30 Pa ±5 Pa
DPG500/PS500: 30 Pa ±5 Pa
DPG600/PS600: 40 Pa ±5 Pa
DPG1,5K/PS1500: 100 Pa ±10 Pa

Accuracy of switching point (High limit typ.):

DPG200/PS200: 200 Pa ±20 Pa
DPG300/PS300: 300 Pa ±40 Pa
DPG500/PS500: 500 Pa ±30 Pa
DPG600/PS600: 600 Pa ±30 Pa
DPG1,5K/PS1500: 1500 Pa ±50 Pa

Electrical rating, resistive load:

3 A / 250 VAC (DPG200/PS200: 0.1 A / 250 VAC)

Electrical rating, resistive load:

2 A / 250 VAC (DPG200/PS200: -)

Maximum pressure:

50 kPa

Service life:

> 1 000 000 switching operations

Technical Specifications

Media compatibility:

Dry air or non-aggressive gases

Measuring units:

Pa

Environment:

Operating temperature: -5...+60 °C
Storage temperature: -40...+85 °C

Physical

Case (DPG & PS):

ABS

Cover (DPG & PS):

PC

Membrane (DPG & PS):

Silicone

Machinery (DPG):

Aluminum and steel spring

Duct connectors (PS):

ABS

Tubing (PS):

PVC, soft

Protection standard:

IP54

Electrical connections:

3-screw terminal

Cable entry:

M16

Pressure fittings:

Male ø 5 mm

Weight:

510 g

Conformance

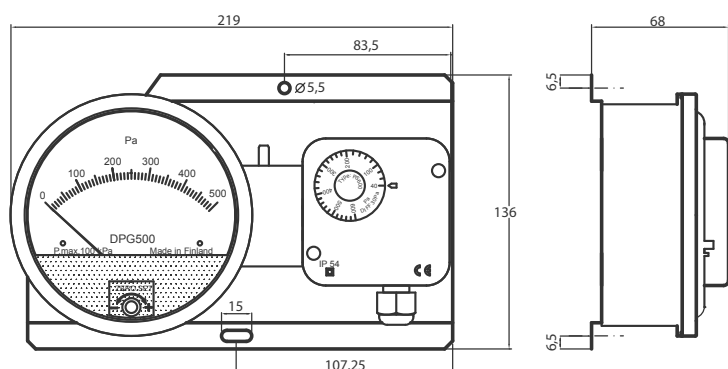
Meets the requirements for:

	CE:	UKCA:
RoHS:	2011/65/EU	S.I. 2012/3032
LVD/EESR:	2014/35/EU	S.I. 2016/1101
WEEE:	2012/19/EU	S.I. 2013/3113

COMPANY WITH
MANAGEMENT SYSTEM
CERTIFIED BY DNV
ISO 9001 • ISO 14001



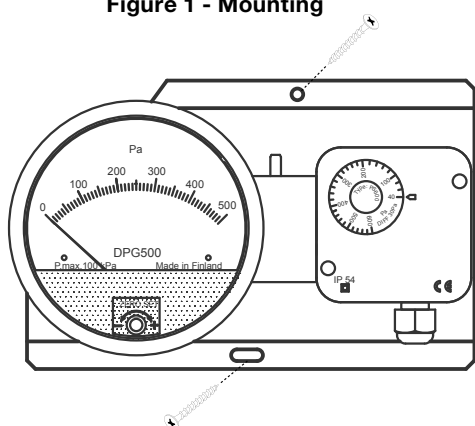
DIMENSIONAL DRAWINGS



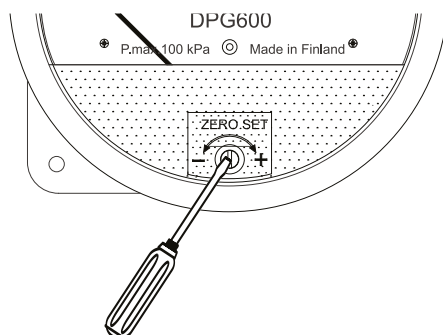
INSTALLATION

- 1) Mount the device in the desired location.
Mounting position: To be installed in horizontal position.

Figure 1 - Mounting



- 2) Install the DPG.
 - a. Adjust the zero point by turning the zero set screw on top of the lid.

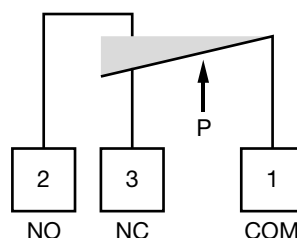


- b. Connect the pressure tubes. Connect positive pressure to port labeled "+" and negative pressure to port "-".

INSTALLATION CONTINUED

- 3) Install the PS.
 - a. Open the lid.
 - b. Select the desired switching point by turning the selection wheel.
 - c. Unscrew the strain relief and route the cable. Connect the wires as shown in Figure 2. Tighten the strain relief.
 - d. Close the lid.

Figure 2 - Wiring diagram



RECYCLING/DISPOSAL

The parts left over from installation should be recycled according to your local instructions. Decommissioned devices should be taken to a recycling site that specializes in electronic waste.



WARRANTY POLICY

The seller is obligated to provide a warranty of five years for the delivered goods regarding material and manufacturing. The warranty period is considered to start on the delivery date of the product. If a defect in raw materials or a production flaw is found, the seller is obligated, when the product is sent to the seller without delay or before expiration of the warranty, to amend the mistake at his/her discretion either by repairing the defective product or by delivering free of charge to the buyer a new flawless product and sending it to the buyer. Delivery costs for the repair under warranty will be paid by the buyer and the return costs by the seller. The warranty does not comprise damages caused by accident, lightning, flood or other natural phenomenon, normal wear and tear, improper or careless handling, abnormal use, overloading, improper storage, incorrect care or reconstruction, or changes and installation work not done by the seller. The selection of materials for devices prone to corrosion is the buyer's responsibility, unless otherwise is legally agreed upon. Should the manufacturer alter the structure of the device, the seller is not obligated to make comparable changes to devices already purchased. Appealing for warranty requires that the buyer has correctly fulfilled his/her duties arisen from the delivery and stated in the contract. The seller will give a new warranty for goods that have been replaced or repaired within the warranty, however only to the expiration of the original product's warranty time. The warranty includes the repair of a defective part or device, or if needed, a new part or device, but not installation or exchange costs. Under no circumstance is the seller liable for damages compensation for indirect damage.